

## TREATMENT PLANT APPROVAL 04/2022

*Plumbing and Drainage Act 2018*

### Approval

1. The **Oxyfix AU (8EP/1200L)** ("the system") described in the Specifications and Drawings in the attached Schedule and manufactured by **Eloy Water Australia Pty Ltd** ("the manufacturer") (ABN 47 161 068 471) has been assessed in accordance with the Queensland Plumbing and Wastewater Code (QPW Code) dated 26 March 2019.
2. Approval is granted for the secondary quality wastewater treatment system, subject to compliance by the manufacturer with the requirements of the *Plumbing and Drainage Regulation 2018*, and the conditions of approval detailed below.
3. This approval, the conditions of approval and the Schedule comprise the entire Treatment Plant Approval document.
4. Any modification by the manufacturer to the design, drawings or specifications scheduled to this approval must be approved by the Chief Executive.

### Conditions of approval

5. The manufacture, installation, operation, service and maintenance of the systems must be in conformity with the conditions of this Treatment Plant Approval.
6. The system when tested by a certification accreditation body in accordance with AS1546.3:2017 was found to comply with the secondary 8EP/1200L level effluent criteria and must continue to meet the following requirements:

**TABLE 2.1 (AS1546.3:2017)**  
**EFFLUENT COMPLIANCE CRITERIA**  
**FOR AN STS WITH NO NUTRIENT**  
**REDUCTION FACILITIES**

Parameter	Secondary effluent	
	90% of samples	Maximum
BOD <sub>5</sub>	≤20 mg/L	30 mg/L
TSS	≤30 mg/L	45 mg/L
<i>E. coli</i> *	≤10 cfu/100 mL	30 cfu/100 mL
FAC	Minimum 0.5 mg/L†	N/A
Turbidity	N/A	N/A

\* Where disinfection is required.

† Minimum level, not 90% of samples.

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Delegated Authority

Department of Energy & Public Works

7. Each system must be serviced in accordance with the accreditation certificate by Global Certification Pty Ltd on 04 July 2022, and details supplied in the owner's operation and maintenance manual.
8. Each system must be supplied with —
  - (a) a copy of this Treatment Plant Approval document;
  - (b) details of the system;
  - (c) instructions for authorised persons for its installation;
  - (d) a copy of the owner's manual to be given to the owner at the time of installation; and
  - (e) detailed instructions for authorised service personal for its operation and maintenance.
9. At each anniversary of the Treatment Plant Approval date, the supplier must submit to the Chief Executive a list of all systems installed in Queensland during the previous 12 months. Where the Chief Executive is notified of any system failures the Chief Executive may randomly select a number of installed systems for audit. The Chief Executive will notify the supplier's nominated NATA accredited laboratory which systems are to be audited for BOD<sup>5</sup> and TSS. The sampling and testing of the selected systems, if required, is to be done at the supplier's expense. The following results must be reported to the Chief Executive;
  - (a) Address of premises;
  - (b) Date inspected and sampled;
  - (c) Sample identification number;
  - (d) BOD<sup>5</sup> for influent and effluent; and
  - (e) TSS for influent and effluent.
10. The Chief Executive may, by written notice, cancel this approval if the manufacturer/supplier fails —
  - (a) to comply with one or more of the conditions of approval; or
  - (b) within 30 days, to remedy a breach, for which a written notice been given by the Chief Executive.
11. This approval may only be assigned with the prior written consent of the Chief Executive.
12. This approval expires on 20 September 2027 unless cancelled earlier in accordance with paragraph 10 above.

**Treatment Plant Approval**

Approved by: Lindsay Walker  
Delegated Authority  
Department of Energy & Public Works



Lindsay Walker

**Director  
Plumbing, Drainage and Special Projects  
Building Legislation and Policy**

Date approved: 21 September 2022

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ABN 61 331 950 314

**TREATMENT PLANT APPROVAL No. 04/2022**  
*Plumbing and Drainage Act 2018*

**SCHEDULE**

**Attachment 1**

Drawings and Specifications for the

**Oxyfix AU(8EP/1200L)**

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## Technical features



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Measure	Unit	Tank
Total height*	mm	2225
Entry height*	mm	1970
Exit height*	mm	1700
Diameter	cm	2500
Weight	T	6.43
Inlet/Outlet pipe diameter	mm	110
Manholes diameter	mm	580

\*external dimensions - tolerance  $\pm 2$ cm

Material	
Tank	Concrete
Media (Oxybee®)	Recycled polypropylene
Aeration ramp	PVC PN 16

### Effluent quality

Parameters	Unit	Performances
BOD5	mg O <sub>2</sub> /L	<20
TSS	mg/L	<30
E coli	cfu/100 ml	<10

Influent	Unit	
BOD <sub>5</sub>	kg O <sub>2</sub> /day	0.48
COD	kg O <sub>2</sub> /day	1.08
TSS	kg/day	0.72
Fat & Oil	mg/L	50 mg/l
Detergent	mg/L	10 mg/l
Daily flow	L/day	1200
Type of application*	Domestic wastewater	

