

OPERATIONAL WASTE & RECYCLING MANAGEMENT PLAN

FOR DEVELOPMENT

AT

CARLEYS BRIDGE STREET,
ENNISCORTHY, CO. WEXFORD



Prepared for

Torca Developments Ltd.

Prepared by

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1.0 INTRODUCTION

This Operational Waste Management Strategy (the 'Strategy') has been prepared by Nevin Traynor BSc.Env, HDIP IT, Cert SHWW, IAH of Traynor Environmental Ltd on behalf of Torca Developments Ltd. ('The Applicant') in support of the proposed Carleys Bridge, Enniscorthy, development (hereafter referred to as the 'Proposed Development') within the Wexford County Council area.

The principal aim of this Strategy is to demonstrate how the Proposed Development has taken into account sustainable methods for waste and recycling management during its operation. Furthermore, with regards to waste and recycling management within the Proposed Development, this Strategy has the following aims:

- To contribute towards achieving current and long-term government, Southern Region waste Management Plan (SR) and Wexford County Council targets for waste minimisation, recycling and re-use;
- To comply with all legal requirements for handling operational waste;
- To achieve high standards of waste management performance, through giving (and continuing to give) due consideration to the waste generated by the Proposed Development during its operation; and
- To provide the Proposed Development with a convenient, clean and efficient waste management strategy that enhances the operation of the Proposed Development and promotes recycling.

It is important to note that the Wexford County Council is part of the Southern Region Waste Management Area. The Southern Region comprises the 10 local authority areas of – Carlow, Clare, Cork County, Cork City, Limerick City & County, Kerry, Kilkenny, Tipperary, Waterford City & County and Wexford.

This Strategy provides a review of the requirements placed upon the Proposed Development under national legislation and implemented policy at all levels of government (i.e. national (Ireland), regional (SR), district and local (Wexford County Council)) Consideration has also been given to requirements included in local standards and guidance documents (i.e. DoEHLG, Sustainable Urban Housing: Design Standards for New Apartments, Guidelines for Planning Authorities (2018) in line with the Regional Waste Management Plan and British Standard Waste Management in Buildings, Code of Practice (BS 5906:2005) so as to comply with relevant objectives and targets.

Estimate volumes of waste generated during operation of the Proposed Development have been provided in the report which also include a breakdown of the waste management process, which details waste handling, storage area provision, and collection arrangements. All waste reduction measures are compliant with BS 5906:2005, Southern Region (SR) and Sustainable Urban Housing: Design Standards for New Apartments which are also discussed in this strategy.

2.0 LEGISLATION/ PLANNING POLICY

A summary of the European, national regional and local planning policy relevant to the Proposed Development is outlined in the section below. It should be noted that this summary identifies those elements of the policy or guidance applicable to waste management within the Proposed Development.

2.1 International and European Policy

The EU Waste Framework Directive (EU WFD) provides the overarching legislative framework for the collection, transport, recovery and disposal of waste, and includes a common definition of waste. It encourages the prevention and reduction of harmful waste by requiring that Member States put waste control regimes into place. These waste management authorities and plans should ensure that necessary measures exist to recover or dispose of waste without endangering human health or causing harm to the environment and includes permitting, registration and inspection requirements.

The directive also requires Member States to take appropriate measures to encourage firstly, the prevention or reduction of waste production and its harmfulness and secondly the recovery of waste by means of recycling, re-use or reclamation or any other process with a view to extracting secondary raw materials, or the use of waste as a source of energy. The directive also puts an end to co-disposal of waste streams.

The definition of waste for the Ireland is governed by the EU WFS as:

“Any substance or object...which the holder discards or intends or is required to discard.”

It is the responsibility of the holder of a substance or object to decide whether or not they are handling waste. The European Protection Agency is the authority responsible for enforcing waste management legislation in Ireland, but where there is a disagreement as to whether or not something is waste it is ultimately a matter for the courts to decide.

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

The European Landfill Directive is in place to reduce the negative effects of land filling on the environment and health. It aims to encourage waste minimisation and increased levels of recycling and recovery; the increased costs of land filling associated with compliance with the Directive will also encourage alternative waste management methods.

The first requirement of the regulations was a ban on the co-disposal of hazardous waste with non-hazardous waste in landfills. The Directive has also imposed a ban on whole tyres going to landfill since 2003, with this ban extending to shredded tyres from July 2006, while liquid wastes were banned from landfill from October 2007.

The Directive also brings with it, tighter site monitoring and engineering standards. This is supplemented by the European Waste Catalogue, which has extended the range of materials classified as 'hazardous', and the Waste Acceptance Criteria, which has introduced potential pre-treatment requirements.

2.2 National Legislation

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

A further policy document '*Preventing and Recycling Waste – Delivering Change*' was published in 2002. 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*'. This document also stressed the need to break the link between economic growth and waste generation, again through waste minimisation and reuse of discarded material.

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

The most recent policy document was published in July 2012 titled '*A Resource Opportunity*'. The policy document stresses the environmental and economic benefits of better waste management, particularly in relation to waste prevention. The document sets out a number of actions, including the following:

- A move away from landfill and replacement through prevention, reuse, recycling and recovery.
- A Brown Bin roll-out diverting 'organic waste' towards more productive uses.
- Introducing a new regulatory regime for the existing side-by-side competition model within the household waste collection market;
- New Service Standards to ensure that consumers receive higher customer service standards from their operator;
- Placing responsibility on householders to prove they use an authorised waste collection service.
- The establishment of a team of Waste Enforcement Officers for cases relating to serious criminal activity will be prioritised;
- Reducing red tape for industry to identify and reduce any unnecessary administrative burdens on the waste management industry;
- Design of waste management equipment and systems must be approved by the supplier;
- A review of the producer responsibility model will be initiated to assess and evaluate the operation of the model in Ireland;
- Significant reduction of Waste Management Planning Regions from ten to three.

While *A Resource Opportunity* covers the period to 2020, it is subject to a mid-term review in 2016 to ensure that the measures are set out properly and to provide an opportunity for additional measures to be adopted in the event of inadequate performance. In early 2016, the Department of the Environment, Community and Local Government invited comments from interested parties on the discussion paper 'Exporting a Resource Opportunity'. While the EPA have issued a response to the consultation, an updated policy document has not yet been published.

In September 2020 the government released 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*' 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.

