



Trinity
Consultants

 **awnconsulting**

Operational Waste Management Plan

Project Title: Large-Scale Residential Development at Greenfields, Swords, Co. Dublin

CLIENT

Jackie
Greene
Construction
Limited

DOCUMENT REFERENCE

257501.0151WMR02

DATE

12/06/2026

DOCUMENT CONTROL

Document Control Sheet		
Our Reference	257501.0151WMR02	
Original Issue Date	12/06/2026	
Client:	Jackie Greene Construction Limited	
Revision	Revision Date	Description

Details	Written by	Approved by
Signature		
Name	Isabel Gogarty Meade	Chonaill Bradley
Title	Environmental Consultant	Associate
Date	12/06/2026	12/06/2026

Disclaimer

This report considers the specific instructions and requirements of our client. It is not intended for third-party use or reliance, and no responsibility is accepted for any third party. The provisions in this report apply solely to this project and should not be assumed applicable to other developments without review and modification.



TABLE OF CONTENTS

1. INTRODUCTION	1-1
2. OVERVIEW OF WASTE MANAGEMENT IN IRELAND	2-2
2.1 National level	2-2
2.2 Regional Level.....	2-3
2.3 Legislative Requirements.....	2-5
2.3.1 Fingal County Council Waste Management Bye-Laws	2-6
2.4 Regional Waste Management Service Providers and Facilities.....	2-7
3. DESCRIPTION OF THE DEVELOPMENT	3-8
3.1 Location, Size and Scale of the Development.....	3-8
3.2 Typical Waste Categories	3-9
3.3 List of Waste Codes.....	3-10
4. ESTIMATED WASTE ARISING	4-12
5. WASTE STORAGE AND COLLECTION	5-13
5.1 Operational Phase Waste Storage – Residential Units	5-15
5.2 Waste Storage – Creche Unit	5-16
5.3 Waste Storage – Commercial Units	5-16
5.4 Waste Collection	5-17
5.5 Additional Waste Materials	5-18
5.6 Waste Storage Area Design.....	5-20
5.7 Facility Management Responsibilities	5-20
5.8 Pest Management	5-21
6. SUMMARY AND CONCLUSION	6-22
7. REFERENCES	7-23
APPENDIX A. WASTE STORAGE AREA LOCATIONS	A-24
APPENDIX B. ROAD SWEEP ANALYSIS FOR REFUSE TRUCK	B-25

LIST OF TABLES

Table 3.1 Typical Waste Types Generated and LoW Codes	3-11
Table 4.1 Estimated Waste Generation for Residential Units.	4-12
Table 4.2 Estimated Waste Generation for Residential Units.	4-12
Table 4.3 Estimated Waste Generation for Commercial Units.	4-12
Table 5.1 Waste Storage Requirements for the Proposed Development	5-14

1. INTRODUCTION

AWN Consulting, a Trinity Consultants Company, has prepared this Operational Waste Management Plan (OWMP) on behalf of Jackie Greene Construction Limited (the Client) for a Large-Scale Residential Development (LRD) comprising 289 No. residential apartments (60 No. 1-bed, 200 No. 2-bed and 29 No. 3-bed); retail / commercial unit (701 sq m); and crèche (418 sq m) with outdoor play area (42 sq m) (the Proposed Development) at a site of 2.22 Ha at Greenfields, Swords Business Park, Swords, Co. Dublin (the site).

This OWMP has been prepared to ensure that the management of waste during the operational phase of the development is undertaken in accordance with the current legal and industry standards including, the *Waste Management Act 1996* as amended and associated Regulations¹, *Environmental Protection Agency Act 1992* as amended², *Litter Pollution Act 1997* as amended³, the *National Waste Management Plan for a Circular Economy 2024 - 2030 (NWMPCE)* (2024)⁴ and *Fingal County Council Segregation Storage, Presentation and of Household and Commercial Waste* (2020)⁵. In particular, this OWMP aims to provide a robust strategy for the storage, 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 development during the operational phase and provides a strategy for managing the different waste streams.

At present, there are no specific national 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. OVERVIEW OF WASTE MANAGEMENT IN IRELAND

2.1 National level

The Irish Government issued a policy statement in September 1998 entitled '*Changing Our Ways*'⁶, 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*'⁷ was published in 2002. 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*'⁸. This document also stressed the need to decouple 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*'⁹. 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 Irish Government published a new policy document outlining a new action plan for Ireland to cover the period of 2020-2025. This plan '*A Waste Action Plan for a Circular Economy*'¹⁰ (WAPCE), 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).

The WAPCE sets the direction for waste planning and management in Ireland up to 2025. This reorientates policy from a focus on managing waste to a much greater focus on creating circular patterns of production and consumption. Other policy statements of a number of public bodies already acknowledge the circular economy as a national policy priority.

The policy document contains over 200 measures across various waste areas including circular economy, municipal waste, consumer protection and citizen engagement, plastics and packaging, construction and demolition, textiles, green public procurement and waste enforcement.

One of the first actions to be taken was the development of the *Whole of Government Circular Economy Strategy 2022-2023 'Living More, Using Less'* (2021)¹¹ to set a course for Ireland to transition across all sectors and at all levels of Government toward circularity and was issued in December 2021. It is anticipated that the Strategy will be updated in full every 18 months to 2 years. The latest version of this strategy has been issued as of February 2026 *Whole of Government Circular Economy Strategy 2026-2028: 'Accelerating Action'* (2026)¹², with the main purpose of this strategy being to increase Ireland's circular material use rate by two percentage points per year.

The *Circular Economy and Miscellaneous Provisions Act 2022*¹³ was signed into law in July 2022. The Act underpins Ireland's shift from a "take-make-waste" linear model to a more sustainable pattern of production and consumption, that retains the value of resources in our economy for as long as possible and that will significantly reduce our greenhouse gas emissions. The Act defines Circular Economy for the first time in Irish law, incentivises the use of recycled and reusable alternatives to wasteful, single-use disposable packaging, introduces a mandatory segregation and incentivised charging regime for commercial waste, streamlines the national processes for End-of-Waste and By-Products decisions, tackling the delays which can be encountered by industry, and supporting the availability of recycled secondary raw materials in the Irish market, and tackles illegal fly-tipping and littering.

