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## **OPERATIONAL WASTE MANAGEMENT PLAN**

for

**Proposed Residential Development**

**Bloomfield Park, Bracklin Road, Edgeworthstown, Co. Longford.**

**March 2022**



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## 1.0 INTRODUCTION

This document presents the Operational Phase Waste Management Plan (OWMP) for the control, management and monitoring of waste associated with the proposed residential development at Bloomfield Park, Bracklin Road, Edgeworthstown, Co. Longford.

The development will consist of 100 units, 50 of which are houses and 50 are apartment type duplex units, with the mix outlined in Table 1 below.

Unit Description	No. Units / Mix %
2 Bedroom Duplex Apartment (End of Terrace)	10
2 Bedroom Duplex Apartment (Mid Terrace)	15
3 Bedroom Duplex Apartment (End of Terrace)	10
3 Bedroom Duplex Apartment (Mid Terrace)	15
3 Bedroom 2 Storey Semi Detached House	11
3 Bedroom 2 Storey Semi Detached House	13
4 Bedroom 2 Storey Semi Detached House	13
4 Bedroom 2 Storey Semi Detached House (Double Front)	5
4 Bedroom 3 Storey Semi Detached House	4
4 Bedroom 2 Storey Detached House	2
5 Bedroom 2 Storey Detached House	2
	100

Table 1 – Unit Mix

Waste Management is an integral requirement essential in the promotion of sustainable development, enhancing good public health and the protection of environment. The following outlines the waste management strategy for the development.

The proposed development will give rise to a variety of waste streams. Given the scale of the development and the volumes of waste that will be generated during the operation of the development, it is imperative to ensure that waste management at the site is tightly controlled and has the least possible impact on the surrounding environment.

The objective of this Waste Management Plan is to maximise the quantity of waste recycled by providing sufficient waste recycling infrastructure, waste reduction initiatives and waste collection and waste management information to the residents of the development.

The goal of this Waste Management Plan is to achieve a residential recycling rate of 50% of managed municipal waste by 2020 in accordance with The Eastern-Midlands Region Waste Management Plan 2015-2021. The Eastern-Midlands Region (EMR) Waste Management Plan 2015-2021 provides a framework for the prevention and management of waste in a sustainable manner in 12 local authority areas, including Longford County.

The Waste Management Plan shall be integrated into the design and operation of the development to ensure the following:

- That sufficient waste management infrastructure is included in the design of the development to assist residents minimise the generation of mixed waste streams.

- That the principle of waste segregation at source is the integrated into the development by the provision of separate bin systems, signage and notifications.
- That the facility management company shall record the volumes and types of waste generated by the development to assess on an annual basis if the 50% recycling rate is being achieved.
- That all waste materials generated by site activities are removed from site by appropriately permitted waste haulage contractors and that all wastes are disposed of at approved waste licensed / permitted facilities in compliance with the Waste Management Act 1996 and all associated Waste Management Regulations.
- That the Duplex Management Company will manage waste storage areas and provide annual bulky waste collection services to facilitate residents.

## 2.0 WASTE MANAGEMENT PLAN – OPERATIONAL PHASE

The Operational Phase of the Waste Management Plan has been prepared in accordance with The Eastern-Midlands Region Waste Management Plan 2015-2021 as referenced in the Longford County Development Plan 2021-2027 - Chapter 5 and which sets out 3 no. specific and measurable performance targets to:

- achieve a 1% reduction per annum in the quantity of household waste generated per capita over the period of the Eastern and Midlands WMP.
- reduce to 0% the direct disposal of unprocessed municipal waste to landfill (from 2016 onwards), in favour of higher value pre-treatment processes and indigenous recovery practices.
- achieve a recycling rate of 50% of managed municipal waste by 2020.

This accords with the transition to a more circular economy and bio economy, where the value of bio-based products, materials and resources is maintained in the economy for as long as possible, and the generation of waste is minimised.

The Longford Development Plan 2021-2027 also outlined specific County Policy Objectives, which are outlined in Table 2 below, all of which have been considered in the design of this Operational Phase Waste Management Plan (OWMP).

