

# Network Operator and Retail Supplier Licence Application Form

*Water Industry Competition Act 2006 (NSW)*

Application Form  
June 2013

**Cooranbong**  **Water**

COORANBONG WATER PTY LTD  
NETWORK OPERATOR LICENCE  
15\_033 VARIATION 2

PUBLIC APPLICATION  
September 2018  
Version 3

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PUBLIC

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# 1 Instructions

The *Water Industry Competition Act 2006* (NSW) (the WICA or Act) came into operation on 8 August 2008 and, among other things, provides for the licensing of private sector water utilities.

Under the WICA, the Minister for Finance and Services (the Minister) is responsible for granting the following licences:

- ▼ **Network Operator's Licence** for constructing, maintaining and operating water industry infrastructure.
- ▼ **Retail Supplier's Licence** to supply water or provide sewerage services, by means of water industry infrastructure.

The Independent Pricing and Regulatory Tribunal of NSW (IPART) is responsible for receiving and assessing licence applications and for the ongoing administration and enforcement of licences.

## 1.1 Who should complete this form?

This form is for corporations that wish to become licensees under the WICA. Under section 8(1) of the WICA, an application for a licence can only be made by or on behalf of a corporation.

A copy of the WICA is available on the NSW Government's legislation website at [www.legislation.nsw.gov.au](http://www.legislation.nsw.gov.au).

## 1.2 Information on filling out and submitting this form

### 1.2.1 General instructions to applicants

The questions asked in the application form are designed to allow you to establish your capacity and expertise to carry out the proposed activities in compliance with your licence (if granted), the WICA and the *Water Industry Competition (General) Regulation 2008* (NSW) (the General Regulation).

Your response should include sufficient information to demonstrate an extensive understanding of the activities you are proposing to undertake, the issues or impacts associated with these activities, and the processes required to address or manage these issues or impacts. The information provided in your application should reflect the type, size, complexity and level of risk associated with the activities to be licensed.<sup>1</sup>

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<sup>1</sup> For example, a recycled water scheme involving a single source, basic treatment, and single pipeline to one commercial customer will be less complex and therefore require less supporting information than a multi-source scheme, with complex treatment and a pipe network ultimately supplying a mix of commercial and residential customers.

Following each question in the application form is an explanation (in italics) as to why we have requested the information and how it will be assessed in relation to the requirements of the WICA and the General Regulation. These explanations are provided as a general guide to help applicants understand the main ways in which the information sought is likely to be relevant for the assessment of their application. However, we may use the information provided for any other relevant purpose when we assess your application.

We will also have regard to the following licensing principles, in accordance with section 7 of the WICA:

- ▼ the protection of public health, the environment, public safety and consumers generally
- ▼ the encouragement of competition in the supply of water and the provision of sewerage services
- ▼ the ensuring of sustainability of water resources
- ▼ the promotion of production and use of recycled water
- ▼ the promotion of policies set out in any prescribed water policy document
- ▼ the potential for adverse financial implications for small retail customers generally arising from the activities proposed to be covered by the licence, and
- ▼ the promotion of the equitable sharing among participants in the drinking water market of the costs of water industry infrastructure that significantly contributes to water security.

Where more extensive information is required in response to a question (ie, example plans), the information is requested to be included as an appendix to the question. Unless indicated otherwise the appendices must be attached to the application to ensure there is sufficient information for IPART to make an assessment in accordance with the relevant legislation. An application that does not attach the necessary appendices may be considered to be an incomplete application resulting in a delay in processing. All appendices should be labelled as per the instructions.

### **1.2.2 Confidential information**

IPART uses open public processes to consider applications and must invite submissions on applications from the public. Unless they are confidential, we treat your applications and appendices as public documents. We publish these documents on our website and distribute them to interested parties as appropriate.

Subject to our disclosure obligations (referred to below), we will treat as confidential the financial information that we request for the purposes of your application. We may share that information with our consultants, but will do so on a confidential basis.

You should let us know if you consider other aspects of your application to be confidential so that we can discuss your confidentiality concerns with you.

You should provide separate confidential and public copies of your application. In particular, you should provide:

- ▼ **a confidential application**, which is clearly marked “confidential” and clearly identifies the confidential information that should not be publicly released, and
- ▼ **a public application**, which does not contain the confidential information, for publication and distribution by IPART.

If we agree with all your confidentiality concerns, we will only publish the public application on our website. However we will furnish a copy of the confidential application to the Ministers specified by the WICA and General Regulation, as we are required to do under section 9(1)(b) of the WICA.

Please note that third parties may apply under the *Government Information (Public Access) Act 2009* for access to applications, including applications that contain confidential information. If we receive such an application, we will determine disclosure in accordance with that Act.

Where an application includes personal information, IPART will deal with that information in accordance with the information protection principles set out in the *Privacy and Personal Information Protection Act 1998*.

### **1.2.3 Is there an application fee?**

The application fee for a network operator’s licence is \$2,500. The application fee for a retail supplier’s licence is \$2,500. If you are applying for both a network operator’s licence and retail supplier’s licence, the fee is \$5,000.

The appropriate licence application fee should be paid either by cheque made payable to the Independent Pricing and Regulatory Tribunal of NSW or by electronic transfer to:

Westpac Banking Corporation  
BSB: 032-001  
Account No: 205717  
Reference: WICA app

If payment is made electronically, please provide a copy of the electronic transfer receipt with your licence application.

Please note that once an application has been submitted, the application fee(s) will not be refunded if the application is rejected or withdrawn.

### 1.2.4 How do you submit the application?

You must submit one hard copy and one electronic copy of each of the versions (public and confidential) of the completed application form and appendices. You may wish to password protect your electronic confidential version. If so, we will contact you to request the password following submission of your application.

The electronic copy should consist of separate files for the application and the appendices for each of the sections. Where there is more than one appendix in a section, they should be combined into a single electronic file. For example, section 3 will have appendices 3.2.1 and 3.6.1 – these appendices should be combined into one electronic file. A summary of the appendices is included in attachment A to this form.

When you have completed your application, you should mark it to the attention of the Water Licensing team, and submit it to IPART in person, via email or via post:

In person	Via email	Via post
Attention: Water Licensing Independent Pricing and Regulatory Tribunal Level 8 1 Market Street Sydney NSW 2000	Attention: Water Licensing Independent Pricing and Regulatory Tribunal  <a href="mailto:compliance@ipart.nsw.gov.au">compliance@ipart.nsw.gov.au</a>	Attention: Water Licensing Independent Pricing and Regulatory Tribunal PO Box Q290 QVB Post Office Sydney NSW 1230

### 1.3 If you require further information

If you have further questions about your application, you can contact the Water Licensing team in IPART by:

- ▼ emailing: [compliance@ipart.nsw.gov.au](mailto:compliance@ipart.nsw.gov.au), or
- ▼ telephoning: (02) 9290-8400 (general number).

We encourage you to discuss your licence application form and obtain assistance from the Water Licensing team *prior* to formally submitting your application. Once we receive your application, we will assign you a contact officer, who will manage your application and remain in contact with you throughout the process.



## 1.4 Where to from here?

### 1.4.1 What will happen next?

IPART will check that your application form is complete and that you have supplied all the necessary information and supporting documentation.

If your application is complete, we will undertake consultation and a detailed assessment before preparing a recommendation to the Minister to either grant or refuse the licence(s).

If the application is incomplete, it will not be processed and you will be asked in writing to supply the outstanding information. This is likely to delay the detailed assessment of your application. We may also request additional information in response to submission or our detailed assessment of your application.

If you wish you can withdraw your application at any stage during the process.

IPART uses our best endeavours to process applications quickly. Complete applications are generally processed between 6 to 8 months depending on the complexity of the project.

### 1.4.2 Audits and ongoing compliance obligations

Licensing obligations are set out in the *Water Industry Competition Act 2006* (NSW) and *Water Industry Competition (General) Regulation 2008* (NSW), which also sets out standard licence conditions.

IPART has also prepared a series of fact sheets explaining the audit and compliance obligations following the grant of a WICA licence.

It is particularly important to note that the granting of a network licence does not allow the licensee to bring any *new* water or sewerage infrastructure into immediate commercial operation. **A licensee must also obtain approval from the Minister before commencing commercial operation of new water or sewerage infrastructure.**

For further information, please refer to the following fact sheets or contact the Water Licensing team at IPART on the details provided above.

Fact sheets:

- ▼ *Summary of Audit Framework*
- ▼ *Commercial operation of new infrastructure*
- ▼ *Register of licences and other publicly available information*
- ▼ *Potable water services - public health requirements*
- ▼ *Water recycling - public health requirement.*

These documents can be downloaded from the IPART website, at <http://www.ipart.nsw.gov.au/water/private-sector-licensing/private-sector-licensing.asp>.

## 2 Contact Information

To be completed by all applicants

### 2.1 Contact Details

You need to nominate a primary contact person for all communication and correspondence between the corporation applying for a licence and IPART. This person must be a senior officer of the applicant corporation and not an external consultant. Ideally, this person's role within the corporation will be related to the project/activity to be licensed, and they must have the authority to speak on behalf of the applicant.

#### PRIMARY CONTACT

FULL NAME

Kirsten Evans

POSITION TITLE

Executive Manager, Risk & Compliance

EMAIL ADDRESS

BUSINESS TELEPHONE NUMBER

MOBILE TELEPHONE NUMBER

POSTAL ADDRESS FOR CORRESPONDENCE

ADDRESS

PO Box R455, Royal Exchange, Sydney

STATE

NSW

POST CODE

1225

#### SECONDARY CONTACT

☒ Please check if the secondary contact should be copied into all correspondence.

FULL NAME

Darren Wharton

POSITION TITLE

Executive Manager, Project Delivery

EMAIL ADDRESS

BUSINESS TELEPHONE NUMBER

MOBILE TELEPHONE NUMBER

POSTAL ADDRESS FOR CORRESPONDENCE

ADDRESS

PO Box R455, Royal Exchange, Sydney

STATE

NSW

POST CODE

1225

### 3 General Information

To be completed by all applicants

#### 3.1 Applicant Details

3.1.1 Please provide the following information for the corporation applying for the licence. Please note an application may only be made by or on behalf of a corporation (s8(1)).

*Your response to this question is used in ASIC, ITSA and CATSI searches\* conducted as part of our assessment of your application. The information will also be used to specify the corporation that holds the licence (Act s.6(1)(a)), if a licence is granted.*

*\* These are searches of databases kept by the Australian Securities and Investments Commission (ASIC), Insolvency and Trustee Service Australia (ITSA), and Office of the Registrar of Indigenous Corporations (for corporations registered under the Corporations (Aboriginal and Torres Strait Islander) Act 2006 (CATSI))*

CORPORATION NAME

**Cooranbong Water Pty Ltd (CW)**

ABN/ARBN

66 169 450 453

ACN

169 450 453

CORPORATION'S REGISTERED OFFICE

ADDRESS

Suite 2, Level 40, 259 George Street, Sydney

Sydney

STATE

NSW

POST CODE

2000

CORPORATION'S PRINCIPAL PLACE OF BUSINESS

ADDRESS

Suite 2, Level 40, 259 George Street, Sydney

STATE

NSW

POST CODE

2000

3.1.2 Please provide the following information for the Chief Executive Officer and ALL Directors of the applicant corporation

*Your response to this question is used in ASIC, ITSA and CATSI searches to determine that the named individual(s) are not disqualified individual(s) and that the applicant corporation is not a disqualified corporation (Act, s10(3)). The information will also be used to assess, among other things, the applicant corporation's organisational capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).*

#### PERSON ONE

FULL NAME

Terence J. Leckie

POSITION TITLE

Executive Director

DATE OF BIRTH

RESIDENTIAL ADDRESS	
ADDRESS	
STATE	POST CODE
<b>PERSON TWO</b>	
FULL NAME	Stephen J. McKewen
POSITION TITLE	Director and Chief Executive Officer
DATE OF BIRTH	
RESIDENTIAL ADDRESS	
ADDRESS	
STATE	POST CODE

## 3.2 Activities for which a licence is sought

Please check ALL the applicable boxes for which you are seeking a licence

*Your response to this question will be used to specify the activities that the applicant corporation will be authorised to undertake (Act s.6(1) and s.11(1)), if a licence is granted. The response to this question is a requirement for any network operator's licence application (Reg cl.6(1)(a) and 6(2)(a)) and for any retail supplier's licence application (Reg cl.10(1)(a) and 10(2)(a)).*

3.2.1 **NETWORK OPERATOR** (to construct, maintain and operate water industry infrastructure)

☒ Water infrastructure - drinking water

☒ Water infrastructure – non potable water (including recycled water)

☒ Sewerage infrastructure

3.2.2 **RETAIL SUPPLIERS** (to supply water or provide sewerage services)

☐ Supply of drinking water

☐ Supply of non-potable water

☐ Provision of sewerage services

3.2.3 Have you commenced any of the activities for which you are seeking a licence?

For example, you may have commenced construction, commercial operation and/or supply of services to customers.

☐ Yes please go to 3.2.4

☒ No please go to 3.2.5

3.2.4 Please briefly describe the activities that you have commenced including the date(s) on which they commenced.

*Your response to the following question will be used to determine whether transitional arrangements apply to the project.*

Not applicable

3.2.5 Please outline the approximate date you anticipate commencing the activities for which you are seeking a licence, if they have not yet commenced. For example, construction of the network infrastructure July 2014, construction of the water treatment plant December 2014, operation of the water treatment plant June 2015, supply to small retail customers August 2015.

*Your response to the following question will be used as background information for the project.*

### North Cooranbong Development

Johnson Property Group Pty Ltd (the “**Developer**”) is undertaking a new large-scale residential development located at Cooranbong, in the City of Lake Macquarie, NSW (the “**North Cooranbong Development**”). The North Cooranbong Development will ultimately comprise approximately 2,236 new homes of which 117 lots (Stages 1A-1D and Jackson, the “**Developed Lots**”) were developed prior to CW's involvement and are being serviced by Hunter Water. The North Cooranbong Development also includes one primary school allotment, landscaped areas, drainage, public open space, recreation areas and a small retail precinct (total additional 95 equivalent tenements)

Flow Systems Pty Ltd (**'Flow'**) has been engaged by the Developer to establish a local water utility (Cooranbong Water Pty Ltd (**"CW"**)) for the North Cooranbong Development excluding the Developed Lots, based on the construction and operation of sewerage, recycled water and drinking water infrastructure and delivery of resulting services to end-user residential and retail customers (the **"Scheme"**).

## Background

In June 2014, Cooranbong Water (**CW**), a wholly-owned subsidiary of Flow Systems Pty Ltd (**Flow**), applied for a network operator's licence (**NOL**) to provide drinking water, recycled water and sewerage services to the entire North Cooranbong Development (minus the Developed Lots). At the time, CW provided a complete application to cover all technical, financial, organisational and environmental capacity considerations for the NOL to be granted for that entire area.

At the time, a development application under Part 4 of the *Environmental Planning and Assessment Act 1979* (**EPAA**) for the water recycling facility (Cooranbong Local Water Centre, **Cooranbong LWC**) had been submitted and was being assessed by Lake Macquarie City Council (**LMCC**) and a development consent for the Development's Precinct 1 (the first 81 lots) had been granted.

CW provided a review of environmental factors (**REF**) consistent with the requirements of Part 5 of the EPAA assessing the environmental impacts of the proposed sewage and recycled water reticulation networks of the Development. This **'Retic REF'** assumed that the broader environmental impacts of the subdivision works (tree clearing, bulk earthworks etc) would be understood to be assessed as part of future Part 4 development applications by the Developer and therefore it only considered the additional impact of the installation of the reticulation networks.

The licence application was exhibited on that basis in April 2015.

Subsequently, the assessors of the licence application determined that the environmental assessment approach could not consider future environmental impact assessments by others. As a result, when the NOL was granted in August 2015, the licensed area of operations was limited only to the area that had been granted development consent and the NOL includes this condition repeated as required for the different services:

*"This Licence authorises the Licensee ..... to construct, maintain and operate the water industry infrastructure ... that has been granted development consent under the EPA Act or is exempt development under the EPA Act and may be carried out without development consent under section 76(3)(a) of the EPA Act ... within the area of operations specified ... subject to the conditions imposed by or under the Act, the Regulation and this Licence."*

By this time development consent had been granted for the Cooranbong LWC as well as Precinct 1. (Subsequent to the LMCC development consent for the Cooranbong LWC in July 2015, the consent was challenged in the NSW Land and Environment Court. The development consent was re-affirmed by the Court in August 2016 with some additional conditions, some minor re-design of the Cooranbong LWC and its re-location within the same lot – Lot 12 DP 1158508).

The July 2015 report by the regulator, IPART, to the Minister recommending the NOL be granted, acknowledges that

*“some elements of the larger scheme have been considered in our assessment where appropriate”.*

It is clear within that report that the technical, organisational and financial capacity of CW had been assessed as adequate for the entire scheme and it was environmental impact assessment of the reticulation network construction that was limiting the NOL area to that which had already been granted development consent.

NOL 15\_033 was granted to Cooranbong Water Pty Ltd by the Minister on 6 August 2015.

Following LMCC's granting of the development consent for Precinct 2, CW applied in November 2015 to have the NOL area varied (NOLV1) to include the lot and DPs incorporating Precinct 2. The balance of the original NOL application was recognised as being applicable and the licence area was expanded by the Minister to include the additional Precinct 2 area on 18 March 2016.

#### **This application to vary the licensed area of operations ('NOLV2')**

Since March 2016 further development consents for subdivision works – including all utility services - have been granted to the Developer. CW has waited to collate a number of development consents to seek the NOL area variation in one application. This licence area variation is now required by **28 February 2019** to enable servicing of several of these subdivided lots. This application takes the opportunity to include these development areas with development consent as well as some other areas, as follows:

- A. Most of the area of the 'Twine' property is included in the existing NOL 15\_033 but Lot 1 DP 348173 and Lot 11 DP 1158508 are excluded. To enable timely servicing of the subdivided lots, CW requires its NOL to be expanded to include these excluded lots.
- B. Due to lot boundary changes, the medium density development of Lot 83 DP 1237780 is only 90% covered by the existing NOL area. The Developer has development consent to subdivide this lot into eight superlots. To ensure the servicing of these lots, CW requires the inclusion of the remaining 10% of this lot into the NOL area.
- C. Precinct 3 holding development consent
- D. Precinct North A holding development consent
- E. Lot boundary changes have caused 14% of the SP2-zoned proposed school lot (Lot 80 DP1237780) to fall outside of the existing licensed area of operations. CW seeks to include the balance of this lot into the NOL area.
- F. CW seeks to add the existing Avondale School as a customer. Avondale School can be serviced with lateral property connections to its western boundary directly off the proposed reticulation networks from within the existing NOL area. The connection point would be at the School's boundary.
- G. CW seeks to include all of Lots 81 and 82 DP1237780 and Lot 5 DP1222727 which are currently only partially covered by the existing NOL area.
  - a. DA/1272/2017 development consent permitted the re-alignment of cadastral lot boundaries in the development. The existing NOL area no longer follows the cadastral boundaries, The revised NOL will need to amend the lot identifiers defining the NOL area.
  - b. DA/2234/2017 has been submitted to LMCC by the Developer to develop and subdivide these lots into 590 residential lots. This development application includes a statement of environmental effects which contemplates the construction of all utility services.
- H. Avondale College and Town Common Designated Irrigation Zones – To assist in the management of seasonal demand for recycled water, CW seeks to include the Avondale College into its NOL area for recycled water servicing only. The pipeline



route along Freemans Drive and Central Road for a recycled water pipe to convey recycled water to the College is also included within this NOL area variation request.

