



Knockharley Landfill Limited

PROJECT WEST

Resource Waste Management Plan





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1 INTRODUCTION

WSP Ireland Consulting Ltd (WSP) has been commissioned to prepare this Resource Waste Management Plan (RWMP) on behalf of Knockharley Landfill Ltd, the Developer and operator of the Proposed Knockharley Landfill Expansion, on lands located at Knockharley, Navan, (includes townlands of Tuiterath & Flemingstown), Co Meath hereafter referred to as the 'Site' or 'Proposed Project'.

This document has been prepared in accordance with the 2021 guidance from the EPA¹.

The RWMP shall detail how excess material/arising from the construction are proposed to be managed primarily as resources on Site where possible to prevent waste generation as encouraged by 'A Waste Action Plan For a Circular Economy. Ireland's National Waste Policy. 2020-2025' (DECC, 2020). Materials not suitable for use on the Site to complete the overall Proposed Project as described in Section 2 will be recovered and recycled offsite under appropriate waste authorisation and disposal will be considered as the least favourable waste management option for the project.

This document is considered a 'live document' and should be updated as information becomes available or where there is any significant change to the overall resource and waste management strategy for the Proposed Project.

1.1 OBJECTIVE

The objective of this RWMP is to ensure that the project construction resources and wastes generated are managed in accordance with applicable legislation, local authority plans and policies and regional waste management targets. This RWMP shall form the appointed Main Contractor's operational RWMP and be updated by the Contractor.

The overall aims of this project are primarily to prevent waste where possible and to efficiently manage resources and waste generated during the project lifespan for construction phases.

The main objectives of the RWMP are as follows:

- Promote an integrated approach to waste and resource management throughout the project lifecycle and set out appropriate responsibilities;
- Promote sustainable waste and resource management in line with the waste management hierarchy; and
- Provide an outline for the management of waste arising from construction phase works for the project in accordance with relevant Irish and EU waste management legislation.

The RWMP outlines methods to achieve waste prevention, maximise reuse and recycling of resources (both onsite and offsite), recovery/disposal of waste. The RWMP also includes recommendations for the management of various anticipated waste streams.

¹ EPA, 2021. *The Best Practice Guidelines on the Preparation of Resource Waste Management Plans for Construction and Demolition Projects*



This plan has been developed to establish specific objectives and guidelines prior to the construction works and to be flexible to allow the plan to evolve throughout the construction phases as required by the Main Contractor.

2 DESCRIPTION OF THE PROPOSED PROJECT AND SITE

2.1 PROJECT LOCATION

The Site is located at the Knockharley Landfill, (includes townlands of Tuiterrath & Flemingstown), approximately 9.5 km east of the town of Navan. The Site is situated approximately 6.5 km south of Slane and is west of the village of Duleek. The N2 national road is located less than 1km to the west of the Site.

2.2 PROJECT DESCRIPTION

The expansion of the existing landfill by construction of an additional active void space of 3.38 million m³ for landfilling (with further void space of 807,000 m³ for the 'Piggyback Cell'). Permission is sought for the acceptance of waste until the expanded landfill void is at capacity.

There will be no increase in the permitted annual acceptance of up to 435,000 tonnes per annum of non-hazardous wastes which comprises up to 150,000 tonnes of incinerator bottom ash (IBA), as well as household, commercial and industrial wastes including residual fines, non-hazardous contaminated soils, construction and demolition (C&D) wastes and baled recyclables. In addition, the acceptance of up to 5,000 tonnes per annum of stable non-reactive hazardous waste.

2.3 EXISTING SITE

The Site is an existing landfill which operates under an Industrial Emissions license (W0146). The waste for disposal at the landfill consists of household, commercial and industrial waste and stable, non-reactive hazardous waste. IBA will also be processed and recovered at the landfill Indoor storage of baled recyclables and baled municipal solid waste will also be provided.

