

Network Operator and Retail Supplier Licence Application Form

Water Industry Competition Act 2006

Wyee Water — Network Operator's Licence Application form (Rev 2)

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PUBLIC VERSION

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1 Instructions

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

Under the WIC Act, 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 WIC Act. Under section 8(1) of the WIC Act, an application for a licence can only be made by or on behalf of a corporation.

A copy of the WIC Act is available on the NSW Government's legislation website at 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 WIC Act and the Water Industry Competition (General) Regulation 2008 (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.¹

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 WIC Act 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 WIC Act:

- ▼ the protection of public health, the environment, public safety and consumers
- the encouragement of competition in the supply of water and the provision of sewerage services
- ▼ the ensuring of sustainability of water resources, and
- ▼ the promotion of production and use of recycled water.

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 WIC Act and regulations, as we are required to do under section 9(1)(b) of the WIC Act.

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.

How do you submit the application? 1.2.4

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	Attention: Water Licensing	Attention: Water Licensing
Independent Pricing and Regulatory Tribunal	Independent Pricing and Regulatory Tribunal	Independent Pricing and Regulatory Tribunal
Level 8		PO Box Q290
1 Market Street	compliance@ipart.nsw.gov.au	QVB Post Office
Sydney NSW 2000		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, 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 endeavors 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 and Water Industry Competition (General) Regulation 2008, 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 WIC Act 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, http://www.ipart.nsw.gov.au/water/private-sector-licensing/private-sectorlicensing.asp.

Contact Information 2

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

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		
Steve Hall		
Position title	Email address	
Executive Manager Project Delivery	shall@flowsystems.com.au	
Business telephone number	Mobile telephone number	
02 8016 1015	0408 483 028	
Postal address for correspondence		
ADDRESS		
PO Box R455, Royal Exchange, Sydney		
STATE	POST CODE	
NSW	1225	
SECONDARY CONTACT		
☑ Please check if the secondary of	contact should be copied into all correspondence.	
Full name		
Stephen McKewen		
Position title	Email address	
Chief Operating Officer	smckewen@flowsystems.com.au	
Business telephone number	Mobile telephone number	
02 8016 1003	0404 486 939	
Postal address for correspondence		
ADDRESS		
PO Box R455, Royal Exchange, Sydney		
STATE	POST CODE	
NSW	1225	

General Information 3

To be completed by all applicants

2.1 Applicant Dataile		
3.1 Applicant Details		
ар	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)).	
	information will als	and CATSI searches* conducted as part of our so be used to specify the corporation that holds
Insolvency and Trustee Service Austro	alia (ITSA), and Office	n Securities and Investments Commission (ASIC), e of the Registrar of Indigenous Corporations (for and Torres Strait Islander) Act 2006 (CATSI))
Corporation name		
Wyee Water Pty Ltd ('WW')		
ABN/ARBN		ACN
17 160 953 775		160 953 775
Corporation's registered office		
ADDRESS		
Level 3, 210 George Street		
Sydney		
STATE POST CODE		POST CODE
NSW		2000
Corporation's principal place of business		
ADDRESS		
Level 3, 210 George Street		
Sydney		
STATE POST CODE		
NSW		2000
	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 James Leckie	
Position title	Managing Direc	tor/Chief Executive Officer
Date of birth		
Residential Address	•	

ADDRESS			
STATE	POST CODE		
PERSON TWO			
Full name	Stephen John McKewe	n	
Position title	Director, Chief Operati	ng Officer	
Date of birth			
Residential address			
ADDRESS			
STATE	POST CODE		
3.2 Activities for which a	ilicence is sought		
Please check ALL the applicable box	es for which you are seekir	ng a licence	
	<u> </u>	vities 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 op			
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 infrastructu	ire	
3.2.2	RETAIL SUPPLIERS (to sup	ply water or provide sewerage services)	
	Supply of drinking wa	ter	
	Supply of non-potable	e 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.			
N/A			

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.

WW has been engaged to establish and operate a combined sewerage, recycled water and drinking water scheme for a new residential development in Wyee, NSW (the "Scheme").

The Scheme infrastructure is proposed to be constructed in two stages:

Stage 1 (June 2014 to enable servicing of first 33 lots) – Water Recycling Facility building, sewage flow balance tank, membrane bioreactor tank, recycled water storage tanks, drinking water storage tanks, plant and equipment for sewage flow balance tank only. Construction of Stage 1 is expected to commence by November 2013.

Stage 2 (est. 2016* to enable servicing of up to 1000 lots) – installation of remaining plant and equipment to Water Recycling Facility building and membrane bioreactor tank, drinking water and recycled water distribution pumps.

Construction of the network reticulation infrastructure (drinking water, recycled water and sewerage systems) will be undertaken by the Developer in a sequence that is staged to meet the rate of lot sales demand. However it should be noted that due to the timing of Federal Funding requirements under the Commonwealth Government's Building Better Regional Cities Program, the recycled water facility (Stage 1) will be constructed by WW ahead of any network reticulation provided by the Developer.

As such, the network reticulation does not form part of this licence application.

Approval to bring new infrastructure into commercial operation will be sought on a phased basis in association with the infrastructure staging as described above (Stage 1 – drinking water and sewerage; Stage 2 – recycled water).

*target date dependent on rate of lot connections

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)(c)).

Туре	Amount
Workers Compensation	Full amount of the employer's liability under the Workers Compensation Act 1987
Public & Products Liability	\$50,000,000
Professional Indemnity	\$10,000,000
Plant and equipment	\$4,400,000



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:

- (a) identifies the key risks of undertaking the activities to be authorised under the licence (if granted)
- (b) sets out the types and levels of insurance obtained by you in relation to the activities being undertaken
- (c) 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
- (d) provides reasons as to why the types and levels of insurance are appropriate for the size and nature of the activities being undertaken, and
- (e) 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)(c)).

The Protectors Insurance Brokers Pty Ltd has reviewed all insurances required by Flow Systems 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 will be conducted as part of this licensing process by an insurance expert in satisfaction of IPART's standard licensing condition in that regard.

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 name: Flow Systems Pty Ltd [formerly named Water Factory Company Pty Ltd ('WFC') prior to 25 June 2013] ABN/ARBN ACN 28 136 272 298 136 272 298 Corporation's registered office **ADDRESS** Suite 1, Level 3, 210 George Street, Sydney **POST CODE STATE** NSW 2000 Please provide a detailed description of the activities that the third party, named above, will undertake on the applicant corporation's behalf. Flow Systems (www.flowsystems.com.au) is the parent company of WW which is a special purpose utility wholly-owned by Flow Systems and established especially for the Wyee project. Full business support (including all technical, financial, organizational, administrative, and retail supplier management services) is provided by Flow Systems to all of its water utility subsidiaries, including WW, under standard group corporate services arrangements. Refer to Appendix 3.4.1(a) Certificate of Registration on Change of Name 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 name: Wyee Development Fund Pty Ltd (WDF) ABN/ARBN ACN 26 125 961 373 125 961 373 Corporation's registered office **ADDRESS STATE POST CODE**

Please provide a detailed description of the activities that the third party, named above, will

undertake on the applicant corporation's behalf.