- I. CW seeks to include existing lots immediately adjacent to the proposed recycled water main in order to provide opportunity for others to become customers of the recycled water service (only).
- J. This application seeks to include the 'Mears' property at Lot 1 DP182756 for drinking water, recycled water and sewerage servicing. It is proposed that the Mears property is connected to Flow's reticulation network via an easement along (and inside) the southern boundary of the 'Dabson' property (Lot 2 DP825266).

The following table, the Map of Proposed NOL Area in the appendix and section 3.5.1 in the appendices summarise the details of the required variations to the NOL area.

ID	Area	Folio identifier
A	Twine	Lot 1 DP348173 Lot 11 DP1158508
B	Medium density	Lot 83 DP 1237780
C	Precinct 3	Lot 3 DP1222727 Lot 7 DP1222727
D	Precinct North A	Lot 219 DP755218
E	Proposed school lot	Lot 80 DP1237780
F	Avondale School	Lot 22 DP1165277 Lot 1 DP1206864 Lot 13 DP129157 Lot 744 DP1204699
G	Re-alignment of NOL area with cadastral boundaries	Lot 82 DP1237780 Lot 5 DP1222727
H	Avondale College Designated Irrigation Zone	Various – see s4.2.3
I	Lots adjacent to the delivery pipeline	Various – see s4.2.3
J	Mears and Dabson properties	Lot 1 DP182756 Lot 2 DP825266

The original NOL application and all of the referenced development applications in this NOL variation application have been publicly exhibited previously, however IPART has indicated that this NOL variation application will again exhibit these development consents and their associated environmental impact assessments along with the environmental impact assessments prepared for the new sections.

Further information regarding the alterations to the lot references within the existing NOL area due to cadastral lot boundary changes is provided in section 3.5.1.

#### **Scheme infrastructure**

##### **Construction**

Scheme Infrastructure is being constructed in the following stages:

##### **Phase 1: Interim servicing**

To enable servicing of up to the initial 300 lots (“**Initial Lots**”) during the interim servicing period:

- sewage is being collected via CW’s pressure sewerage system and discharged to Hunter Water’s sewerage network at a maintenance hole off Wainman Drive.
- the drinking water reticulation network has also been connected to Hunter Water’s drinking water supply via a bulk water meter off Wainman Drive.
- the recycled water reticulation has been constructed in Phase 1 but is being serviced by drinking water.

**Phase 2: Permanent servicing infrastructure**

The treatment infrastructure on Lot 12 DP1158508 is approved under the existing NOL and DA/714/2014. Construction of a Local Water Centre (“**LWC**”) began in **February 2017** including construction of the water recycling facility and boosting and distribution capacity for drinking water. Construction has been staged, with the drinking water storage and booster system constructed and commissioned first. The civil and structural works for the water recycling facility component are substantially complete and the mechanical and electrical fitout to provide biological capacity of 500kL/day to service the first 1,250 residential lots or equivalent will commence in **January 2019** and is expected to be commissioned, verified and approved for commercial operation by **30 September 2019**. The balance of fit-out works to expand this to 1,000kL/day will proceed in line with the rate of lot sales, likely around **2023**.

As with most residential subdivisions, construction of the network reticulation infrastructure (drinking water, recycled water and sewerage systems) is being undertaken by the Developer in a sequence that is staged to meet the rate of lot sales demand. The reticulation infrastructure is being dedicated to CW following satisfaction of CW’s compliance requirements including quality assurance inspections.

**Operation and Maintenance**

Approval to bring new infrastructure into commercial operation is being sought on a phased basis in association with the infrastructure staging as described above.

**Phase 1:** The Minister’s approval to bring new drinking water, sewerage and recycled water network infrastructure into commercial operation was granted on **14 April 2016**.

**Phase 2:** Commencement of operation of Phase 2 is scheduled for **September 2019**.

Following dedication of the reticulation infrastructure, CW is responsible for ownership, operation and maintenance of the reticulation infrastructure and this forms part of this licence application.

**RELEVANT APPENDICES**

- Appendix 3.2.5(a) North Cooranbong Development Location
- Appendix 3.2.5(b) North Cooranbong Development
- Appendix 3.2.5(c) Existing NOL 15\_033
- Appendix 3.2.5(d) Map of proposed NOL area
- Appendix 3.2.5(e) Approval for commercial operation

### 3.3 Insurance Details

3.3.1 What types of insurance do you have or intend to obtain particularly in relation to the activities for which you are seeking a licence? Provide details of the level (i.e. amount) of insurance you are covered or intend to be covered by for each type. Include a summary of itemised inclusions and exclusions for each type of insurance you hold. **Attach copies of all relevant insurance certificates in Appendix 3.3.1.**

Types of insurance may include but are not limited to professional indemnity insurance, public liability insurance, workers' compensation and product liability insurance.

*Your response to this question will be used to ascertain whether the applicant corporation has made appropriate arrangements with respect to insurance (Act s10(4)).*

CW's insurance is summarised by type, provider and coverage amount below.

Type	Amount
Workers Compensation	Full amount of the employer's liability under the <i>Workers Compensation Act 1987</i>
Public & Products Liability	\$50,000,000
Professional Indemnity	\$20,000,000
•	
•	
•	
•	

3.3.2 Explain why the level of cover provided or proposed by your insurer is sufficient for the size and nature of your proposed activities

For existing (brownfield) schemes, you must provide us with a report from an independent insurance broker which holds an Australian financial services licence under Part 7.6 of the *Corporations Act 2001 (Cth)* for the provision of insurance broking services ("Insurance Expert"), that:

- identifies the key risks of undertaking the activities to be authorised under the licence (if granted)
- sets out the types and levels of insurance obtained by you in relation to the activities being undertaken
- certifies whether, in the Insurance Expert's opinion, the type and level of insurance obtained by you is appropriate for the size and nature of the activities to be authorised under the licence
- provides reasons as to why the types and levels of insurance are appropriate for the size and nature of the activities being undertaken, and
- if any risks arising from undertaking the activities remain uninsured, provides reasons as to why.

*Your response to this question will be used to ascertain whether the applicant corporation has made appropriate arrangements with respect to insurance (Act s.10(4)).*

The Protectors Insurance Brokers Pty Ltd has reviewed all insurances required by the Flow Systems group of utilities in connection with its business and has arranged the above insurance cover to match the business requirements. Flow Systems reviews its insurances annually with The Protectors Insurance Brokers Pty Ltd to ensure that its insurance arrangements are adequate for its requirements.

Also, a comprehensive whole-of-business and project-specific insurance risk assessment for the Scheme was conducted in April 2016 prior to the Minister's approval for commercial operation for CW to operate the scheme.

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### 3.4 Third parties undertaking activities

3.4.1 If you intend on using third parties to undertake any **significant** activities for which you are seeking a licence (eg, construction of the reticulation network, management of the billing system) please provide their details below. If there are multiple third parties please provide the details for each party as well as an explanation of the activities it will be undertaking.

Third parties undertaking minor sub-contracting works on behalf of the applicant corporation such as electrical or plumbing contractors do not need to be named in the application. If you are unsure of whether the works are significant or otherwise please include the details or contact IPART.

*Your response to this question will be used to determine whether any other persons should be specified on the licence (Act s.6(1)(a)), if a licence is granted. Where applicable, information from those third parties named may also be used to assess the applicant corporation's technical, organisational and financial capacity to undertake the activities for which it is seeking a licence.*

#### CORPORATION 1:

CORPORATION NAME

#### Flow Systems Pty Ltd (Flow)

ABN/ARBN

CAN

28 136 272 298

136 272 298

CORPORATION'S REGISTERED OFFICE

ADDRESS

Level 40, 259 George Street, Sydney

STATE

POST CODE

NSW

2000

3.4.2 Please provide a detailed description of the activities that the third party, named above, will undertake on the applicant corporation's behalf.

Flow is the parent company of CW, which in turn is a special-purpose wholly-owned subsidiary, established specifically for delivery and operation of the Cooranbong utility scheme.

Full business support (including all technical, financial, administrative and retail services) is provided by Flow.

3.4.3 Please provide details of the contractual arrangements the applicant corporation has in place with the third party, named above, to ensure the third party undertakes the activities in accordance with the licence (if granted).

Commercial in confidence

#### CORPORATION 2:

CORPORATION NAME

#### Avondale Greens Developments Pty Ltd (Developer)

ABN/ARBN

CAN

27 106 910 598

106 910 598

CORPORATION'S REGISTERED OFFICE

ADDRESS	
STATE	POST CODE
3.4.2	Please provide a detailed description of the activities that the third party, named above, will undertake on the applicant corporation's behalf.
<p>Flow has been appointed by Avondale Greens Developments Pty Ltd, the special purpose delivery vehicle of Johnson Property Group Pty Ltd (together, the "<b>Developer</b>") to establish a local water utility (CW) to deliver and operate the Scheme. Amongst other things, the Developer will provide the sewerage, drinking water and recycled water reticulation infrastructure in the Scheme. The Developer will also be providing land and access to all other areas within the North Cooranbong Development for the purposes of CW delivering the Scheme.</p>	
3.4.3	Please provide details of the contractual arrangements the applicant corporation has in place with the third party, named above, to ensure the third party undertakes the activities in accordance with the licence (if granted).
<p>Commercial in confidence</p> <ul style="list-style-type: none"> <li>•</li> </ul>	

### 3.5 Other regulatory approvals

- 3.5.1 Please list any other regulatory approvals that have been obtained (or are being sought) for any of the activities for which the applicant corporation is seeking a licence. Include any regulatory approvals also related to the activities or the project. Such approvals may include development consents for a housing development under the *Environmental Planning and Assessment Act 1979*, section 68 approval under the *Local Government Act 1993*, an Environment Protection Licence under the *Protection of the Environment Operations Act 1997*. **Provide a copy of any other regulatory approvals and/or licences in Appendix 3.5.1.**

*Your response to this question will be used to determine whether IPART needs to co-ordinate this approvals process with other regulatory authorities. Information required in other approval processes may also be requested and used by us in determining this licence application.*

#### Development Approvals

The Developer obtained concept plan approval on 15 December 2008 (Major Project No. 07\_0147) from the Minister for Planning pursuant to s75O and s75P of Part 3A of the *Environmental Planning and Assessment Act 1979* ('EPAA') in relation to the North Cooranbong Development.

As part of that application process, an environmental assessment dated June 2008 was prepared to address environmental considerations in relation to the development including the reticulation infrastructure within the North Cooranbong Development area.

Development approvals for the Cooranbong LWC (DA/714/2014), Precinct 1 and Precinct 2 (DA/307/2015) have been previously considered as part of CW's existing NOL and therefore are not repeated here.

This NOL variation application (NOLV2) seeks consideration of the following environmental impact assessments in the expansion of the licensed area of operations for NOL 15\_033:

ID	Area	EIA
A	Twine	DA/1574/2012 Development consent and associated SEE
B	Medium density	DA/1725/2017 Development consent and associated SEE
C	Precinct 3	DA/1833/2015 Development consent and associated SEE
D	Precinct North A	DA/1834/2015 Development consent and associated SEE
E	Proposed school lot	N/A Single customer of the development – property connection point is at the boundary
F	Avondale School	N/A Single customer of the development – property connection point is at the boundary
G	Re-alignment of cadastral boundaries and 590-lot DA	DA/1272/2017 Development consent DA/2234/2017 Development application and associated SEE
H	Avondale College Extension	Review of Environmental Factors (REF)
I	Lots adjacent to the delivery pipeline	N/A – referenced in the REF in H above
J	Mears and Dabson	DA/2233/2017 Development consent and associated SEE for Stage 1 DA/74/2018 Development consent and associated SEE for Stage 2

The Statements of Environmental Effects (SEE) associated with each development consent consistently and explicitly refer to the environmental impact assessment including the utility services. The specific references are summarised in the “CW NOLV2 EIA Summary” in the appendices to this NOLV2 application.

Also, due to cadastral lot boundary changes as a result of development consent DA/1272/2017 and prior subdivisions, the lot references within the development consents do not match current lot folio identifiers. Extracts of the maps from each development consent are provided in the appendices. This is provided by CW to be viewed along with a Google Earth file provided electronically and the NSW Government’s free “NSW Globe” Google Earth database to assist the assessor to cross-check the existing and proposed NOL areas.

The most recent development consent is provided for each development application along with their associated SEEs. Full documentation and associated correspondence for each development application is available on LMCC’s Application Tracking website (<http://apptracking.lakemac.com.au/modules/ApplicationMaster/default.aspx>) using the development application number.

#### RELEVANT APPENDICES

- Appendix 3.2.5(d) Map of proposed NOL area
- Appendix 3.5.1(a) CW NOLV2 EIA summary
- Appendix 3.5.1(b) Maps extracted from relevant environmental impact assessments
- Appendix 3.5.1(c) DA/1574/2012 Twine consent and SEE (ID A)
- Appendix 3.5.1(d) DA/1725/2017 Medium density consent and SEE (ID B)
- Appendix 3.5.1(e) DA/1833/2015 Precinct 3 consent and SEE (ID C)
- Appendix 3.5.1(f) DA/1834/2015 Precinct North A and SEE (ID D)
- Appendix 3.5.1(g) Avondale School In-principle Support (ID F)
- Appendix 3.5.1(h) DA/1272/2017 Boundary re-alignment consent and associated application (ID G)
- Appendix 3.5.1(i) DA/2234/2017 590-lot subdivision DA and SEE (ID G)
- Appendix 3.5.1(j) REF for the Extension of NOL15\_033 to Avondale College (ID H)
- Appendix 3.5.1(k) Avondale College In-principle Support (ID H)
- Appendix 3.5.1(l) DA/2233/2017 Mears Stage 1 consent and SEE (ID J – Stage 1)
- Appendix 3.5.1(m) DA/74/2018 Mears Stage 2 consent and SEE (ID J – Stage 2)

### 3.6 Monopoly supply

- |       |  |
|-------|--|
| 3.6.1 | <p>In your opinion, will the supply of water and/ or sewage services to customers be a monopoly service? If yes, please specify whether the monopoly service is in relation to:</p> <ul style="list-style-type: none"> <li>▼ a specified water supply or sewerage service</li> <li>▼ a specified area, and</li> <li>▼ a specified class of customers.</li> </ul> |
|-------|--|

*Your response to this question will be used to determine whether the Minister should consider declaring the licensee a monopoly supplier in accordance with section 51 of the WICA.*

No. The supply of drinking water, recycled water and sewerage services by CW is not a monopoly service. The licence area proposed by CW is already served by Hunter Water for drinking water and sewerage. All customer classes have the ability to choose who will provide their drinking water and sewerage services.



### 3.7 Licensing principles

3.7.1	<p>How does your proposed activity address the following principles (if applicable):</p> <ul style="list-style-type: none"> <li>▼ The protection of public health, the environment, public safety and consumers generally</li> <li>▼ The encouragement of competition in the supply of water and the provision of sewerage services</li> <li>▼ The ensuring of sustainability of water resources</li> <li>▼ The promotion of production and use of recycled water</li> <li>▼ The promotion of policies set out in any prescribed water policy document</li> <li>▼ The potential for adverse financial implications for small retail customers generally arising from the activities proposed to be covered by the licence, and</li> <li>▼ The promotion of the equitable sharing among participants in the drinking water market of the costs of water industry infrastructure that significantly contributes to water security?</li> </ul>
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*Your response to this question will be used in consideration of the licensing principles, in accordance with section 7 of the WICA*

#### **The protection of public health, the environment, public safety and consumers**

Public health, the environment, public safety and consumers will be protected through the following:

- CW will ensure that its infrastructure operations and maintenance arrangements are structured where relevant so that public health, the environment, public safety and consumers are protected (including incident/emergency response plans, business continuity and disaster recovery plans). Flow has already proven its expertise in delivering drinking water, recycled water and sewage management plans in full compliance with relevant laws and regulations, as confirmed by IPART audit, in relation to various other private water utility schemes operated by the Flow Systems group (i.e., Pitt Town, Central Park, Discovery Point, Huntlee, Box Hill, Green Square, Shepherds Bay and the early part of Cooranbong)
- CW will ensure that all infrastructure is constructed in accordance with all relevant laws, regulations and standards (e.g. Water Supply Code of Australia)
- CW will only supply recycled water that is treated in full compliance with all relevant Australian standards and guidelines
- Signage will be posted advising of the use of recycled water in public open space areas in accordance with the relevant guidelines and industry best practice
- The appropriate disclosure to and education of end user customers regarding the use of recycled water

#### **The encouragement of competition**

Currently each incumbent public water utility provider has a monopoly in its respective catchment areas on water services in NSW. The licence will enable the private sector to compete in the provision of requisite infrastructure and delivery of resulting services to owners of properties within the Scheme area.

Hence, competition is promoted within the incumbent's area of operation.

#### **The sustainability of water resources**

The licensed activities will reduce unnecessary usage of drinking water for non-potable uses (e.g. toilet flushing, clothes washing machines, car washing, irrigation of lawns and gardens) by providing a reliable and sustainable and abundant supply of non-potable water. Further, traditional gravity sewerage systems and centralised sewage treatment systems would otherwise contribute to diffuse source pollution of local waterways through sewage pump station overflows and sewage treatment plant discharge and/or bypass whereas Flow's pressure sewer system and local treatment system does not.

#### **The promotion of production and use of recycled water**

The licence will enable CW to provide sustainable recycled water within the Scheme area. This will facilitate delivery of Government policy and further cements recycled water as an integral part of the water cycle.

#### **The promotion of policies set out in any prescribed water policy document**

Flow's communication program includes comprehensive information online. Not only does the company use this avenue to report on the progress of its licensed operations but it makes the case for the use of recycled water and sustainable water solutions. Our promotion of sustainable water solutions includes marketing and communication activities as well as community education, where appropriate. The company participates in public debate and government consultation about the development of water policies, including where it results in policy documents. Additionally, it contributes its skill and expertise in the water industry to further develop options and possibilities for improvement and further development of sustainable water policies being developed by government.

#### **The potential for adverse financial implications for small retail customers generally arising from the activities proposed to be covered by the licence**

As Flow has a price parity policy with the local incumbent water authority there is no potential for adverse financial implications for small retail customers.

That means water and wastewater charges are in line with the local water authority. Customers benefit because our recycled water is cheaper than the incumbent's drinking water price.

Because of this policy, changes to the incumbent's water and wastewater charges impact on Flow fees and charges and prices are reviewed annually and matched to the incumbent. The only pricing that is varied from the incumbent are the one off charges such as administration fees or connection fees where our business model differs.

Flow also matches the incumbent water authority's concessions and medical dependency rebates even though Flow has no access to government rebates for these social programs. In this way, no customers are disadvantaged by being part of our communities.

#### **The promotion of the equitable sharing among participants in the drinking water market of the costs of water industry infrastructure that significantly contributes to water security.**

As recycled water is provided at a reduced rate to participants/ customers for end uses such as toilet flushing, clothes washing, and irrigation, this results in a reduction of drinking water of up to 70%. These savings will significantly contribute to water security in the region, and allows currently available drinking water stocks to be utilised by a greater number of participants.

## 4 Network Operator

You need to complete the following section of this form if the applicant corporation is seeking a network operator's licence. Please note the sections are divided into the types of infrastructure as follows:

- ▼ 4.1 Water infrastructure - drinking water
- ▼ 4.2 Water infrastructure – non potable water (including recycled water and stormwater reuse)
- ▼ 4.3 Sewerage infrastructure.

Please complete only those sections that relate to your response in question 3.2.1 above.

PUBLIC

## 4.1 Water infrastructure – drinking water

Only provide a response to the questions in the following section if the applicant corporation is seeking a licence for the construction, maintenance and operation of water infrastructure for the supply of drinking water.

