

## **APPENDIX 14.2      OPERATIONAL AND WASTE MANAGEMENT PLAN**

**OPERATIONAL WASTE  
MANAGEMENT PLAN FOR A  
PROPOSED RESIDENTIAL  
DEVELOPMENT  
AT  
PORTMARNOCK SOUTH,  
CO. DUBLIN**

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Report Prepared For

**Quintain Developments Ireland  
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Our Reference


DD/21/12227WMR02

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Date of Issue

29 November 2021

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## Document History

Document Reference		Original Issue Date	
DD/21/12227WMR02		29 November 2021	
Revision Level	Revision Date	Description	Sections Affected

## Record of Approval

Details	Written by	Approved by
Signature		
Name	David Doran	Chonaiil Bradley
Title	Environmental Consultant	Senior Environmental Consultant
Date	29 November 2021	29 November 2021

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## 1.0 INTRODUCTION

AWN Consulting Ltd. (AWN) has prepared this Operational Waste Management Plan (OWMP) on behalf of Quintain Developments Ireland Limited for a proposed residential development. The development will consist of the construction a mix of residential apartments/duplexes (22 no. units) and houses (150 no. units), along with the provision of public open space. Construction will also include for internal roads, services and landscaping at the site located Portmarnock, Co. Dublin.

This OWMP has been prepared to ensure that the management of waste during the operational phase of the proposed residential development is undertaken in accordance with current legal and industry standards including, the *Waste Management Act 1996 – 2011* as amended and associated Regulations <sup>1</sup>, *Protection of the Environment Act 2003* as amended <sup>2</sup>, *Litter Pollution Act 1997*, as amended <sup>3</sup>, the *'Eastern-Midlands Region (EMR) Waste Management Plan 2015 – 2021'* <sup>4</sup>, and the Fingal County Council *'Segregation, Storage and Presentation of Household and Commercial Waste Bye-Laws' (2020)* <sup>5</sup>. In particular, this OWMP aims to provide a robust strategy for storing, handling, collection and transport of the wastes generated at site.

This OWMP aims to ensure maximum recycling, reuse and recovery of waste with diversion from landfill, wherever possible. The OWMP also seeks to provide guidance on the appropriate collection and transport of waste to prevent issues associated with litter or more serious environmental pollution (e.g. contamination of soil or water resources). The plan estimates the type and quantity of waste to be generated from the Proposed Development during the operational phase and provides a strategy for managing the different waste streams.

At present, there are no specific guidelines in Ireland for the preparation of OWMPs. Therefore, in preparing this document, consideration has been given to the requirements of national and regional waste policy, legislation and other guidelines.

## 2.0 OVERVIEW OF WASTEMANAGEMENT IN IRELAND

### 2.1 National Level

The Government issued a policy statement in September 1998 titled as *'Changing Our Ways'* <sup>6</sup> which identified objectives for the prevention, minimisation, reuse, recycling, recovery and disposal of waste in Ireland. A heavy emphasis was placed on reducing reliance on landfill and finding alternative methods for managing waste. Amongst other things, *Changing Our Ways* stated a target of at least 35% recycling of municipal (i.e. household, commercial and non-process industrial) waste.

A further policy document *'Preventing and Recycling Waste – Delivering Change'* was published in 2002 <sup>7</sup>. This document proposed a number of programmes to increase recycling of waste and allow diversion from landfill. The need for waste minimisation at source was considered a priority.

This view was also supported by a review of sustainable development policy in Ireland and achievements to date, which was conducted in 2002, entitled *'Making Irelands Development Sustainable – Review, Assessment and Future Action'* <sup>8</sup>. This document also stressed the need to break the link between economic growth and waste generation, again through waste minimisation and reuse of discarded material.

In order to establish the progress of the Government policy document *Changing Our Ways*, a review document was published in April 2004 entitled *'Taking Stock and*

*Moving Forward*<sup>9</sup>. Covering the period 1998 – 2003, the aim of this document was to assess progress to date with regard to waste management in Ireland, to consider developments since the policy framework and the local authority waste management plans were put in place, and to identify measures that could be undertaken to further support progress towards the objectives outlined in *Changing Our Ways*.

In particular, *Taking Stock and Moving Forward* noted a significant increase in the amount of waste being brought to local authority landfills. The report noted that one of the significant challenges in the coming years was the extension of the dry recyclable collection services.

