

Site Characterisation Assessment Report

Údarás na Gaeltachta



1st & 2nd Floor Kilmurry House, Main Street,
Castlerea, Co. Roscommon, F45 DK58

Tel: 094 962 1258 **Website:** www.coyleenv.ie



About Coyle Environmental Ltd.

Coyle Environmental Ltd are a highly respected and progressive Environmental Monitoring & Consulting practice.

For over two decades, Coyle Environmental Ltd has been a trusted provider of professional Environmental Monitoring and Consulting Services throughout Ireland.

Our reputation is built on innovative work practices, cost-effective solutions, and unwavering client dedication.

Operating nationwide from our base in the West of Ireland we pride ourselves on delivering consistently high-quality services, ensuring that projects are completed on time and within budget. Our commitment to Continuous Professional Development (CPD) and investment in the latest technology keeps us at the forefront of the industry.

We deliver to our valued clients a consistently excellent quality of service.

We offer a specialist range of services comprising:

- Environmental Monitoring
- Environmental Consulting
- Environmental Project Management

Coyle Environmental Ltd's ability to provide a cost-efficient professional service coupled with a proven track record on project completion and delivery ensures that we remain an industry leader in our areas of expertise.

Our progressive and innovative work practices, together with our commitment to CPD (Continuous Professional Development) ensure that our workforce are consistently upgrading their professional skills and that the company is constantly investing in the most recent technology and equipment.

Domestic Sewage & Percolation Testing



Commercial Wastewater Management



Environmental Project Management



Environmental Monitoring



Environmental Permits & Compliance



Document Control

Project Title:	Site Characterisation Assessment Report for Údarás na Gaeltachta
Project Reference No:	24-006 C
Project Description:	Site Characterisation Assessment Report for Údarás na Gaeltachta at Cape Clear, Co. Cork. P81 DX54
Status:	Final Report
Client Details:	Cape Clear, Co. Cork. P81 DX54
Issued By:	Coyle Environmental Ltd., 1st & 2nd Floor Kilmurry House, Castlerea, Co. Roscommon

Document Production & Approval

Appendix Number	Description		
Prepared by:	Patrick Mannion	13/08/2025	Sewage & Wastewater Department Manager

Revision History

Rev	Status	Date
01	Final	13/08/2025

Coyle Environmental Limited disclaims any responsibility to the Client and others in respect of any matters outside the scope of the report. The report has been prepared with reasonable skill, care and diligence within the terms of the Contract with the client. The report is confidential to the Client and Coyle Environmental Limited accepts no responsibility of whatsoever nature to third parties to whom this report or any part thereof is made known. Any such party relies upon the report at their own risk.

Table of Contents

1.0	Non- Technical Summary
2.0	Introduction
3.0	Site Characterisation form
4.0	Appendices

Appendices

Appendix Number	Description
1	Photographic Representation of Site & Site Characterisation Assessment
2	General Mapping, Aquifer, Vulnerability & Groundwater Protection Information
3	Site Layout & Cross Section of Proposed Site, Illustration of Water Table, Existing & Proposed Ground Levels
4	Manufacturer Site Specific Report
5	Specific Purpose Certificate
6	Coyle Environmental Professional Indemnity Insurance

1.0 Non-Technical Summary

A Site Characterisation Assessment was undertaken in accordance with the EPA Code of Practice: Domestic Wastewater Treatment Systems (p.e.≤10) 2021. to establish the soil percolation rate at Cape Clear, Co. Cork. P81 DX54. This was needed in order to progress the development at the site location and to provide adequate wastewater treatment to be discharged to groundwater. This development falls under section 1.3 of the code of practice as this site has an existing wastewater treatment system present on site and is considered an upgrade to the existing wastewater treatment on site.

The proposed development will have a maximum design population of 15.12. no persons for Hydraulic and 30.3 for organic loading as per EPA Wastewater Treatment Manuals for Small Communities, Business, Leisure Centres and Hotels.

Source		Loading (litres/day)		BOD (grams/day)		PE
Type	Occupancy	Per Occupancy	Total	Per Occupancy	Total	
Toilet Use	137	10	1368	10	1368	23
Staff	5	60	300	30	150	3
Cumann Staff & Expansion	10	60	600	30	300	5
Total:			2268		1818	30.3

Results from the percolation test yields a Subsurface Value of 26.00 min/25mm and a Surface Value of 28.00 min/25mm.

With a total daily demand of 15.12 Hydraulic loading and 30.3 for organic loading we recommend a minimum PE 31 proprietary treatment system is proposed with discharge to 3no. Ter3 packaged tertiary unit with a minimum 120m² attenuation layer. Soil probing to take place before installation of percolation area, If the required 0.9m of soil is not present imported soil to be brought in to make up the required separation distance of 0.9m from base of percolation area to bedrock. Imported soil to have suitable percolation values. Imported soil to be tested for suitable percolation values as per EPA COP 2021. (Explanatory note: The Percolation Area is designed in accordance with the EPA Code of Practice Wastewater Treatment and Disposal Systems serving Single Houses 2021).

2.0 Introduction:

Coyle Environmental was commissioned by Údarás na Gaeltachta to undertake a Site Characterisation Assessment in order to design a wastewater treatment system for the proposed development.

The site is situated in an area of Extreme groundwater vulnerability as per mapping produced from the Geological Survey of Ireland. The site has an R2¹ Protection Response which is acceptable subject to normal good practice. Where domestic water supplies are located nearby, particular attention should be given to the depth of the subsoil over bedrock such that the minimum depth required in chapter 6 are met and the likelihood of microbial pollution is minimised.(i.e. system selection, construction, operation and maintenance in accordance with EPA Code of Practice Wastewater Treatment and Disposal Systems serving Single Houses 2021).

The proposed development is located in at Cape Clear, Co. Cork. P81 DX54. The townland consists mainly of agricultural grassland, residential and agricultural buildings. There are 2 houses located within 250m of the development. Groundwater is the primary target at risk and suitable distances will have to be adhered to.

APPENDIX A: SITE CHARACTERISATION FORM

File Reference:

1.0 GENERAL DETAILS (From planning application)

Prefix: First Name: Surname:

Address: Site Location and Townland:

Number of Bedrooms: Maximum Number of Residents:

Comments on population equivalent

The proposed development will have a maximum design population of 15.12. no persons for Hydraulic and 30.3 for organic loading as per EPA Wastewater Treatment Manuals for Small Communities, Business, Leisure Centres and Hotels.

Proposed Water Supply:

Mains ☒ Private Well/Borehole Group Well/Borehole

2.0 GENERAL DETAILS (From planning application)

Soil Type, (Specify Type):

Subsoil, (Specify Type):

Bedrock Type:

Aquifer Category: Regionally Important ☐ Locally Important ☐ LI ☐ Poor ☐

Vulnerability: Extreme ☒ High ☐ Moderate ☐ Low ☐

Groundwater Body: Status:

Name of Public/Group Scheme Water Supply within 1 km:

Source Protection Area: ZOC ☐ SI ☐ SO ☒ Groundwater Protection Response:

Presence of Significant Sites (Archaeological, Natural & Historical):

Past experience in the area:

Comments:

(Integrate the information above in order to comment on: the potential suitability of the site, potential targets at risk, and/or any potential site restrictions).

THIS SITE HAS AN R21 GROUNDWATER PROTECTION RESPONSE: ACCEPTABLE TO NORMAL GOOD PRACTICE WHERE DOMESTIC WATER SUPPLIES ARE LOCATED NEARBY, PARTICULAR ATTENTION SHOULD BE GIVEN TO THE DEPTH OF SUBSOIL OVER BEDROCK SUCH THAT THE MINIMUM DEPTH REQUIRED (EPA 2021) ARE MET AND THAT THE LIKELIHOOD OF MICROBIAL POLLUTION IS MINIMISED SEPARATION DISTANCES CAN BE FOUND IN TABLE 6.2 AND 6.3 IN EPA CODE OF PRACTICE: DOMESTIC WASTE WATER TREATMENT SYSTEMS (PE<10), 2021.

Note: Only information available at the desk study stage should be used in this section.

3.0 ON-SITE ASSESSMENT

3.1 Visual Assessment

Landscape Position:

BACKGROUND WHEN ROAD USED AS BENCHMARK

Slope:

Steep (>1:5) ☐

Shallow (1:5-1:20) ☒

Relatively Flat (<1:20) ☐

Slope Comment

Surface Features within a minimum of 250m (Distance To Features Should Be Noted In Metres):

Houses:

2 Within 250m
12 Within 500m

Existing Land Use:

Unused area

Vegetation Indicators:

Grass With Weeds

Groundwater Flow Direction:

Potentially Northeast

Ground Condition:

Firm underfoot

Site Boundaries:

None

Roads:

Local road south of site

Outcrops (Bedrock And/Or Subsoil):

Present On Site

Surface Water Ponding:

None within 250m

Lakes:

None within 250m

3.0 ON-SITE ASSESSMENT

3.1 Visual Assessment (contd.)

Beaches/Shellfish Areas:

Coast line north of site

Wetlands:

None within 250m

Karst Features:

None within 250m

Watercourses/Streams: *

None within 250m

Drainage Ditches: *

None on site

Springs: *

None Within 250m as per GSI Mapping

Wells: *

None Within 250m as per GSI Mapping

Comments:

(Integrate the information above in order to comment on: the potential suitability of the site, potential targets at risk, the suitability of the site to treat the wastewater and the location of the proposed system within the site).

GROUNDWATER IS POTENTIALLY AT RISK, SUITABLE SEPARATION DISTANCES WILL HAVE TO BE ADHERED TO. SEPARATION DISTANCES CAN BE FOUND IN TABLE 6.1, 6.2 AND B.3 IIN EPA CODE OF PRACTICE: DOMESTIC WASTE WATER TREATMENT SYSTEMS (PE<10), 2021.

Note and record water level

Site Characterisation Assessment Report 2025

3.2 Trial Hole (should be a minimum of 2.1m deep (3m for regionally important aquifers))

To avoid any accidental damage, a trial hole assessment or percolation tests should not be undertaken in areas which are at or adjacent to significant sites, (e.g.NHAs, SACs, SPAs, and / or Archaeological etc.), without prior advice from National Parks and Wildlife Service or the Heritage Service.

Depth of trial hole (m):

Depth from ground surface to bedrock (m)(if present):

Depth from ground surface to water table (m)(if present):

Depth of water ingress:

Rock type (if present):

Date and time of excavation:

Date and time of examination:

Depth of Surface and Subsurface Percolation Tests

Soil/Subsoil Texture & Classification**

Plasticity and dilatancy***

Soil Structure

Density/Compactness

Colour****

Preferential flowpaths

0.1 m		TOPSOIL	DILATANT	CRUMB	FIRM	BROWN	GRASSROOTS
0.2 m							
0.3 m							
0.4 m		SILT/CLAY	DILATANT	STRUCTURELESS	MEDIUM COMPACT	LIGHT BROWN	
0.5 m							
0.6 m							
0.7 m							
0.8 m							
0.9 m							
1.0 m							
1.1 m							
1.2 m		CLAY	UNCERTAIN DILATANT	STRUCTURELESS	MEDIUM COMPACT	BROWN	
1.3 m							
1.4 m							
1.5 m							
1.6 m							
1.7 m							
1.8 m		BASE OF TRIAL HOLE	BASE OF TRIAL HOLE	BASE OF TRIAL HOLE	BASE OF TRIAL HOLE	BASE OF TRIAL HOLE	BASE OF TRIAL HOLE
1.9 m							
2.0 m							
2.1 m							
2.2 m							
2.3 m							
2.4 m							
2.5 m							
2.6 m							
2.7 m							
2.8 m							
2.9 m							
3.0 m							
3.1 m							
3.2 m							
3.3 m							
3.4 m							
3.5 m							

Site Characterisation Assessment Report 2025

Likely Subsurface Percolation Value:

Likely Surface Percolation Value:

Note:

*Depth of percolation test holes should be indicated on log above. (*Enter Surface or Subsurface at depths as appropriate)

** See Appendix E for BS 5930 classification.

*** 3 samples to be tested for each horizon and results should be entered above for each horizon

**** All signs of mottling should be recorded

Evaluation:

O-HORIZON CONSISTED OF GRASSROOTS A-HORIZON CONSISTED OF TOP SOIL AND WENT DOWN 0.3M B-HORIZON CONSISTED OF SILT/CLAY AND DOWN 1.2M C-HORIZON CONSISTED OF CLAY AND WENT DOWN 1.7M T-TEST STARTED AT 0.3M NO WATER TABLE ENCOUNTERED IN THE TIRAL HOLE AT BELOW GROUNDLEVEL

3.3(a) Subsurface Percolation Test for Subsoil

Step 1: Test Hole Preparation

Percolation Test Hole	1	2	3
Depth from ground surface to top of hole (mm) (A)	300	300	300
Depth from ground surface to base of hole (mm) (B)	700	700	700
Depth of hole (mm) [B - A]	400	400	400
Dimensions of hole [length x breadth (mm)]	300 x 300	300 x 300	300 x 300

Step 2: Pre-Soaking Test Holes

Pre-soak start	Date	26-06-2025	26-06-2025	26-06-2025
	Time	09:00	09:00	09:00
2nd Pre-soak start	Date	26-06-2025	26-06-2025	26-06-2025
	Time	17:00	17:00	17:00

Each hole should be pre-soaked twice before the test is carried out.

Step 3: Measuring T₁₀₀

Percolation Test Hole No.	1	2	3
Date of test	27-06-2025	27-06-2025	27-06-2025
Time filled to 400 mm	09:00	09:00	09:00
Time filled to 300 mm	09:45	09:55	10:23
Time (min.) to drop 100 mm (T ₁₀₀)	45	55	83
Average T ₁₀₀	61.00		

If T₁₀₀ > 480 minutes then Subsurface Percolation value >120 - site unsuitable for discharge to ground

If T₁₀₀ ≤ 210 minutes then go to Step 4;

If T₁₀₀ > 210 minutes then go to Step 5;

Site Characterisation Assessment Report 2025

Step 4: Standard Method (where $T_{100} \leq 210$ minutes)

Percolation Test Hole	1			2			3		
Fill no.	Start Time (at 300 mm)	Finish Time (at 200 mm)	Δt (min)	Start Time (at 300 mm)	Finish Time (at 200 mm)	Δt (min)	Start Time (at 300 mm)	Finish Time (at 200 mm)	Δt (min)
1	09:45	10:40	55	09:55	11:10	75	10:23	12:10	107
2	10:40	12:15	95	11:10	12:50	100	12:10	14:10	120
3	12:15	14:28	133	12:50	15:57	187	14:10	16:35	145
Average Δt Value			94.33			120.67			124.00

Average $\Delta t/4$ [Hole No.1] = 23.58 Average $\Delta t/4$ [Hole No.2] = 30.17 Average $\Delta t/4$ [Hole No.3] = 31.00

Result of Test: Subsurface Percolation Value = 28.00 (min/25 mm)

Comments:

SUBSOIL HAS SUITABLE PERCOLATION PROPERTIES TO BE USED AS A PERCOLATION OPTION AS PER STEP 4 STANDARD METHOD

Step 5: Modified Method (where $T_{100} > 210$ minutes)

Percolation Test Hole 1

Fall of water in hole (mm)	Time Factor = T_f	Start Time hh:mm	Finish Time hh:mm	Time of fall (mins) = T_m	$K_{fs} = T_f / T_m$	T - Value = $4.45 / K_{fs}$
300 - 250	8.1					
250 - 200	9.7					
200 - 150	11.9					
150 - 100	14.1					
Average	T - Value	T - Value Hole 2 = (T2) =				

Percolation Test Hole 2

Fall of water in hole (mm)	Time Factor = T_f	Start Time hh:mm	Finish Time hh:mm	Time of fall (mins) = T_m	$K_{fs} = T_f / T_m$	T - Value = $4.45 / K_{fs}$
300 - 250	8.1					
250 - 200	9.7					
200 - 150	11.9					
150 - 100	14.1					
Average	T - Value	T - Value Hole 2 = (T2) =				

Percolation Test Hole 3

Fall of water in hole (mm)	Time Factor = T_f	Start Time hh:mm	Finish Time hh:mm	Time of fall (mins) = T_m	$K_{fs} = T_f / T_m$	T - Value = $4.45 / K_{fs}$
300 - 250	8.1					
250 - 200	9.7					
200 - 150	11.9					
150 - 100	14.1					
Average	T - Value	T - Value Hole 3 = (T3) =				

Result of Test: Subsurface Percolation Value = min/25 mm

Comments:

3.3(b) Surface Percolation Test for Soil :

Step 1: Test Hole Preparation

Percolation Test Hole

	1	2	3
Depth from ground surface to top of hole (mm)	0	0	0
Depth from ground surface to base of hole (mm)	400	400	400
Depth of hole (mm)	400	400	400
Dimensions of hole [length x breadth (mm)]	300 x 300	300 x 300	300 x 300

Step 2: Pre-Soaking Test Holes

Pre-soak start	Date	26-06-2025	26-06-2025	26-06-2025
	Time	09:00	09:00	09:00
2nd Pre-soak start	Date	26-06-2025	26-06-2025	26-06-2025
	Time	17:00	17:00	17:00

Each hole should be pre-soaked twice before the test is carried out.