\*a grease trap is required for wastewater coming from a commercial kitchen

Useful volume/area	Unit	
Primary chamber	m <sup>3</sup>	3519
Biological reactor	m <sup>3</sup>	1450
Clarifier	m <sup>3</sup>	1013
Tertiary treatment	m <sup>3</sup>	1093
Emergency storage	At least 24hrs	

### Electromechanical components

#### Blower

Type	Diaphragm
Installed power	61 watt
Noise level	41 dBA
Voltage	240 V
Air diffusers	3
Type of air diffusers	Fine bubbles
Type of sludge recirculation	Airlift
Controller	Sound and visual alarm

### Maintenance

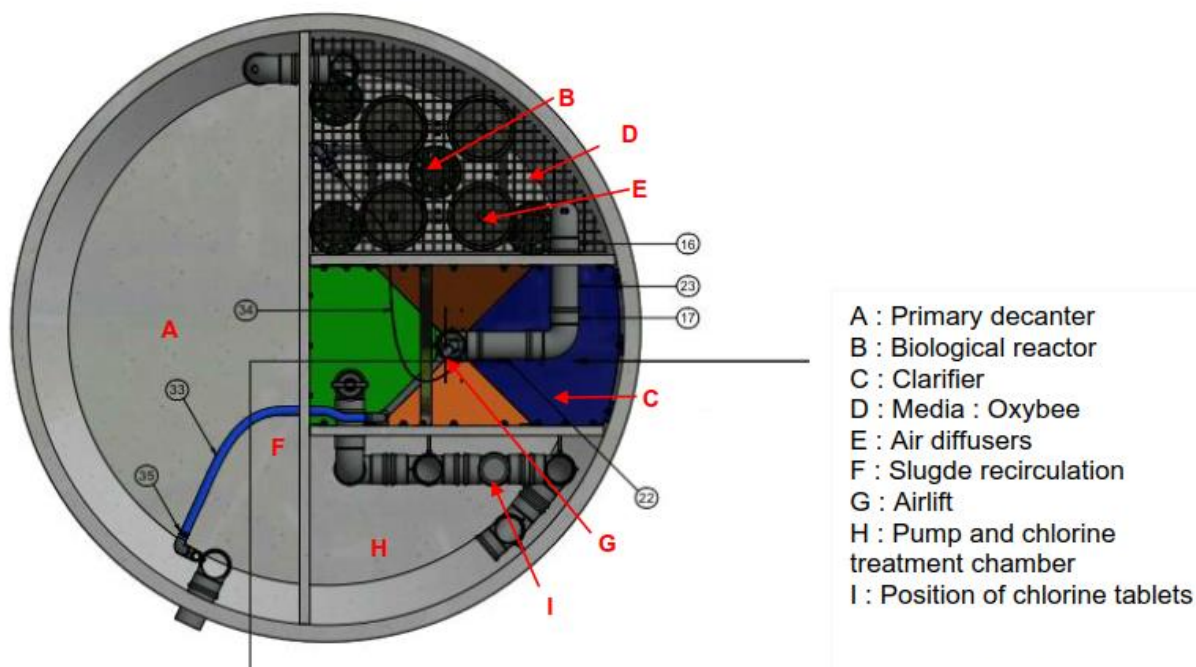
Desludging frequency	When 70% of primary chamber is reached months
Servicing frequency	4 months

### Spare parts (subject to recommended servicing)

Air filter (blower)	Every 1 year
Diaphragm (blower)	Every 2 years
Air diffusers	Every 8 years

- Technical sheet
- Oxyfix AU
- 1200 liters/day - 1 tank

## Components and options



Components included	Options
1 x treatment plant – 1 tank	Riser
1 x diaphragm blower	Lid
1 x technical room with visual and sound alarm	

### Certifications/accreditations

AS 1546.3:2017 / Certificate: 3865-2928-01

Warranties	Year
Tank	10
Other components**	2

\*if :

- ID card is sent back within 3 months after the commissioning
- Commissioning report done by approved company
- Servicing contract during the whole warranty period