<b>Waste Management - County Policy Objectives</b>	
It is the County Policy Objective to:	
CPO 5.121	Support the implementation of the Eastern and Midlands Waste Management Plan 2015-2021 and any updates made thereto.
CPO 5.122	Continue to facilitate and promote the provision of civic amenity sites, including 'bring centres' for the purposes of providing a collection point for the recycling of domestic waste, subject to siting, location, compatibility with adjacent land uses and other relevant development management criteria.
CPO 5.123	Promote the principles of the circular economy in minimising waste going to landfill and maximise waste as a resource, with prevention, preparation for reuse, recycling and recovery prioritised in that order, over the disposal of waste.
CPO 5.124	Promote and support the provision of separate collection of waste in accordance with the requirements of the <i>Waste Management (Food Waste) Regulations 2009</i> , the <i>Waste Framework Directive Regulations 2011</i> and other relevant legislation.
CPO 5.125	Promote and facilitate communities to become involved in environmental awareness activities and community-based recycling initiatives or environmental management initiatives that will lead to local sustainable waste management practices.
CPO 5.126	Promote and facilitate high quality sustainable waste recovery and disposal infrastructure/technology including composting (anaerobic digester) plants for managing organic solid waste, at appropriate locations, with the County subject to the protection of the amenities of the surrounding environment including European Sites, and in keeping with the EU waste hierarchy.
CPO 5.127	Require, where necessary, Project Construction and Demolition Waste Management Plans as part of applications for development in accordance with " <i>Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects</i> " (DoEHLG, 2006). Such plans should be submitted for developments above the stated thresholds within these guidelines and as required by the Planning Authority.
CPO 5.128	Control development within its powers through the planning process in order to prevent and/or limit the impact of potential air, water and soil pollution.
CPO 5.129	The Council shall continue to fulfil its duties under the Waste Management (certification of historic unlicensed waste disposal and recovery activity) Regulations 2008 (S.I. No 524 of 2008), including those in relation to the identification and registration of closed landfills.
CPO 5.130	Ensure that all waste collectors and householder who use the services of authorised waste collectors are fully compliant with the Waste Management Act 1996, as amended and the Waste Management (Collection Permits) Regulations 2007, as amended.

Table 2 – Longford County Policy Objectives 2021-2027

#### Key Aspects to achieve Waste Targets

- All residential units shall be provided with information on the segregation of waste at source and how to reduce the generation of waste by the Duplex Management Company.
- All waste handling and storage activities shall occur in the dedicated communal apartment waste storage areas or within the curtilage of individual houses.
- The development's Facility Management Company shall appoint a dedicated Waste Services Manager to ensure that waste is correctly and efficiently managed throughout the development.
- The Operational Phase of the Waste Management Plan is defined by the following stages of waste management for both the residential and commercial aspects of the development:
  - Stage 1 Occupier Source Segregation
  - Stage 2 Occupier Deposit and Storage

- Stage 3 Bulk Storage and On-Site Management
- Stage 4 On-site treatment and Off-Site Removal
- Stage 5 End Destination of wastes

The operational phase of the WMP has been prepared with regard to British Standard BS 5906:2005 Waste Management in Buildings-Code of Practice which provides guidance on methods of storage, collection, segregation for recycling and recovery for residential building.

The duplex apartments which will include a 3 - bin waste segregation at source system together with the communal waste storage areas have been designed with regard to Section's 4.8 and 4.9 Refuse Storage of The Department of Housing, Planning and Local Government – Sustainable Urban Housing: Design Standards for New Apartments – Guidelines for Planning Authorities (2020).

Section 3 below describes how the development will be designed and operated in compliance with the above guidelines and standards.

### 3.0 RESIDENTIAL UNITS DOMESTIC WASTE MANAGEMENT

Individual houses shall have external storage space for 3 no. 220 litre waste bins for segregating recyclable, non-recyclable and organic waste. Residential houses shall be served by private waste collection contractor.

The apartment/duplex blocks shall be served by common waste storage areas and shall include clearly visible guidelines on the appropriate segregation of different waste types. Signage will be posted to inform residents indicating the location of the local can, glass and clothing bring-bank at Costcutter Car Park in Edgeworthstown and the nature of waste materials that can be brought and deposited there.

Each individual housing unit will be required to sort their waste into the following segregation categories:

- Dry Mixed Recycling
- Mixed Non Recycling
- Organic – Food & Garden Waste

Each resident will be required to segregate their own waste at source. Each dwelling will be provided with a chart explaining exactly how waste materials should be segregated. The duplex and apartment residents will then be required to bring the suitable waste streams from their units to the labelled bin storage areas. The different bin types will be clearly colour coded and labelled in Waste Storage Area. In addition to the above waste streams, the chart given to each dwelling will encourage the reuse of the products below. Failing the resident finding a reuse for the products, they will be encouraged to segregate and appropriately disposal of:

- Glass (segregated into clear, brown and green);
- Electrical goods (WEEE);
- Batteries;
- Chemicals (paints, adhesives, resins, detergents);
- Waste cooking oil;
- Textiles;
- Furniture.