The *Department of Housing, Local Government and Heritage authored Sustainable Residential Development and Compact Settlements - Guidelines for Planning Authorities (2024)*¹⁴, suggests the below thresholds at which the need for the supplemental information such as the OWMP should be considered.

► *30 or more residential units*

Since 1998, the Environmental Protection Agency (EPA) has produced periodic 'National Waste (Database) Reports' which as of 2023 have been renamed *Circular Economy and Waste Statistics Highlight Reports*¹⁵ 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 2025 National Circular Economy and Waste Statistics web resource, which is the most recent study published, along with the national waste statistics web resource (2025) reported the following key statistics for 2023:

- *Ireland generated 3.13 million tonnes of municipal waste in 2023, relatively unchanged compared to the 3.19 million tonnes generated in 2022.*
- *Between 2016 and 2023, municipal waste increased from 2.7 million tonnes to 3.13 million tonnes.*
- *Some 1.3 million tonnes of municipal waste generated in Ireland was recycled in 2023, resulting in a recycling rate of 42%. This indicates that we face significant challenges to meet the upcoming EU recycling targets for 2025 to 2035.*
- *Of the municipal waste recycled in 2023, over 814,000 tonnes went for material recycling (approximately the same as 2022) and over 480,000 tonnes were treated by composting/anaerobic digestion (approximately the same as 2022 but up 37% on 2020).*
- *A rounded 1.3 million tonnes of Ireland's municipal waste went for incineration with energy recovery in 2023. This tonnage is 43% of municipal waste managed.*
- *Ireland's landfill rate for municipal waste managed was 14% in 2023. This is a 1% decrease from 2022's rate of 15%.*
- *There has been a steep decline in Ireland's landfill rate for municipal waste from over 80% in 2001. Ireland must reduce the share of municipal waste landfilled to 10% or less by 2035, which includes waste landfilled at each step along the waste treatment process in Ireland and abroad.*
- *An estimated 42% (1.2 million tonnes) of all municipal waste managed was exported abroad in 2023, an increase from the 39% in 2022. Of the waste exported, most went for recycling (49%) or energy recovery (36%) while 11% went for composting or anaerobic digestion.*

2.2 Regional Level

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

The Eastern Midlands Region (EMR) Waste Management Plan 2015 – 2021, which previously governed waste management policy in the FCC area, has been superseded as of March 2024 by the NWMPCE 2024 – 2030, the national waste management plan for Ireland.

The NWMPCE does not dissolve the three regional waste areas. The NWCPCE sets the ambition of the plan to have a 0% total waste growth per person over the life of the Plan with an emphasis on non-household wastes including waste from commercial activities and the construction and demolition sector.

This Plan seeks to influence sustainable consumption and prevent the generation of waste, improve the capture of materials to optimise circularity and enable compliance with policy and legislation.

The national plan sets out the following strategic targets for waste management in the country that are relevant to the Proposed Development:

National Targets

- ▶ **1A.** *(Residual Municipal Waste) 6% Reduction in Residual Municipal Waste per person by 2030.*
- ▶ **2A.** *(Contamination of Materials) 90% of Material in Compliance in the Dry Recycling Bin.*
- ▶ **2B.** *(Material Compliance Residual) 10% per annum increase in Material Compliance in the residual bin. (90% by the end of 2030).*
- ▶ **3A.** *(Reuse of Materials) 20kg Per person / year – Reuse of materials like cloths or furniture to prevent waste.*

Municipal landfill charges in Ireland are based on the weight of waste disposed. In the Leinster Region, charges are approximately €140-160 per tonne of waste, which includes an €85 per tonne landfill levy introduced under the *Waste Management (Landfill Levy) (Amendment) Regulations 2015* (as amended)¹⁶. *The Circular Economy (Waste Recovery Levy) Regulations 2024*¹⁷ will also incur a levy of €10 per tonne for waste accepted for recovery. This will include backfilling at authorised recovery sites and at municipal waste landfills.

The *Fingal Development Plan 2023 – 2029*¹⁸ (2023) sets out a number of policies and objectives for the Fingal region in line with the objectives of the regional waste management plan, including the following:

- ▶ **Objective IU034 – Waste Management in New Developments** - *Require the provision of appropriate, well designed, accessible space to support the storage, separation and collection of as many waste and recycling streams as possible in all new commercial and residential developments within the County.*
- ▶ **Objective DMSO234 – Provision of Public Bring Banks** - *Ensure the provision of public bring banks in all large retail developments, unless there are existing facilities within a 1 km radius. Bring bank facilities will generally be required at appropriate locations in the following development types:*
 - *In conjunction with significant new commercial developments, or extensions to existing developments.*
 - *In conjunction with new waste infrastructure facilities, proposals should include bring facilities for the acceptance of non-hazardous and hazardous wastes from members of the public and small businesses.*
 - *In conjunction with medium and large scale residential and mixed-use developments providing in excess of 10 residential units, proposals should provide recycling and bring bank facilities to serve residents and in some appropriate locations, the wider community.*
 - *In conjunction with all large retail developments provide space for reverse vending machines to promote the circular economy.*
- ▶ **Objective DMSO235 – Communal Refuse Storage Provision** - *In the case of communal refuse storage provision, the collection point for refuse should be accessible both to the external collector and to the resident and be secured against illegal dumping by non-residents. In the case of individual houses, the applicant shall clearly show within a planning application the proposed location and design of bin storage to serve each dwelling, and having regard to the number of individual bins required to serve each dwelling at the time of the application and any possible future requirements*

for refuse storage/collection. The following criteria will be considered in the assessment of the design and siting of waste facilities and bring facilities:

- *The location and design of any refuse storage or recycling facility should ensure that it is easily accessible both for residents and/or public and for bin collection, be insect and vermin proofed, will not present an odour problem, and will not significantly detract from the residential amenities of adjacent property or future occupants.*
 - *Provision for the storage and collection of waste materials shall be in accordance with the guidelines for waste storage facilities in the relevant Regional Waste Management Plan and the design considerations contained in Section 4.8 and 4.9 of the Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities, DHLGH (2020).*
 - *Refuse storage for houses should be externally located, concealed / covered and adequate to cater for the size and number of bins normally allocated to a household. For terraced houses, the most appropriate area for bins to be stored is to the front of the house, which should be located in well-designed enclosures that do not detract from visual amenity.*
 - *All applications shall clearly identify the waste storage and collection points and detail the anticipated waste collection schedule having regard to the impact on road users both within the development and the surrounding area.*
 - *Access to private waste storage in residential schemes should be restricted to residents only.*
- ▶ **Objective DMSO236** – *Segregation and Collection of Waste - Ensure all new large-scale residential and mixed-use developments include appropriate facilities for source segregation and collection of waste.*
- ▶ **Objective DMSO237** – *Distance from Front Door to Communal Bin Area - 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 DMSO239** – *Refuse storage areas - 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 or other such mitigation measures are provided.*
- ▶ **Objective DMSO240** – *Distance to Communal Bin Areas - 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 Proposed Development are:

- ▶ *Waste Management Act 1996 as amended;*
- ▶ *Environmental Protection Agency Act 1992 as amended;*
- ▶ *Litter Pollution Act 1997 as amended;*
- ▶ *Planning and Development Act 2000 as amended¹⁹; and*
- ▶ *Circular Economy and Miscellaneous Provisions Act 2022.*

These Acts and subordinate Regulations transpose the 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, creche tenants, commercial tenants and the proposed building management company undertake on-site management of waste in accordance with all legal requirements and that the facilities management company 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 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 Management Bye-Laws

The FCC "Fingal County Council (Segregation Storage, Presentation and of Household and Commercial Waste) Bye-Laws (2020)" came into use 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)*’. The Bye-Laws set a number of enforceable requirements on waste holders with regard to storage, separation and presentation of waste within the FCC functional area. Key requirements under these Bye-Laws of relevance to the development include the following

- ▶ *Kerbside waste presented for collection shall not be presented for collection earlier than 6.00 pm 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, unless an alternative arrangement has been approved in accordance with bye-law 4;*
- ▶ *Documentation, including receipts, is obtained and retained for a period of no 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; 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 commercial and 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 all are 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 in Poolbeg in Dublin.

The Estuary Recycling Centre at Seatown Park, Swords, Dublin, K67V003, located c. 0.6 km to the east of the Proposed Development site, which can be utilised by the residents of the Proposed Development for other household waste streams. There are also numerous bottle banks in the Swords area where residents can dispose of glass bottles.

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

3. DESCRIPTION OF THE DEVELOPMENT

3.1 Location, Size and Scale of the Development

The Proposed Development consists of a mixed-use development that constitutes a 'Large-Scale Residential Development' (LRD) at this site of 2.22 Ha principally located at Swords Business Park, Swords, Co. Dublin. The site is principally bound: to the north by an access road and ancillary car park to serve Swords Business Park; to the east by the M1 Motorway; to the south by Mantua Road; and to the west by an access road to serve Swords Business Park. The application site also extends to include parts of: the access road to the north and west for footpath, landscape and foul drainage connection works; Mantua Road to the west for foul drainage connection works; and the green strip to the south at Mantua Road for a pedestrian and cyclist connection.

Permission is sought for a mixed-use development with a gross floor area of 30,358 sq m and principally comprised in 5 No. blocks (A–E), with heights ranging from 1 No. to 9 No. storeys. The proposed block heights are as follows: Block A is 6 No. to 7 No. storeys; Block B is 6 No. to 7 No. storeys; Block C is 6 No. to 7 No. storeys; Block D is 6 No. to 9 No. storeys; and Block E is 1 No. to 9 No. storeys. The development consists of: 289 No. residential apartments (60 No. 1-bed, 200 No. 2-bed and 29 No. 3-bed); retail/commercial unit (701 sq m); and crèche (418 sq m) with outdoor play area (42 sq m).

Permission is also sought for: new multi-modal site entrance to the west; minor relocation of existing northern site entrance to the east; internal road, cycle and footpath network; 132 No. car parking spaces; 13 no. motorcycle parking spaces; cycle parking; hard and soft landscaping, including public open space, communal amenity space (at-grade and as roof gardens atop Block D and Block E) and incidental open space; private amenity space as balconies and terraces facing all directions; public lighting; bin stores; plant rooms; 2 No. sub-stations; green roofs; rooftop plant, PV panels, telecommunications infrastructure, lift overruns and automatic opening vents; and all associated works above and below ground.



Figure 3.1 Proposed Site Layout & Redline Boundary Map (Source: MCORM Architecture and Urban Design, Drawing No. SWO-MCORM-AR-00-DR-P4-1002, 2026)

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 less frequently / in smaller quantities which will need to be managed separately including:

- ▶ Drink Cans and Bottles (Deposit Return Scheme)
- ▶ Green / garden waste may be generated from 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.);
- ▶ Light bulbs;
- ▶ Textiles;
- ▶ Waste cooking oil (if any generated by the residents or the commercial or creche tenants);
- ▶ 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 List of Waste Codes

In 1994, the *European Waste Catalogue*²⁰ and *Hazardous Waste List*²¹ were published by the European Commission. In 2002, the EPA published a document titled the *European Waste Catalogue and Hazardous Waste List*²², 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*'²³ 2018. 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 for typical waste materials expected to be generated during the operation of the Proposed Development are provided in Table 3.1 below.

