

## Appendices – Submitted by BIGbin Waste Tech Ltd.

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# 1. Landowner Consent

Landowner Permission

08/12/2021

Re: Newcastle Service Station Ballynakeilly Newcastle  
Co Dublin D22 ETNB

I am the landowner at

I give permission to BIGbin Waste Tech Ltd to submit a planning application and certificate of registration application for the placing of pay-to-use portable waste compactors at this site.

Yours Faithfully

  
Brian Kelly

## 2. E.P.A Declaration



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10 January 2020

Article 11 No: 2480

Re: Article 11 Declaration

Dear Mrs Loughlin

The Agency has reviewed your Article 11 Request, which was received on the 7 January 2020, and, based on the information provided, advises as follows:

The Agency has determined that a Certificate of Registration is required under Class 2 of Part II of the Third Schedule of the Waste Management (Facility Permit & Registration) Regulations 2007, as amended. This determination is contingent on the following conditions of the class being met:

- The maximum amount of waste stored at any one time not exceeding 1,000 tonnes;
- receiving the local authority's approval.

I trust this advice assists.

Yours faithfully

Environmental Licensing Programme  
Office of Environmental Sustainability

### **3. Schedule of Drawings to be Submitted**

Schedule of plans/drawings being submitted for planning application by BIGbin Waste Tech Ltd. for placement of two pay-to-use portable waste compactors at Newcastle Service Station, Main Street, Ballynakelly, Newcastle, Co. Dublin, D22 E7N6.

1. Site location map 1:10,000
2. Site location map 1:1000
3. Site Layout 1:500
4. PTU drawings and specifications 1:50

## **4. BIGbin Standard Operation Procedure**

### **Overview**

BIGbin compactors are designed to provide the owner with a payback system, while the public have the facility for a readily available, cheap, and clean way of disposing of their recyclable and non-recyclable waste.

BIGbin Waste Tech Ltd. supply BIGbin compactors on petrol station forecourts and in other locations such as supermarket car parks. Our BIGbins are for bags of domestic waste only.

All general domestic waste is accepted but customers can avail of better value if they recycle first. Users bring their rubbish and dispose of it through a simple process. The user buys a ticket in the shop beside it, keys in the code and places their rubbish in the drum. The drum will accept a maximum of 2 x 80L bin bags. A ticket costs €8.00 for general waste, food and dry recyclables are charged at €5.00

Alternatively, the customer can create an online account. The user then has access to an account that will allow them to place a flexible amount of credit to the account. On arrival at the location of the BIGbin, the user enters their mobile number into the keypad & their unique 4-digit pin code. If the minimum credit required for a disposal is on the account, the drum will automatically open. The waste is placed inside the container and the cost is debited from the account.

BIGbin is an alternative to a locked-in annual bin collection service for low usage customers or can also be used for supplementary disposal, surplus to regular collections, providing an option for those who require additional collection. The user has control of when they want to dispose of their rubbish and as units are available 7 days a week, users don't need to wait for a specific day if using the service outside their regular collections.

BIGbin is ideal for people on a budget, single householders, holiday homes or people who do not generate enough waste to warrant a collection. At each site there are two compactors. One for the collection of residual waste and food waste and a second one for the collection of dry recyclables.

Usage is spread evenly across the day/week with a typical site expecting up to 20 uses a day which is equal to less than 2 per hour.

The BIGbin facility is confined to the acceptance of household waste. Each compartment for the acceptance of each waste stream is limited in size to limit misuse and deposition of incompatible waste. The drum for the acceptance of residual waste and the drum for the acceptance of mixed recyclables accept a maximum of 160L or most commonly; two 80L household bags. The compartment for the acceptance of food waste is a reduced size to accommodate compostable food waste bags and negate the use of large bags for residual or recyclable waste. The compactor allocated for the acceptance of recyclable waste only is fitted with a guard to prevent large bags of non-recyclables materials being placed within the compactor. The compactor allocated to the acceptance of residual waste and food waste has separate compartments, the compartment for the residual waste is located on the front of the compactor and labelled clearly. Photos below have been included showing the clear labelling of each compactor and compartment.



**Left:** Compactor  
for acceptance of  
recycling waste  
with guard (closed)



**Right:** Compactor  
for acceptance of  
recycling waste  
with guard  
(opened)



Left Top:

Compactor shows the smaller, clearly labelled receptacle for the acceptance of food/organic waste.



Left/Bottom:

Labelled receptacle for household rubbish (residual waste)

The compactors have been designed to incorporate weighing systems. A screen is attached to the face of the bin beside the weighing containers. This will highlight the weight of each waste stream.

