

AUGUST, 2022

Prepared by CWPA Planning & Architecture

Flemington Lane, Balbriggan, Co. Dublin

OPERATIONAL WASTE MANAGEMENT PLAN

Strategic Housing Development

Prepared on behalf of Kinvara Properties Ltd.

CWPA
Planning & Architecture



Unit 10, North Street Business Park, Seatown West, Swords Co. Dublin, K67 C992.
Email info@cwpa.ie Phone 01- 6856616





Table of Contents

1.0	Introduction	1
2.0	Overview of Irelands Waste Management.....	2
2.1	National Level	2
2.2	Regional Level	4
2.3	Legislative Requirements.....	5
2.3.1	Fingal County Council Waste Bye-Laws.....	7
2.4	Regional Waste Management Service Providers and Facilities	7
3.0	Proposed Development	8
3.1	Location, Size & Scale of the Development.....	8
3.2	Typical Waste Categories.....	9
3.3	European Waste Codes.....	10
4.0	Estimated Waste Arising.....	11
5.0	Waste Storage and Collection	12
5.1	Waste Storage Areas (WSAs)	12
5.2	Waste Storage – Duplex Units (Shared WSAs)	13
5.3	Waste Storage – Houses and Terraced Units (Individual WSAs).....	14
5.4	Waste Storage – Childcare Facility	14
5.5	Waste Collection	15
5.6	Additional Waste Materials	15
5.7	Waste Storage Area Design	16
6.0	Conclusion.....	17
7.0	References	18



Quality Assurance - Mandate Stature

This document has been prepared and scrutinized in accordance with CWPA Planning & Architecture Quality Assurance team provisions.

Date of Preparation	Prepared By	Checked By	Approved By
August, 2022	Anika Haget	Mark Whelan	Joseph Corr

CWPA Ltd. DISCLAIMER. 2022

This report has been prepared by CWPA Planning and Architecture, with all reasonable skill, care and diligence within the terms of the contract with the Client, incorporation of our General Terms and Condition of Business and taking account of the resources devoted to us by agreement with the Client. We disclaim any responsibility to the Client and others in respect of any matters outside the scope of the above. This report is confidential to the Client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at its own risk.



1.0 Introduction

CWPA Planning & Architecture, Unit 10, North Street Business Park, Seatown West, Swords, Co. Dublin, has been retained by our Client, Kinvara Properties Ltd., to prepare this Operational Waste Management Plan 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, *Protection of the Environment Act 2003* as amended, *Litter Pollution Act 2003*, as amended, the '*Eastern-Midlands Region (EMR) Waste Management Plan 2015 – 2021*', and the *Fingal County Council Segregation Storage, Presentation and of Household and Commercial Waste (2019)*. In particular, this Operational Waste Management Plan provides a robust strategy for storing, handling, collection and transport of the wastes generated on site.

This Operational Waste Management Plan aims to ensure that maximum recycling, reuse and recovery of waste with diversion from landfill, wherever possible. This Operational Waste Management Plan also provides guidance on the appropriate collection and transport of waste to prevent issues associated with litter or more serious environmental pollution (i.e. contamination of soil or water resources). This 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.



2.0 Overview of Irelands Waste Management

2.1 National Level

In 1998, the Government issued a Policy Statement titled '*Changing Our Ways*'. This Policy Statement identified the following objectives in regards to waste in Ireland:

- Prevention,
- Minimisation,
- Reuse,
- Recycling,
- Recovery, and
- disposal

A large emphasis was placed on reducing reliance on landfill and finding alternative methods for managing waste. *Changing Our Ways, 1998* stated a target of at least 35% recycling of municipal¹ waste.

An additional waste policy document was published in 2002 titled '*Preventing and Recycling Waste – Delivering Change*'. This policy document proposed a number of initiatives to further increase recycling of waste and allow diversions from landfill. Minimising waste at source was considered the priority. A view that was also supported by the review of Irelands sustainable development policy which occurred in 2002 and was titled '*Making Irelands Development Sustainable – Review, Assessment and Future Action*'. This document clearly outlined the need to break the association between economic growth and waste generation through the minimisation of waste and reuse/recycling of materials.