4.1.1	Describe the proposed drinking water infrastructure from the source of the drinking water through to the end use (i.e. catchment to tap). Please include in your description all of the infrastructure for which the applicant corporation is seeking a licence. This will include any infrastructure that is to be used for the production, treatment, filtration, storage, conveyance or reticulation of the drinking water. Please list all sources and end uses in the description. Identify the infrastructure for which the applicant corporation is seeking a licence. <b>Provide a detailed process flow diagram of the proposed infrastructure from source to end use in Appendix 4.1.1.</b>
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You must attach a process flow diagram in response to this question. The process flow diagram should only include the drinking water infrastructure where the scheme includes more than one type of infrastructure and must cover the process from source to end use. You may also include a piping and instrumentation diagram for additional information.

*The response to this question will be used to draft a proposed licence. The licence will specify the type of water industry infrastructure, if a licence is granted (Act s.6(1)(a)). The response will also be used to ensure you have applied for the correct licence(s) and as a context for our assessment of the applicant corporation's technical, organisational and financial capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).*

Under existing NOL 15\_033, CW is sourcing drinking water from Hunter Water's drinking water system via a bulk water meter located off Wainman Drive, at the boundary of the Scheme. CW's retail supplier under retail supplier's licence 13\_001R, Flow Systems Pty Ltd, has a commercial agreement known as a Utility Services Agreement (USA) with Hunter Water for this drinking water supply. This USA satisfies condition B10 of NOL 15\_033 for the parties to maintain a Code of Conduct. It also outlines the infrastructure requirements of both Hunter Water and CW.

Downstream of the bulk water meter, drinking water is conveyed to the community via a drinking water storage and boosting system located on the Cooranbong LWC site.

This NOLV2 application seeks expansion of the drinking water reticulation network to the balance of the Development including a high-level storage within Precinct 3.

### RELEVANT APPENDICES

- Appendix 4.1.1(a) Process Flow Diagram (Drinking Water)
- Appendix 4.1.1(c) Water Servicing Strategy
- Appendix 4.1.1(d) Drinking Water Reticulation Masterplan
- Appendix 4.1.1(e) Drinking Water Infrastructure Responsibility Schematics

4.1.2	Describe whether the infrastructure is existing infrastructure or is to be constructed. If the infrastructure is existing, please describe its current condition and operability. If the infrastructure is a mixture of existing and to be constructed <b>identify the infrastructure as existing or to be constructed on the process flow diagram in Appendix 4.1.1.</b>
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*The response to this question will be used as a context for the assessment of environmental risks from the proposed scheme (Act s.10(4)(e), Reg cl.7).*

Drinking water infrastructure has been constructed within the existing NOL area and is to be expanded throughout the Development area.

4.1.3	Describe the <u>location</u> of the proposed infrastructure. For example include:
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<ul style="list-style-type: none"> <li>▼ the identification of specific lot descriptors (e.g. lot and DP numbers) for the production, treatment, filtration and/or storage infrastructure.</li> <li>▼ the location of infrastructure for the conveyance and/or reticulation of drinking water by street name, local government area or other description as appropriate to the size of the scheme.</li> </ul> <p><b>Provide a map showing the location of the proposed infrastructure from source to end use in Appendix 4.1.3.</b></p>																																																																													
<p>The map may include all water industry infrastructure (i.e., drinking water, non-potable water and/or sewerage) where the scheme includes more than one type of infrastructure.</p>																																																																													
<p><i>The response to this question is a requirement for any network operator's licence (Reg cl.6(1)(a)). The response to this question will be used to specify the authorised area of operations (Act s.11(1)), if a licence is granted. The response will also be used as a context for the assessment of environmental risks from the proposed scheme (Act s.10(4)(e), Reg cl.7).</i></p>																																																																													
<p>The drinking water infrastructure described in section 4.1.1 above is and is to be contained within the Scheme area as shown in the Drinking Water Reticulation Masterplan.</p> <p>Drinking water storage and distribution pumps approved under the existing NOL are located on the Cooranbong LWC site on Lot 12 DP 1158508.</p> <p>The cadastral lot boundaries within the Development area have changed several times since CW's original NOL application and the granted and varied NOL. This will require the updating of some lot and DP references in the NOL within the existing area to reflect their new folio identifiers.</p> <p>This variation application also seeks expansion of the existing NOL area to a revised NOL area.</p> <p>The following is a summary of the proposed changes to the NOL area but note that due to significant lot boundary adjustments the existing NOL lots and their folio identifiers don't directly align with the revised NOL lots and their folio identifiers.</p> <table border="1"> <thead> <tr> <th colspan="2">Existing NOL</th> <th colspan="2">Revised NOL</th> <th rowspan="2">ID</th> </tr> <tr> <th>Lot</th> <th>DP</th> <th>Lot</th> <th>DP</th> </tr> </thead> <tbody> <tr> <td>553-580</td> <td>1202854</td> <td>501-520</td> <td>1202854</td> <td rowspan="4">Precinct 1</td> </tr> <tr> <td>601-621</td> <td>1202855</td> <td>601-621</td> <td>1202855</td> </tr> <tr> <td>701-741</td> <td>1204699</td> <td>701-741</td> <td>1204699</td> </tr> <tr> <td></td> <td></td> <td>223</td> <td>1179214</td> </tr> <tr> <td>11</td> <td>129156</td> <td>846</td> <td>1215384</td> <td rowspan="8">Precinct 2</td> </tr> <tr> <td>6-9</td> <td>7352</td> <td>847</td> <td>1215384</td> </tr> <tr> <td>742</td> <td>1204699</td> <td>801-844</td> <td>1215384</td> </tr> <tr> <td></td> <td></td> <td>901-928</td> <td>1215385</td> </tr> <tr> <td></td> <td></td> <td>929-950</td> <td>1229185</td> </tr> <tr> <td></td> <td></td> <td>1001-1024</td> <td>1222346</td> </tr> <tr> <td></td> <td></td> <td>1201-1250</td> <td>1242682</td> </tr> <tr> <td></td> <td></td> <td>1200*</td> <td>1242682</td> </tr> <tr> <td>12</td> <td>1158508</td> <td>12</td> <td>1158508</td> <td>LWC/Thomson</td> </tr> <tr> <td>212</td> <td>1037011</td> <td>212*</td> <td>1037011</td> <td rowspan="3">A - Twine</td> </tr> <tr> <td></td> <td></td> <td>1</td> <td>348173</td> </tr> <tr> <td></td> <td></td> <td>11</td> <td>1158508</td> </tr> </tbody> </table>	Existing NOL		Revised NOL		ID	Lot	DP	Lot	DP	553-580	1202854	501-520	1202854	Precinct 1	601-621	1202855	601-621	1202855	701-741	1204699	701-741	1204699			223	1179214	11	129156	846	1215384	Precinct 2	6-9	7352	847	1215384	742	1204699	801-844	1215384			901-928	1215385			929-950	1229185			1001-1024	1222346			1201-1250	1242682			1200*	1242682	12	1158508	12	1158508	LWC/Thomson	212	1037011	212*	1037011	A - Twine			1	348173			11	1158508
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7/6	3533	83	1237780	B - Medium density
743	1204699	84	1237780	
		80	1237780	E - Proposed school lot
8/6	3533	3, 6, 7	1222727	C – Precinct 3
		219	755218	D – Precinct North A
		22	1165277	F – Avondale School
		1	1206864	
		13	129157	
		744	1204699	
3	1206864	3	1206864	
		81-82	1237780	G – Re-alignment of NOL area with cadastral boundaries and 590-lot subdivision
		5	1222727	
		1	182756	J – Mears/Dabson
		2	825266	

\*Note that lots marked with an asterisk (and possibly others) are likely to be further subdivided before any NOL variation may be granted.

#### RELEVANT APPENDICES

- Appendix 3.2.5(d) Map of proposed NOL area
- Appendix 4.1.1(d) Drinking Water Reticulation Masterplan

4.1.4 Describe any interconnections between the proposed drinking water infrastructure and other infrastructure not part of this scheme (e.g., interconnections with other licensed network operators or public utilities). Identify in your description who is responsible for the construction, operation and maintenance of which infrastructure. **Identify all interconnections with other infrastructure on the process flow diagram in Appendix 4.1.1 and the map in Appendix 4.1.3.**

*The response to this question will be used to ensure the correct area of operation is specified in the licence, if a licence is granted (Act s.11(1)). The response will also be used as a context for the assessment of risks from the proposed scheme and to identify possible additional licence conditions relating to the inter-connected systems and responsibilities for risks.*

All drinking water is being and will be sourced from Hunter Water's existing drinking water system.

All of the Scheme's drinking water infrastructure ultimately connects to Hunter Water infrastructure at or within the boundary of the Scheme area.

There is an existing, licensed connection point (bulk water meter) within the existing NOL area, located off Wainman Drive and it is proposed to construct a second connection point (bulk water meter) within the existing NOL area on Lot 212 DP 1037011. That proposed Hunter Water main feeding the second bulk water meter would connect to the existing 250mm diameter main in Freemans Drive.

A commercial agreement known as the USA between Hunter Water and CW's retailer, Flow, clearly outlines the parties' respective responsibilities.

The water servicing strategy identifies that a section of main will need to be laid in or near Newport Road as part of Hunter Water's network to remove a restriction in the supply network. The USA documents that this upgrade will need to be conducted by Hunter Water as a part of its network and responsibilities and therefore does not form part of this licence application.

CW is responsible for the construction, operation and maintenance of the drinking water infrastructure downstream of the Hunter Water connection points to the customer connection points including throughout the expanded NOL area requested.

#### RELEVANT APPENDICES

- Appendix 4.1.1(a) Process Flow Diagram (Drinking Water)
- Appendix 4.1.1(c) Water Servicing Strategy
- Appendix 4.1.1(d) Drinking Water Reticulation Masterplan

4.1.5	Where applicable, describe the connection point to customers or end users (e.g. the customer connection point may be a water meter). Identify in your description who is responsible for the construction, operation and maintenance of which infrastructure. <b>Identify all customer and/or end user connections on the process flow diagram in Appendix 4.1.1 and the map in Appendix 4.1.3.</b>
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*The response to this question will be used to ensure the correct area of operation is specified in the licence, if a licence is granted (Act s.11(1)). The response will also be used as a context for the assessment of risks from the proposed scheme.*

The detailed design and construction of the drinking water infrastructure up to, but not including, the drinking water meter inside each customer's property will be undertaken by the Developer, however CW will establish the masterplan and design standards, and carry out detailed design review and inspection and testing of the constructed infrastructure prior to its dedication to CW.

Each lot owners' builder will install the drinking water sub-meter issued by Flow to facilitate the building process and local connection of water services.

Following dedication of the constructed infrastructure, CW is responsible for the operation and maintenance of all drinking water infrastructure up to and including the drinking water meter inside each customer's property.

Each individual customer will be responsible for the construction, operation and maintenance of the drinking water infrastructure (plumbing) downstream of the drinking water meter.

NSW Fair Trading is responsible for inspection and review of the customer's drinking water infrastructure. CW will liaise with NSW Fair Trading (or its delegate) to ensure that compliance has been achieved in accordance with the Plumbing Regulations.

#### RELEVANT APPENDICES

- Appendix 4.1.1(a) Process Flow Diagram (Drinking Water)
- Appendix 4.1.1(d) Drinking Water Reticulation Masterplan
- Appendix 4.1.1(e) Drinking Water Infrastructure Responsibility Schematics

4.1.6	What volume of water is available from the proposed source? Where applicable, please provide the capacity of the source and the (allowable) average daily extraction rate from the source. If there is more than one source, please provide the requested information for each of the sources. <b>Where relevant, provide a copy of any agreements and/or licences to access the source water in Appendix 4.1.6.</b>
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<p><i>The response will also be used as a context for the assessment of the technical, organisational and financial capacity of the applicant corporation (Act s.10(4)(a)).</i></p>	
<p>Drinking water is being and will continue to be sourced from Hunter Water.</p> <p>CW and Hunter Water will continue to work together to determine the short and long term infrastructure requirements to service the Scheme area.</p> <p>To service the drinking water needs of the Scheme, Hunter Water and CW/Flow have agreed through the USA and approved Water Servicing Strategy that up to 37L/s can be drawn from Hunter Water's supply network over a 7-hour period from 11.30pm to 6.30am each night (total 932kL/day) and stored in the storage tanks at the LWC site. From there it will be distributed throughout the Scheme area to meet demand including diurnal peaks. The storage in the system and off-peak extraction of drinking water from Hunter Water's network will buffer peak demands, minimise energy costs, provide security of supply and minimise capital expenditure upstream in Hunter Water's network.</p> <p><b>RELEVANT APPENDICES</b></p> <ul style="list-style-type: none"> <li>• Appendix 4.1.1(c) Water Servicing Strategy</li> <li>• Appendix 4.1.6(a) Cooranbong Scheme Water Balance Summary Report</li> </ul>	
4.1.7	<p>What volume of water will be treated by the scheme? Please provide the average and peak daily flow rates <u>treated by</u> the scheme.</p>
<p><i>This information will be used to determine the fee category for the scheme, if a licence is granted. The response to this question may be used to draft a proposed licence, if a licence is granted.</i></p>	
<p>Treated drinking water is being and will continue to be sourced from Hunter Water.</p> <p>The drinking water storage and boosting system located on the Cooranbong LWC site comprises a hypochlorite dosing system for dosing when necessary to retain a free-chlorine residual.</p> <p>This system formed part of the original NOL and is approved for commercial operation.</p>	
4.1.8	<p>What volume of drinking water will be produced by the scheme? Please provide the average and peak daily volume supplied to end users or retail suppliers.</p>
<p><i>This information will be used to assess the retail supplier's obligation not to over commit, if a licence is granted. The response to this question may be used to draft a proposed licence, if a licence is granted.</i></p>	
<p>Treated drinking water is being and will continue to be sourced from Hunter Water.</p> <p>Together with Hunter Water, CW has determined a drinking water servicing strategy that provides a sufficient volume to supply the Scheme.</p> <p>The water servicing strategy shows that the ultimate average volume of drinking water supplied to end users for the Scheme is to be 677 kL/d (7.84L/s x 3600s/hr x 24hr) and up to 31.62 L/s peak hour demand given supply of recycled water for non-potable uses. The Cooranbong Scheme Water Balance Report shows that the peak day demand for drinking water will ultimately be 829kL/day but as stated in section 4.1.6, up to 932kL/day is available from the Hunter Water source.</p> <p><b>RELEVANT APPENDICES</b></p> <ul style="list-style-type: none"> <li>• Appendix 4.1.1(c) Water Servicing Strategy</li> </ul>	



4.1.9	<p><b>Provide your preliminary risk assessment for the scheme from source to end use in Appendix 4.1.9.</b> It is important that your preliminary risk assessment accurately identifies any hazards present in the source water or likely to result from the proposed treatment process. The risk assessment will also address the intended, inadvertent and unauthorised end uses (and therefore routes of exposure) to the water. The preliminary risk assessment will identify any reasonably foreseeable risk event with the potential to expose people or the environment to hazards. The preliminary risk assessment will outline the broad mitigation measures where the risk of exposure to a hazard is unacceptable to human health or the environment in order to reduce the risk of exposure.</p> <p>The risk assessment must also identify the events and circumstances that could adversely affect the applicant corporation's ability to carry out the activities for which the licence is sought (including any activities undertaken by a nominated third party), the probability of the occurrence of any such event or circumstance and the measures to be taken by the applicant corporation to prevent or minimise the likelihood of any such event or circumstance.</p>
<p>The preliminary risk assessment should demonstrate the application of a consistent methodology for identifying hazards and assessing potential impacts and risks to health and the environment. We strongly recommend that the applicant corporation utilises an established risk management system, such as outlined in AS/NZS ISO 31000:2009 (Risk management – Principles and guidelines), which is consistent with the approach outlined in the Australian Drinking Water Guidelines (element 2).</p>	
<p><i>The response to this question is a requirement for any network operator's licence for water infrastructure (Reg cl.6(1)(b) and cl.6(1)(c)(ii)). The response to this question will be used to determine whether there are any issues of public interest arising from the proposed scheme (Act s.10(4)(f)). The response to this question will also be used to draft a proposed licence. The licence will specify the purpose for which the infrastructure can be used, if a licence is granted (Act s.6(1)(a)). The response will also be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i></p>	
<p>The preparation of the preliminary risk assessment was undertaken in accordance with the Australian Drinking Water Guidelines.</p> <p><b>RELEVANT APPENDICES</b></p> <ul style="list-style-type: none"> <li>Appendix 4.1.9(a) Cooranbong Scheme Risk Register Summary</li> </ul>	
4.1.10	<p>Describe how the 12 elements of the framework for the management of drinking water quality, as detailed in the Australian Drinking Water Guidelines (ADWG), have been addressed and will be implemented and maintained. <b>Provide evidence of the applicant corporation's capacity to implement the 12 elements of the framework in the ADWG in Appendix 4.1.10.</b></p>
<p>The evidence should be in the form of management plans for either the proposed scheme or other similar schemes undertaken by the applicant corporation, or in a comprehensive statement detailing the process by which the management plan will be developed. For existing (brownfield) schemes you should provide the actual water quality plan for the site.</p>	
<p><i>The response to this question is a requirement for any network operator licence for water infrastructure (Reg cl.6(1)(d)(i)). The response will also be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i></p>	
<p>The majority of the 12 elements of the framework for the management of drinking water quality will be covered by Hunter Water as the producer and bulk supplier of drinking water. CW will further address each of the 12 elements with adoption of the Flow Systems Drinking Water Quality Plan.</p> <p>It is important to note that the 12 elements for the management of drinking water are analogous to the 12 elements of the framework for recycled water. Flow and its various subsidiaries (e.g. Pitt Town Water, Central Park Water, Discovery Point Water, Huntlee Water, Green Square Water, Cooranbong Water and Flow Systems Operations) have demonstrated previously that they have the capacity to implement and maintain the 12 element approach.</p>	

<p>Flow's capacity to develop and implement a Water Quality Plan is evidenced by independent audits conducted at Pitt Town (recycled water only), Central Park, Discovery Point, Huntlee and Cooranbong (drinking water and recycled water).</p> <p><b>RELEVANT APPENDICES</b></p> <ul style="list-style-type: none"> <li>Appendix 4.1.10(a) Flow Systems Drinking Water Quality Plan Table of Contents</li> <li>Appendix 4.1.10(b) Cooranbong Scheme Management Plan Table of Contents</li> </ul>	
4.1.11	<p>How will the continuity of supply of the drinking water be ensured? What contingency plans are in place in the case of failure of the infrastructure? What alternative supplies of drinking water will be used when the infrastructure is inoperable?</p> <p><i>The response to this question is a requirement for any network operator's licence for water infrastructure (Reg cl.6(1)(c)). The response to this question will be used to determine whether there are any issues of public interest arising from the proposed scheme (Act s.10(4)(f)). The response will also be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i></p> <p>Continuity of drinking water supply will be achieved through:</p> <ul style="list-style-type: none"> <li>CW's retailer, Flow, has a commercial agreement (known as the USA) with Hunter Water which details volume, pressure and reliability.</li> <li>Reticulation is designed in loops where possible to enable redundancy in the supply of drinking water for most premises</li> <li>Significant redundancy is provided by the local drinking water storage and boosting system</li> <li>Drinking water distribution pumps have been installed in a duty/standby arrangement and supported by an on-site back up power generator.</li> </ul> <p>Flow has developed detailed contingency plans in the event of infrastructure failure. These contingency plans are a component of Flow's Infrastructure Operating Plan and include:</p> <ul style="list-style-type: none"> <li>Minimisation of drinking water demand through customer notifications</li> <li>Rapid response to infrastructure failure</li> <li>Trucking of drinking water into the drinking water storage tanks to maintain supply</li> </ul> <p><b>RELEVANT APPENDICES</b></p> <ul style="list-style-type: none"> <li>Appendix 4.1.11(a) Flow Systems Infrastructure Operating Plan Table of Contents</li> </ul>
4.1.12	<p>Describe the systems and processes that the applicant corporation will have in place to manage the water infrastructure. <b>Provide evidence of the applicant corporation's capacity to develop and implement an infrastructure operating plan in Appendix 4.1.12(a).</b></p> <p>The evidence may include examples of processes and procedures for either the proposed scheme or other similar schemes undertaken by the applicant corporation. The processes and/or procedures should demonstrate good operational practice including life cycle planning, system redundancy, contingency planning, condition monitoring, management maintenance processes and processes of supporting skills needs. The examples should demonstrate links to a risk management process. For existing (brownfield) schemes you should provide the actual water quality plan for the site.</p> <p><i>The response to this question is a requirement for any network operator's licence for water infrastructure (Reg cl.6(1)(c)). The response will be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i></p> <p>CW has adopted the Flow Systems Infrastructure Operating Plan for all services, which follows a risk based approach to operating infrastructure, including system redundancy, contingency planning, operational asset management and maintenance.</p> <p>A similar approach has been implemented on existing Flow schemes at Pitt Town (recycled water only), Central Park, Discovery Point, Huntlee and Cooranbong, which have been reviewed through the operational audit process.</p>

#### RELEVANT APPENDICES

- Appendix 4.1.10(a) Flow Systems Drinking Water Quality Plan Table of Contents
- Appendix 4.1.10(b) Cooranbong Scheme Management Plan Table of Contents
- Appendix 4.1.11(a) Flow Systems Infrastructure Operating Plan Table of Contents

4.1.13	Describe the studies that have been completed to investigate any environmental impacts (including but not limited to water quality, quantity, air, odour, noise, sea level rise, biodiversity and Aboriginal cultural heritage) from the construction and operation of the infrastructure? Have the studies identified any significant environmental impacts from the scheme? If so, how are the environmental impacts proposed to be managed? <b>Provide a copy of any environmental study and/or risk assessment in Appendix 4.1.13.</b>
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As a minimum, an application must be accompanied by a statement of environmental effects (SEE) (unless the development is designated development, Part 5 development or a major project, in which case either an environmental impact statement (EIS) or comprehensive environmental assessment is required). The SEE may be prepared by the applicant corporation or by a consultant acting on behalf of the applicant. The SEE must identify the environmental impacts of the proposed scheme, and the steps which will be taken to protect the environment or reduce the harm. Where the study is in the form of a comprehensive environmental assessment or EIS, please include only the executive summary.

