APPENDIX A18.1 RESOURCE AND WASTE MANAGEMENT LEGISLATION AND POLICY

Appendix 18.1 Legislation, Policy and Best Practice Guidance

Introduction

Resource and waste management takes place in a legislative and policy framework. A review of applicable legislation, policy and best practice guidance was undertaken to inform the impact assessment and recommended mitigation. EU, national and local policy, legislation and guidance relevant to the M7 Osberstown Interchange and R407 Sallins Bypass is as follows:

SI 126 of 2011 - European Communities (Waste Directive) Regulations 2011.

These regulations which were adopted in 2011 significantly changed the provisions of the Waste Management Acts, 1996 to 2011. The Regulations define "waste disposal" and "waste recovery" as well as setting out tests which must be complied with in order for material to be described as a "by-product" or achieve "end of waste" status.

The Regulations formally set out the following waste hierarchy which shall apply as a priority order in waste prevention and management legislation and policy:

- (a) prevention;
- (b) preparation for re-use;
- (c) recycling;
- (d) other recovery (including energy recovery); and
- (e) disposal

The Regulations require that all waste management plans and hazardous waste management plans in existence at the commencement of the Regulations shall be evaluated by 31 December 2012 and where appropriate be revised to be brought into line with Directive 2006/12/EC on Waste.

The Regulations also require the Environment Agency to establish a waste prevention programme by December 2013.

Directive 2006/12/EC of the European Parliament and of the Council of 5 April 2006 on Waste.

The European Council of Ministers has adopted the revised Waste Framework Directive, a decision that means member states will now be expected to reach a 70% recycling rate for non-hazardous construction and demolition waste by 2020.

Directive 2008/98/EC came into force on 12th December 2008, and Ireland has two years from this date to implement it into national law. The Directive lays down the five-step hierarchy of waste management options, with waste prevention as the preferred option, followed by re-use, recycling, recovery and safe disposal, in descending order. In addition, the Directive also deals with the issue of 'end of waste' and clarifies the definitions of recovery, disposal and by-product. The directive states that, "The recovery of waste and the use of recovered material as raw materials should be encouraged in order to conserve natural resources." Once the Directive is implemented into Irish law it

is likely that this provision will facilitate recovery of useful excavation materials from the Grangegorman Development.

Waste Management Acts, 1996 to 2011 and associated Regulations.

The Waste Management Act, 1996 was enacted in May, 1996 and sets out the responsibilities and functions of various persons in relation to waste. This was subsequently amended by a number of subsequent acts including the Waste Management (Amendment) Act 2001 and the Protection of the Environment Act 2003. The Act:

- Prohibits any person from holding, transporting, recovering or disposing of waste in a manner which causes or is likely to cause environmental pollution.
- Requires any person who carries on activities of an agricultural, commercial or industrial nature to take all such reasonable steps as are necessary to prevent or minimise the production of waste.
- Prohibits the transfer of waste to any person other than an authorised person (i.e. a holder of a waste collection permit or a local authority).
- Requires the Environmental Protection Agency (EPA) to make a national plan in relation to hazardous waste.
- Requires local authorities to make waste management plans in relation to nonhazardous waste.
- Imposes certain obligations on local authorities to ensure that a service is provided for collection of household waste and to provide facilities for the recovery and disposal of such waste.
- Enables the Minister for the Environment and Local Government to make Regulations for various purposes to promote better waste management.
- Provides for substantial penalties for offences including fines, imprisonment and/or liability for clean-up measures.

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

Waste collection permits are granted in accordance with the Waste Management (Collection Permit) Regulations, 2007 as amended. Waste from Grangegorman may only be collected by the holder of a waste collection permit, a local authority or other authorised waste collector in accordance with the Waste Management Acts 1996-2010. Waste storage and collection areas on site should be designed to prevent environmental pollution.

Waste Management (Shipments of Waste) Regulations 2007, S.I. No. 419 of 2007.

Where waste is exported outside of Ireland for recovery or disposal the National Transfrontier Shipment (TFS) Office within Dublin City Council must be notified. Certain financial guarantees must be in place and a certificate issued by the National TFS Office prior to the waste movement taking place.

Department of the Environment and Local Government (1998). Waste Management Changing Our Ways – A Policy Statement.

