



Construction Waste Management Plan

Proposed Large-scale Residential Development at Rathmullan, Drogheda, Co. Meath.

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This document has been prepared and checked in accordance with Waterman Group's IMS (BS EN ISO 9001: 2015, BS EN ISO 14001: 2015)

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Comments



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1. Introduction

This preliminary Construction and Waste Management Plan (CWMP) is indicative only and should not be construed as representing the exact method or sequence in which the construction works shall be carried out. This is a draft document; the Contractor is to produce a finalised Construction and Waste Management Plan adopting the information here within and developing it further. This report should be reviewed in conjunction with the Resource Waste Management Plan.

As is normal practice, the Main Contractor for the project is responsible for the method in which the demolition and construction works are carried out and to ensure that best practices and all legal obligations including Local Authority requirements, Health and Safety legislation and Environment Protection Legislation are complied with. The main contractor is also responsible for the design and installation of all temporary works required to complete the permanent works. The Applicant reserves the right to deviate from the contents of this report, while still complying with all relevant Local Authority requirements and legislation.

We would further note that this document will be updated during the construction stage of the project indicating the construction-specific items.

The current lands proposed to be developed have demolition/removal of all existing farm buildings/structures on the subject site, which will be demolished as part of the works.

The buildings have been assessed as per asbestos report attached. The extent of material will be classified again and quantified during the construction stage and will be carted off-site to a registered landfill area where required. If material classification allows for this material to be re-used, the contractor will consider the same. The exact details of these ruins will be outlined in a Construction Stage Waste Management Plan. Receipts of these will be kept in the construction Safety File for ease of reference when inspections are carried out.

This report has been prepared by Waterman Moylan Consulting Engineers, on behalf of Earlsfort Developments Drogheda Limited, for a proposed large scale residential development at Rathmullan, Drogheda, Co. Meath, situated to the west of Drogheda town centre. The proposal relates to a residential development of 249 No. residential units and a creche.

2. Site Description

2.1 Site Location

The site is located on Rathmullan Road in Drogheda, Co. Meath. The site is situated approximately 2.5 km west of Drogheda town centre. The proposed development is bounded to the south by agricultural land. The site is bound to the east by existing residential development, consisting of two-storey terraced houses and three-storey duplexes. The site is bound to the north by Rathmullan Road, the Boyne Greenway and the Boyne River. To the west the site is bound by agricultural land, and the M1 Motorway is c. 500m away from the vicinity of the site in the same direction. The proposed development will be accessed from Rathmullan Road via a new signal-controlled four-arm junction.

The proposed site area within the proposed red line boundary is approximately 9.20 hectares. The current agricultural lands exhibit a general slope from the south-west to the north-east towards the River Boyne, with existing ground levels ranging from 30 m to 6m OD Malin within the proposed red line boundary. Access to the site is currently facilitated through an existing entrance located off the Rathmullan Road to the east of the overall site.

Please refer to Waterman Moylan drawing No. 18-014-P401 – Rev A for the exact site location and surrounding lands as outlined above.



Figure 1: Proposed Development Location

2.2 Proposed Development

The proposed development includes (i) demolition/removal of all existing farm buildings/structures and associated hard standing on site; (ii) construction of a large-scale residential development (LRD) of 249 no. units comprising 170 no. two-storey houses (including 37 no. two-bedroom houses, 111 no. three-bedroom houses and 22 no. four-bedroom houses), 16 no. three-storey duplex buildings (accommodating 16 no. one-bedroom and 16 no. two-bedroom units) and a mix of 8 no. three-storey and 3 no. four-storey apartments blocks accommodating a total of 22 no. one-bedroom and 25 no. two-bedroom apartments); (iii) construction of a new vehicular entrance and access road off Rathmullan Road with associated junction works and associated internal access road network with pedestrian and cyclist infrastructure; (iv) provision of a three-storey creche facility (411sq.m) with external play areas at ground and second floor levels and vehicular/bicycle parking area; and, (v) all ancillary site and infrastructural works, inclusive of removal of existing vehicular entrances, general landscaping and public open space provision, vehicular parking provision (396 no. spaces in total), bicycle parking, boundary treatments, foul/surface water drainage, attenuation areas, provision of a pumping station and provision of an ESB substation, as necessary to facilitate the proposed development. Each house will be served by vehicular parking to the front and private amenity space in the form of a rear garden. Each duplex building will be served by vehicular parking to the front and private amenity space in the form of balcony/terrace spaces to the rear. Each apartment block will have shared access to adjoining car parking bays with communal amenity space and bicycle/bin stores provided to the rear and each apartment will be provided with private amenity space in the form of a balcony or terrace. The development includes provision of a landscaped area of public open space to the north of the site, with 2 no. pedestrian/cyclist connections (via the northern/eastern site boundaries) to Rathmullan Road which will be subsequently ceded to Meath County Council. The application is accompanied by a Natura Impact Statement (NIS) and an Environmental Impact Assessment Report (EIAR).