Each weighing container incorporates one or more load cells configured to weigh the waste accurately and reliably to a maximum of 50Kg at an accuracy of +/- 500g. Each weighing container volume is slightly less than the existing bin drum. The system is weatherproof to IP67 and is capable of operating in temperatures from - 10 to +50 degrees C. The power requirement is 220VAC at 2A. The unit has undergone the necessary tests and has been certified by the UK National Measurement Office (ref UK/0126/0210).

The system is based around a central server and database. This server is hosted professionally, and the data backed up regularly as it is critical for the operation and without it no transactions can take place. The server holds and controls all transactions. Credit ID numbers, user IDs and transactions etc. form the basis of the database and from this all decisions are made. The central server also controls all transactions with the user interface and controls the opening of the bins.

Each weighing terminal uses a GSM/3G mobile modem to communicate with a central server. The server also acts as an exchange sending open commands to the bins. As bins will be exchanged and moved it will be part of the moving process to register bins to sites and their weighing terminals. All communication will be safe and encrypted where necessary.



## **Customer Charter**

The BIGbin company has an existing Customer Charter, which is available for publication on the website of the local authority. The local authority will be made aware, without delay of any revisions. Accepted waste is listed on the front of the unit (see below). The customer charter is also available to view on the BIGbin website through the link:

<http://bigbin.ie/charter>.

## User Process

1. Enter phone number associated with customer account or token number into the validator of the PTU.
2. The beacon will flash, and an automated message will announce the drum is about to open
3. The drum then automatically opens
4. The PTU will only accept a maximum of two 80L bags
5. Customer places the bagged waste inside the feed drum. All waste must be inside the drum to avoid blockages
6. Once inside the drum, after 40 seconds the drum will automatically close following the flashing beacon and auto message stating the drum is about to close
7. When the drum has fully closed, the beacon will stop flashing and the auto message advises the drum is about to rotate.
8. All waste inserted is then compacted inside the fully sealed container of the PTU
9. When the compaction process has completed, the PTU automatically stops.
10. To access the feed drum, a further token number or phone number must be entered



Customer using pay-to-use (PTU) to dispose of bagged waste

## **Health & Safety**

- ⌚ All designated personnel on site of the PTU are fully trained on the operations of the machine
- ⌚ Safety stickers and instructions are clearly displayed on each machine, at eye level to the front and side of the machine that is most visible
- ⌚ A flashing beacon is placed and activated when the feed drum is opening or closing to alert the user
- ⌚ The automated announcement notifies the user of the drum opening/closing prior to each action.
- ⌚ Inspection checklists required to be updated on each inspection.

Each unit is subject to regular maintenance and inspections to always ensure complete working order. The inspector is provided with a comprehensive inspection checklist, which are required to be updated upon each inspection. Each inspection requires the inspector to evaluate and maintain aspects including mechanical measures, spillages & leaks, security such as orientation of CCTV etc. Also, within the maintenance procedures is an emergency response procedure and an incident report.

## **Facility Security**

The site and machine are continually monitored with particular emphasis on security.

The machines are monitored using the on-site CCTV. The pay-to-use compactor is inaccessible outside of opening hours of the site the on which the PTU is located preventing unsupervised use of the machine. The landowner/customer of BIGbin is required to report instances of fly tipping to BIGbin Waste Tech Ltd. Fly tipped waste is retained for inspection and any evidence gathered shall be investigated and prosecutions may be taken. BIGbin is responsible for cleaning up the area and disposing of the fly-tipped waste.

BIGbin also has a dedicated phone line on 086-6047147, email contact form at info@bigbin.ie and Facebook page that is monitored early to late 08:00-22:00 whereby, if necessary, complaints or reports of fly-tipping can be made. Complaints are handled without delay. We have had no issues of fly-tipping at our existing sites and unfortunately the people who are pre-disposed to fly-tipping generally offend in remote, unmonitored locations. Due to the populated location at busy forecourt/retail premises and our vigilant monitoring procedures, fly-tipping is virtually non-existent at our locations.

Constant communication is maintained between the customer and BIGbin operations team where any issues are reported.

#### **Section 4. Emptying & Replacing**

When the individual unit reaches 75% capacity; notification is sent to the operations team. Collection and emptying are then scheduled for the next available date to prevent overloading or full capacity. The collection for the proposed units will be arranged with licenced and permitted collector. The agreement between BIGbin and the licenced collector will be put in place following grant of permission. Collections are scheduled during typically low usage hours. A standard skip truck attends site to lift and remove the compactor. The unit is then returned emptied to the site. All drivers of the skip trucks are fully trained in health and safety and always adhere to compliance.

The BIGbin Company attempt to divert waste that would ordinarily go to landfill and recycle the waste to produce compost or is sent to another facility to be recycled or recovery for energy production.

