



BLACKWOOD SQUARE APARTMENTS SHD

Waste Management Plan



12TH NOV 2019 AMENDMENT
PRESENTED BY
KeyWaste Management Ltd.



Company Name	On Behalf Of Cosgraves For Proposed Santry Apartments SHD
Contact	Gerard O'Neill MCORM / Helena Gavin RPS Group
Date	12 th 11 2019 Amended
Subject	Review For A Sustainable Waste Management Plan

To Whom It May Concern,

please see outlined below the operational waste management proposal.

All waste will be collected in accordance with the relevant by-laws. We are able to facilitate any waste requirements that are available on the market. 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. We always keep our clients 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.

Sustainability/Corporate Responsibility

Ireland is one of the leading countries within the EU for recycling and reducing our dependence on landfill. In addition, Ireland was the leading small country for recycling WEEE in 2015. With this in mind, KeyWaste is committed to ensuring that our waste methods and practices are in line with all EU targets, 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. KeyWaste would focus on developing a uniformed approach to managing the waste for tenants/cleaners/management companies. We aim 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 newly opened 'Waste to Energy Plant' in Poolbeg Dublin 4, where it will be transferred into energy.

- **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 making it the greenest practice available.

Recommended for 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 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). Essentially expect the doors to get a lot of wear if either mag doors hinges 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 be a part of keeping 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.
- Possibly the installation of air fresheners, to make for a better experience.



- An extensive choice of external and internal bin receptacles and workplace solutions.



Examples of Bin Rooms





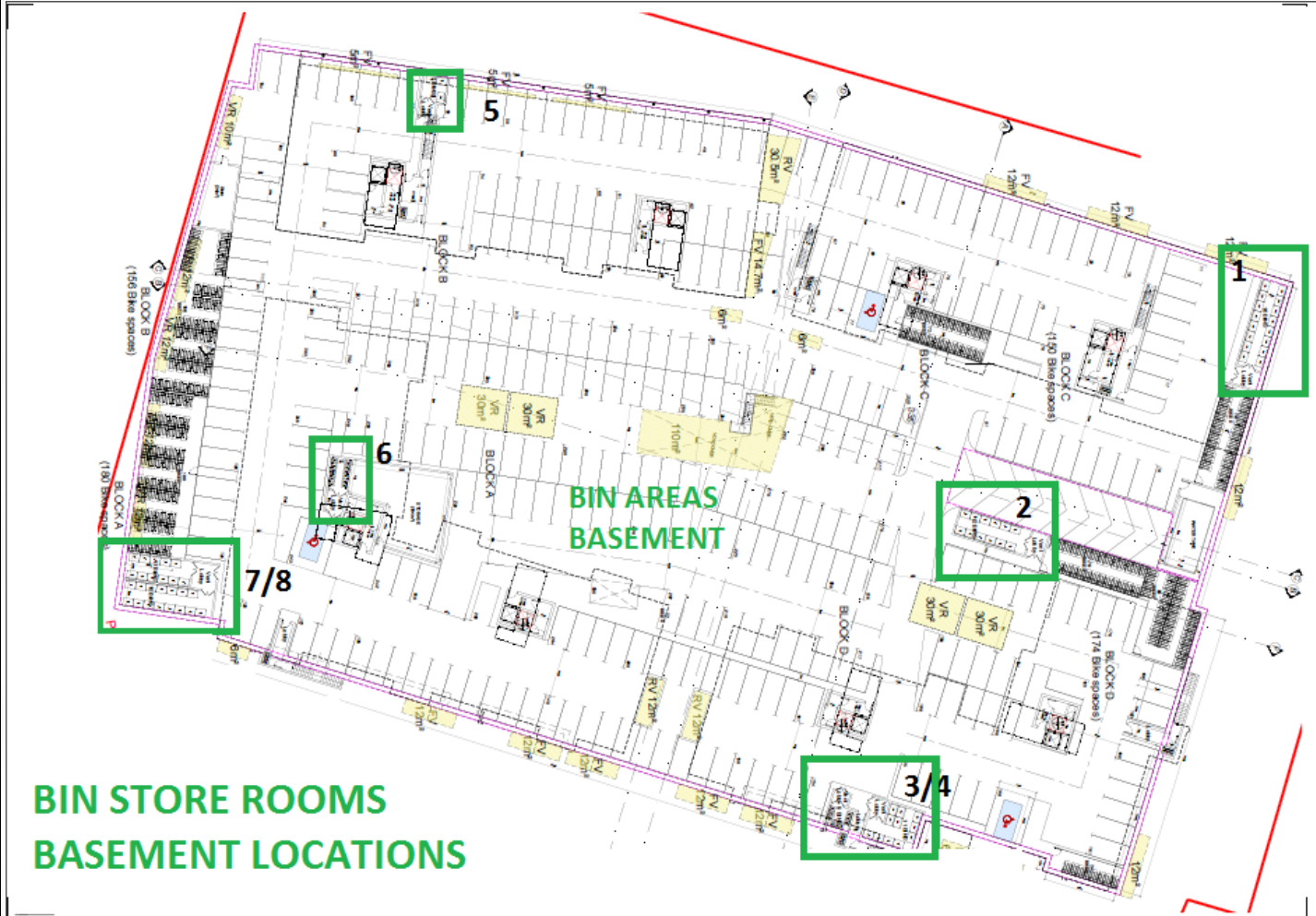
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Example of 6 month old doors below due to damage of bins taken in and out.