In April 2004, a review of the Governments Policy Document *Changing Our Ways*, was published. This was entitled '*Taking Stock and Moving Forward*'. This review covered the period of 1998 – 2003 and the aim of this review document was to assess the progress to date with regards to waste management in Ireland, 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 objective denoted *Changing Our Ways*. *Taking Stock and Moving Forward* in particular, noted a substantial increase in the amount of

¹ Municipal Waste i.e. household, commercial and non-process industrial waste



waste being transported to Local Authority landfills. This review report noted that one of the major challenges in the coming years was the extension of the dry recyclable collection services.

In response to the ‘European Green Deal’ which set out a roadmap for a transition to a new economy where climate and environmental challenges are turned into opportunities, the Government released a new Policy Document in September 2020 entitled ‘*A Waste Action Plan for a Circular Economy*’ which outlined a new Action Plan for Ireland for 2020 – 2025. This replaced the previous national waste management plan ‘*A Resource Opportunity, 2012*’.

The *Waste Action Plan for a Circular Economy* aims to fulfil the commitment in the programme for Government to publish and start implementing a new National Waste Action Plan. The intention of the new national waste policy will inform and direct waste planning and management in Ireland over the coming years. The policy is aimed at the production chain as an alternative to waste disposal. Regulations are already being implemented and prepared to help implement these changes. The Policy Document contains approximately more than 200 measures across various areas including Municipal Waste, Consumer Protection & Citizen Engagement, Plastics and Packaging, Construction and Demolition, Textiles, Green Public Procurement and Waste Enforcement.

The Environmental Protection Agency (EPA) have produced a periodic ‘*National Waste (Database) Reports*’ (NWS) since 1998 which details (among other things) estimates for Municipal Waste generation in Ireland in addition to the level of recycling, recovery and disposal of these materials.

The 2018 NWS published the following key statistics:

- **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 quarter (15%) of municipal waste was landfilled in 2018, this is a decrease from 23% in 2017.

2.2 Regional Level

The proposed Strategic Housing Development, that is the subject of this application is located within the administrative jurisdiction of Fingal County Council.

The *Eastern and Midlands Waste Management Plan 2015 – 2021* is the regional waste management plan for Fingal County Council and was published in May, 2015. The following strategic targets for waste management in the region are denoted in the plan:

- 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.

The charge for Municipal landfill in Ireland is based on the weight of the waste being disposed. In the province of Leinster, charges are approximately €130 - €150 per tonne of waste including the €75 per tonne landfill levy introduced under the *Waste Management (Landfill Levy) (Amendment) Regulations 2012*.

The *Fingal Development Plan 2017 – 2023* was implemented in 2017. This document sets out a number of policies and objectives for Fingal County Council in line with the objectives of the regional waste management plan.

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

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 Country 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 and 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 and Midlands Region Waste Management Plan 2015 – 2021 (or any subsequent plans).*

Objective DMS36: *Ensure all new residential schemes include appropriate design measures for refuse storage areas, details of which should be clearly shown at preplanning 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 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 Committees (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 1998 (S.I. No. 419 of 2007) as amended
- *European Communities (Transfrontier Shipment of Waste) Regulations 1994 (S.I. No. 121 of 1994)*
- 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.

The list of Acts in addition to the subordinate Regulations enable the transposition of relevant European Union Policy and Directives into Irish Law.

A guiding principle of European waste legislation, which has in turn been incorporated into the *Waste Management Act 1996 – 2011* and subsequent Irish legislation includes the ‘*Principle of Care*’. This principle implies that the producer of the waste is responsible for waste from the time it is generated through until its legal disposal including the methods of its disposal. It is acknowledged that it is unpractical for the waste producer to physically transfer the waste from where it is produced to the final disposal area, was contractors are employed to physically transport waste to the final waste disposal sites.