The installation covers an area of 135 hectares, of which approximately 25 hectares is utilised for the landfill. The site infrastructure includes a landfill gas collection and utilisation plant, flaring system, leachate management system, surface water management system and associated infrastructure including weighbridges, wheelwash, waste inspection and quarantine area, maintenance garage, administration building and a car parking area.

2.4 CONSTRUCTION/LANDSCAPING PHASE SEQUENCING & ACTIVITIES

The expansion of the landfill will follow the below proposed sequence:

- Phase 1 (Years 0-2) – construction of Cell 31 and Cell 32, including a ramp for access
- Phase 2 (Years 3-4) - construction of Cell 33 and Cell 34, including a ramp for access
- Phase 3 (Years 6-7) - construction of Cell 35 and Cell 36; capping of Cell 31 and Cell 32.
- Phase 4 (Years 9-10) - construction of Cell 37 and Cell 38; capping of Cell 33 and Cell 34
- Phase 5 (Years 12-14) - construction of Cell 39; capping of Cell 35 and Cell 36
- Phase 6 (Years 16-17) - capping of Cell 37 and Cell 38. The original landfill area will be capped and Cell 40 will be created as a piggyback cell between the original landfill and the proposed landfill areas which are capped.
- Phase 7 (Years 18-21) – Cell 39 will be capped and Cell 40 (piggyback cell) will be extended southwards and subsequently capped.

3 ROLES AND RESPONSIBILITIES

The Best Practice Guidelines on the Preparation of Resource Waste Management Plans for Construction and Demolition Projects promotes that a Resource Manager should be appointed. The Resource Manager role may be performed by a number of different individuals over the life-cycle of the Proposed Project; however, it is intended to be a reliable person chosen from within the Contracting Team, with adequate knowledge and understanding of waste practices and waste legislation, who takes the responsibility to ensure that the objectives and measures within the Resource Waste Management Plan are complied with. The Resource Manager shall have the authority to ensure the objective and obligations of the RWMP are met. The role will include activities such as conducting waste checks/audits and adopting construction methodology that is designed to facilitate maximum reuse and/or recycling of waste.

3.1 ROLE OF THE CLIENT

The 'Client' is typically the party that funds the project and are also usually the original 'waste producer' which means anyone whose activities produce waste or anyone who carries out pre-processing, mixing or other waste operations. For the purposes of this document, the 'Client' can be interpreted to be the 'waste holder' which means the waste producer or legal person who is in possession of the waste or resource until such time it is legally transferred to another party. The Client is the body establishing the aims and the performance targets for the project (often in conjunction with the 'Client Advisory Team' described below).

- The Client should require the preparation and submission of a preliminary RWMP as part of the design and planning submission;
- The Client should commission the preparation and submission of an updated RWMP as part of the construction tendering process;
- The Client should ensure that the RWMP is agreed and submitted to the local authority prior to commencement of works on site; and
- The Client should request the end-of-project RWMP from the Contractor.

3.2 ROLE OF THE CLIENT ADVISORY TEAM

The Client Advisory Team or Design Team is formed of consultants and engineers and are responsible for:

- Drafting and maintaining the RWMP through the design, planning and procurement phases of the project.
- Appointing a Resource Manager (RM) to track and document the design process, inform the Design Team and prepare the preliminary RWMP.
- Including details and estimated quantities of all projected waste streams with the support of Environmental consultants/scientists. This should also include data on waste types (e.g. waste characterisation data,
- contaminated land assessments, site investigation information) and prevention mechanisms (such as by- products) to illustrate the positive circular economy principles applied by the Design Team.
- Managing and valuing the demolition and construction work with the support quantity surveyors.

- Handing over of the RWMP to the selected Contractor at commencement of construction for the development of the RWMP in a similar fashion to how the safety file is handed over to the Contractor for updating and maintaining as a 'Live' document for the duration of the works.
- Working with the Contractor as required to meet the performance targets for the project.