Step 3: Measuring T₁₀₀

Percolation Test Hole No.

	1	2	3
Date of test	27-06-2025	27-06-2025	27-06-2025
Time filled to 400 mm	09:00	09:00	09:00
Time filled to 300 mm	09:38	09:45	10:00
Time (min.) to drop 100 mm (T ₁₀₀)	38	45	60

Average T₁₀₀

47.67

If T₁₀₀ > 480 minutes then Subsurface Percolation value >120 – site unsuitable for discharge to ground

If T₁₀₀ ≤ 210 minutes then go to Step 4;

If T₁₀₀ > 210 minutes then go to Step 5;

Step 4: Standard Method (where T₁₀₀ ≤ 210 minutes)

Percolation Test Hole	1			2			3		
Fill no.	Start Time (at 300 mm)	Finish Time (at 200 mm)	Δt (min)	Start Time (at 300 mm)	Finish Time (at 200 mm)	Δt (min)	Start Time (at 300 mm)	Finish Time (at 200 mm)	Δt (min)
1	09:38	10:33	55	09:45	10:42	57	10:00	11:13	73
2	10:33	12:05	92	10:42	11:55	73	11:13	13:40	147
3	12:05	14:35	150	11:55	14:30	155	13:40	16:22	162
Average Δt Value			99.00			95.00			127.33

Average Δt/4 =
[Hole No.1]

24.75

Average Δt/4 =
[Hole No.2]

23.75

Average Δt/4 =
[Hole No.3]

31.75

Result of Test: Surface Percolation Value =

26.00 min/25 mm

Comments:

TOPSOIL HAS SUITABLE PERCOLATION PROPERTIES TO BE USED AS A PERCOLATION OPTION AS PER STEP 4 STANDARD METHOD

Step 5: Modified Method (where $T_{100} > 210$ minutes)

Percolation Test Hole 1

Fall of water in hole (mm)	Time Factor = T_f	Start Time hh:mm	Finish Time hh:mm	Time of fall(mins)= T_m	Kfs= T_f / T_m	T - Value= $4.45 / Kfs$
300 - 250	8.1					
250 - 200	9.7					
200 - 150	11.9					
150 - 100	14.1					
Average	T-Value		T- Value Hole 1 = (T_1) =			

Percolation Test Hole 2

Fall of water in hole (mm)	Time Factor = T_f	Start Time hh:mm	Finish Time hh:mm	Time of fall(mins)= T_m	Kfs= T_f / T_m	T - Value= $4.45 / Kfs$
300 - 250	8.1					
250 - 200	9.7					
200 - 150	11.9					
150 - 100	14.1					
Average	T-Value		T- Value Hole 2 = (T_2) =			

Percolation Test Hole 3

Fall of water in hole (mm)	Time Factor = T_f	Start Time hh:mm	Finish Time hh:mm	Time of fall(mins)= T_m	Kfs= T_f / T_m	T - Value= $4.45 / Kfs$
300 - 250	8.1					
250 - 200	9.7					
200 - 150	11.9					
150 - 100	14.1					
Average	T-Value		T- Value Hole 3 = (T_3) =			

Result of Test: Surface Percolation Value =

min/25 mm

Comments:

4.0 CONCLUSION of SITE CHARACTERISATION

Integrate the information from the desk study and on-site assessment (i.e. visual assessment, trial hole and percolation tests) above and conclude the type of system(s) that is (are) appropriate. This information is also used to choose the optimum final disposal route of the treated wastewater.

Slope of proposed infiltration / treatment area:	0
Are all minimum separation distances met?	X
Depth of unsaturated soil and/or subsoil beneath invert of gravel (or drip tubing in the case of drip dispersal system)	0.9
Percolation test result: Surface:	28.00
Sub-surface:	26.00
Not Suitable for Development	☐
Suitable for Development	☒

Identify all suitable options

1. Septic tank system (septic tank and percolation area) (Chapter 7)	No
2. Secondary Treatment System (Chapters 8 and 9) and soil polishing filter (Section 10.1)	No
3. Tertiary Treatment System and Infiltration /treatment area (Section 10.2)	Yes

Discharge Route

5.0 SELECTED DWWTS

Propose to install:

and discharge to:

Invert level of the trench/bed gravel or drip tubing (m)

Site Specific Conditions (e.g. special works, site improvement works testing etc.

From our Site Characterisation Assessment, we can confirm that this site is suitable to provide treatment for domestic sewage via discharge to groundwater.

This development falls under section 1.3 of the code of practice as this site has an existing wastewater treatment system present on site and is considered an upgrade to the existing wastewater treatment on site

The proposed development will have a maximum design population of 15.12. no persons for Hydraulic and 30.3 for organic loading as per EPA Wastewater Treatment Manuals for Small Communities, Business, Leisure Centres and Hotels.

With a total daily demand of 15.12 Hydraulic loading and 30.3 for organic loading we recommend a minimum PE 31 proprietary treatment system is proposed with discharge to 3no. Ter3 packaged tertiary unit with a minimum 120m2 attenuation layer. Soil probing to take place before installation of percolation area, If the required 0.9m of soil is not present imported soil to be brought in to make up the required separation distance of 0.9m from base of percolation area to bedrock. Imported soil to have suitable percolation values. Imported soil to be tested for suitable percolation values as per EPA COP 2021.

With a total daily demand of 900L/day we are proposing a PROPRIETARY PE 6 wastewater treatment system or similar with discharge to a TER 3 PACKAGED TERTIARY UNIT and a distribution ATTENUATION LAYER OF 60sqm.

PIPE RUNS MUST BE VENTED.

The location of filter can be seen on the attached site layout plan and cross section detail (Appendix 3) We would recommend that the installation be supervised and certified by the Environmental Engineer who carried out the site characterisation assessment and proposed design.

¹ A discharge of sewage effluent to "waters" (definition includes any or any part of any river, stream, lake, canal, reservoir, aquifer, pond, watercourse or other inland waters, whether natural or artificial) will require a licence under the Water Pollution Acts 1977-90. Refer to Section 2.4.

6.0 TREATMENT SYSTEM DETAILS

SYSTEM TYPE: Septic Tank Systems (Chapter 7)

Tank Capacity (m3)		Percolation Area		Mounded Percolation Area	
		No. of Trenches		No. of Trenches	
		Length of Trenches (m)		Length of Trenches (m)	
		Invert Level (m)		Invert Level (m)	

SYSTEM TYPE: Secondary Treatment System (Chapters 8 and 9) and polishing filter (Section 10.1)

Secondary Treatment Systems receiving septic tank effluent (Chapter 8)

Packaged Secondary Treatment Systems receiving raw wastewater (Chapter 9)

Media Type	Area (m2)*	Depth of Filter	Invert Level	Type
Sand/Soil				PE31 TREATMENT
Soil				Capacity PE 31
Constructed Wetland				Sizing of Primary Compartment
Other				m3

Polishing Filter*: (Section 10.1)

Surface Area (m2)*		Option 3 - Gravity Discharge Trench length (m)	
Option 1 - Direct Discharge Surface area (m2)		Option 4 - Low Pressure Pipe Distribution Trench length (m)	
Option 2 - Pumped Discharge Surface area (m2)		Option 5 - Drip Dispersal Surface area (m2)	

SYSTEM TYPE: Tertiary Treatment System and infiltration / treatment area (Section 10.2)

Identify purpose of tertiary treatment Provide performance information Provide design information

demonstrating system will provide required treatment levels

EUROTANK TER3 UNIT IS A TERTIARY TREATMENT SYSTEM IS REOUIRE TO MEAT SEPERATION DISTANCE AS PER EPA CODE 2021 TABLE 6.1

EFFLUENT QUALITY AS PER PIA TEST BOD 2MG/L NH4N 0.3MG/L SUSPENDED SOLIDS 4MG/L PHOPHATES<6MG/L ECOLI AND TOTAL COLIFORM REMOVAL >99%

3 NO. TER 3 PACKAGED TERTIARY UNIT and a distribution ATTENUATION LAYER OF 120sqm

DISCHARGE ROUTE:

Groundwater	☒	Hydraulic Loading Rate * (l/m2.d)		Surface area (m2)	
Surface Water **	☐	Discharge Rate (m3/hr)			

*Hydraulic loading rate is determined by the percolation rate of subsoil

**Water Pollution Act discharge licence required

6.0 TREATMENT SYSTEM DETAILS

QUALITY ASSURANCE:

Installation & Commissioning

Manufactures certification of installation & supervising engineers certification of compliance with planing and building regulations this certificate will be forwarded to the local authority.

On-going Maintenance

Maintenance contract with manufacturer & de sludging as per epa cop by the owner. Certificate must be kept.

7.0 SITE ASSESSOR DETAILS

Company: COYLE ENVIRONMENTAL

Prefix: MR.