In September 2020 the government released a new national policy document outlining a new action plan for Ireland and its waste to cover the period of 2020-2025. This plan '*A Waste Action Plan for a Circular Economy*'<sup>10</sup> was prepared in response to the 'European Green Deal' which sets a roadmap for a transition to a new economy, where climate and environmental challenges are turned into opportunities. Replacing the previous national waste management plan "*A Resource Opportunity (2012)*"<sup>11</sup>.

It aims to fulfil the commitment in the Programme for Government to publish and start implementing a new National Waste Action Plan. It is intended that this new national waste policy will inform and give direction to waste planning and management in Ireland over the coming years. It will be followed later this year by an All of Government Circular Economy Strategy. The policy document shifts focus away from waste disposal and moves it back up the production chain. To support the policy, regulation is already being used (Circular Economy Legislative Package) or in the pipeline. The policy document contains over 200 measures across various waste areas including Circular Economy, Municipal Waste, Consumer Protection & Citizen Engagement, Plastics and Packaging, Construction and Demolition, Textiles, Green Public Procurement and Waste Enforcement.

One of the first actions to be taken is the development of a high-level, whole of Government Circular Economy Strategy to set a course for Ireland to transition across all sectors and at all levels of Government toward circularity. This strategy was issued for public consultation in April 2021.

Since 1998, the Environmental Protection Agency (EPA) has produced periodic '*National Waste (Database) Reports*'<sup>12</sup> detailing among other things estimates for household and commercial (municipal) waste generation in Ireland and the level of recycling, recovery and disposal of these materials. The 2018 National Waste Statistics, which is the most recent study published, along with national waste statistics web resource (August 2020) reported the following key statistics for 2018:

- **Generated** – Ireland produced 2,912,353 t of municipal waste in 2018, this is almost a five percent increase since 2017. This means that each person living in Ireland generated 600kg of municipal waste in 2018;
- **Managed** – Waste collected and treated by the waste industry. In 2018, a total of 2,865,207 t of municipal waste was managed and treated;
- **Unmanaged** –Waste that is not collected or brought to a waste facility and is therefore likely to cause pollution in the environment because it is burned, buried or dumped. The EPA estimates that 47,546 t was unmanaged in 2018;
- **Recovered** – the amount of waste recycled, used as a fuel in incinerators, or used to cover landfilled waste. In 2018, around 85% of municipal waste was recovered, this is an increase from 77% in 2017;
- **Recycled** – the waste broken down and used to make new items. Recycling also includes the breakdown of food and garden waste to make compost. The recycling rate in 2018 was 38%, which is down from 41% in 2017; and
- **Disposed** – Less than a fifth (15%) of municipal waste was landfilled in 2018, this is a decrease from 23% in 2017.

## 2.2 Regional Level

The Proposed Development is located in the Local Authority area of Fingal County Council (FCC).

The *EMR Waste Management Plan 2015 – 2021* is the regional waste management plan for the FCC area published in May 2015.

The regional plan sets out the following strategic targets for waste management in the region:

- A 1% reduction per annum in the quantity of household waste generated per capita over the period of the plan;
- Achieve a recycling rate of 50% of managed municipal waste by 2020; and
- Reduce to 0% the direct disposal of unprocessed residual municipal waste to landfill (from 2016 onwards) in favour of higher value pre-treatment processes and indigenous recovery practices.

Municipal landfill charges in Ireland are based on the weight of waste disposed. In the Leinster Region, charges are approximately €130 - €150 per tonne of waste which includes a €75 per tonne landfill levy specified in the *Waste Management (Landfill Levy) Regulations 2015*.

The *Fingal Development Plan 2017 – 2023*<sup>13</sup> came into effect on March 2017 and sets out a number of policies and objectives for the Fingal region in line with the objectives of the regional waste management plan.

Waste objectives with a particular relevance to the proposed development are:

### Objectives:

- Objective **WM03** Implement the provisions of the Eastern Midlands Region Waste Management Plan 2015 -2021 or any subsequent Waste Management Plan applicable within the lifetime of the Development Plan. All prospective developments in the County will be expected to take account of the provisions of the Regional Waste Management Plan and adhere to the requirements of that Plan.
- Objective **WM05** Prevent and minimise the generation of waste in accordance with the Eastern Midlands Region Waste Management Plan 2015 -2021 (or any subsequent plans).
- Objective **WM07** Promote the increased re-use of waste in accordance with the Eastern Midlands Region Waste Management Plan 2015-2021 (or any subsequent plan)."
- Objective **DMS36** Ensure all new residential schemes include appropriate design measures for refuse storage areas, details of which should be clearly shown at pre-planning and planning application stage. Ensure refuse storage areas are not situated immediately adjacent to the front door or ground floor window, unless adequate screened alcoves or other such mitigation measures are provided.
- Objective **DMS37** Ensure the maximum distance between the front door to a communal bin area does not exceed 50 metres.