3.3 ROLE OF THE CONTRACTOR

The contractor shall implement this RWMP. They shall be responsible for:

Preparing, implementing, and reviewing the (including the Pre-Demolition) RWMP through demolition and construction stage (including the management of all suppliers and sub-contractors) as per the requirements of these guidelines; Identifying a designated and suitably experienced and knowledgeable Resource Manager (RM) at construction stage who will be responsible for implementing the RWMP:

- Identifying suitably permitted/licenced haulier hauliers with the appropriate waste collection permits, to be engaged to transport each of the resources / wastes off-site;
- Implementing waste management practices whereby waste/resource materials generated on site are to be segregated, reused and recycled as far as practicable;
- Identifying all destinations for resources and resources taken off-site. As above, any resource that is legally a 'waste' must only be transported to an authorised waste facility;
- Clarification and implementation of any other statutory waste management obligations, which could include on-site processing;
- Full records of all resources (both wastes and other resources) should be maintained for the duration of the project (records should include waste/resource description, LoW Code where applicable and tonnage/volumes and
- Preparing a RWMP Implementation Review Report at project handover.

Table 3-1 – Roles and Responsibilities

Responsible Party	Responsibility	Project Stage
Client	<ul style="list-style-type: none"> ■ Appointment of competent Main Contractor and Design Team ■ Responsible for waste management for lifespan of the project including all documentation 	<ul style="list-style-type: none"> ■ Project commencement and tender award ■ All project stages (Design, and construction stage)
Main Contractor	<ul style="list-style-type: none"> ■ Resource Waste Management Plan 	<ul style="list-style-type: none"> ■ Project Implementation
Resource Manager	<ul style="list-style-type: none"> ■ RWMP Implementation ■ Ensure that's the objectives of both the RWMP and the contractors RWMP are put in place. ■ Waste characterisation. Selection of techniques and design to minimize waste and to maximize recovery 	<ul style="list-style-type: none"> ■ Project Implementation ■ Construction stage ■ Construction stage

Responsible Party	Responsibility	Project Stage
	<ul style="list-style-type: none"> and recycling of waste during the project ■ Maintenance of Waste Documentation for 3 years. ■ Completion of Final Waste Management Report ■ Educate colleagues, site staff, external contractors and suppliers about alternatives to conventional construction waste disposal 	<ul style="list-style-type: none"> ■ Project Design Phase and during project implementation ■ Post-construction stage ■ Post-construction stage ■ Construction stage
Design Team	<ul style="list-style-type: none"> ■ Identification of Key Waste Streams ■ Design to minimize waste generation in lifecycle of completed construction. ■ Adequately provide for waste management in tender documents and declare all relevant information & data 	<ul style="list-style-type: none"> ■ Project Design Stage ■ Project Design Stage ■ Procurement Stage

4 PROPOSED PROJECT RESOURCE TARGETS

Project specific resource and waste management targets for the Proposed Project have not yet been set and this information should be updated for these targets once these targets have been confirmed by the client. However, it is expected for projects of this nature that a target of 70% of waste is fully re-used, recycled, or recovered. Typical Key Performance Indicators (KPIs) that may be used to set targets include (as per guidelines):

- Weight (tonnes) or Volume (m3) of waste generated per construction value;
- Weight (tonnes) or Volume (m3) of waste generated per construction floor area (m2);
- Fraction of resource reused on site;
- Fraction of resource notified as by-product;
- Fraction of waste segregated at source before being sent off-site for recycling/recovery; and
- Fraction of waste recovered, fraction of waste recycled, or fraction of waste disposed.

5 DESIGN APPROACH

It is understood that the client has considered a designing out waste approach early in the design of the overall Proposed Project by establishing the potential for any reusable site assets such as topsoil and other materials. The client has considered the re-use of topsoil and excavated material for the following on Site:

- Screening berms during construction;
- Cell formation and road construction;
- Clay lining system for cells;
- Temporary and permanent capping; and
- Landscaping.

The design proposal is deemed to provide substantial economic savings and provides a high level of sustainability through design that incorporates waste prevention, re-use, and recycling of resources on Site.

Where possible, offsite waste disposal associated with the volume of removal of soils will be designed out and potential HGV movements through the local road network will also be reduced. The design approach for designing out waste, re-use, recycling, green procurement and materials optimisation are discussed below.