First Name: PATRICK

Surname: MANNION

Address: 1ST AND 2ND FLOOR KILMURRY HOUSE, MAIN STREET,
CASTLEREA, CO. ROSCOMMON

Qualifications/Experience: BSc ENV (HONS) IAH IEMI FETAC SITE ASSESSOR 2000

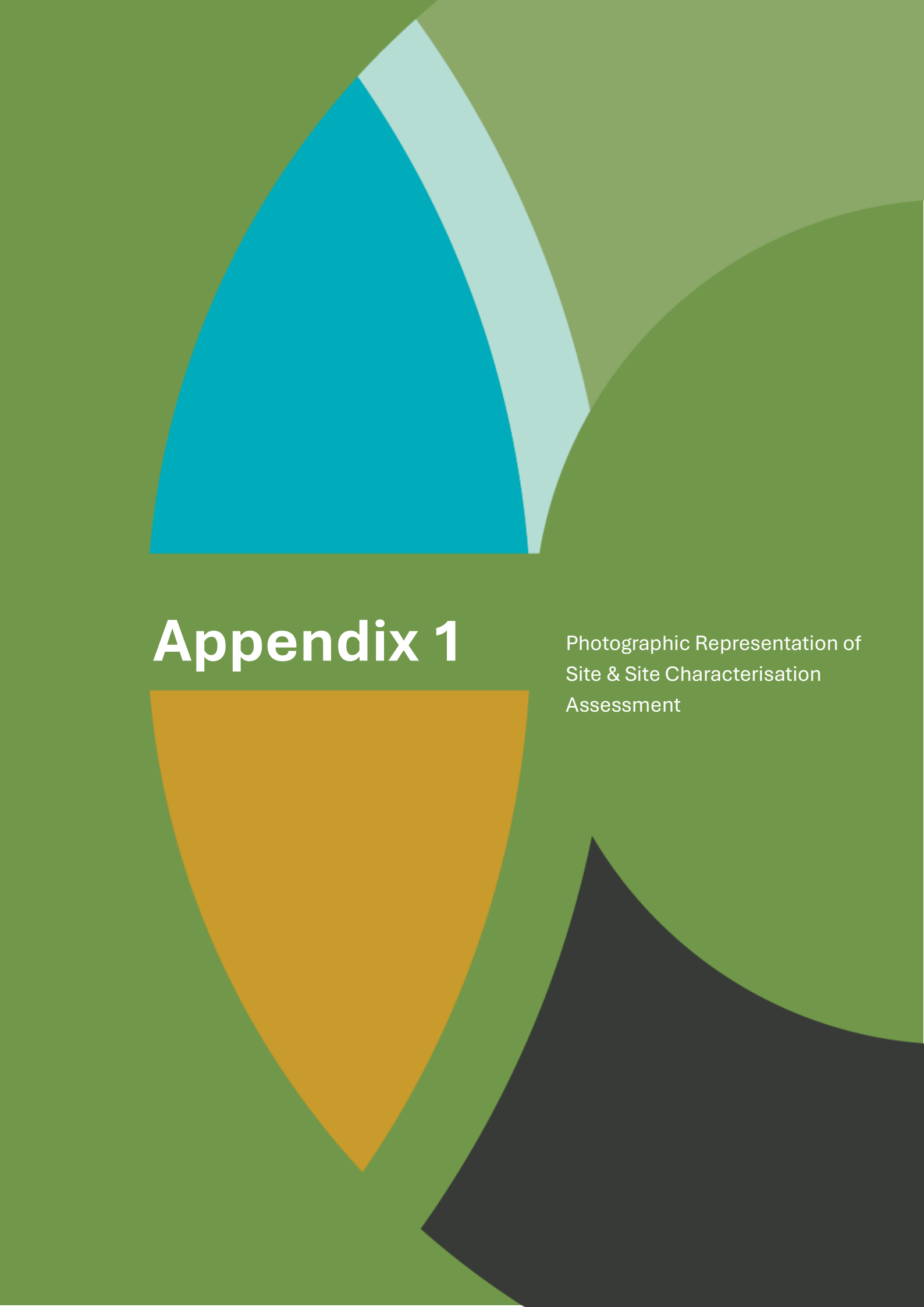
Date of Report: 13/08/2025

Phone: 0949621258

E-mail: info@coyleenv.ie

Indemnity Insurance
Number: RL UNDERWRITING LTD PL/C/12420/1

Signature: *Patrick Mannion*



Appendix 1

Photographic Representation of
Site & Site Characterisation
Assessment

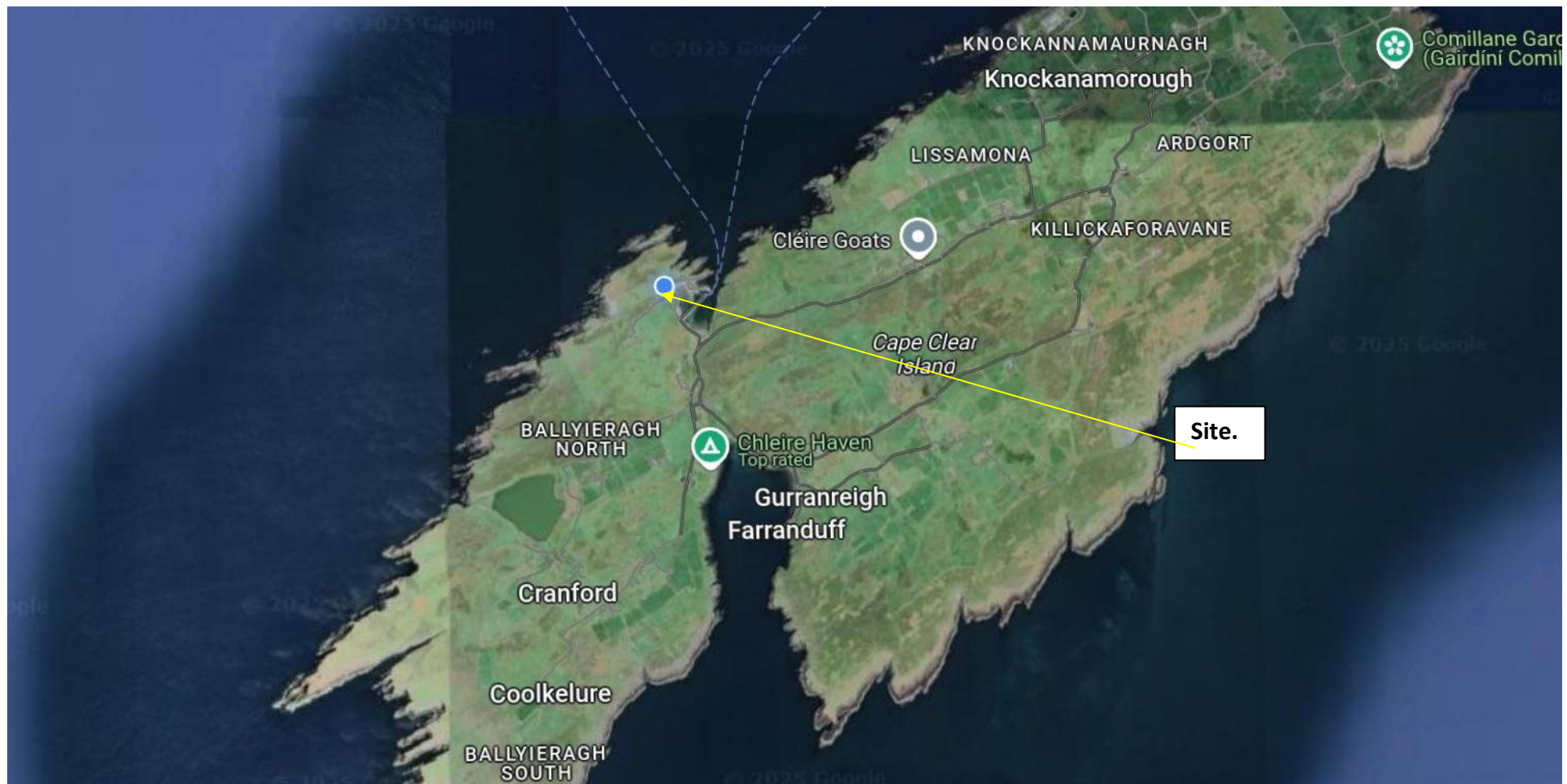


Figure 1: Shows a Google image of the site location.



Figure 2: Shows a Google image of the site location and trial hole location.



Figure 3: This photograph provides an overview of the site and illustrates the location of trial pit and subsurface & surface test holes.



Figure 4: Illustrates the trial hole depth at 1.7m below ground level.



Figure 5: Shows the different layers within the trial hole.



Figure 6: Shows the different layers within the trial hole.



Figure 7: Shows the different layers within the trial hole.



Figure 8: Shows subsurface percolation test carried out.



Figure 9: Shows surface percolation test carried out.



Figure 10: Shows subsurface and surface percolation test carried out.



Figure 11: Shows location of subsurface and surface percolation test and trial hole



Figure 12: Shows digger used to dig trial hole.



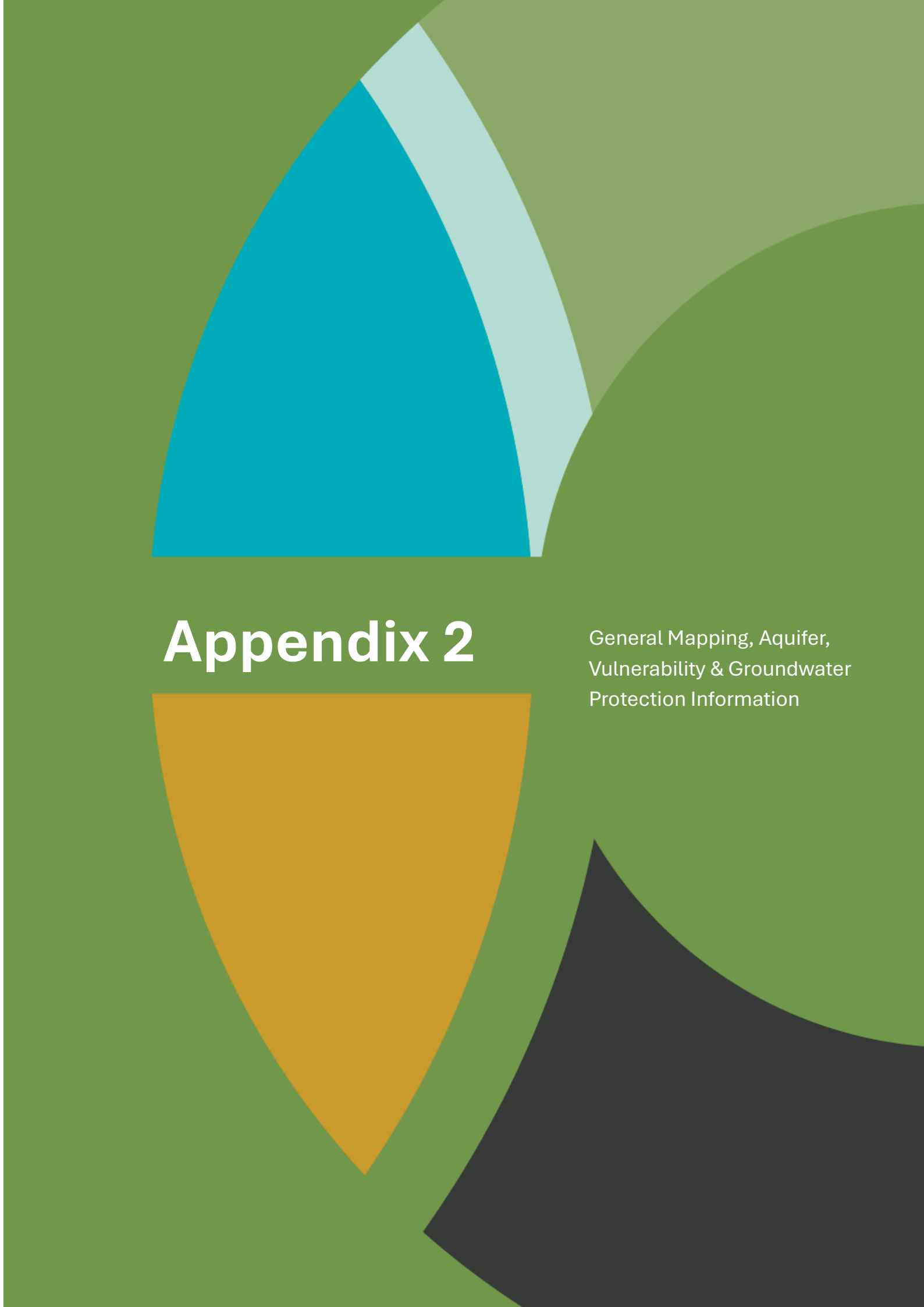
Figure 13: Shows Trial hole been dug on site.



Figure 14: Shows overview of site.

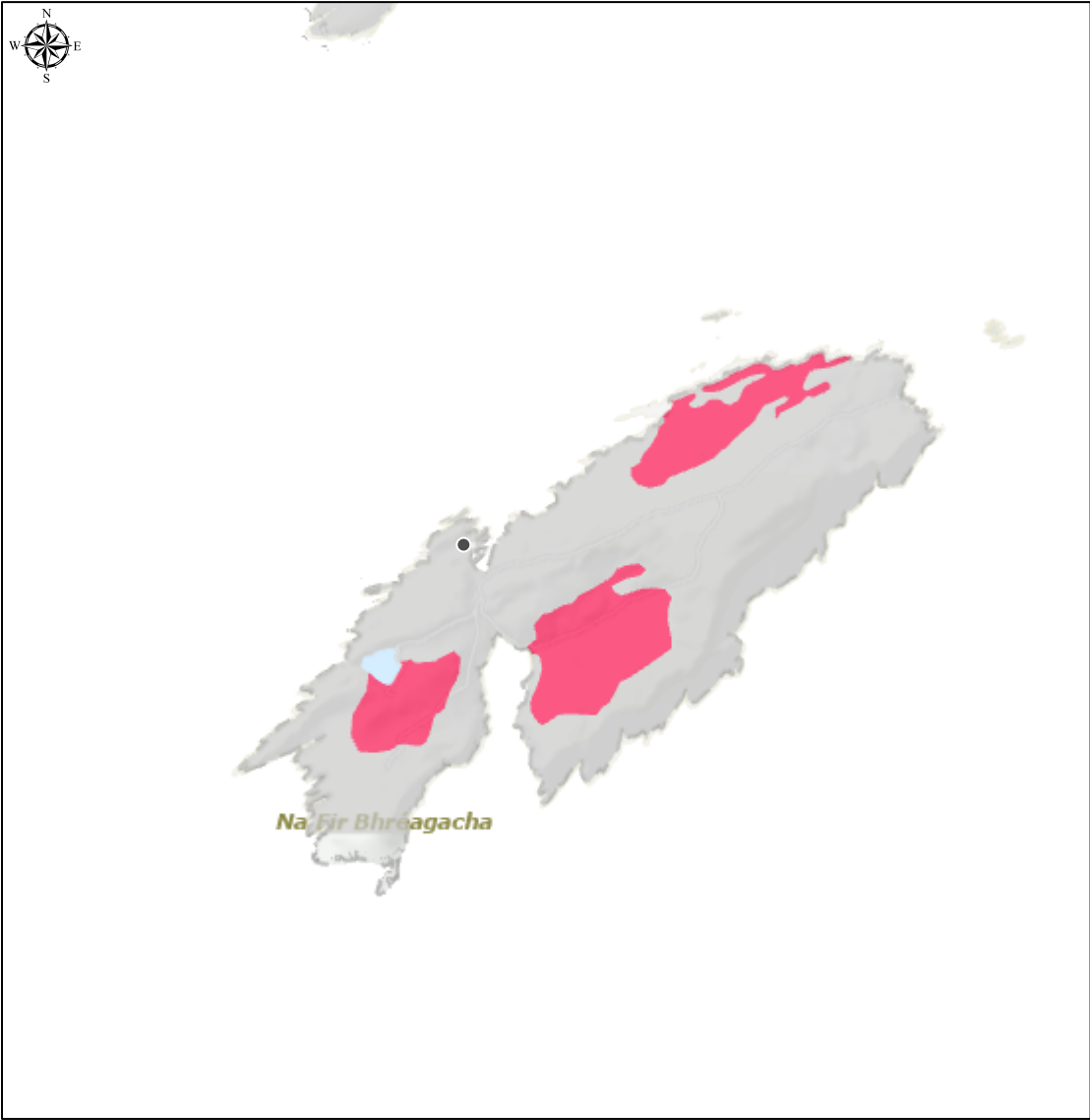


Figure 15: Shows overview of site.



Appendix 2

General Mapping, Aquifer,
Vulnerability & Groundwater
Protection Information



GROUNDWATER AQUIFERS



Legend

IE_GSI_Sand_and_Gra...

Regionally important
gravel aquifer

Locally important
gravel aquifer

IE_GSI_Aquifer_G...

IE_GSI_Bedrock_Aquif...

Rkc - Regionally
Important Aquifer -
Karstified (conduit)

Rkd - Regionally
Important Aquifer -
Karstified (diffuse)

Rk - Regionally
Important Aquifer -
Karstified

Rf - Regionally
Important Aquifer -
Fissured bedrock

Rf/Rk - Regionally
Important Aquifer -
Fissured
bedrock/Regionally
Important Aquifer -
Karstified

Lm - Locally
Important Aquifer -
Bedrock which is
Generally Moderately
Productive

Lk - Locally
Important Aquifer -
Karstified

LI - Locally Important
Aquifer - Bedrock
which is Moderately
Productive only in
Local Zones

PI - Poor Aquifer -
Bedrock which is
Generally
Unproductive except
for Local Zones

Pu - Poor Aquifer -
Bedrock which is
Generally
Unproductive

Lake

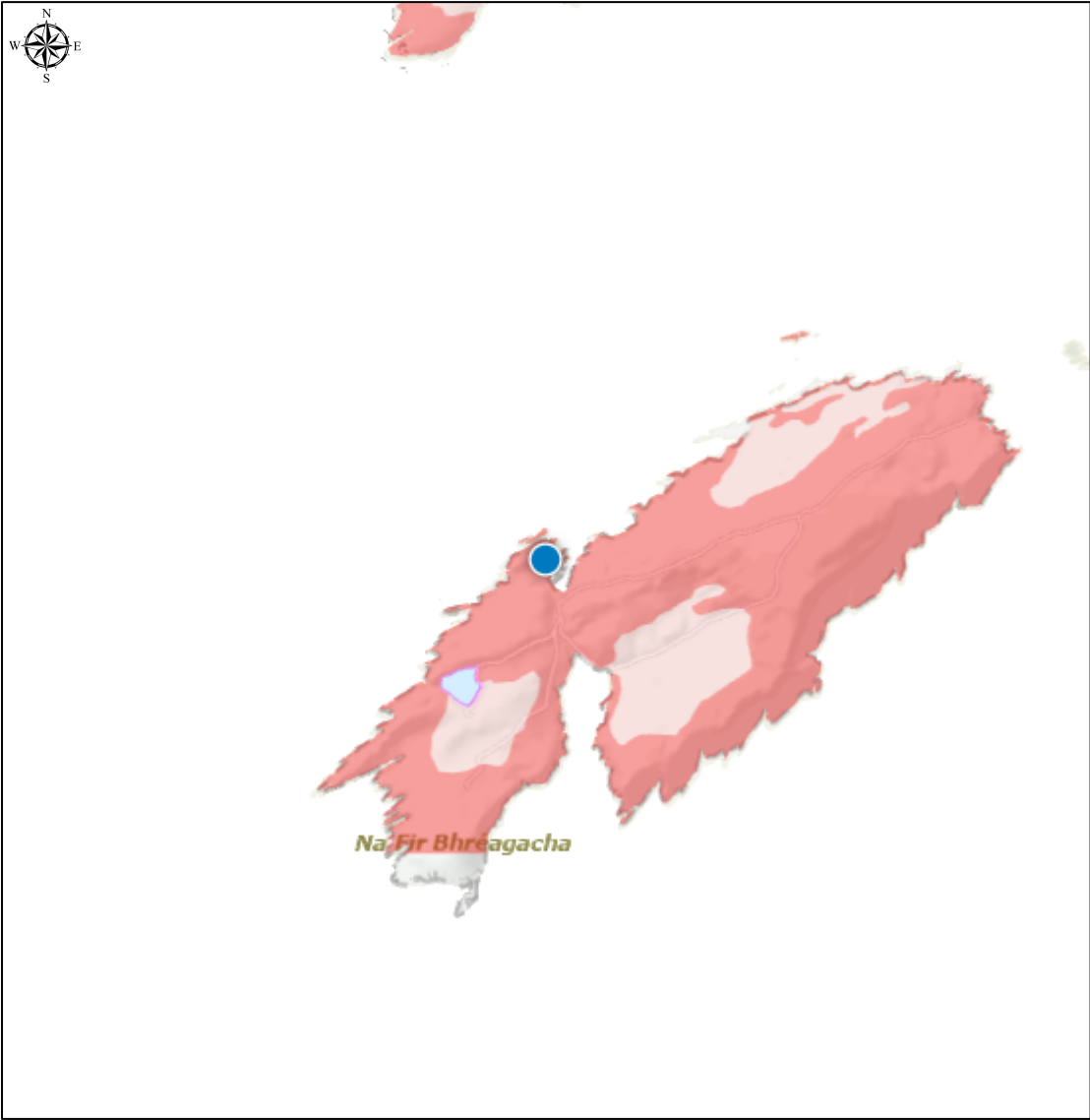
Unclassified

GROUNDWATER VULNERABILITY

Legend

IE_GSI_Groundwater_V...