Information on the local facilities available to deal with the above waste streams as well as other recycling facilities are available on the Longford County Council website here - [www.longfordcoco.ie/services/environment/environmental-awareness-education/recycling/](http://www.longfordcoco.ie/services/environment/environmental-awareness-education/recycling/).

Only companies who are approved and hold waste collection permits from Longford County Council will be considered for the collection of the wastes in the development. This will ensure the wastes are collected and disposed of at an approved facility. Non-recyclable waste and organic waste will be collected weekly, as there may be odour risks if the waste is left for longer periods before being collected. The dry recycling waste will also be collected weekly and it is acknowledged that it is subject to seasonal spikes such as the post-Christmas and Easter periods. All waste storage bins will be presented for collection in a manner that will not create a hazard to traffic. The movement will be closely co-ordinated to ensure bins are presented for a short period only as not create an excessive odour nuisance or generate litter. Records of the collections will be maintained by the Duplex Management company for the development.

Signage to inform residents of their obligations to reduce waste, segregate waste within the home and dispose of waste in the correct bin will be clearly posted within the waste storage area.

All waste storage bins shall be clearly labelled with exactly what type of waste materials may be deposited within them.

The communal waste storage area for the Duplex apartments shall be designed to include the following aspects:

- A defined pedestrian route shall be marked from the apartment buildings to the waste storage area.
- A non-slip surface shall be provided within the waste storage area.
- The waste storage area shall be of a block construction with a roof.
- The waste storage shall be passively ventilated.
- The waste storage area shall be fitted with sensor lighting.
- The waste storage area shall be fitted with CCTV cameras and associated signage.
- The waste storage area shall be designed to provide safe access from the apartment units by mobility impaired persons.
- A dedicated and clearly labelled area shall be provided in which mobility impaired persons may place wastes into receptacles at a lower level which will be subsequently transferred to the bulk storage bins on a weekly basis by the Duplex Management Company.
- The waste storage area shall include ground drainage to allow for its regular cleaning and disinfection.
- The Duplex Management Company shall engage a mobile bin cleaning service provider to clean waste bins as required.
- Sufficient domestic waste storage areas shall be provided throughout the development.
- Each communal waste storage area shall contain a brown organic waste bulk bin. Appropriate signage shall be placed on all brown bins informing residents of the exact nature of organic waste that can be placed in the bin. Signage will also state that all organic waste must be placed within biodegradable bags before placing in the bulk bin.
- Each communal waste storage area shall contain a biodegradable waste bag dispenser which will facilitate and encourage residents of apartments and duplexes to separately segregate food and organic waste within their apartments in a dedicated bin.

The Duplex Management Company shall conduct at least twice weekly inspections of the waste storage areas and shall sign a check list which shall be displayed within the area.

The Duplex Management Company shall ensure that an adequate supply of biodegradable organic waste bags are in place at all times.

It shall be the responsibility of the Duplex Management Company to maintain and ensure the cleanliness of all waste storage areas to prevent odours and the attraction of vermin.

The Duplex Management Company shall engage a specialist cleaning contractor on a quarterly basis to clean and sterilise all communal waste storage areas.

It is expected that a single Waste Collection contractor shall be engaged to remove all mixed domestic waste and recyclable wastes from the waste storage areas and from individual houses on a minimum weekly basis. The name of the waste collection contractor(s) once appointed shall be forwarded to the Environment Department of Longford County Council.

#### **Waste Management & Record Keeping**

The Duplex Management Company shall maintain a weekly register detailing the quantities and breakdown of general mixed domestic waste, recyclable waste and organic waste wastes removed from the development. Supporting documentation shall be provided by the Waste Collection Contractor on a monthly basis. This will allow for waste recycling targets to be tracked to achieve the 50% recycling target.

The Duplex Management Company shall prepare an annual information report for all residential units detailing the quantities and waste types generated by the development for the previous year. The report shall include reminder information on the correct segregation at source procedures and the correct placement of wastes in the waste storage area. Other aspects of ongoing waste management continuous improvement shall also be stated. This annual report shall also be submitted to Longford County Council's Environment Department.

#### **Annual Bulky Waste & WEEE Collections**

The Duplex Management Company shall provide a bulky waste and WEEE collection and transport service to the closest recycling centres on an annual basis which will allow residents to have bulky items such as appliances and furniture removed from their houses and apartments and transported to a licenced facility. This initiative will also reduce the potential for illegal waste collections and fly-tipping in the local area.