It aims to fulfil the commitment in the Programme for Government to publish and start implementing a new National Waste Action Plan. It is intended that this new national waste policy will inform and give direction to waste planning and management in Ireland over the coming years. It will be followed later this year by an All of Government Circular Economy Strategy. The policy document shifts focus away from waste disposal and moves it back up the production chain. To support the policy, regulation is already being used (Circular Economy Legislative Package) or in the pipeline

(Single Use Plastics Directive). The policy document contains over 200 measures across various waste areas including Circular Economy, Municipal Waste, Consumer Protection & Citizen Engagement, Plastics and Packaging, Construction and Demolition, Textiles, Green Public Procurement and Waste Enforcement.

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

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

2.3 Regional Level

The proposed development is located in the Local Authority area of Enniscorthy – Wexford County Council. The *SR Waste Management Plan 2015 – 2021* is the regional waste management plan for the area which was published in May 2015. This plan replaces the previous Wexford region plan due to changing National policy as set out in *A Resource Opportunity: Waste Management Policy in Ireland* and changes being enacted by the *Waste Framework Directive (2008/98/EC)*.

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

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

Municipal landfill charges in Ireland are based on the weight of waste disposed. In the Southern Region, charges are approximately €130 - €150 per tonne of waste which includes a €75 per tonne landfill levy introduced under the *Waste Management (Landfill Levy) (Amendment) Regulations 2015*. The Enniscorthy County Development Plan 2016 – 2022 sets out a number of objectives and actions for the Enniscorthy area in line with the objectives of the regional waste management plan.

Waste policies with a particular relevance to the proposed development are as follows:

Policy EI12: Waste Management Strategy

It is Council policy to conform to the European Union and National waste management hierarchy as follows:

- waste prevention
- minimisation
- re-use
- waste recycling
- energy recovery and
- disposal

subject to economic and technical feasibility and Environmental Assessment.

Policy EI13: Waste Plans

It is Council policy to publish plans for the collection, treatment, handling and disposal of waste in accordance with the provisions of the Waste Management Act 1996 (as amended) and Protection of the Environment Act 2003 (as amended).

Policy EI14: Private Waste Companies

It is Council policy to ensure that all waste that is disposed of by private waste companies is done so in compliance with the requirements of the Environmental Protection Agency and the Waste Management Legislation and in accordance with the Planning Code.

Policy EI15: Waste Prevention and Reduction

It is Council policy to promote the prevention and reduction of waste and to co-operate with industry and other agencies in viable schemes to achieve this.

Policy EI16: Waste Re-use and Re-cycling

It is Council policy to promote the increased re-use and re-cycling of materials from all waste streams. The Council will co-operate with other agencies in viable schemes for the extraction of useful materials from refuse for re-use or re-cycling and will adopt the National targets as stated in the 'Wexford Regional Waste Management Plan 2005-2010'. (Note: the SR Waste Management Plan 2015 - 2021 was published in 2015. It is assumed this objective is relevant to the

SR Waste Management Plan and not the Wexford Regional Waste Management Plan which is no longer valid). In addition, Planning Scheme Objective PD15 states “To promote the strategic design and location of bin-stores, service boxes and similar ancillary provision, including meter boxes, into the curtilage of developments or as positive design features that enhance the local streetscape and do not register as visual clutter”.

2.4 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. Sub-ordinate legislation includes:
 - European Communities (Waste Directive) Regulations 2011 (SI 126 of 2011) as amended
 - Waste Management (Collection Permit) Regulations (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 2004 (S.I. No. 395 of 2004) as amended
 - Waste Management (Packaging) Regulations 2014 (S.I. 282 of 2014) as amended
 - Waste Management (Planning) Regulations 1997 (S.I. No. 137 of 1997)
 - Waste Management (Landfill Levy) Regulations 2015 (S.I. No. 189 of 2015)
 - European Union (Waste Electrical and Electronic Equipment) Regulations 2014 (S.I. No. 149 of 2014)
 - European Union (Batteries and Accumulators) Regulations 2014 (S.I. No. 283 of 2014) as amended
 - Waste Management (Food Waste) Regulations 2009 (S.I. 508 of 2009), as amended
 - European Union (Household Food Waste and Bio-waste) Regulation 2015 (S.I. No. 191 of 2015)
 - Waste Management (Hazardous Waste) Regulations, 1998 (S.I. No. 163 of 1998) as amended
 - Waste Management (Shipments of Waste) Regulations, 2007 (S.I. No. 419 of 2007) as amended
 - Waste Management (Movement of Hazardous Waste) Regulations, 1998 (S.I. No. 147 of 1998)
 - 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) as amended.
- Environmental Protection Act 1992 (No. 7 of 1992) as amended.
- Litter Pollution Act 1997 (No. 12 of 1997) as amended.
- Planning and Development Act 2000 (No. 30 of 2000) as amended.

2.5 Responsibilities of the Waste Producer

The waste producer is responsible for waste from the time it is generated through until its legal disposal (including its method of disposal.) Waste contractors will be employed to physically transport waste to the final waste disposal / recovery site.

It is therefore imperative that the residents, commercial tenants and the proposed facilities management company undertake on-site management of waste in accordance with all legal requirements and employ suitably permitted/licenced contractors to undertake off-site management of their waste in accordance with all legal requirements. This includes the

requirement that a waste contactor handle, transport and reuse/recover/recycle/dispose of waste in a manner that ensures that no adverse environmental impacts occur as a result of any of these activities.

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

2.6 Wexford County Council Bye Laws

By-Laws Section 2 - Obligation to Participate in a Waste Collection Service

a) Subject to paragraph (b), household kerbside waste that arises from the premises where such waste is produced shall not be presented to any person other than to an authorised waste collector.

b) Paragraph (a) does not apply where such waste:

(i) is deposited in an appropriate waste container provided under a contract by an authorised waste company to another person for the management of that waste and where that other person has consented to the receipt of that waste, or

(ii) is delivered directly by the holder to an authorised waste facility.

c) Documentary evidence, such as receipts, statements or other proof of payment, demonstrating compliance with this bye-law shall be presented to an authorised person within a time specified in a written request from either that person or from another authorised person employed by Wexford County Council.

By-Laws Section 3 - Maintenance and Management of Waste Containers

Containers used for the presentation of kerbside waste shall be maintained in such condition and state of repair that the waste placed therein will not be a source of nuisance or litter. Waste shall not be presented in a container where:

a) the wheels or lid have been removed or damaged to such an extent that it is not able to contain the waste without spillage, is otherwise unfit for the purpose for which it was designed or is not capable of being conveniently emptied.