- Rock at or near Surface or Karst
- Extreme
- High
- Moderate
- Low
- Water

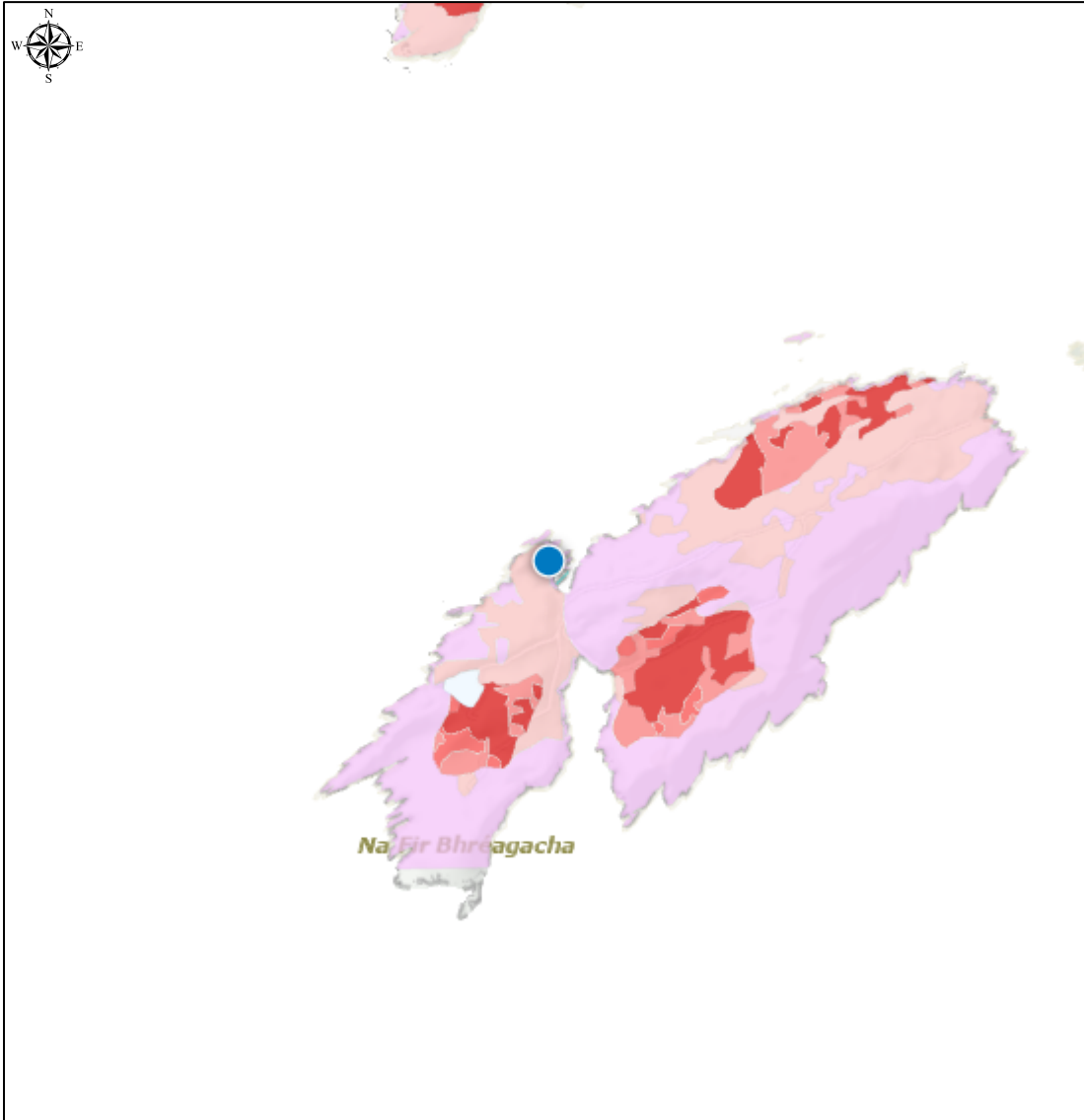


An Roinn Comhshaoil,
Aeráide agus Cumarsáid
Department of the Environment,
Climate and Communications



Map created by GSI on 17/01/2025 10:20:00

TEAGASC SOILS



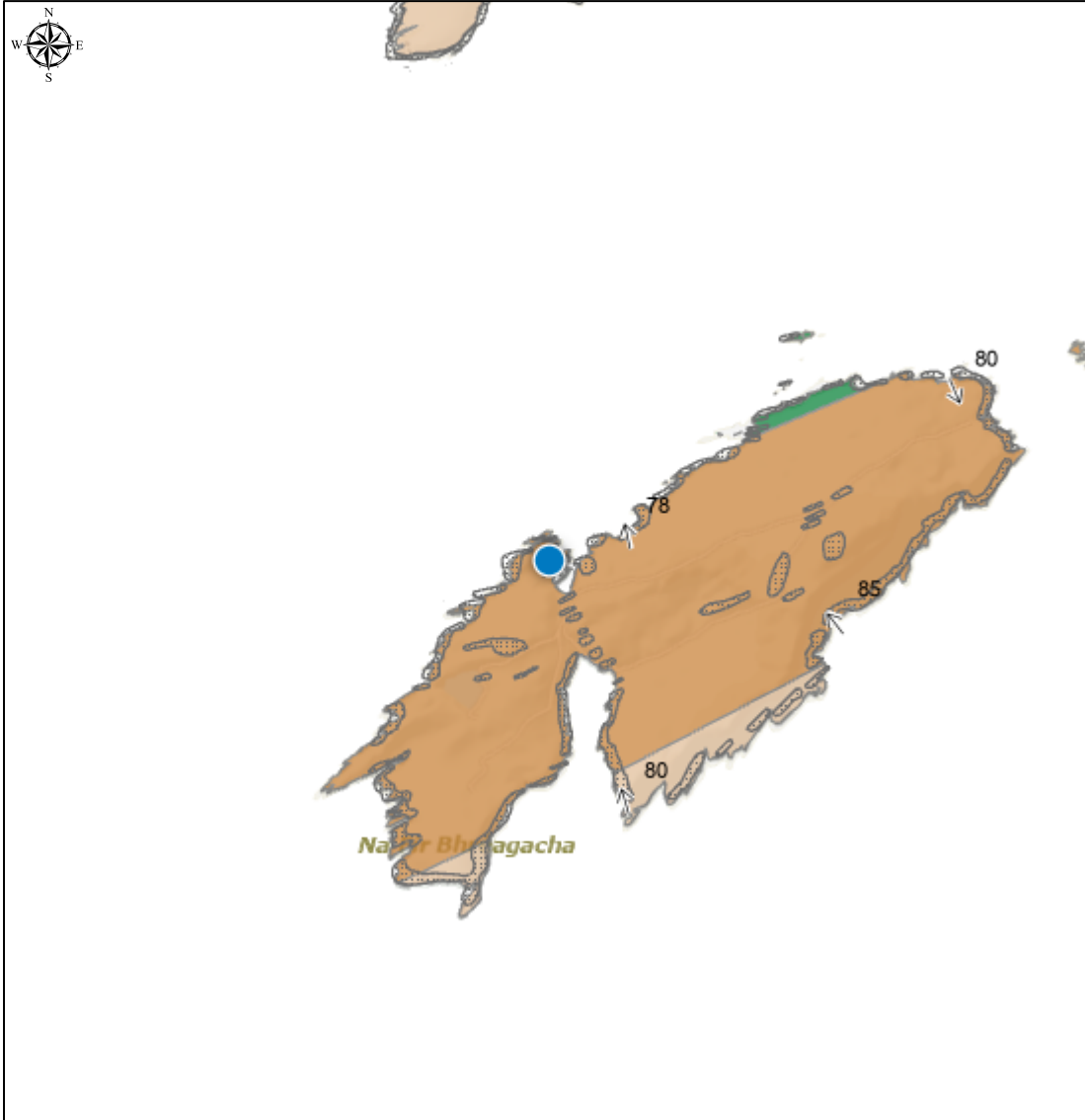
Legend

IE_GSI_TEAGASC_EPA...

- AminDW - Deep well drained mineral (Mainly acidic)
- AminPD - Mineral poorly drained (Mainly acidic)
- AminPDPT - Peaty poorly drained mineral (Mainly acidic)
- AminSW - Shallow well drained mineral (Mainly acidic)
- AminSP - Shallow poorly drained mineral (Mainly acidic)
- AminSPPT - Shallow peaty poorly drained mineral (Mainly acidic)
- AminSRPT - Shallow, rocky, peaty/non-peatymi... complexes (Mainly acidic)
- BminDW - Deep well drained mineral (Mainly basic)
- BminPD - Mineral poorly drained (Mainly basic)
- BminPDPT - Peaty poorly drained mineral (Mainly basic)
- BminSW - Shallow well drained mineral (Mainly basic)

- BminSP - Shallow poorly drained mineral (Mainly basic)
- BminSPPT - Shallow peaty poorly drained mineral (Mainly basic)
- BminSRPT - Shallow, rocky, peaty/non-peatymi... complexes (Mainly basic)
- BktPt - Blanket peat
- FenPt - Fen peat
- RsPt - Raised Peat
- Cut - Cutover/cutaway peat
- AlluvMIN - Alluvial (mineral)
- AlluvMRL - Alluvial (marl)
- Lac - Lacustrine type soils
- Scree - Scree
- AeoUND - Aeolian undifferentiated
- MarSands - Marine sand and gravel
- MarSed - Marine/estuarine sediments
- Made - Made ground
- Water - Water
- Unclass

GEOLOGY BEDROCK



Legend

IE_GSI_Structural_Sym...

- ↑ Dip of bedding or main foliation, old GSI data
- ↖ First foliation parallel to bedding
- I Foliation trend, Thorr and Rosses Granites
- + Horizontal Bedding
- ↗ Strike and dip of bedding, right way up
- ↖ Strike and dip of bedding, way up unknown
- ↖ Strike and dip of first foliation
- ↖ Strike and dip of overturned bedding
- ↖ Strike and dip of second foliation
- ↖ Strike and dip of third foliation
- ↖ Strike and plunge of first generation fold axis
- ↖ Strike and plunge of second generation fold axis
- ↖ Strike and plunge of third generation fold axis
- + Strike of vertical bedding/foliation
- ↖ Strike of vertical first foliation
- Bedrock Outcrops
- ↖ Antiformal axis
- Aquifer Boundary
- - Area
- Coal seam
- Dyke
- Fault
- Ghost Line
- Goniatite marine band (R1-R4)
- Lithological boundary offshore
- Metadolerite sheet, mainly sills
- Paleogene/ Tertiary Dyke
- ↖ Synclinal Axis
- ↖ Synformal axis
- Tectonic Slide, barbs on hanging-wall
- Thin stratigraphical unit, diagrammatic
- ↖ Thrust, barbs on hanging-wall side
- Tuff band
- Unconformity, dots on younger side
- X-Section

IE_GSI_Geological_Lin...

- ↖ Antiformal Axis
- ↖ Synclinal Axis

GROUNDWATER DRINKING WATER PROTECTION AREAS

Legend

IE_GSI_Public_Water_S...

- SI-Inner Protection Area
- SO-Outer Protection Area
- Group Water Scheme Preliminary Source Protection Areas Zones of Contribution



An Roinn Comhshaoil,
Aeráide agus Cumarsáide
Department of the Environment,
Climate and Communications





GROUNDWATER WELLS AND SPRINGS

Legend

 Groundwater Wells
and Springs - circle
size is location
accuracy



An Roinn Comhshaoil,
Aeráide agus Cumarsáide
Department of the Environment,
Climate and Communications