## 2.3 Legislative Requirements

The primary legislative instruments that govern waste management in Ireland and applicable to the project are:

- Waste Management Act 1996 (No. 10 of 1996) as amended 2001 (No. 36 of 2001), 2003 (No. 27 of 2003) and 2011 (No 20 of 2011). Sub-ordinate and associated legislation include:
  - European Communities (Waste Directive) Regulations 2011 (S.I. No. 126 of 2011) as amended;
  - Waste Management (Collection Permit) Regulations 2007 (S.I. No. 820 of 2007) as amended;
  - Waste Management (Facility Permit and Registration) Regulation 2007 (S.I No. 821 of 2007) as amended;
  - Waste Management (Licensing) Regulations 2000 (S.I No. 185 of 2000) as amended;
  - European Union (Packaging) Regulations 2014 (S.I. No. 282 of 2014) as amended;
  - Waste Management (Planning) Regulations 1997 (S.I. No. 137 of 1997) as amended;
  - Waste Management (Landfill Levy) Regulations 2015 (S.I. No. 189 of 2015);
  - European Communities (Waste Electrical and Electronic Equipment) Regulations 2014 (S.I. No. 149 of 2014);
  - Waste Management (Batteries and Accumulators) Regulations 2014 (S.I. No. 283 of 2014) as amended;
  - Waste Management (Food Waste) Regulations 2009 (S.I. No. 508 of 2009) as amended;
  - European Union (Household Food Waste and Bio-waste) Regulations 2015 (S.I. No. 430 of 2015);
  - Waste Management (Hazardous Waste) Regulations 1998 (S.I. No. 163 of 1998) as amended;
  - Waste Management (Shipments of Waste) Regulations 2007 (S.I. No. 419 of 2007) as amended;
  - European Communities (Transfrontier Shipment of Waste) Regulations 1994 (SI 121 of 1994);
  - European Communities (Shipments of Hazardous Waste exclusively within Ireland) Regulations 2011 (S.I. No. 324 of 2011);
  - European Union (Properties of Waste Which Render it Hazardous) Regulations 2015 (S.I. No. 233 of 2015) as amended;
- Environmental Protection Act 1992 (S.I. No. 7 of 1992) as amended;
- Litter Pollution Act 1997 (Act No. 12 of 1997) as amended; and
- Planning and Development Act 2000 (S.I. No. 30 of 2000) as amended <sup>14</sup>.

These Acts and subordinate Regulations enable the transposition of relevant European Union Policy and Directives into Irish law.

One of the guiding principles of European waste legislation, which has in turn been incorporated into the *Waste Management Act 1996* as amended and subsequent Irish legislation, is the principle of “*Duty of Care*”. This implies that the waste producer is responsible for waste from the time it is generated through until its legal disposal (including its method of disposal). As it is not practical in most cases for the waste producer to physically transfer all waste from where it is produced to the final disposal area, waste contractors will be employed to physically transport waste to the final waste disposal site.

It is therefore imperative that the residents undertake on-site management of waste in accordance with all legal requirements and employ suitably permitted/licenced



contractors to undertake off-site management of their waste in accordance with all legal requirements. This includes the requirement that a waste contractor handle, transport and reuse/recover/recycle/dispose of waste in a manner that ensures that no adverse environmental impacts occur as a result of any of these activities.

A collection permit to transport waste must be held by each waste contractor which is issued by the National Waste Collection Permit Office (NWCPO). Waste receiving facilities must also be appropriately permitted or licensed. Operators of such facilities cannot receive any waste, unless in possession of a Certificate of Registration (COR) or waste permit granted by the relevant Local Authority under the *Waste Management (Facility Permit & Registration) Regulations 2007* as amended or a waste or IED (Industrial Emissions Directive) licence granted by the EPA. The COR/permit/licence held will specify the type and quantity of waste able to be received, stored, sorted, recycled, recovered and/or disposed of at the specified site.