The application for this development also includes all the necessary associated infrastructure to service the above. This includes the installation of a network of foul water and storm water pipes, watermains, and a network of roads and footpaths.

The proposed estate road levels around the site, range from 19m to 30.20m. Additionally, the proposed finished floor levels for the housing units also range between 19.6m and 30.2m above the OD Malin.

In terms of access to the site, the existing Rathmullan Road will be extended towards the site with the existing road, footpath and cycle path removed and area landscaped. Details can be seen in Waterman Moylan drawing No. RAT-WMX-PH2-00-DR-C-P416 – Rev A. Main point of junction entry will be provided via a newly proposed four-armed signalized junction. This junction will connect the Rathmullan Road (East), the Rathmullan Road (North), the proposed site access and the Oldbridge Road.

The design and layout of the proposal has been prepared to fully comply with the current relevant design standards and specifications applicable to this form of development. The relevant design standards and specifications that the layout has been designed in accordance with but not limited to are as follows:

- DMURS
- Uisce Eireann Code of Practice (CoP) and Standard Details (Water and Wastewater)
- Transport Infrastructure Ireland (TII)
- Cycle Design Manual

- SuDS Manual Ciria C753
- Technical Guidance Documents, Section H etc.

2.3 Proposed Construction Works

The proposed work will consist of the following:

- Site preparation;
- Demolition of the agricultural buildings on site and the removal of demolition waste;
- · Erection of security fencing/perimeter fencing;
- Setting up a secure site compound including wash down area;
- · Site clearance including topsoil stripping;
- Construction of infrastructure including access road, footpaths, drainage and services, a pumping station;
- Construction of 4-arm signalised junction and roadways which connects to the existing Rathmullan Road;
- Construction of residential housing scheme comprising 170 no. houses 32 no. duplexes and 47 no. apartments units (providing a total of 249 no. residential units) and a creche.
- The development provides for a preliminary 24-month construction period commencing in 2026 with completion in 2027/28

3. General Site Up and Pre-Commencement Measures

Detailed condition surveys (including photographs) will be carried out on certain adjacent / adjoining third party buildings prior to any work being carried out on the site. The purpose of the survey would be to record the condition of the properties before the works commence. Copies of these survey reports would be provided to the third-party owners.

A detailed condition survey (including photographs) will be carried out on the roads and footpaths surrounding the site. The purpose of the survey would be to record the condition of the streets and footpaths around the site prior to the works commencing.

A site compound(s) including offices and welfare facilities will be set up by the main contractor in locations to be decided.

Prior to any site works commencing, the main contractor will investigate / identify the exact location of and tag all existing services and utilities around and through the site with the assistance of the relevant Meath County Council technical divisions and utility companies.

Typical working hours for the site will be 08.00 to 19.00 Monday to Friday and 09.00 to 13.00 Saturday. No Sunday work will generally be permitted. The above working hours are typical; however, special construction operations may need to be carried out outside these hours in order to minimise disruption to the surrounding area.

4. Site Security and Hoarding Lines

Hoarding lines and site security will be set up within the development site as required.

Hoarding and security fencing will be required on the public roads during the construction works and for construction of the new realigned entrance to the site.

A draft construction traffic management plan has been prepared for discussion with Meath County Council ("MCC")as the Road Authority. Prior to construction commencing on site, detailed plan will be prepared by the appointed contractor and agreed with Meath County Council prior to the commencement of works..

The traffic management plan will identify staging areas, delivery of materials, strategy for large concrete pours, removal of demolition waste, traffic routes etc.

Access gates will be operated by a flagman who will divert incoming / outgoing vehicles / pedestrians and general traffic as necessary.

5. Construction and Demolition Waste Management

 These preliminary Construction Waste Management guidelines will be incorporated into the requirements for the Contractor and this report will be developed by the Contractor as the construction progresses.