Map created by Ordnance Survey (2025) 1:50,000

SURFACE WATER FEATURES

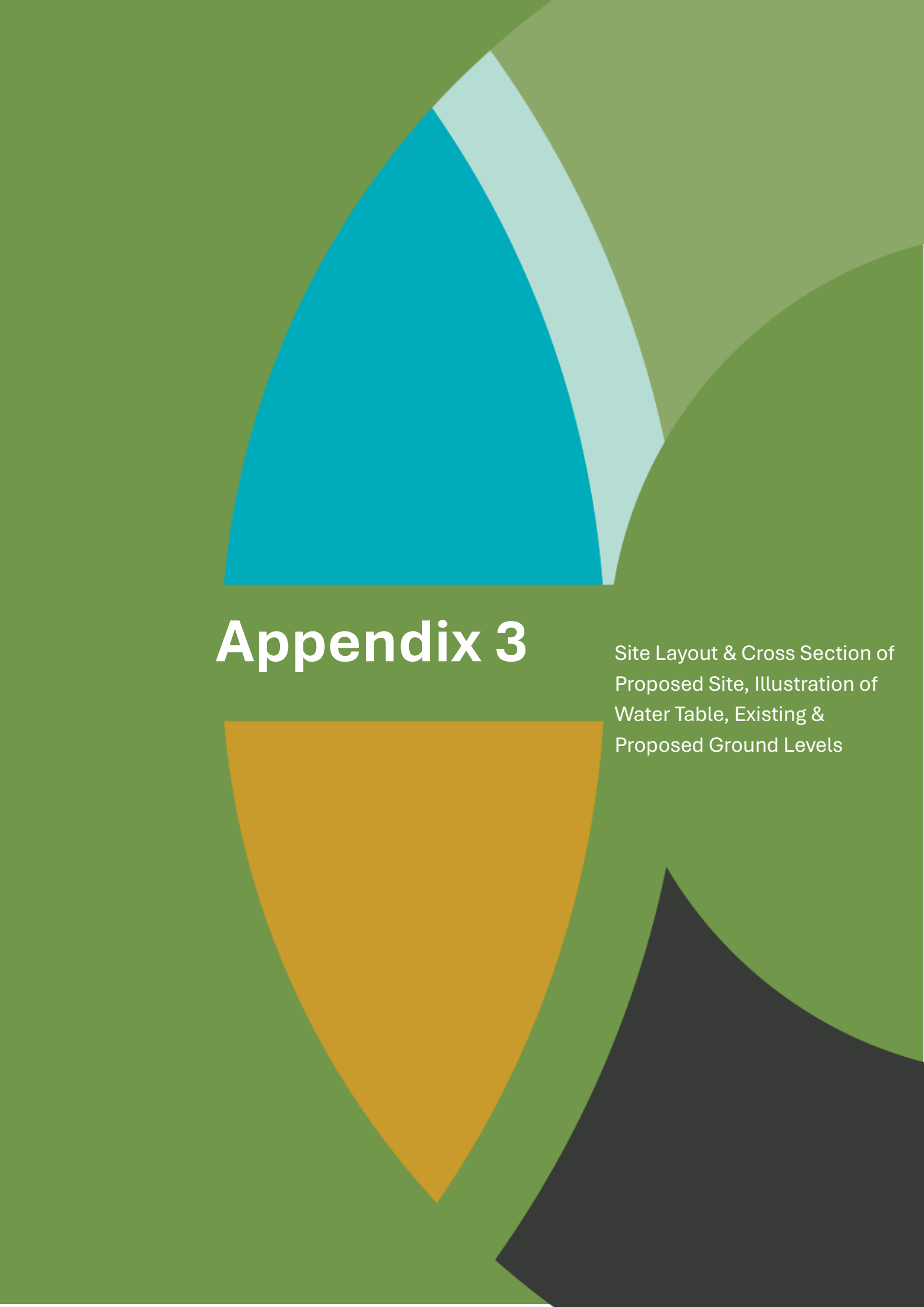
Legend

-  River and River Flow Direction Arrow
-  Lake



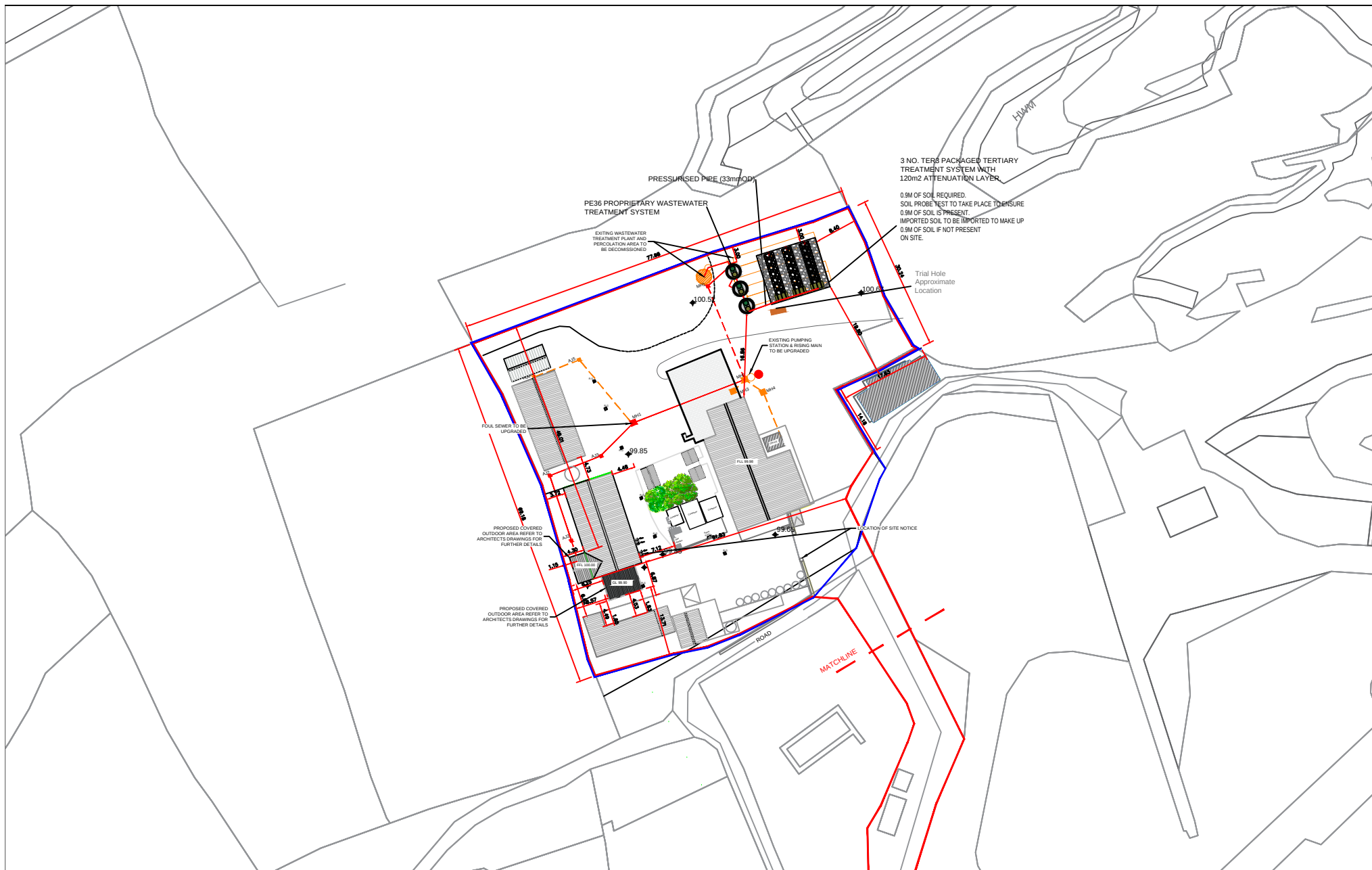
An Roinn Comhshaoil,
Aeráide agus Cumarsáide
Department of the Environment,
Climate and Communications





Appendix 3

Site Layout & Cross Section of
Proposed Site, Illustration of
Water Table, Existing &
Proposed Ground Levels



Sheet Title:-

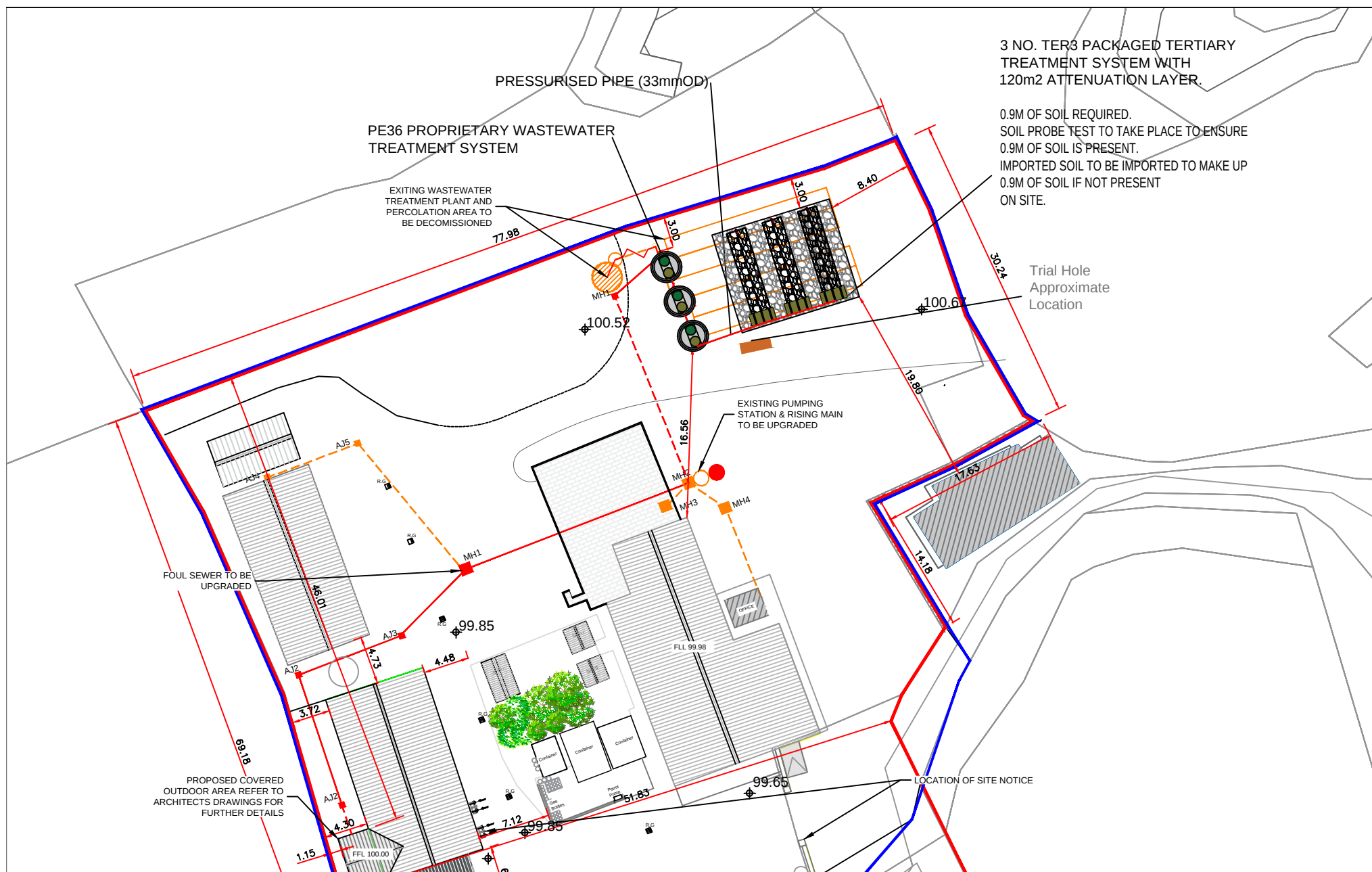
Site Layout

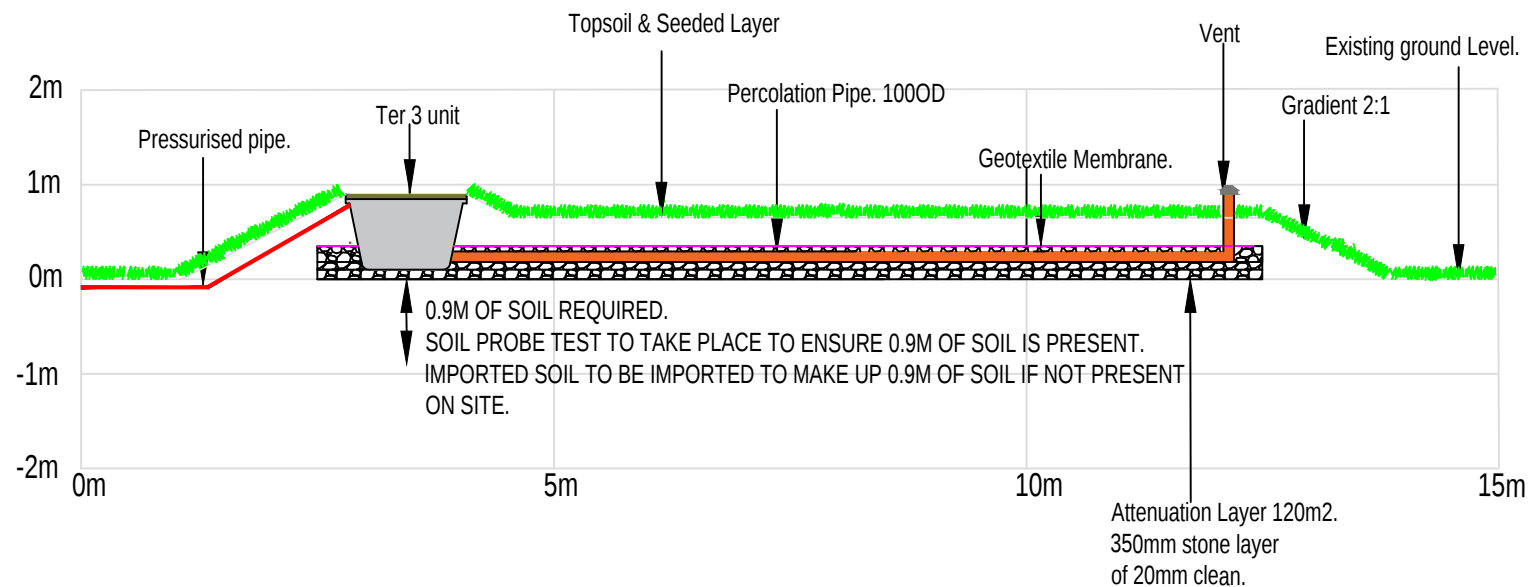
Client:- Údarás na Gaeltachta	Project No:-24-006 C	Drg No:-01
Project Description:- Proposed new wastewater treatment system and Ter 3 Packaged Tertiary Unit at Cape Clear, Co. Cork. P81 DX54.	Scale: 1:1000 @ A4	Rev:-
	Drawn by:- P.M.	Date:-13/08/2025



ENVIRONMENTAL • MONITORING • CONSULTING

1st and 2nd Floor, Kilmurry House, Main Street,
Castlerea, Co Roscommon, F45 X854
094-9621258
www.coyleenv.ie info@coyleenv.ie





Sheet Title:-

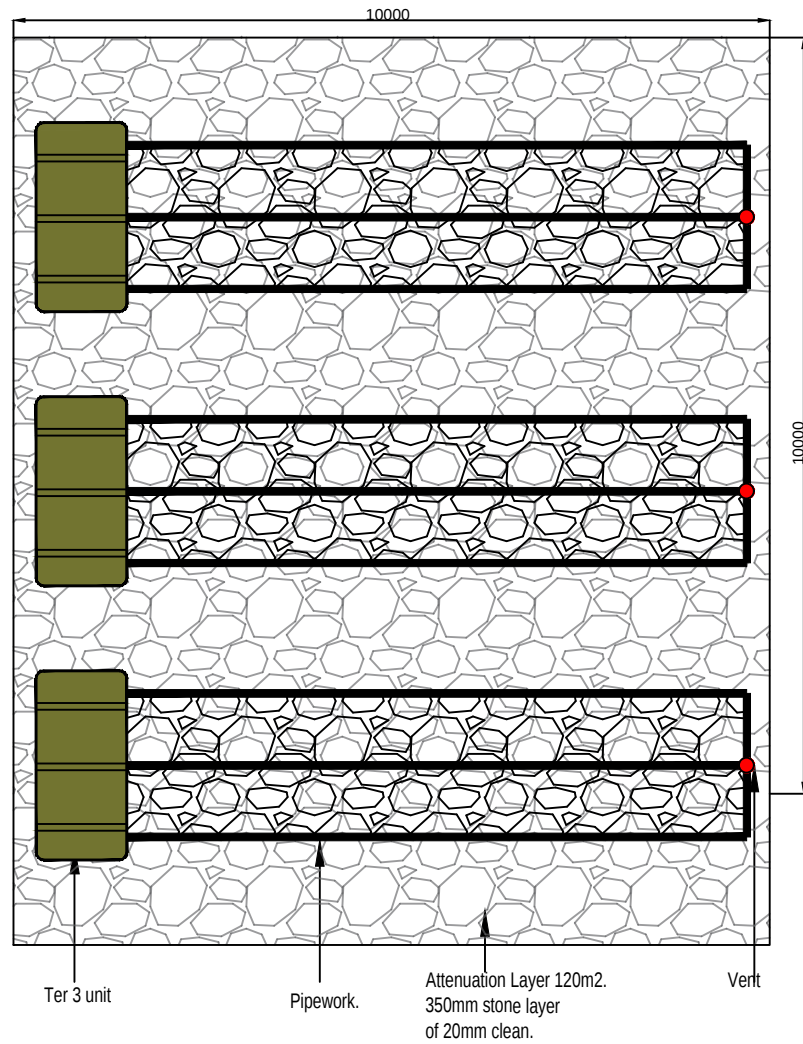
Cross Section

Client:- Údarás na Gaeltachta	Project No:24-006 C	Drg No:-03
Project Description:- Proposed new wastewater treatment system and Ter 3 Packaged Tertiary Unit at Cape Clear, Co. Cork. P81 DX54.	Scale: 1:80 @ A4	Rev:-
	Drawn by:- P.M.	Date:-13/08/2025



ENVIRONMENTAL • MONITORING • CONSULTING

1st and 2nd Floor, Kilmurry House, Main Street,
Castlerea, Co Roscommon, F45 X854
094-9621258
www.coyleenv.ie info@coyleenv.ie