## Section 5. Environmental Impact

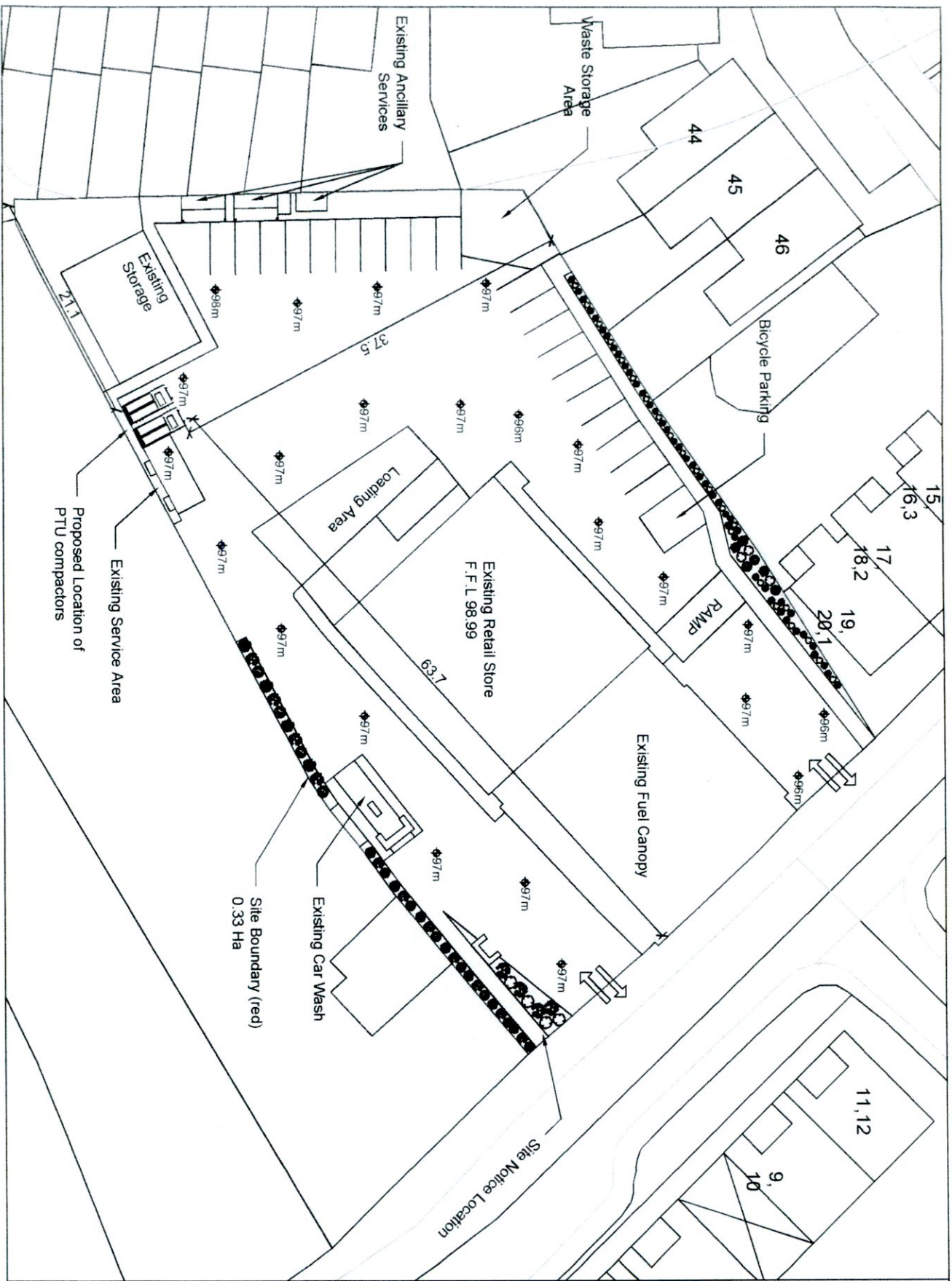
**Adverse Environmental Impact:** There will be no adverse environmental impact caused by the BIGbin compactors