### 2.3.1 Fingal County Council Waste Bye-Laws

The FCC “*Segregation, Storage and Presentation of Household and Commercial Waste Bye-Laws 2020*” came into effect in March 2020. The Bye-Laws set a number of enforceable requirements on waste holders and collectors with regard to storage, separation, presentation and collection of waste within the FCC functional area. Key requirements under these *Waste Bye-Laws* are:

- Kerbside waste presented for collection shall not be presented for collection earlier than 6:00pm on the day immediately preceding the designated waste collection day;
- All containers used for the presentation of kerbside waste and any uncollected waste shall be removed from any roadway, footway, footpath or any other public place no later than 9:00am on the day following the designated waste collection day;
- Neither recyclable household kerbside waste nor food waste arising from households shall be contaminated with any other type of waste before or after it has been segregated; and
- A management company, or another person if there is no such company, who exercises control and supervision of residential and/or commercial activities in multi-unit developments, mixed-use developments, flats or apartment blocks, combined living/working spaces or other similar complexes shall ensure that:
  - separate receptacles of adequate size and number are provided for the proper segregation, storage and collection of recyclable household kerbside waste and residual household kerbside waste;
  - additional receptacles are provided for the segregation, storage and collection of food waste where this practice is a requirement of the national legislation on food waste;
  - the receptacles referred to in paragraphs (a) and (b) are located both within any individual apartment and at the place where waste is stored prior to its collection;
  - any place where waste is to be stored prior to collection is secure, accessible at all times by tenants and other occupiers and is not accessible by any other person other than an authorised waste collector;
  - written information is provided to each tenant or other occupier about the arrangements for waste separation, segregation, storage and presentation prior to collection;
  - an authorised waste collector is engaged to service the receptacles referred to in this section of these bye-laws, with documentary evidence, such as receipts, statements or other proof of payment, demonstrating the existence of this engagement being retained for a period of no less than two years. Such evidence shall be presented to an authorised person within a time specified in a written request from either that person

- or from another authorised person employed by South Dublin County Council;
- receptacles for kerbside waste are presented for collection on the designated waste collection day; and
- adequate access and egress onto and from the premises by waste collection vehicles is maintained.

The full text of the Waste Bye-Laws is available from the FCC website

## **2.4 Regional Waste Management Service Providers and Facilities**

Various contractors offer waste collection services for the residential sectors in the FCC region. Details of waste collection permits (granted, pending and withdrawn) for the region are available from the NWCPO.

As outlined in the regional waste management plan, there is a decreasing number of landfills available in the region. Only three municipal solid waste landfills remain operational and are all operated by the private sector. There are a number of other licensed and permitted facilities in operation in the region including waste transfer stations, hazardous waste facilities and integrated waste management facilities. There are two existing thermal treatment facilities, one in Duleek, Co. Meath and a second facility in Poolbeg in Dublin.

The Civic Amenity Centre on Oscar Traynor Road is located c. 5.2km to the southwest of the development and can be utilised by the residents of the development for certain household waste streams. This centre can accept plastics, oil filters, waste mineral oil, edible oil and fat, light bulbs, electrical items, textiles, shoes, clothes, Tetra Pak, metals, glass, garden (green) waste, food waste, paper and rigid plastic. There is also a bring bank located c. 2.1km to the west of the development at Fingal cemetery, where glass and aluminium cans can be deposited.

A copy of all CORs and waste permits issued by the Local Authorities are available from the NWCPO website and all waste/IED licenses issued are available from the EPA.

## **3.0 DESCRIPTION OF THE PROJECT**

### **3.1 Location, Size and Scale of the Development**

The proposed development comprises in summary of the following components:

- 172no. residential units consisting of 22no. duplex / apartments and 150no. houses ranging in heights between 1.5 and 3 storeys.
- Provision of public open space including Skylark Park, (c. 7,000 sq. m), extension to Railway Linear Park (c. 5,900 sq. m) and extension of Townland Boundary Linear Parks (c. 18,500 sq. m).
- Vehicular access to serve the development is proposed off the existing / under construction access points on roads serving the St. Marnock's Bay development.
- A new vehicular road is proposed to serve the proposed development which will connect with Moyne Road. The permanent road includes the provision of a new junction with Moyne Road and associated ancillary works including SuDs features to control surface water run-off.
- Upgrade of existing temporary foul water pumping station and 24 wastewater storage tank to increase capacity.
- All associated and ancillary site development, infrastructural, landscaping and boundary treatment works.