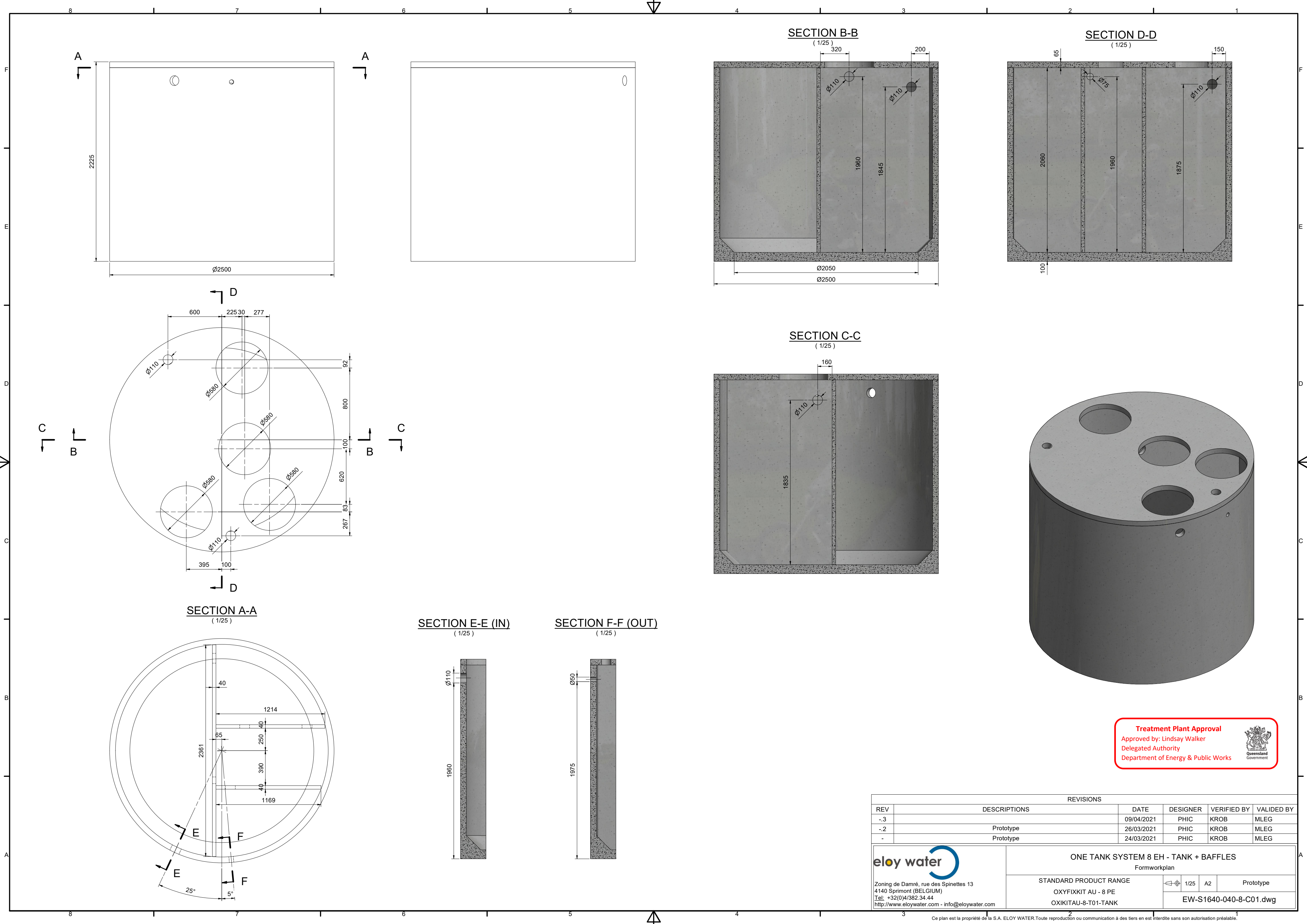
\*\*spare parts/accessories/options not included

