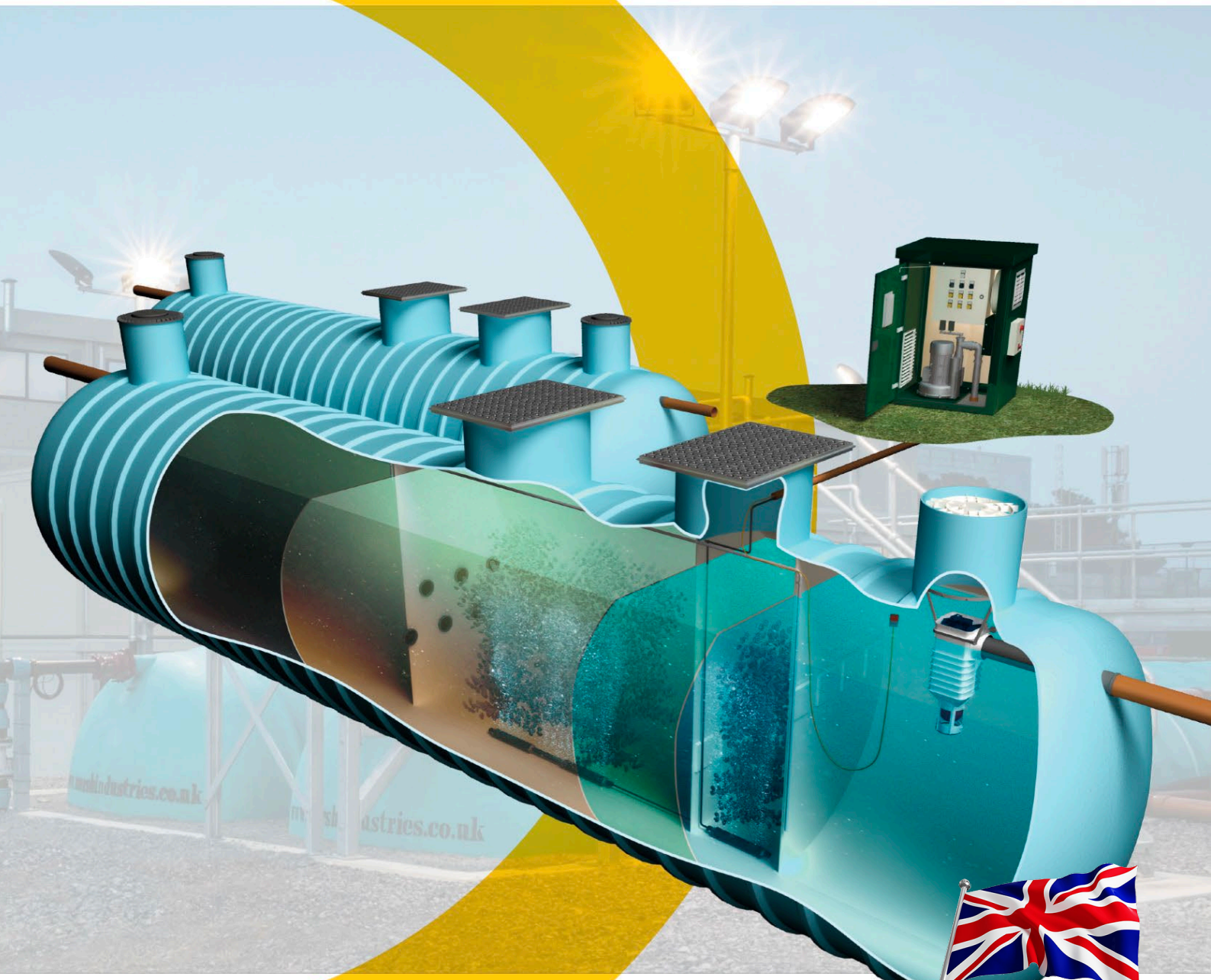
CUSTOMER **QUOTATION**

Bethesda Rugby Club
C L Jones Bethesda



UK MANUFACTURER

MARSH

Marsh Ultra:Polylok™
Advanced biological processing for off-mains wastewater

18th March 2026

Dear Mr Iain Buchanan,

Thank you for contacting Marsh Industries.