By-Laws Section 4 - Location for container storage

Other than on the day before and the designated waste collection day, containers used for the presentation of kerbside waste shall be held within the curtilage of the premises where the waste is produced. They shall not be stored on a roadway, footway, footpath or any other public place unless the location has been expressly authorised in writing by an authorised person.

By-Laws Section 5 - Use of Waste Containers on Collection Day

- (a) Subject to paragraph (b), household kerbside waste shall only be presented for collection in an appropriate waste container. The container shall not be over-loaded and the lid shall be securely closed. No waste shall be presented on the top of the lid or adjacent to the waste container.
- (b) Paragraph (a) shall not apply where waste is collected in bags or sacks from households that are granted a bag exemption from Wexford County Council.

By-Laws Section 6 - Collection Times and Container Removal

Kerbside waste presented for collection shall not be presented for collection earlier than 07.00 pm on the day immediately preceding the designated waste collection day.

Or:

- a) 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 09:00am on the day following the designated waste collection day, unless an alternative arrangement has been approved in accordance with bye-law 6 {see above}.

By-Laws Section 7 - Prohibited Waste Types

Household waste that comprises hazardous waste or waste electrical and electronic equipment shall not be placed in an appropriate waste container for kerbside collection.

By-Laws Section 8 - Segregation of Household Waste, Contamination Prevention and Extending Food Waste Collection

- a) Subject to paragraph (c), household kerbside waste shall be segregated into residual household kerbside waste and recyclable household kerbside waste, with these fractions being stored separately. Any such separated recyclable waste shall not be deposited into a container designated for residual household kerbside waste and no such residual waste shall be deposited into a container designated for recyclable household kerbside waste.
- b) Neither recyclable household kerbside waste nor food waste arising from households shall be contaminated with any other type of waste before or after it has been segregated.

- c) Where a dwelling is situated in any place in Wexford where there is a brown bin collection service, household kerbside waste shall be segregated into residual/ household kerbside waste, recyclable household kerbside waste and food waste, with these fractions being stored separately. Such separated recyclable waste shall not be deposited into a container designated for residual household kerbside waste or for food waste; separated food waste shall not be deposited into a container designated for residual household kerbside waste or recyclable household kerbside waste.

By-Laws Section 9 - Additional Provisions for Householders not availing of a Kerbside Collection Service

Where an occupier of a dwelling is not participating in a household kerbside waste collection service, that person shall ensure that:

- a) recyclable household kerbside waste segregated in compliance with bye-law 8 is taken to an authorised waste facility and is deposited there in a manner that allows it to be recycled or otherwise recovered,
- b) residual household kerbside waste segregated in compliance with bye-law 8 is taken to an authorised waste facility, and
- c) 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.

Documentation required to be obtained and retained by this bye-law, or copies of it, shall be presented to an authorised person within a time period specified in a written request from either that person or from another authorised person employed by Wexford County Council.

By-Laws Section 10 - Provisions affecting Multi-user Buildings, Apartment Blocks, etc.

A management company, or another person if there is no such company, who exercises control and supervision of residential and/or commercial activities in multi-unit developments, mixed-use developments, flats or apartment blocks, combined living/working spaces or other similar complexes shall ensure that:

- a) separate receptacles of adequate size and number are provided for the proper segregation, storage and collection of recyclable household kerbside waste and residual household kerbside waste.
- b) additional receptacles are provided for the segregation, storage and collection of food waste where this practice is a requirement of the national legislation on food waste,
- c) the receptacles referred to in paragraphs (a) and (b) are located both within any individual apartment and at the

place where waste is stored prior to its collection,

- d) any place where waste is to be stored prior to collection is secure, accessible at all times by tenants and other occupiers and is not accessible by any other person other than an authorised waste collector.
- e) written information is provided to each tenant or other occupier about the arrangements for waste separation, segregation, storage and presentation prior to collection,
- f) an authorised waste collector is engaged to service the receptacles referred to in this section of these bye-laws, with documentary evidence, such as receipts, statements or other proof of payment, demonstrating the existence of this engagement being retained for a period of no less than two years. Such evidence shall be presented to an authorised person within a time specified in a written request from either that person or from another authorised person employed by Wexford County Council,
- g) receptacles for kerbside waste are presented for collection on the designated waste collection day,
- h) adequate access and egress onto and from the premises by waste collection vehicles is maintained.

By-Laws Section 11 - Interference with Orderly Waste Collection

- a) Employees of an authorised waste collector or of Wexford County Council involved in the removal of waste shall not be willfully obstructed, disturbed, interrupted or otherwise interfered with in the course of their engagement in waste collection.
- b) Unless the following activities have been subject to approval by the authorised waste collector responsible for the container, a microchip attached to an appropriate waste container or any non-time expired identification mark, badge, label, tag, disc or other thing attached to that container or to a refuse bag or to another container shall not be removed, damaged, destroyed, tampered with or otherwise rendered inoperative.
- c) Waste stored or presented for the purposes of collection shall not be:
 - (i) supplemented by waste added by another person unless that person has been authorised to do so by the person storing or, as the case may be, presenting the container of waste for collection.
 - (ii) otherwise interfered with by another person.
- (d) Waste shall not be deposited into a refuse collection vehicle by any person other than by an employee of an authorised waste collector or a local authority

By-Laws Section 12 - Additional Provisions for Commercial Waste

Commercial waste shall not be deposited at any bring facility provided by or on behalf of Wexford County Council.

By-Laws Section 13 - Enforcement Provisions/Fixed Payment Notices.

- a) Subject to paragraph (b), a person found guilty of the contravention of these bye-Laws shall be liable to the penalty of no more than €2,500.
- b) Paragraph (a) shall not apply where a fixed payment notice has been issued in accordance with the Local Government Act 2001 (Bye-Laws) Regulations and where a full payment has been made by the person subject to that notice.
- c) Where the contravention of any provision of these bye-laws continues after a person has been subject to the fine referred to in paragraph (a), a person found guilty of an offence relating to this continued contravention shall be liable to a penalty of no more than €500. [penalty cannot exceed €500] per day for each day the contravention continues after that conviction.
- d) A fixed payment notice may be issued requiring a person found to have contravened or be contravening these bye-laws to make a payment of €75. Payment of this notice shall be made within 21 days of the date of the notice in order to avoid the person subject to this notice being prosecuted for the contravention of these bye- laws.