*The response to this question will be used to determine whether the activities authorised by a licence (if granted) present a significant risk of harm to the environment (Reg cl.7). The response to this question may be used to draft a proposed licence, if a licence is granted.*

Please refer to section 3.5.1 above with regards to environmental impact assessments relevant to this licence variation (NOLV2) application.

4.1.14	If a treatment process forms part of the infrastructure for which the applicant corporation is seeking a licence, what waste streams will be generated by the proposed treatment plant and how will the waste be disposed of or handled?
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*The response to this question will be used to determine whether the activities authorised by a licence (if granted) present a significant risk of harm to the environment (Reg cl.7). The response will also be used as a context for our assessment of the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).*

Apart from dosing with sodium hypochlorite to ensure a free chlorine residual, CW is not proposing to treat the drinking water which will be bulk supplied to CW by Hunter Water. There is no waste stream from dosing with sodium hypochlorite.

## 4.2 Water infrastructure – non-potable water

Only provide a response to the questions in the following section if the applicant corporation is seeking a licence for the construction, maintenance and operation of water infrastructure for the supply of non-potable water.

4.2.1	<p>Describe the proposed non-potable water infrastructure from the source of the water through to the end use (i.e., catchment to tap). Please include in your description all of the infrastructure for which the applicant corporation is seeking a licence. This will include any infrastructure that is to be used for the production, treatment, filtration, storage, conveyance or reticulation of the non-potable water. Please list all sources and end uses in the description. Identify the infrastructure for which the applicant corporation is seeking a licence. <b>Provide a detailed process flow diagram of the proposed infrastructure from source to end use in Appendix 4.2.1.</b></p>
	<p>You must attach a process flow diagram in response to this question. The process flow diagram should only include the non-potable water infrastructure where the scheme includes more than one type of infrastructure and must cover the process from source to end use. You may also include a piping and instrumentation diagram for additional information.</p>
	<p><i>The response to this question will be used to draft a proposed licence. The licence will specify the type of water industry infrastructure, if a licence is granted (Act s.6(1)(a)). The response will also be used to ensure you have applied for the correct licence(s) and as a context for our assessment of the applicant corporation's technical, organisational and financial capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i></p>
	<p>This NOLV2 application seeks expansion of the recycled water reticulation network to the whole Development (minus the Developed Lots) plus Avondale School, Avondale College Town Common and existing lots located immediately adjacent to the proposed recycled water pipe route.</p> <p>The wastewater treatment and recycled water production infrastructure is already approved as part of the existing NOL 15_033. The following is provided for background and context.</p> <p>The recycled water catchment is the Scheme area. Wastewater collected from predominantly residential households will be delivered into the LWC via a permanent flow balance tank which forms an integral part of the LWC itself. Further, note that the LWC is also designed to draw on drinking water when recycled water demand exceeds the available supply (see section 4.2.6 below).</p> <p>Infrastructure involved, and key steps, in the treatment process are as follows:</p> <p><b>Permanent flow balance tank</b> – Used to buffer incoming supply vs. treatment capacity.</p> <p><b>Inlet screening</b> – Material greater than 2mm will be removed from the raw sewage (already macerated by the on-lot pressure sewer pump) to protect the downstream equipment. Dewatered screenings will be collected and disposed off-site via a licensed waste disposal contractor.</p> <p><b>Membrane Bioreactor</b> – A membrane bioreactor will form the core treatment process for the LWC. The biological reactor will be designed to achieve the required levels of BOD and nutrient reduction. Nitrogen will be removed biologically whereas phosphorus will be precipitated with alum and subsequently form part of the biomass. The membranes will separate the biomass from the treated water and provide the first disinfection barrier. The biomass is sent back to the start of the biological reactor and the treated water is sent onto further disinfection. Excess biomass is periodically wasted from the membrane zone. The bioreactor is configured into distinct zones via baffles to minimise short-circuiting.</p> <p><b>UV Disinfection</b> – UV disinfection provides the second disinfection barrier. Importantly, the low turbidity water (typically ~0.2NTU) produced from membrane filtration is well suited to UV disinfection.</p> <p><b>Chlorination</b> – A chlorine contact time provides the third disinfection barrier. Importantly, the low turbidity water (typically ~0.2NTU) produced from membrane filtration is well suited to chlorine disinfection.</p> <p><b>Chemical storage and dosing</b> – A variety of chemicals including sodium hypochlorite and citric acid will be used for treatment process purposes, disinfection and membrane cleaning.</p> <p><b>WAS Dewatering</b> – The Waste Activated Sludge (WAS) from the membrane zone will be dewatered. The filter cake will be collected and disposed off-site via an approved waste management contractor and delivered for beneficial reuse as a fertiliser.</p>

**Odour scrubbing** – Foul air from the inlet screens and flow balance tank will be collected and processed via an odour scrubbing. The primary treatment process for odour will be biological followed by activated carbon.

**Control System** – The control and operation of the overall scheme is based on a PLC/SCADA system which will be designed to ensure safe and correct functional operation of the LWC and associated ancillary components.

The PLC follows specific steps to automatically control valves, pumps, etc. during the operating states for the scheme and provides automated control of the equipment. All the programming for the control of the scheme is stored in the PLC.

The SCADA system software allows the full and complete interaction between the Scheme operators and the scheme. It supplies all the data from field transmitters and displays the values and statuses by the animation of graphic objects and colours in the required number of graphic pages.

**Recycled water storage** – Used to provide a buffer between production capacity and recycled water demand.

**Recycled water network reticulation infrastructure** – Recycled water will be supplied to end use customers through a pressurised distribution network. A pressure pump set will boost recycled water from the recycled water storage tanks to the distribution network to achieve a minimum pressure of 15 metres static head at each property boundary measured for a continuous 30 minute period during normal system operation.

The **end uses** for recycled water are described in section 4.2.9 below.

#### RELEVANT APPENDICES

- Appendix 4.2.1(a) Recycled Water Reticulation Masterplan
- Appendix 4.2.1(b) Recycled Water Infrastructure Responsibility Schematics

4.2.2	Describe whether the infrastructure is existing infrastructure or is to be constructed. If the infrastructure is existing, please describe its current condition and operability. If the infrastructure is a mixture of existing and to be constructed <b>identify the infrastructure as existing or to be constructed on the process flow diagram in Appendix 4.2.1.</b>
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*The response to this question will be used as a context for the assessment of environmental risks from the proposed scheme (Act s.10(4)(e), Reg cl.7).*

Non-potable water infrastructure has been constructed within the existing NOL area and is to be expanded within the proposed NOL area.

4.2.3	Describe the <u>location</u> of the proposed infrastructure. For example include: <ul style="list-style-type: none"> <li>▼ The identification of specific lot descriptors (e.g., lot and DP numbers) for the production, treatment, filtration and/or storage infrastructure.</li> <li>▼ The location of infrastructure for the conveyance and/or reticulation of non-potable water by street name, local government area or other description as appropriate to the size of the scheme.</li> </ul> <b>Provide a map showing the location of the proposed infrastructure from source to end use in Appendix 4.2.3.</b>
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The map may include all water industry infrastructure (i.e., drinking water, non-potable water and/or sewerage) where the scheme includes more than one type of infrastructure.

*The response to this question is a requirement for any network operator's licence for water infrastructure (Reg cl.6(1)(a)). The response to this question will be used to specify the authorised area of operations (Act s.11(1)), if a licence is granted. The response will also be used as a context for the assessment of environmental risks from the proposed scheme (Act s.10(4)(e), Reg cl.7).*

The recycled water infrastructure described in section 4.2.1 above is contained within the Scheme area as shown in the Recycled Water Reticulation Masterplan plus its extension to service Avondale School, Avondale College, Town Common and the existing lots immediately adjacent to the proposed recycled water pipe route.

Recycled water storage and distribution pumps will be located in a separate area alongside the LWC as part of the existing NOL on Lot 12 DP 1158508.

The cadastral lot boundaries within the Development area have changed several times since CW's original NOL application and the originally granted and varied licence. This will require the updating of some lot and DP references in the NOL within the existing area to reflect their new folio identifiers.

This variation application also seeks expansion of the existing NOL area to a revised NOL area.

The summary of the proposed changes to the NOL area in section 4.1.3 also applies to the non-potable network.

For the non-potable network only, the following additional lots are also to be added to the Scheme area:

Northeast		S. of Freemans		Northwest	
Lot	DP	Lot	DP	B	
1	949585	1-30	1/3533	B	417719
2	949586	2-5	2/3533	910	338440
171-172	566271	9-13	2/3533	122	1055697
181-184	1141376	18-32	2/3533	92	788148
1-2	626662	1-5	3/3533	81	1007441
201	1059478	8	3/3533		551865
1	362702	17-23	3/3533		
1	107903	28-29	3/3533	W. of Dora Creek	
1	176217	12	4/3533	Lot	DP
221-222	597525	1-10	7/3533	2	1198484
1-2	1049393	1-22	3534	33	736908
1, 2, 4	263276	25	3534	1231	561165
200	1145829	19	129134	211-212	859820
SP57931		16-17	129155	22	814293
SP95896		41	755218	1-2	806401
		4	1117517		
		100	1135959		

#### RELEVANT APPENDICES

- Appendix 4.2.1(a) Recycled Water Reticulation Masterplan
- Appendix 4.2.3(a) RW only Lot and DP reference extract from Extension REF

4.2.4	Describe any interconnections between the proposed non-potable water infrastructure and other infrastructure not part of this scheme (e.g., interconnections with other licensed network operators or public utilities such as sewers or water mains). Identify in your description who is responsible for the construction, operation and maintenance of which infrastructure. <b>Identify all interconnections with other infrastructure on the process flow diagram in Appendix 4.2.1 and the map in Appendix 4.2.3.</b>
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<p>Examples of interconnections may include potable water top up or trade waste disposal, as well as to other network operators.</p>	
<p><i>The response to this question will be used to ensure the correct area of operation is specified in the licence, if a licence is granted (Act s.11(1)). The response will also be used as a context for the assessment of risks from the proposed scheme and to identify possible additional licence conditions relating to the inter-connected systems and responsibilities for risks.</i></p>	
<p>The proposed non-potable water infrastructure will not interconnect with other sewer or water mains outside of the Scheme.</p>	
4.2.5	<p>Where applicable, describe the connection point to customers or end users (e.g., the customer connection point may be a water meter). Identify in your description who is responsible for the construction, operation and maintenance of which infrastructure. <b>Identify all customer and/or end user connections on the process flow diagram in Appendix 4.2.1 and the map in Appendix 4.2.3.</b></p>
<p><i>The response to this question will be used to ensure the correct area of operation is specified in the licence, if a licence is granted (Act s.11(1)). The response will also be used as a context for the assessment of risks from the proposed scheme.</i></p>	
<p>The detailed design and construction of the recycled water infrastructure from the LWC up to but not including the recycled water meter inside each customer's property will be undertaken by the Developer, in accordance with the masterplan and design standards prepared by CW. CW is and will continue to carry out detailed design review and inspection and testing of the constructed infrastructure prior to dedication to CW.</p> <p>CW will install the recycled water meter inside each property following the construction of the dwelling/building on each lot by the property owner's builder and cross-connection checks by NSW Fair Trading (or its delegate) and CW.</p> <p>Following dedication of the constructed infrastructure, CW is responsible for the operation and maintenance of all recycled water infrastructure up to and including the recycled water meter inside each customer's property.</p> <p>Each individual customer will be responsible for the construction, operation and maintenance of the recycled water infrastructure (plumbing) downstream of the recycled water meter.</p> <p>NSW Fair Trading (or its delegate) is responsible for inspection and review of the customer's recycled water infrastructure. CW will liaise with NSW Fair Trading (or its delegate) to ensure that compliance has been achieved in accordance with the Plumbing Regulations.</p> <p><b>RELEVANT APPENDICES</b></p> <ul style="list-style-type: none"> <li>• Appendix 4.2.1(a) Recycled Water Reticulation Masterplan</li> <li>• Appendix 4.2.1(b) Recycled Water Infrastructure Responsibility Schematics</li> </ul>	
4.2.6	<p>What volume of water is available from the proposed source? Where applicable, please provide the capacity of the source and the (allowable) average daily extraction rate from the source. If there is more than one source, please provide the requested information for each of the sources. <b>Where relevant, provide a copy of any agreements and/or licences to access the source water in Appendix 4.2.6.</b></p>
<p><i>The response will also be used as a context for the assessment of the technical, organisational and financial capacity of the applicant corporation (Act s.10(4)(a)).</i></p>	
<p>There are two sources for the recycled water, namely:</p> <p>1) <b>Sewage</b> – This source can provide approximately 651kL/day of raw sewage based on the Water Balance Report. The conversion of raw sewage to recycled water is approximately 98%, with approximately 2% lost through treatment waste streams.</p> <p>(NB: Recycled water will not be supplied until the infrastructure in Phase 2 is completed and existing lots are delivering sewage to the LWC).</p>	

2) **Drinking water** – As outlined above, the Initial Lots will be supplied by a drinking water connection from CW's drinking water reticulation network into the recycled water reticulation network until recycled water becomes available. Once recycled water is being produced and supplied by the LWC, if recycled water demand exceeds the supply of raw sewage and prolonged use depletes the recycled water storages, then drinking water from CW's drinking water reticulation network will be used to supplement supply. CW has worked with Hunter Water to develop the drinking water system such that sufficient drinking water is available to be used for top-up of recycled water storages.

The land capability assessment for the project provides a high level, conservative view of water demands across the development. CW has separately prepared a Water Balance report which recognises that BASIX40 (and the potential change to BASIX50) has driven and will continue to drive (over the course of the 20-year development roll-out) a change in behaviour and a change in water fittings and appliances available in the market. The 'average' installation therefore has a lower water demand in new developments. This data is calibrated by observed demands in the market. Current water balance modelling shows that during the development roll-out, up to 120kL/day of top up may be required to meet recycled water demand at or around 2027. This will be minimised through further calibration of the model from observed demands and optimisation of the timing for implementation of new storage in the system. The water balance model shows that top up is not required at ultimate build out.

#### RELEVANT APPENDICES

- Appendix 4.1.6(a) Cooranbong Scheme Water Balance Summary Report

4.2.7	What volume of water will be treated by the scheme? Please provide the average and peak daily flow rates <u>treated by</u> the scheme.
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*This information will be used to determine the fee category for the scheme, if a licence is granted. The response to this question may be used to draft a proposed licence, if a licence is granted.*

The Scheme will have the capacity to treat average daily flows of up to 1,000kL/day of biological source water (i.e. sewage) and up to 1,500kL/day hydraulic capacity. The conversion of raw sewage to recycled water is approximately 98%, with approximately 2% lost through treatment waste streams.

All sewage from the Development (minus the Developed Lots) will be treated at the Cooranbong LWC. The Cooranbong Scheme Water Balance Report indicates that this equates to an ultimate average daily volume of 651kL/day resulting in approximately 638kL/day of recycled water produced.

In relation to peak daily sewage flow:

- Instantaneous and diurnal peaks will be buffered by the storage in the pressure sewer network and the permanent flow balance tank at the Cooranbong LWC.
- The nature of the pressure sewer network prevents inflow/infiltration thereby eliminating the peak flow normally associated with wet weather in conventional gravity sewer systems.
- The catchment is residential and population is expected to be relatively stable throughout the year.

Therefore peak daily flow through the LWC is expected to be equivalent to average daily flow through the LWC.

#### RELEVANT APPENDICES

- Appendix 4.1.6(a) Cooranbong Scheme Water Balance Summary Report

4.2.8	What volume of non-potable water will be produced by the scheme? Please provide the average and peak daily volume supplied to end users or retail suppliers.
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*This information will be used to assess the retail supplier's obligation not to over commit, if a licence is granted. The response to this question may be used to draft a proposed licence, if a licence is granted.*

All sewage from the Development will be treated at the Cooranbong LWC. The conversion of raw sewage to recycled water is approximately 98%, with approximately 2% lost through treatment waste streams. The Cooranbong Scheme Water Balance Report indicates that this equates to an ultimate average daily volume of 651kL/day resulting in approximately 638kL/day of recycled water produced.

Cooranbong LWC will ultimately have the capacity to produce up to 980kL/day of recycled water from sewage and 1,470 kL/day if there is enough source water available. The average volume of recycled water supplied to end users will vary with time of year due to irrigation demands. The Cooranbong Scheme Water Balance Report identifies the ultimate average day demand for recycled water as 511kL/day and the ultimate peak day demand as 1,253 kL/day. This will be buffered by recycled water storage in the network.

These recycled water demand volumes do not include an allowance for Avondale School nor potential additional future connections to existing lots immediately adjacent to the proposed recycled water pipeline route to Avondale College for which demand for connections is yet to be understood.

This application to vary NOL 15\_033 includes the incorporation of Avondale College as a customer which itself has 58.6 hectares of designated irrigation zones available. The Cooranbong Scheme Water Balance Report and Avondale College DIZ Land Capability Assessment indicate that this has the capacity to demand up to 580kL of recycled water for irrigation. The actual volume of recycled water supplied to the Avondale College designated irrigation zone will depend on the volume available for supply due to seasonal changes to demand across the remainder of the Scheme. It is not intended that all designated irrigation zones would be irrigated at once but instead small areas would be irrigated at a time and moved around at the discretion of the College.

As outlined in section 4.2.6, drinking water from CW's drinking water reticulation network could be used should recycled water demand temporarily exceed recycled water production.