We are pleased to enclose our quotation and brochure for your consideration for Bethesda Rugby Club.

This quotation has been completed based on the site requirements and details that you have provided. We hope you will agree that this comprehensive package will provide you with confidence when compared to other manufacturers. If this quotation is successful, we believe that your purchase will provide an excellent return on investment.

In the meantime, if you have any questions or need clarification on any of the information detailed within this quotation, please feel free to contact me. My contact details shown on page 9.

With thanks,

Leonilla
Commercial Sales Advisor

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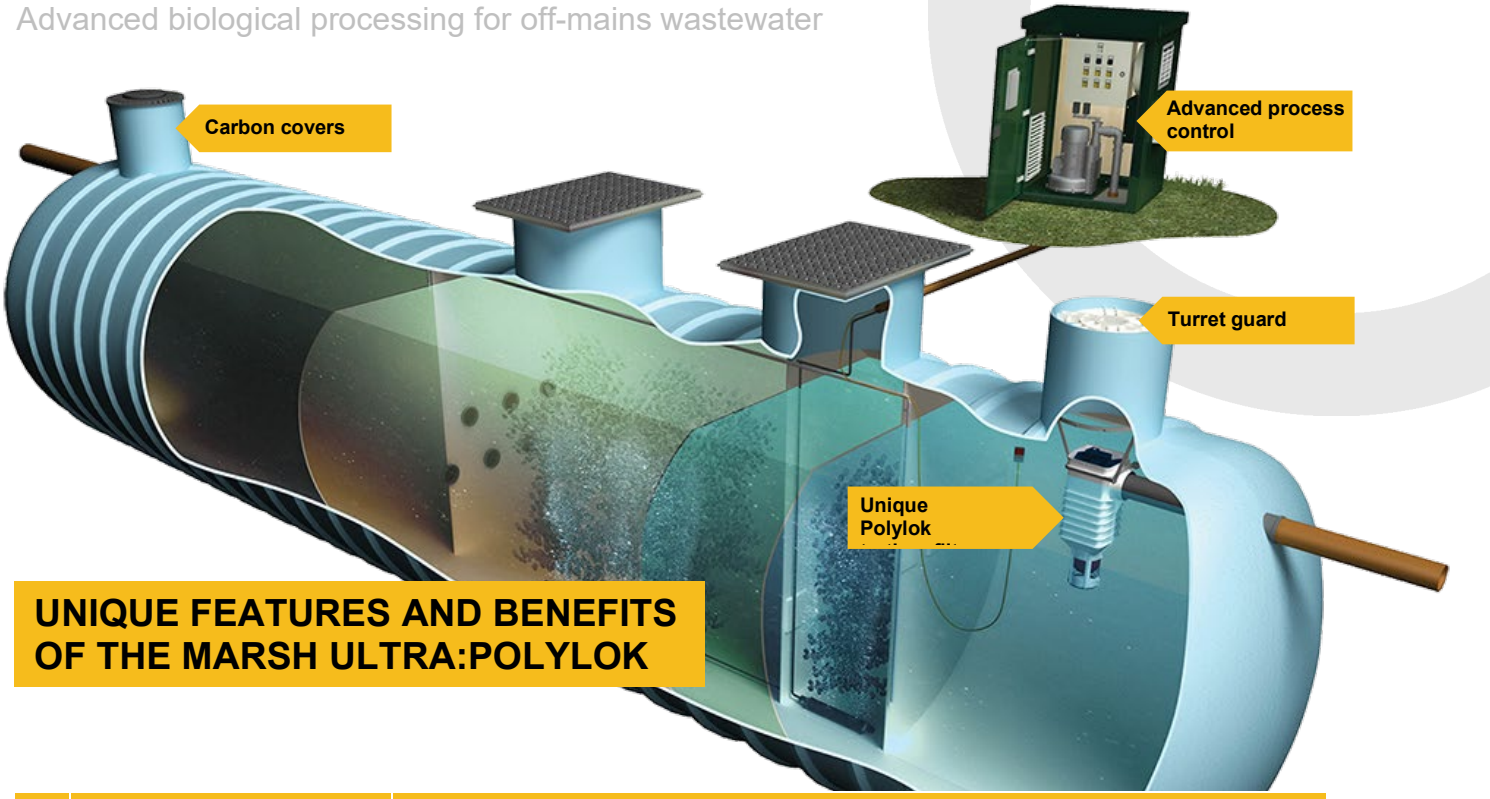
Marsh Ultra:Polylok™