This is referred to as Portmarnock South Phase 1D.

### 3.2 Typical Waste Categories

The typical non-hazardous and hazardous wastes that will be generated at the Proposed Development will include the following:

- Dry Mixed Recyclables (DMR) - includes waste paper (including newspapers, magazines, brochures, catalogues, leaflets), cardboard and plastic packaging, metal cans, plastic bottles, aluminium cans, tins and Tetra Pak cartons;
- Organic waste – food waste and green waste generated from internal plants/flowers;
- Glass; and
- Mixed Non-Recyclable (MNR)/General Waste.

In addition to the typical waste materials that will be generated at the development on a daily basis, there will be some additional waste types generated in small quantities which will need to be managed separately including:

- Green/garden waste may be generated from internal plants or external landscaping;
- Batteries (both hazardous and non-hazardous);
- Waste electrical and electronic equipment (WEEE) (both hazardous and non-hazardous);
- Printer cartridges/toners;
- Chemicals (paints, adhesives, resins, detergents, etc.) ;
- Lightbulbs;
- Textiles (rags);
- Waste cooking oil (if any generated by the residents);
- Furniture (and from time to time other bulky wastes); and
- Abandoned bicycles.

Wastes should be segregated into the above waste types to ensure compliance with waste legislation and guidance while maximising the re-use, recycling and recovery of waste with diversion from landfill wherever possible.

### 3.3 European Waste Code

In 1994, the *European Waste Catalogue*<sup>15</sup> and *Hazardous Waste List*<sup>16</sup> were published by the European Commission. In 2002, the EPA published a document titled the *European Waste Catalogue and Hazardous Waste List*<sup>17</sup>, which was a condensed version of the original two documents and their subsequent amendments. This document has recently been replaced by the EPA '*Waste Classification – List of Waste & Determining if Waste is Hazardous or Non-Hazardous*'<sup>18</sup> which became valid from the 1st June 2015. This waste classification system applies across the EU and is the basis for all national and international waste reporting, such as those associated with waste collection permits, COR's, permits and licences and EPA National Waste Database.

Under the classification system, different types of wastes are fully defined by a code. The List of Waste (LoW) code (also referred to as European Waste Code or EWC) for typical waste materials expected to be generated during the operation of the Proposed Development are provided in Table 3.1 below.

Waste Material	LoW Code
Paper and Cardboard	20 01 01
Plastics	20 01 39
Metals	20 01 40
Mixed Non-Recyclable Waste	20 03 01
Glass	20 01 02
Biodegradable Kitchen Waste	20 01 08
Oils and Fats	20 01 25
Textiles	20 01 11
Batteries and Accumulators *	20 01 33* - 34
Printer Toner/Cartridges*	20 01 27* - 28
Green Waste	20 02 01
WEEE *	20 01 35*-36
Chemicals (solvents, pesticides, paints & adhesives, detergents, etc.) *	20 01 13*/19*/27*/28/29*30
Fluorescent tubes and other mercury containing waste *	20 01 21*
Bulky Wastes	20 03 07

\* Individual waste type may contain hazardous materials

**Table 3.1** Typical Waste Types Generated and LoW Codes

#### 4.0 ESTIMATED WASTE ARISING

A waste generation model (WGM) developed by AWN, has been used to predict waste types, weights and volumes arising from operations within the Proposed Development. The WGM incorporates building area and use and combines these with other data including Irish and US EPA waste generation rates.

The estimated quantum/volume of waste that will be generated from the residential units has been determined based on the predicted occupancy of the units.

The estimated waste generation for the development for the main waste types is presented in Table 4.1.

Waste type	Waste Volume (m <sup>3</sup> /week)		
	2-bed house/duplex (individual)	3-bed house/duplex (individual)	4-bed house (individual)
Organic Waste	0.02	0.02	0.02
DMR	0.11	0.13	0.17
Glass	<0.01	<0.01	<0.01
MNR	0.07	0.08	0.10
<b>Total</b>	<b>0.20</b>	<b>0.23</b>	<b>0.29</b>

**Table 4.1** Estimated waste generation for the Proposed Development for the main waste types

The BS5906:2005 Waste Management in Buildings – Code of Practice <sup>19</sup> was considered in the estimations of the waste arising. The predicted total waste generated from the residential units based on the Code of Practice is c. 44.01m<sup>3</sup> per week for the residential units. AWN's waste generation model has a similar estimate of c. 42.40m<sup>3</sup> per week from the residential units. AWN's modelling methodology is based on data from recent published data and data from numerous other similar developments in Ireland and based on AWN's experience it is a more representative estimate of the likely waste arisings from the development.