WDF is the development company (the 'Developer') in relation to the residential development at Hue Hue Road and Bushells Ridge Road, Wyee (the 'Development'). WDF will provide the sewerage, drinking water and recycled water reticulation infrastructure in the Development.

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 name:

Permeate Partners Pty Limited

ABN/ARBN	ACN
54 130 112 257	130 112 257

Corporation's registered office

ADDRESS

STATE	POST CODE

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

Permeate Partners (www.permeate.com.au) has been engaged as WW's Technical Advisor to undertake design, procurement support, and technical operational support services for construction and operation of the WRF.

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 name:

Perich Constructions Pty Ltd

ABN/ARBN	ACN
80 141 172 189	141 172 189

Corporation's registered office

ADDRESS

STATE	POST CODE

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

Perich Constructions (www.perichconstructions.com.au) has been engaged to undertake the detailed design and construction of the WRF civil and building works.

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

Further, WW intends to go to market for tenders in relation to the detailed design and installation of the mechanical and electrical plant and equipment for the WRF. In accordance with Flow Systems Group policy, WW will award the contract to a major experienced supplier.

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.

Water Recycling Facility (WRF)

WW have prepared a Review of Environmental Factors (REF) report for the WRF site that includes consideration of other regulatory approvals.

Drinking Water infrastructure

WW is currently preparing a Development Application (DA) and associated supporting documentation for submission to Lake Macquarie City Council in order to obtain development consent under Part 4 of the Environmental Planning & Assessment Act 1979 for the drinking water infrastructure at the WRF.

WRF site early works

WW has prepared and submitted a Development Application (DA) to Lake Macquarie City Council for approval to commence early works (ie. bulk earthworks, fencing, site preparation etc.) at the WRF site.

WW have prepared a Statement of Environmental Effects (SEE) and the Developer has prepared an Aboriginal Heritage Impact Assessment (AHIA) in support of the early works DA.

Refer to Appendix 3.5.1(b) Aboriginal Heritage Impact Assessment

Wyee Development Area

The Wyee Development Area has been subject to a rezoning which was approved by Lake Macquarie City Council on 12 November 2012, and gazetted by the Minister for Planning and Infrastructure on 24 May 2013.

The Wyee Local Environmental Study 15 October 2010 was prepared in support of the rezoning and includes environmental considerations for reticulation infrastructure within the Development Area.

Refer to Appendix 3.5.1(c) Amendment to Lake Macquarie LEP 2004

Refer to Appendix 3.5.1(d) Proposed Wyee Rezoning Plan

Refer to Appendix 3.5.1(e) Wyee Local Environmental Study

3.6 Monopoly supply 3.6.1 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 ▼ a specified water supply or sewerage service, and ▼ a specified area, and ▼ a specified class of customers. 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 WIC Act. No. The supply of drinking water, recycled water and sewerage services by WW is not a monopoly service. The licence area proposed by WW is already served by Hunter Water for drinking water. All customer classes have the ability to choose who will provide their drinking water, recycled water and

3.7 Licensing principles

sewerage service.

3.7.1 How does your proposed activity address the following principles (if applicable):

- ▼ The protection of public health, the environment, public safety and consumers
- ▼ 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?

Your response to this question will be used in consideration of the licensing principles, in accordance with section 7 of the WIC Act.

Protection of public health, the environment, public safety and consumers

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

- WW will only supply drinking water and recycled water from the highest quality sources in full compliance with all relevant Australian standards.
- WW will ensure that our infrastructure operations and maintenance arrangements are structured where relevant so that public health, public safety and consumers are protected (including incident/emergency response plans, business continuity and disaster recovery plans).
- WW will ensure that on-lot infrastructure is constructed in accordance with all relevant laws and regulations (ie. Plumbing Code of Australia and Australian Standard AS 3500 Part 2 Sanitary Plumbing and Drainage).
- Signage will be posted advising of the use of recycled water for irrigation of public open space in accordance with the relevant guidelines and industry best practice.
- The selection and identification of an appropriately experienced retail supplier to ensure the education of end user customers regarding appropriate discharge into sewers, and the use of recycled water.

Encouragement of competition

Currently each incumbent public water utility provider has a monopoly in their respective catchment areas on water and sewerage services in the state of NSW. The license will enable private sector to compete in the provision of requisite infrastructure and delivery of resulting services to owners of properties within the Development Area and potentially within surrounding precincts.

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

Sustainability of water resources

The licensed activities will:

- provide a sustainable and drought proof supply of irrigation water
- reduce the amount of drinking water use in the community and surrounding precincts
- provide a constant and reliable source of water for non-drinking purposes

Promotion of production and use of recycled water

The license will enable WW to provide sustainable recycled water within the Development Area with potential to also service surrounding areas. This will facilitate delivery of Government policy and further cements recycled water as an integral part of the whole-of-water lifecycle.

4 Network Operator

You need to complete the following section of this form if the applicant corporation is seeking a <u>network operator's licence</u>. 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.

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 <u>water infrastructure for the supply of drinking water.</u>

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. Provide a detailed process flow diagram of the proposed infrastructure from source to end use in Appendix 4.1.1.

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)).

Drinking water will be sourced from Hunter Water's drinking water system at the boundary of the Development Area.

Preliminary advice from Hunter Water confirms commitment to negotiate terms and agree commercial arrangements for bulk drinking water supply to the Development Area.

This preliminary advice shows a suggested location from which to extend the Hunter Water network to the boundary of the Development. WW will work with Hunter Water to determine the infrastructure requirements outside of and within the Development Area that aligns with the existing and future Hunter Water drinking water system within Wyee.

WW and Hunter Water will work together to determine the most appropriate infrastructure requirements for the whole of Wyee, the staging of the infrastructure and the contributions from each

party. This infrastructure does not form part of this licence application.

Refer to Appendix 4.1.1(a) Process Flow Diagram – Potable Water (detailing the proposed infrastructure from source to end use)

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 identify the infrastructure as existing or to be constructed on the process flow diagram in Appendix 4.1.1.

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).

All drinking water infrastructure under this licence application is to be constructed.