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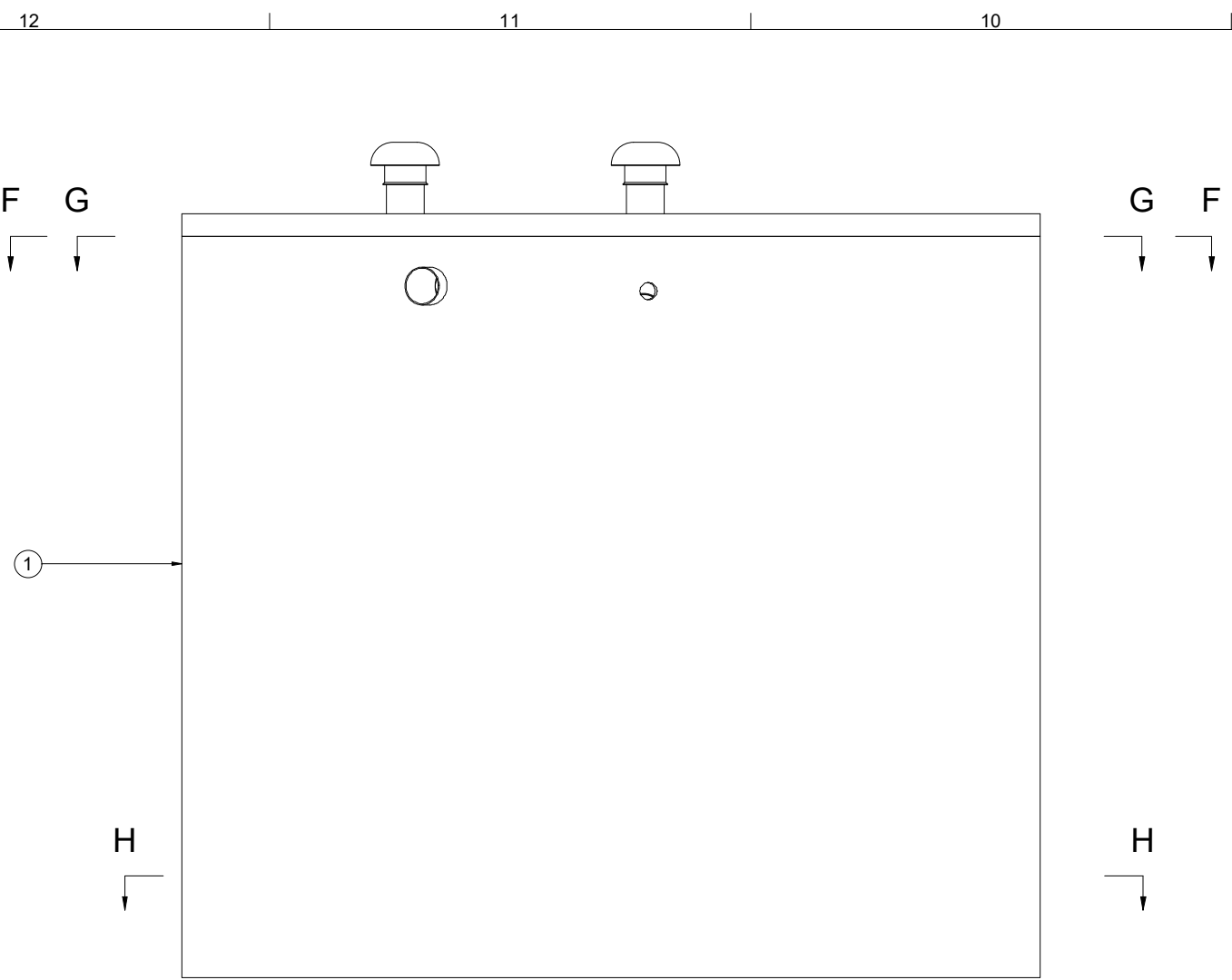


REVISIONS					
REV	DESCRIPTIONS	DATE	DESIGNER	VERIFIED BY	VALIDED BY
-3		09/04/2021	PHIC	KROB	MLEG
-2	Prototype	26/03/2021	PHIC	KROB	MLEG
-	Prototype	24/03/2021	PHIC	KROB	MLEG

**eloy water**  
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4140 Sprimont (BELGIUM)  
Tel: +32(0)4/382.34.44  
<http://www.eloywater.com> - [info@eloywater.com](mailto:info@eloywater.com)

ONE TANK SYSTEM 8 EH - TANK + BAFFLES			
Formworkplan			
STANDARD PRODUCT RANGE		1/25	A2
OXYFIXKIT AU - 8 PE		Prototype	
OXIKITAU-8-T01-TANK		EW-S1640-040-8-C01.dwg	