2.7 Regional Waste Management Service Providers & Facilities

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

As outlined in the new regional waste management plan, there is a decreasing number of landfills available in the region. Only three municipal solid waste landfills remain operational and are all operated by the private sector. There are a number of other licensed and permitted facilities in operation in the region including waste transfer stations, hazardous waste facilities and integrated waste management facilities. A copy of all CORs and waste permits issued by the Local Authorities are available from the NWCPO website and all waste/IED licenses issued are available from the EPA. Additionally, textiles and other bulky wastes can be brought to the following bring centres located in the Enniscorthy area:

- Enniscorthy Recycling Center - Kilcannon, Old Dublin Road, Enniscorthy, Co Wexford. Y21 KC43
- Bring Bank - 1978 Centre, St. John's Road Enniscorthy Wexford
- Bring Bank - Ross Road Car Park Enniscorthy Wexford Y21H5F3
- Bring Bank - St. Senan's National School, Templeshannon Enniscorthy Wexford Y21H4C9

2.8 Policy Context

Development Plan Policy generally sets out guidelines for waste management which conform to the European Union and National Waste Management Hierarchy as follows:

- Waste Prevention
- Minimisation
- Re-use
- Waste Recycling
- Energy Recovery
- Disposal



This guidance is subject to economic and technical feasibility and environmental assessment. Wexford County Council's Waste Management Strategy is firmly grounded in EU and National policy and can be summarised by the waste hierarchy of prevention, recycling, energy recovery and disposal.

3.0 DESCRIPTION OF THE PROJECT

3.1 Location, Size and Scale of the Development

Torca Developments Ltd. are applying for a Strategic Housing Development on a site at Enniscorthy, County Wexford. The site is located approximately 1.1km south-west of Enniscorthy town centre. The proposed Strategic Housing Development will comprise a residential development of 233 no. units (53 no., 3-4 bed houses and 180 no. 1/2/3 bed duplexes/apartments). Provision of a creche. Associated car parking, bicycle parking, and open spaces/landscaping. Vehicular and pedestrian accesses provided via Carley's Bridge Road to the north west, pedestrian/cyclist access via Carley's Bridge Road to the north and Millbrook Residential Estate to the east of the site. All associated site works including boundary treatments, plant, bin stores, site services and connections to facilitate the development.

Type	Number of Units				Total
	1-Bed	2-Bed	3-Bed	4-Bed	
Houses	-	-	45	8	53
Duplex	-	27	63	-	90
Apartments	72	13	5	-	90
Total	72	40	113	8	233

Table 1.0 Residential Development Unit Mix

Block	Public Amenities	Floor Space m ²
	Creche	290m ²
Total		290 m²

Table 2.0 Mixed Development Details Non-Residential Floor Areas

3.2 Typical Waste Categories

The predicted waste types that will be generated at the proposed development include the following:

- **Dry Mixed Recyclables (DMR)** – includes Newspaper / General paper Magazines, Cardboard Packaging, Drink (Aluminum) Cans, Washed Food (Steel/Tin) Cans, Washed Tetra-Pak Milk & Juice Cartons, Plastic Bottles (Mineral/Milk/Juice/Shampoo/Detergents), Rigid Plastics. (Pots/Tubs/Trays*)
- **Mixed Non-Recyclables (MNR) / All General Waste** – Nappies, soiled food, packaging, old candles, plasters, vacuum cleaner contents, broken delph, contaminated plastics.
- **Organic (food) Waste** – Bread, pasta and rice, Meat, fish, poultry bones, Out of date food (no plastic packaging), Tea Bags, Coffee grounds and paper filters. Fruit and vegetables (cooked and uncooked). Food soiled cardboard or paper (no coated paper) Eggs and dairy products (no plastic packaging) Paper napkin and paper towels
- **Glass**

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

- Green/garden waste - may be generated from internal plants and external landscaping carried out by the management company.
- Textiles
- Batteries
- Waste electrical and electronic equipment (WEEE)
- Chemicals (solvents, pesticides, paints, adhesives, resins, detergents, etc.)
- Furniture (and from time to time other bulky wastes)

Wastes should be segregated into the above waste types to ensure compliance with waste legislation and guidance set out in the Wexford County Council Bye-Laws, 2019, while maximising the re-use, recycling and recovery of waste with diversion from landfill wherever possible in line with Waste Management (Food Waste) Amendment Regulations 2015 (S.I. 191 of 2015) and the European Union (Household Food Waste and Bio Waste) Regulations 2015 (S.I. 191 of 2015), Waste Management (Food Waste) Regulations 2009 (S.I. 508/2009) and the Eastern-Midlands Regional Waste Management Plan 2015 – 2021).

3.3 European Waste Codes

Under the classification system, different types of wastes are fully defined by a code. The List of Waste (LoW) code (also referred to as European Waste Code or EWC) for typical waste materials expected to be generated during the operation of the proposed development are provided in the Table below 3.0.

Waste Material	LoW Code
Paper and Cardboard	20 01 01
Plastic	20 01 39
Metals	20 01 40
Mixed Municipal Waste	20 03 01
Glass	20 01 02
Biodegradable Kitchen Waste	20 01 08
Oils and Fats	20 01 25/26*
Biodegradable garden and park wastes	20 02 01
Textiles	20 01 11
Batteries and accumulators*	20 01 33*-34
Printer Toner / Cartridges*	20 01 27* -28
Green Waste	20 02 01

Waste electrical and electronic equipment*	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

Table 3.0 LoW Code

3.4 Methodology

3.4.1 Residential Calculation Methodology

Waste arisings were calculated in accordance with BS 5906:2005 and included a provision of 5 litres (L) of food waste per residential unit per week. These guidelines determine the minimum capacity for waste storage space to be allocated and are as follows:

- 30 liters (L) per unit + 70L per bedroom (see Table 4.0 for further details);
- Split 50:50 between DMR and residual waste; and
- 5L per residential unit for food waste.

Number of Bedrooms	Weekly Waste Arisings per Unit (L)			
	DMR	Food Waste	MNR	Total
1 Bedroom	50	5	50	105
2 Bedroom	85	5	85	175
3 Bedroom	120	5	120	245
4 Bedroom	155	5	155	315

Table 4.0 Weekly Waste Arisings Methodology

3.4.2 Commercial Calculation Methodology

BS 5906:2005 provides a methodology for the calculation of waste arisings from communal areas and crèche. These calculation methodologies are outlined within Table 5.0 of this Strategy. A 50:50 split between DMR and residual waste has been assumed for the crèche and communal area.