4.1.3 Describe the <u>location</u> of the proposed infrastructure. For example include:

- ▼ the identification of specific lot descriptors (e.g. lot and DP numbers) for the production, treatment, filtration and/or storage infrastructure.
- 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.

Provide a map showing the location of the proposed infrastructure from source to end use in Appendix 4.1.3.

The map may include all water industry infrastructure (ie. 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 (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 drinking water infrastructure described in 4.1.1 above is contained within the Development Area.

Drinking water storage and distribution pumps will be located in a separate area alongside the WRF. The drinking water supply and distribution network will be located throughout the Development Area.

The Wyee Development Area may be described as follows:

LOT	DP	DESCRIPTION
17	870597	Main area: Hue Hue Road to Bushells Ridge Róad & Dilabarra Road
212	866437	Tank site at Bushells Ridge Road
16	870597	Frontage to Hue Hue Road
1	244839	Access from Digary Road
1	785709	Battle-axe block across Mannering Creek; frontage to Hue Hue Road
215	860081	Frontage to Hue Hue Road
210	846801	Frontage to Hue Hue Road

Refer to Appendix 4.1.3(b) Wyee Development Survey Plan (showing Lots and Deposited Plan Numbers)

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 will be sourced from Hunter Water's existing drinking water system.

All of the Scheme's drinking water infrastructure will connect to Hunter Water infrastructure at the boundary of the Development Area as agreed with Hunter Water. Hunter Water is responsible for extending their existing infrastructure to enable connection at the boundary of the Development Area. Currently this connection point will either be at Hue Hue Road or Dillabirra Road.

Hunter Water is responsible for construction, operation and maintenance of the drinking water infrastructure upstream of the Development Area boundary connection point(s). The Developer (WDF) is responsible for the construction of the drinking water infrastructure downstream of the Hunter Water connection point(s) to the customer connection points. WW is responsible for the operation and maintenance of all drinking water infrastructure downstream of the Hunter Water connection point(s) to the customer connection points.

Commercial agreements between Hunter Water and WW once complete, will clearly outline each parties' responsibilities.

Refer to Appendix 4.1.1(a) Process Flow Diagram – Potable Water (identifying the proposed interconnections with other infrastructure)

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. 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.

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 and including the drinking water meter inside each customer's property will be undertaken by the Developer, however WW will establish the masterplan and design standards, and carry out detailed design review and inspection and testing of the constructed infrastructure prior to dedication to WW.

Following dedication of the constructed infrastructure, WW 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 downstream of the drinking water meter (connection point).

Office of Fair Trading is responsible for inspection and review of the customer's drinking water infrastructure. WW will liaise with Office of Fair Trading to ensure that compliance has been achieved in accordance with the WIC Act.

Refer to Appendix 4.1.1(a) Process Flow Diagram - Potable Water (identifying the end user connections)

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. Where relevant, provide a copy of any agreements and/or licences to access the source water in Appendix 4.1.6.

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)).

Drinking Water will be sourced from Hunter Water.

WW and Hunter Water will work together to determine the short and long term infrastructure requirements within the Development Area and surrounding areas.

4.1.7

What volume of water will be treated by the scheme? Please provide the average and peak daily flow rates treated by the scheme.

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.

Treated drinking water will be sourced from Hunter Water as outlined in section 4.1.6.

Requirements for any additional treatment within the Scheme (ie. chlorine dosing) will be determined in conjunction with the long term supply arrangements jointly developed with Hunter Water as per section 4.1.6.

4.1.8

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.

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.

Together with Hunter Water, WW will determine a drinking water servicing strategy that provides a sufficient volume to supply at least 1000 residential lots.

Volume of drinking water supplied to end users is estimated as:

- 550kL/d based on 1000 residential lots and assuming no recycled water supply
- 275kL/d based on 1000 residential lots and assuming recycled water supply

4.1.9 Provide your preliminary risk assessment for the scheme from source to end use in Appendix 4.1.9. 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.

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 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).

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)).

The preliminary risk assessment is a commercial in confidence document.

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
- 4.1.10 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. Provide evidence of the applicant corporation's capacity to implement the 12 elements of the framework in the ADWG in Appendix 4.1.10.

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 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)).

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. WW will further address each of the 12 elements in its Water Quality Plan - Drinking Water.

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. WW's parent company Flow Systems and its various subsidiaries (eg. Pitt Town Water Factory), have demonstrated previously that it has the capacity to implement and maintain the 12 element approach. Flow Systems' capacity to develop and implement a Water Quality Plan is evidenced by independent audit (Water Futures 30 May 2012) confirming that the requirements of the WIC Act have been met for Pitt Town Water Factory.

Flow Systems will support WW in the development of the Water Quality Plan - Drinking Water documentation that embodies the 12 element approach.

Refer to Appendix 4.1.10(b) WIC Act NOL Audit Report Pitt Town

4.1.11 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?

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)).

Continuity of drinking water supply will be achieved through:

- WW will have a commercial agreement with Hunter Water which will detail volume, pressure and reliability. The terms of this agreement will be similar to those used in Hunter Water's standard Customer Contract.
- Significant redundancy is provided by the local drinking water storage tank which provides up to 72 hours supply at average demand.
- Drinking water distribution pumps will be installed in a duty/standby arrangement and supported by an on-site back up power generator.

WW will develop detailed contingency plans in the event of infrastructure failure. These contingency plans will be a component of the Infrastructure Operating Plan and will include:

- Minimisation of drinking water demand through customer notifications.
- Rapid response to infrastructure failure.
- Trucking of drinking water if supply interruption exceeds 48 hours.
- Describe the systems and processes that the applicant corporation will have in place to 4.1.12 manage the water infrastructure. Provide evidence of the applicant corporation's capacity to develop and implement an infrastructure operating plan in Appendix 4.1.12.

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.

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)).

The systems and processes for the drinking water infrastructure will be similar to those currently being prepared for Central Park Water.

Central Park Water and WW are sister companies and both are wholly owned subsidiaries of Flow

Systems. Flow Systems will assist WW to develop and implement both a Water Quality Plan – Drinking Water (as outlined in section 4.1.10) and an Infrastructure Operating Plan.

Flow Systems' capacity to develop and implement appropriate Water Quality Plans and Infrastructure Operating Plans is evidenced by independent audit (Water Futures 30 May 2012) confirming that the requirements of the WIC Act have been met for Pitt Town Water Factory.

Evidence is also provided by Ministerial approval to commence commercial operation for Pitt Town Water Factory (1 June 2012).

Refer to Appendix 4.1.12(c) Notice of Approval for Commercial Operation (Pitt Town)

Refer to Appendix 4.1.10(b) WIC Act NOL Audit Report Pitt Town

4.1.13 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? Provide a copy of any environmental study and/or risk assessment in Appendix 4.1.13.

