



WHITEHAVEN SHD

Operational Waste Management Plan



MARCH 2022
PRESENTED BY
KeyWaste Management Ltd.



Company Name	On Behalf Of Cosgrave Developments For Proposed WhiteHaven SHD
Contact	Gerard O'Neill MCORM / Helena Gavin RPS Group
Date	March 2022 (Updated)
Subject	Operational Waste Management Plan

To Whom It May Concern,

Please see outlined below the operational waste management plan.

All waste will be collected in accordance with the relevant by-laws. We are able to facilitate any waste requirements. We have recommended the following based on our in-depth knowledge of waste management for similar sites. This will give you a good outline of what is required. We propose carrying out site visits when required, to advise and assist during the construction and finishing stage.

The latest technologies with fleet tracking/on-board CCTV, hand held PDA's for drivers to capture data/pictures/updates etc. will be available. Clients will be kept up to date with any exciting or innovative changes in the industry. In the background we use the most up to date technologies and eco-friendly methods of disposing of waste. All bins receptacles are chipped and bar coded and weights recorded.

Sustainability/Corporate Responsibility

Ireland is one of the leading countries within the EU for recycling and reducing our dependence on landfill. In addition, with this in mind we are committed to ensuring that our waste methods and practices are in line with all EU directives. We endeavour to over achieve and grow the green credentials for our clients. KeyWaste can assist in the following areas:

- Recycling programmes
- Recycling literature
- ISO accreditation
- LEED certification compliance in particular O+M (Operations + Maintenance)
- Advise on any waste related innovations
- Waste reporting and statistics
- We also have a number of other initiatives we can advise on

The four main waste streams below will make up around 85-90% of the annual waste services. About 10-15% will comprise of WEEE/removal of ad hoc waste etc.

Going forward the quality of recycled waste will be an area of major focus within the industry. There will be zero tolerance from international trading markets regarding contamination of recycled waste. An increase in composting/recycling, proper source segregation and in turn overall reduction in general waste will prevail. A focus on developing a uniformed approach to managing the waste by tenants/cleaners/management companies is required. Our aim is to have our clients ahead of the trends. The bin areas and sizes have been designed within the proposed development to accommodate flexibility to increase recycling and composting ratios in line with this.



A 'Zero To Landfill' policy will be offered for the development.

- **General Waste**
General waste will be sent to the recently opened 'Waste to Energy Plant' in Poolbeg Dublin 4, where it will be transferred into energy and provide electricity for homes. (Providing heating down the line when the infrastructure is developed).
- **Recycling/Cardboard**
Fully processed, recycled and shipped to mills and recycling plants.
- **Glass**
This is brought to our partner Glassco who have a world class facility in Kildare. There it is turned into glass cullet and eventually is recycled back into glass bottles.
- **Food Waste**
Fully composted whilst also trapping the methane produced to create electricity and bio gas to fuel vehicles making it the greenest practice available.

Recommended for Bin Rooms / Waste Areas

- Drainage of a basic nature is recommended for the bin areas. This is to allow for up keep/power washing of the area. (Actual specification would be referred to the contractor).
- Ventilation would also be required referring to contractor on relevant regulations.
- Mag door openers that strictly comply with fire safety regulations are recommended to allow for removing bins without damaging doors. A metal strip can also be put on areas where bins can damage doors or areas of concern (picture below as example). Expect the doors to get a lot of wear if either mag doors hinges (in compliance with H&S regulations) or protection is not provided.
- Adequate lighting is recommended to allow for a brighter, safer environment. Lux of 350-450 advised minimum, this is above the standard requirement.
- We also recommend that a waste brush and pan set be kept in all bins rooms. This allows the tenants to keep the rooms clean if a bag spills etc.
- We recommend that a waterproof epoxy paint is used on the floors and also to fully paint the walls. Epoxy paint to go up to 4.5 feet on wall an additional option. This allow for spillages to be easily cleaned, but also for greatly improved aesthetics.
- Recycling guidelines and policy for the residents will be provided.
- The installation of air fresheners, to make for a better experience.