Table 3.1 Typical Waste Types Generated and LoW Codes

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

4. ESTIMATED WASTE ARISING

A waste generation model (WGM) developed by AWN has been used to predict waste types, weights and volumes expected to arise 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 floor area usage (m²) has been used to predict the waste generated from the creche unit and the commercial units.

The estimated waste generation for the Proposed Development for the main waste types is presented in Tables 4.1 to 4.3.

Table 4.1 Estimated Waste Generation for Residential Units.

Waste Type	Waste Volume (m ³ / week)		
	Block A (Shared WSA)	Block B (Shared WSA)	Block C (Shared WSA)
Organic Waste	0.90	0.97	0.97
Dry Mixed Recyclables	6.40	6.84	6.84
Glass	0.17	0.19	0.19
Mixed Non-Recyclables	3.37	3.60	3.60
Total	10.85	11.60	11.60

Table 4.2 Estimated Waste Generation for Residential Units.

Waste Type	Waste Volume (m ³ / week)	
	Block D (Shared WSA)	Block E (Shared WSA)
Organic Waste	0.95	0.84
Dry Mixed Recyclables	6.70	5.92
Glass	0.18	0.16
Mixed Non-Recyclables	3.52	3.11
Total	11.35	10.03

Table 4.3 Estimated Waste Generation for Commercial Units.

Waste Type	Waste Volume (m ³ / week)	
	Creche WSA	Commercial Unit WSA
Organic Waste	0.05	0.24
Dry Mixed Recyclables	1.92	4.64
Glass	0.01	1.93
Mixed Non-Recyclables	1.05	0.13
Total	3.03	6.94

*BS5906:2005 Waste Management in Buildings – Code of Practice*²⁴ has been considered in the calculations of waste estimates. AWN's modelling methodology is based on recently published data and data from numerous other similar developments in Ireland and is based on AWN's experience, it provides a more representative estimate of the likely waste arisings from the Proposed Development.

5. WASTE STORAGE AND COLLECTION

This section provides information on how waste generated within the site will be stored and collected. 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,*
- ▶ *The NWMPCE (2024);*
- ▶ *Fingal Development Plan 2023 – 2029 (2023);*
- ▶ *Fingal County Council Segregation Storage, Presentation and of Household and Commercial Waste (2020); and*
- ▶ *DoHLGH, Sustainable Urban Housing: Design Standards for New Apartments, Guidelines for Planning Authorities (2025)*²⁵.

Waste Storage Areas

The location of the Waste Storage Areas (WSAs) can be viewed on the drawings submitted with the planning application under separate cover and Appendix A of this report.

Locations

- ▶ There is one (1 no.) shared WSA for the Block A Apartment Units which is located internally at ground floor level.
- ▶ There is one (1 no.) shared WSA for the Block B Apartment Units which is located internally at ground floor level.
- ▶ There is one (1 no.) shared WSA for the Block C Apartment Units which is located internally at ground floor level.
- ▶ There is one (1 no.) shared WSA for the Block D Apartment Units which is located internally at ground floor level.
- ▶ There is one (1 no.) shared WSA for the Block E Apartment Units which is located internally at ground floor level.
- ▶ There is one (1 no.) WSA for the Commercial Units in Block E which is located internally at ground floor level.
- ▶ There is one (1 no.) WSAs for the Creche Unit in Block A which is located externally at ground floor level.

Using the estimated waste generation volumes in Tables 4.1 to 4.3, the waste receptacle requirements for MNR, DMR, organic waste and glass have been established for the WSA. It is envisaged that MNR, DMR, organic waste and glass will be collected on a weekly basis.

If it is not feasible to provide an appropriate bin wash area, a contract can be put in place with the nominated contractor to collect and wash the bins.

Waste Storage Requirements

Estimated waste storage requirements for the operational phase of the Proposed Development are detailed in Table 5.1, below.

Table 5.1 Waste Storage Requirements for the Proposed Development

Area/Use	Bins Required			
	MNR ¹	DMR ²	Glass	Organic
Block A (Shared WSA)	3 x 1100L	6 x 1100L	1 x 240L	4 x 240L
Block B (Shared WSA)	4 x 1100L	6 x 1100L & 1 x 240L	1 x 240L	4 x 240L
Block C (Shared WSA)	4 x 1100L	6 x 1100L & 1 x 240L	1 x 240L	4 x 240L
Block D (Shared WSA)	3 x 1100L & 1 x 240L	6 x 1100L	1 x 240L	4 x 240L
Block E (Shared WSA)	3 x 1100L	6 x 1100L	1 x 240L	4 x 240L
Creche Unit	1 x 1100L	2 x 1100L	1 x 120L	1 x 120L
Commercial Units	2 x 1100L	5 x 1100L	1 x 240L	1 x 240L

Note: ¹ = Mixed Non-Recyclables

² = Dry Mixed Recyclables

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

Waste storage receptacles as per Table 5.1 above (or similar appropriate approved containers) will be provided by the facilities management company in the WSA.

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 in the WSA are shown in Figure 5.1. All waste receptacles used will comply with the SIST EN 840-1:2020 and SIST EN 840-2:2020 as the standards for performance requirements of mobile waste containers, where appropriate.

**Figure 5.1 Typical Waste Receptacles of Varying Size (240L and 1100L)**

Receptacles for organic, mixed dry recyclable, glass and mixed non-recyclable waste will be provided in the WSA prior to first occupation of the development i.e. prior to the first residential unit or creche / commercial unit being occupied.

Tenants in the creche and commercial units will be required to supply their own waste receptacles. Bins for the shared WSAs will be supplied by the facilities management company.

This Plan will be provided to each resident commercial and creche tenant from first occupation of the Proposed Development i.e. once the first residential unit or creche / commercial unit is occupied. This Plan will be supplemented, as required, by the facilities management company with any new information on waste segregation, storage, reuse and recycling initiatives that are subsequently introduced. Training will be provided to the relevant staff on the implementation of the Plan.