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.

Water Recycling Facility (WRF)

WW have prepared a Review of Environmental Factors (REF) report for the WRF site that includes the local drinking water storage tanks, dosing, distribution pumps and on-site backup generator.

Wyee Development Area

The Development Area is subject to the Wyee Local Environmental Study 15 October 2010 which was prepared in support of the rezoning and includes environmental considerations for reticulation infrastructure within the Development Area.

Refer to Appendix 3.5.1(e) Wyee Local Environmental Study

As outlined in section 3.5.1, all regulatory approvals for the network reticulation infrastructure will be obtained by the Developer prior to the commencement of those works, and these approvals will be subject to an appropriate level of environmental impact assessment.

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?

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 the possibility of dosing with chlorine, WW is not proposing to treat the drinking water which will be bulk supplied to WW by Hunter Water. There is no waste stream from chlorine dosing.

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 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. Provide a detailed process flow diagram of the proposed infrastructure from source to end use in Appendix 4.2.1.

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.

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)).

The initial recycled water catchment is the Development Area, with potential expansion to include the existing Wyee township in the future. Wastewater collected from predominantly residential households will be made available to the WRF via the Flow Balance Tank.

Key steps in the proposed treatment process are as follows:

Flow balance tank – Used to buffer incoming supply vs. treatment capacity. Initially, this tank will be used for storage of raw sewage prior to trucking off-site via an approved waste management contractor.

Inlet screening – Material greater than 2mm will be removed from the raw sewage to protect the downstream equipment. Dewatered screenings will be collected and disposed off-site via an approved waste management contractor.

Membrane Bioreactor - A membrane bioreactor will form the core treatment process for the proposed WRF. 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.

UV Disinfection – 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.

Chlorination – 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

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

Recycled water distribution – Used to provide the required flow and pressure at the point of end use.

Chemical storage and dosing – A variety of chemicals including sodium hypochlorite, alum, etc. will be used for treatment process purposes, disinfection and membrane cleaning.

WAS Dewatering – Initially, Waste Activated Sludge (WAS) will be trucked off-site. Once volumes are significant (based on gradual connection of developed lots), an on-site belt press will be used to dewater the WAS. Dewatered WAS will be collected and disposed off-site via an approved waste management contractor.

Refer to Appendix 4.2.1 Process Flow Diagram – Sewerage & Recycled Water (proposed recycled water infrastructure from source to end use).

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 identify the infrastructure as existing or to be constructed on the process flow diagram in Appendix 4.2.1.

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).

All recycled water infrastructure under this licence application is to be constructed.

- 4.2.3 Describe the <u>location</u> of the proposed infrastructure. For example include:
 - ▼ the identification of specific lot descriptors (e.g. lot and DP numbers) for the production, treatment, filtration and/or storage infrastructure.
 - 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.

Provide a map showing the location of the proposed infrastructure from source to end use in Appendix 4.2.3.

The map may include all water industry infrastructure (ie, 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 infrastructure described in 4.2.1 above is contained within the Development Area.

Recycled water storage and distribution pumps will be located in a separate area alongside the WRF. The recycled water supply and distribution network will be located throughout the Development Area.

The Wyee Development Area may be described as follows:

LOT	DP	DESCRIPTION
17	870597	Main area: Hue Hue Road to Bushells Ridge Róad & Dilabarra Road
212	866437	Tank site at Bushells Ridge Road
16	870597	Frontage to Hue Hue Road
1	244839	Access from Digary Road
1	785709	Battle-axe block across Mannering Creek; frontage to Hue Hue Road
215	860081	Frontage to Hue Hue Road
210	846801	Frontage to Hue Hue Road

Refer to Appendix 4.1.3(b) Wyee Development Survey Plan (showing Lots and DP Numbers).

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. Identify all interconnections with other infrastructure on the process flow diagram in Appendix 4.2.1 and the map in Appendix 4.2.3.

Examples of interconnections may include potable water top up or trade waste disposal, as well as to other network operators.

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.

WW will not be treating wastewater from outside the Wyee Development Area under this current licence application.

4.2.5 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. 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.

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.

WW is responsible for the design, construction, operation and maintenance of all recycled water infrastructure within the WRF.

The detailed design and construction of the recycled water infrastructure from the WRF up to and including the recycled water meter inside each customer's property will be undertaken by the Developer, however WW will establish the masterplan and design standards, and carry out detailed design review and inspection and testing of the constructed infrastructure prior to dedication to WW.

Following dedication of the constructed infrastructure, WW 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.

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

Office of Fair Trading is responsible for inspection and review of the customer's recycled water infrastructure. WW will liaise with Office of Fair Trading to ensure that compliance has been achieved in accordance with the WIC Act.

Refer to Appendix 4.2.1 Process Flow Diagram - Sewerage & Recycled Water (identifying the end user connections)

4.2.6 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. Where relevant, provide a copy of any agreements and/or licences to access the source water in Appendix 4.2.6.

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)).

There are two sources for the recycled water, namely:

- 1) **Sewage** Based on a design capacity of 1000 lots with an estimated population of 3 persons/lot and wastewater production of 150L/person/day, this source can provide 450kL/day of raw sewage. The conversion of raw sewage to recycled water is ~95%.
- 2) **Drinking water supply** If recycled water demand exceeds the supply of raw sewage and prolonged use depletes the recycled water storages, then drinking water will be used to supplement supply. WW will work with Hunter Water to develop the drinking water system such that drinking water may be used for top-up of recycled water storages.
- 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.

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.

All of the recycled water sources identified in the response to question 4.2.6 will be treated by the Scheme. The average daily flow rate treated by the Scheme is therefore 450kL/day at ultimate Stage 2 capacity (1000 lots).

In relation to peak daily flow:

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

Therefore peak daily flow is expected to be equivalent to average daily flow.

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.

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.

The peak volume of recycled water produced by the Scheme will be approximately 95% of the incoming raw sewage supply, ie. $95\% \times 450 \text{kL/d} = 428 \text{kL/d}$.

The average volume of recycled water supplied to end users will vary with time of year due to irrigation demand.

As outlined in section 4.2.6, drinking water top-up will be used when recycled water demand exceeds recycled water production.

- Residential demand = approx. 300kL/d
- Community irrigation demand = approx. 0kL/d (winter) to 100kL/d (summer)
- Discretionary irrigation demand = approx. 20kL/d 80kL/d
- Max recycled water available for other users (refer section 4.2.15) = approx. 28kL/d 128kL/d

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 intended end uses for the recycled water will include:

- **Dual reticulation**
- Clothes washing (cold tap only)
- Irrigation (unrestricted access)
- Toilet flushing
- Car washing
- Water features
- Process water in the WRF

4.2.10 Provide your preliminary risk assessment for the scheme from source to end use in Appendix 4.1.10. 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.