Advanced biological processing for off-mains wastewater



UNIQUE FEATURES AND BENEFITS OF THE MARSH ULTRA:POLYLOK

	Standard Features	Benefit & Assurances
✓	**Gaia system design**	Developed by Marsh Industries in partnership with Loughborough University, the unique Gaia process design software uses core information to accurately calculate and tailor key variables ensuring total optimisation for individual applications. These precise calculations provide assurance to consultants, engineers, specifiers and contractors that the system is specifically designed to meet the appropriate standards of regulatory bodies.
✓	**Advanced process control**	Energy-efficient, economical and flexible process control provides optimised system performance and improved running costs – meaning the end-user can be assured they have the most economical and cost-effective solution for their wastewater system. *In sites where noise pollution may be an issue, Marsh Industries can supply PUNF foam filled 'decibel busting' kiosks.*
✓	**Process guarantee**	Marsh Industries provides a process guarantee, based on the design loadings and pH level being between 7-9. *Note: Fats, oils, grease and surface water must not enter the plant. More information can be found in our installation and operating manual.*
✓	**Structural strength** *(Installation note: Full concrete surround recommended)*	**Structural integrity tests** performed in accordance with EN ISO 179-1/1eA: 2010-11 were undertaken to evaluate the strength of Marsh Industries' GRP materials against similar GRP materials used by other manufacturers. Results proved Marsh GRP material to be 40% stronger than the other materials tested.
✓	**Health and safety**	**Fire resistance testing** was performed to assess ignitability of products subjected to direct impingement of flame. Marsh Industries' GRP material passes all practical testing to achieve EN ISO 11925-2:2010 standard.
✓	**Carbon covers**	Carbon covers provide significant strength and durability, and helps to reduce possible odours. Heavy duty access covers also provided. Turret guards are a unique safety feature designed to prevent dropped objects or unauthorised personnel from entering the tank.
✓	**Tertiary treatment supplied as standard**	All Marsh Ultra:Polylok sewage treatment plants are fitted with the patented Polylok tertiary filter to reduce suspended solids in the final effluent by a further 35%, whilst also reducing residual BOD.
✓	**Flexible delivery**	Marsh operates AM or PM delivery windows, including Saturdays, so you can choose the time your Ultra:Polylok plant is delivered.
✓	**After-sales and technical support**	Marsh offers flexible servicing and maintenance that, when combined with our comprehensive site support and technical team, gives you the backup and support you would expect from one of Europe's leading manufacturers of off-mains drainage products.

Ultra:Polylok process animation
www.youtube.com/watch?v=QrFTo5ifX4Q

Note: Tank model shown for illustration purpose only

ENERGY-EFFICIENT, ECONOMICAL AND FLEXIBLE PROCESS CONTROL

Efficiency

Air blower output is controlled using a variable speed 'drive' which supplies the precise amount of air required to enable the sewage treatment plant to function efficiently.

Optimisation of the air blower output results in improved running costs, meaning the end-user can be assured they have the most economical solution for their wastewater system.