### **4.0 WASTE GENERATION FIGURES**

The National Waste Prevention Programme (NWPP) is playing an important enabling role in that necessary transformational change by supporting businesses, households and the public sector to be more resource efficient.

A value of 0.942Kg of waste generated per person per day has been taken for the purposes of this report to estimate the volume of waste to be generated by the residential units; this is based on data obtained from the EPA.



***'The household waste per person in Ireland has been decreasing over the period 2006 to 2012 from 470 kg/person in 2006 to 344 kg/person in 2012.'***

Extract from 2013 'EPA Publication, National Waste Prevention Programme' The typical wastes generated at a residential development are as follows:

- Dry Mixed Recycling;
- Mixed Non-Recycling;
- Organic Material.

In addition to the common waste type outlined above, a residential development generally also generates the following wastes in small quantities:

- Glass;
- Electrical Waste: Electronic Equipment such as televisions, printers, radios, mobile phones and batteries;
- Chemicals: Paints, glues, resins, detergents;
- Textiles;
- Furniture.

Green garden waste from trimmings and cuttings will be dealt with by the landscaping contractor.

#### 4.1 Waste Storage for House Units

Each house has provision for the above at the rear of the dwelling, with screened storage units similar to the sample in the image below, with typical measures 2.13m(W) x 0.8m(D) x 1.165m(H).



The rear garden of each house is of adequate size to easily facilitate the above. The footpaths servicing the back gardens are of adequate width to allow for the bins to be stored in the garden and move to the front of the houses for collection.

The above is in accordance with 'Quality Housing for Sustainable Communities' published by Department of the Environment, Heritage and Local Government and DMS 16.45 of Chapter 16 of the Longford County Development Plan 2021 – 2027, which states

**“DMS 16.45: Adequate provision shall be made for the storage and collection of waste materials. Each house shall have adequate screened storage for at least 3 number ‘wheelie’ bins.”,**

#### 4.2 Waste Storage for Duplex Apartment Units

There are three communal Bin Store areas proposed to serve the following;

1. Block A
2. Block B & C (Blocks to be constructed over 2 phases, however the Bin Store will be constructed in earlier Phase)
3. Block D & E

The expected number and type of 1,100 litre bins to be collected on a weekly basis are calculated per Table 3 below.

Block	Unit Description	No. Units / Mix %	No of Persons per Apartment Equivalent	No of Persons Equivalent	Projected Waste Generated per day (0.942kg/person)	Projected Waste Generated per Week in KG	Projected Waste Generated per Week in Litres (KG x 10)	Split 34.5% Organic Waste (Brown Bin)	Split 37.5% Mixed Dry Recyclables (Green Bin)	Split 23% Non Recyclables (Black Bin)	Split 5% Glass			
A	2 bedroom	6	3.50	21	19.78	138.47	1,385	478	519	318	69			
A	3 bedroom	6	3.50	21	19.78	138.47	1,385	478	519	318	69			
								955	1,039	637	138			
					No. of 1,100 Litre Bin Pick Ups Required Per Week*							1	1	1
BC	2 bedroom	10	3.50	35	32.97	230.79	2,308	796	865	531	115			
BC	3 bedroom	10	3.50	35	32.97	230.79	2,308	796	865	531	115			
								1,592	1,731	1,062	231			
					No. of 1,100 Litre Bin Pick Ups Required Per Week*							1	2	1
DE	2 bedroom	9	3.50	32	29.67	207.71	2,077	717	779	478	104			
DE	3 bedroom	9	3.50	32	29.67	207.71	2,077	717	779	478	104			
								1,433	1,558	955	208			
					No. of 1,100 Litre Bin Pick Ups Required Per Week*							1	2	1

\*Assume 50% Organic Waste Used in Gardens and does not require to be serviced

#### CONCLUSIONS ON WASTE MANAGEMENT PLAN

This plan aims to ensure minimise waste generation while promoting maximum recycling, reuse and recovery. The plan estimates the amount of waste generated and the storage, handling and collection of dry recyclables, mixed non-recyclables and organic wastes.

Fully implementing the above waste management plan will promote a high level of recycling, reuse and recovery by first promoting segregation at source. This Waste Management Plan is to be incorporated into a larger Operational Estate Management Programme by the building management company to ensure its full implementation. The waste segregation facilities that will be provided for the development will ensure that waste generated at the site will be managed correctly and in compliance with all current waste management legislation.