## 5.0 WASTE STORAGE AND COLLECTION

This section provides information on how waste generated within the development will be stored and how the waste will be collected from the development. This has been prepared with due consideration of the proposed site layout as well as best practice standards, local and national waste management requirements including those of FCC. In particular, consideration has been given to the following documents:

- BS 5906:2005 Waste Management in Buildings – Code of Practice;
- EMR Waste Management Plan 2015 – 2021;
- *Fingal County Council Development Plan 2017 – 2023 (2017)*;
- *Fingal County Council Segregation Storage, Presentation and of Household and Commercial Waste (2018)*; and
- DoHLGH, *Sustainable Urban Housing: Design Standards for New Apartments, Guidelines for Planning Authorities (2020)* <sup>20</sup>

### Houses

Houses with external rear garden access will store their bins within their back gardens. Houses without external rear garden access will have a dedicated, screened off space to the front of their houses to store their bins.

### Duplexes

All duplex units will have a dedicated, screened off space to the front of their unit to store their bins.

Using the estimated waste generation volumes in Table 4.1, the waste receptacle requirements for MNR, DMR, organic waste and glass have been established for the WSAs. These are presented in Tables 5.1.

Area/Use	Bins Required			
	MNR*	DMR**	Organic	Glass
House (Individual)	1 x 240L	1 x 240L	1 x 120L	Bottle bank
Duplex (Individual)	1 x 240L	1 x 240L	1 x 120L	Bottle bank

Note: \* = Mixed Non-Recyclables

\*\* = Dry Mixed Recyclables

**Table 5.1** Waste storage requirements for the Proposed Development

The waste receptacle requirements have been established from distribution of the total weekly waste generation estimate into the holding capacity of each receptacle type.

Mixed non-recyclable waste, dry mixed recyclable waste and organic waste will be collected weekly by the nominated waste contractor. It will be the responsibility of the residents in each unit to dispose of their glass waste at a bottle bank.

It will be the responsibility of the individual residential unit to contact a waste contractor to acquire the appropriate waste storage receptacles (as per Table 5.1 above, or similar appropriately approved containers), which will be provided by the waste contractor for that individual unit

The types of bins used will vary in size, design and colour dependent on the appointed waste contractor. However, examples of typical receptacles to be provided are shown in Figure 5.1. All waste receptacles used will comply with the IS EN 840 2012 standard for performance requirements of mobile waste containers, where appropriate.



Figure 5.1 Typical waste receptacles of varying size (240L and 1100L)

## 5.1 Waste Storage – Houses & Duplexes

Residents in the houses and duplexes will be required to segregate their waste into the following waste categories within their own units:

- DMR;
- Organic waste;
- Glass; and
- MNR.

It is anticipated that residents with external access to the rear of the property and will store waste in bins at the back of the house. For units with no external access to the rear, a dedicated shielded area for storage of 2 no. 240l and 1 no. 120l wheelie bins have been allocated at the front of the property.

Residents will be required to place their segregated waste materials into these bins as necessary.

It is anticipated that DMR, MNR and organic waste will be collected on a fortnightly basis. Glass waste will be required to be brought to the nearest bottle bank for disposal.

Other waste materials such as textiles, batteries, printer toner/cartridges and WEEE may be generated infrequently by the residents. Residents will be required to identify suitable temporary storage areas for these waste items within their own units and dispose of them appropriately. Further details on additional waste types can be found in Section 5.3.

## 5.2 Waste Collection

There are numerous private contractors that provide household waste collection services in the Fingal area. All waste contractors servicing the Proposed Development must hold a valid waste collection permit for the specific waste types collected. All waste collected must be transported to registered/permited/licensed facilities only.

Residents in the houses and duplexes will bring their bins to the street/curb prior to the scheduled collection period and will return them to either in front or behind their houses once being emptied.

It is recommended that bin collection times/days are staggered to reduce the number of bins required to be emptied at once and the time the waste vehicle is onsite. This will be determined during the process of appointment of a waste contractor.

### 5.3 Additional Waste Materials

In addition to the typical waste materials that are generated on a daily basis, there will be some additional waste types generated from time to time that will need to be managed separately. A non-exhaustive list is presented below.