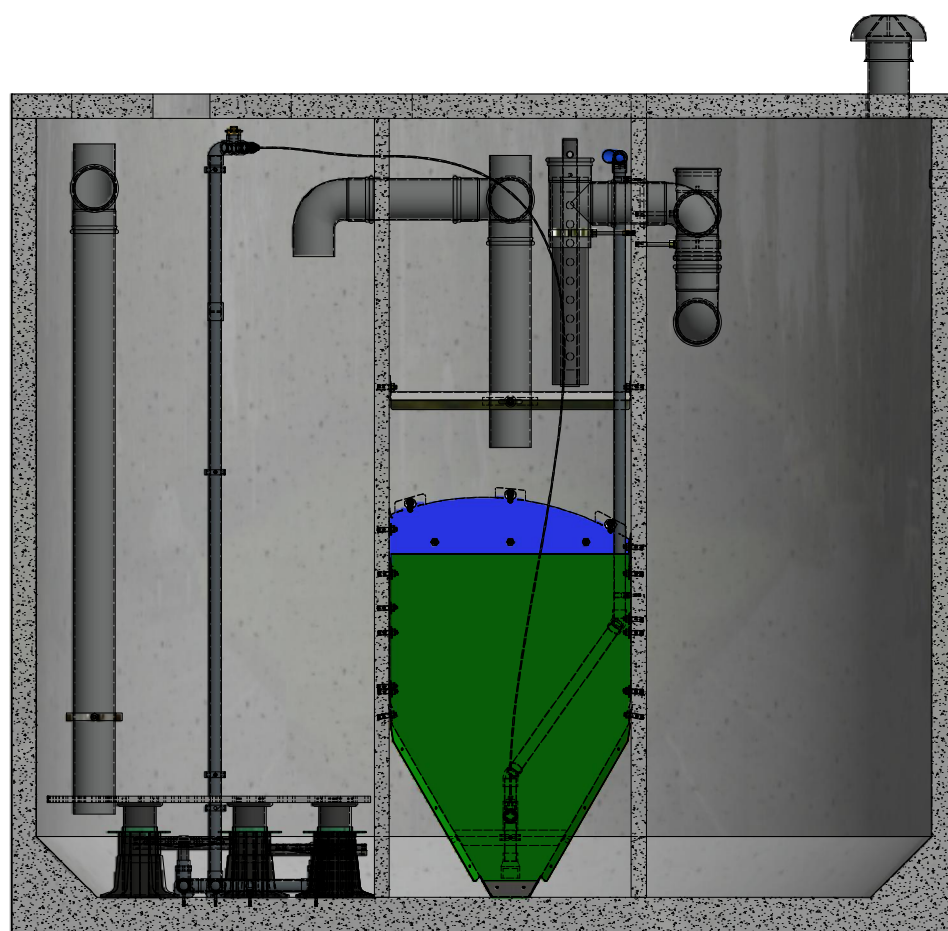




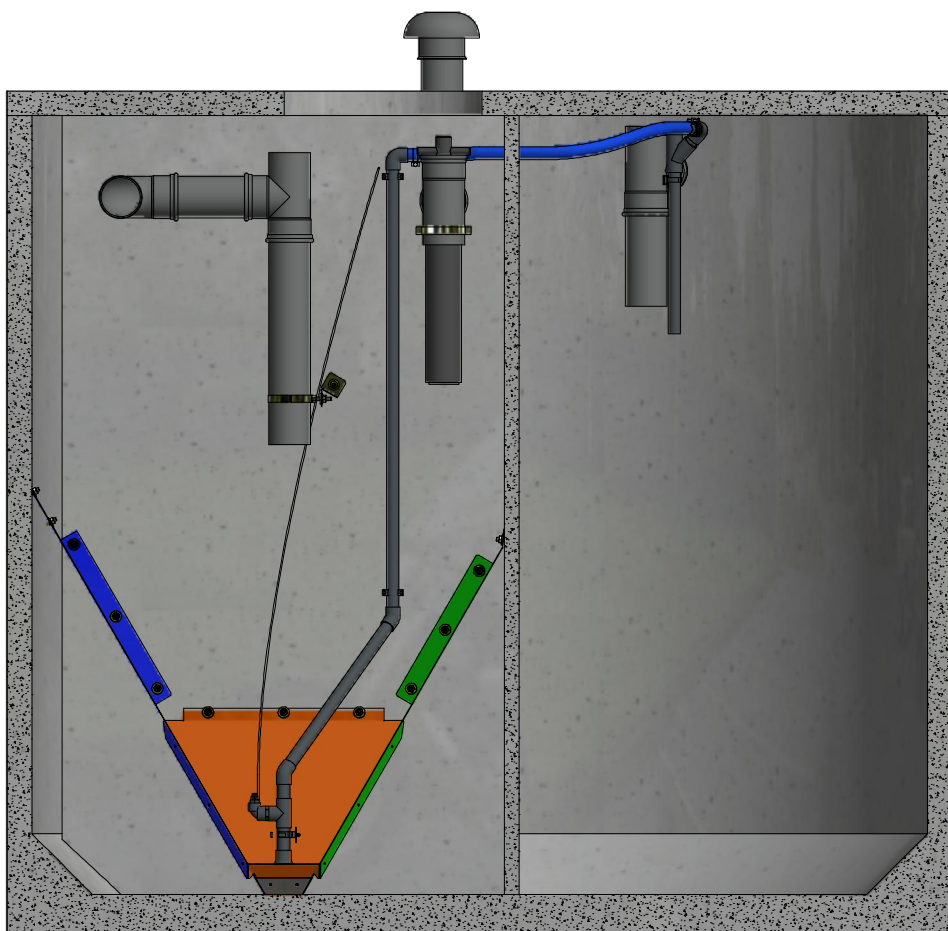
SECTION A-A  
( 1/20 )



SECTION B-B  
( 1/20 )