The October 1998 policy statement 'Waste Management - Changing our Ways' outlines the Government's policy objectives in relation to waste management and suggests some key issues and considerations that must be addressed in order to achieve these objectives. In particular, it focuses on the need to give clear and practical expression to the requirements of the waste hierarchy by developing and pursuing integrated solutions, which combine progressive policies with a sustainable and cost effective waste infrastructure. Changing our ways set the following targets for achievement over a fifteen year timescale:

- A minimum 65% reduction in biodegradable municipal wastes consigned to landfill.
- The development of composting and other feasible biological treatment facilities capable of treating up to 300,000 tonnes of organic waste annually.
- Materials recycling of 35% of municipal waste.
- Recovery of at least 50% of construction and demolition waste within a five year period, with a progressive increase to at least 85% over fifteen years.

Department of the Environment and Local Government (2002). Preventing and Recycling Waste – Delivering Change – A Policy Statement.

The Government added to the messages presented in 'Waste Management - Changing our Ways' with the publication of 'Preventing and Recycling Waste - Delivering Change' in 2002. In addition to setting objectives the policy statement set out how these might be achieved through investment from the National Development Plan in waste infrastructure. Key objectives of the policy statement are:

- The setting up of a Market Development Group focusing on markets for recyclables.
- Formulating a National Strategy on Biodegradable Waste Policy.
- Expansion of the network of civic amenity sites and materials recycling facilities.

Department of the Environment, Heritage and Local Government (2004). Waste Management - Taking Stock and Moving Forward.

This document reviews progress of implementation of national waste policy objectives to 2004. It sets up a framework for implementing key policies including the National Waste Prevention Programme and the setting up of a Market Development Group. It also sets an objective date of 1 January 2005 for implementation of user based charging for waste collection.

Department of the Environment, Heritage and Local Government (2006). National Strategy on Biodegradable Waste.

The National Strategy on Biodegradable Municipal Waste (BMW) published by the Department of the Environment, Heritage and Local Government (DoEHLG) in 2006 sets out measures to progressively divert biodegradable municipal waste from landfill in accordance with the agreed targets in EU Directive 1999/31/EC on the landfill of waste (Landfill Directive). By 2016 in the region of 1.8 million tonnes of biodegradable municipal waste will need to be diverted annually in order to meet the Directive's targets.

The Strategy is based on the integrated waste management approach established as

Government policy since the publication of Changing Our Ways in 1998. The preferred options for dealing with BMW are:

- Prevention and minimisation avoiding generating the waste.
- Recycling mainly of paper and cardboard but also of textiles.
- Biological treatment mainly of kitchen and garden waste including composting.
- Residual treatment thermal treatment with energy recovery or by way of mechanical biological treatment.

The Strategy sets specific objectives for the contributions that each of these measures will make to achieving EU Landfill Directive targets for diversion of BMW from landfill.

Department of the Environment, Heritage and Local Government (2012). A Resource Opportunity- Waste Management Policy in Ireland

This policy document sets out measures through which Ireland will make further progress to increase recycling rates and reduce delivery of waste to landfill following coming into force of the Waste Framework Directive. Key measures set out in the report are as follows:

- Significant reduction of Planning Regions from ten to three. A review of regional waste management plans will be undertaken to comply with the requirements of the Waste Framework Directive. The reviews will be supported by a National Waste Management Planning Coordination Committee
- Through waste collection permits waste collectors will be required to manage waste in accordance with the waste hierarchy and operate pricing structures to incentivise environmentally sustainable behaviours by households in terms of waste reduction
- All householders will be obliged to demonstrate that they are availing of an authorised waste collection service or are otherwise managing their waste in an environmentally acceptable manner
- All current and future producer responsibility schemes will be required, as part of the conditions of their approval, to formulate, implement and demonstrate significant waste prevention and re-use initiatives for their particular waste streams.
- Separate collection of organics will be a required waste permit condition for those collecting from households within population centres of a given size and will be introduced on a phased basis over a 4 year period, beginning with larger population centres.
- Ireland requires an adequate network of quality waste treatment facilities. The EPA will undertake a review of recovery infrastructure to advise on national requirements for managing municipal waste in accordance with the principles of proximity and self sufficiency.
- Timing and nature of the application of landfill bans will be considered taking into account the level of diversion being achieved and the development of viable

beneficial uses for waste in support of the virtual elimination of our dependence on landfill.

Environmental Protection Agency (2008). National Hazardous Waste Management Plan, 2008-2012.