5.1 Operational Phase Waste Storage – Residential Units

Residents will be required to segregate waste into the following main waste streams:

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

Provision will be made in all residential units to accommodate 3 no. bin types to facilitate waste segregation at source. An example of a potential 3 bin storage system is provided in Figure 5.2 below.



Figure 5.2 Example Three Bin Storage System to be Provided Within the Unit Design

Access to the shared WSAs will be restricted to authorised residents, facilities management and waste contractors by means of a key or electronic fob access. The location of the shared WSAs are illustrated in the drawings submitted with the planning application under a separate cover and in Appendix A of this report.

Graphical signage will be erected by facilities management, above or on the bins to show exactly which wastes can be put in each. Bins / containers will also be colour coded to avoid cross contamination of the different waste streams.

Other waste materials such as textiles, batteries, printer toner / cartridges, cooking oil 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 5.4.

5.2 Waste Storage – Creche Unit

The creche tenants will be required to segregate their waste into the following main waste categories within their own unit:

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

The creche tenants will be required to take their segregated waste materials to their designated WSA and deposit their segregated waste into the appropriate bins. The location of the WSA is illustrated in the drawings submitted with the planning application under separate cover.

Suppliers for the creche tenants should be requested by the tenants to make deliveries in reusable containers, minimize packaging or remove any packaging after delivery, where possible, to reduce waste generated by the Proposed Development.

If any kitchens are allocated in creche unit, this will contribute a significant portion of the volume of waste generated on a daily basis, and as such it is important that adequate provision is made for the storage and transfer of waste from these areas to the WSA.

If kitchens are required it is anticipated that waste will be generated in kitchens throughout the day, primarily at the following locations:

- ▶ Food Storage Areas (i.e. cold stores, dry store, freezer stores and stores for decanting of deliveries);
- ▶ Meat Preparation Area;
- ▶ Vegetable Preparation Area;
- ▶ Cooking Area and
- ▶ Dish-wash and Glass-wash Area.

Small bins will be placed adjacent to each of these areas for temporary storage of waste generated during the day. Waste will then be transferred from these areas to the designated creche WSA.

All bins / containers in the creche tenants area as well as in the WSA will be clearly labelled and colour coded to avoid cross contamination of the different waste streams. Signage will be posted above or on the bins to show exactly which wastes can be put in each.

Access to the creche WSA will be restricted to authorised tenants, facilities management and waste contractors by means of a key or electronic fob access.

Other waste materials such as textiles, batteries, printer toner/cartridges, cooking oil and WEEE may be generated infrequently by the tenants. Tenants 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 5.4.

5.3 Waste Storage – Commercial Units

The commercial tenants will be required to segregate their waste into the following main waste categories within their own unit:

- ▶ Organic waste;
- ▶ DMR;
- ▶ Glass; and

► MNR.

The commercial tenants will be required to take their segregated waste materials to their designated WSA and deposit their segregated waste into the appropriate bins. The location of the WSA is illustrated in the drawings submitted with the planning application under separate cover.

Suppliers for the commercial tenants should be requested by the tenants to make deliveries in reusable containers, minimize packaging or remove any packaging after delivery, where possible, to reduce waste generated by the Proposed Development.

If any kitchens are allocated in commercial units, this will contribute a significant portion of the volume of waste generated on a daily basis, and as such it is important that adequate provision is made for the storage and transfer of waste from these areas to the WSA.

If kitchens are required it is anticipated that waste will be generated in kitchens throughout the day, primarily at the following locations:

- Food Storage Areas (i.e. cold stores, dry store, freezer stores and stores for decanting of deliveries);
- Meat Preparation Area;
- Vegetable Preparation Area;
- Cooking Area and
- Dish-wash and Glass-wash Area.

Small bins will be placed adjacent to each of these areas for temporary storage of waste generated during the day. Waste will then be transferred from these areas to the designated commercial WSA.

All bins / containers in the commercial tenants area as well as in the WSA will be clearly labelled and colour coded to avoid cross contamination of the different waste streams. Signage will be posted above or on the bins to show exactly which wastes can be put in each.

Access to the commercial WSA will be restricted to authorised tenants, facilities management and waste contractors by means of a key or electronic fob access.

Other waste materials such as textiles, batteries, printer toner/cartridges, cooking oil and WEEE may be generated infrequently by the tenants. Tenants 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 5.4.

5.4 Waste Collection

There are numerous contractors that provide waste collection services in the FCC area. All waste contractors servicing the development must hold a valid waste collection permit for the specific waste types collected. All waste collected must be transported to registered / permitted / licensed facilities only.

Upon collection, bins from the shared WSAs, the creche WSA and the commercial WSA will be taken directly from the WSAs to the waste truck for emptying by the waste contractor or facilities management, depending on agreement., there will be no temporary staging area associated with this Proposed Development. Bins will be returned to the shared WSAs, creche WSA and commercial WSA immediately following collection in line with the FCC waste bye-laws by the waste contractor or facilities management, depending on agreement. A road sweep analysis of the development can be found in Appendix B of this report.

The collection of bins will be such that it will not obstruct traffic or pedestrians (allowing a footway path of at least 1.8m, the space needed for two wheelchairs to pass each other) as is recommended in the *Design Manual for Urban Roads and Streets* (2019) ²⁶.

Suitable access and egress have been provided to enable the bins to be moved easily from the WSAs to the waste collection vehicles on the appropriate days. Waste will be collected at agreed days and times by the nominated waste contractors.

All waste receptacles should be clearly identified as required by waste legislation and the requirements of the FCC *Waste Bye-Laws*. Waste will be presented for collection in a manner that will not endanger health, create a risk to traffic, harm the environment or create a nuisance through odours or litter.

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

5.5 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.

Deposit Return Scheme

Most drinks containers can be recycled via the deposit return scheme, such as bottles, cans and tins made from plastic, aluminium or steel can be returned once they are between 150ml and 3 litres in size and have the Re-turn logo on them.