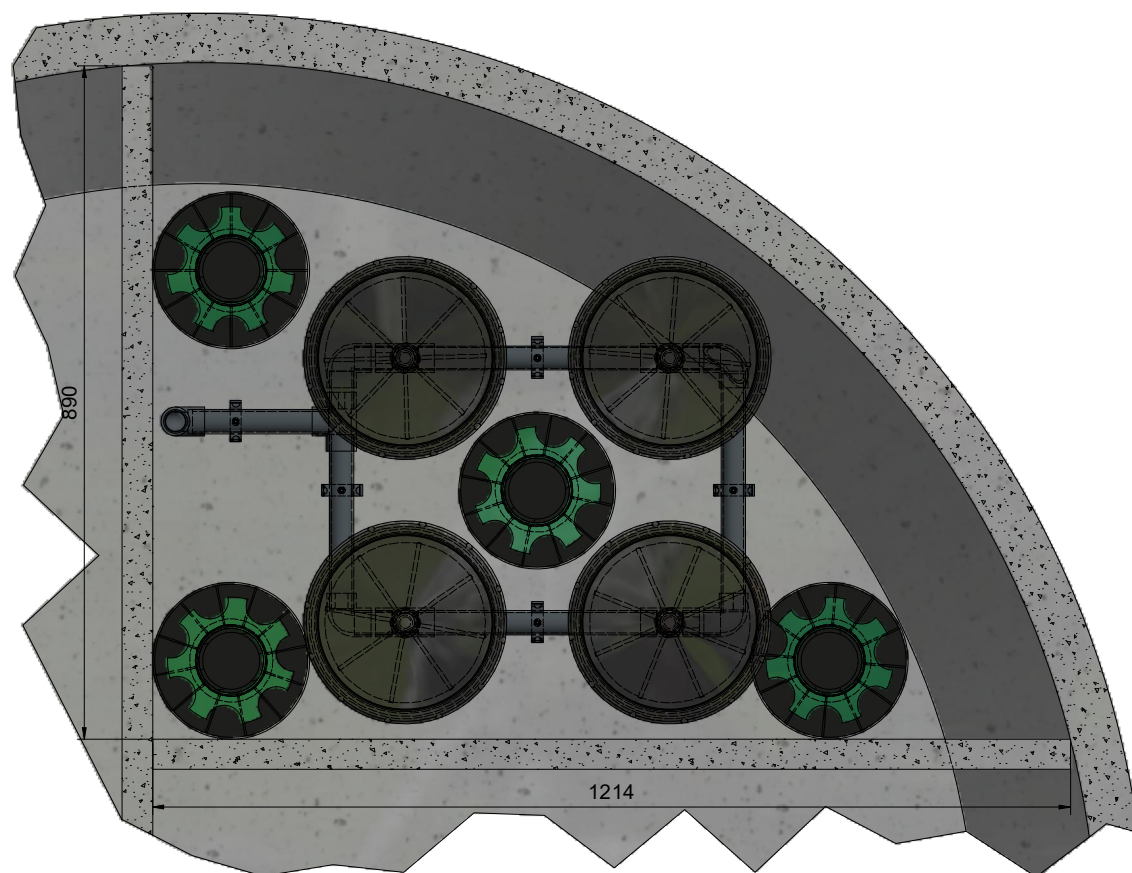
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( 1/20 )



