APPLICATION FOR WATER SERVICES LICENCE TMC WITCHCLIFFE PTY LTD APPLICATION SUMMARY

1. Introduction

This application is for a water services license to provide Sewerage Services and Non Potable Water Supply ex scheme to the irrigation discharge field plantation.

The Witchcliffe Ecovillage is located approximately 10 kilometers south of Margaret River in Western Australia.

Sewerage conveyance and treatment to provide 414 connections including residential, commercial and tourism lots within the Witchcliffe Ecovillage with treated effluent from the scheme disposed through a designated agricultural irrigation within the site.

2. The Applicant

The applicant for the water services license is TMC Witchcliffe Pty Ltd (TMC Witchcliffe) ACN 632 933 263 registered 15th April 2019.

TMC Witchcliffe is a related entity of Technology Management Consulting Australasia Pty Ltd.(TMC) with common Director Tony Johansen.

TMC Witchcliffe is funded by Witchcliffe Ecovillage developers, Sustainable Settlements Pty Ltd and Perron Developments Pty Ltd.

TMC Witchcliffe's core activities are to design, construct, own and operate the Witchcliffe Ecovillage Sewer Scheme (WESS)

TMC Witchcliffe will contract TMC for the operation and management of the WESS. Servicing of WESS equipment contracted to Ultraclear Servicing Pty Ltd. The developer will operate and manage the treated effluent irrigation field as an avocado plantation under the Department of Environment and Water Regulation recycled water standard.

3. The Description

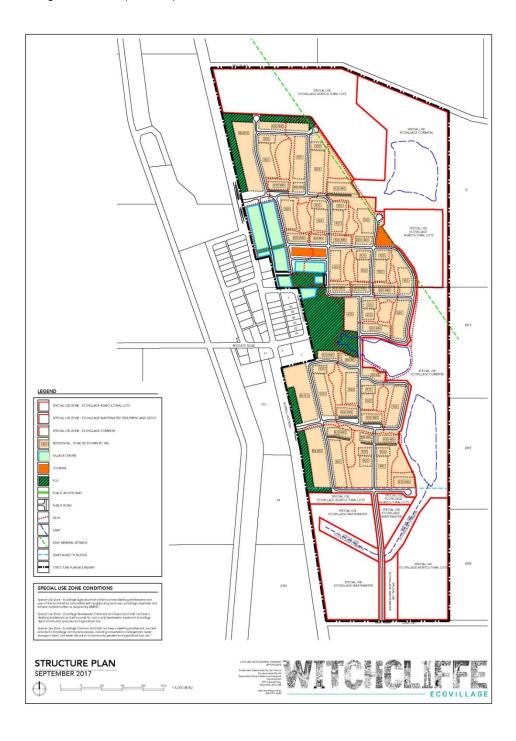
All lots within the Ecovillage will be connected to a sewer gravity/pressure main with waste water treated by a central facility. Treated waste water is stored in a 30ML storage lagoon prior to irrigation of a 9ha avocado plantation

The WESS infrastructure conveyance comprise a gravity and pressure main that will be installed together with other civil works on a staged construction plan. On completion the network will include three pump stations, inspection and maintenance facilities. Waste water in the sewer main is pumped to a central waste water treatment facility (WWTF); treated water compliant to license conditions is discharged to a 30ML lined irrigation lagoon. The lagoon is sized to accommodate the WWTF maximum discharge rate 160kL/d and seasonal storm water. Stored water a combination of treated and storm water irrigates a 9ha avocado plantation.

The WWTF is based on moving bed bioreactor technology (MBBR); four process MBBR trains are installed as complete package plants each with the capacity to treat 40kL/d. The installation mirrors the staged program of the Ecovillage construction. The WWTF infrastructure include: screening, odor control, raw water storage, sludge digestion/dewatering and processing (MBBR). While process logic controls (PLC) are connected to equipment the entire WWTF is supervised by SCADA software enabling a high level of automation, process control and reporting.

4. License Operating Area

The Witchcliffe Ecovillage is located over two titles Lot 2807 and Lot 2812 Bussell Highway south of Margaret River (120 ha).



5. Approvals

Planning approvals for the Witchcliffe Ecovillage have been obtained by the Witchcliffe Ecovillage developers Sustainable Settlements Pty Ltd and Perron Developments Pty Ltd.

TMC Witchcliffe Pty Ltd has made WESS application for approvals with the Department of Health Western Australia for the construction and operation of the WWTF; Department of Water and Environmental Regulation for a works approval of the WESS, and the Economic Review Authority for a Water License

6. Public Interest Information

Development of an Ecovillage at Witchcliffe has been supported by the Shire of Augusta Margaret River and approved by the Minister for Planning and Western Australian Planning Commission on the basis of being serviced by an on-site licensed sewerage scheme. Extensive technical assessment and public consultation was undertaken as part of the planning process.

Amendment of the Shire of Augusta Margaret River Town Planning Scheme to include the Witchcliffe Ecovillage has been advertised and approved. The scheme amendment was supported by a Local Water Management Strategy that included onsite sewerage treatment and reuse.

The Witchcliffe Ecovillage Structure Plan included preparation of a Urban Water Management Plan that provided detailed planning for water management of the development including onsite sewerage treatment and reuse. The plan was advertised for public comment and referred to Department of Water and Environment Regulation and Department of Health prior to endorsement by the Shire of Augusta Margaret River Council and approval by the Department of Planning.