At the shops you can either return the containers:

- ▶ Using a Reverse Vending Machine (RVM)
- ▶ Manually in the shop

If a shop does not have a RVM but they sell containers with the Re-turn logo, the shop may allow you to manually return containers in store, unless they have a take back exemption.

Locations of RVM machines can be found via the Re-turn website (www.re-turn.ie)

Green Waste

Green waste may be generated from gardens, external landscaping and internal plants / flowers. Green waste generated from landscaping of external areas will be removed by external landscape contractors. Green waste generated from gardens internal plants / flowers can be placed in the organic waste bins.

Batteries

A take-back service for waste batteries and accumulators (e.g. rechargeable batteries) is in place in order to comply with the S.I. No. 283/2014 - European Union (Batteries and Accumulators) Regulations 2014, as amended. In accordance with these regulations, consumers are able to bring their waste batteries to their local civic amenity 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.

The creche and commercial tenants cannot use the civic amenity centre. They must segregate their waste batteries and either avail of the take-back service provided by retailers or arrange for recycling / recovery of their waste batteries by a suitably permitted / licenced contractor. Facilities management may arrange collection, depending on the agreement.

Waste Electrical and Electronic Equipment (WEEE)

The WEEE Directive (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.

As noted above, the creche and commercial tenants cannot use the civic amenity centre. They must segregate their WEEE and either avail of the take-back / collection service provided by retailers or arrange for recycling / recovery of their WEEE by a suitably permitted / licenced contractor. Facilities management may arrange collection, depending on the agreement.

Printer Cartridge / Toners

It is recommended that a printer cartridge / toner bin is provided in the commercial and creche units, where appropriate. The commercial and creche tenants will be required to store this waste within their units and arrange for return to retailers or collection by an authorised waste contractor, as required.

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

Chemicals (such as solvents, paints, adhesives, resins, detergents, 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 waste cleaning products or waste packaging from cleaning products generated in the commercial or creche units that is classed as hazardous (if they arise) will be appropriately stored within the tenants' own spaces. Facilities management may arrange collection, depending on the agreement.

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

Light Bulbs

Waste light bulbs (fluorescent, incandescent and LED) may be generated by lighting at the commercial or creche units. It is anticipated that commercial and creche tenants will be responsible for the off-site removal and appropriate recovery / disposal of these wastes. Facilities management may arrange collection, depending on the agreement.

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. The residents, commercial and creche tenants will be responsible for disposing of waste textiles appropriately.

Waste Cooking Oil

If the commercial or creche tenants use cooking oil, waste cooking oil will need to be stored within the unit on a bunded area or spill pallet and regular collections by a dedicated waste contractor will need to be organized as required. Under sink grease traps will be installed in any cooking space.

If the residents generate waste cooking oil, this can be brought to a civic amenity centre.

Furniture & Other Bulky Waste Items

Furniture and other bulky waste items (such as carpet, etc.) may occasionally be generated by the commercial or creche tenants. The collection of bulky waste will be arranged, as required by the tenants. If residents wish to dispose of furniture, this can be brought a civic amenity centre.

Abandoned Bicycles

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 or facilities management may arrange collection by a licensed waste contractor.

5.6 Waste Storage Area Design

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

- ▶ Be fitted with a non-slip floor surface;
- ▶ Provide ventilation to reduce the potential for generation of odours with a recommended 6-10 air changes per hour for a mechanical system for internal WSA;
- ▶ Provide suitable lighting – a minimum Lux rating of 400 is recommended;
- ▶ Be easily accessible for people with limited mobility;
- ▶ Be restricted to access by nominated personnel only;
- ▶ Be supplied with hot or cold water for disinfection and washing of bins;
- ▶ Be fitted with suitable power supply for power washers;
- ▶ Have a sloped floor to a central foul drain for bins washing run-off;
- ▶ Have appropriate signage placed above and on bins indicating correct use;
- ▶ Have access for potential control of vermin, if required; and
- ▶ Be fitted with CCTV for monitoring.

The facilities management company, residents and commercial and creche tenants will be required to maintain the bins and storage areas in good condition as required by the FCC Waste Bye-Laws.

5.7 Facility Management Responsibilities

It shall be the responsibility of the Facilities Management Company to ensure that all waste generated by residents, commercial and creche tenants is managed to ensure correct storage prior to collection by an appropriately permitted waste management company.

Facilities Management will provide the following items to all residents, commercial and creche tenants and any facilities management team appointed:

- ▶ Provision of a Waste Management Plan document, prepared by the Facilities Management Company to all residential units, commercial and creche tenants and facilities management staff which shall clearly state the methods of source waste segregation, storage, reuse and recycling initiatives that shall apply to the management of the Proposed Development;

- ▶ Provision and maintenance of appropriate graphical signage in the shared WSAs, commercial WSA and creche WSA to inform residents and commercial and creche tenants of their obligation to reduce waste, segregate waste and in the correct bin;
- ▶ Preparation of a waste management report for all residents, commercial and creche tenants and staff to view;
- ▶ Designation of access routes to shared waste storage areas to ensure safe access from the residential units by mobility impaired persons;
- ▶ Provision of an appropriately qualified and experienced staff member, who will be responsible for all aspects of waste management at the development for the shared WSAs, commercial WSA and creche WSA;
- ▶ Frequent inspection of shared waste storage areas, commercial and creche waste storage areas and signing of a check list, which shall be displayed within the area; and
- ▶ Maintenance of a register, detailing the quantities and breakdown of wastes collected from the development and provision of supporting documentation by the waste collector to allow tracking of waste recycling rates.

5.8 Pest Management

A pest control operator will be appointed as required to manage pests onsite during the operational phase of the development. All waste generated within the Proposed Development will be stored in closed waste receptacles both within units and within the shared WSAs, commercial WSA and creche WSA. Any waste receptacles will be carefully managed to prevent leaks, odours and pest problems.