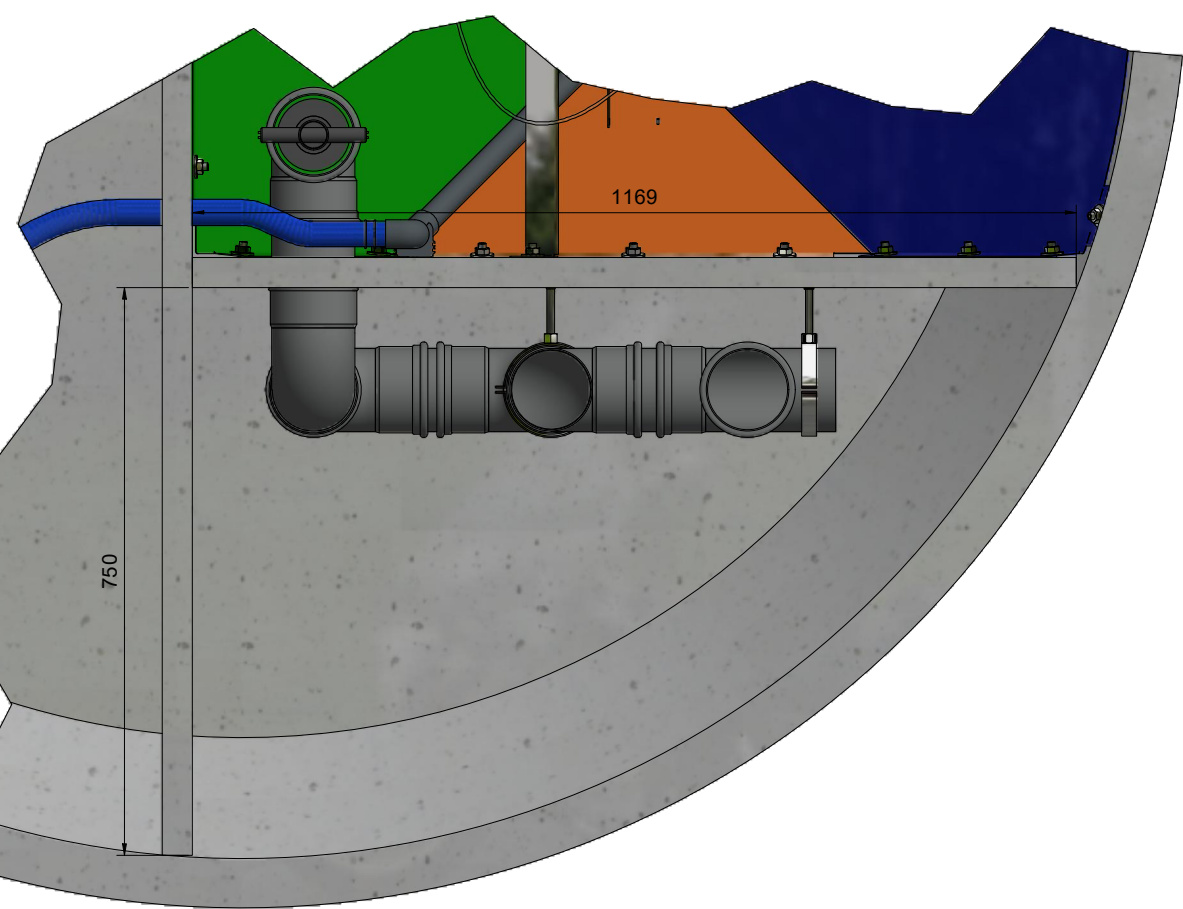
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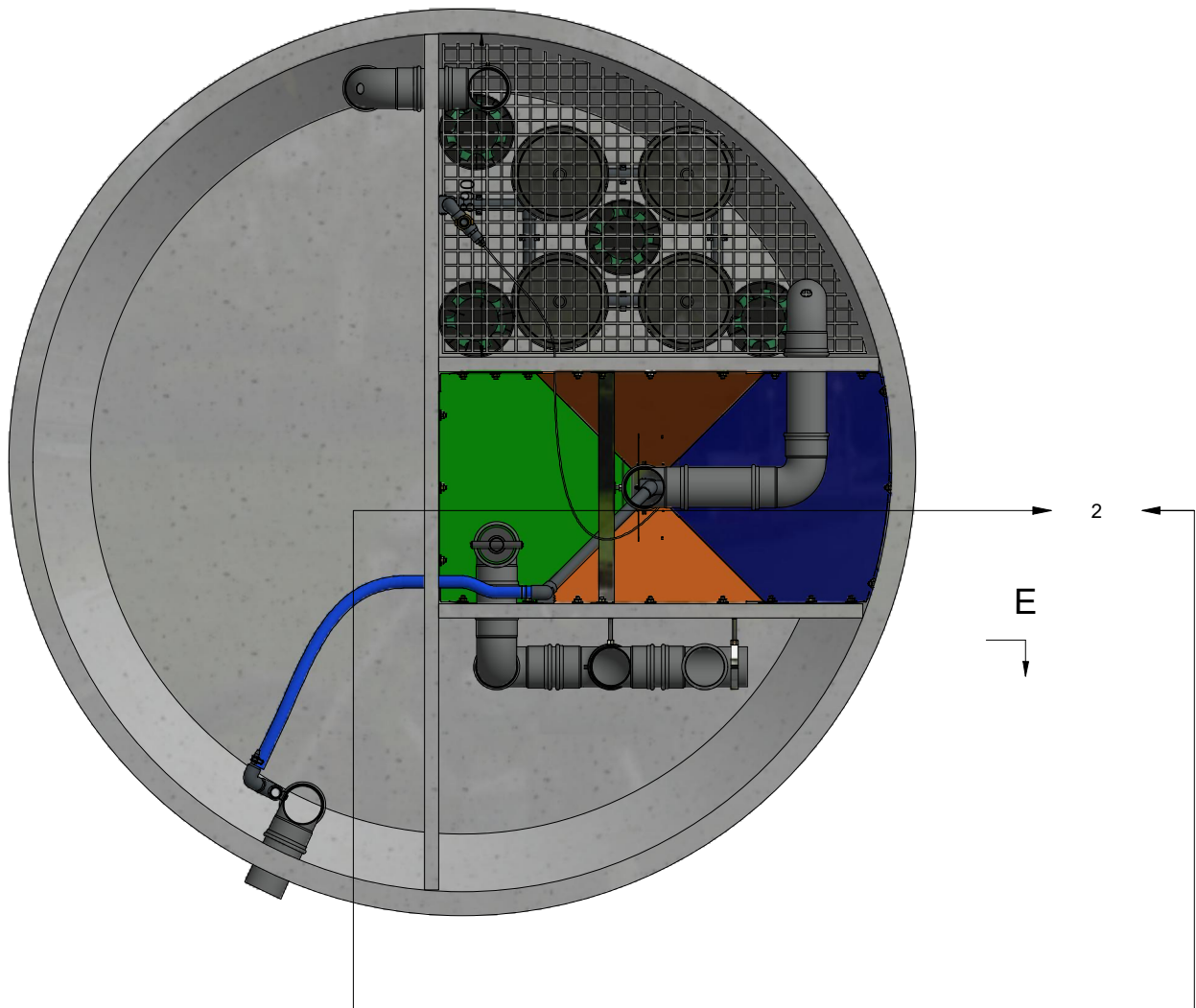
DETAIL 1  
( 1/10 )



DETAIL 2  
( 1/10 )