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 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 preliminary risk assessment is a commercial in confidence document.

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
- 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.

WW will address each of the 12 elements associated with recycled water in the Water Quality Plan -Recycled Water. WW's parent company Flow Systems and its various subsidiaries (eg. Pitt Town Water Factory), have demonstrated previously that it has the capacity to implement and maintain the 12 element approach.

Pitt Town Water Factory and WW are sister companies and both are wholly owned subsidiaries of Flow Systems. Flow Systems will assist WW to develop and implement the Water Quality Plan – Recycled Water documentation that embodies the 12 element approach.

The systems and processes for the recycled water infrastructure are similar to those prepared by Pitt Town Water Factory. Flow Systems' capacity to develop and implement a Water Quality Plan – Recycled Water is evidenced by independent audit (Water Futures 30 May 2012) confirming that the requirements of the WIC Act have been met for Pitt Town Water Factory.

Evidence is also provided by Ministerial approval to commence commercial operation for Pitt Town Water Factory (1 June 2012).

Refer to Appendix 4.1.10(b) WIC Act NOL Audit Report Pitt Town

Refer to Appendix 4.1.12(c) Notice of Approval for Commercial Operation (Pitt Town)

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

Element	Comments	
1	Commitment to responsible use and management of recycled water	
	Address	
	Key stakeholders (ie. management, construction, operation, end users and regulators) were identified and have been involved in the development of the	

proposed recycled water scheme at Wyee. Commitment has been sought, and received, from these stakeholders in relation to the responsible use and management of recycled water at Wyee.

Implement

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.

Maintain

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.

Assessment of the recycled water system

Address

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:

- Intended uses and sources of recycled water
- Recycled water system analysis
- Assessment of water quality data
- Hazard identification and risk assessment

Implement

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.

Maintain

The registers will be updated as required as the project moves through construction, commissioning and operation.

3 Preventive measures for recycled water management

Address

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.

Implement

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.

Maintain

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:

- There is a significant change in the project or stakeholders
- There is a change in regulation
- There is an incident on this or a similar scheme

The accuracy of critical control points will be confirmed via verification testing.

4 Operational procedures and process control

Address

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.

Implement

Operational procedures will be developed in the later stages of the project construction phase and will be included in the SMP. The process control system will be based on the agreed functional description for the system including the Critical Control Points.

Maintain

The operational procedures will be live documents over the life of the scheme. In addition to regular audits they will be reviewed/updated when:

- There is a significant change in the project or stakeholders
- There is a change in regulation
- There is an incident on this or a similar scheme

Process control systems will be checked regularly for accuracy and to ensure logic around Critical Control Points remains valid.

5 Verification of recycled water quality and environmental performance

Address

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.

Implement

The ongoing sampling and monitoring program detailed in the SMP 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.

Maintain

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:

- There is a significant change in the project or stakeholders
- There is a change in regulation
- There is an incident on this or a similar scheme

6 Management of incidents and emergencies

Address

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.

Implement

The incident and emergency response protocols will be included in the SMP. 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.

Maintain

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:

- There is a significant change in the project or stakeholders
- There is a change in regulation
- There is an incident on this or a similar scheme

Employee training and regular incident simulations will be used to confirm system effectiveness and efficiency.

Operator, contractor and end user awareness and training

Address

Awareness and training requirements will be developed for operators, managers, contractors and end users. These requirements will be clearly detailed in the SMP. 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.

Implement

Awareness and training requirements will be included in the SMP 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 WW website.

Maintain

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:

- There is a significant change in the project or stakeholders
- There is a change in regulation
- There is an incident on this or a similar scheme

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.

8 **Community involvement**

Address

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.

Implement

The community consultation strategy will be incorporated into the SMP as part of the communications plan. The WW 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.

Maintain

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:

- There is a significant change in the project or stakeholders
- There is a change in regulation
- There is an incident on this project or a similar scheme

9 Validation, research and development

Address

Key focus areas in relation to the ongoing validation, research and development

needs of the project will be captured in the SMP.

Implement

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.

Maintain

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.

10 **Documentation and reporting**

Address

Documentation, data and reporting will be managed and secured through the SMP and control system. Internal and external reports will transmit important information to project stakeholders.

Implement

A hard copy of the SMP will be kept on site in the RWF control room adjacent to the SCADA. Electronic copies of the SMP 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 stakeholders in accordance with agreed protocols.

Maintain

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.

11 Evaluation and audit

Address

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.

Implement

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.

Maintain

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.

12 Review and continual improvement

Address

Senior management of WW will be provided with regular reports on system performance and copies of incident reports as required by protocols.

Implement

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.

Maintain

Training will be provided for senior managers to ensure they can actively take part in the review process.

4.2.12 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?

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)).

Continuity of recycled water supply will be achieved through:

- WW will have a commercial agreement with Hunter Water that will include drinking water availability as top up for recycled water. The terms of this agreement will be similar to those used in Hunter Water's standard Customer Contract.
- Significant redundancy is provided by the local drinking water storage tanks (for top-up) and the local recycled water storage tanks.
- Recycled water distribution pumps will be installed in duty/standby arrangement and supported by an on-site back up power generator.

WW will develop detailed contingency plans in the event of infrastructure failure. These contingency plans will be a component of the Infrastructure Operating Plan and will include:

- Minimisation of demand through customer notifications.
- Rapid response to infrastructure failure.

4.2.13 Describe the systems and processes that the applicant corporation will have in place to manage the non-potable water infrastructure. Provide evidence of the applicant corporation's capacity to develop and implement an infrastructure operating plan in Appendix 4.2.13.

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.

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)).

The systems and processes for the recycled water infrastructure are similar to those prepared by Pitt Town Water Factory.

Pitt Town Water Factory and WW are sister companies and both are wholly owned subsidiaries of Flow Systems. Flow Systems will assist WW to develop and implement both a Water Quality Plan – Recycled Water (as outlined in section 4.2.11) and an Infrastructure Operating Plan.

Flow Systems' capacity to develop and implement appropriate Water Quality Plans and Infrastructure Operating Plans is evidenced by independent audit (Water Futures 30 May 2012) confirming that the requirements of the WIC Act have been met for Pitt Town Water Factory.

Evidence is also provided by Ministerial approval to commence commercial operation for Pitt Town

Water Factory (1 June 2012).