- ⌚ **Litter:** Waste is accepted in bags in the PTU, which is completely sealed, minimising the production of litter. Site inspections are carried out by Service Station staff and BIGbin staff. The site will be added to the applicant's regular site cleaning/inspection schedule and there is also CCTV monitoring. There has been no issue of litter or illegal dumping at the existing 15 sites.
- ⌚ **Dust:** No dust is generated from the waste collected due to the nature of the waste collected.
- ⌚ **Odour:** Alerts are provided when units are 75% full and emptied on a regular basis to prevent stagnant or deteriorating waste building up, causing undesirable odours. Surplus to this, units are completely sealed, keeping odours minimal.
- ⌚ **Noise:** Noise is only generated by the PTU during operation, which lasts between 1-2 minutes per use. Usage is spread evenly across the day/week with a typical site expecting up to 20 uses a day which is equal to less than 2 per hour. Readings have recorded noise production at source at 70dB, the equivalent of a vacuum cleaner or dishwasher. There have not been any complaints regarding the noise levels of any of the existing compactors.
- ⌚ **Vermin:** Units are fully sealed which prevents the emission of odours which may attract vermin and prevent vermin entering the unit. Units are emptied following the notification of 75% capacity regularly. Regular disposal ensures no odours or stagnant waste is present on site to attract vermin.

## 5. Existing BIGbin sites

Images below are for illustrative purpose only to show how placement of PTU compactor fits into an existing site. Images below are subject to copyright.





Site Location Map: Texaco, Newcastle Service Station, Main St, Ballynakelly, Newcastle, Co. Dublin, D22 E7N6

Site Boundary

Planning application for permission for placement of a portable pay-to-use waste compactor for the acceptance of residual and food waste and a portable pay-to-use compactor for mixed recyclables

Sheet	1 of 1
Size	A4
Scale	1:500
Date	09/03/22
Centre coordinates X, Y =	700488.59, 728352.7895

Map Series | Map Sheets  
1:2,500 | 3368-A

Data Extraction Date:  
09-Mar-2022

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Drawn By: E. Reville  
BICShin Waste Tech



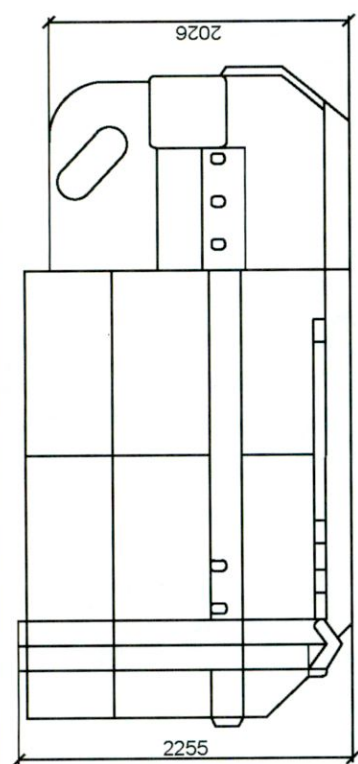
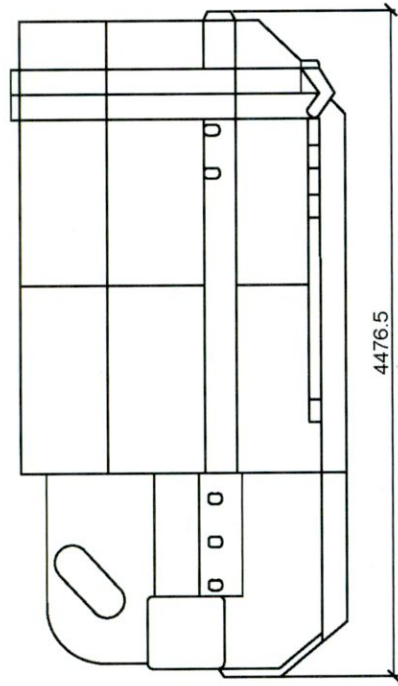
The BIGbin is a free-standing, fully sealed 'pay to use' (PTU) compactor designed for the disposal of separately collected household waste/recyclables. Two units are available - one for dry recyclables and one for residual waste and food waste (collected in separate compartments). The units are fully sealed and there are no emissions from them

Size	A4
Scale	1:50
Rev	0
Date	09/03/2022

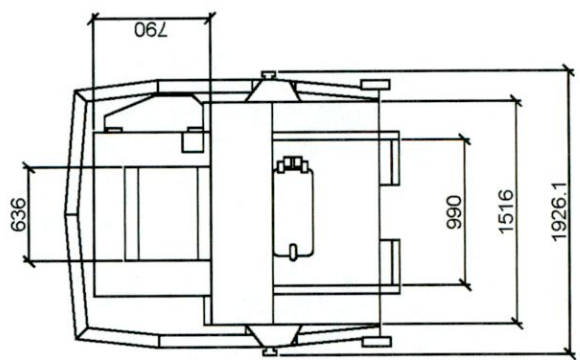
Drawn By:  
Ellen Reville

Site Location:  
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Service Station, Main  
St, Ballynakelly,  
Newcastle, Co. Dublin,  
D22 E7N6

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FRONT VIEW



BACK VIEW