Plan View Through Ter 3 Packaged Tertiary Unit

Sheet Title:-

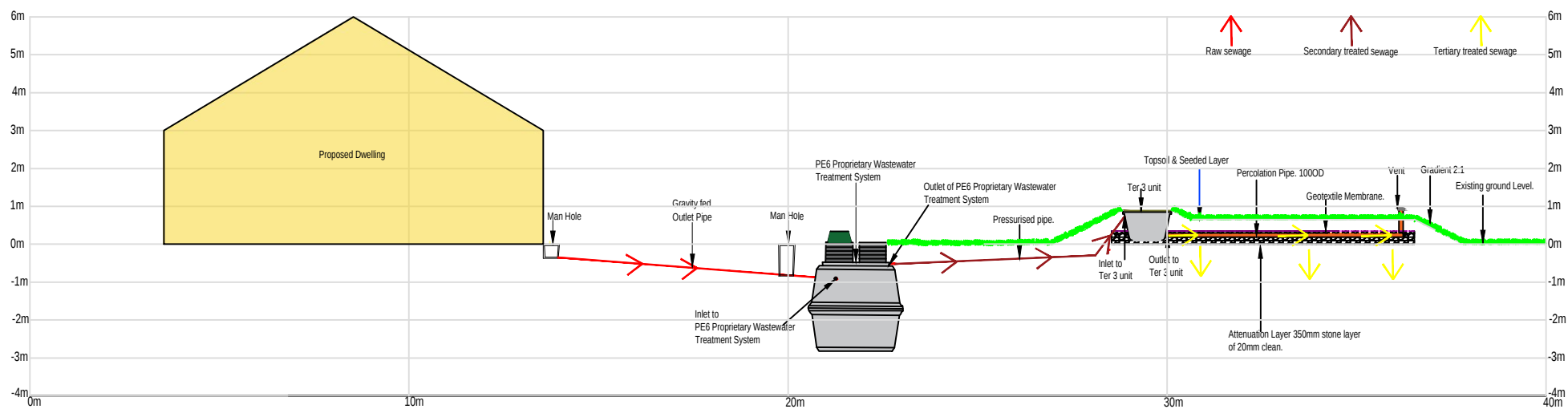
TER3 Layout

Client:- Údarás na Gaeltachta	Project No:-24-006 C	Drg No:-04
Project Description:- Proposed new wastewater treatment system and Ter 3 Packaged Tertiary Unit at Cape Clear, Co. Cork. P81 DX54.	Scale: 1:100 @ A4	Rev:-
	Drawn by:- P.M.	Date:-13/08/2025



ENVIRONMENTAL • MONITORING • CONSULTING

1st and 2nd Floor, Kilmurry House, Main Street,
Castlerea, Co Roscommon, F45 X854
094-9621258
www.coyleenv.ie info@coyleenv.ie



Sheet Title:-

Long Cross Section Example

Not Site Specific

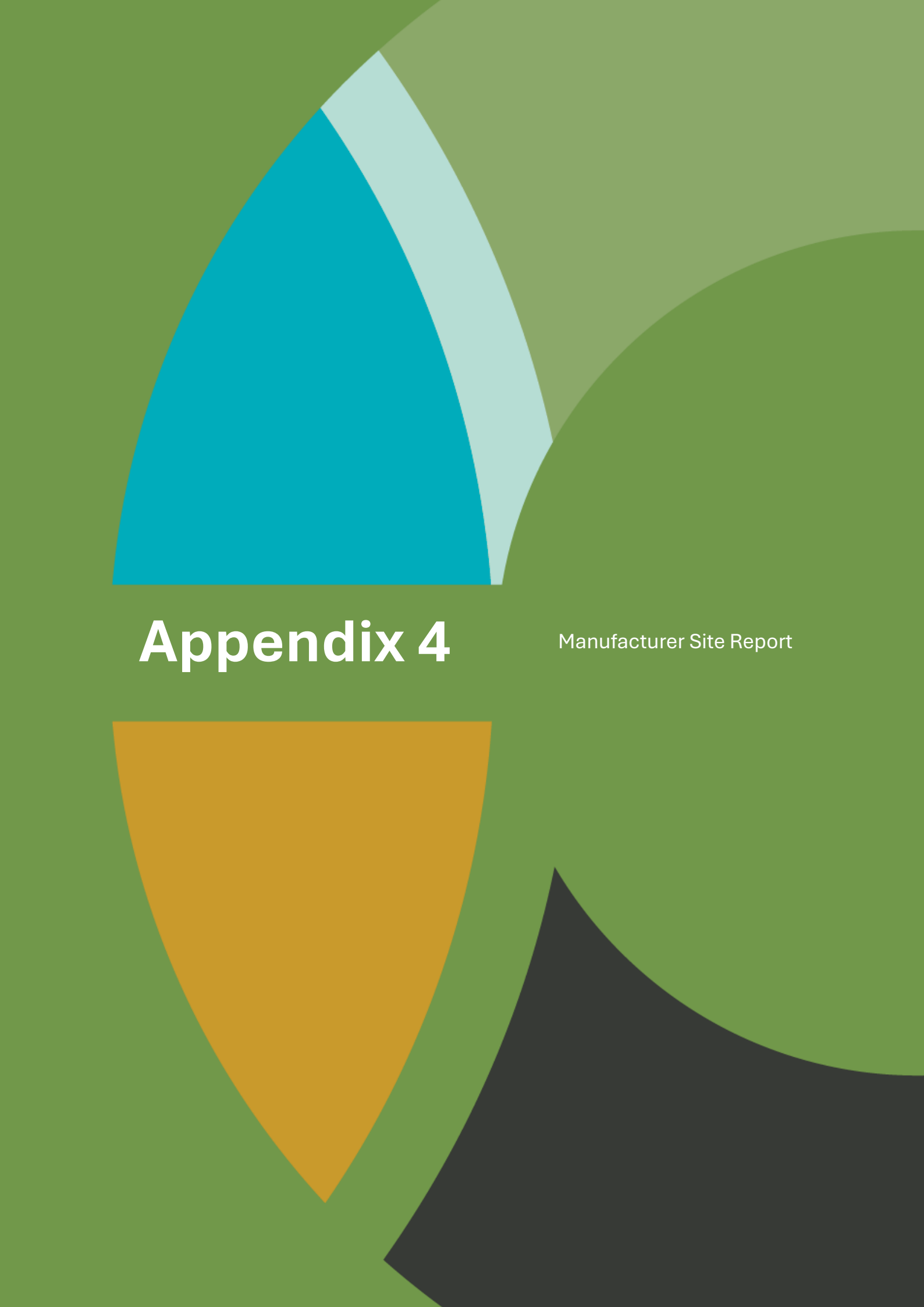
Client:- Údarás na Gaeltachta
Project Description:- Proposed new wastewater treatment system and Ter 3 Packaged Tertiary Unit at Cape Clear, Co. Cork. P81 DX54.

Project No:24-006 C	Drg No:-05
Scale: 1:160 @ A4	Rev:-
Drawn by:- P.M.	Date:-13/08/2025



ENVIRONMENTAL • MONITORING • CONSULTING

1st and 2nd Floor, Kilmurry House, Main Street,
Castlerea, Co Roscommon, F45 X854
094-9621258
www.coyleenv.ie info@coyleenv.ie



Appendix 4

Manufacturer Site Report

SITE SPECIFIC REPORT

Údarás na Gaeltachta.

Cape Clear, Co. Cork. P81
DX54.



Email: info@sewagesystems.ie

Web: www.sewagesystems.ie

Annie: 087 2807724

Peter: 087 9859681

Date: 15/07/2025

Client Name: Údarás na Gaeltachta

Site Location: Cape Clear, Co. Cork. P81 DX54.

MAXIMUM DESIGN LOADINGS

The proposed development will have a maximum design population of 15.12 no persons for Hydraulic and 30.3 for organic loading as per EPA Wastewater Treatment Manuals for Small Communities, Business, Leisure Centres and Hotels.

Source		Loading (litres/day)		BOD (grams/day)		PE
Type	Occupancy	Per Occupancy	Total	Per Occupancy	Total	
Toilet Use	137	10	1368	10	1368	23
Staff	5	60	300	30	150	3
Cumann Staff & Expansion	10	60	600	30	300	5
Total:			2268		1818	30.3

SITE RELEVANT PARAMETERS

A review of the Site Characterisation Assessment carried out on this site provided the following data.

T-Value (Subsurface)	26.00
P-Value (Surface)	28.00
Depth from ground to Water Table	N/A
Depth from ground to Bedrock	N/A
Groundwater Protection Response	R21
Minimum Infiltration Area (m2)	SEE SCA REPORT

PROPOSED SYSTEM DETAILS

Based on the information provided to us in the Site Characterisation Assessment for your site and the requirements of the 2021 EPA Code of Practice, the most suitable system for sewage treatment and percolation on your site is the EuroTank BAF2 Wastewater Treatment System followed by 3 6PE EuroTank TER3 Percolation Unit.

EUROTANK BAF2 WASTEWATER TREATMENT SYSTEM

The EuroTank BAF2 is a concrete wastewater treatment system and is certified by EN12566/3 & NSAI SR66 as listed on www.pia-gmph.com (Irish Certificates). The system uses Moving Bed Technology in a 3 stage Biological Aeration Filtration process.

Chamber 1: Primary settlement chamber, receives raw sewage and wastewater & settles solids.

Chamber 2: Reactor, biological treatment with the use of aeration and high spec fluidised media.

Chamber 3: Clarifier, any remaining solids are allowed to settle and are returned to the primary chamber to aid the activated sludge process.

The final Effluent leaves Chamber 3 via gravity or a float switch pump.

Appendix 1 : EuroTank BAF2 Specification Brochure, PIA Certification and Drawings

EUROTANK TER3 PERCOLATION UNIT

The EuroTank TER3 is a concrete packaged tertiary treatment system which further treats effluent from a secondary treatment system. It is certified by EN12566/3 & NSAI SR66 as listed on www.pia-gmph.com (Irish Certificates).

Effluent from the EuroTank BAF2 is pumped via a network of pipes over the surface of the TER3 percolation unit. It then trickles down through the various layers in the TER3 where it receives biological treatment before final discharge to the ground via a network of percolation pipes which sit on a layer of distribution stone. The TER3 will be either a slightly raised small bed or finished at ground level, depending on the results of the percolation test.

Appendix 2: EuroTank TER3 Specification Brochure, PIA Certification and Drawings

CLIENT RESPONSIBILITIES

- Any necessary excavation or backfilling on site.
- Provision of a solid, unimpeded access for a crane lorry to drop the BAF2 Wastewater.
- Treatment System into the excavated hole.
- Provision of power supply and connection to the BAF2 Wastewater Treatment System.
- Provision of a 12T machine or similar to lift TER onto the stone bed if required.
- Provision of 30m², 60m² or 90m² stone bed, as per Percolation Test Report.



BAF2 Secondary Wastewater Treatment System

Description:

Eurotank BAF2 is a very strong Concrete, Economical, Efficient, Wastewater / Sewage Treatment System for use in domestic housing and commercial applications.

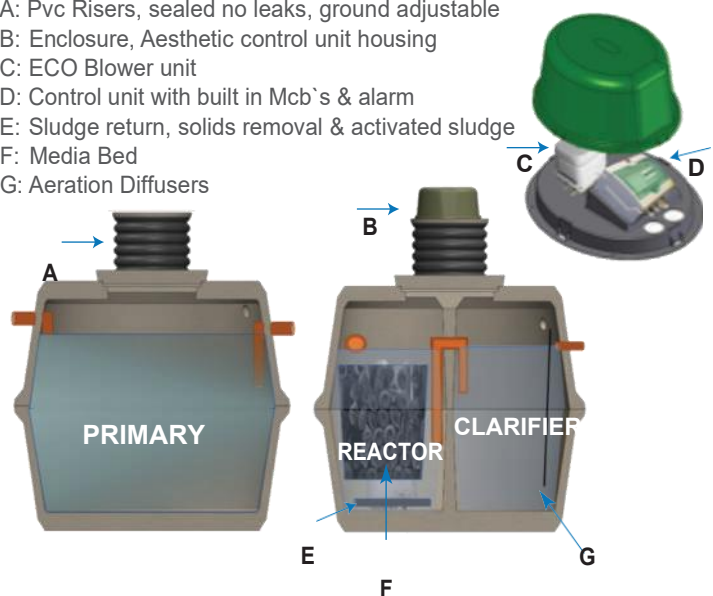
The system is EN12566/3 & NSAI SR66 Certified as listed on www.pia-gmph.com (Irish Certificates). Eurotank BAF uses Moving Bed Technology in a 3 stage Biological Aeration Filtration process as a very simple method of treatment with great effluent quality. The range comprises various tank sizes, comes fully built and delivered with a lot of installation advantages.

Full after-sales nationwide service.

Population Equivalent PE	6 TO 50 Tank configurations for 6, 12, 25, 50 and up to 300
Certification	By Pia Gmbh To En12566/3 SR66 as listed for Irish use. (ATTACHED)
Effluent Quality	BOD5 - 11 mg/lit <20mg/l required SS - 12mg/lit <30mg/l required NH4-N - 6.2 mg/lit <20mg/l required Exceeding Irish Requirement
Electrical Consumption -Cable -Protection	1kWh/D 2.5mm2 x 3 core SWA (up to 100m run) RCD 16 amp, 230v, 30ma, Bs 4293 standard
Alarm	Audible for Pump Failure
Outlet	Gravity or Pumped



- A: Pvc Risers, sealed no leaks, ground adjustable
- B: Enclosure, Aesthetic control unit housing
- C: ECO Blower unit
- D: Control unit with built in Mcb's & alarm
- E: Sludge return, solids removal & activated sludge
- F: Media Bed
- G: Aeration Diffusers



Internal Treatment Process & Chamber Layout: The Process has 3 Functions Housed in 3 Chambers

Chamber 1 – Primary settlement chamber, receives raw Sewage and Wastewater & settle solids.

Chamber 2 – Reactor, Biological treatment with use of aeration and high spec Fluidised Media

Chamber 3 – Clarifier, any remaining solids are allowed settle and are returned to primary chamber to aid activated sludge process.

Final Effluent leaves chamber 3 Via gravity or float switched pump.

Email: info@sewagesystems.ie

Web: www.sewagesystems.ie



TREATMENT PERFORMANCE RESULTS

TPW Systems Ltd

Ballyheige, Screen, Co. Wexford, Ireland

EN 12566-3

Results corresponding to EN 12566-3 and S.R. 66

PIA2020-SR66-2007-1023.02

EUROTANK BAF2 (range with 5 models)

Biological aerated filter

Nominal organic daily load	0.29 kg/d		
Nominal hydraulic daily load	0.9 m³/d		
Material	Concrete		
Watertightness	Pass		
Structural behaviour (Crushing resistance)	Pass (also wet conditions)		
Durability	Pass		
Treatment efficiency (nominal sequences)		Efficiency	Effluent
		COD	92.9 % 59 mg/l
		BOD ₅	96.4 % 11 mg/l
		NH ₄ -N	84.3 % 6.2 mg/l
		SS	96.9 % 12 mg/l
Number of desludging	Not more than once		
Electrical consumption	1.10 kWh/d		

Performance tested by:

PIA – Prüfinstitut für Abwassertechnik GmbH

(PIA GmbH)