Land Use Class	Waste Storage Requirements	Waste Stream Ratios
Crèche	10L per m ² NIA	50: 50 DMR: Residual
Amenities Space	5L per m ² NIA	50: 50 DMR: Residual

Table 5.0 Commercial Waste Arising Calculations (Weekly)

4.0 ESTIMATED WASTE ARISING

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 and is presented in table 6.0 below.

Waste Volume (L/week)				
Waste Type	Houses	Duplex	Apartments	Totals
Organic Waste	265	450	450	1165
Mixed Dry Recyclables	6640	9855	5305	21800
Municipal Waste	6640	9855	5305	21800
Glass	265	450	450	1165
Total	13,810	20,610	11,510	45,930

Table 6.0 Residential Waste Prediction (L/per week)

Non-Residential Floor Areas	Location	Area (sq.m)	Area (sq.) GIA	Area(sq.) (NIA)	DMR (Recycling)	Food Waste	MNR (Residual)	Glass	Total (L)
Creche	North of Site	290	266.8	223.30	2233	1117	2233	1117	6,699
Total		290	266.8	223.30	2233	1117	2233	1117	6,699

Table 7.0 Amenities/Creche Waste Predictions (L/per week)

4.1 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 Wexford County Council. 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;
- Wexford County Council, *Presentation and Storage of Waste Bye-Laws* (2019);
- DoEHLG, Sustainable Urban Housing: Design Standards for New Apartments, Guidelines for Planning Authorities (2018).

4.2 Residential Waste and Recycling Management and Storage Strategy

It is required that space be provided for recycling bins to accommodate 50% of the total weekly volume. This is in line with the BS5906:2005 requirements. Residual waste (MNR) is required for 87.5% of the total weekly arising. For the purpose of the strategy Glass and Organic Waste is required for 87.5% of the total weekly arising.

Type	Number of Bins Required for a Weekly Collection			
	MNR 1100L	Organic 240L	DMR 1100L	Glass 240L
Apartments	2 x 1100L	2 x 240L	2 x 1100L	2 x 240L

Table 8.0 Residential Storage Requirements

Type	Number of Bins Required for a Weekly Collection			
	MNR	Organic	DMR	Glass
Crèche	2 x 1100L	2 x 240L	2 x 1100L	2 x 240L

Table 9.0 Amenity & Crèche Storage Requirements

4.3 Waste Storage Residential Units

Provision is made for the segregation and storage of domestic waste within each unit. Each unit is provided with bins in the kitchen area to enable the separation of waste into different waste streams – glass, food, DMR (Dry Mixed Recycling) and general waste.



Figure 1 below outlines the location of all bin stores on site. There are three types of bin store Type 1, Type 2 and Type 3. Plans elevations and section of these storage areas can be seen in figure 2 – 4.

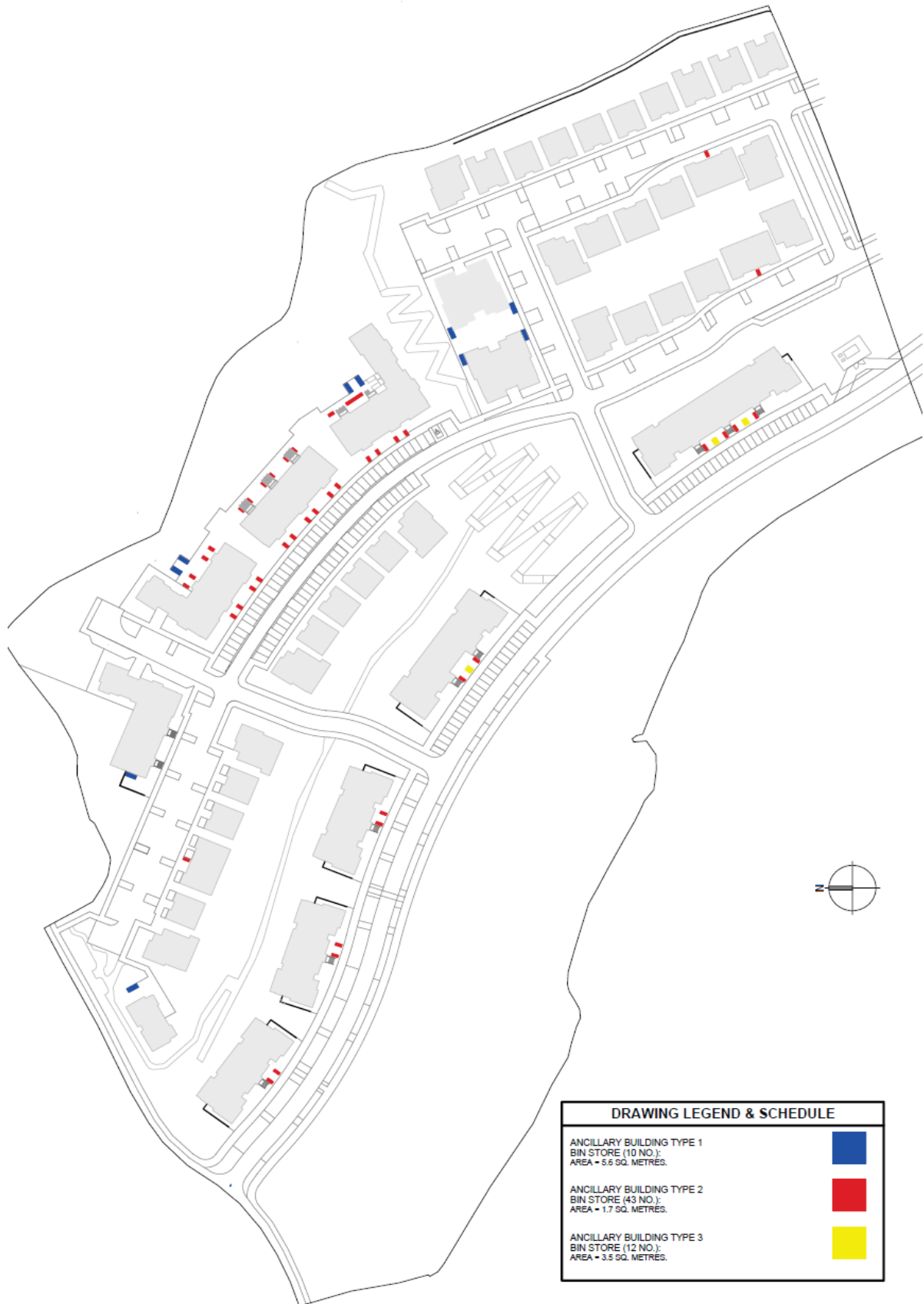


Figure 1 Location of Bin Stores on site.