#### **RELEVANT APPENDICES**

- Appendix 4.1.6(a) Cooranbong Scheme Water Balance Summary Report
- Appendix 4.3.13(b) Avondale College DIZ Land Capability Assessment

4.2.9 List all the intended end uses for the non-potable water generated by the scheme.

*The response to this question will be used to determine whether there are any issues of public interest arising from the proposed scheme (Act s.10(4)(f)). The response to this question will also be used to draft a proposed licence. The licence will specify the purpose for which the infrastructure can be used, if a licence is granted (Act s.6(1)(a), Reg cl.8(1)).*

The current licensed authorised end uses for the recycled water (to be expanded to the expanded NOL area are:

- Toilet flushing
- Washing machines
- Car washing
- Water features
- Irrigation, which would include irrigation:
  - by customers for watering plants, gardens, lawns etc.
  - of newly developed land release stages (using relocatable surface irrigation systems) in readiness for sale.
  - for the establishment of new tree plantings within the public open space of public open space with permanent irrigation systems as each area is established.
  - Designated Irrigation Zones ('DIZ') - this NOL variation application seeks expansion of the NOL 15\_033 area to include additional recycled water only customers including Avondale College which itself comprises 58.6 hectares of designated irrigation zones and the Town Common.

(Irrigation on DIZs is to be carried out in accordance with the Flow Systems Recycled Water Irrigation Management Plan).

This NOL variation application also seeks approval to add the following to the list of authorised end uses:

- Dust suppression for construction activities within the North Cooranbong Development area.

#### RELEVANT APPENDICES

- Appendix 4.2.9(a) Flow Systems Recycled Water Irrigation Management Plan Table of Contents

4.2.10	<p><b>Provide your preliminary risk assessment for the scheme from source to end use in Appendix 4.2.10.</b> It is important that your preliminary risk assessment accurately identifies any hazards present in the source water or likely to result from the proposed treatment process. The risk assessment will also address the intended, inadvertent and unauthorised end uses (and therefore routes of exposure) to the non-potable water. The preliminary risk assessment will identify any reasonably foreseeable risk event with the potential to expose people or the environment to hazards. The preliminary risk assessment will outline the broad mitigation measures where the risk of exposure to a hazard is unacceptable to human health or the environment in order to reduce the risk of exposure.</p> <p>The risk assessment must also identify the events and circumstances that could adversely affect the applicant corporation's ability to carry out the activities for which the licence is sought (including any activities undertaken by a nominated third party), the probability of the occurrence of any such event or circumstance and the measures to be taken by the applicant corporation to prevent or minimise the likelihood of any such event or circumstance.</p>
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The preliminary risk assessment should demonstrate the application of a consistent methodology for identifying hazards and assessing potential impacts and risks to health and the environment. We strongly recommend that the applicant corporation utilises an established risk management system, such as outlined in AS/NZS ISO 31000:2009 (Risk management – Principles and guidelines), which is consistent with the approach outlined in the Australian Guidelines for Water Recycling (element 2).

*The response to this question is a requirement for any network operator's licence for water infrastructure (Reg cl.6(1)(b) and cl.6(1)(c)(ii)). The response to this question will be used to determine whether there are any issues of public interest arising from the proposed scheme (Act s.10(4)(f)). The response to this question will also be used to draft a proposed licence. The licence will specify the purpose for which the infrastructure can be used, if a licence is granted (Act s.6(1)(a), Reg. cl.8(1)). The response will also be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).*

The preparation of the preliminary risk assessment was undertaken in accordance with the following sections of the "Australian Guidelines for Water Recycling : Managing Health and Environmental Risks (Phase 1) 2006":

- Section 2.2.4 – Hazard identification and risk assessment
- Section 2.3 – Preventative measures for recycled water management
- Section 2.3.1 – Preventative measures and multiple barriers
- Section 2.3.2 – Critical control points

#### RELEVANT APPENDICES

- Appendix 4.1.9(a) Cooranbong Scheme Risk Register Summary

4.2.11 Describe how the 12 elements of the framework for the management of recycled water, as detailed in the Australian Guidelines for Water Recycling (AGWR), have been addressed and will be implemented and maintained. **Provide evidence of the applicant corporation's capacity to implement the 12 elements of the framework in the AGWR in Appendix 4.2.11.**

The evidence should be in the form of management plans for either the proposed scheme or other similar schemes undertaken by the applicant corporation, or in a comprehensive statement detailing the process by which the management plan will be developed. For existing (brownfield) schemes you should provide the actual water quality plan for the site.

*The response to this question is a requirement for any network operator's licence for water infrastructure (Reg cl.6(1)(d)(i)). The response to this question will also be used to draft a proposed licence. The licence will specify the purpose for which the infrastructure can be used, if a licence is granted (Act s.6(1)(a), Reg. cl.8(2)). The response will also be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence.*

CW will address each of the 12 elements associated with recycled water by adoption of the Flow Systems Recycled Water Quality Plan. CW's parent company, Flow Systems Pty Ltd, and its various subsidiaries (e.g. Pitt Town Water, Central Park Water, Discovery Point Water, Huntlee Water and Cooranbong Water), have demonstrated previously that they have the capacity to implement and maintain the 12 element approach.

The systems and processes for the recycled water infrastructure for CW are similar to those prepared for Pitt Town Water, Central Park Water, Discovery Point Water, Huntlee Water, Green Square Water and Flow Systems Operations.

Flow's capacity to develop and implement a Water Quality Plan is evidenced by independent audits conducted at Pitt Town, Central Park, Discovery Point, Huntlee and Cooranbong.

Evidence is also provided by Ministerial approval to commence commercial operation for recycled water for Pitt Town Water, Central Park Water, Discovery Point Water and Green Square Water.

The following table provides further information on how CW will address, implement and maintain each of the 12 elements of the AGWR.

Element	Comments
1	<b>Commitment to responsible use and management of recycled water</b> <i>Address</i>

	<p>Key stakeholders (i.e. management, construction, operation and end users) were identified and have been involved in the development of the proposed recycled water scheme at the Development. Commitment has been sought, and received, from these stakeholders in relation to the responsible use and management of recycled water at the Development.</p> <p><i>Implement</i></p> <p>Regular communication will be maintained with the stakeholders during the design, construction and operation of the recycled water scheme to ensure it continues to be responsible/ sustainable. Specialist consultants will be engaged as required to ensure the project team has the necessary expertise.</p> <p><i>Maintain</i></p> <p>Stakeholder engagement and end user education will be a continuous process during the operation of the scheme to ensure the responsible use and management of recycled water.</p>
2	<p><b>Assessment of the recycled water system</b></p> <p><i>Address</i></p> <p>Representatives from each of the key stakeholders have been engaged to assess the recycled water system for compliance with project objectives, integration with the Development, regulatory requirements and risks (technical/commercial). The assessment includes:</p> <ul style="list-style-type: none"> <li>• Intended uses and sources of recycled water</li> <li>• Recycled water system analysis</li> <li>• Assessment of water quality data</li> <li>• Hazard identification and risk assessment</li> </ul> <p><i>Implement</i></p> <p>Design workshops and commercial/technical risk registers will be used to capture the assessment of the recycled water system. Specialist consultants will be engaged as required to ensure the project team has the necessary expertise.</p> <p><i>Maintain</i></p> <p>The registers will be updated as required as the project moves through construction, commissioning and operation.</p>
3	<p><b>Preventive measures for recycled water management</b></p> <p><i>Address</i></p> <p>For each identified risk, preventive measures will be developed to eliminate or mitigate the likelihood or consequence of the impact. Where appropriate, a multiple barrier approach will be adopted.</p> <p><i>Implement</i></p> <p>During the development of the risk registers, the risk will be assessed with and without preventive measures. Greater focus will be placed on events where the residual risk is still rated High to Very High. Critical Control Points will be developed and implemented to ensure recycled water quality is always safe for the intended end uses.</p> <p><i>Maintain</i></p> <p>The risk register will be a live document over the life of the scheme. In addition to regular audits it will be reviewed/updated when:</p> <ul style="list-style-type: none"> <li>• There is a significant change in the project or stakeholders</li> <li>• There is a change in regulation</li> <li>• There is an incident on this or a similar scheme</li> </ul> <p>The accuracy of critical control points will be confirmed via verification testing.</p>
4	<p><b>Operational procedures and process control</b></p>

	<p><b>Address</b></p> <p>Operational procedures will be developed for all processes and activities associated with the recycled water system from source to end use. A comprehensive SCADA based control and monitoring system will provide continuous feedback/monitoring on system performance and Critical Control Points.</p> <p><b>Implement</b></p> <p>Operational procedures will be developed in the later stages of the project construction phase and will be included in the management plan. The process control system will be based on the agreed functional description for the system including the Critical Control Points.</p> <p><b>Maintain</b></p> <p>The operational procedures will be live documents over the life of the scheme. In addition to regular audits they will be reviewed/updated when:</p> <ul style="list-style-type: none"> <li>• There is a significant change in the project or stakeholders</li> <li>• There is a change in regulation</li> <li>• There is an incident on this or a similar scheme</li> </ul> <p>Process control systems will be checked regularly for accuracy and to ensure logic around Critical Control Points remains valid.</p>
5	<p><b>Verification of recycled water quality and environmental performance</b></p> <p><b>Address</b></p> <p>Verification of the recycled water quality will involve monitoring and analysis of key parameters to confirm the Critical Control Points remain valid. Environmental performance will be confirmed by monitoring discharges for compliance and the sustainability of irrigation.</p> <p><b>Implement</b></p> <p>The ongoing sampling and monitoring program detailed in the management plan will include a list of key parameters, the location of the monitoring point and monitoring frequency. The incident and emergency response plan will include protocols for recording and reacting to any environmental issues.</p> <p><b>Maintain</b></p> <p>The monitoring program will be a live document over the life of the scheme. In addition to regular audits it will be reviewed/updated when:</p> <ul style="list-style-type: none"> <li>• There is a significant change in the project or stakeholders</li> <li>• There is a change in regulation</li> <li>• There is an incident on this or a similar scheme</li> </ul>
6	<p><b>Management of incidents and emergencies</b></p> <p><b>Address</b></p> <p>To ensure efficient/effective communication, protocols will be developed detailing how incidents are recorded, actioned and followed up. These protocols will also include contact details for key operational personnel, stakeholders and regulators.</p> <p><b>Implement</b></p> <p>The incident and emergency response protocols will be included in the management plan. To test the adequacy of these protocols a number of incidents will be simulated during commissioning. The protocols will be integrated with the communication plan.</p> <p><b>Maintain</b></p> <p>The incident and emergency management plan will be a live document over the life of the scheme. In addition to regular audits it will be reviewed/updated when:</p>

	<ul style="list-style-type: none"> <li>• There is a significant change in the project or stakeholders</li> <li>• There is a change in regulation</li> <li>• There is an incident on this or a similar scheme</li> </ul> <p>Employee training and regular incident simulations will be used to confirm system effectiveness and efficiency.</p>
7	<p><b>Operator, contractor and end user awareness and training</b></p> <p><i>Address</i></p> <p>Awareness and training requirements will be developed for operators, managers, contractors and end users. These requirements will be clearly detailed in the management plan. Internal and external training programs will be used to ensure the required skills and knowledge is sufficient and current. Inductions will be used for Contractors, visitors and new employees.</p> <p><i>Implement</i></p> <p>Awareness and training requirements will be included in the management plan together with records of any training or inductions that are carried out. End users will be updated and educated through regular communication via newsletters and the FSO website.</p> <p><i>Maintain</i></p> <p>The awareness and training requirements will be a live document over the life of the project. In addition to regular audits it will be checked / updated when:</p> <ul style="list-style-type: none"> <li>• There is a significant change in the project or stakeholders</li> <li>• There is a change in regulation</li> <li>• There is an incident on this or a similar scheme</li> </ul> <p>End users will be consulted on a regular basis regarding their knowledge of recycled water and the restrictions on end use. Awareness programs will be updated accordingly.</p>
8	<p><b>Community involvement</b></p> <p><i>Address</i></p> <p>A comprehensive community consultation strategy will be developed which takes into account the nature of the project and the specific requirements of end users and the broader community.</p> <p><i>Implement</i></p> <p>The community consultation strategy will be incorporated into the management plan as part of the communications plan. The FSO website will be used as the primary interface for customer engagement. Records will be maintained of any incoming or outgoing communication with end users and the broader community.</p> <p><i>Maintain</i></p> <p>The community consultation strategy will be a live document over the life of the scheme. In addition to regular audits it will be reviewed/updated when:</p> <ul style="list-style-type: none"> <li>• There is a significant change in the project or stakeholders</li> <li>• There is a change in regulation</li> <li>• There is an incident on this project or a similar scheme</li> </ul>
9	<p><b>Validation, research and development</b></p> <p><i>Address</i></p> <p>Key focus areas in relation to the ongoing validation, research and development needs of the project will be captured in the management plan.</p> <p><i>Implement</i></p> <p>All new equipment critical to recycled water quality will be validated in accordance with regulatory requirements and industry best practice. Research and development areas will be identified during the first year of operation and prioritised.</p>

	<p><i>Maintain</i></p> <p>Project performance will be benchmarked against similar facilities to ensure the recycled water scheme incorporates industry best practice. Technology developments will be monitored for the relevance to and impact on the scheme.</p>
10	<p><b>Documentation and reporting</b></p> <p><i>Address</i></p> <p>Documentation, data and reporting will be managed and secured through the management plan and control system. Internal and external reports will transmit important information to project stakeholders.</p> <p><i>Implement</i></p> <p>A hard copy of the management plan will be kept on site in the WRF control room adjacent to the SCADA. Electronic copies of the management plan will be available to all key operational personnel. The SCADA will be configured to enable remote access and collection of data. Reports on system performance will be distributed to internal and external stakeholders on an agreed frequency. Incident reports will be distributed to internal and external stakeholders in accordance with agreed protocols.</p> <p><i>Maintain</i></p> <p>As noted previously all documentation will be considered 'live' and will be reviewed and updated (as required) on a regular basis. Document control procedures will be utilised to ensure the current version is in use. All important data will be securely backed up off-site.</p>
11	<p><b>Evaluation and audit</b></p> <p><i>Address</i></p> <p>The design of the control system will enable the efficient capture and management of system data which will subsequently be used to evaluate long term performance. Internal and external audits will be used to verify the adequacy of the management systems.</p> <p><i>Implement</i></p> <p>Evaluation will commence during the first year of operating following validation and in parallel with verification. Audits will be conducted before and after commissioning and then in accordance with internal/external requirements.</p> <p><i>Maintain</i></p> <p>Regular checks will be made of the data collection system for accuracy and completeness. All system data will be securely backed up off-site. Recommendations of internal and external audits will be reviewed and implemented where appropriate.</p>
12	<p><b>Review and continual improvement</b></p> <p><i>Address</i></p> <p>Senior management of FSO will be provided with regular reports on system performance and copies of incident reports as required by protocols.</p> <p><i>Implement</i></p> <p>Key areas for improvement will be identified during formal review meetings and progressed as agreed. Industry benchmarking and audits will be used to continuously improve system documentation, operation and control.</p> <p><i>Maintain</i></p> <p>Training will be provided for senior managers to ensure they can actively take part in the review process.</p>
<p><b>RELEVANT APPENDICES</b></p> <ul style="list-style-type: none"> <li>• Appendix 4.1.10(b) Cooranbong Scheme Management Plan Table of Contents</li> <li>• Appendix 4.2.11(a) Flow Systems Recycled Water Quality Plan Table of Contents</li> </ul>	



4.2.12	<p>How will the continuity of supply of the non-potable water be ensured? What contingency plans are in place in the case of failure of the infrastructure? What alternative supplies of non-potable water will be used when the infrastructure is inoperable?</p>
<p><i>The response to this question is a requirement for any network operator's licence for water infrastructure (Reg cl.6(1)(c)). The response to this question will be used to determine whether there are any issues of public interest arising from the proposed scheme (Act s.10(4)(f)). The response will also be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i></p>	
<p>Continuity of recycled water supply will be achieved through:</p> <ul style="list-style-type: none"> <li>• Significant redundancy is provided by the recycled water storage tanks</li> <li>• Recycled water distribution pumps will be installed in duty/standby arrangement and supported by an on-site back up power generator</li> <li>• Reticulation is designed in loops where possible to enable route diversity in the supply of recycled water in case of a local pipe leak or failure</li> <li>• CW's retailer, Flow, has a commercial agreement with Hunter Water known as a USA that includes drinking water availability as top up for recycled water</li> </ul> <p>CW has developed contingency plans in the event of infrastructure failure. These contingency plans are a component of the Flow Systems Infrastructure Operating Plan and include:</p> <ul style="list-style-type: none"> <li>• Minimisation of demand through customer notifications.</li> <li>• Rapid response to infrastructure failure.</li> <li>• Trucking of drinking water into the drinking water and/or recycled water storage tanks to maintain supply</li> </ul> <p><b>RELEVANT APPENDICES</b></p> <ul style="list-style-type: none"> <li>• Appendix 4.1.11(a) Flow Systems Infrastructure Operating Plan Table of Contents</li> <li>• Appendix 4.1.10(b) Cooranbong Scheme Management Plan Table of Contents</li> </ul>	
4.2.13	<p>Describe the systems and processes that the applicant corporation will have in place to manage the non-potable water infrastructure. <b>Provide evidence of the applicant corporation's capacity to develop and implement an infrastructure operating plan in Appendix 4.2.13.</b></p>
<p>The evidence may include examples of processes and procedures for either the proposed scheme or other similar schemes undertaken by the applicant corporation. The processes and/or procedures should demonstrate good operational practice including life cycle planning, system redundancy, contingency planning, condition monitoring, management maintenance processes and processes of supporting skills needs. The examples should demonstrate links to a risk management process. For existing (brownfield) schemes you should provide the actual water quality plan for the site.</p>	
<p><i>The response to this question is a requirement for any network operator's licence for water infrastructure (Reg cl.6(1)(c)). The response will also be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i></p>	
<p>The systems and processes for the recycled water infrastructure at Cooranbong are similar to those prepared for Pitt Town Water, Central Park Water, Discovery Point Water, Green Square Water, Huntlee Water and Flow Systems Operations.</p> <p>Pitt Town Water, Central Park Water, Discovery Point Water, Green Square Water, Huntlee Water, Flow Systems Operations and CW are sister companies and are all wholly-owned subsidiaries of Flow Systems. CW adopts and implements Flow's Recycled Water Quality Plan and Infrastructure Operating Plan.</p>	



Flow's capacity to develop and implement appropriate Water Quality Plans and Infrastructure Operating Plans is evidenced by independent audit confirming that the requirements of the WICA have been met for the Pitt Town LWC, Central Park LWC and Discovery Point LWC and the reticulation networks at Huntlee, Cooranbong and Green Square.

Evidence is also provided by Ministerial approval to commence commercial operation for schemes at Pitt Town, Central Park, Discovery Point, Huntlee, Cooranbong, Green Square, Box Hill and Shepherds Bay.

#### RELEVANT APPENDICES

- Appendix 4.1.10(b) Cooranbong Scheme Management Plan Table of Contents
- Appendix 4.1.11(a) Flow Systems Infrastructure Operating Plan Table of Contents
- Appendix 4.2.11(a) Flow Systems Recycled Water Quality Plan Table of Contents

4.2.14 Describe the studies that have been completed to investigate any environmental impacts (including but not limited to water quality, quantity, air, odour, noise, sea level rise, biodiversity and Aboriginal cultural heritage) from the construction and operation of the infrastructure? Have the studies identified any significant environmental impacts from the scheme? If so, how are the environmental impacts proposed to be managed? **Provide a copy of any environmental study and/or risk assessment in Appendix 4.2.14.**

As a minimum an application must be accompanied by a statement of environmental effects (SEE) (unless the development is designated development, Part 5 development or a major project, in which case either an environmental impact statement (EIS) or comprehensive environmental assessment is required). The SEE may be prepared by the applicant corporation or by a consultant acting on behalf of the applicant. The SEE must identify the environmental impacts of the proposed scheme, and the steps which will be taken to protect the environment or reduce the harm. Where the study is in the form of a comprehensive environmental assessment or EIS, please include only the executive summary.