The shared WSAs, commercial WSA and creche WSA will have access for potential control of vermin, if required, be supplied with hot or cold water, drainage point and will be regularly inspected by facilities management to deter pests.

6. SUMMARY AND CONCLUSION

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 Proposed Development.

Implementation of this OWMP will ensure a high level of recycling, reuse and recovery at the Proposed Development. All recyclable materials will be segregated at source to reduce waste contractor costs and ensure maximum diversion of materials from landfill, thus contributing to the targets set out in the *NWMPCE 2024 - 2030*.

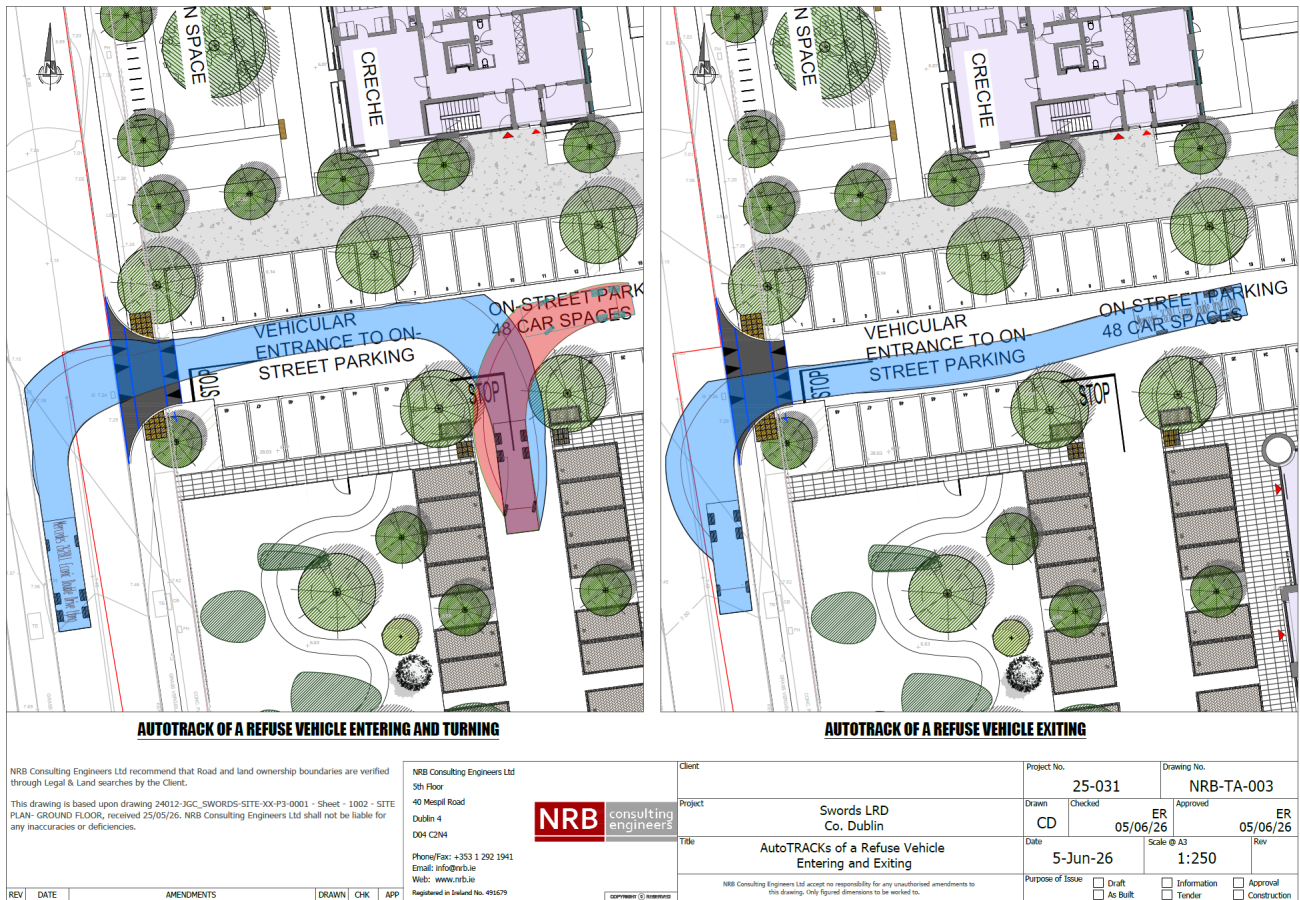
Adherence to this plan will also ensure that waste management at the Proposed Development is carried out in accordance with the requirements of the *FCC Waste Bye-Laws*.