Refer to Appendix 4.1.10(b) WIC Act NOL Audit Report Pitt Town

Refer to Appendix 4.1.12(c) Notice of Approval for Commercial Operation (Pitt Town)

4.2.14 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? 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).

Water Recycling Facility (WRF)

WW has prepared a Review of Environmental Factors (REF) report for the WRF.

Wyee Development Area

The Development Area is subject to the Wyee Local Environmental Study 15 October 2010 which was prepared in support of the rezoning and includes environmental considerations for reticulation infrastructure within the Development Area.

Refer to Appendix 3.5.1(e) Wyee Local Environmental Study

As outlined in section 3.5.1, all regulatory approvals for the network reticulation infrastructure will be obtained by the Developer prior to the commencement of those works, and these approvals will be subject to an appropriate level of environmental impact assessment.

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)).

There will be three waste streams generated by the WRF, namely:

- Dewatered screenings As noted previously these will be collected and disposed off-site via an approved waste management contractor.
- Waste activated sludge (WAS) As noted previously, WAS will be collected and disposed offsite via an approved waste management contractor.
- Excess recycled water In the short to medium term, excess recycled water will be fully utilised to irrigate newly developed land release stages in readiness for sale. Recycled water will also be used for dust suppression for construction activities within the Development Area, and the establishment of new tree plantings within the public open space.

There are a number of longer term (ie. during the period of developing up to 1000 lots over an

expected 15 to 30 year timeframe) options for the disposal of excess recycled water involving a combination of irrigation and storage. Irrigation will be by way of relocatable surface irrigation systems established on each new staging area prior to construction of housing. As each public open space area is established, permanent sub-surface irrigation systems will be installed and maintained by WW. Furthermore, prior to completion of development a high level storage reservoir and off-site customer base will be established to take all excess recycled water.

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 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. Provide a detailed process flow diagram of the proposed infrastructure from collection to disposal or reuse in Appendix 4.3.1.

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.

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)).

The total Scheme sewerage infrastructure consists of:

- domestic pressure sewer pumping systems at each individual lot
- pressure sewer reticulation network connecting each lot to the WRF

The ultimate Stage 2 development scenario will deliver sewage to the flow balance tank at the WRF before passing through the membrane bioreactor and disinfection treatment process units to be reused as recycled water within the Development. This is designed for up to 1000 lots with a minimum treatment capacity (biological) of 500kL/day.

As stated in section 3.2.5, the network reticulation does not form part of this licence application.

Refer to Appendix 4.2.1 Process Flow Diagram – Sewerage & Recycled Water (proposed sewerage infrastructure from source to end use).

4.3.2 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 identify the infrastructure as existing or to be constructed on the process flow diagram in Appendix 4.3.1.

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).

All sewerage infrastructure under this licence application is to be constructed.

- 4.3.3 Describe the <u>location</u> of the proposed infrastructure. For example include:
 - ▼ the identification of specific lot descriptors (eg, lot and DP numbers) for the collection, treatment, filtration and/or storage infrastructure

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.

Provide a map showing the location of the proposed infrastructure from source to end use in Appendix 4.3.3

The map may include all water industry infrastructure (ie, 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 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 contained within the Development Area.

The Wyee Development Area may be described as follows:

LOT	DP	DESCRIPTION
17	870597	Main area: Hue Hue Road to Bushells Ridge Róad & Dilabarra Road
212	866437	Tank site at Bushells Ridge Road
16	870597	Frontage to Hue Hue Road
1	244839	Access from Digary Road
1	785709	Battle-axe block across Mannering Creek; frontage to Hue Hue Road
215	860081	Frontage to Hue Hue Road
210	846801	Frontage to Hue Hue Road

Refer to Appendix 4.1.3(b) Wyee Development Survey Plan (showing Lots and DP Numbers).

4.3.4 Describe any interconnections between the proposed sewerage infrastructure and other infrastructure not part of this scheme (eg, 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. Identify all interconnections with other infrastructure on the process flow diagram in Appendix 4.3.1 and the map in Appendix 4.3.3.

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.

There are no interconnections between the proposed sewerage infrastructure and other infrastructure not part of this Scheme.

4.3.5 What volume of sewage will be treated by the scheme? Please provide the average and peak daily (hydraulic and biological, where relevant) flow rates treated by the scheme.

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.

As outlined in section 4.2.6, the average daily flow rate of sewage treated by the Scheme is 450kL/day at ultimate Stage 2 capacity (1000 lots).

In relation to peak daily sewage flow rates:

Instantaneous peaks will be buffered by the pressure sewer network and the flow balance

tank.

- The nature of the pressure sewer network prevents inflow/infiltration thereby eliminating the peak flow normally associated with wet weather in conventional sewer systems.
- The catchment is residential and population is expected to be relatively stable throughout the year.

Therefore peak daily flow is expected to be equivalent to average daily flow (450kL/day). However, as outlined in section 4.3.1, the minimum treatment capacity (biological) at ultimate Stage 2 capacity is 500kL/day.

4.3.6

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.

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.

All of the sewage will be collected under the Scheme.

Under the Stage 2 development scenario (up to 1000 lots), all sewage will be collected and treated by the WRF, with 95% of the incoming sewage (ie. 450kL/d) recycled and re-used throughout the Development Area for non-potable water usage (as outlined in section 4.2 of this licence application and below). The remaining 5% will be discharged to tanker truck and appropriately disposed of by an approved waste management contractor.

4.3.7

How will the treated effluent be disposed of from the scheme?

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).

There are four destinations for the treated effluent (ie. Stage 2 recycled water) from the Scheme, namely:

- In-lot reuse Recycled water will be provided to homes via dual reticulation for toilet flushing, washing machines, irrigation (unrestricted access) and car washing.
- Irrigation of public open space Recycled water will be provided to public open space via dual reticulation for irrigation (unrestricted access).
- Excess recycled water (short to medium term) In the short to medium term, excess recycled water will be fully utilised to irrigate newly developed land release stages in readiness for sale.
 Recycled water will also be used for dust suppression for construction activities within the Development Area, and the establishment of new tree plantings within the public open space.
- Excess recycled water (long term) There are a number of longer term (ie. during the period of developing up to 1000 lots over an expected 15 to 30 year timeframe) options for the disposal of excess recycled water involving a combination of irrigation and storage. Irrigation will be by way of relocatable surface irrigation systems established on each new staging area prior to construction of housing. As each public open space area is established, permanent sub-surface irrigation systems will be installed and maintained by WW. Furthermore, prior to completion of development a high level storage reservoir and off-site customer base will be established to take all excess recycled water.

4.3.8 What wastewater and/or catchment characterisation studies have been undertaken? Provide a summary report of any wastewater characterisation or catchment studies including results in Appendix 4.3.8.