It is imperative that all parties, such as, residents, tenants and proposed facilities management companies undertake on-site management of waste in accordance with all of the legal requirements in addition to employing suitably permitted/ licenced contractors to undertake off-site management of their waste in line with all applicable requirements. The waste contractor must 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 all contractors which is issued by the National Waste Collection Permit Office. Facilities receiving the waste must also be appropriately permitted or licenced. Operators of these facilities cannot accept any waste unless they are in possession of a Certificate of Registration or a waste permit granted by the relevant Local Authority under the *Waste Management (Facility Permit & Registration) Regulations 2007* as amended or a waste or Industrial Emissions Directive licence granted by the EPA. The certificate of Registration/ Permit/ Licence held will specify the type and quantum 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

Fingal County Councils '*Fingal County Council (Segregation Storage, Presentation and of Household and Commercial Waste) Bye-Laws for the 2020*' were implemented these bye-laws on the 1st of April 2020. These bye-laws repeal the previous '*Fingal County Council Bye-Laws for the Storage, Presentation and Collection of Household Waste (2006)*'. These bye-laws introduced a set of enforceable requirements on waste holders with regard to storage, separation and presentation of waste within the Fingal County Council Jurisdiction. The key requirements introduced by these bye-laws of particular relevance for this development include the following:

- Kerbside waste presented for collection shall not be presented for collection earlier than 06:00pm 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 9:00 am on the day following the designated waste collection day, unless an alternative arrangement has been approved in accordance with bye-law 4
- Documentation including receipts is obtained and retained for a period of less than one year to provide proof that any waste removed from the premises has been managed in a manner that conforms to these bye-laws, to the Waste Management Act and, where such legislation is applicable to that person, to the European Union (Household Food Waste and Bio-Waste) Regulations 2015
- Adequate access and egress onto and from the premises by waste collection vehicles is maintained

2.4 Regional Waste Management Service Providers and Facilities

Various contractors offer waste collection services for the residential sector within the jurisdiction of Fingal County Council. Details of waste collection permits (granted, pending and withdrawn) for the region are available from the National Waste Collection Permit Office.

As outlined in the *regional waste management plan*, there is currently a decrease in the 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, Co. Dublin.

The closest civic amenity centre can be found at Estuary Recycling Centre located within Seatown West, Swords, Co. Dublin, the civic amenity centre can be used for disposal of other household wastes as outlines in section 5.6.

A copy of all Certificate of Registration and waste permits issued by the Local Authorities are available from the National Waste Collection Permit Office website and all waste/IE licenses issued are available from the EPA.

3.0 Proposed Development

3.1 Location, Size & Scale of the Development

The subject site is located on lands at Flemington Lane, Balbriggan, Co. Dublin, located within the administrative jurisdiction of Fingal County Council. The overall area of the subject site within the red line boundary extends to c. 4.4 ha. Currently occupied by agricultural fields the majority of the site is zoned "RA" Residential Area while a strip along the southern boundary of the site is zoned "OS" Open Space.

The subject site is located within the development boundary of Balbriggan, c. 4 km northwest of Balbriggan Town Centre, c. 30 km north of Dublin City Centre and 1 km east of the M1 Motorway. The town of Balbriggan is designated as a Large Growth Town in the Fingal Development Plan 2017 – 2023 and is strategic in terms of the Dublin/Belfast economic and train corridor.

The proposed Strategic Housing Development consists of the following:

The total planning application site area extends to c. 44,365m² (4.4Ha) with a developable Area of 34,135m² (3.4Ha) with a substantive residential site development area of c.7.2 ha. The subject property is located off Flemington Lane, approximately 150m East of the junction with Flemington Road and approximately 4km North-west of Balbriggan Town Centre. The proposed development consists of the removal of an existing derelict structure of 134sqm and the construction of 127 no. residential units (14 no. 2-bed dwelling units of 93sqm, 47 no. 3-bed dwelling units of 109sqm, 4 no. 4-bed dwelling units of 145sqm and 31 no. 2-bed ground floor duplex units with 31 no. 3-bed duplex units over, of 204sqm), surface car parking (211 no. spaces in total, including accessible spaces); car sharing provision; electric vehicle charging points; bicycle parking (long and short stay