Hergenrather Weg 30

52074 Aachen, Germany

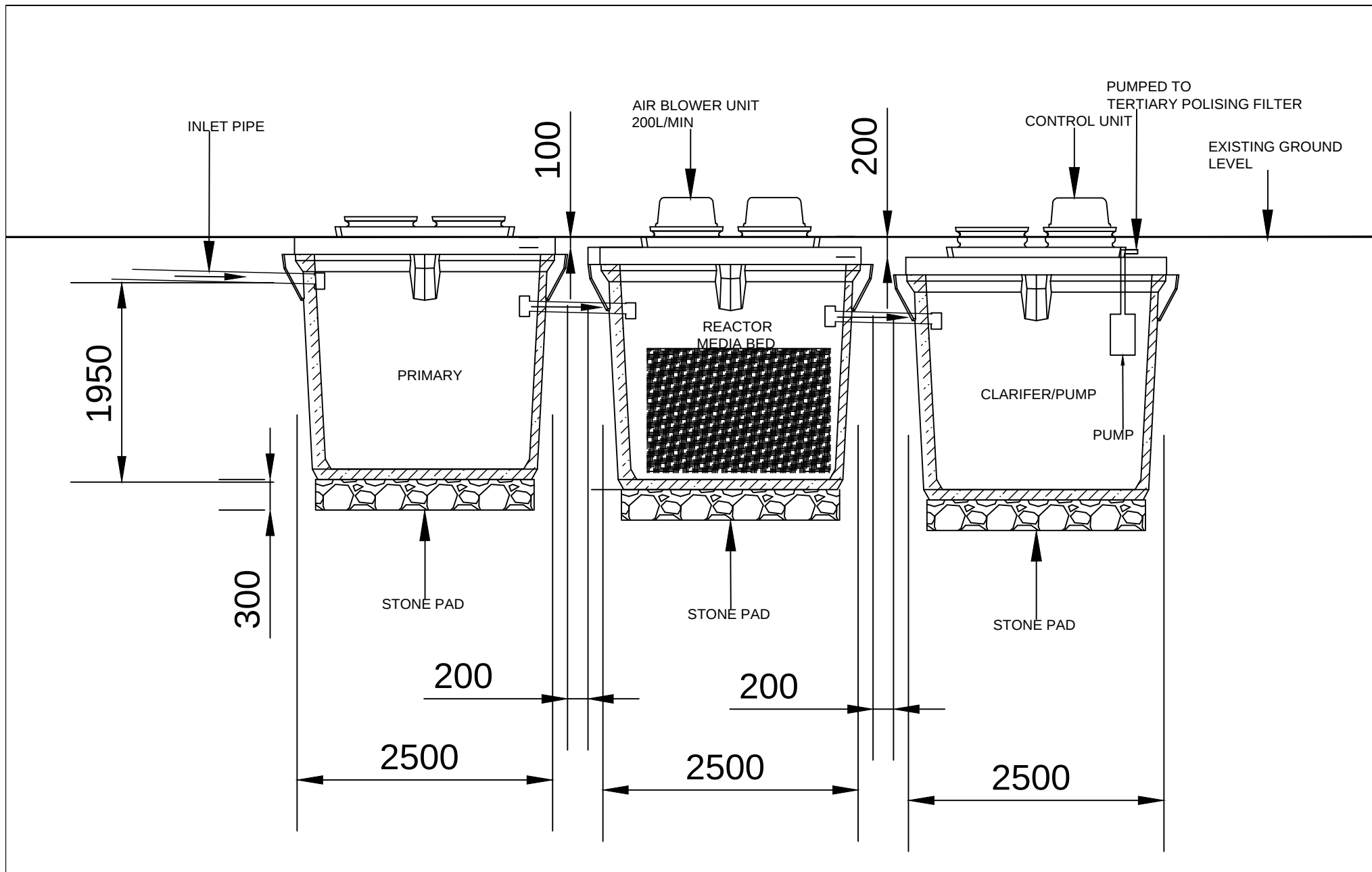
This document replaces neither the declaration of performance nor the CE marking.

Notified Body
No.: 1739

Certified according to
ISO 9001:2015



Verschitz / Wermter February 2021



EUROTANK BAF2 (PE36)

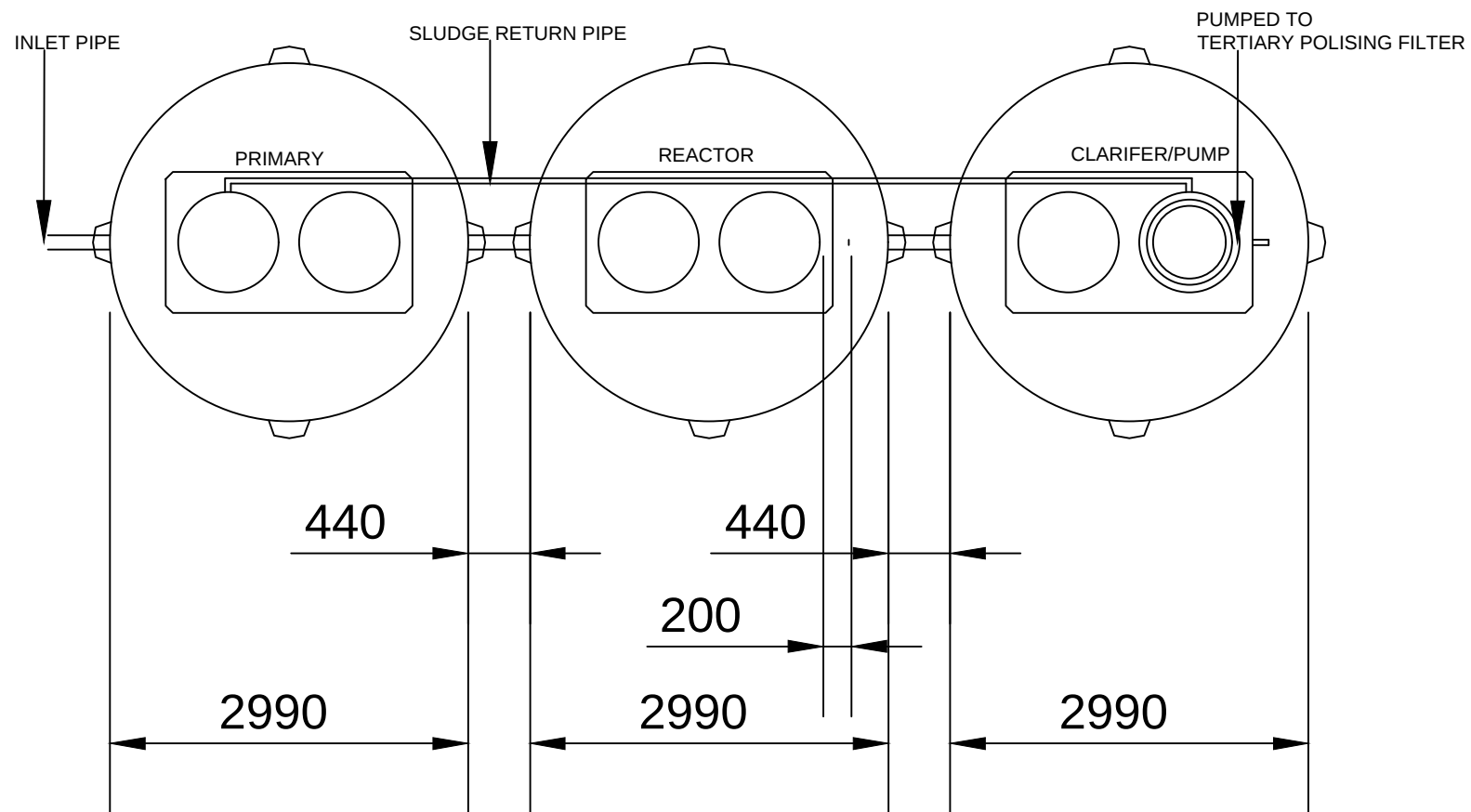
Sheet Title: EuroTank

Scale: 1:50 @ A4

Drawn by: PM

Sewage Systems Ltd
1st and 2nd Floor, Kilmurry House, Main
Street, Castlerea, Co Roscommon, F45 DK58
info@sewagesystems.ie Annie: 0872807724
www.Sewagesystems.ie Peter: 0879859681

SEWAGE
SYSTEMS



EUROTANK BAF2 (PE36)

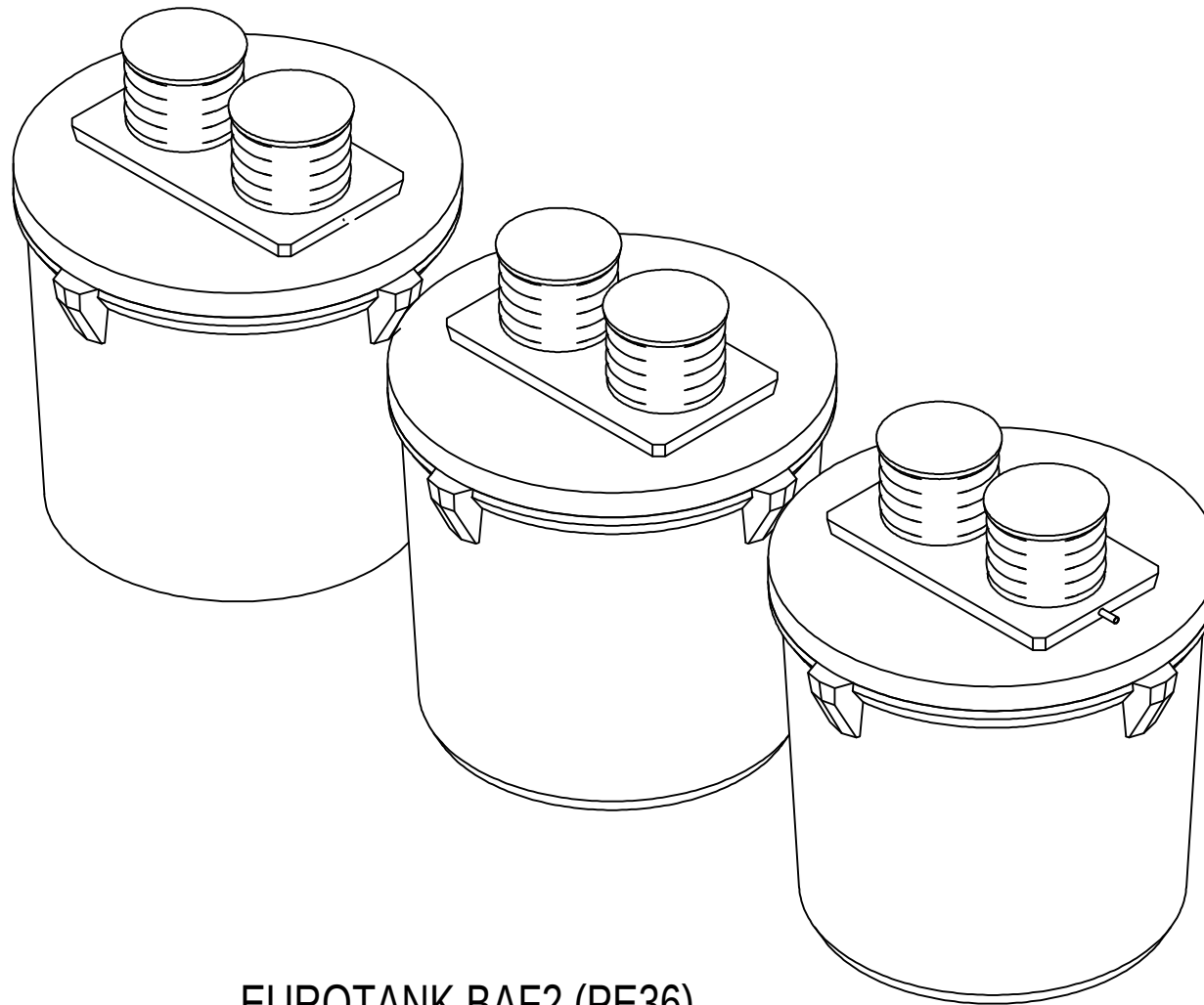
Sheet Title: EuroTank

Scale: 1:50 @ A4

Drawn by: PM

Sewage Systems Ltd
 1st and 2nd Floor, Kilmurry House, Main
 Street, Castlerea, Co Roscommon, F45 DK58
 info@sewagesystems.ie Annie: 0872807724
 www.Sewagesystems.ie Peter: 0879859681

SEWAGE
SYSTEMS



EUROTANK BAF2 (PE36)

Sheet Title: EuroTank

Scale: 1:N/A @ A4

Drawn by: PM

Sewage Systems Ltd
1st and 2nd Floor, Kilmurry House, Main
Street, Castlereagh, Co Roscommon, F45 DK58
info@sewagesystems.ie Annie: 0872807724
www.Sewagesystems.ie Peter: 0879859681





TER3

Packaged Tertiary Percolation Unit

Description:

EuroTank TER3, is a CONCRETE Packaged Tertiary Treatment System which further treats effluent from a secondary treatment system. It is fully PIA Certified and compliant with the EPA Code of Practice 2021. It is ideal for most sites including difficult sites with poor soakage and a high water table, sites in Environmentally Sensitive Areas and is especially suited to small sites due to its small footprint and low profile.

Raw sewage from the dwelling enters a wastewater treatment system where it is partially treated. Effluent then leaves this system and is pumped via a network of pipes over the surface of the TER3. It then trickles down through the various layers in the TER3 where it receives biological treatment before final discharge to the ground via a network of percolation pipes which sit on a layer of distribution stone.

The TER3 will be either a slightly raised small bed or finished at ground level, depending on the results of the percolation test. **EuroTank TER3 is a Cost effective, Easily Installed, Low Profile and Efficient method of complete on-site wastewater treatment and disposal.**

Population Equivalent PE	6 to 50 with configurations for 6, 9, 12, 18, 24, 36, 43, 50.
Effluent Quality (Far Exceeding Irish Minimum Standards)	Bod 2mg/l Suspended Solids 4mg/l NH4N 0.3mg/l Phosphates < 6mg/l Ecoli and Total Coliform Removal >99%
Concrete	45n reinforced
Certification	By PIA GMBH Under EN12566/3 To Irish NSAI SR66 Standard

Key Features:

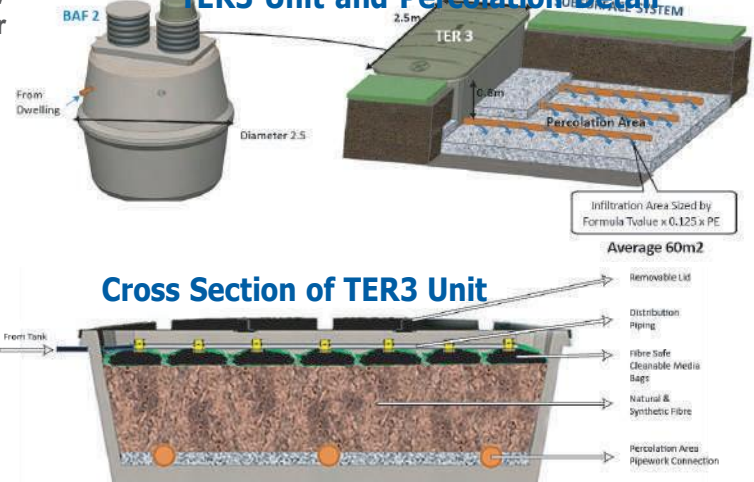
- High Effluent Quality, with superior reduction in BOD, COD, Suspended solids, Nutrients, and Pathogens. (Best on the Irish Market!)
- Suitable for many sites including small restricted existing sites.
- Concrete unit.
- Fibre safe pre-clean system, in cleanable bags that can be shaken or washed.
- Very easy to maintain.
- Includes percolation pipe connections.

Email: info@sewagesystems.ie

Web: www.sewagesystems.ie



TER3 Unit and Percolation Detail



Operation Principles:

Secondary treated water from the tank is pumped and distributed via a pipe network with orifice shielding. Water is distributed evenly over the Fibre safe Bags which remove any residual solids and in particular greases which ensure long life use of the natural and synthetic mixfibre Media.

The waters then trickle through the fibre to receive final treatment and polishing before entering the percolation pipework over a bed of stone for distribution and final discharge to underlying soils.