*The response to this question may be used to draft a proposed licence, if a licence is granted. The response to this question will be used to determine whether the activities authorised by a licence (if granted) present a significant risk of harm to the environment (Reg cl.7).*

Please refer to section 3.5.1 above with regards to environmental impact assessments relevant to this NOL variation application.

4.2.15 If a treatment process forms part of the infrastructure for which the applicant corporation is seeking a licence, what waste streams will be generated by the proposed treatment plant and how will the waste be disposed of or handled?

*The response to this question will be used to determine whether the activities authorised by a licence (if granted) present a significant risk of harm to the environment (Reg cl.7). The response will also be used as a context for our assessment of the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).*

The treatment infrastructure is already licensed within the existing NOL 15\_033 and no further treatment processes or waste streams are relevant to this NOLV2 application.

### 4.3 Sewerage infrastructure

Only provide a response to the questions in the following section if the applicant corporation is seeking a licence for the construction, maintenance and operation of sewerage infrastructure.

4.3.1	<p>Describe the proposed sewerage infrastructure from the collection to disposal or reuse. Include in your description all of the sewerage infrastructure for which the applicant corporation is seeking a licence. This will include any infrastructure that is to be used for the collection, treatment, filtration, storage, conveyance or disposal of the sewerage or treated effluent. <b>Provide a detailed process flow diagram of the proposed infrastructure from collection to disposal or reuse in Appendix 4.3.1.</b></p>
<p>You must attach a process flow diagram in response to this question. The process flow diagram should only include the sewerage infrastructure where the scheme includes more than one type of infrastructure and must cover the process from source to end use. You may also include a piping and instrumentation diagram for additional information.</p>	
<p><i>The response to this question will be used to draft a proposed licence. The response to this question is a requirement for any network operator's licence for sewerage infrastructure (Reg cl.6(2)(d)(ii)). The licence will specify the type of water industry infrastructure, if a licence is granted (Act s.6(1)(a)). The response will also be used to ensure you have applied for the correct licence(s) and as a context for our assessment of the applicant corporation's technical, organisational and financial capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i></p>	
<p>The total Scheme sewerage infrastructure consists of:</p> <ul style="list-style-type: none"> <li>• domestic pressure sewer pumping systems at each individual lot</li> <li>• pressure sewer reticulation network connecting each lot to the LWC</li> </ul> <p>Phase 1 will convey sewage from the customer lot via the pressure sewer reticulation network and discharge it to Hunter Water's sewerage network (i.e. without treatment).</p> <p>Phase 2 will deliver sewage to the licensed Cooranbong LWC for treatment to be redistributed as recycled water for reuse within the Scheme area.</p> <p><b>RELEVANT APPENDICES</b></p> <ul style="list-style-type: none"> <li>• Appendix 4.1.10(b) Cooranbong Scheme Management Plan Table of Contents</li> <li>• Appendix 4.3.1(a) Sewerage Reticulation Masterplan</li> <li>• Appendix 4.3.1(b) Sewerage Infrastructure Responsibility Schematics</li> </ul>	
4.3.2	<p>Describe whether the infrastructure is existing infrastructure or is to be constructed. If the infrastructure is existing, please describe its current condition and operability. If the infrastructure is a mixture of existing and to be constructed <b>identify the infrastructure as existing or to be constructed on the process flow diagram in Appendix 4.3.1.</b></p>
<p><i>The response to this question will be used as a context for the assessment of environmental risks from the proposed scheme (Act s.10(4)(e), Reg cl.7).</i></p>	
<p>Sewerage infrastructure has been constructed within the existing NOL area and is to be expanded throughout the Development area.</p>	
4.3.3	<p>Describe the <u>location</u> of the proposed infrastructure. For example include:</p> <ul style="list-style-type: none"> <li>▼ the identification of specific lot descriptors (e.g. lot and DP numbers) for the collection, treatment, filtration and/or storage infrastructure</li> <li>▼ the location of infrastructure for the conveyance and/or reticulation of sewage by street name, local government area or other description as appropriate to the size of the scheme.</li> </ul> <p><b>Provide a map showing the location of the proposed infrastructure from source to end use in Appendix 4.3.3.</b></p>
<p>The map may include all water industry infrastructure (i.e., drinking water, non-potable water and/or sewerage) where the scheme includes more than one type of infrastructure.</p>	

*The response to this question is a requirement for any network operator's licence for sewerage infrastructure (Reg cl.6(2)(a)). The response to this question will be used to specify the authorised area of operations (Act s.11(1)), if a licence is granted. The response will also be used as a context for the assessment of environmental risks from the proposed scheme (Act s.10(4)(e), Reg cl.7).*

The sewerage infrastructure described in 4.3.1 above is to be contained within the Scheme area as shown in the Pressure Sewer Reticulation Masterplan.

The cadastral lot boundaries within the Development area have changed several times since CW's original NOL application and the originally granted and varied licence. This will require the updating of some lot and DP references in the NOL within the existing area to reflect their new folio identifiers.

This variation application also seeks expansion of the existing NOL area to a revised NOL area.

The summary of the proposed changes to the NOL area identified in section 4.1.3 also applies to the sewerage network.

4.3.4	Describe any interconnections between the proposed sewerage infrastructure and other infrastructure not part of this scheme (e.g., interconnections with other licensed network operators or public utilities such as sewers). Identify in your description who is responsible for the construction, operation and maintenance of which infrastructure. <b>Identify all interconnections with other infrastructure on the process flow diagram in Appendix 4.3.1 and the map in Appendix 4.3.3.</b>
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*The response to this question will be used to ensure the correct area of operation is specified in the licence, if a licence is granted (Act s.11(1)). The response will also be used as a context for the assessment of risks from the proposed scheme and to identify possible additional licence conditions relating to the inter-connected systems and responsibilities for risks.*

Within the existing NOL area, there is a connection from the pressure sewerage infrastructure to the existing Hunter Water sewerage infrastructure at an existing maintenance hole in Lot 223 DP 1179214 off Wainman Drive. This connection allows discharge of sewage for the Initial Lots while the LWC is developed and commissioned. When the LWC is built, commissioned and approved for commercial operation, this connection may be closed off.

Under an agreement between Flow and Hunter Water, CW has funded Hunter Water's upgrade of the pumps at Hunter Water's wastewater pump station (Cooranbong 7 WWPS) immediately downstream of the CW discharge point. This was agreed to provide at least the additional 5.6L/s capacity required in the receiving sewerage system which has allowed CW to extend the time period over which it is discharging under this interim arrangement.

The detailed design and construction of the sewerage infrastructure from (and including) the pressure sewer collection tank on each customer's property downstream to the LWC will be undertaken by the Developer, in accordance with the masterplan and design standards prepared by CW. CW is and will continue to carry out detailed design review and inspection and testing of the constructed infrastructure prior to dedication to CW.

Following dedication of the constructed infrastructure, CW is responsible for the installation of on-lot pressure sewer pumps and control panels and then the operation and maintenance of all sewerage infrastructure including the pressure sewer collection tank, pumps, control panel and boundary kit inside each customer's property.

Each individual customer will be responsible for the construction, operation and maintenance of the sewerage infrastructure upstream of the pressure sewer collection tank.

NSW Fair Trading is responsible for inspection and review of the customer's sewerage infrastructure. In accordance with the WIC Act, CW liaises with NSW Fair Trading to ensure that compliance has been achieved in accordance with the Plumbing Regulations.

#### RELEVANT APPENDICES

- Appendix 4.3.1(a) Sewerage Reticulation Masterplan
- Appendix 4.3.1(b) Sewerage Infrastructure Responsibility Schematics

4.3.5	<p>What volume of sewage will be treated by the scheme? Please provide the average and peak daily (hydraulic and biological, where relevant) flow rates <u>treated by</u> the scheme.</p> <p><i>This information will be used to determine the fee category for the scheme, if a licence is granted. The response to this question may be used to draft a proposed licence, if a licence is granted.</i></p> <p>All sewage from the Development will be treated at the Cooranbong LWC. The Scheme will have the capacity to treat average daily flows of up to 1,000kL/day of biological source water (i.e. sewage) and up to 1,500kL/day total hydraulic capacity. The conversion of raw sewage to recycled water is approximately 98%, with approximately 2% lost through treatment waste streams. The Cooranbong Water Balance Report indicates that this equates to an ultimate average daily volume of 651kL/day resulting in approximately 638kL/day of recycled water produced.</p> <p>The land capability assessment for the project provides a high level, conservative view of water demands across the development. Flow Systems has separately prepared a Water Balance report which recognises that BASIX40 (and the potential change to BASIX50) has driven and will continue to drive (over the course of the 20-year development roll-out) a change in behaviour and a change in water fittings and appliances available in the market. The 'average' installation therefore has a lower water demand and therefore lower sewage production in new developments". This data is calibrated by observed demands in the market.</p> <p>In relation to peak daily sewage flow:</p> <ul style="list-style-type: none"> <li>• Instantaneous and diurnal peaks will be buffered by storage in the pressure sewer network and the permanent flow balance tank at the Cooranbong LWC</li> <li>• The nature of the pressure sewer network prevents inflow/infiltration thereby eliminating the peak flow normally associated with wet weather in conventional gravity sewer systems</li> <li>• The catchment is predominantly residential and population is expected to be relatively stable throughout the year</li> </ul> <p>Therefore peak daily flow through the LWC is expected to be equivalent to average daily flow through the LWC.</p> <p><b>RELEVANT APPENDICES</b></p> <ul style="list-style-type: none"> <li>• Appendix 4.1.6(a) Cooranbong Scheme Water Balance Summary Report</li> <li>• Appendix 4.3.13(a) Cooranbong Land Capability Assessment</li> </ul>
4.3.6	<p>What volume of treated effluent will be disposed of from the scheme? Please provide the average and peak daily disposal rates <u>disposed from</u> the scheme.</p> <p><i>The response will be used as a context for the assessment of environmental risks from the proposed scheme (Act s.10(4)(e), Reg cl.7). The response to this question may be used to draft a proposed licence, if a licence is granted.</i></p> <p>All of the sewage will be collected under the scheme.</p> <p>Under Phase 1 the collected sewage will be provided by the pressure sewer collection tanks which will then be discharged to Hunter Water's sewerage network (i.e. without treatment).</p> <p>Under Phase 2, all sewage will be collected and treated by the LWC, with 98% of the incoming sewage recycled and re-used throughout the Scheme area for non-potable water usage (as outlined in section 4.2 above). The remaining 2% will be discharged to tanker truck and appropriately disposed of by an approved waste management contractor.</p> <p><b>RELEVANT APPENDICES</b></p> <ul style="list-style-type: none"> <li>• Appendix 4.1.6(a) Cooranbong Scheme Water Balance Summary Report</li> </ul>

4.3.7	How will the treated effluent be disposed of from the scheme?
<p><i>The response to this question may be used to draft a proposed licence, if a licence is granted. The response will also be used as a context for the assessment of environmental risks from the proposed scheme (Act s.10(4)(e), Reg cl.7).</i></p>	
<p>The current licensed authorised end uses for the recycled water (to be expanded to the expanded NOL area are:</p> <ul style="list-style-type: none"> <li>• Toilet flushing</li> <li>• Washing machines</li> <li>• Car washing</li> <li>• Water features</li> <li>• Irrigation, which would include irrigation: <ul style="list-style-type: none"> <li>○ by customers for watering plants, gardens, lawns etc.</li> <li>○ of newly developed land release stages (using relocatable surface irrigation systems) in readiness for sale.</li> <li>○ for the establishment of new tree plantings within the public open space of public open space with permanent irrigation systems as each area is established.</li> <li>○ Designated Irrigation Zones (DIZ) - this NOL variation application seeks expansion of the NOL 15_033 area to include additional recycled water only customers including Avondale College which itself comprises 58.6 hectares of designated irrigation zones and the Town Common.</li> </ul> </li> </ul> <p>(Irrigation on DIZs is to be carried out in accordance with the Flow Systems Recycled Water Irrigation Management Plan).</p> <p>This NOL variation application also seeks approval to add the following to the list of authorised end uses:</p> <ul style="list-style-type: none"> <li>• Dust suppression for construction activities within the North Cooranbong Development area.</li> </ul> <p><b>RELEVANT APPENDICES</b></p> <ul style="list-style-type: none"> <li>• Appendix 4.2.9(a) Flow Systems Recycled Water Irrigation Management Plan Table of Contents</li> </ul>	
4.3.8	What wastewater and/or catchment characterisation studies have been undertaken? <b>Provide a summary report of any wastewater characterisation or catchment studies including results in Appendix 4.3.8.</b>
<p><i>This information will be used as a context to the potential health and environmental risks posed by the scheme.</i></p>	
<p>The wastewater catchment will be developed over the period for the roll-out of the Development. The wastewater catchment is expected to have exclusively residential development with typical medium strength domestic sewage for which the Cooranbong LWC is primarily designed to treat. The design wastewater characteristics have been based on values for similar catchments in reference schemes including data obtained at Flow's Pitt Town scheme. There is also allowance under Flow's trade waste policy for pre-treatment of wastewater emanating from non-residential customers where necessitated by the type of development and quality of wastewater produced.</p>	



4.3.9	<p><b>Provide your preliminary risk assessment for the scheme from collection to disposal in Appendix 4.3.9.</b> It is important that your preliminary risk assessment accurately identifies any hazards present in the sewage or likely to result from the proposed treatment process. The risk assessment should also address the intended method of disposal and any inadvertent releases (and therefore routes of exposure) to the treated effluent. The preliminary risk assessment will identify any reasonably foreseeable risk event with the potential to expose people or the environment to hazards. The preliminary risk assessment will outline the broad mitigation measures where the risk of exposure to a hazard is unacceptable to human health or the environment in order to reduce the risk of exposure.</p> <p>The risk assessment must also identify the events and circumstances that could adversely affect the applicant corporation's ability to carry out the activities for which the licence is sought (including any activities undertaken by a nominated third party), the probability of the occurrence of any such event or circumstance and the measures to be taken by the applicant corporation to prevent or minimise the likelihood of any such event or circumstance.</p>
<p>The preliminary risk assessment should demonstrate the application of a consistent methodology for identifying hazards and assessing potential impacts and risks to health and the environment. We strongly recommend that the applicant corporation utilises an established risk management system, such as outlined in AS/NZS ISO 31000:2009 (Risk management – Principles and guidelines). Where relevant, the risk assessment should identify and include any environmental risks and/or management actions identified in the development approval.</p>	
<p><i>The response to this question is a requirement for any network operator's licence for sewerage infrastructure (Reg cl.6(2)(b), cl.6(2)(c)(ii), cl.6(2)(d)(i)). The response to this question will be used to determine whether there are any issues of public interest arising from the proposed scheme (Act s.10(4)(f)). The response to this question will also be used to draft a proposed licence. The licence will specify the purpose for which the infrastructure can be used, if a licence is granted (Act s.6(1)(a)). The response will also be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i></p>	
<p>The preliminary risk assessment review was undertaken in accordance with the following sections of the "Australian Guidelines for Water Recycling : Managing Health and Environmental Risks (Phase 1) 2006":</p> <ul style="list-style-type: none"> <li>• Section 2.2.4 – Hazard identification and risk assessment</li> <li>• Section 2.3 – Preventative measures for recycled water management</li> <li>• Section 2.3.1 – Preventative measures and multiple barriers</li> <li>• Section 2.3.2 – Critical control points</li> </ul> <p><b>RELEVANT APPENDICES</b></p> <ul style="list-style-type: none"> <li>• Appendix 4.1.9(a) Cooranbong Scheme Risk Register Summary</li> </ul>	
4.3.10	<p>Describe the systems and processes that the applicant corporation will have in place to manage the sewerage infrastructure. <b>Provide evidence of the applicant corporation's capacity to develop and implement an infrastructure operating plan in Appendix 4.3.10.</b></p>
<p>The evidence may include examples of processes and procedures for either the proposed scheme or other similar schemes undertaken by the applicant corporation. The processes and/or procedures should demonstrate good operational practice including life cycle planning, system redundancy, contingency planning, condition monitoring, management maintenance processes and processes of supporting skills needs. The examples should demonstrate links to a risk management process. For existing (brownfield) schemes you should provide the actual water quality plan for the site.</p>	
<p><i>The response to this question is a requirement for any network operator's licence for sewerage infrastructure (Reg cl.6(2)(c)). The response will also be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i></p>	

The systems and processes for the sewerage infrastructure at Cooranbong are similar to those prepared for Flow's other schemes at Pitt Town, Central Park, Discovery Point, Huntlee, Box Hill and Shepherds Bay.

Pitt Town Water, Central Park Water, Discovery Point Water, Huntlee Water, Flow Systems Operations (licensed to operate Box Hill and Shepherds Bay) and CW are sister companies and are wholly-owned subsidiaries of Flow. CW will adopt and implement the Flow Systems Sewage Management Plan and Infrastructure Operating Plan with scheme-specific details contained in the relevant Scheme Management Plan.

Flow's capacity to develop and implement these plans is evidenced by independent audit confirming that the requirements of the WICA have been met for Pitt Town Water, Central Park Water, Discovery Point Water, Huntlee Water, Flow Systems Operations (at Box Hill and Shepherds Bay) and for the existing CW licensed area.

Evidence is also provided by Ministerial approval to commence commercial operation for sewerage services for Pitt Town, Central Park, Discovery Point, Huntlee, Cooranbong, Box Hill and Shepherds Bay.

#### RELEVANT APPENDICES

- Appendix 4.1.10(b) Cooranbong Scheme Management Plan Table of Contents
- Appendix 4.1.11(a) Flow Systems Infrastructure Operating Plan Table of Contents
- Appendix 4.3.10(a) Flow Systems Sewage Management Plan Table of Contents

4.3.11	How will the continuity of the provision of sewerage services be ensured? What contingency plans are in place in the case of failure of the infrastructure?
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*The response to this question is a requirement for any network operator's licence for sewerage infrastructure (Reg cl.6(2)(c)). The response to this question will be used to determine whether there are any issues of public interest arising from the proposed scheme (Act s.10(4)(f)). The response will also be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (act s.10(4)(a)).*

Continuity of the provision of sewerage services will be achieved through:

- Up to 48 hours storage at each lot in the pressure sewer wastewater collection tanks
- Flexibility in the operation of the pressure sewer network
- Remote monitoring of failure alarms at each lot in the pressure sewer system
- Storage in the permanent flow balance tank at the LWC
- Critical equipment at the LWC will be installed in duty/standby configuration to ensure adequate redundancy
- Back-up generator onsite at the LWC.
- Remote monitoring of failure alarms on critical infrastructure at the LWC.