This information will be used as a context to the potential health and environmental risks posed by the scheme

The sewerage catchment will be predominantly residential. The design sewage characteristics have been based on conservative values for similar catchments.

4.3.9 Provide your preliminary risk assessment for the scheme from collection to disposal in Appendix 4.3.8. 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

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.

unacceptable to human health or the environment in order to reduce the risk of exposure.

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.

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)).

The preliminary risk assessment is a commercial in confidence document.

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

4.3.10 Describe the systems and processes that the applicant corporation will have in place to manage the sewerage infrastructure. Provide evidence of the applicant corporation's capacity to develop and implement an infrastructure operating plan in Appendix 4.3.10.

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.

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)).

The systems and processes for the sewerage infrastructure are similar to those prepared by Pitt Town Water Factory.

Pitt Town Water Factory and WW are sister companies and both are wholly owned subsidiaries of Flow Systems. Flow Systems will assist WW to develop and implement both a Sewage Management Plan and an Infrastructure Operating Plan.

Flow Systems' capacity to develop and implement appropriate Management Plans and Infrastructure Operating Plans is evidenced by independent audit (Water Futures 30 May 2012) confirming that the requirements of the WIC Act have been met for Pitt Town Water Factory.

Evidence is also provided by Ministerial approval to commence commercial operation for Pitt Town Water Factory (1 June 2012).

Refer to Appendix 4.1.10(b) WIC Act NOL Audit Report Pitt Town

Refer to Appendix 4.1.12(c) Notice of Approval for Commercial Operation (Pitt Town)

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?

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 pumping system.
- Flexibility in the operation of the pressure sewer network.
- Remote monitoring of failure alarms at each lot in the pressure sewer pumping system.
- Up to 16 hours storage in the flow balance tank at the WRF.
- Critical equipment at the WRF will be installed in duty/standby configuration to ensure adequate redundancy.
- Remote monitoring of failure alarms on critical infrastructure at the WRF.

WW will develop detailed contingency plans in the event of infrastructure failure. These contingency plans will be a component of the Infrastructure Operating Plan and will include:

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

4.3.12 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? Provide a copy of any environmental study and/or risk assessment in Appendix 4.3.12.

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).

Water Recycling Facility (WRF)

WW has prepared a Review of Environmental Factors (REF) report for the WRF.

Wyee Development Area

The Development Area is subject to the Wyee Local Environmental Study 15 October 2010 which was prepared in support of the rezoning and includes environmental considerations for reticulation infrastructure within the Development Area.

Refer to Appendix 3.5.1(e) Wyee Local Environmental Study

As outlined in section 3.5.1, all regulatory approvals for the network reticulation infrastructure will be obtained by the Developer prior to the commencement of those works, and these approvals will be subject to an appropriate level of environmental impact assessment.

4.3.13 Where relevant, what land capability assessments have been undertaken on the proposed land disposal area? Provide a copy of any soil capability assessment in Appendix 4.3.13.

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).

WW has prepared a land capability assessment for the reuse and disposal of recycled water to the developed and undeveloped land.

Refer to Appendix 4.3.13 Wyee Land Capability Report

4.3.14 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 (such as screenings and biosolids but not including the treated effluent) 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)).

There will be three waste streams generated by the WRF, namely:

- **Dewatered screenings** As noted previously these will be collected and disposed off-site via an approved waste management contractor.
- Waste activated sludge (WAS) As noted previously, WAS will be collected and disposed offsite via an approved waste management contractor.
- Excess recycled water In the short to medium term, excess recycled water will be fully utilised to irrigate newly developed land release stages in readiness for sale. Recycled water will also be used for dust suppression for construction activities within the Development Area, and the establishment of new tree plantings within the public open space.

There are a number of longer term (ie. during the period of developing up to 1000 lots over an

expected 15 to 30 year timeframe) options for the disposal of excess recycled water involving a combination of irrigation and storage. Irrigation will be by way of relocatable surface irrigation systems established on each new staging area prior to construction of housing. As each public open space area is established, permanent sub-surface irrigation systems will be installed and maintained by WW. Furthermore, prior to completion of development a high level storage reservoir and off-site customer base will be established to take all excess recycled water.

5 Retail Supplier

Only to be completed by applicants seeking a <u>retail supplier's licence</u>.

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 supply of water by means of any water industry infrastructure.

5.1.1 Describe the water industry infrastructure that the applicant corporation will access to supply

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)).

Not applicable

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. Where relevant, provide a copy of any agreements and/or licences to access the source water in Appendix 5.1.2.

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)).

Not applicable

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.

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)).

Not applicable

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.

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.

Not applicable

5.1.5

Provide your preliminary risk assessment for the retail activities related to the scheme in Appendix 5.1.5. 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.

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).

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)).

Not applicable

5.1.6

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?

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.

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)).

Not applicable

5.1.7

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. Provide evidence of the applicant corporation's capacity to develop and implement a retail supply management plan in Appendix 5.1.7.

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.

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)).

Not applicable

5.2 **Provision of sewerage services**

Please provide a response to the questions in the following section if you are seeking a licence for the provision of sewerage services 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.

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).

Not applicable

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.

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)).

Not applicable

5.2.3 Will you be providing small retail customers with sewerage services (i.e. less than 10.5

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.

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.

Not applicable

5.2.4 Provide your preliminary risk assessment for the retail activities related to the scheme in Appendix 5.2.4. 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).

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)).

Not applicable

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?

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)).

Not applicable

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.

Provide evidence of the applicant corporation's capacity to develop and implement a retail supply management plan in Appendix 5.1.4.

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.

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)).

Not applicable

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)).

WW does not have any direct employees and will rely upon employees from its parent company, Flow Systems Pty Ltd, pursuant to the Corporate Services Agreement. Further, Flow Systems has the benefit of significant additional resourcing and support from its parent, Brookfield Infrastructure Partners group.

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)).

WW is a wholly-owned subsidiary of Flow Systems.

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

Two of Flow Systems' other wholly-owned subsidiaries (Pitt Town Water Factory Pty Ltd and Central Park Water Factory Pty Ltd) hold network operator's licenses.

Flow Systems, together with its key industry partners Permeate Partners and Perich Constructions, has delivered a fully commissioned, validated and verified recycled water facility at its Pitt Town project and has received Ministerial consent to commence commercial operations. Flow Systems is currently constructing its Central Park recycled water facility and has a current licence application with IPART for its Discovery Point project (to be conducted through another wholly-owned subsidiary, Discovery Point Water Factory Pty Ltd).

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. Provide a position description for each of the key personnel positions in Appendix 6.1.3.

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.

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)).