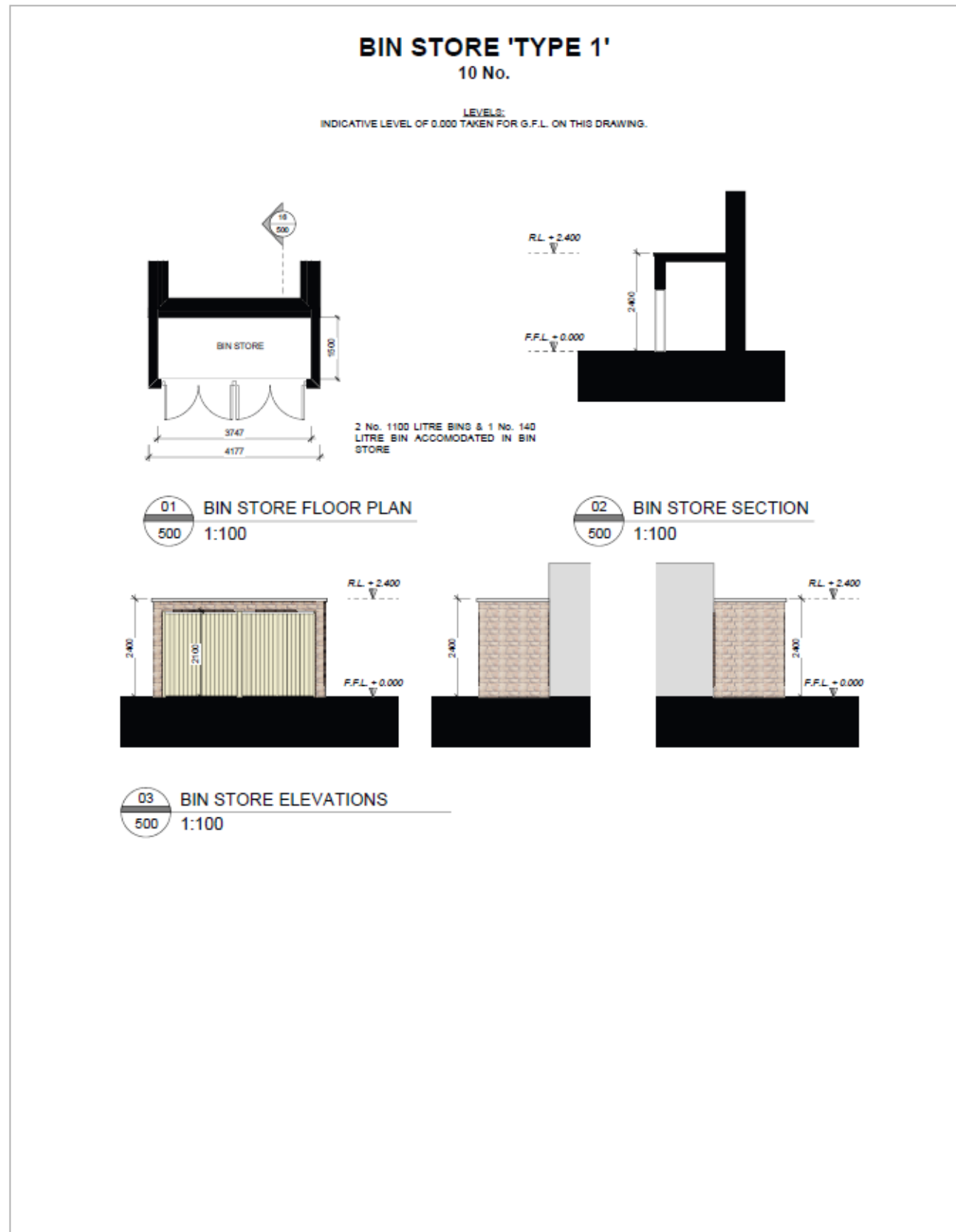
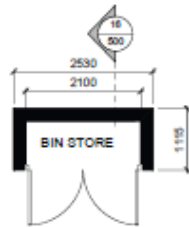


Figure 2 – Bin Store Type 1

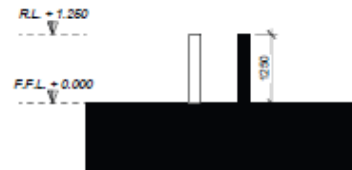
BIN STORE 'TYPE 2' 43 No.

LEVELS:
INDICATIVE LEVEL OF 0.000 TAKEN FOR G.F.L. ON THIS DRAWING.