#### Green waste

Green waste may be generated from internal plants/flowers and private gardens which can be placed in the organic waste bins.

Green waste generated from landscaping of communal areas will be removed by external landscape contractors.

#### Batteries

A take-back service for waste batteries and accumulators (e.g. rechargeable batteries) is in place in order to comply with the Waste Management Batteries and Accumulators Regulations 2014 as amended. In accordance with these regulations consumers are able to bring their waste batteries to their local recycling centre or can return them free of charge to retailers which supply the equivalent type of battery, regardless of whether or not the batteries were purchased at the retail outlet and regardless of whether or not the person depositing the waste battery purchases any product or products from the retail outlet.

#### Waste Electrical and Electronic Equipment (WEEE)

The *WEEE Directive 2002/96/EC* and associated Waste Management (WEEE) Regulations have been enacted to ensure a high level of recycling of electronic and electrical equipment. In accordance with the regulations, consumers can bring their waste electrical and electronic equipment to their local recycling centre. In addition consumers can bring back WEEE within 15 days to retailers when they purchase new equipment on a like for like basis. Retailers are also obliged to collect WEEE within 15 days of delivery of a new item, provided the item is disconnected from all mains, does not pose a health and safety risk and is readily available for collection.

#### Printer Cartridge/Toners

Waste printer cartridge/toners generated by residents can usually be returned to the supplier free of charge or can be brought to a civic amenity centre.

#### Chemicals (solvents, paints, adhesives, resins, detergents etc)

Chemicals (such as solvents, paints etc) are largely generated from building maintenance works. Such works are usually completed by external contractors who are responsible for the off-site removal and appropriate recovery/recycling/disposal of any waste materials generated.

Any chemical waste materials generated by residents can be taken to the recycling centre. Any waste cleaning products or waste packaging from cleaning products that are classed as hazardous (if they arise) generated by the residents should be brought to a civic amenity centre.

#### Light bulbs (Fluorescent Tubes, Long Life, LED and Lilament bulbs)

Waste light bulbs may be generated from building maintenance works. Such works are usually completed by external contractors or facilities management who are responsible for the off-site removal and appropriate recovery/recycling/disposal of any waste materials generated.

Light bulbs generated by residents should be taken to the nearest civic amenity centre for appropriate storage and recovery/disposal.

### Textiles

Where possible, waste textiles should be recycled or donated to a charity organisation for reuse.

### Waste Cooking Oil

If the residents generate waste cooking oil, this can be brought to a civic amenity centre or placed in the organic waste bin.

### Furniture (and other bulky wastes)

Furniture and other bulky waste items (such as carpet etc.) may occasionally be generated by residents. If residents wish to dispose of furniture or bulky waste, this can be brought a civic amenity centre.

### Abandoned Bicycles

Bicycle parking areas are planned for the development. As happens in other developments, residents sometimes abandon faulty or unused bicycles and it can be difficult to determine their ownership. Abandoned bicycles should be donated to charity if they arise.

### COVID-19 Waste

Any waste generated by residents of the development that have tested positive for COVID-19 should be managed in accordance with the current COVID-19 HSE Guidelines at the time that that waste arises. At the time this report was prepared, the HSE Guidelines require the following procedure for any waste from a person that tests positive for COVID-19:

- Put all waste (gloves, tissues, wipes, masks) from that person in a bin bag and tie when almost full;
- Put this bin bag into a second bin bag and tie a knot;
- Store this bag safely for 3 days, then put the bag into the non-recyclable waste/general waste wheelie bin for collection/emptying.

Please note that this guidance is likely to be updated by the time the development is open and occupied and the relevant guidance at the time will need to be reviewed.

## **6.0 CONCLUSIONS**

In summary, this OWMP presents a waste strategy that addresses all legal requirements, waste policies and best practice guidelines and demonstrates that the required storage areas have been incorporated into the design of the development.

Implementation of this OWMP will ensure a high level of recycling, reuse and recovery at the development. All recyclable materials will be segregated at source to reduce waste contractor costs and ensure maximum diversion of materials from landfill, thus achieving the targets set out in the *EMR Waste Management Plan 2015 – 2021*.

Adherence to this plan will also ensure that waste management at the development is carried out in accordance with the requirements of the *FCC Waste Bye-Laws*.

