

Appendix 19.2 Operational Waste Management Strategy

APPENDIX 19.2 OPERATIONAL WASTE MANAGEMENT STRATEGY

1 Introduction

This Operational Waste Management Strategy has been prepared as part of the EIS for the Proposed M20 Cork-Limerick Motorway scheme. The purpose of this strategy is to ensure that all wastes arising from the operation of the proposed M20 Cork-Limerick motorway scheme, to include wastes generated at the associated Motorway Service Area are dealt with from generation to disposal in a systematic way and in accordance with the governing legislation e.g. The Waste Management Act, 1996 and subsequent amendments and Waste regulations.

1.1 Guidelines/Requirements

This strategy has been prepared for the provision of waste management for the operational phase of the proposed road development in accordance with the NRA "Guidelines for the Management of Waste from National Road Construction Projects". WYG have taken account of best practice and the primary guidance documents on the management of waste from buildings including;

- BS5906 Code of Practice Waste Management in Buildings
- Regional Waste Management Plans
- Waste Management Policy Documents e.g. Changing Our Ways and predecessors

A separate plan has been prepared for the construction and demolition phase of the development (see Appendix 19.1). All details in this report are based on available information at the date of production of the report. Any quantities presented are subject to detailed design and should not be taken as definitive.

To date no formal discussions have been held with waste management contractors regarding collection frequencies, vehicles, waste storage containers etc. These details will be fully explored and provided to the relevant local authorities and the NRA following the appointment of a contractor and detailed design of the scheme.

2 Proposed Waste Management

In accordance with the above guidance the following will be implemented under the operational waste plan for the proposed development. The proposed development will give rise to a wide variety of waste streams which will be generated, stored, segregated and disposed of as outlined below.

2.1 Likely Waste Arisings

It is anticipated that the majority of the waste arisings during the operational phase of this project will be generated at the Motorway Services Area. It is anticipated that the only other significant wastes arising on the scheme will arise from periodic motorway maintenance in the form of road and verge cleaning and green waste from landscaping. It is understood that the maintenance of the motorway and associated landscaping will be provided by a suitable

contractor. The contractor will be responsible for ensuring that all maintenance wastes are segregated and sent to suitable facilities for disposal/recovery as appropriate.

2.2 Waste Contractor

Waste contractors will be appointed for the provision of waste storage receptacles and the collection and transfer of such waste to authorised facilities. Details of the contractors permitting/licensing arrangements will be made available to the local authority following appointment should they be required.

Private waste management providers in the Limerick/Cork Regions currently provide a comprehensive waste recycling and disposal service. The exact size and number of storage receptacles and the frequency of their collection will be agreed with the Waste Contractor and will be reviewed when the development is fully occupied and as waste management trends evolve. However it is initially proposed that the waste management system will operate as set out in Section 2.3 below.

2.3 Waste Management System

2.3.1 Motorway Services Area

The Motorway Services Area, comprising of shop, fuel forecourt, restaurant, and associated staff facilities will be provided with sufficient waste storage in the form of bins that comply with IS EN 840 1997. 1,100 litre bins should be used with a load capacity of approximately 0.5 tonnes. Standard 1100L bins typically used for commercial wastes typically measure 1.3 long by 1.0m wide and 1.3m high.

It is proposed that bins be provided for dry recyclables, residual and organic wastes in the proportions outlined here e.g. 2/3 recyclable to 1/3 residual. The residual bins should be approximately 50% for non organic wastes and 50% for organic wastes. The estimated waste storage required is presented in Table 1.

Table 1 Estimated waste storage required

Motorway Services Area Breakdown	Area m2	Equation for weekly waste arisings	Volume of Waste Arising	1100L bin equivalent per week
Shop	231.8	Volume arising per m2 of sales area (10L x square meterage)	2,318L	2.1
Restaurant (175 covers)	229.4	Volume per number of covers (75L)	13,125L	11.93
Services Yard	273.5	-	-	-
Total Building Area	1403.5	-	-	14.03

On a weekly basis it is therefore recommended that a minimum of 14 x 1100L bins be provided for residual, recyclable and organic wastes. Therefore approximately 20m² of waste storage area will be required. The final sizing and collection frequency for the Motorway Services Area should be discussed with the appointed waste contractor as waste generation rates evolve.

Special provision will be made for glass in the form of bottle banks. Containers will be provided, one for clear, green and brown glass respectively. The location of the bottle bank will be external and such that it will be accessible to a crane for servicing.

2.3.2 Access Provisions

It is anticipated that wastes will be transferred on a daily or more frequent basis from the shop, restaurant and food preparation areas directly to the waste storage facilities provided at the rear of the Motorway Services Area at the services yard.

On larger scale commercial/retail developments, it is typically recommended that compaction or other on site waste treatment systems including shredding, glass crushing, baling, and incineration be considered. While it is not proposed to provide these systems at the proposed development initially it is recommended that the potential for compaction of wastes be considered and discussed with waste contractors. There may be savings to be achieved as waste generation rates become established and could have a significant impact on the required frequency of collection and numbers of general domestic bins required for the development.

A minimum clear space of 150mm between individual waste storage containers and between containers and surrounding walls is recommended. Sufficient space for the use and servicing of containers without moving other containers should be provided. If bulk waste storage containers or compacted waste containers are used there should be sufficient space for access and handling. To provide sufficient working headroom when communal containers that conform to BS EN840 are used the minimum height of the compound should be two metres. Where bulk containers are used the minimum headroom should be determined at the final design stage.

In accordance with the requirements of BS 5906, the waste storage compound will be constructed within a fire compartment structure i.e. designed to contain a fire. Walls and roofs of compounds shall be formed of non-combustible material. Suitable fire fighting measures will be provided and consultation will be held with a fire safety officer in this regard.

Waste storage areas will be equipped with wastewater drainage points for cleaning and disinfecting purposes. The responsible personnel should ensure that waste containers are readily available for collection at the appropriate time each week.

Appropriate lighting and the ability to reach and open required containers should also be taken into consideration when designing the waste storage locations. For access and egress of the containers from the waste storage area there should be no steps and have a minimal incline ramp.

3 Waste Strategy Summary

On the basis of the information available at the time of the production of the report, WYG have prepared outline provisions for the management of wastes arising from the proposed M20 Cork-Limerick Motorway scheme.

Wastes arising from periodic motorway maintenance and landscaping will be segregated and sent for disposal/recovery at suitably licensed facilities. Contractors appointed to provide motorway maintenance and landscaping will be responsible for ensuring compliance with the requirements of this plan. This requirement will be stipulated as part of the tender documents for appointment of contractors.

Waste storage areas (of a suitable size as required by Best Practice and BS5906) will be provided at the services areas at the Motorway Services Area. Waste storage areas will be directly accessible by waste collection vehicles. The potential optimisation of waste management collection systems with on site treatment systems including shredding, compaction and baling will be considered as waste generation rates evolve.

The implementation of a detailed waste management plan in conjunction with the Environmental Operating Plan for the scheme will ensure the impact of the proposed scheme to the local environment from waste management practices will be no worse than a neutral imperceptible impact and may provide a slight positive impact when compared to the existing situation.

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