Examples of Bin Rooms:





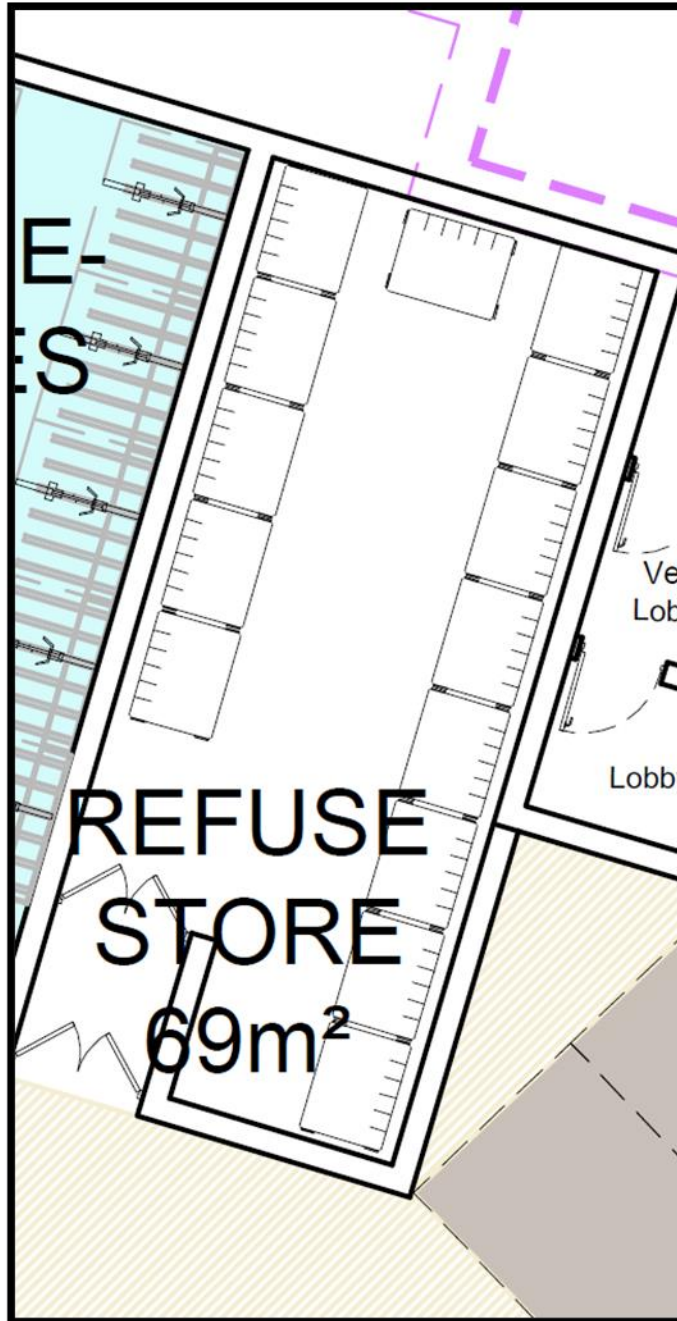
BASEMENT BIN AREA LOCATOR





BIN AREAS ENLARGED

Bin Room 1

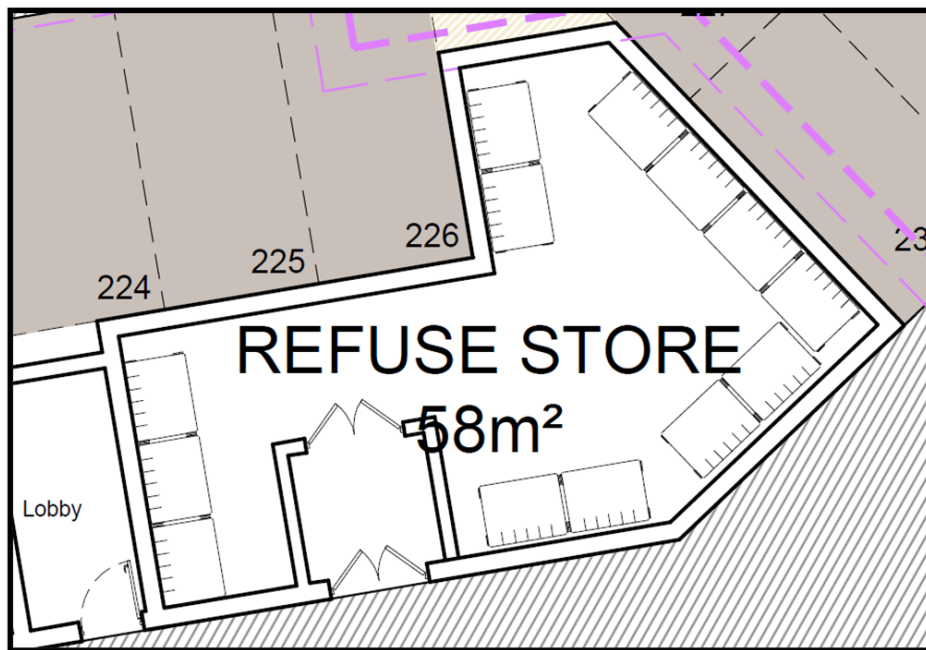




Bin Room 2

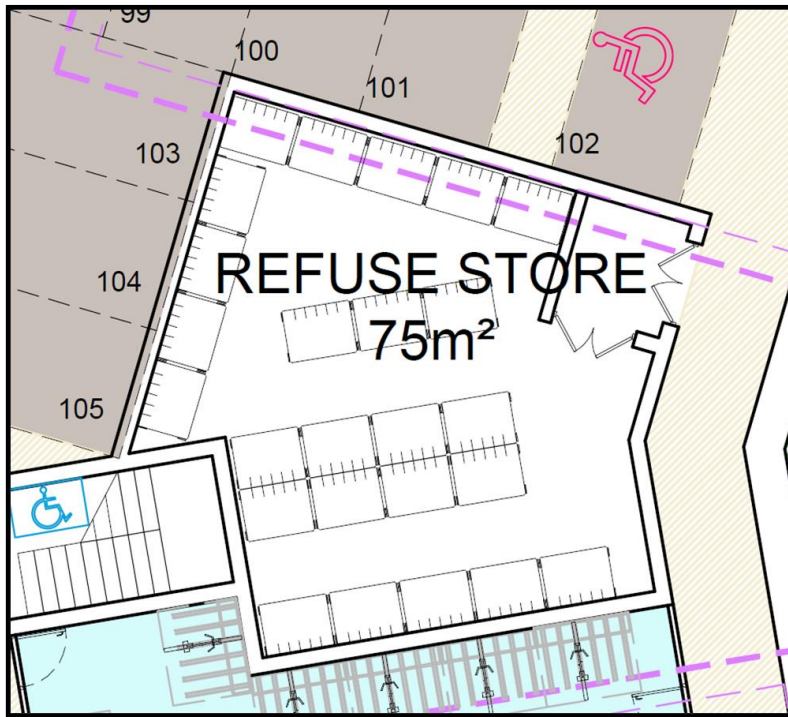


Bin Room 3

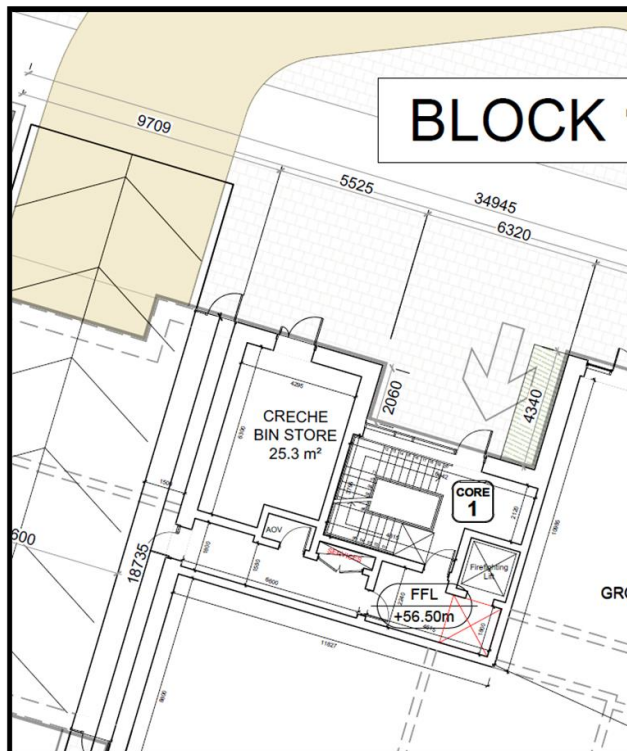




Bin Room 4



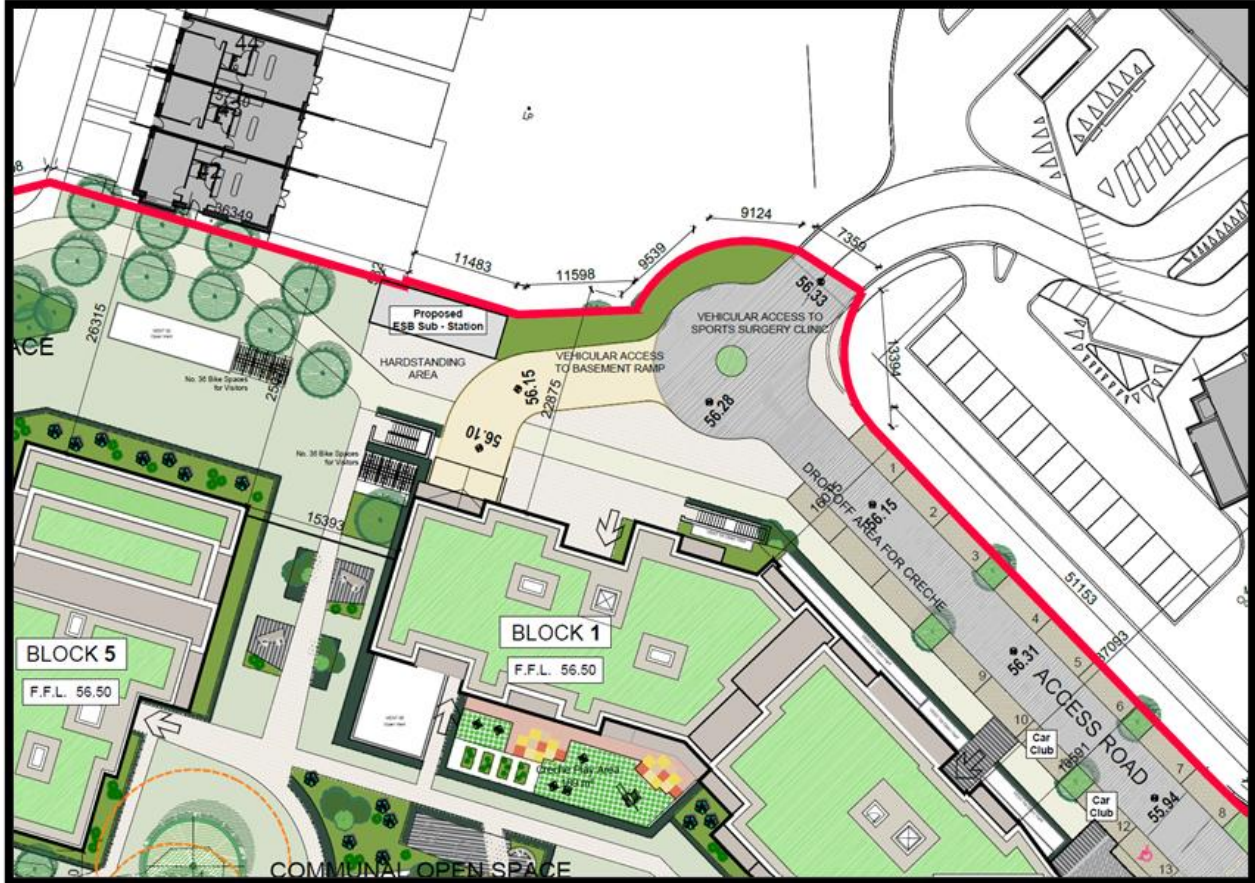
Bin Room 5 Creche Surface





Surface Layout/Collection Point

NB: allowances for bin holding and vehicle turning given due consideration.



Residential Services

Based on 255 units comprising of mixed rooms and the expected clientele & location of the development, we have estimated the below frequency and waste types. Please note this is based on approximately 3 months after the full occupancy of the development.

A total of 5 bin stores will be provided 4 in the basement for residents and 1 surface for the creche . KeyWaste can confirm there is enough storage space provided for this development based on the number of bin rooms v's residents, with allowances for future flexibility.