The waste strategy presented in this document will provide sufficient storage capacity for the estimated quantity of segregated waste. The designated area for waste storage will provide sufficient room for the required receptacles in accordance with the details of this strategy.



## 7.0 REFERENCES

1. Waste Management Act 1996 (S.I. No. 10 of 1996) as amended 2001 (S.I. No. 36 of 2001), 2003 (S.I. No. 27 of 2003) and 2011 (S.I. No. 20 of 2011). Sub-ordinate and associated legislation includes:
  - European Communities (Waste Directive) Regulations 2011 (S.I. No. 126 of 2011) as amended ;
  - Waste Management (Collection Permit) Regulations 2007 (S.I. No. 820 of 2007) as amended;
  - Waste Management (Facility Permit and Registration) Regulations 2007 (S.I. No. 821 of 2007) as amended;
  - Waste Management (Licensing) Regulations 2000 (S.I. No. 185 of 2000) as amended;
  - European Union (Packaging) Regulations 2014 (S.I. No. 282 of 2014);
  - Waste Management (Planning) Regulations 1997 (S.I. No. 137 of 1997);
  - Waste Management (Landfill Levy) Regulations 2015 (S.I. No. 189 of 2015);
  - European Communities (Waste Electrical and Electronic Equipment) Regulations 2014 (S.I. No. 149 of 2014);
  - Waste Management (Batteries and Accumulators) Regulations 2014 (S.I. No. 283 of 2014) as amended;
  - Waste Management (Food Waste) Regulations 2009 (S.I. No. 508 of 2009) as amended 2015 (S.I. No. 190 of 2015);
  - European Union (Household Food Waste and Bio-waste) Regulations 2015 (S.I. No. 430 of 2015);
  - Waste Management (Hazardous Waste) Regulations 1998 (S.I. No. 163 of 1998) as amended;
  - Waste Management (Shipments of Waste) Regulations 2007 (S.I. No. 419 of 2007) as amended;
  - European Communities (Transfrontier Shipment of Waste) Regulations 1994 (SI 121 of 1994);
  - European Communities (Shipments of Hazardous Waste exclusively within Ireland) Regulations 2011 (S.I. No. 324 of 2011); and
  - European Union (Properties of Waste which Render it Hazardous) Regulations 2015 (S.I. No. 233 of 2015) as amended
2. Environmental Protection Act 2003 (Act No. 27 of 2003) as amended
3. Litter Pollution Act 2003 (Act No. 12 of 1997) as amended
4. Eastern-Midlands Waste Region, *Eastern-Midlands Region (EMR) Waste Management Plan 2015 – 2021* (2015)
5. Fingal County Council ‘*Segregation, Storage and Presentation of Household and Commercial Waste Bye-Laws*’ (2020)
6. Department of Environment and Local Government (DoELG) Waste Management – Changing Our Ways, A Policy Statement (1998)
7. Department of Environment, Heritage and Local Government (DoEHLG) *Preventing and Recycling Waste - Delivering Change* (2002)
8. DoELG, Making Ireland’s Development Sustainable – Review, Assessment and Future Action (World Summit on Sustainable Development) (2002)
9. DoEHLG, *Taking Stock and Moving Forward* (2004)
10. Department of Communications, Climate Action and Environment (DoCCAE), Waste Action Plan for the Circular Economy - Ireland’s National Waste Policy 2020-2025 (Sept 2020)
11. DoECLG, A Resource Opportunity - Waste Management Policy in Ireland (2012)
12. Environmental Protection Agency (EPA), *National Waste Database Reports 1998 – 2018*
13. FCC, *Fingal County Development Plan 2017 – 2023* (2017)
14. Planning and Development Act 2000 (S.I. No. 30 of 2000) as amended 2010 (S.I. No. 30 of 2010) and 2015 (S.I. No. 310 of 2015)

15. European Waste Catalogue - Council Decision 94/3/EC (as per Council Directive 75/442/EC)
16. Hazardous Waste List - Council Decision 94/904/EC (as per Council Directive 91/689/EEC)
17. EPA, *European Waste Catalogue and Hazardous Waste List* (2002)
18. EPA, *Waste Classification – List of Waste & Determining if Waste is Hazardous or Non-Hazardous* (2015)
19. BS 5906:2005 *Waste Management in Buildings – Code of Practice*.
20. DoHLGH, *Sustainable Urban Housing: Design Standards for New Apartments, Guidelines for Planning Authorities* (2020)