This is a unique feature when it comes to overall energy-efficiency as most process control kiosks currently available within the industry have a one size fits all approach.

Flexibility

These next-generation process control kiosks are built with flexibility in mind. Additional control options can be programmed into the 'drive' to regulate the volume of air delivered to the sewage treatment plant for different periods. This can be particularly beneficial for seasonal applications such as campsites, caravan parks, lodges or hotels where they may operate at peak capacity for short periods of the year. This functionality permits the volume of air to be increased or reduced, depending on the amount of people to be accommodated, thereby offering the end-user the ability to further reduce energy and running costs.

In addition, the process control kiosk allows for system expansion in the case of business/site growth (subject to design), thus eliminating the need to install extra tanks, pipework, air blowers, etc.

Noise reduction

We believe these kiosks to be the quietest on the market today. They are fitted with a number of noise reduction measures as standard, making them ideal for caravan parks, campsites, etc, subject to kiosk placement/location. This can reduce the need for creating barriers or planting to restrict noise.

Further noise reduction measures can be added through the use of acoustic PUNF foam linings and various acoustic noise absorbing baffles. This not only reduces noise but enables the kiosk to be placed in a more convenient location on sites where space is at a premium (the recommended distance from the sewage treatment plant should be 10m).

Specification/costs of noise reduction options, including measured decibel levels at a given distance from the kiosk, can be supplied on request.

- **Powder coated, mild steel or GRP kiosk (Green - RAL6005)**
  The kiosk protects the motor and controls from the elements
- **Forced ventilation, including ambient temperature control**
  A ventilation fan/thermostat maintains the optimal ambient temperature in accordance with the air blower manufacturer's specifications
- **Thermal protection on motors**
  Protects the motor windings from overheating, increasing the reliability and lifespan of the motor
- **Electrical overload and short circuit protection**
  As required by electrical regulations
- **Air intake filter maintenance alarm**
  Alerts the end-user when the intake filter needs cleaning/replacing
- **High pressure alarm**
  Alerts the end user if the system design pressure has been exceeded, typically suggesting a blockage or restriction in the pipework
- **Low pressure alarm**
  Alerts the end user if the system design pressure is low, typically suggesting a leakage in the pipework
- **Standard acoustic attenuation including air intake silencer and external acoustic hood**
  Reduces noise from the blower motor and air intake
  .

Customer details

Name	Mr Iain Buchanan
Project reference	Bethesda Rugby Club
Company	C L Jones Bethesda
Telephone	07771 803122
Email	iainbuchanan@cljonesltd.co.uk
Date	18th March 2026

Site specific information

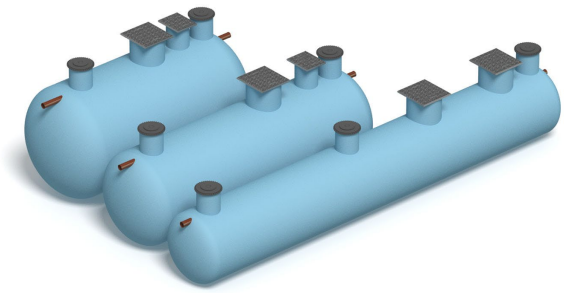
Any additional site requirements? N/A
Discharge quality required? 20:30:20
Invert level? 600mm

Products / services

Item	Price £
Marsh Ultra Polylok 180PE Sewage Treatment Plant – Gravity Outlet with 600mm Inlet Invert	£26,646.55+VAT.
AAA Covers supplied as standard – 2.5T Slow Wheel Loading	
Heavier Duty Covers Can be Supplied If Required.	
• **Designed in accordance with BSEN12255**	
• **Eco Processing Control System**	
• **Unique Polylok Tertiary Filter & Turrets Guards & High Surface Area Bio Media**	
MG2800 Marsh GMS Grease Separator include Grease Alarm	£1,443.05+VAT
Marsh 3800l Shallow Elsan Tank includes MAHLA Alarm	£1,409.80+VAT
	Total: £29,499.40+VAT.