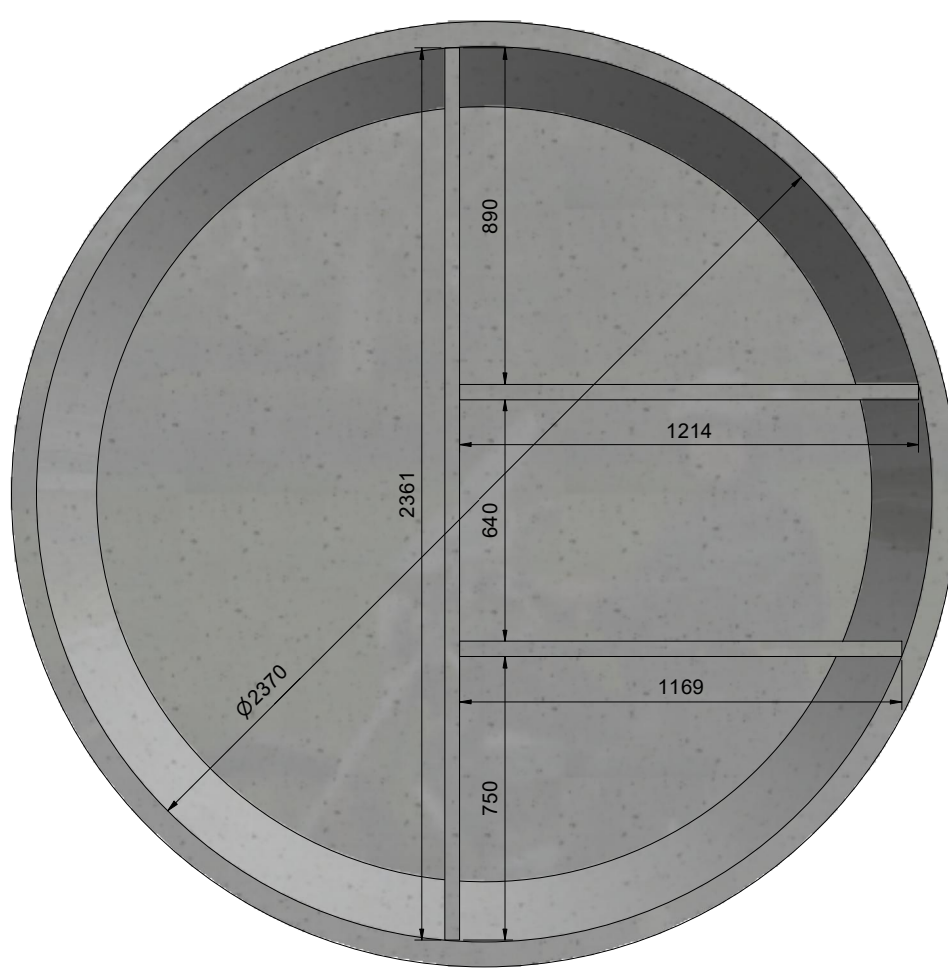
SECTION G-G  
( 1/20 )



SECTION E-E  
( 1/20 )



SECTION F-F  
( 1/20 )



REVISIONS					
REV	DESCRIPTIONS	DATE	DESIGNER	VERIFIED BY	VALIDATED BY
A	Released	05/04/2022	PHIC		
<b>eloy</b>					
Zoning de Dammé, rue des Spinettes 13 4140 Sprimont (BELGIUM) Tel: +32 (0)4 382 34 44 http://www.eloywater.com - info@eloywater.com					
ONE TANK SYSTEM 8 PE ELECTROMECHANICAL PLAN					
STANDARD PRODUCT RANGE OXYFIXKIT AU - 8 PE KITFIXAU-8-T01			1/20	A1	Released
EW-S1640-040-8-E02.dwg					





# PRODUCT CERTIFICATE OF REGISTRATION

## Eloy Water Australia Pty Ltd

1/575, Darling Street, Rozalle, NSW 2309, Australia

## Product Performance Testing

AS 1546.3:2017

Secondary Quality at 1200 L/day (8 EP level)

Model	Disinfection	Average Results over the Test Period	Servicing Frequency	Discharge	Manufactured and assembled
Oxyfix AU	Yes	TSS - 10.27mg/L BOD <sub>5</sub> - 3.88mg/L E coli - 2.76CFU/100mL	4 Monthly	Pumped via disinfection/pump chamber with chlorine dispenser	Manufactured and Assembled: 40 Hill Street, Woombye, QLD 4559, Australia
The system took 1 week to achieve the Secondary Level. Chlorine was added during the test period for sterilisation purposes.					

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*This Certificate of Conformance to the Product Certificate Scheme for "Domestic Wastewater Treatment Units (AWTS)" remains the property of Global Certification Pty. Ltd. and is granted subject to the terms and conditions of the Contract Application, in respect of the Product certified on this page and the attached schedule to the Certification of Conformance, bearing the same number as this certificate.*

Managing Director



CERTIFICATION DATE:

21 June 2022

DATE OF ISSUE:

4 July 2022

EXPIRY DATE:

21 June 2027

CERTIFICATE #:

3865-2928-02