5.1 CONSTRUCTION AND MATERIALS OPTIMISATION

The main construction phases largely comprises excavation works for the construction of the landfill cells. Designing out waste through the reuse of excavated material on-Site is a key element in reducing the potential to generate waste at the Site.

This avoids importing a large amount of soil or material to restore the Site, which is an efficient use of material and aligns with the EPA's Circular Economy Programme²

5.2 DESIGN FOR GREEN PROCUREMENT

The contractor will discuss proposed design solutions, encourage innovation in supply chain and recognise sustainable approaches. The contractor shall also discuss options for packaging reduction with subcontractors/suppliers using measures such as 'Just-in-Time' delivery and use ordering procedures that avoid excessive waste.

² EPA (2021) The Circular Economy Programme 2021-2027. Available at: [EPA Circular Economy 2021 Programme Apr22 Web.pdf](#)

6 RESOURCE WASTE MANAGEMENT

The Main Contractor will be responsible for defining and maintaining resource management across the site during the construction phase. There will be correct segregation of waste materials. The prevention, reuse, recycling, recovery and disposal of waste and by-products will be performed as the construction phases progress and the materials are generated.

The off-site handling of waste generated by this project are subject to the required statutory authorisations under the Waste Management Act, there is also a requirement that the management of waste complies with the Waste Hierarchy. This hierarchy outlines that waste prevention and minimisation are the first priority in managing wastes, followed by waste reuse and recycling with disposal being considered as a last resort (see Figure 6-1). The EU Waste Directive (2008/98/EC) also mandates that hazardous waste generation should be avoided or at least minimised.

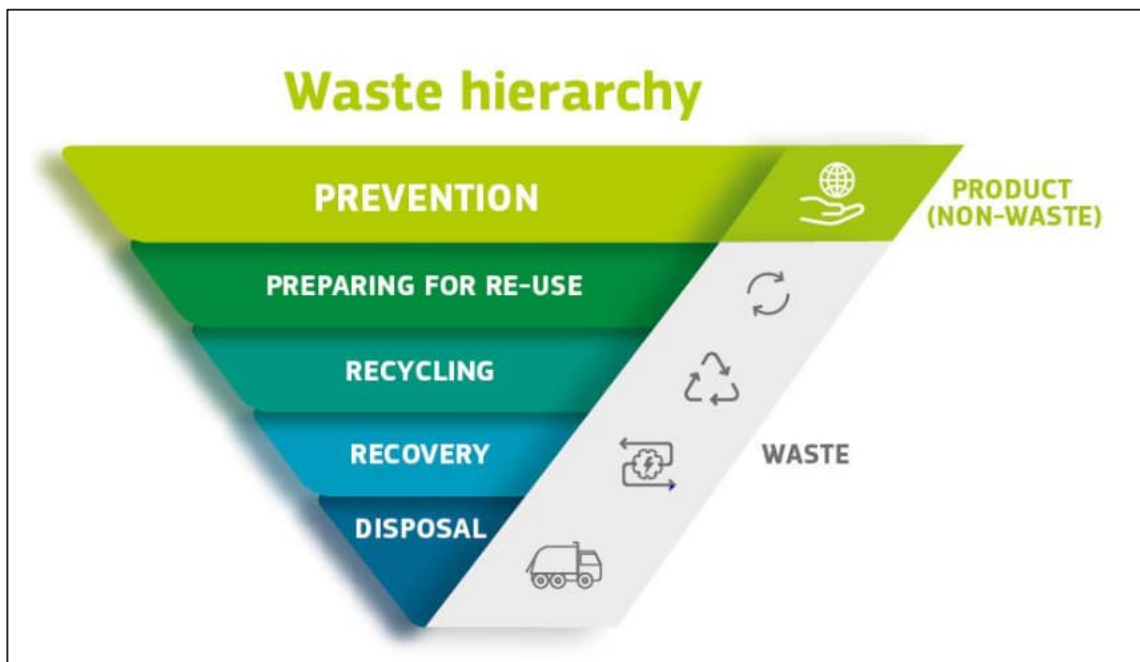


Figure 6-1 - Waste Hierarchy

6.1 WASTE PREVENTION AND MINIMISATION

The following waste minimisation measures will be implemented during the course of the works:

On site segregation of all waste/resource materials generated during construction stage to appropriate categories, including (non-exhaustive list):

Non-Hazardous Waste Streams

- Topsoil, sub soil, stones, made ground fill from excavations;
- Scrap metal from ESB pylons;
- Cardboard and other packaging;
- Plastic including wrapping and packaging;
- Paper;
- Glass;

- Cut off pieces of HDPE liner
 - Waste from portable site toilets;
 - Canteen and food waste; and
 - Damaged materials.
- All waste assessed by the Resource Manager as 'not suitable for reuse' will be stored in skips or other suitable receptacles in a designated area of the site, to prevent cross contamination between waste streams;
 - Uncontaminated excavated material (top-soil, sub soil, etc.) will be segregated, stockpiled and re-used on site in preference to importation of clean fill, where possible;
 - All soil materials identified for re-use off site will be subject to testing and quality assurance controls to be protective of the environment;
 - Where possible, the contractor will ensure that all waste leaving site will be recycled or recovered.

6.2 WASTE/RESOURCE GENERATION & QUANTIFICATION

Quantities of construction resource/waste materials may vary depending on methodologies of construction. Therefore, the difficulty of estimating resource/waste quantities is noted which depends on the approach of the appointed Main Contractor. During construction these quantities may be subject to change during the phase.

This RWMP incorporates the provisions to promote sustainable waste management in line with the waste hierarchy, and also focus on integrating good site management practices to ensure efficiency and reduce potential for any other negative environmental effects.

This Proposed Project comprises of construction activities and the main wastes and resources generated by the Proposed Project are listed below in Table 6-1.

Other potential waste/resource sources on the site are also included in Table 6-2.

Estimated quantities are also provided and should be updated as the Proposed Project advances.

Table 6-1 - Construction Arisings, LoW and Estimated Quantities/Volume

Waste/Resource Material	LoW Code	Estimated Quantities (m3)
Metals	17 04 05	50 T
Concrete	17 01 01	5 T
Masonry	17 03 02	1T
Mixed Construction and Demolition Wastes	17 09 04	5T
Timber	17 02 01	1 T

6.3 CONSTRUCTION ARISING

It is anticipated that the majority of resources/wastes generated will be suitable for reuse, recovery or recycling and will therefore be segregated to facilitate the reuse, recovery and/or recycling, wherever possible.

A non-exhaustive list of construction waste categories which may be generated during the construction phase of the Proposed Project have been identified below and the appropriate European Waste Catalogue Code for these wastes has been identified in Table 6-2. These LoW's only apply to construction materials that have no further use at the Site and meet the definition of waste. Where materials have a beneficial use either on site or offsite these materials should not be considered waste (subject to meeting certain criteria, e.g. excavated material being notified as by-product).

Table 6-2 - Typical C&D waste potentially expected from the construction phase of the Proposed Project.

Waste Material	LoW/EMC Code
Concrete, Bricks, Tiles and Ceramics	17 01
Concrete	17 01 01
Wood, Glass and Plastic	17 02
Wood	17 02 01
Plastic	17 02 03
Metals (including their alloys)	17 04
Iron and Steel	17 04 05
Mixed Metals	17 04 07
Soil and stones, other than those mentioned in 17 05 03*	17 05 04
Insulation and Construction Materials	17 06 04
Paper and Cardboard	20 01 01
Wood other than that mentioned in 20 01 37	20 01 38
Soil and Stones	20 02 02
Mixed Municipal Waste	20 03 01
Hydraulic oils	13 01 01*
Fuel oils and diesel	13 07 01*

Waste Material	LoW/EMC Code
Aqueous liquid waste other than those mentioned in 16 10 01 (to be considered for portable toilet wastes)	16 10 02

6.4 PROPOSED WASTE MANAGEMENT OPTIONS

The Main Contractor is responsible for defining and maintaining resource and waste storage areas across the site during the construction phase. These areas will be secured and provide for appropriate segregation of materials. The relocation of these areas will be planned appropriately as works progress. The Main Contractor will implement waste management policies whereby resource and waste materials generated on site are to be segregated as far as practicable.

The Main Contractor will ensure that all wastes which arise from the construction of the Proposed Project will be removed from site by an approved waste contractor. These contractors will be required to hold a valid waste collection permit. Furthermore, all waste materials which are required to be disposed off-site will be reused, recycled, recovered or disposed of at an appropriate facility which holds appropriate registration, permit or license. The Contractor will retain on file up-to-date copies of the relevant collection permits, and facility registrations, permits and licenses.

Other written records of the waste arisings will be maintained as per Section 7 of this RWMP.

6.5 MANAGEMENT OF WASTES AND RESOURCES

6.5.1. RESOURCES/WASTE

Quantities of materials/wastes identified below are based on estimates for a project of this size and scale. These quantities will be tracked and assessed for improvement opportunities throughout the course of the Proposed Project.

6.6 MANAGEMENT OF STOCKPILES

Segregation and storage of wastes generated during works will be segregated and temporarily stored onsite (pending removal or for re-use on site) in accordance with a pre-determined segregation and storage strategy While waste classification and acceptance at a waste facility is pending, materials for recovery/disposal shall be stockpiled as follows:

- Stockpile number;
- Origin (i.e. location and depth of excavation)
- Approximate volume of stockpile
- Date of creation;
- Description and Classification of material;
- Date sampled;
- Date removed from site;
- Disposal / recovery destination; and
- Photograph

Wastes for removal onsite will be segregated into separate skips by LoW/EWC codes pending collection by the prescribed Authorised Waste Collector – these are outlined in Section 7.2 below.

Waste storage, fuel storage and stockpiling and movement are to be undertaken with a view to protecting any essential services (electricity, water, etc) and to protect any existing surface and new water drains.

Waste will be stored on site, including soil stockpiles, in such a manner as to:

- Prevent environmental pollution (bundled and / or covered storage, minimise noise generation and implement dust / odour control measures, as may be required); and
- Maximise waste segregation minimise potential cross contamination of waste streams and facilitate subsequent re-use, recycling and recovery.
- As this report is preliminary version of a live document – the main contractor will provide the location of the waste storage areas before the demolition and construction phases begin and the report will be updated appropriately.

Protection of adjacent surface water systems from deleterious matter are achieved by the following:

- Clear marking of buffer zones to maintain their integrity before commencing any work;
- Restricting machinery access to these zones unless absolutely necessary;
- Enforcing the prohibition of material stockpiles or spoil heaps within them.

Temporary drainage systems associated with construction activities should be designed to divert water away from buffer zones and avoid direct discharge into aquatic areas. To prevent contamination, mixing of soiled water from yards and other hard surfaces with uncontaminated water from roofs or other sources is prohibited. Only clean, uncontaminated water should be discharged into soak-away systems or surface water.

6.6.1. SOILS AND STONES

Volumes of soils are to be excavated on Site during the Proposed Project. It is expected that these volumes will arise from topsoil stripping and from excavations to construct the landfill cells. It is proposed to re-use subsoil materials on Site where possible. Any excess soils that satisfy by-product criteria will be notified as by-product for beneficial reuse on other sites. This accords with the waste framework hierarchy for waste prevention.

The Soil and Stone Recovery & Disposal Capacity (Update Report 2020) recommends that proposed developments with demolition and excavation processes exhaust all reuse possibilities before sending to recovery or disposal facilities. Provisions in the EC (Waste Directive) Regulations 2011 provide for the reclassification of waste as resources, and this is addressed under Article 27 (by-product) and Article 28 (end-of- waste).

When certain criteria can be demonstrated by the economic operator, Article 27 allows for the declaration of a material as a by-product rather than a waste. This instrument is well established for soils and stone. The classification of soils and stone as a by-product can have significant economic benefits and allow for the handling of these materials outside waste legislation. There are also large environmental benefits through facilitating a circular economy approach.

These decisions made by the economic operator must be notified to the EPA. This is considered by the EPA on a case-by-case basis and the EPA then takes a risk-based approach in making their determination. This determination has an advisory period of 10 weeks. For this declaration the economic operator is required to demonstrate that all four of the by-product conditions are met:

1. The further use of the soil and stone is certain;

2. The soil and stone can be used without any further processing other than normal industrial practice;
3. The soil and stone are produced as an integral part of a production process; and,
4. Further use is lawful fulfilling relevant product, environmental and health protection requirements for the specific use and will not lead to overall adverse environmental or human health impacts.

The Main Contractor should seek advice on this process from an appropriately qualified consultant.

Where required, the Main Contractor is responsible for ensuring permits, issued by the National Waste Collection Permit Office (NWCPO), are held by each waste collection contract in accordance with Waste permitting, licences & Documentation under the Waste Management (Collection Permit) Regulations 2007.

6.6.2. CONTAMINATED SOILS

The Site is an existing landfill, should any contaminated materials be identified during construction, these materials should be removed offsite for recovery or disposal as required.

6.6.3. METALS

Metals from ESB pylon removal will be segregated in appropriate skips or other receptacles in accordance with the authorised waste collectors' requirements. The contractor shall liaise with the metal waste contractor as to the segregation streams relevant to their site. The majority of metal waste will be recycled.

6.6.4. TIMBER AND WOOD

Uncontaminated timber and wood products will be segregated accordingly. The contractor shall ensure that appropriate segregation is maintained to exclude materials containing glues, preservatives, paints, varnishes, etc.

Waste timber production on site will be limited.

6.6.5. PLASTIC

Appropriate waste and 'off-cut' construction plastic (hard plastic) will be segregated appropriately in accordance with the waste contractor's requirements and recycled appropriately. Soft plastics and plastic wrapping shall be segregated for offsite recycling where possible. Small amount of plastics will be placed in the mixed C&D skip and segregated offsite at the waste facility where not feasible to have a separate plastics skip.

6.6.6. WASTES FROM CONSTRUCTION SITES OFFICES AND STAFF

During the course of the construction phase waste will be generated from employees on the site. These will encompass general refuse, mixed dry recyclables, food wastes and wastes from onsite portaloos. These wastes will be managed by appropriately licenced and specialised waste contractors. These wastes will be collected and stored separately from the C&D wastes generated through construction activities.

6.6.7. OTHER WASTES

As required and depending on the stage of the construction, the contractor will determine if other waste streams need appropriate segregation. These streams may include: glass, bricks and tiles. These needs will be periodically assessed and evaluated by the contractor.

Excess concrete (17 01 01) will be returned to concrete supplier.

6.6.8. HAZARDOUS WASTES

The management of all hazardous waste streams will be coordinated in conjunction with the Contractor's Site Health and Safety Manager. Hazardous waste arisings are not anticipated however the appropriate waste management practices will be employed.

Hazardous wastes (anticipated to be limited to waste oils, lubricant and other construction liquids) will be stored in secure, dedicated and clearly labelled impermeable containers. These will be located in an appropriate waste compound. If identified through additional testing, contaminated soils will also be appropriately segregated on Site for onward disposal.

6.7 COSTS OF WASTE MANAGEMENT

Re-iterating the Waste Hierarchy (Figure 6-1) it is clear that cost of waste management reflects this top-down pyramid. Therefore, incentivising this project to first prevent waste from being created as is outlined above will reduce the cost of waste management and overall construction costs.

Reuse of material also is beneficial to cost as virgin material that is manufactured or mined and subsequently transported to Site may well be in excess of reuse costs. The Proposed Project will reuse appropriate, non-hazardous waste topsoil for landscaping purposes.

Scrap metal, wood, plastics, and other wastes will be assessed by the main contractor/resource manager. Metal salvage waste costs can be offset by rebates. Acceptable plastic and wood will also be from the site.

Disposal costs for landfill are typically (est.) €160.00 per tonne including the landfill levy (Waste Management (Landfill Levy) Regulations 2015 (S.I. No. 189 of 2015)). This price is non-inclusive of skip hire and collection costs which can widely vary. Thus, the Proposed Project will endeavour to accord with the Waste Hierarchy to prevent, reuse and recycle before disposal of waste where appropriate.

7 SITE MANAGEMENT

Site Management will ultimately be the responsibility of the Contractor. Control of the Site including waste management will be transferred to the Contractor at commencement of the Proposed Project. The Design Team or client representative may set recommended tasks for the contractor to follow in the works specification.

7.1 RESOURCE MANAGEMENT RESPONSIBILITY

- Agree and revise as necessary any commitments or targets included in the RWMP developed at design/planning with the Client for acceptance and adoption in the RWMP for construction;
- Allocate responsibility for resource management to one or more individuals of sufficient seniority to put the relevant procedures into practice. Nominate a suitably qualified Resource Manager (RM) with expertise in waste and resource management to implement the RWMP;
- The RM will be required to update the plan as required to reflect new resource streams, work practices, suppliers or resource management options as required;
- The RM will be responsible for delivery of all training and induction in relation to resource management;
- The RM will be responsible for ensuring site infrastructure is supplied and maintained as fit for purpose;
- The RM will be responsible for conducting all relevant internal site audits including audits of subcontractor operations;
- The RM will be available as required for any Local Authority or other audits undertaken;
- The RM will be responsible for maintaining site records for waste and resources exported offsite and ensuring these are undertaken by suitably authorised operators to suitably authorised sites; and
- The RM will be engaged with relevant individuals who have access to ordering and stock-control records to ensure supply chain initiatives have been adopted.

7.2 AUTHORISED WASTE COLLECTION AND RECEIVING FACILITIES

All waste removed from site must be carried out by a contractor with a current waste collection permit for the waste codes to be collected.

All residual resources legally classified as a 'waste' taken from site must be sent to suitably authorised waste facilities for disposal or recovery. The following authorisations are applicable:

- Certificate of Registration (CoR) from the Local Authority (issued to private sector);
- Waste Facility Permit (WFP) from the Local Authority; and
- Licenced Landfill.

7.2.1. WASTE CONTRACTORS

The Main Contractor will nominate only authorised Waste Collectors and Facilities from the list available at <http://www.nwcpo.ie/permitsearch.aspx> for each relevant LoW Code. This RWMP document will be updated by the Contractor at the pre-construction and main construction when they have been selected. A list of authorised provisional intended Waste Collection Contractors and a list Waste Facility Permit holders.

WASTE COLLECTION CONTRACTORS

- Starrus Eco Holdings Ltd (trading as Panda) – NWCPO-13-11193-08
- Multimetals Recycling Ltd. – NWCPO-09-01185-04

NWCPO contractor(s) will be used to collect the following waste streams:

Table 3 – LoW Codes for Collection

Waste/Resource/Material	LoW Code
Metals	17 04 05
Concrete	17 01 01
Masonry	17 03 02
Mixed Construction and Demolition Wastes	17 09 04
Timber	17 02 01

Other authorised Waste Collection Contractors from the NWCPO register will be engaged if capacity issues are affecting the above contractor(s).

WASTE FACILITIES

- Starrus Eco Holdings Limited (trading as Panda) – W0140-05
- Multimetals Recycling Limited - WFP-WW-09-0014-07

The above WFP holder(s) will be used as the final destination for the following waste streams:

Table 4 – LoW Codes for Facilities

Waste/Resource/Material	LoW Code
Metals	17 04 05
Concrete	17 01 01
Masonry	17 03 02
Mixed Construction and Demolition Wastes	17 09 04
Timber	17 02 01
Metals	17 04 05

Other authorised Waste Facilities from the NWCPO register will be engaged if capacity issues are affecting the above facility.



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