spaces for duplex) including visitor spaces; internal roads, pathways and cycle paths, including connections to adjoining lands; hard and soft landscaping and boundary treatments; temporary pumping station; plant; revised entrances and tie-in arrangements to Flemington Lane including new cycle lane and footpath; solar panels; attenuation tank and related SUDS measures; signage; public lighting; and all site development and excavation works above and below ground. The development also includes a two storey creche of 528sqm with 9no. dedicated car parking (including 2no. disabled persons spaces) and secure open play space; public open space of 4130m² and communal open space of 681sqm, provision of public open space in Zoned OS "Open Space" of 10,230sqm including children's play area and public artwork, provision of a new access roadway from Flemington Lane and future road connection to adjoining lands to the south-eastern boundary) and all associated site works, landscaping and boundary treatments to facilitate the development. The total gross area of the development is 13,869sqm with a unit density of 37.4 units per hectare.

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 – includes wastepaper (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.

Further 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 which includes the following:

- Green/garden waste may be generated from internal plants or external landscaping;
- Batteries (both hazardous and non-hazardous);
- Waste electrical and electronic equipment (WEEE) (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 or commercial tenants);



- Furniture (and from time to time other bulky wastes); and
- Abandoned bicycles

All 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 whenever possible.

3.3 European Waste Codes

The *European Waste Catalogue* and *Hazardous Waste List* were published by the European Commission in 1994 and in 2002, the EPA published a document titled the *European Waste Catalogue and Hazardous Waste List*. This was a condensed version of the original 2 no. documents and their subsequent amendments. This document was recently replaced by the EPA 'Waste Classification – List of Waste & Determining if Waste is Hazardous or Non-Hazardous'. This had become valid from June 1st, 2015. This waste classification system applies across the European Union and is the basis for all national and international waste reporting, such as those associated with waste collection permits, Certificate of Registration, 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 code (also referred to as the European Waste Code or EWC) for typical waste materials expected to be generated during the operation of the proposed development are provided in the Table 1 below.

Table 1: Typical Waste Types Generated and Low Codes

Waste Material	LoW/EWC 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

4.0 Estimated Waste Arising

An assessment to determine the volume of waste generated from the proposed development has been undertaken based on Irish Waste Generation rates. Waste volumes from residential units have been calculated based on the predicted occupancy of the units while waste from childcare units have been calculated based on the floor area. The assessment incorporates the type of development, housing type and sizes.

Table 2: Estimated Waste Generation

Development	Waste Volume (L / week)
Residential	c. 30,000 L
Childcare	c. 3,500 L

The BS5906:2005 Waste Management in Buildings – Code of Practice was considered in the estimations of the waste arising. It has been assumed that waste will be generated by the residential units over a 7-day period, while the Childcare facilities will operate over a 5-day period. It is anticipated that the conservative estimation of waste quantities from the residential units will be sufficient to cover the small quantities likely to be generated in the communal areas on a weekly basis. Waste for the amenity areas is included within the residential waste, with waste from residential amenities being taken to the closest residential waste storage area (WSA) for storage.



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
- DoEHLG, Sustainable Urban Housing: Design Standards for New Apartments, Guidelines for Planning Authorities (section 4.8-4.9) (2020)
- Fingal County Council Development Plan 2017 – 2023 (2017)
- Fingal County Council Segregation Storage, Presentation and of Household and Commercial Waste (2020)

5.1 Waste Storage Areas (WSAs)

Duplex Blocks

4 no. shared WSAs have been allocated in the development design for use by the duplex units that share WSAs.

Individual units

Individual housing units will have their own individual bin storage. Those with external access to the rear of the property will store waste bins at the rear of the dwelling, while housing units without external access to the rear will be provided with a screened area to store waste bins at the front or side of the property.

Childcare Facilities

The childcare facility will have their own individual WSA allocated on ground floor level at the side of the building.