Delivery details

Est. delivery date	TBC
Delivery address	Direct To Site



Important information

- See tables 1-5 on page 6 for sewage treatment plant data and bespoke tank sizing options.
- When you have chosen the diameter and size of the plant we will prepare a technical drawing in PDF format.
- All prices exclude VAT.
- Quotation valid for 6 months.

Three bespoke tank size options

We provide three optional tank sizes in Ø1.9, Ø2.5 and Ø3m diameters. This allows you to consider the best tank length and depth for your site, taking into consideration access, pylons, tree roots, hard rock or high water table conditions, etc. **Each option is exactly the same price.**

Table 1 - Daily loadings for the site over a 24-hour period

This table illustrates the daily loadings for the site along with the peak flows over a 24-hour period

Waste Source		Flow [l / day]		BOD [g / day]		Ammonia [g / day]	
Description	No.	Per head	Total	Per head	Total	Per head	Total
2No. Office/factory without canteens	2	50	100	25	50	5	10
6No. *Full time staff	6	90	540	38	228	5	30
14No. *Part time staff	14	45	630	25	350	3	42
140No. Restaurants-Full meals-preprepared mea	140	25	3500	30	4200	2.5	350
160No. Toilet (WC) per use	160	10	1600	12	1920	2.5	400
100No. Local community sports club,eg squash,r	100	40	4000	25	2500	6	600
Total for this Schedule			**10370**		**9248**		**1432**

Table 2 - Flows / influent concentrations

This table displays peak and average flows along with influent concentrations of BOD and Ammonia

Biochemical oxygen demand [mg/l]	892
Ammonia concentration [mg/l]	138.1
Average hydraulic flow [l/hour]	432
Peak flow [l/hour]	1296

Table 3 - Effluent standard / desludge period

This table details the final effluent standard and optimum desludge period when the plant is at 100% loading

Biochemical oxygen demand [mg/l]	20
Total suspended solids [mg/l]	30
Ammonia concentration [mg/l]	20
Desludge frequency [days]	90

Table 4 - Three bespoke tank options to suit loadings

The price for the Marsh Ultra:Polylok 180PE will be the same regardless of diameter profile

Tank chambers	Chamber length [m]			Volume [m^3]		
	1.9m	**2.5m**	**3m**	**1.9m**	**2.5m**	**3m**
Primary hemisphere	0.45	**0.65**	0.85	0.85	**2.13**	4.01
Primary settlement tank	7.94	**4.33**	2.74	22.51	**21.24**	19.36
First biological zone	4.80	**2.77**	1.93	13.61	**13.61**	13.61
Second biological zone	2.23	**1.29**	0.89	6.32	**6.32**	6.32
Final settlement tank	0.72	**0.60**	0.60	2.05	**2.95**	4.24
Final hemisphere	0.45	**0.65**	0.85	0.85	**2.13**	4.01
Total	**16.59**	**10.29**	**7.86**	**46.19**	**48.36**	**51.54**
		↑ **Recommended**			↑ **Recommended**	

We have processed the design of the plant using our industry-leading 'Gaia' design software which generates a volume to fit in three different diameter sizes; 1.9m, 2.5m and 3m. This allows you to consider the best length and depth for the site taking into consideration access, pylons, tree roots, hard rock or high water table conditions, etc.

Table 5 - Kiosk & Recommended Electrical Requirements

Kiosk Size (H x W x D)	Electrical Supply 400V	Electrical Supply 230V
1425mm x 850mm x 500mm	**400V TP&N 20A type C/D MCB**	**230V SP&N 25A type C/D MCB**

This table specifies the electrical supply recommended for the system

ANCILLARY PRODUCTS AND SERVICES

Grease traps
Available in capacities from 2800 to 20,000 litres, Marsh Industries' range of grease traps effectively prevents Fats, Oils and Grease (FOG) from entering the drainage network or sewage treatment plants.