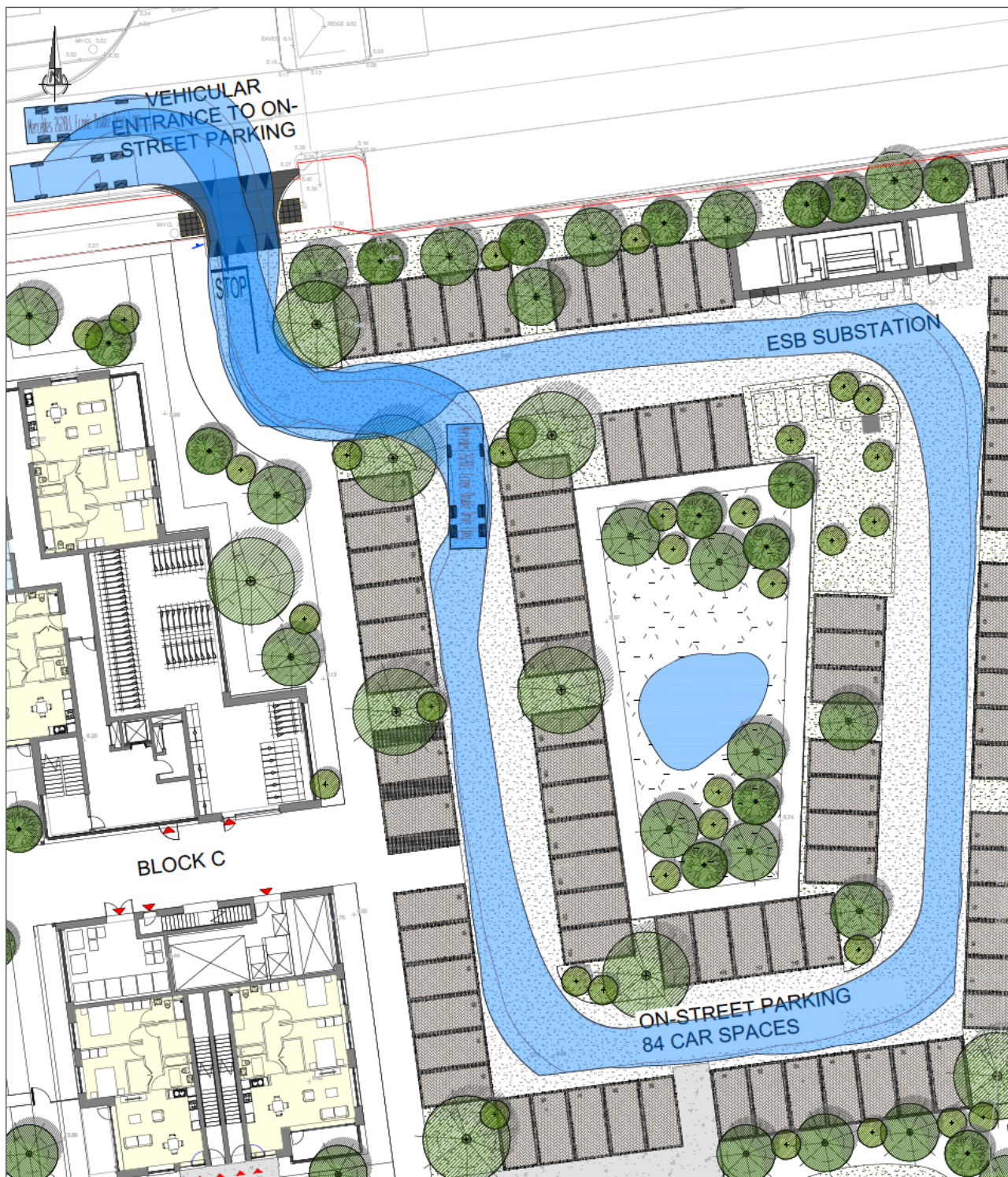
The waste strategy presented in this document will provide sufficient storage capacity for the estimated quantity of segregated waste. The designated areas for waste storage will provide sufficient room for the required receptacles in accordance with the details of this strategy.

7. REFERENCES

1. Waste Management Act 1996 as amended.
2. Environmental Protection Agency Act 1992 as amended.
3. Litter Pollution Act 1997 as amended.
4. Regional Waste Management Planning Offices, *The National Waste Management Plan for a Circular Economy 2024 - 2030 (2024)*.
5. Fingal County Council, Segregation Storage, Presentation and of Household and Commercial Waste (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 (DCCAE), *Waste Action Plan for the Circular Economy - Ireland's National Waste Policy 2020-2025* (2020).
11. DCCAE, *Whole of Government Circular Economy Strategy 2022-2023 'Living More, Using Less'* (2021).
12. Whole of Government Circular Economy Strategy 2026-2028: 'Accelerating Action' (2026)
13. Circular Economy and Miscellaneous Provisions Act 2022.
14. The Department of Housing, Local Government and Heritage authored *Sustainable Residential Development and Compact Settlements - Guidelines for Planning Authorities* (2024).
15. Environmental Protection Agency (EPA), *National Waste Database Reports 1998 – 2020* and the *Circular Economy and National Waste Database Report 2021 – 2022* (2024).
16. *Waste Management (Landfill Levy) (Amendment) Regulations 2015*.
17. *Circular Economy and National Waste Database Report 2021 – 2022* (2024)
18. FCC, *Fingal County Development Plan 2023 – 2029* (2023).
19. Planning and Development Act 2000 (S.I. No. 30 of 2000) as amended.
20. European Waste Catalogue - Council Decision 94/3/EC (as per Council Directive 75/442/EC).
21. Hazardous Waste List - Council Decision 94/904/EC (as per Council Directive 91/689/EEC).
22. EPA, *European Waste Catalogue and Hazardous Waste List* (2002).
23. EPA, *Waste Classification – List of Waste & Determining if Waste is Hazardous or Non-Hazardous* (2018).
24. BS 5906:2005 Waste Management in Buildings – Code of Practice.
25. Department of Housing Local Government and Heritage (DoHLGH), *Sustainable Urban Housing: Design Standards for New Apartments, Guidelines for Planning Authorities* (2025).
26. Department of Housing Local Government and Heritage (DoHLGH), *Design Manual for Urban Roads and Streets* (2019).

APPENDIX B. ROAD SWEEP ANALYSIS FOR REFUSE TRUCK





AUTOTRACK OF A REFUSE VEHICLE ENTERING AND EXITING THE DEVELOPMENT

NRB Consulting Engineers Ltd recommend that Road and land ownership boundaries are verified through Legal & Land searches by the Client.

This drawing is based upon drawing 24012-JGC_SWORDES-SITE-XX-P3-0001 - Sheet - 1002 - SITE PLAN- GROUND FLOOR, received 25/05/26. NRB Consulting Engineers Ltd shall not be liable for any inaccuracies or deficiencies.

REV	DATE	AMENDMENTS	DRAWN	CHK	APP	Project No.		Drawing No.	
						25-031		NRB-TA-004	
						Drawn	Checked	ER	Approved
						CD	05/06/26	05/06/26	ER
						Date	5-Jun-26		Scale @ A3
							1:250		Rev
						Purpose of Issue		☐ Draft	☐ Information
								☐ As Built	☐ Approval
								☐ Tender	☐ Construction