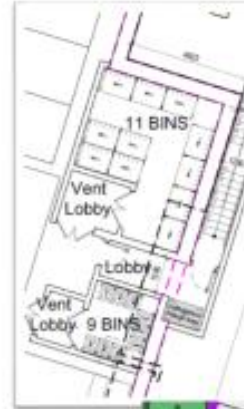
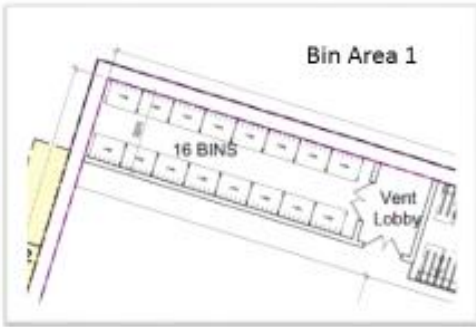
BASEMENT BIN AREA LOCATOR



**BIN STORE ROOMS
BASEMENT LOCATIONS**



BIN AREAS ENLARGED





Residential Services

Based on 331 units comprising of mixed rooms, the expected clientele and location of the development we have estimated the below frequency and waste types. Please note this is based on about 3 months after the full occupancy of the development.

A total of 9 bin stores will be provided in the basement/surface. 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.

Commercial Services

A separate provision for commercial/retail tenants is provided proximate to the access route to the retail park side of the building. This location will reduce noise of moving bins via the court yard, reduce distance to commercial bin storage and is located further away from the childcare facility. Refuse vehicles would park for a short time in the carpark with allowance for a clear access to take and return bins. This time will be limited and have minimal impact on traffic (as there would only be a small amount of bins to collect from this location). The design and aesthetics of this facility has been carefully considered. Access is via gate by commercial tenants only.

Waste Vehicle Lay By/Surface Bin Holding Area

On waste collection days, the resident 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 / pick up times for parents will be considered and the waste operatives will seek to make sure that bin collection does not coincide with creche drop off / pick up where possible. A proposed time of approx. 9.30-12pm for collection would be aimed for. Vehicles have 360° camera systems on them along with reverse camera system for reference. There should be no requirement for reverse movement for the bin collection vehicles.



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:

- Composting 20% of overall waste
- General 40% of overall site waste
- Glass 10% of overall waste
- Recycling 30% of overall waste

Commercial to hold up to 10 x 1100lt approx. to allow for future proofing, exact set up will be decided as units are filled.

Type of Waste	Container		Frequency
General Waste	1100lt	TBC	
Mixed Recycling	1100lt	TBC	
Compost/Food	140lt	TBC	
Mixed Glass	240lt	TBC	

Residential

Type of Waste	Container		Frequency
General Waste	1100lt x Up to 40 Approx	Divided Per Store	Once Weekly
Mixed Recycling	1100lt x Up to 26-30	Divided Per Store	Once Weekly
Compost/Food	660lt x 4 to 8	1-2 Per Store	Once Weekly
Mixed Glass	240lt x 20-24	5-6 Per Store	Every Two Weeks
WEEE/Non-Domestic			As Required
Air fresheners		1 Per Store	As Required
Dust Pan and Brush Set		1 Per Store (3 spare sets)	As Required



- WEEE and 'non domestic' waste tends to be removed on request. To make it sustainable and cost effective, this is taken when it reaches a certain amount and can be stored in a separate room or put to one side till then.
- A promotion for residents advising of local recycling centres will be provided.
- Composting whilst a requirement now for many years, has been difficult to implement for apartments blocks within the industry due to 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 an general waste bin?

Plastic and Metal Waste

Black Bag Waste

Cigarette Butts

Polystyrene Cups

Soppies

Vacuum Bags

Always try to Reuse and Recycle your Waste

KeyWaste

DRY MIXED RECYCLING
What can go into a recycling bin?

Newspapers

Beverage Cans

Plastic Bottles

Magazines

Cardboard

Plastic Packaging

All recyclables must be washed clean!

KeyWaste

ORGANIC WASTE
What can go into an organic bin?

Cooked & Uncooked Vegetables

Cooked Meat & Fish

Garden Waste

Coffee & Tea Bags

Kitchen Roll & Paper

Packaged Food

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

MIXED COLOUR GLASS
BOTTLES & JARS ONLY



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



Local Public Contracts Board - Dublin City Council



I hope this will give you a guidance as to the waste requirements, and I look forward to discussing this further.

Kind regards,

Richard Hobbs

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