Degrilleur™ bar screen trash barrier
When non-dissolvable objects are flushed into the sewer and then into a sewage treatment plant or pump station downstream, it can lead to blockages or worse - possible plant failure. To combat this Marsh Industries has developed the 'Degrilleur' – a bar screen which prevents any unsuitable materials from entering the system.

Pumped outlet / final effluent pump chambers
A pumped outlet will be required when final effluent is to be directed to an outfall at a higher level than the sewage treatment plant. Marsh Industries can incorporate this either integrated into the outlet end of the treatment plant, or as a separate pump chamber installed after the plant.

Alarm systems
Marsh Industries can supply various types of alarm, as well as bespoke options as required:

- Beacon alarms
- Klaxon and beacon alarms
- SMS Alarms
- Micro SMS battery alarms
- Micro SMS solar panel alarms

Commissioning and servicing
Marsh Industries offers a nationwide service to cover all aspects of commissioning and servicing. Packages can be tailored to customer requirements from basic commissioning contracts to commissioning and full service contracts, including on-going support and advice.

MATERIALS AND FIRE SAFETY TESTING

Structural integrity testing
Structural integrity tests, performed in accordance with EN ISO 179-1/1eA: 2010-11, were undertaken to evaluate the strength of Marsh Industries' GRP materials against similar GRP materials used by other manufacturers.

Three separate material samples were submitted for impact testing; Marsh GRP material (virgin unfilled resin), a GRP material containing calcium fillers and a GRP material containing sand filler.

The tests involved 12 samples of each material at a size of 80x10x5mm. The nominal pendulum energy was 15J at an impact velocity of 3.8m/s.

Results proved Marsh GRP material to be 40% stronger than the other materials tested.

Fire resistance testing
Fire resistance testing was performed to assess ignitability of products subjected to direct impingement of flame. Marsh Industries' GRP material passed all practical testing to achieve EN ISO 11925-2:2010 standard.

WHY CHOOSE MARSH INDUSTRIES?

The innovator in domestic, commercial and agricultural off-mains products

Marsh Industries provides world-class off-mains drainage products and solutions to the domestic, commercial and agricultural sectors from its UK manufacturing plants in Kettering and Bridgwater.

Working smarter

Efficiently meeting the demands of our customers

We strive to be recognised as a collaborative and trusted partner for our customers, aligned to their business, and with a reputation for providing quality products that really do add value.

Innovative thinking

Enabling technologies that deliver tangible benefits

Working across many areas of the UK and European construction sectors our specialist 'innovation' team combines 100+ years' experience of designing, manufacturing and testing wastewater treatment products that are proven to be economic, efficient and environmentally sensitive.

Product compliance

In line with UK/EU building and environmental regulations

Our products are fully type-tested and certified to ensure compliance with relevant environmental permitting programmes and Building Regulations.

Delivering on time

UK nationwide and overseas

With one of the largest merchant distributor networks available in Europe, customers specify Marsh products and services because they know we deliver from a solid foundation of knowledge, experience, product quality and proven performance.

Supporting your business

Specialist services to further enhance customer requirements

There are times when our customers need a little extra support. Whether this is on-site advice, backup support, specialist testing or bespoke project solutions, we offer a range of services when and where required.

