



**GMC,
Badgerhill,
Rathcoole,
Co. Dublin**

O'Reilly **Oakstown** Environmental



Oakstown, Trim
 Co. Meath
 Tel: 046 - 943 - 1389
 Fax: 046 - 943 - 7054

E: info@oreillyoakstown.com
 W: www.oreillyoakstown.com
 V.A.T Reg. No.: IE 6401624D
 Company Reg. No.: 381624

Date: 03rd December 2021

Applicant Name: GMC

Site Address: Badgerhill, Rathcoole, Co. Dublin

Design Capacity: Up to 10 Workers

A representative of *O'Reilly Oakstown Ltd* has assessed the Soil Test Report and confirms the suitability of their Oakstown BAF 6 PE Wastewater Treatment System to treat effluent being discharged from the above proposed dwelling based on the residential demands submitted to us above.

1. Waste Water Treatment System Design Details:

- Maximum Capacity Design Loadings:

Max No. of users	Flow Litres/day/person	Total Hydraulic Load	BOD5 (grams/day/person)	Total Organic Loading (grams/day)
6	150	900 litres	60	360

- Maximum Daily Design Loadings as per client:

Total Organic Loading	0.24kg BOD/day
Total Hydraulic loading	0.6m ³ /day

- Average treated effluent standard - see performance results on EN-12566-3 certification attached

BOD	8mg/litre
TSS	12mg/litre
Ammonia	13mg/litre

- Proposed system details: ► Oakstown BAF 6 P.E.

Volume of Total Plant	6.7m ³
Volume of Primary Sedimentation Chambers	2.86m ³
Volume of Secondary Aeration Chamber	1.2m ³
Volume of Biomedia	0.8m ³





2. Wastewater Treatment system description:

The Oakstown BAF 6 PE is designed to provide proven, cost effective primary and secondary wastewater treatment in robust steel reinforced concrete tanks.

The primary sedimentation chamber has a 2.86m³ capacity to allow anaerobic digestion to occur naturally while letting sludge settle on the tank floor.

Once primary treatment has taken place the effluent is further degraded in the aeration chamber where oxygen enriched wastewater provides ideal conditions for aerobic bacteria to thrive.

Before pumping to the percolation area the clear water is left to further settle in the clarifier chamber to eliminate any remaining settle able solids.

3. Guarantee and warranties:

O'Reilly Oakstown provide a 12 month maintenance service contract on all systems from date of first occupation. We provide a 24 month warranty on all parts.

4. Percolation:

The percolation area designed must conform to the requirements of Chapter 10 or Table 8.1 of EPA Code of Practice 2021 Wastewater Treatment and Disposal System serving single houses.

The percolation area requirements are as follows:

Groundwater Protection Response: R1

T-value: 28.11 as per Site Characterisation Form.

P-value: 35.17 as per Site Characterisation Form.

Depth from ground surface to water table: 1.0m BGL.

Depth from ground surface to bed rock: None Encountered BGL.

Depth from ground surface to mottling: None Encountered BGL.

Area of raised Soil Polishing filter: 120m²

Soil Polishing Filter must be covered in 25-40mm drainage stone.

Soil Polishing Filter must be covered in geo-textile cover then in topsoil.

► See Site Characterisation report for percolation area details.

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5. Client Responsibilities unless included in our quotation:

- Excavation and backfill.
- Construction of the percolation / polishing filter as recommended by the site engineer on the Site Characterisation report and/or drawing.
- Provision of access for delivery by hi-ab truck to within 3 metres of the excavation.
- Provision of a power ducting from the tanks to the house/garage.
- Mounting and connection of control panel to mains power in the house/garage.

6. Operation and Maintenance:

The client is responsible for the operation and maintenance of the wastewater treatment system in accordance with the owner's manual supplied by O'Reilly Oakstown.

Please do not hesitate to contact us if there are any further queries.

Yours sincerely,

Sarah O'Connor





TREATMENT PERFORMANCE RESULTS

O'Reilly Oakstown Environmental Ltd.
Oakstown, Trim, Co. Meath, Ireland

EN 12566-3

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

PIA-SR66-1603-1036

Oakstown BAF System
Submerged aerated fixed film bioreactor

Nominal organic daily load	0.38 kg/d	
Nominal hydraulic daily load	1.20 m ³ /d	
Material	Concrete	
Watertightness	Pass	
Structural behaviour (Calculation)	Pass (also wet conditions)	
Durability	Pass	
Treatment efficiency (nominal sequences)	Efficiency	Effluent
	COD	93.0 % 46 mg/l
	BOD ₅	97.5 % 8 mg/l
	NH ₄ -N	61.0 % 13 mg/l
	SS	96.7 % 12 mg/l
Number of desludging	Not more than once	
Electrical consumption	2.0 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 9001:2008



Prüfinstitut für Abwassertechnik GmbH
Elmar Lancé
geprüft - tested - teste

Elmar Lancé

January 2017

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This contract is between O'Reilly Oakstown Limited (The Company) and

_____ (The owner) of system No: _____

In relation to the maintenance of The Oakstown Domestic BAF Waste Water Treatment System (The system) associated with a domestic dwelling located at

Address: _____

Telephone: _____

Purpose of the contract.