Terry Leckie – Flow Systems Managing Director/Chief Executive Officer, WW Director

Stephen McKewen - Flow Systems Chief Operating Officer, WW Director

Steve Hall – Flow Systems Executive Manager Project Delivery (responsible for construction of the WRF)

Andrew Horton – Flow Systems Executive Manager Operations (responsible for operation and maintenance of the WRF and the reticulation networks)

Refer to 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.

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)).

WW does not currently hold any other regulatory approvals or licences in relation to the construction and operation of the proposed infrastructure; however WW is currently seeking various regulatory approvals as outlined in section 3.5.1.

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)).

WW will have in place the following risk management systems to address regulatory requirements:

- Compliance and Risk Management Framework this covers all relevant laws and regulations, as well as ensuring compliance with all relevant contractual arrangements in relation to the WRF. Reporting under management plans forms part of the Flow Systems Group external reporting framework. Reporting includes:
 - a. WIC Act (licences)
 - b. BASIX (Planning)
 - c. General Corporate (ASIC, tax, WHS etc.)

Refer to Appendix 6.1.5 Compliance and Risk Management Framework

- 2. Legal – retention arrangements with Sparke Helmore to advise of changes in legislative and regulatory environment directly impacting the WRF.
- 3. Asset Management - WW will be using the Asset Management system employed by the Flow Systems Group (currently NetSuite).
- 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.

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. Provide an organisational diagram in Appendix 6.2.1. 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)).

Not applicable

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

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

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

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

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.

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

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:

1			U		0	
		Question				
_	7.1	7.2	7.3	7.4	7.5	7.6
Retail supply licence only	✓	✓	✓			
Network operator licence						
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 ^a	√	✓	✓	√	√	√

^a 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. Provide evidence of any financial guarantees or commitment of financial support in Appendix 7.1.1.

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 (eg, 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.				
Events	and circumstances may include but are not limited to:				
▼ Gove	ernment or other investigation of the applicant corporation or related entities				
	tract terminated				
com	▼ 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				
▼ Any	▼ Any outstanding tax liabilities				
	▼ Any other particulars which are likely to adversely affect the applicant corporation's capacity to undertake the services under the licence (if granted).				
Comme	ercial in confidence				
1					

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 Appendix

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?

WW will own all of the water infrastructure outlined in this application.

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?

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)).

Not applicable

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.

No, as WW was only incorporated on 25 October 2012 it does not have a financial history.

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 Appendix 7.4.2.

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 (eg, 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 **Appendix 7.4.3**.

Not applicable

- 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 **Appendix 7.4.4(a)**. Provide financial statements for the last 3 years in **Appendix 7.4.4(b)**. Where the latest annual financial statements are more than 3 months old, provide the latest available management reports showing:
 - ▼ a trading statement
 - ▼ a profit and loss statement, and
 - a trial balance.

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)

Not applicable (ie. the applicant is a new corporation having been incorporated on 25 October 2012).

7.4.5 If applicable, what is the applicant corporation's credit rating? Provide the applicant corporation's Credit rating memorandum (eg, Standard & Poor's, Moody's or Fitch), if available in **Appendix 7.3.6**.

Not applicable

7.4.6 Provide details of the applicant corporation's debt/equity finance and any debt covenants on existing borrowings.

Commercial in confidence

7.5 Contacts

7.5.1 Does the applicant corporation have an accountant? If yes, what are the accountant's contact details?

Yes

Jeff Charge, Partner Charge Thoo & Co 7.5.2 Does the applicant corporation have an external auditor? If yes, what are the external auditor's contact details? No 7.5.4 If required, may we contact the accountant and/or external auditor registered taxation agent to clarify any information provided? Yes 7.6 Internal accounting records 7.6.1 Provide bank reconciliations, aged accounts receivable reports, and aged accounts payable reports in **Appendix 7.6.1** at the dates of: ▼ The latest management accounting reports (if applicable) and annual financial statements ▼ 30 September (most recent) ▼ 31 December (most recent) ▼ 31 March (most recent), and ▼ 30 June (most recent) for the applicant corporation. Commercial in confidence 7.6.2 Provide an extract of the superannuation payable ledger in **Appendix 7.6.2** for: ▼ The 12 months ending on the date of the latest annual financial statements, and ▼ 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) for the applicant corporation Commercial in confidence 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 Appendix 7.6.3.

Commercial in confidence

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; 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 not a disqualified corporation and that no director or person concerned in the management of the applicant corporation is or would be a disqualified individual within the meaning of the WIC Act.

I, do solemnly and sincerely declare that:

- 1. I am Chief Executive Officer and Director 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 a disqualified corporation within the meaning of the WIC Act;
- 5. no director or person concerned in the management of the applicant corporation is, or would be, a disqualified individual within the meaning of the WIC Act;
- 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 Leckie

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

Signature of person making the declaration:

Declared at [place]: Level 3, 210 George Street, Sydney

On [date]: 29 August 2013

In the presence of

Jonathan Gunn

Title of witness: Solicitor of the Supreme Court of NSW

NSW Law Society Number: 11246

Address of witness: Level 16, 321 Kent St, Sydney NSW 2000

[Justice of the peace, Solicitor, other (specify)]

And as a witness, I certify the following matters concerning the person who made this declaration:

- 1. I saw the face of the person.
- 2. I have confirmed the person's identity using the following identification document: current driver's license.

Signature of witness:

I, do solemnly and sincerely declare that:

- 1. I am a Director of the applicant (named in the application form accompanying this declaration);
- 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 a disqualified corporation within the meaning of the WIC Act;
- 5. no director or person concerned in the management of the applicant corporation is, or would be, a disqualified individual within the meaning of the WIC Act;
- 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 McKewen
Title of person making the application: Director
Signature of person making the declaration:
Declared at [place]: Level 3, 210 George Street, Sydney
On [date]: 29 August 2013
In the presence of

Jonathan Gunn

Title of witness: Solicitor of the Supreme Court of NSW

NSW Law Society Number: 11246

Address of witness: Level 16, 321 Kent St, Sydney NSW 2000

[Justice of the peace, Solicitor, other (specify)]

And as a witness, I certify the following matters concerning the person who made this declaration:

- 1. I saw the face of the person.
- 2. I have confirmed the person's identity using the following identification document: current driver's license.

Signature of witness:		

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.

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 (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: Terence Leckie

Title of person making the acknowledgement: Managing Director/Chief Executive Officer

On [date]: 29 August 2013

Signature of person making the acknowledgement:

Stephen J McKewen Name of person making the acknowledgement:

Title of person making the acknowledgement: Director

On [date]: 29 August 2013

Signature of person making the acknowledgement: