



Block 6,  
Central Business Park,  
Clonminch,  
Tullamore,  
Co. Offaly.  
R35 F8K0

## **Wellwood Housing - Puttaghan Lands, Tullamore, Co Offaly. Waste Management Plan**

<i>Document Reference No.</i>	<i>Rev.</i>	<i>Rev. date</i>	<i>Status</i>

<b>1.0</b>	<b>Construction and Demolition Waste .....</b>	<b>3</b>
1.1	Introduction .....	3
1.2	General Information.....	3
1.3	Site Location.....	4
1.4	Description of the Project .....	5
1.5	Waste Management Hierarchy .....	5
1.6	Preparation of Waste Management Plan .....	6
1.7	Auditing of Waste Management Plan.....	6
1.8	Estimated Cost of Waste Management .....	7
1.9	Waste Generated .....	7
1.10	Waste Types & EWC Codes .....	8
1.11	Volumes of Each Waste Type Expected to arise during Construction and Demolition .....	9
1.12	How Waste Types are Intended to be Stored Prior to Collection.....	9
1.13	Licensed / Permitted Waste Haulage Contractor .....	9
1.14	AES- Waste Collection Permit .....	10
1.15	Waste Management Coordinator .....	11
1.16	Waste Targets for the Project .....	11
1.17	Proposals for Minimisation / Reuse / Recycling.....	11
1.18	Implementation Protocols and Parties Responsible .....	12
1.19	Skip Details Form.....	13
1.20	Relevant construction debris and materials diverted from landfill. .... <b>Error! Bookmark not defined.</b>	
1.21	Waste Storage & Segregation Area.....	16
1.22	Waste Transport.....	16
1.23	Waste Records.....	17
1.24	Implementation of Best Practise.....	17
1.25	Traceability and Support Documentation .....	17
1.26	Waste Facility Permit (Landfill) TBA.....	18
1.27	Waste Collection Permit –possible vendors to be Decided.....	19

## 1.0 Construction and Demolition Waste

### 1.1 Introduction

This document sets out the Waste Management Plan (WMP) for the construction phase associated with the Wellwood Housing programme at Puttaghan, Tullamore. It sets out measures and off-site disposal for construction / demolition waste.

The WMP describes how Hazardous and Non-Hazardous **Construction and Demolition Waste** (C&DW) streams generated on the project will be segregated, collected, re-used / recycled / disposed of and recorded to ensure comprehensive Waste Management records are maintained by John Flanagan Developments Ltd to minimise the environmental impact of waste generated by on-site activities. The WMP will fully comply with all statutory requirements with respect to the disposal of waste.

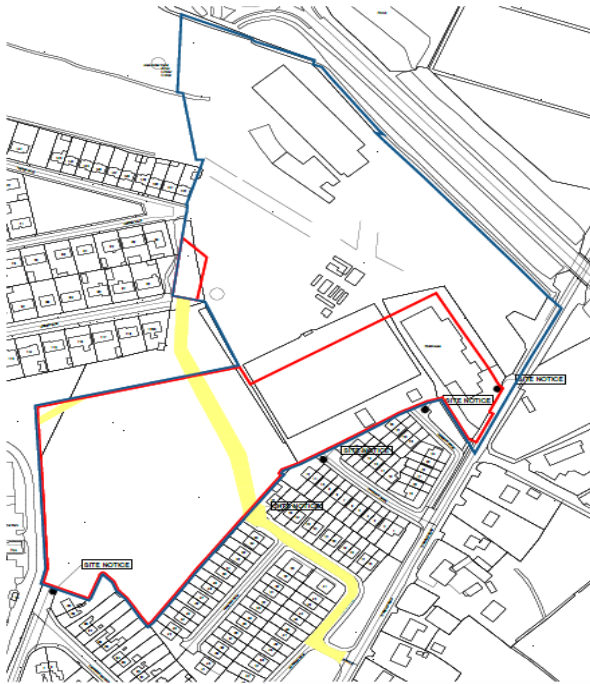
Waste Management is carried out in accordance with regulatory requirements.

### 1.2 General Information

<b>Name of the Contractor:</b>	<b>John Flanagan Developments Ltd</b>
<b>Name of Project Manager:</b>	TBA
<b>Address of Contractor:</b>	Block 6 Central Business Park, Clonminch, Tullamore, Co Offaly. R35 F8K0
<b>Name of Waste Management Coordinator:</b>	TBA
<b>Address of Development:</b>	Puttaghan, Tullamore, Co Offaly
<b>Coordinates</b>	53.285271,-7.480994

### 1.3 Site Location

The site is located approximately 1km north North of Tullamore Town Centre with access from the Tullamore/Kilbeggan by pass via .



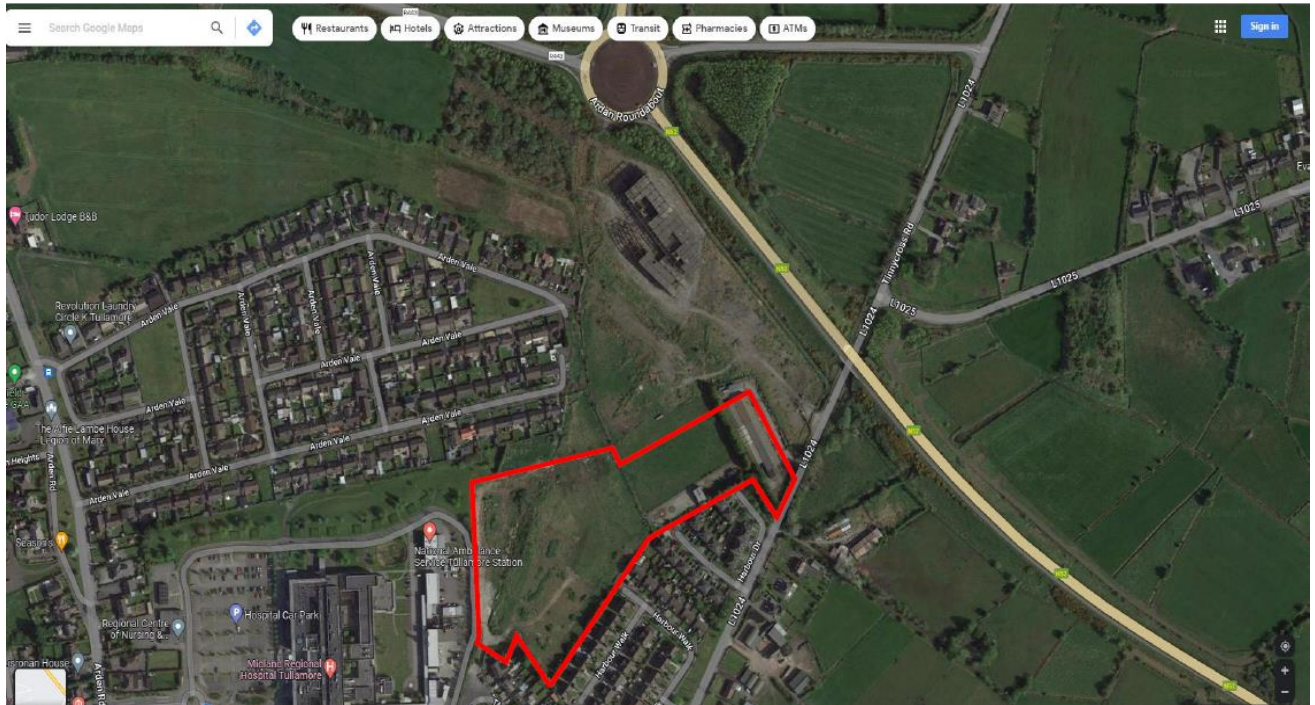
### Access to Site



1. Via the N52 By Pass for all waste transport operations to and from the site.
2. Take the N52 North/South depending on route.
3. Enter on to tinny cross road. Head south on the L1024.Site Entrance ON THE RIGHT.

## 1.4 Description of the Project

The project at Wellwood Housing, Puttaghan, Tullamore will consist of the construction of 3 bed semi-detached dwellings and apartments as outlined in the planning submissions. The works will also involve supporting development works including underground surface water attenuation, pedestrian and cycle, ESB substation, temporary construction signage, estate signage, varied site boundary treatment comprising walls and fencing and all associated site works.



## 1.5 Waste Management Hierarchy

JFD Ltd have prepared this plan taking into consideration the “Waste Management Hierarchy (WMH)”. The WMH indicates an order of preference for action to reduce and manage waste. The hierarchy captures the progression of a material or product through successive stages of waste management and represents the latter part of the life-cycle for each product.

The aim of the waste hierarchy is to extract the maximum practical benefits from products and to generate the minimum amount of waste. The proper application of the waste hierarchy can have many benefits. It can help prevent emissions of greenhouse gases, reduce pollutants, save energy, conserve resources, create jobs and stimulate the development of green technologies.



## 1.6 Preparation of Waste Management Plan

The Waste Management Plan has been prepared in accordance with “Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects” published by the Department of the Environment, Heritage and Local Government.

JFD Ltd Waste Management Plan will promote a coherent, integrated approach, whereby the management of construction and demolition waste is given due consideration throughout the duration of the project.

The effectiveness of the C&D Waste Management Plan and its implementation will be tracked through regular checks and audits carried out on site, which should focus on material inputs to the project and the waste outputs for each unit operation. Such internal auditing will be carried out by an appropriately trained and technically competent “C&D Waste Manager”.

## 1.7 Auditing of Waste Management Plan

The Waste Management Plan will be submitted for approval and agreement with Offaly County Council in advance of works commencing on site. The WMP Plan reflects the waste management hierarchy with waste prevention and minimisation being the first priority succeeded by reuse and recycling.

The principle contractor as part of the waste auditing on site the waste manager will record details of the inputs of materials to site and the outputs of wastage arising from the project. The Audit will examine the manner in which waste is produced on site and strive to reduce the waste streams which will also record lessons learned that can be applied to future projects. The waste audit will also look at the costs associated with the generation of waste and based on the actual quantities experienced on site the total cost of C&D waste management will be measured.



## 1.8 Estimated Cost of Waste Management

The total cost of C&D waste management will be measured and will take into account of the purchase costs / handlings costs / storage costs and disposal costs for the various materials.

By reusing materials on site there will be a reduction in the transport and recycle/recovery/ disposal costs associated with the requirement for a waste contractor to take the material off site. Clean and inert soils which cannot be used on site may be used as a capping material for landfill sites and this is often taken free of charge or at a reduced fee therefore reducing the final waste disposal costs.

Recycling will be utilised on site to reduce the costs of the collection and transportation of the skips. Waste will be segregated on site to ensure they are clean and uncontaminated for collection by the waste contractors. Waste contractors will charge considerably less for the collection of such materials that can be easily recycled and thereby reduce overall costs.

As a last resort materials will be disposed of at landfill. In the Leinster region the charges for landfill are approx. €115-€120 (**approx. fees**) per tonne which includes the Landfill Levy. In addition to this cost the contractors will also charge a fee for the collection of the skips from site.

The removal of the surplus inert soil from site will have to go to a permitted waste facility. This material will have both transportation and disposal costs. The current market rates for this are €15-18 / m<sup>3</sup> transportation and €10-13 / m<sup>3</sup> (**approx. fees**) disposal at waste facility.

## 1.9 Waste Generated

All wastes generated on site will be categorised in accordance with the European Waste Catalogue (EWC) and the Hazardous Waste List (HWL). Each category is designated as either Hazardous or Non-Hazardous in the EWC publication.

## 1.10 Waste Types & EWC Codes

Waste Type (EWC Code)	Waste Type Description	Permitted Waste Collectors	Permitted/ Licensed Facility
17 01 01	Concrete	TBA	TBA
17 01 02	Bricks	TBA	TBA
17 01 03	Tiles & Ceramics	TBA	TBA
17 01 07	Mixture of concrete, bricks & tiles	TBA	TBA
17 02 01	Wood	TBA	TBA
17 02 02	Glass	TBA	TBA
17 02 03	Plastic	TBA	TBA
17 03 02	Bituminous mixtures	TBA	TBA
17 04 01	Copper, bronze, brass	TBA	TBA
17 04 02	Aluminium	TBA	TBA
17 04 03	Lead	TBA	TBA
17 04 05	Iron & Steel	TBA	TBA
17 04 06	Tin	TBA	TBA
17 06 07	Mixed metals	TBA	TBA
17 05 04	Soil and Stones other than 17 05 03	TBA	TBA
	Domestic / Food Waste	TBA	TBA

<b>Hazardous</b>	Electrical and Electronic Components		16 02
	Liquid Fuels		13 07
	Wood Preservatives		03 02
	Batteries		16 06
	Soil and stones containing dangerous substances		17 05 03
	Waste construction material containing asbestos		17 06 05
	Other construction and demolition wastes containing dangerous substances		17 09 03

***The above table identifying Hazardous material is for referenced purposes only. None of the above coded material has been identified on site. This can be used in the event of an unforeseen material arising during site preparation works.***



### 1.11 Volumes of Each Waste Type Expected to arise during Construction and Demolition

JFD Ltd have set a target of recycling 92% of waste generated on site.

Our goal is to minimise waste transfer to landfill.

Monthly reports will be issued detailing the volumes of each waste type collected, the recycling rate and the volumes sent to landfill.

### 1.12 How Waste Types are Intended to be Stored Prior to Collection

It is intended to store waste types in skips prior to their collection.

Any hazardous waste will be stored in dedicated hazardous waste skips.

Bulk excavation will be stockpiled and recycled as fill material on site. Any balance will be sent to a permitted waste facility site for disposal.

### 1.13 Licenced / Permitted Waste Haulage Contractor

JFD Ltd propose to appoint a registered and licensed Waste contractor for the project. Thornton's Recycling is committed to providing the highest standards in the provision of waste management services. They are committed to providing a service that seeks to incentivise waste prevention and to encourage the segregation of waste so that it can be managed in accordance with the waste hierarchy, whereby waste prevention, preparing for reuse, recycling, and other recovery are preferred over the disposal of waste.

Their Waste Collection Permit is shown below:

**(WCP Permit Number: insert on appointment).**



Offaly County Council  
 Áras an Chontae  
 Charleville Road  
 Tullamore  
 Co. Offaly  
 Telephone: 057 9357428  
 Email: [contactus@nwcpo.ie](mailto:contactus@nwcpo.ie)

## WASTE COLLECTION PERMIT

### Waste Management (Collection Permit) Regulations, 2007 as amended

Offaly County Council as the National Waste Collection Permit Office being a nominated authority under Section 34(1)(aa) of the Waste Management Act 1996, has granted a waste collection permit to:

Applicant Name:	<b>Advanced Environmental Solutions(Ireland) Ltd</b> (herein called the permit holder)
Permit Number:	NWCPO-08-10601-07
Trading Address:	Bord na Mona Offices Main Street Newbridge Co. Kildare
Registered Company Address:	Bord na Mona Offices Main Street Newbridge Co. Kildare
Permit Holder Phone Number:	045439000
Valid From:	15/12/2020
Valid to and Expires on	14/12/2025

This permit, issued to the aforementioned permit holder, is subject to the attached schedule of conditions.

Any non-compliance with the conditions of this permit is an offence under the Waste Management (Collection Permit) Regulations, 2007 as amended and Section 34(1) of the Waste Management Act 1996.

Signed:

  
 Programme Manager

Date:

15/12/2020

### 1.15 Waste Management Coordinator

JFD LTD will nominate a Waste Management Coordinator for the project who will ensure compliance with the approved Waste Management Plan for the project. The Waste Management Coordinator will be assigned the authority to instruct all site personnel to comply with the specific provisions of WMP. He/she will coordinate with the Environmental Manager to ensure ongoing compliance.

At an operational level, the Project Manager, Senior Engineer, Site Foremen and Foremen from each subcontractor on site will be assigned the direct responsibility to ensure that the operations stated in this plan are complied with on an on-going basis.

### 1.16 Waste Targets for the Project

JFD Ltd have set the following exemplary target on the project:

- Target - 92% of the Waste Generated on Site to be recycled.

### 1.17 Proposals for Minimisation / Reuse / Recycling

Construction will be planned to identify and implement ways to prevent, reduce, reuse and recycle waste, with a preference given to prevention, reusing and recycling of waste. The following hierarchy will be used, in order of preference, for management of all excavated materials and construction waste.

1. Prevention of potential waste generation.
2. Minimisation / reduction of potential waste generation.
3. Reuse and/or recycle materials within the site.
4. Find a beneficial reuse for the materials on another site subject to approval.
5. Transport off site for recycling.
6. Transport off site for recovery.
7. Transport off site for disposal.

Due to the nature of the site topography there will be a significant amount of excavation to occur during the site formation. To minimise the quantity of material to be removed to landfill it is proposed to reuse a large proportion of this material in a cut & fill exercise. Below are the approx. preliminary quantities of materials anticipated on the project.

Material	Waste Estimate	Quantity Reused	Quantity Disposed
Topsoil	TBD	TBD	TBD
Inert Soil	TBD	TBD	TBD
C&D Waste	TBD	TBD	TBD

## 1.18 Implementation Protocols and Parties Responsible

ID	Activity	Responsibility
1.1	Skips delivered to site/collected from site. A numbered docket accompanies the skip. The docket contains the date of collection/delivery, and the truck registration number.	Project Manager
1.2	Skips located at designated waste generation points on site. For large volume C&D waste streams, specific locations will be identified.	Project Manager
1.3	All site personnel / subcontractors etc are responsible for correct filling of skips.	Project Manager Waste Management Coordinator
1.4	Encourage employees through appropriate environmental awareness training sessions, to; <ul style="list-style-type: none"> <li>• Reduce waste by, for example, properly storing and handling of construction materials.</li> <li>• Reuse materials, for example, boarding and fencing can be reused many times before they need to be thrown away.</li> <li>• Save and reuse materials such as paints, thinners, either on-site or at another location.</li> </ul>	Project Manager
1.5	Any hazardous waste streams will be disposed of at the earliest opportunity by a permitted Hazardous Waste Contractor to avoid possible contamination of other C&DW streams.	Project Manager
1.6	The Waste Management Coordinator notifies appropriate approved Waste Disposal Contractors for Waste Disposal when collection is due.	Waste Management Coordinator
1.7	The skip is then transported to the Licenced Waste Facility and weighed. The weight record is recorded on the weighbridge operating system, showing the time of weighing, the quantity of waste and the truck registration number.	Waste Collector
1.8	The Waste Disposal Contractors will provide a report on a monthly basis, showing the total quantity of waste collected from site, the quantities of the different materials recovered for recycling and the quantity of material either sent for landfill or for use as Refuse Derived Fuel. This report will also include the number of the service docket for skips which can be cross referenced with the weighbridge report.	Waste Disposal Contractor Project Manager
1.9	The Project Manager / Waste Management Coordinator will ensure that all Waste Disposal Contractors used by JFD Ltd have the appropriate waste disposal permit/licence to collect and transport waste in accordance with Waste Management Regulations.	Project Manager Waste Management Coordinator

2.0	<p>Waste Statistics Reports will be provided for all skips showing date of collection, skip size, waste type, weight, docket number and tonnage details. A pie chart will be provided for each skip showing the percentage of different waste grades and the breakdown of Waste v Recycling. A final Cumulative Waste Statistics Report will be presented in excel format over a number of sheets showing cumulative analysis of each skip and an overall pie-chart depicting the percentage recycling rate for each waste stream. The percentage of non-recyclable waste sent to landfill together with the tonnage will also be shown.</p> <p><b>See Skip Details Form below</b></p>	Environmental Manager
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1.19 Skip Details Form

*Please affix relevant docket here*

Site Name	Date	Docket No.

Skip Content (Please tick & write %)

- Rubble \_\_\_\_\_ %
- Concrete/ Bricks/ Tiles \_\_\_\_\_ %
- Timber \_\_\_\_\_ %
- Plasterboard \_\_\_\_\_ %
- Insulation \_\_\_\_\_ %
- Plastic \_\_\_\_\_ %
- Cardboard/ Paper \_\_\_\_\_ %
- Other materials \_\_\_\_\_ %
- \_\_\_\_\_ %
- \_\_\_\_\_ %

Subcontractor(s) Name \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

***NOTE: Please ensure that the skip is full and compacted***

**Advisory only, Colour Coding of Skips**

**Segregation of Waste**

Segregation of waste for proper disposal and recycling. Less waste goes to landfill and hazardous waste is treated to make it safe.

Health, Safety & Environment

**Hazardous Waste**  
Paint, Containers, Batteries, etc

**Non-Hazardous Waste**  
e.g. Metal, Scrap

**Non-Hazardous Waste**  
e.g. Paper, Plastic, Wood etc

**Organic Waste**  
Food Waste

WASTE OIL STORAGE AREA

Colour Code for Skips & Bins

1.20 Relevant construction debris and materials diverted from landfill.

Target Materials	Steps Taken to Prevent / Minimise / Reuse / Reduce / Recycle / Recover
Excavation	Permitted Site - Recycled
Masonry	Offsite Waste recovery
Concrete	Offsite Waste recovery
Steel	Fully recycled off site
Timber	Fully recycled at Licensed Waste Recovery Facility
Hazardous Waste for example Asbestos (Non-Identified)	Removed to Licensed Hazardous Waste Facility by Licensed Hazardous Waste Contractor.
Packaging	Collected & recycled off site





*The area outlined in red is a shed (former dressing room) will be used as a lock up during the build phase. The metal cladded roof will be removed and the associated building material segregated as outlined in the Waste Management plan.*

## 1.21 Waste Storage & Segregation Area

Waste generated on site will need to be stored prior to removal by appointed Waste Haulage Contractor. For this project JFD Ltd propose the following measures:

- Cardboard/paper will to be stored separately in a dry location.
- Re-fuelling small plant will be carried out in a designated containment store with drip tray protection.

Containment store will have appropriate signage directing operatives to this area.

- All other waste will be stored in skips.  
Fuel products will be stored in a bunded tanks which has a bunded capacity of 110% of the maximum fuel storage allowable. Tanks will be stored at a height at an agreed suitable location on site. Typified by 'tank within a tank' construction, the bunded fuel tank is engineered for the safe, secure and responsible storage of diesel / oil. The inner tank is the primary fuel storage container, whilst the outer tank acts as a holding tank in the event of a spill.



The tank location and condition will be inspected on a daily basis to ensure it is fit for use. Drip Trays will be used on site whilst re-fuelling plant. Re-fuelling signage will be erected directing operatives to the containment areas. Refuelling of small plant will be carried out in designated areas with drip tray protection. Containment Areas will have appropriate signage.

## 1.22 Waste Transport

Any waste removed from the site will only be transported by a Company who holds a valid Waste Collection Permit to transport such material. It is proposed to use either one of the following AES/Oxigen/Chris lynch Waste for commercial wate, a copy of the Company Waste Permit will be kept on site and is shown in section 1.13 of the WMP. Any person transporting waste should have a copy of their Waste Collection Permit on the vehicle at all times. The Project Manager / Waste Management Coordinator will carry out spot checks on Waste Transport Vehicles and keep records of same.

Waste will only be transported and deposited into a licenced facility. It is proposed that the Soils and stones required to be removed from site will be taken to the **agreed Licensed Facility**. The waste permit for this facility is **WFP- - - -**. An exert from the permit of this facility are shown in section 1.25 of the WMP.

Section 1.26 shows the waste permit for **examples only, until** *facility/waste service provider are appointed.*

### 1.23 Waste Records

The Project Manager will retain current copies of all Waste Disposal Contractor Licences / Permits on site for inspection. Skip Dockets will be stored centrally for the project and returned to Head Office at the start of each week for the previous week's collection. Likewise, consignment and disposal note for any hazardous waste will be returned on a weekly basis. Following completion of the project all waste records scanned and stored for future reference.

### 1.24 Implementation of Best Practise

JFD Ltd in developing this Site Waste Management Plan and managing the construction phase will implement the best practice approaches which will include the following:

1. Designing out waste;
2. Simplifying material components;
3. Using recycled content in construction;
4. Designing for deconstruction; and
5. Designing for flexibility and adaptability

JFD Ltd aim to minimise any adverse impacts that construction has on the environment. This will be implemented through the design process, materials selection, construction techniques, and operational methods. All Subcontractors, Specialists and Suppliers appointed to work on our behalf will be required to work in accordance with these principles. The waste to landfill objective is to reduce waste and use materials efficiently.

JFD Ltd work to the following principles:

1. Forecast likely waste streams.
2. Reduce materials wasted on the project.
3. Reduce the proportion of waste that is sent to landfill, our target is less than 8% of the waste generated on site will be sent to landfill.
4. Increase the use of recovered materials and materials with above average levels of recycled content.

### 1.25 Traceability and Support Documentation

JFD LTD The following records will be maintained:

1. Site traceability photographs of mixed waste skips / segregated skips and collection lorry registration with date record.
2. Collection Docket on removal from site with traceability records.
3. Breakdown of recycled waste referenced to collection docket.
4. Full breakdown and support documentation for recycled content with proof.
5. Records of any waste sent to landfill.
6. Diversion from landfill includes salvage of materials on-site, reuse of materials off-site, recycling of materials at a materials recovery facility and may also include donation of materials to charitable organisations that will reuse the material.

7. Overall tonnage of construction waste generated, overall tonnage of construction waste diverted from landfill, total percentage of construction waste diverted from landfill (%).
8. Waste Statistics Report for each Skip showing recycling percentage achieved.
9. Cumulative Waste Statistics Report showing overall recycling percentage achieved on the project.

#### 1.26 Waste Facility Permit (Landfill) TBA



Offaly County Council

**Waste Facility Permit**

ISSUED UNDER

THE WASTE MANAGEMENT ACT, 1996 as amended

AND

THE WASTE MANAGEMENT (FACILITY PERMIT AND REGISTRATION)  
REGULATIONS 2007, AS AMENDED.

A WASTE FACILITY PERMIT GRANTED BY OFFALY  
COUNTY COUNCIL TO

HEALIONS CONTRACTORS LTD., SPOLLINSTOWN,  
TULLAMORE

WASTE FACILITY PERMIT NO: WFP-OY-18-0201-01

Please note: Appendices are subject to change.



## WASTE COLLECTION PERMIT

### Waste Management (Collection Permit) Regulations, 2007 as amended

Offaly County Council as the National Waste Collection Permit Office being a nominated authority under Section 34(1)(aa) of the Waste Management Act 1996, has granted a waste collection permit to:

Applicant Name:	<b>Advanced Environmental Solutions(Ireland) Ltd</b> (herein called the permit holder)
Permit Number:	NWCPO-08-10601-07
Trading Address:	Bord na Mona Offices Main Street Newbridge Co. Kildare
Registered Company Address:	Bord na Mona Offices Main Street Newbridge Co. Kildare
Permit Holder Phone Number:	045439000
Valid From:	15/12/2020
Valid to and Expires on	14/12/2025

This permit, issued to the aforementioned permit holder, is subject to the attached schedule of conditions.

Any non-compliance with the conditions of this permit is an offence under the Waste Management (Collection Permit) Regulations, 2007 as amended and Section 34(1) of the Waste Management Act 1996.

Signed:

  
 Programme Manager

Date:

15/12/2020



## WASTE COLLECTION PERMIT

Waste Management (Collection Permit) Regulations, 2007 as amended	
Offaly County Council as the National Waste Collection Permit Office being a nominated authority under Section 34(1)(aa) of the Waste Management Act 1996, has granted a waste collection permit to:	
<b>Applicant Name:</b>	<b>Chris Lynch Waste Management Ltd</b> (herein called the permit holder)
<b>Permit Number:</b>	NWCPO-13-11207-02
<b>Trading Address:</b>	Zone C, No. 31 Mullingar Business Park Mullingar Co Westmeath
<b>Registered Company Address:</b>	Walshestown South, Mullingar, Co Westmeath
<b>Contact Phone Number:</b>	0449339544
<b>Valid From:</b>	02. 04. 2019
<b>Valid to and Expires on</b>	01. 04. 2024

This permit, issued to the aforementioned permit holder, is subject to the attached schedule of conditions and authorises this permit holder to:

- Only collect the waste type(s) specified in Appendix A (List of Waste six digit codes)
- Only transfer waste to the facilities specified in Appendix B
- Only use vehicle(s) specified in Appendix C, and for household kerbside waste collection, only use vehicles listed Appendix C Table 2
- Only collect waste within the local authority areas specified in Appendix D

Any non-compliance with the conditions of this permit is an offence under the Waste Management (Collection Permit) Regulations, 2007 as amended and Section 34(1) of the Waste Management Act 1996.

Signed:

  
Programme Manager

Date:

02/04/19