Flow has developed contingency plans in the event of infrastructure failure. These contingency plans will be a component of the Flow Systems Infrastructure Operating Plan and include:

- Minimisation of sewage production through customer notifications
- Rapid response to infrastructure failure
- Trucking of sewage off-site via an approved waste management contractor

#### RELEVANT APPENDICES

- Appendix 4.1.10(b) Cooranbong Scheme Management Plan Table of Contents
- Appendix 4.1.11(a) Flow Systems Infrastructure Operating Plan Table of Contents

4.3.12	<p>Describe the studies that have been completed to investigate any environmental impacts (including but not limited to water quality, quantity, air, noise, sea level rise, biodiversity and Aboriginal cultural heritage) from the construction and operation of the infrastructure? Have the studies identified any significant environmental impacts from the scheme? If so, how are the environmental impacts proposed to be managed?</p> <p><b>Provide a copy of any environmental study and/or risk assessment in Appendix 4.3.12.</b></p>
<p>As a minimum an application must be accompanied by a statement of environmental effects (SEE) (unless the development is designated development, Part 5 development or a major project, in which case either an environmental impact statement (EIS) or comprehensive environmental assessment is required). The SEE may be prepared by the applicant corporation or by a consultant acting on behalf of the applicant. The SEE must identify the environmental impacts of the proposed scheme, and the steps which will be taken to protect the environment or reduce the harm. Where the study is in the form of a comprehensive environmental assessment or EIS, please include only the executive summary.</p>	
<p><i>The response to this question may be used to draft a proposed licence, if a licence is granted. The response to this question will be used to determine whether the activities authorised by a licence (if granted) present a significant risk of harm to the environment (Reg cl.7).</i></p>	
<p>Please refer to section 3.5.1 above with regards to environmental impact assessments relevant to this NOLV2 application.</p>	
<p><b>4.3.13</b></p>	
4.3.13	<p>Where relevant, what land capability assessments have been undertaken on the proposed land disposal area? <b>Provide a copy of any soil capability assessment in Appendix 4.3.13.</b></p>
<p><i>The response to this question may be used to draft a proposed licence, if a licence is granted. The response to this question will be used to determine whether the activities authorised by a licence (if granted) present a significant risk of harm to the environment (Reg cl.7).</i></p>	
<p>CW has prepared two land capability assessments for the reuse of recycled water in:</p> <ol style="list-style-type: none"> <li>1. the Development;</li> <li>2. the Avondale College Designated Irrigation Zone.</li> </ol> <p>The land capability assessment for the project provides a high level, conservative view of water demands across the development. Flow has separately prepared a Water Balance report which recognises that BASIX40 (and the potential change to BASIX50) has driven and will continue to drive (over the course of the 15- to 20-year development roll-out) a change in behaviour and a change in water fittings and appliances available in the market. The 'average' installation therefore has a lower water demand and therefore lower sewage production in new developments". This data is calibrated over time by observed demands in the market. Irrigation of recycled water has been assessed in selected areas with details and management systems reflected in the Cooranbong Scheme Management Plan and Flow Systems Recycled Water Irrigation Management Plan and Monitoring and Sampling Plan.</p>	
<p><b>RELEVANT APPENDICES</b></p> <ul style="list-style-type: none"> <li>• Appendix 4.1.6(a) Cooranbong Scheme Water Balance Summary Report</li> <li>• Appendix 4.3.13(a) Cooranbong Land Capability Assessment</li> <li>• Appendix 4.3.13(b) Avondale College DIZ Land Capability Assessment</li> <li>• Appendix 4.3.13(c) Flow Systems Monitoring and Sampling Plan Table of Contents</li> </ul>	
4.3.14	<p>If a treatment process forms part of the infrastructure for which the applicant corporation is seeking a licence, what waste streams will be generated by the proposed treatment plant (such as screenings and biosolids but not including the treated effluent) and how will the waste be disposed of or handled?</p>



*The response to this question will be used to determine whether the activities authorised by a licence (if granted) present a significant risk of harm to the environment (Reg cl.7). The response will also be used as a context for our assessment of the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).*

The treatment infrastructure is already licensed within the existing NOL 15\_033 and no further treatment processes or waste streams are relevant to this NOL variation application.

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## 5 Retail Supplier

Only to be completed by applicants seeking a retail supplier's licence.

Note a retail supplier's licence may only be granted if sufficient quantities of the water supplied will have been obtained otherwise than from a public water utility (Act s.10(4)(d)).

5.1 Supply of water	
Please provide a response to the questions in the following section if you are seeking a licence for the <u>supply of water</u> by means of any water industry infrastructure. This section applies to the supply of drinking water and non-potable water.	
5.1.1	Describe the water industry infrastructure that the applicant corporation will access to supply water.
<i>The response to this question is a requirement for any retail supplier's licence for water industry infrastructure (Reg cl.10(1)(a)). The response will also be used to ensure you have applied for the correct licence(s)).</i>	
Not applicable. Flow Systems separately holds retail supplier's licence 13_001R that covers the CW NOL area.	
5.1.2	What volume of water is available from the proposed source? Where applicable, please provide the capacity of the source and the (allowable) average daily extraction rate from the source. If there is more than one source, please provide the requested information for each of the sources. <b>Where relevant, provide a copy of any agreements and/or licences to access the source water in Appendix 5.1.2.</b>
<i>The response to this question will be used to determine whether sufficient quantities of the water supplied will have been obtained otherwise than from a public water utility (Act s.10(4)(d)).</i>	
Not applicable. Flow Systems separately holds retail supplier's licence 13_001R that covers the CW NOL area.	
5.1.3	What customers or classes of customers does the applicant corporation propose to supply with water?
Classes of customers may include residential, industrial, commercial or agricultural.	
<i>The response to this question is a requirement for any retail supplier's licence (Act s.6(1)(b)). The response will also be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i>	
Not applicable. Flow Systems separately holds retail supplier's licence 13_001R that covers the CW NOL area.	
5.1.4	Will you be supplying small retail customers with water (i.e., less than 15ML/year)?
A person is a small retail customer in relation to water supply if the maximum rate at which water is supplied, pursuant to one or more water supply contracts, to all premises that the person owns, leases or occupies is less than 15 megalitres per year.	

<p><i>The response will be used as context to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)). The response will also be used as a context for the assessment of risks from the proposed scheme and to identify possible additional licence conditions relating to the supply of water to small retail customers.</i></p>	
<p>Not applicable. Flow Systems separately holds retail supplier's licence 13_001R that covers the CW NOL area.</p>	
5.1.5	<p><b>Provide your preliminary risk assessment for the retail activities related to the scheme in Appendix 5.1.5.</b> The risk assessment must identify the events and circumstances that could adversely affect the applicant corporation's ability to carry out the activities for which the licence is sought (including any activities undertaken by a nominated third party), the probability of the occurrence of any such event or circumstance and the measures to be taken by the applicant corporation to prevent or minimise the likelihood of any such event or circumstance.</p>
<p>The preliminary risk assessment should demonstrate the application of a consistent methodology for identifying hazards and assessing potential impacts and risks. We strongly recommend that the applicant corporation utilises an established risk management system such as outlined in AS/NZS 4360 (Risk Management).</p>	
<p><i>The response to this question is a requirement for any retail supplier's licence (Reg cl.10(1)(b)). The response to this question will be used to determine whether there are any issues of public interest arising from the proposed scheme (Act s.10(4)(f)).</i></p>	
<p>Not applicable. Flow Systems separately holds retail supplier's licence 13_001R that covers the CW NOL area.</p>	
5.1.6	<p>How will the continuity of the supply of water to customers be ensured? What contingency plans are in place in the case of failure of the infrastructure?</p>
<p>The continuity of supply may differ between customer classes. If this is the case for your project please define the different levels of service for each customer class and how the continuity of supply of water, relevant to that class of customer, will be maintained.</p>	
<p><i>The response to this question is a requirement for any retail supplier's licence (Reg cl.10(1)(b)(iii)). The response to this question will be used to determine whether there are any issues of public interest arising from the proposed scheme (Act s.10(4)(f)). The response will also be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i></p>	
<p>Not applicable. Flow Systems separately holds retail supplier's licence 13_001R that covers the CW NOL area.</p>	
5.1.7	<p>Describe the systems and processes that the applicant corporation will have in place to manage retail activities including billing systems, complaint and debt recovery procedures. <b>Provide evidence of the applicant corporation's capacity to develop and implement a retail supply management plan in Appendix 5.1.7.</b></p>
<p>The evidence may include examples of processes and procedures for either the proposed scheme or other similar schemes undertaken by the applicant corporation. The examples should demonstrate links to a risk management process. For existing (brownfield) schemes you should provide the actual systems and procedures.</p>	
<p><i>The response to this question is a requirement for any retail supplier's licence (Reg cl.10(1)(b)(iv)). The response will also be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i></p>	
<p>Not applicable. Flow Systems separately holds retail supplier's licence 13_001R that covers the CW NOL area.</p>	

<b>5.2 Provision of sewerage services</b>	
Please provide a response to the questions in the following section if you are seeking a licence for the <u>provision of sewerage services</u> by means of any water industry infrastructure.	
5.2.1	Describe the water industry infrastructure that the applicant corporation will access to provide sewerage services.
<i>The response to this question is a requirement for any retail supplier's licence for water industry infrastructure (Reg cl.10(2)(a)). The response will also be used to ensure you have applied for the correct licence(s).</i>	
Not applicable. Flow Systems separately holds retail supplier's licence 13_001R that covers the CW NOL area.	
5.2.2	What customers or classes of customers does the applicant corporation propose to provide with sewerage services?
Classes of customers may include residential, industrial, commercial or agricultural. The licence may also specify whether the customers are small retail customers.	
<i>The response to this question is a requirement for any retail supplier's licence (Act s.6(1)(b)). The response will also be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i>	
Not applicable. Flow Systems separately holds retail supplier's licence 13_001R that covers the CW NOL area.	
5.2.3	Will you be providing small retail customers with sewerage services (i.e. less than 10.5 ML/year)?
A person is a small retail customer in relation to the provision of sewerage services if the maximum rate at which sewage is discharged, pursuant to one or more sewerage service contracts, from all premises that the person owns, leases or occupies is less than 10.5 megalitres per year, as determined in accordance with guidelines issued by IPART.	
<i>The response will be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)). The response will also be used as a context for the assessment of risks from the proposed scheme and to identify possible additional licence conditions relating to the supply of water to small retail customers.</i>	
Not applicable. Flow Systems separately holds retail supplier's licence 13_001R that covers the CW NOL area.	
5.2.4	<b>Provide your preliminary risk assessment for the retail activities related to the scheme in Appendix 5.2.4.</b> The risk assessment must also identify the events and circumstances that could adversely affect the applicant corporation's ability to carry out the activities for which the licence is sought (including any activities undertaken by a nominated third party), the probability of the occurrence of any such event or circumstance and the measures to be taken by the applicant corporation to prevent or minimise the likelihood of any such event or circumstance.
The preliminary risk assessment should demonstrate the application of a consistent methodology for identifying hazards and assessing potential impacts and risks. We strongly	

recommend that the applicant corporation utilises an established risk management system such as outlined in AS/NZS 4360 (Risk Management).	
<i>The response to this question is a requirement for any retail supplier's licence (Reg cl.10(2)(b)). The response to this question will be used to determine whether there are any issues of public interest arising from the proposed scheme (Act s.10(4)(f)).</i>	
Not applicable. Flow Systems separately holds retail supplier's licence 13_001R that covers the CW NOL area.	
5.2.5	How will the continuity of the provision of sewerage services be ensured? What contingency plans are in place in the case of failure of the infrastructure?
<i>The response to this question is a requirement for any retail supplier's licence (Reg cl.10(2)(b)(iii)). The response to this question will be used to determine whether there are any issues of public interest arising from the proposed scheme (Act s.10(4)(f)). The response will also be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i>	
Not applicable. Flow Systems separately holds retail supplier's licence 13_001R that covers the CW NOL area.	
5.2.6	Describe the systems and processes that the applicant corporation will have in place to manage retail activities including billing systems, complaint and debt recovery procedures. <b>Provide evidence of the applicant corporation's capacity to develop and implement a retail supply management plan in Appendix 5.2.6.</b>
The evidence may include examples of processes and procedures for either the proposed scheme or other similar schemes undertaken by the applicant corporation. The examples should demonstrate links to a risk management process. For existing (brownfield) schemes you should provide the actual systems and procedures.	
<i>The response to this question is a requirement for any retail supplier's licence (Reg cl.10(2)(b)(iv)). The response will also be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i>	
Not applicable. Flow Systems separately holds retail supplier's licence 13_001R that covers the CW NOL area.	

## 6 Applicant experience and systems

The response will be used to assess the applicant corporation's technical and organisational capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).

### 6.1 Network operator

Only provide a response to the questions in the following section if the applicant corporation is seeking a network operator's licence

- 6.1.1 Describe the structure of the applicant corporation. Include in the description a list of the entities that have an ownership interest in the applicant corporation, whether legal or equitable. **Provide an organisational diagram in an Appendix 6.1.1.** The diagram should clearly show all entities that have an ownership interest in the applicant corporation,

*The response will be used to assess the applicant corporation's technical and organisational capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).*

CW does not have any direct employees and will rely upon employees from its parent company, Flow, pursuant to a Corporate Services Agreement. Flow has the benefit of significant additional resourcing and support from its parent, Enwave Australia, part of the Brookfield Infrastructure Group.

- **RELEVANT APPENDICES** Appendix 6.1.1(a) CW Ownership Structure (Public Version)
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- 6.1.2 Describe the applicant corporation's (and, where relevant, the nominated third parties) current experience in the construction, maintenance and operation of water and/or other utility infrastructure such as gas, electricity or telecommunications.

*The response will be used to assess the applicant corporation's technical and organisational capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).*

CW is a wholly-owned subsidiary of Flow.

CW's experience is based on the collective experience of Flow's Directors and other key personnel in the executive management team who are integral members of the CW project delivery and operations team. This experience includes finance, equity, insurance, procurement, legal, equipment supply, design, construction, operation and maintenance.

Eight of Flow's wholly-owned subsidiaries (Pitt Town Water Pty Ltd, Central Park Water Pty Ltd, Discovery Point Water Pty Ltd, Wyee Water Pty Ltd, Huntlee Water Pty Ltd, Cooranbong Water Pty Ltd, Green Square Water Pty Ltd and Flow Systems Operations Pty Ltd) hold nine network operator licences (FSO holds two NOLs for the Box Hill and Shepherds Bay schemes).

Flow or its wholly-owned subsidiaries have delivered fully commissioned, verified and validated water recycling facilities and received Ministerial consent to commence their commercial operation at Pitt Town, Central Park, Discovery Point and Green Square.

Flow or its wholly-owned subsidiaries have delivered or facilitated the delivery of, fully commissioned and received Ministerial consent to commence the commercial operation of reticulation networks at the following schemes:

Scheme	Drinking Water	Recycled Water	Sewerage
Pitt Town	N/A	✓	✓

Central Park	✓	✓	✓
Discovery Point	✓	✓	✓
Huntlee	✓	✓	✓
Cooranbong	✓	✓	✓
Green Square	N/A	✓	N/A
Box Hill	N/A	✓	✓
Shepherds Bay	✓	✓	✓

FSO has current licence applications with IPART for its Bellbird and Glossodia schemes. Flow's Executive Manager Utility Operations, Andrew Horton, was integrally involved in the delivery and operation of the Sydney Olympic Park Water Reclamation & Management Scheme (WRAMS), and also commissioned Sydney Water's St Marys Recycled Water Plant (Replacement Flows) Project in 2010. Andrew has been responsible for Flow's utility operations since 2010.

Flow's Executive Manager, Project Delivery, Darren Wharton, has extensive experience in the delivery of water, electricity and transport infrastructure in Australia and abroad fulfilling key design and construction roles in Sydney Water's Priority Sewerage Program Alliance, SewerFix Wet Weather Alliance and Ausgrid's Energised Alliance as well as design and delivery roles with Sydney Water, Thames Water (London), Tube Lines (London Underground) and Ausgrid. Darren has been responsible for Flow's utility delivery since 2014.

Flow uses specialist consultants for advice where in house experience is not available. For example, whilst in-house resources have qualifications and considerable experience in environmental planning for large infrastructure projects, Flow also seeks the professional advice of planning lawyers and planners. For this project, legal advice relating to planning has been sought from Sparke Helmore and the global environmental planning consultancy RPS have been consulted for planning and environmental assessment advice.

The Flow Executive Manager, Project Delivery and Flow Executive Manager, Risk and Compliance, Kirsten Evans are both key personnel involved in preparing and reviewing the environmental management aspects of the CW scheme. Both of these key personnel have environmental management qualifications and considerable relevant experience in the environmental assessment and compliance aspects of infrastructure delivery projects. The Executive Manager, Project Delivery particularly, has experience in environmental assessment and compliance on sewage treatment and reticulation projects in NSW.

RPS has been engaged to prepare environmental assessment reports for the CW scheme which have been contributed to and reviewed by the Flow Executive Manager, Project Delivery.

6.1.3	List the key personnel involved in each of the significant activities (construction, maintenance and operation) and summarise their required skills, qualifications and experience. <b>Provide a position description for each of the key personnel positions in Appendix 6.1.3.</b>
Clearly identify whether the key personnel are employees of the applicant corporation or, where relevant, the nominated third party. It is not necessary to list all the employees. Ensure that the key personnel include the person or persons responsible for managing the applicant corporation's compliance with their legislative responsibilities.	
<i>The response will be used to assess the applicant corporation's technical and organisational capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i>	



Stephen McKewen – Flow and CW Chief Executive Officer and CW Director  
 Terence Leckie – Flow and CW Executive Director and Director, Strategy and Business Development  
 Rob Gittins – Flow Chief Operating Officer  
 Andrew Horton – Flow Executive Manager, Utility Operations (responsible for operation and maintenance of the Scheme)  
 Darren Wharton – Flow Executive Manager, Project Delivery (responsible for construction of the scheme, project planning, environmental assessment and project delivery)  
 Kirsten Evans – Flow Executive Manager, Risk and Compliance (responsible for work health and safety, risk management, licensing and regulatory compliance management systems).

#### **RELEVANT APPENDICES**

- Appendix 6.1.3(a) Position Descriptions (Key Personnel)

6.1.4	Please provide details of any other regulatory approvals or licences the applicant corporation or nominated third party holds in relation to the infrastructure activities for which you are seeking a licence.
Include relevant approvals for similar projects interstate or overseas to demonstrate the experience of the applicant corporation. We may seek confirmation of your compliance history in relation to other regulatory approvals or licences as part of our assessment.	
<i>The response will be used to assess the applicant corporation's technical and organisational capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i>	
CW is a wholly-owned subsidiary of Flow.	



CW's experience is based on the collective experience of Flow's Directors and other key personnel in the executive management team who are integral members of the CW project delivery and operations team. This experience includes finance, equity, insurance, procurement, legal, equipment supply, design, construction, operation and maintenance.

Eight of Flow's wholly-owned subsidiaries (Pitt Town Water Pty Ltd, Central Park Water Pty Ltd, Discovery Point Water Pty Ltd, Wyee Water Pty Ltd, Huntlee Water Pty Ltd, Cooranbong Water Pty Ltd, Green Square Water Pty Ltd and Flow Systems Operations Pty Ltd (FSO)) hold nine network operator licences (FSO holds two NOLs for the Box Hill and Shepherds Bay schemes).

Flow or its wholly-owned subsidiaries have delivered fully commissioned, verified and validated water recycling facilities and received Ministerial consent to commence their commercial operation at Pitt Town, Central Park, Discovery Point and Green Square.

Flow or its wholly-owned subsidiaries have delivered or facilitated the delivery of, fully commissioned and received Ministerial consent to commence the commercial operation of reticulation networks at the following schemes as follows.

Scheme	Drinking Water	Recycled Water	Sewerage
Pitt Town	N/A	✓	✓
Central Park	✓	✓	✓
Discovery Point	✓	✓	✓
Huntlee	✓	✓	✓
Cooranbong	✓	✓	✓
Green Square	N/A	✓	N/A
Box Hill	N/A	✓	✓
Shepherds Bay	✓	✓	✓

FSO has current licence applications with IPART for its Bellbird and Glossodia schemes.

Flow holds a retail suppliers licence (13\_001R) for the provision of sewerage, drinking water and recycled water services.

6.1.5 What business systems will the applicant corporation have in place to ensure they can comply with your regulatory requirements? Are any of the systems certified or will they be certified?

Business systems may include but not be limited to quality assurance, asset management and environmental management systems.