Domestic and commercial off-mains drainage solutions

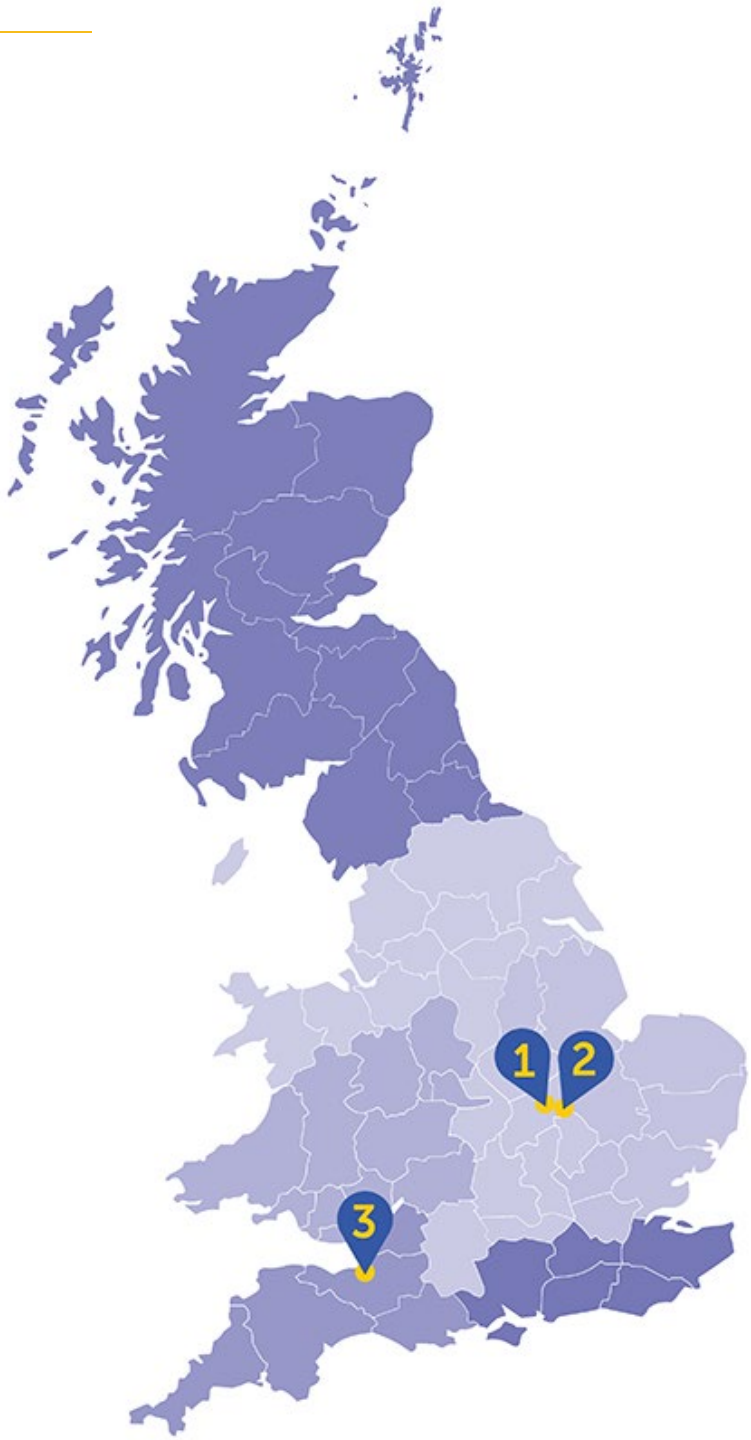
- **Sewage treatment plants**
- **Pump stations**
- **Septic tanks and cesspools**
- **Uni:Gem★ septic conversion**
- **Marsh GMS★ grease traps**
- **Degrilleur™ trash/debris barrier**
- **Agri-silage tanks**
- **Water attenuation systems**
- **Rainwater harvesting systems**
- **Oil separators**
- **UV disinfection chambers**
- **Whisspurr® - Acoustic vibration reduction units**

Testing, certification and validation

Marsh Industries is a leading member of British Water and holds 15 EN certificates for product testing performed at notified Test Centres, PIA and TUV-Sud.

Your Marsh point of contact for this project

Name	Neil Prescott
Position	Area Sales Manager
Tel	07760 667645
Email	Neil.Prescott@marshindustries.co.uk



Civils / Commercial products

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LOCAL KNOWLEDGE
NATIONAL COVERAGE

1 Marsh HQ and factories
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Kettering, Northamptonshire NN14 4AS

2 Raunds factory
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3 Bridgwater factory
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