The purpose of this contract is to provide for the annual inspection and servicing of the system installed at the above address as stated.

Duration of Contract

This contract is for a period of twelve months to commence upon the date on which both parties affix their signatures to this copy of the standard agreement. The annual fee for the first year's maintenance is included in the price of the system. A further maintenance contract will be offered for the years thereafter.

Scope of Contract.

The scope of the contract is restricted to the holding and treatment tanks, associated blowers, electric motors and fittings which comprise the original system as installed by the company or their approved representatives.

Exclusions

This contract excludes all percolation and drainage areas associated with the system together with any other drainage or treatment system in use on the same site or connected to the same domestic premises. Also excluded are treatment systems connected to any premises other than private domestic dwellings.

The provisions of this contract, in addition, do not apply to any system that has been the subject of alteration by the customer or their representative following installation by the company.

Features of the Contract

The service contract provides the following:

A yearly inspection of the system which reviews and addresses the following.

- A review of the electric control panel.
- Inspection of air filter and replacement if necessary.
- A general inspection of the installation to ensure that optimum operating conditions are being maintained
- A functional test of the system to verify that pumps and blowers are operating as required.
- The completion of a service report and the submission of same to the householder/occupier.

Emergency Call Out Facility

In addition to the provisions of a standard service inspection, the features of this contract include an emergency call out facility. The facility operates on the following basis:

- Calls received on or before 11.00 a.m. will generally be attended to on day of receipt.
- Calls made after that time may be attended to on the same day but will in any event be attended to the on the following day or as soon as possible thereafter.
- Service and emergency calls should where possible be made during normal office hours.
- Prior to making an emergency call, system users are requested to ascertain the nature of the presenting defect and to be prepared to provide this information to the company personnel receiving the call.
- In the event that telephone instructions can correct the problem the system user will be provided with the appropriate instructions.



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- Should a site visit prove necessary the company personnel involved will on the basis of information supplied, evaluate the circumstances involved and schedule a service call on the basis of supplied information
- If deemed necessary, company personnel may issue temporary instruction to minimise the impact of the source of the problem.
- Service call reports are completed upon the conclusion of each visit.

Signed: _____
On behalf of O'Reilly Oakstown Limited, Trim, Co. Meath.

Signed: _____
The customer

Date of signing: _____

Materials and Components

Materials and components supplied as a result of contract or emergency site visit will be the itemised on reports and will be subject of charges where necessary in addition to the annual contract fee.

Annual Contract Fee

There is no annual contract fee for the first year. A contract fee will be charged for the maintenance contract thereafter. The contract fee will be that prevailing at the time the contract is signed and will be subject to annual review thereafter.

Contract fees are subject to the addition of VAT at the prevailing rates applicable on the date of acceptance and approval of the contract.

Cancellation of Contract.

Service contracts may be cancelled by the issuance of written notice within a fourteen day period prior to the renewal date.

Confirmation and Acceptance

The parties to this contract signify their acceptance of the terms and conditions of same through the appendage of their signatures below and confirmation of receipt of the specified annual contract fee.

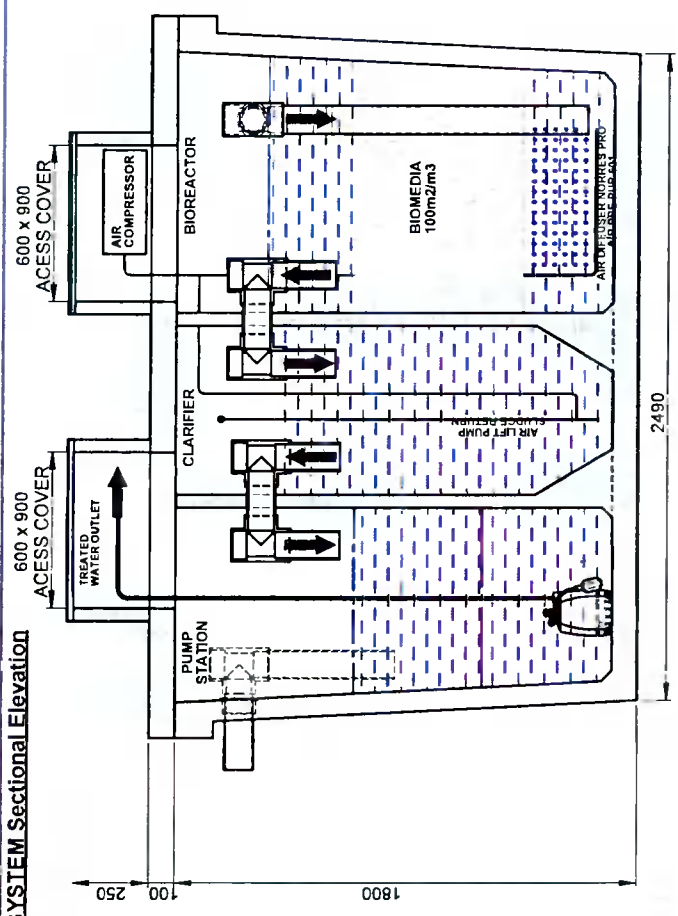
This contract becomes effective for the full period as stated upon the appendage of signatures by both parties and the payment of the annual contract fee to the company by the customer.