TREATMENT PERFORMANCE RESULTS

TPW Systems Ltd

Ballyheige, Screen, Co. Wexford, Ireland

EN 12566-3

Results corresponding to EN 12566-3 and S.R. 66

PIA2020-SR66-2007-1024

EUROTANK BAF2 + TER3 (range with 7 models)

Biological aerated filter + packaged tertiary treatment mod

Nominal organic daily load	0.29 kg/d		
Nominal hydraulic daily load	0.9 m ³ /d		
Material	Concrete		
Watertightness	Pass		
Structural behaviour (Crushing resistance)	Pass (also wet conditions)		
Durability	Pass		
Treatment efficiency (nominal sequences)		Efficiency	Effluent
	COD	96.6 %	28 mg/l
	BOD ₅	99.3 %	2 mg/l
	NH ₄ -N	99.3 %	0.3 mg/l
	SS	98.8 %	4 mg/l
Number of desludging	Not more than once		
Electrical consumption	1.16 kWh/d		

Performance tested by:

PIA – Prüfinstitut für Abwassertechnik GmbH

(PIA GmbH)

Hergenrather Weg 30

52074 Aachen, Germany

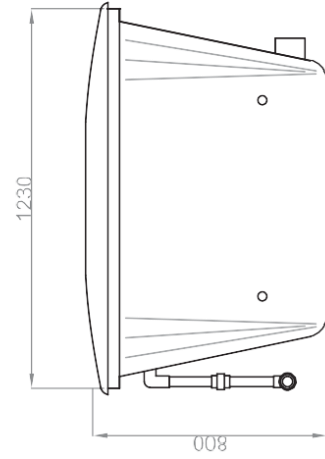
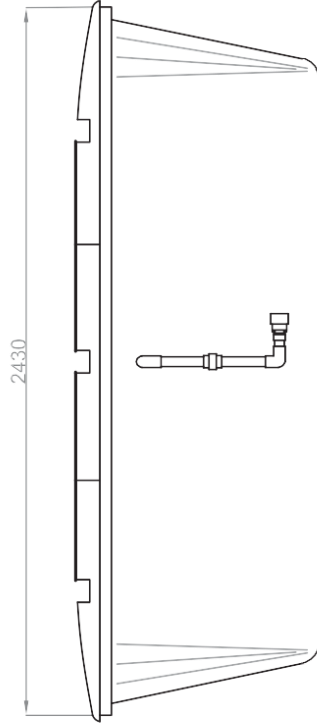
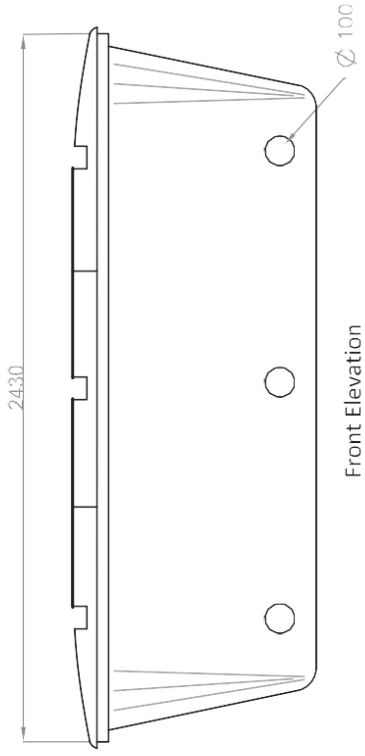
This document replaces neither the declaration of performance nor the CE marking.

Notified Body
No.: 1739

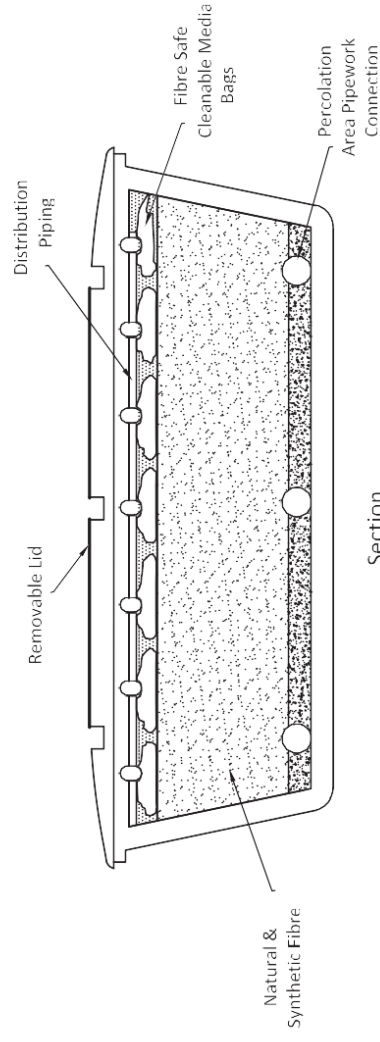
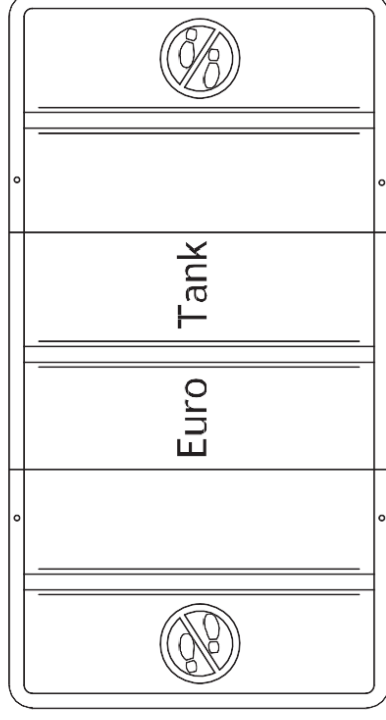
Certified according to
ISO 9001:2015

PIA - Sustainable Certification
J. Verschitz
H. Wermter
geprüft - tested - testé

Verschitz / Wermter July 2020



TER3



Notes: All Dimensions are given in good faith and believed to be correct
No responsibility can be taken with any errors found by measuring of this drawing

Scale:	Date:
1:25@ A4	18/11/2021

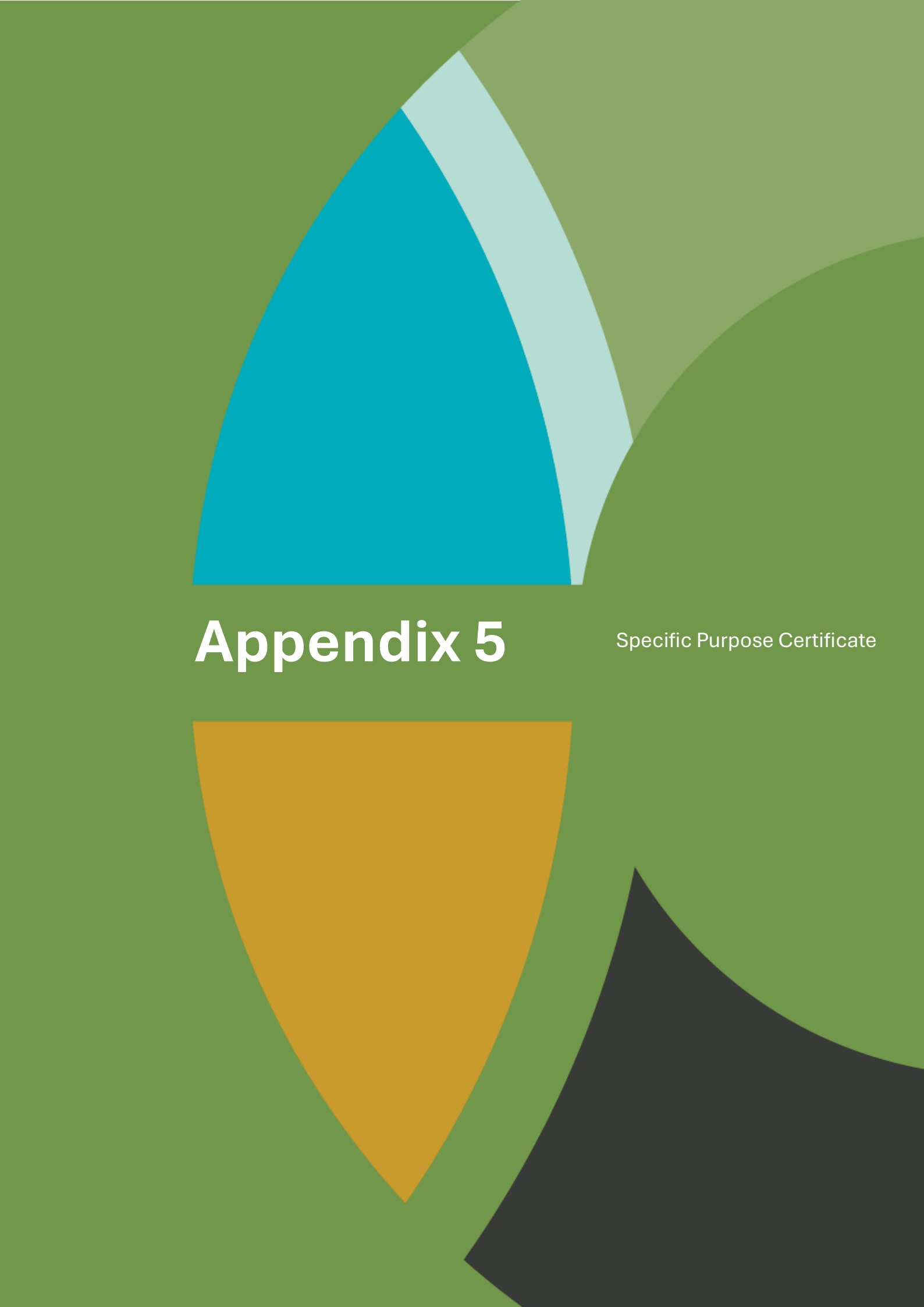
www.Sewagesystems.ie
Phone : 087 9855681

TER 3 Percolation Unit 6PE

1st & 2nd Floor, Kilmurry House, Main Street,
Castlerea, Co Roscommon, F45 DK58

Notes: Do not Scale off this Drawing





Appendix 5

Specific Purpose Certificate



QQI AWARD

Dámhachtain Breisoideachais agus Oiliúna
Further Education and Training Award

TEASTAS CUSPÓRA SHAINIÚIL LEIBHÉAL 6
LEVEL 6 SPECIFIC PURPOSE CERTIFICATE

i
in

Oiriúnacht Suíomh Láithreáin i gcomhair Cóireáil Fuoílluisce
Site Suitability for Wastewater Treatment

le Tuillteanas
with Merit

Bronnta ar
Awarded to

PATRICK MANNION

ar
on

14 Feabhra 2021
14 February 2021

Príomhfheidhmeannach
Chief Executive QQI

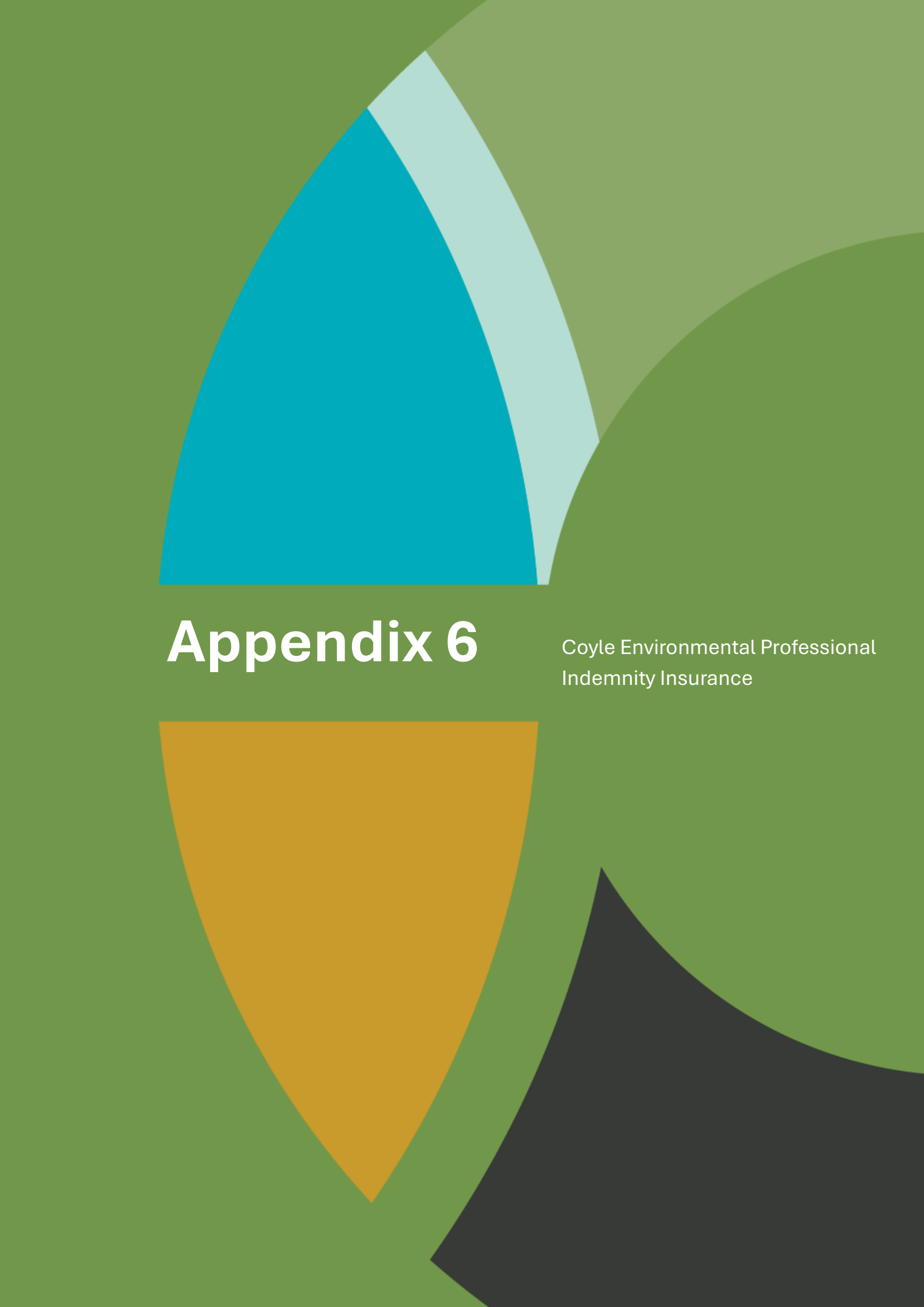
FET Creidiúntí/Credits 10
NFQ Leibhéal/Level 6
EQF Leibhéal/Level 5



6S2241
F1714793
38906N

Bronnta ag Dearbhú Cailiochta agus Cailiochtaí Éireann faoi Chuid 4 den Acht um Chailiochtaí agus Dearbhú Cailiochta (Oideachas agus Oiliúint) 2012.
Awarded by Quality and Qualifications Ireland under Part 4 of the Qualifications and Quality Assurance (Education and Training) Act 2012.

www.QQI.ie



Appendix 6

Coyle Environmental Professional
Indemnity Insurance

To Whom It May Concern

Re: Our Client: **Coyle Environmental Limited, 1st & 2nd Floor, Kilmurray House, Main Street, Castlerea, Co Roscommon**

We act as insurance broker on behalf of our above-named client and we have pleasure in confirming their Combined Liability and Professional Indemnity, details as follows: -

INSURED: **Coyle Environmental Limited**

BUSINESS DESCRIPTION: **Environmental Monitoring & Consulting**

**COMBINED LIABILITY
INSURANCE**

INSURERS: **Hiscox SA**
POLICY No.: **HU PI6 8524721**

EFFECTIVE DATES: **07/07/2024 - 06/07/2025**

EMPLOYERS LIABILITY

Limit of Indemnity: **€13 million each and every accident, unlimited any one period.**

PUBLIC LIABILITY

Limit of Indemnity: **€6.5 million each and every accident, unlimited any one period and in all in respect of Products Liability.**

PROFESSIONAL INDEMNITY

INSURERS: **Aspen 5383 Lloyds Brussels via DUAL Insurance**
POLICY No.: **PI/C/12420/21/1**
EFFECTIVE DATES: **09/12/2024 – 08/12/2025**
LIMIT IF INDEMNITY: **€1,500,000 any one claim**

This document is for information purposes only. Please refer to the policy document and schedule issued by your Insurer for the policy terms conditions endorsements exceptions and exclusions.

Yours sincerely,

Nigel Quigley

Nigel Quigley | Commercial Account Executive
Campion Insurance