The National Hazardous Waste Management Plan published by the Environmental Protection Agency in 2008 replaces the first national hazardous waste management plan published in 2001.

This Plan sets out priority actions to be taken in relation to:

- Prevention of hazardous waste.
- Improved collection rates for certain categories of hazardous waste.
- Steps required to improve Ireland's self-sufficiency in hazardous waste management.
- Management of certain legacy hazardous wastes such as contaminated soil.

Kildare County Council (2005). Kildare Waste Management Plan 2005-2010.

The Kildare Waste Management Plan 2005-2010 identifies waste prevention and minimisation as a key objective for waste management in County Kildare. Where waste is generated the plan sets out measures for diversion of waste from landfill in the County. The adopted measures, which are relevant to the proposed development, are as follows:

Kildare County Council will promote the provision of mobile crushing and screening systems located at existing/proposed waste facilities, where practicable.

Kildare County Council will also promote and raise awareness of the Voluntary Construction Industry Initiative for increasing minimisation and recycling rates for construction and demolition waste.

Kildare County Council will also promote and encourage quarry operators and large construction sites to develop temporary recycling facilities where possible.

The European Communities (Waste Directive) Regulations 2011 require that the plan shall be evaluated by 31 December 2012 and where appropriate be revised to be brought into line with Directive 2006/12/EC on Waste. The plan review is underway and until it is complete the existing plan remains in force.

Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects.

These guidelines were published by the DoEHLG in July 2006. They were developed in conjunction with the National Construction & Demolition Waste Council (NCDWC) as part of the Voluntary Construction Industry Initiative and give advice on planning for C&D waste management. They also give guidance on source separation of waste, the diversion of waste from landfill and encourage construction companies to work towards achieving the national recycling target of 85% as outlined in the Government Policy Document Changing Our Ways (DOEHLG).

APPENDIX A18.2 RESOURCE AND WASTE MANAGEMENT GUIDELINES ON THE PREPARATION OF CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT PLANS (CDWMP)

Appendix 18.2 Guidelines on the Preparation of Construction and Demolition Waste Management Plans

Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects were developed by the DoEHLG and National Construction & Demolition Waste Council (NCDWC) as part of the NCDWC voluntary construction industry initiative, which aims to meet the national C&D waste recovery target of 85% by 2013.

The Construction and Demolition Waste Management Plan for DART Underground will include the following as a minimum:

- Name and contact details of the main contractor including the nominated project manager.
- Description of the Project.
- Specific waste management objectives for the project.
- Roles including training and responsibilities for C&D Waste.
- Wastes arising including proposals for minimisation/reuse/recycling.
- Estimated cost of waste management.
- Demolition Plan.
- Material handling procedures.
- Waste auditing protocols.
- Record keeping procedures.
- Proposals for education of workforce and plan dissemination programme.

The following will also be considered as part of the Waste Management Plan:

- The identification of the amounts intended to be stored temporarily on site and the location of such storage.
- Procedures for controlling sub contracts i.e. for checking waste procedures of subcontractors and ensuring sub-contractors fulfil design teams and contractors obligations in respect of waste management.
- Designation of separate storage areas for different types of waste materials in order to maximise their re-use and recycling potential.
- Procedure for record keeping for hazardous waste, for example C1 forms and transfrontier shipment documents.
- Details of authorised waste hauliers with appropriate and up-to-date Waste Collection Permits. Details of permitted or licensed recovery and/or disposal facilities where waste materials will be sent, including copies of permits and licenses.

APPENDIX A18.3 RESOURCE AND WASTE MANAGEMENT ICE DEMOLITION PROTOCOL

Appendix 18.3 ICE Demolition Protocol

The ICE Demolition Protocol 2008 describes how the demolition and design processes for buildings can be managed to ensure that resource efficiency is increased by minimising waste and maximising the displacement of primary materials where viable.

The Demolition Protocol provides methodologies which:

- Ensure that the principles of the waste hierarchy are adopted in the decision making process for evaluating buildings, the fit out materials and structures.
- Offer a process-driven approach to setting targets for deconstruction, reclamation and reuse.
- Provide a Deconstruction/Demolition Recovery Index (DRI) this is the
 percentage of building elements, products or materials to be reused, recovered or
 recycled.
- Estimate bulk quantities through a pre-demolition audit, summarised in a Demolition Bill of Quantities (D-BOQ).
- Provides a new build recovery index (NBRI) describing the percentage of building elements, products or materials recovered for use in the new build.