Creche Services

The proposed creche will use a separate surface level area beside the creche to hold their bins.

Temporary Waste Vehicle Lay By/Surface Bin Holding Area

On waste collection days, the bins will be taken from the basement via the ramp. A combined vehicle lay by/bin holding area is provided for bins from the basement to be kept temporarily at surface level. This will ensure traffic management and safety is catered for. The actual number of bins pulled up to the surface will be flexible based on the available space provided/using staggered collections days and working with onsite staff.

The childcare facility drop off point is located to the road away from the waste collection point. Extra due care will be given when approaching site. Trucks will have 360 degree camera systems along with reverse camera systems, no reversing movement is required at the creche collection point.

Waste Types (Noting additional Types Added If E.U. Directives Advance).

Overall ratios of waste streams will change depending on patterns and as the education and cultural changes evolve. An approximate estimate to aim for initially would be:

Apartments

Type of Waste	Container	Total Per Week	Frequency
General Waste	110olt	26-28	Once Weekly /As Required
Mixed Recycling	110olt	20-22	Once Weekly /As Required
Compost/Food	66olt	4	Once Weekly
Mixed Glass	24olt	20	Bi Weekly

Creche

Type of Waste	Container	Total Per Week	Frequency
General Waste	110olt	2	Once Weekly
Mixed Recycling	110olt	2	Once Weekly
Compost/Food	14olt	1 -2	Once Weekly



- WEEE and 'non domestic' waste can be removed on request. To ensure sustainability and cost effectiveness, this is taken when it reaches a certain amount.
- Use of local recycling centres should be promoted to residents.
- Composting for apartment blocks has been very difficult to manage in recent years for a number of reasons. There is much more of an appetite now to ensure residents are correctly separating their waste.