Note: The Oakstown BAF Wastewater Treatment System provides the optimum conditions to allow both anaerobic and aerobic bacteria to break down household effluent in an efficient and odour free process. However, to keep your system working properly please remember to use non-biological washing powders with low levels of phosphates, minimise use of bleach and caustic sodas and never allow grease, cooking oil or household chemicals into the system.

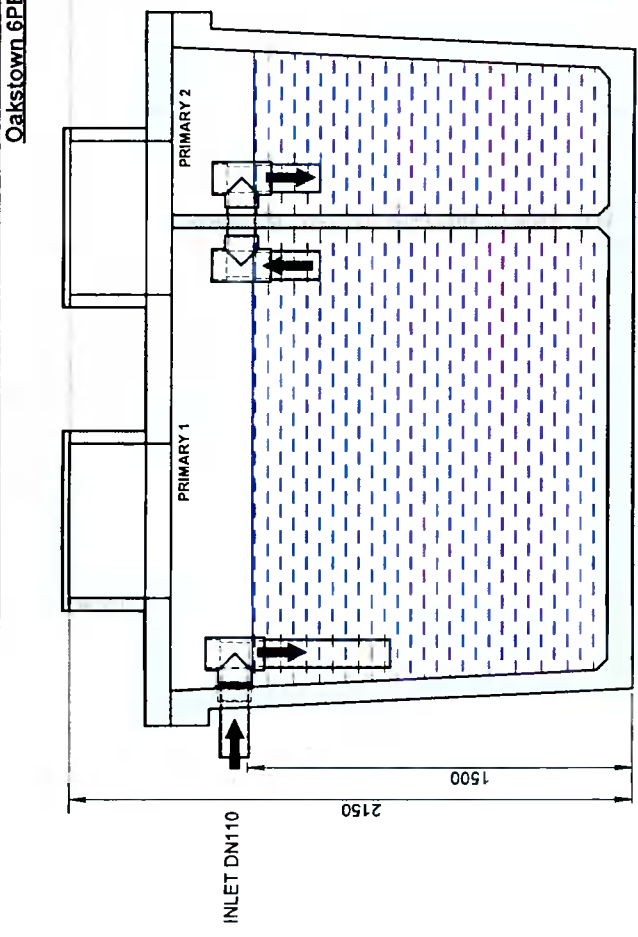
O'Reilly Oakstown Environmental is a trading name for O'Reilly Oakstown Limited



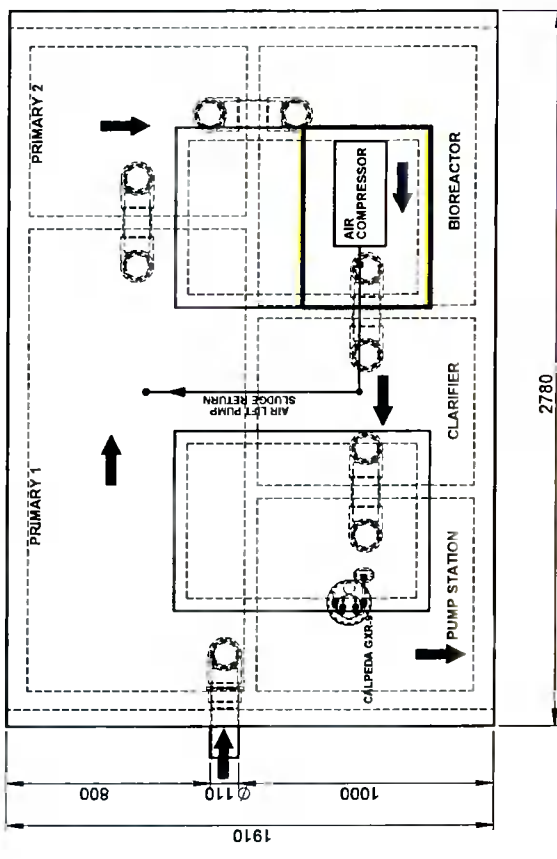
Oakstown 6PE BAF SYSTEM Sectional Elevation



SECTION A-A



SECTION B-B



VOLUME: 6730
LITRES:
TANK 6500kg
WEIGHT: LID 1010kg

PROJECT: SR-66 O'Reilly Oakstown
TITLE: 6 PE BAF SYSTEM
DRAWN: T. Nicinski
CHECKED: D. O'Reilly

O'REILLY OAKSTOWN LTD.
BAF - WASTEWATER TREATMENT SYSTEM



O'REILLY OAKSTOWN
THM Co. MEATH
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SCALE:	DWG NO:	REV:	DATE:
N.T.B.	CAK9 P01701	BR06	09/017