Using the estimated waste generation volumes in Table 2 the waste receptacle requirements for MNR, DMR, organic waste, and glass have been assessed for the WSAs. These are presented in Table 3.



Table 3: Waste Storage requirements for the proposed development

Area Use	Bins Required			
	MNR	DMR	Organic	Glass
Houses (Individual)	1 x 240 L	1 x 240 L	1 x 120 L	Bottle Bank
Duplex 1 (28 Units Shared)	2 x 1100 L	3 x 1100 L	3 x 240 L	Bottle Bank
Duplex 2 (14 Units Shared)	1 x 1100 L	2 x 1100 L	2 x 240 L	Bottle Bank
Duplex 3 (16 Units Shared)	1 x 1100 L	2 x 1100 L	2 x 240 L	Bottle Bank
Duplex 4 (4 Units Shared)	2 x 240 L	2 x 240 L	1 x 240 L	Bottle Bank
Childcare	1 x 1100 L	2 x 1100 L	2 x 240 L	1 x 240 L

5.2 Waste Storage – Duplex Units (Shared WSAs)

Dedicated, shared waste stores are provided, these bin stores are centrally located to ensure security and ease of access for residents throughout the development. Residents will be required to segregate waste into the following waste categories:

- Dry Mixed Recyclables
- Organic (food) waste
- Mixed Non Recyclables
- Glass

Residents will be responsible to dispose of their segregated waste materials into the appropriate bins located in their designated WAS. Adequate space is allocated in the residential units to accommodate all necessary bin types for waste segregation at source. Residents will have secure access to their designated shared WSA in which each bin will be clearly labelled, and colour coded to identify what wastes can and cannot be placed in the bin and labels will be pictorial.

The Management Company will be responsible for the provision of a leaflet to all new tenants encouraging good waste segregation and pictorial information detailing the waste streams that can be placed in each bin.

Using the estimated figures for waste volumes, the main waste streams will be collected on a weekly basis. At the designated collection times, bins will be brought by the personnel, nominated by the facilities management company, from the shared WSAs directly to the designated collection point at the closest road.



Any additional household wastes generated by the residents, such as textiles, batteries, bulky waste, WEEE, etc. must be disposed appropriately at a local recycling facility. Further Details of additional waste can be found in Section 5.6.

5.3 Waste Storage – Houses and Terraced Units (Individual WSAs)

Residents in Houses, Duplexes and Terraced Units will be required to segregate waste within their own units into the following categories:

- Dry Mixed Recyclables
- Organic (food) waste
- Mixed Non Recycables
- Glass

Residents with external access to the rear of the property will store waste bins at the rear of the dwelling, while housing units without external access to the rear will be provided with a screened area to store waste bins at the front or side of the property.

DMR, MNR and Organic waste bins are expected to be emptied on a weekly basis. Residents will be required to dispose of glass waste at the nearest bottle bank.

Any additional household wastes generated by the residents, such as textiles, batteries, bulky waste, WEEE, etc. must be disposed appropriately at a local recycling facility. Further Details of additional waste can be found in Section 5.6.

5.4 Waste Storage – Childcare Facility

Staff of the childcare facility will be required to segregate waste within their own units into the following categories:

- Dry Mixed Recyclables
- Organic (food) waste
- Mixed Non-Recyclables
- Glass

Staff will be responsible for disposing segregated waste materials into the appropriate bins located in their designated WAS. Staff will have secure access to their designated WSA in which each bin will be clearly labelled and colour coded to identify what wastes can and cannot be placed in the bin and labels will be pictorial.



Using the estimated figures for waste volumes, the main waste streams will be collected on a weekly basis. At the designated collection times, bins will be brought by the personnel nominated by the facilities management company from the shared WSAs directly to the designated collection point at the closest road.

Any additional wastes generated by users, such as textiles, batteries, bulky waste, WEEE, etc. must be disposed appropriately at a local recycling facility. Further Details of additional waste can be found in Section 5.6.