Additional collections can be provided for each service if needed

Proposed Bin Colour Types



Uniformed Signage And Posters For Bins/Bin Rooms

KeyWaste

GENERAL WASTE BIN
What can go into a general waste bin?

Plastic and Metal Waste Black Bag Waste Cigarette Butts
Polystyrene Cups Nappies Vacuum Bags

Always try to Reuse and Recycle your Waste

KeyWaste

DRY MIXED RECYCLING
What can go into a recycling bin?

Newspapers Drink Cans Food Tins Plastic Bottles
Magazines Cardboard Plastic Packaging

All recyclables must be washed clean!

KeyWaste

ORGANIC WASTE
What can go into an organic bin?

Cooked Meat & Bones Cooked Meat & Bones Bones
Coffee & Tea Bags Paper Bags & Soppies Compostable Food

Clear or compostable bags must be used to contain waste in your organic bin.



Bin Size Dimensions



Recycling Centre Information Example

Ringsend Recycling Centre

Pigeon House Road, Ringsend, Dublin 4.
(01) 614 4750

Household use only

Opening Hours: March 1st – Oct 31st
 Mon – Fri 9am – 8pm
 Sat / Bank Holidays 9am – 4pm
 Sundays Closed

Opening Hours: Nov 1st – Feb 28th
 Mon – Fri 9am – 5pm
 Sat / Bank Holidays 9am – 2pm
 Sundays Closed

To comply with Health and Safety Regulations users of this facility must exercise due care. Children must be under the care of an adult at all times.

Please note

- Commercial waste will NOT be accepted on site.
- Full large or commercial vans will NOT be accepted.
- No illegal dumping – offenders will be prosecuted.
- Under no circumstances should material be removed from the facility without written consent from Dublin City Council

Water Butts (190 litres)
Available to purchase on site

Bring Centres – North City

Coordinate Collection Waste Area Clean Dublin City Council

To comply with Health and Safety Regulations users of Dublin City Council Bring Centres must exercise due care. There is a 5MPH/8KMH site speed limit at all sites as listed. Children must be under the care of an adult at all times. To save you time and effort – please have your recyclables separated prior to arriving at the facility. Please be patient when containers are being serviced.

DISCLAIMER
All vehicles (including their contents and accessories) while parked at this premises are at the sole risk of the owner/driver. Dublin City Council, its servants or agents, do not accept any responsibility whatsoever for any injury, loss or damage to vehicles, property and/or persons howsoever caused, whether caused by their respective servants or agents or otherwise, whilst such vehicles, property and/or persons are on the premises. For further information Tel: 222 2222

Location	Opening hours	Materials accepted
Grangegorman, Upper Grangegorman Road, Dublin 7 (Off North Circular Road)	Mon – Thurs 9am – 4pm Fri 9am – 1pm Sat 10am – 4pm Closed Bank Holidays Open every Sunday from 3 rd June until Sunday 2 nd Sept 10am – 2pm	Paper, Cans, Cardboard, Tetra Pak, Plastics, Textiles, Light bulbs, Glass, Flat glass, Cooking oil, Waste engine oil *Green waste
Collins Avenue, Dublin 9 (Opposite entrance to DCU)	Mon – Thurs 9am – 4pm Fri 9am – 1pm Sat 10am – 4pm Closed Bank Holidays Open every Sunday from 3 rd June until Sunday 2 nd Sept 10am – 2pm	Paper, Cans, Cardboard, Tetra Pak, Plastics, Textiles, Batteries, Light bulbs, Glass, Flat glass, Cooking oil, Waste engine oil *Green waste
Oscar Traynor Road, Coolock, Collins Avenue, Dublin 5	Mon – Thurs 9am – 4pm Fri 9am – 1pm Sat 10am – 4pm Closed Bank Holidays Open every Sunday from 3 rd June until Sunday 2 nd Sept 10am – 2pm	Paper, Cans, Cardboard, Tetra Pak, Plastics, Textiles, Batteries, Light bulbs, Glass, Flat glass, Books, Cooking oil, Waste engine oil *Green Waste

*The following charges apply for the disposal of green waste – €2 per 80 litre bag & €16 per 1m³ skip bag. Commercial Green Waste will not be accepted.



I hope this will give clear guidelines as to the waste requirements.

Kind regards,

Richard Hobbs
Development Director
KeyWaste Management Ltd
086 1712147
014299846
Richard.hobbs@keywaste.ie

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