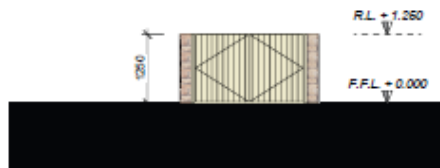


2 No. 240 LITRE BINS & 1 No. 140 LITRE BIN ACCOMMODATED IN BIN STORE

04 BIN STORE FLOOR PLAN
500 1:100



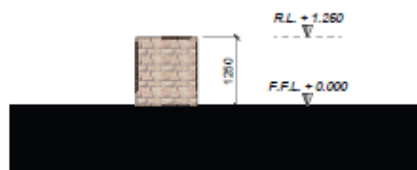
05 BIN STORE SECTION
500 1:100



06 BIN STORE FRONT ELEVATION
500 1:100



07 BIN STORE REAR ELEVATION
500 1:100



08 BIN STORE REAR ELEVATION
500 1:100



09 BIN STORE SIDE ELEVATION
500 1:100

Figure 3 – Bin Store Type 2

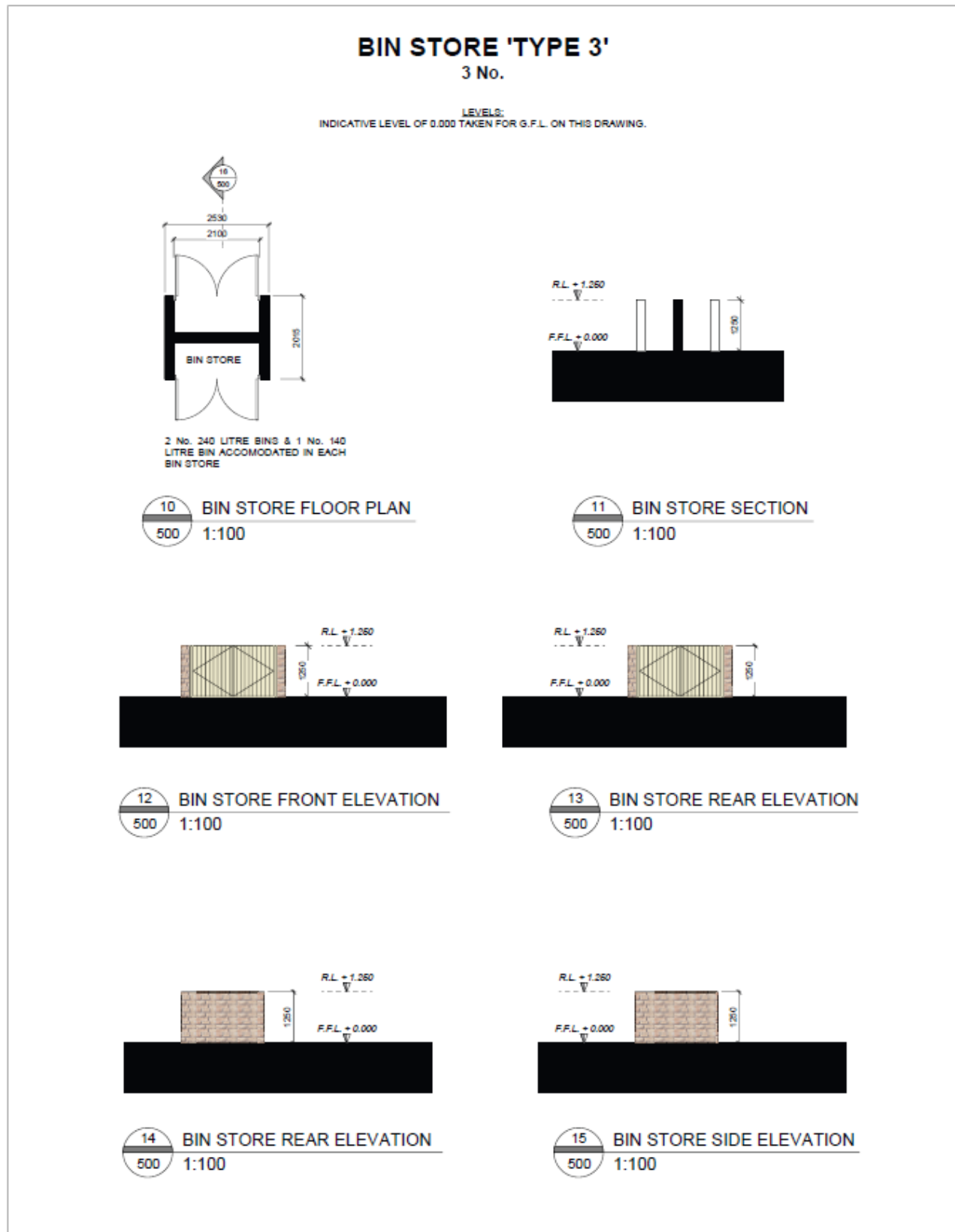


Figure 4 – Bin Store Type 3

4.3.1 All Apartment Blocks

Residential Developments will ensure access for all (including people with disabilities) in a brightly lit, safe & well sighted area, spacious enough for easy manoeuvrability, good ventilation and ready access if required for the control of potential vermin.

Sufficient access and egress must be provided to enable receptables to be moved easily from the storage area to an appropriate collection point within the curtilage of the development in accordance with Wexford County Council (Segregation, Storage & Presentation of Household and Commercial Waste) Bye-Laws, 2019, Section 9.

Each apartment shall include individual waste storage bins which shall be sized to allow their easy manual handling to be brought to the waste storage area at their building. It is anticipated that DMR, MNR, organic waste and Glass will be collected on a weekly basis.

Residents will be expected to take all waste arisings from their units to the appropriate residential waste storage area. Residents will be required to segregate their waste into the following waste categories within their own apartment units:

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

The proposed Waste Storage Areas for different building types are outlined in the figures below. It is recommended that the WSAs will have secure access to ensure only residents may place waste in the WSA. On collection day, the bins will be brought from the bin store up to the waste collection point by the waste management company personnel. Once the bins are emptied the bins will be brought back down to the waste storage area.

4.3.2 Houses and Duplexes

Residential houses will have a typical three/four bin system per house which will be separate to the waste storage areas discussed above in Section 3.0. Residents will be required to segregate their waste into the following waste categories within their own houses and duplexes:

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

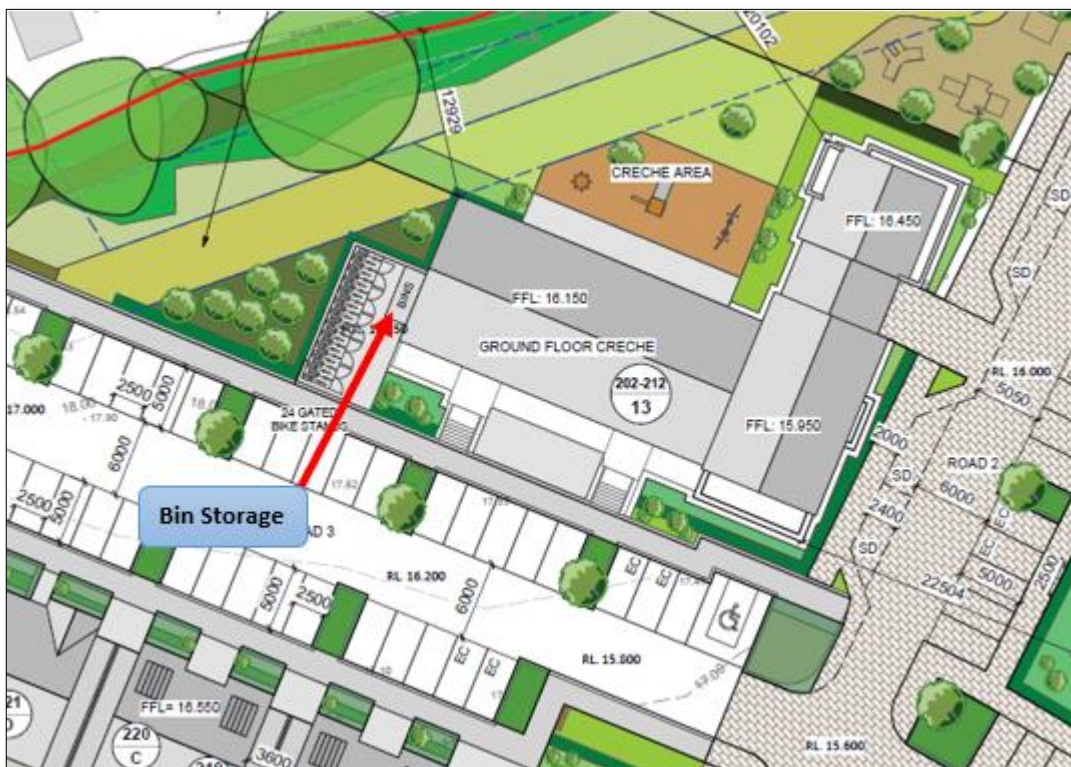
4.3.3 Waste Storage – Creche

The Creche and Communal areas will be required to segregate their waste into the following waste categories within their own unit:

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

As required, the staff will need to bring segregated DMR, MNR, Organic and Glass waste to the dedicated WSA.

Figure 5 - Building Type 13 - Bin storage Area



Bins will be strategically located throughout the communal areas. All bin/containers should be clearly labelled, and colour coded to avoid cross contamination of the different waste streams. Signage should be posted on or above the bins to show which wastes can be put in each bin.

Waste materials such as batteries, WEEE and printer toner/cartridges may be generated within the units, but it is anticipated that they will be generated infrequently (if they do arise). Temporary storage areas may be identified within the units for these items pending collection by an authorised waste contractor.

4.4 Waste Collection Contractors

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

All waste requiring collection by the appointed waste contractor will be collected from the WSAs by nominated waste contractors or facilities management depending on the agreement and will be brought to the temporary waste collection areas. The empty bins will be promptly returned to the appropriate WSAs.

All waste receptacles presented for collection will be clearly identified as required by waste legislation and the requirements of the Wexford Waste County Council Bye-Laws. Also, 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.

4.5 Additional Waste Materials

There is likely to be a small component of the overall waste arisings from the Proposed Development that will comprise other waste streams, such as WEEE, printer and toner cartridges, and fluorescent light tubes. Building maintenance will also give rise to materials such as paints and will be the responsibility of the management company to dispose of this waste.

4.6 Waste Storage Area Design

This area will be installed in accordance with BS 5906:2005.

- The walls and roofs of the bin stores will be formed of non-combustible, robust, secure and impervious material, and have a fire resistance of one hour.
- All containers for waste, including recyclable material, will be easily accessible to both the occupier and waste collector;
- Waste stores will be designed and located in such a way as to limit potential noise disturbance to residents;
- Storage areas for waste and DMR will be clearly designated for this use only, by a suitable door or wall sign and, where appropriate, with floor markings;
- Waste storage sites will include areas for instructional signage detailing correct use of the facilities;
- The entrance of the waste storage room will be free from steps and projections;
- Where the area is to be enclosed in a roofed building, adequate ventilation will be provided. Permanent ventilators will be provided giving a total ventilation area of not less than 0.2m²;
- Contain electrical lighting by means of sealed bulkhead fittings (housings rated to IP65 in BS EN 60529:199 for the purpose of cleaning down with hoses and inevitable splashing. Luminaires will be low energy light fittings or low energy lamp bulbs, controlled by proximity detection or a time delay button to prevent lights being left on; and
- Gullies for wash down facilities will be positioned so as not to be in the track of container trolley wheels.
- In addition to the above requirements, past experience and best practice for the storage of waste materials will include the following provisions:

- Waste storage facilities will not block any utility service points;
- Waste storage areas will not obstruct sight lines for pedestrians, drivers and cyclists, if doors open outwards they will not open onto a road or highway;
- Waste containers will be inside or at least enclosed. If bins are outside, they will be secured in a compound; Information packs will be provided to residents to include full information on available recycling facilities;
- Colour coding will be used for bins of different streams; and Any internal storage areas adjacent to a fire escape route will be fitted with fire doors, automatic fire detection and a sprinkler system and comply with the Building Regs.
- The facilities management company will be required to maintain the bins and their WSAs in good condition. All residents should be made aware of the waste segregation requirements and waste storage arrangements.

5.0 WASTE COLLECTION REQUIREMENTS

In line with BS 5906:2005 and Wexford County Council Bye Laws 2019 guidance, the following collection requirements have been designed into the Proposed Development in order to comply with all mandatory waste storage requirements:

5.1 BS 5906 2005

All paths used to transport bins from the storage area to the collection point will have a minimum width of 2m, be free from kerbs or steps, have a solid foundation and be finished with a smooth, continuous finish. Based on the clearance height and tonnage specified by the dimensions of a standard waste collection vehicle have been used to undertake the swept path analysis.

Dimensions	
Width	2.53 metres
Gross vehicle weight	26 tonnes
Length	11.2 metres
Clearance Height	4.75m (Any part of a building through which a waste collection vehicle passes must have a minimum clear height of 4.75 m, to allow for overhead fixtures and fittings)
Turning Circle (diameter)	9.5 metres

Table 8.0 Collection Vehicle Dimensions: Waste/Recycling Collection Vehicle

6.0 CONCLUSIONS

The Proposed Development will be achieved with high standards of waste management performance. As such, due consideration has been given to waste which will be generated by the Proposed Development during its operation. Waste management within the Proposed Development has the following aims:

- To contribute towards achieving current and long-term government, Wexford County Council and EMR targets for waste minimisation, recycling and reuse;
- To ensure that all legal requirements for the handling and management of waste during the operation of the Proposed Development are complied with; and
- To provide tenants with convenient, clean and efficient waste management systems that enhance the operation of the buildings and promote high levels of recycling.

Once operational, the Development is anticipated to produce approximately 45,693L of residential waste which includes MNR, DMR, organic and glass and 6,699 of non-residential waste. Residential waste storage allows for a weekly storage capacity for DMR, food and MNR (i.e. nonrecyclable).

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