5.5 Waste Collection

There are multiple private companies providing waste collection services in the Fingal County area. All waste companies operating for the proposed development must have a valid waste collection licence for each type of waste. All waste collected will only be transported to registered/approved/licensed facilities. All waste from the shared WSAs is taken to the collection point by the personnel designated by the facility management company to be collected by the waste contractor. Residents with individual WSAs are responsible for bringing their own bins to the street for collection to/from their WSAs. 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 appointing a suitable waste contractor.

5.6 Additional Waste Materials

Other waste materials may be generated infrequently by the occupants of the residential units, such as follows:

- Green Waste
- Batteries
- Waste Electrical and Electronic Equipment
- Printer Cartridge / Toner
- Chemicals (solvents, paints, adhesives, resins, detergents, etc.)
- Light Bulbs
- Textiles
- Waste Cooking Oil
- Furniture (and other bulky waste)
- Etc.



Residents will be requested to dispose of them correctly at recycle centres or civic amenity facilities. Details of nearby recycling centres and bring banks is available on the Repak.ie website. All occupants will be supplied with information by the management company on the location of recycling facilities in the area.

5.7 Waste Storage Area Design

The shared WSAs should be designed and fitted-out to meet the requirements of relevant design standards, including:

- Provide non-slip floor surface
- Provide ventilation
- Provide suitable lighting
- Provide easy access for people with limited mobility
- Restrict access to nominated personnel only
- Provide hot or cold water for disinfection and washing of bins
- Provide suitable power supply for power washers
- Provide sloped floor to a central foul drain for bins washing run-off
- Provide appropriate signage on bins
- Provide access for potential control of vermin,
- Provide CCTV for monitoring.

The facilities management company will be required to maintain the waste storage areas in good condition as required by the FCC Waste Bye-Laws.



6.0 Conclusion

This OWMP sets out a waste strategy that meets all the legal requirements, waste policy and best practice guidelines. The implementation of this OWMP is intended to ensure a high level of recycling, reuse and recovery of waste in the proposed development by separating all recyclable materials at the earliest possible stage. This will also reduce costs for waste companies and ensure that only a minimal amount of waste terminates at landfill, achieving the targets set out in the EMR Waste Management Plan 2015-2021. Adherence to this plan will also ensure that the requirements of the FCC Waste Bye-Laws are met and sufficient storage capacity is provided for the estimated amount of segregated waste.



7.0 References

- 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. 191 of 2015)
 - Waste Management (Hazardous Waste) Regulations 1998 (S.I. No. 163 of 1998) as amended 2000 (S.I. No. 73 of 2000)
 - 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 Union (Properties of Waste which Render it Hazardous) Regulations 2015 (S.I. No. 233 of 2015)
- Protection of the Environment Act 2003, (No. 27 of 2003) as amended
- Litter Pollution Act 1997 (S.I. No. 12 of 1997) as amended
- Eastern-Midlands Waste Region, Eastern-Midlands Region (EMR) Waste Management Plan 2015 – 2021 (2015)



- Fingal County Council (FCC), Segregation, Storage, Presentation and of Household and Commercial Waste (2020)
- Department of Environment and Local Government (DoELG) Waste Management - Changing Our Ways, A Policy Statement (1998)
- Department of Environment, Heritage and Local Government (DoEHLG) Preventing and Recycling Waste - Delivering Change (2002)
- DoELG, Making Ireland's Development Sustainable – Review, Assessment and Future Action (World Summit on Sustainable Development) (2002)
- DoEHLG, Taking Stock and Moving Forward (2004)
- Department of Communications, Climate Action and Environment (DCCA), Waste Action Plan for the Circular Economy - Ireland's National Waste Policy 2020-2025 (2020). DoEHLG, A Resource Opportunity - Waste Management Policy in Ireland (2012)
- DoELG, Making Ireland's Development Sustainable – Review, Assessment and Future Action (World Summit on Sustainable Development) (2002)
- Environmental Protection Agency (EPA), National Waste Database Reports 1998 – 2017. FCC, Fingal County Development Plan 2017 – 2023 (2017)
- 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)