*The response will be used to assess the applicant corporation's technical and organisational capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).*

CW has in place the following risk management systems to address regulatory requirements:

**1. Compliance and Risk Management**

This covers all relevant laws and regulations, as well as ensuring compliance with all relevant contractual arrangements. Reporting under management plans forms part of the Flow Systems' external reporting framework. Reporting includes:

- WIC Act (licences)
- BASIX (Planning)
- General Corporate (ASIC, tax, WHS etc.)

**2. Legal**

In house General Counsel advise of changes in legislative and regulatory environment directly impacting Flow's business and licensing obligations.

3. **Asset Management**

Flow uses a platform system called Real Asset Management (RAM) to manage Flow's assets.

4. **Workplace Health and Safety (WHS)**

Monitoring and managing WHS performance and recording any workplace incidents to ensure application of safety processes, procedures, consultation and training of all our employees and contractors. Flow Systems is certified to AS4801 and OSHAS18001 for safety management systems.

5. **Retail Platform**

Flow has implemented NetSuite CRM as its customer relationship management platform. NetSuite is a best-in-class customer service management and support tool that supports Flow's group wide customer interactions. Flow is in the process of implementing a new online customer portal into its website to allow customers access to their monthly invoices and water usage. Customers are encouraged to provide feedback and otherwise lodge enquiries or complaints on-line.

Flow's Blue Oak billing platform is integrated with Merchant Warrior which has the highest level of PSI DSS compliance required for safe storage and usage of customer's electronic payment information.

Enquiry and complaint's tracking and management is facilitated via Zendesk "Case Management" logic. Zendesk case management assigns an individual "ticket" number to each enquiry and case and tracks the response timing according to priority, status and business rules.

- a. For more information regarding NetSuite see [www.netsuite.com](http://www.netsuite.com)
- b. For more information on Zendesk see [www.zendesk.com](http://www.zendesk.com)
- c. For more information regarding SecurePay see [www.securepay.com.au](http://www.securepay.com.au)

6. **Quality Assurance and Environmental Management**

Flow has developed its business using the principles of ISO 9001 and is certified to ISO 9001 for quality management systems and ISO 14001 for environmental management systems.

7. **Document Control System**

Flow uses a Document Control System to control all documents that form part of the Flow Business Management System such as policies, procedures, management plans, work instructions and forms. All Flow staff have access to this system, this is where staff will find information on the Flow position on all business related business activities including various plans, policies, how the policies will be implemented (procedures), step by step instructions (work instructions), and where to record information (forms).

8. **Incident Management Plan**

Flow has an Incident Management Plan which addresses how the organisation manages incidents from an operational and business perspective. This forms a part of Flow's:

- commitment to compliance with WICA
- commitment to compliance with the *Public Health Act 2010 (NSW)*
- overall management plan framework for the provision of drinking water, recycled water and sewage management services.

- **RELEVANT APPENDICES** Appendix 6.1.5(c) ISO Certification

## 6.2 Retail supplier

Only provide a response to the questions in the following section if the applicant corporation is seeking a retail supplier's licence

- |       |   |
|-------|---|
| 6.2.1 | Describe the structure of the applicant corporation. Include in the description a list of the entities that have an ownership interest in the applicant corporation, whether legal or equitable, and a list of the entities that the applicant corporation has an ownership interest in. <b>Provide an organisational diagram in Appendix 6.2.1.</b> The diagram should clearly show all entities that have an ownership interest in the applicant corporation. |
|-------|---|

*The response will be used to assess the applicant corporation's technical and organisational capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).*

Not applicable. Flow Systems separately holds retail supplier's licence 13\_001R that covers the CW NOL area.

- |       |   |
|-------|---|
| 6.2.2 | Describe the applicant corporation's (and, where relevant, the nominated third parties) current experience in the supply of water or the provision of sewerage services. Please also outline any previous experience in the retailing of other services such as gas, electricity or telecommunications. |
|-------|---|

*The response will be used to assess the applicant corporation's technical and organisational capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).*

Not applicable. Flow Systems separately holds retail supplier's licence 13\_001R that covers the CW NOL area.

- |       |   |
|-------|---|
| 6.2.3 | List the key personnel involved in the retail activities and summarise their required skills, qualifications and experience. <b>Provide a position description for each of the key personnel positions in Appendix 6.2.3.</b> |
|-------|---|

Clearly identify whether the key personnel are employees of the applicant corporation or, where relevant, the nominated third party. Ensure that the key personnel include the person or persons responsible for managing the applicant corporation's compliance with their legislative responsibilities.

*The response will be used to assess the applicant corporation's technical and organisational capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).*

Not applicable. Flow Systems separately holds retail supplier's licence 13\_001R that covers the CW NOL area.

- |       |   |
|-------|---|
| 6.2.4 | Please provide details of any other regulatory approvals or licences the applicant corporation or nominated third party holds in relation to the retail activities for which you are seeking a licence. |
|-------|---|

Include relevant approvals for similar projects interstate or overseas to demonstrate the experience of the applicant corporation. We may seek confirmation of your compliance history in relation to other regulatory approvals or licences as part of our assessment.

*The response will be used to assess the applicant corporation's technical and organisational capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).*

Not applicable. Flow Systems separately holds retail supplier's licence 13\_001R that covers the CW NOL area.

6.2.5	What business systems will the applicant corporation have in place to ensure they can comply with your regulatory requirements? Are any of the systems certified or will they be certified?
Business systems may include but not be limited to quality assurance and environmental management systems. Retails systems such as billing and complaint management should be included in the response to this question.	
<i>The response will be used to assess the applicant corporation's technical and organisational capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i>	
Not applicable. Flow Systems separately holds retail supplier's licence 13_001R that covers the CW NOL area.	

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## 7 Financial capacity

The response to the following questions will be used to assess the applicant corporation's financial capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).

Provide a response to the financial questions according to the following matrix:

	Question					
	7.1	7.2	7.3	7.4	7.5	7.6
<b>Retail supply licence only</b>	✓	✓	✓			
<b>Network operator licence</b>						
For infrastructure used for self supply	✓	✓				
For infrastructure used to supply large retail customers	✓	✓	✓			
For infrastructure used to supply small retail customers with non-essential services	✓	✓	✓	✓	✓	
For infrastructure used to supply small retail customers with essential services <sup>a</sup>	✓	✓	✓	✓	✓	✓

<sup>a</sup> Applicant corporations who are providing essential services to small retail customers will be required to meet with our financial assessment team following submission of the application to discuss the information requirements for making the financial capacity assessment.

### 7.1 How will the applicant corporation finance the proposed activity?

7.1.1	Describe the mechanisms by which the applicant corporation's activities are financed or to be financed. <b>Provide evidence of any financial guarantees or commitment of financial support in Appendix 7.1.1.</b>
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Evidence of financial support may include, but is not limited to; a letter from a financial institution (being a bank, credit union or the government) confirming indicative financing of the applicant corporation's activities, including:

- ▼ the nature of finance (e.g., bridging, long term, corporate debt, government funding)
- ▼ type and limit of the facility
- ▼ type and limit of any guarantee, and
- ▼ terms and conditions.

Commercial in confidence

## 7.2 Are there any events that could affect the applicant corporation's future financial capacity?

7.2.1	Are there any events or circumstances, that you are currently aware of, that could affect the applicant corporation's future financial capacity? If applicable, provide details of all such events relevant to the applicant corporation for the last 3 years from the date of this application.
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Events and circumstances may include but are not limited to:	
<ul style="list-style-type: none"> <li>▼ Government or other investigation of the applicant corporation or related entities</li> <li>▼ Contract terminated</li> <li>▼ Factors which might impact on the applicant corporation such as significant litigation, business commitments, contingent liabilities, collections by debt collection agencies on behalf of creditors or liquidation proceedings</li> <li>▼ Any outstanding tax liabilities</li> <li>▼ Any other particulars which are likely to adversely affect the applicant corporation's capacity to undertake the services under the licence (if granted).</li> </ul>	

Commercial in confidence

## 7.3 What is the projected financial performance of the proposed activities?

7.3.1	Summarise the projected cash flows (net EBITDA), including key financial modelling assumptions, such as capex, for the first 5 years of operation (at minimum). Provide the projected cash flows for a minimum of the next five (5) years of operation (including projected closing balance sheets and profit and loss statements), taking into account the licensing agreements, with details of all key financial modelling assumptions in <b>Appendix 7.3.1</b> .
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If necessary, a longer period may be provided to demonstrate financial viability of the project.

Commercial in confidence

7.3.2	Where the applicant corporation is seeking a network operator's licence, who is the owner of the infrastructure for which the applicant corporation is seeking a licence?
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Commercial in confidence

7.3.3	Where the applicant corporation is applying for a retail supplier's licence to supply water or provide sewerage service to residential households, provide an estimate of the cost per household per year to supply water and/or provide sewerage services (as is relevant). Who will pay the cost? What is the proposed price level and structure for the first five years of operation?
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*The response to this question will be used to determine whether there are any issues of public interest arising from the proposed scheme (Act s.10(4)(f)).*

Commercial in confidence

7.4 What is the applicant corporation's financial history?	
7.4.1	Does the applicant corporation have a financial history? If not, explain why.
Commercial in confidence	
7.4.2	Where the applicant is a new corporation, supported by one or more parent entities, provide a copy of guarantee or cross deed of indemnity provided by the parent entity, and financial statements for the parent entity for the last 3 years in <b>Appendix 7.4.2</b> .
Please include any parent entity with more than 20 per cent of equity in the applicant corporation.	
Commercial in confidence	
7.4.3	Where the applicant is a new corporation financed through alternative arrangements (eg, debt or equity), provide a letter from a financial institution (e.g., bank, credit union or the government) certifying an existing or proposed line of credit or financial support, and a copy of guarantee or cross deed of indemnity provided by an entity such as a holding company or Director (provide financial statements demonstrating the financial viability of the guarantor) in <b>Appendix 7.4.3</b> .
Commercial in confidence	
7.4.4	Where the applicant is not a new corporation, summarise the performance of the applicant corporation over the past 3 years below. Provide copies of tax returns for the corporation for the last 3 years in <b>Appendix 7.4.4(a)</b> . Provide financial statements for the last 3 years in <b>Appendix 7.4.4(b)</b> . Where the latest annual financial statements are more than 3 months old, provide the latest available management reports showing: <ul style="list-style-type: none"> <li>▼ a trading statement</li> <li>▼ a profit and loss statement, and</li> <li>▼ a trial balance.</li> </ul>
It is preferable that these financial statements are audited. It is recognised that not all corporations are required to have their annual financial statements audited. However, where you are required to lodge audited financial statements with the Australian Securities and Investments Commission (ASIC), provide copies of these statements. (Note: consolidated accounts for the parent organisation or group to which the applicant corporation belongs would not be considered acceptable)	
Commercial in confidence	
7.4.5	If applicable, what is the applicant corporation's credit rating? Provide the applicant corporation's Credit rating memorandum (e.g., Standard & Poor's, Moody's or Fitch), if available in <b>Appendix 7.4.5</b> .
Commercial in confidence	

7.4.6	Provide details of the applicant corporation's debt/equity finance and any debt covenants on existing borrowings.
Commercial in confidence	
<b>7.5 Contacts</b>	
7.5.1	Does the applicant corporation have an accountant? If yes, what are the accountant's contact details?
Commercial in confidence	
7.5.2	Does the applicant corporation have an external auditor? If yes, what are the external auditor's contact details?
Commercial in confidence	
7.5.3	If required, may we contact the accountant and/or external auditor registered taxation agent to clarify any information provided?
Commercial in confidence	
<b>7.6 Internal accounting records</b>	
7.6.1	<p>Provide bank reconciliations, aged accounts receivable reports, and aged accounts payable reports in <b>Appendix 7.6.1</b> at the dates of:</p> <ul style="list-style-type: none"> <li>▼ The latest management accounting reports (if applicable) and annual financial statements</li> <li>▼ 30 September (most recent)</li> <li>▼ 31 December (most recent)</li> <li>▼ 31 March (most recent), and</li> <li>▼ 30 June (most recent)</li> </ul> <p>for the applicant corporation.</p>
<ul style="list-style-type: none"> <li>• Commercial in confidence</li> </ul>	
7.6.2	<p>Provide an extract of the superannuation payable ledger in <b>Appendix 7.6.2</b> for:</p> <ul style="list-style-type: none"> <li>▼ the 12 months ending on the date of the latest annual financial statements, and</li> <li>▼ the period commencing on the date of the latest annual financial statements and ending on the date of the latest management accounting reports (if applicable)</li> </ul> <p>for the applicant corporation.</p>
<p>Commercial in confidence</p> <ul style="list-style-type: none"> <li>•</li> </ul>	



7.6.3	Provide bank statements for the 3 months to the date of the latest management accounting reports (if applicable) or annual financial statements for the applicant corporation, whichever has been submitted with the application in <b>Appendix 7.6.3</b> .
Commercial in confidence	
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## 8 Statutory declaration and acknowledgement

To be completed by all applicants

### 8.1 Statutory declaration

Provide a statutory declaration from:

- a) the Chief Executive Officer and a director of the applicant corporation (each must complete a separate declaration); or
- b) the sole director and Chief Executive Officer of the applicant corporation; or
- c) such other person that IPART agrees may provide the statutory declaration/s;

to the effect that the information provided in the application is true and correct. For the purposes of Part 3 of this application form, the statutory declaration should also state that the applicant corporation is neither:

- a disqualified corporation for the purpose of section 10(3)(a) of the Water Industry Competition Act 2006 (NSW) (WIC Act); nor
- for the purpose of section 10(3)(b) of the WIC Act, a related entity of a disqualified corporation that would have a direct or indirect interest in, or influence on, the carrying out of the activities that the licence (the subject of the application in relation to which this declaration is made), if granted, would authorise.

A statutory declaration must be signed by an authorised witness.

This is a list of NSW authorised witnesses:

- a justice of the peace;
- a solicitor or barrister with a current New South Wales or interstate practising certificate;
- a commissioner of the court for taking affidavits;
- a notary public; and
- a person by law authorised to administer an oath (e.g., authorised witnesses in other jurisdictions).

I, do solemnly and sincerely declare that:

1. I am a director / ~~the Chief Executive Officer / the sole director and~~ Chief Executive Officer [~~delete as applicable~~] of the applicant (named in the application form accompanying this declaration);
2. the information provided in this application is true and correct to the best of my knowledge;
3. I am aware of the requirements under the *Water Industry Competition Act 2006* (NSW) (**WIC Act**) for the licence being applied for;
4. the applicant corporation is not, for the purpose of section 10(3)(a) of the WIC Act, a disqualified corporation (as defined in the Dictionary of the WIC Act);
5. the applicant corporation is not, for the purpose of section 10(3)(b) of the WIC Act, a related entity of a disqualified corporation (as defined in the Dictionary of the WIC Act) that would have a direct or indirect interest in, or influence on, the carrying out of the activities that the licence (the subject of the application in relation to which this declaration is made), if granted, would authorise;
6. I have the authority to make this application on behalf of the applicant (named in the application form accompanying this declaration);

and I make this solemn declaration conscientiously believing the same to be true and by virtue of the provisions of the *Oaths Act 1900* (NSW).

Name of person making the declaration: **Stephen J. McKewen**

Title of person making the application: **Director / Chief Executive Officer**

Signature of person making the declaration: \_\_\_\_\_

Declared at [place]: **Sydney, New South Wales**

On [date]:

**27/9/18**

In the presence of an authorised witness, who states:

I [insert name of authorised witness] **Jonathan Gunn**

a [insert qualification to be authorised witness] **Solicitor of the Supreme Court of NSW, NSW Law Society Number: 11246**

certify the following matters concerning the making of this statutory declaration by the person who made it: [*\* please cross out any text that does not apply*]

1. ~~\*I saw the face of the person or~~ ~~I did not see the face of the person because the person was wearing a face covering, but I am satisfied that the person had a special justification for not removing the covering.~~
2. ~~\*I have known the person for at least 12 months or~~ ~~I have confirmed the person's identity using an identification document and the document I relied on was~~ [*describe identification document relied on*]

Signature of authorised witness: \_\_\_\_\_

Date:

**27.9.18**



I, do solemnly and sincerely declare that:

1. I am a director ~~/ the Chief Executive Officer / the sole director and Chief Executive Officer~~ ~~[delete as applicable]~~ of the applicant (named in the application form accompanying this declaration);
2. the information provided in this application is true and correct to the best of my knowledge;
3. I am aware of the requirements under the *Water Industry Competition Act 2006 (NSW) (WIC Act)* for the licence being applied for;
4. the applicant corporation is not, for the purpose of section 10(3)(a) of the WIC Act, a disqualified corporation (as defined in the Dictionary of the WIC Act);
5. the applicant corporation is not, for the purpose of section 10(3)(b) of the WIC Act, a related entity of a disqualified corporation (as defined in the Dictionary of the WIC Act) that would have a direct or indirect interest in, or influence on, the carrying out of the activities that the licence (the subject of the application in relation to which this declaration is made), if granted, would authorise;
6. I have the authority to make this application on behalf of the applicant (named in the application form accompanying this declaration);

and I make this solemn declaration conscientiously believing the same to be true and by virtue of the provisions of the *Oaths Act 1900 (NSW)*.

Name of person making the declaration: **Terence J. Leckie**

Title of person making the application: **Director**

Signature of person making the declaration: \_\_\_\_\_

Declared at [place]: **Sydney, New South Wales**

On [date]: **24.09.18**

In the presence of an authorised witness, who states:

I [insert name of authorised witness] **Jonathan Gunn**

a [insert qualification to be authorised witness] **Solicitor of the Supreme Court of NSW, NSW Law Society Number: 11246**

certify the following matters concerning the making of this statutory declaration by the person who made it: [\* please cross out any text that does not apply]

1. \*I saw the face of the person or \*I did not see the face of the person because the person was wearing a face covering, but I am satisfied that the person had a special justification for not removing the covering.
2. \*I have known the person for at least 12 months or \*I have confirmed the person's identity using an identification document and the document I relied on was [describe identification document relied on]

Signature of authorised witness: \_\_\_\_\_

Date: **24.9.2018**

## 8.2 Acknowledgement

An acknowledgement should be provided by:

- (a) company secretary and a director, or
- (b) 2 directors, or
- (c) in the case of a sole director, the sole director, or
- (d) such other person that IPART agrees may provide the acknowledgement.

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The applicant (named in the application form accompanying this acknowledgement) agrees to IPART furnishing a copy of the applicant's completed application form, including any confidential information contained in that application form, to:

- the Minister administering the *Water Industry Competition Act 2006* (NSW) (except Part 3)
- the Minister administering the *Public Health Act 1991* (NSW)
- the Minister administering Chapter 2 of the *Water Management Act 2000* (NSW)
- the Minister administering the *Environmental Planning and Assessment Act 1979* (NSW), and
- the Minister administering the *Protection of the Environment Operations Act 1997* (NSW),

in accordance with section 9(1) of the *Water Industry Competition Act 2006* (NSW) and clause 17 of the *Water Industry Competition (General) Regulation 2008* (NSW).

In the interest of expediting the processing of your application, would you please indicate below whether you agree to a copy of your completed application form (including any confidential information contained in that application form) being provided on a confidential basis directly to relevant departmental staff with responsibility to advise the Ministers named above on issues relating to the provision of water and sewerage services.


☒ I **agree** that a copy of my completed application form (including any confidential information contained in that application form) may be provided to relevant departmental staff as outlined above.

☐ I **do not agree** that a copy of my completed application form (including any confidential information contained in that application form) may be provided to relevant departmental staff as outlined above.

Name of person making the acknowledgement: **Stephen J. McKewen**

Title of person making the acknowledgement: **Director**

On: 27/9/18

Signature of person making the acknowledgement: 

Name of person making the acknowledgement: **Terence J. Leckie**

Title of person making the acknowledgement: **Director**

On: 24.09.18

Signature of person making the acknowledgement: 