2. Policy and Legislation

The principles and objectives to deliver sustainable waste management for this project have been incorporated in the preparation of this report and are based on the following strategic objectives which are most up-to-date national and regional policies relevant to waste management as of 2025:

- National Policy: The Waste Management Acts 1996 to 2023 (as amended), including the Environment (Miscellaneous Provisions) Act 2011
- Protection of the Environment Act 2003
- Local Policy: Eastern Midlands Regional Waste Management Plan 2015-2021.

This Waste Management Plan is also in accordance with the following guidance note published by the Department of the Environment, Heritage and Local Government in November 2021:

 Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition (C&D) Projects.

The hierarchy of waste management sets out the guiding principles in order of importance as follows:

- a. Reduction of the amount of waste generated by the construction process.
- b. Segregation of waste is a key concept that will be implemented during the course of the construction plot of the development to enable ease in re-use and recycling, wherever appropriate.
- c. Recycle waste material where feasible, including the use of excess excavations as fill material, recycling of various waste fractions such as metals, packaging etc.
- 3. Typical construction waste which will be generated by the development is as follows:
 - General site clearance waste
 - Excavated material
 - Surface water runoff
 - Packaging and waste construction materials generated during the course of the construction activities

4. On site Waste Management

An estimate of the quantities of surplus construction waste and materials which will arise during the course of the construction plot is not confirmed at the time of writing. Construction waste will be categorised as outlined in Table 6.1 below.

The Purchasing Manager shall ensure that materials are ordered so that the quantity delivered, the timing of the delivery and the storage is not conducive to the creation of unnecessary waste.

Table 1: Estimated C&D Waste Arising on Site

C & D Waste Material	Quantity (tonnes)
Clay and stones	TBC
Concrete	TBC

Masonry	TBC
Wood	TBC
Packaging	TBC
Hazardous Materials	TBC
Other Waste Materials	TBC
TOTAL ARISINGS	TBC

Off Site Waste Management Licensing/Permitting

All waste materials (where necessary, after in-situ reuse and recycling options have been fully considered) shall be disposed of offsite, under the appropriate Duty of Care and subject to approvals/consents from the relevant statutory bodies. It is the responsibility of the Main Contractor to ensure that any company to whom waste is transferred is legally permitted to do so and that the facility they bring the waste to is licensed to handle that type of waste as outlined in the Waste Management Acts 1996-2005. The Waste Collection Permit Register, in accordance with the Waste Management (Collection Permit) Regulations 2001 will be consulted to ensure that waste carriers hold the appropriate permit.

It is anticipated that there is the possibility that waste materials will have to be moved off site. Specialist waste service contractors possessing the requisite authorisations will be engaged for the collection and movement and to transport the material to a facility which currently holds a Waste Licence, Waste Permit, or Certificate of Registration. Details of waste service contractors are not confirmed at the time of writing. The following waste authorisations will be arranged specifically for the project:

Table 2: Specific Waste Authorisations Necessary for the Scheme

Authorisation Type	Specific Need for Project
	(Yes / No?)
Waste Licence	Yes
Waste Permit	Yes
Waste Collection Permit	Yes
Transfrontier Shipment Notification	No - waste will not be exported outside the Republic of Ireland
Movement of Hazardous Waste Form	No - no hazardous waste is anticipated to arise from the subject site

Any waste that has to be disposed/recycled off site will be transported to the nearest appropriate facility in order to comply with the proximity principle and reduce the associated emissions from the transportation of waste. The Environmental Protection Agency holds details of waste facilities, which will be consulted where necessary.

An inspection of the site shall be made by the Main Contractor for hazardous substances, gas cylinders and the like. If such substances are encountered during the course of construction, then works must be halted. The project supervisor for the construction stage (PSCS) and the responsible Statutory Authority shall be informed immediately.

The Main Contractor shall prepare a detailed inventory of construction based hazardous waste generated, such as tars, adhesives, sealants and other dangerous substances, and these will be kept segregated from other non-hazardous waste to prevent possible contamination. Arrangements shall be made for such substances for disposal in a safe manner at an authorized disposal site or by means acceptable to the relevant Authority.

The Contractor shall ensure that the excavation works are carried out in accordance with best standard practice and excavation materials are well segregated to minimize any potential cross-contamination.

The Contractor shall carry out appropriate environmental chemistry testing in order to determine the waste classification of the soils that are to be excavated from areas where contamination is likely and that shall include Waste Acceptance Criteria testing. The test regime shall be agreed with the receiving landfill operator and the testing shall be carried out by an accredited laboratory.

Should excavation materials be assessed to be hazardous, the Contractor shall carry out pretreatment of the waste soil to a methodology that is agreed with the receiving landfill operator and in accordance with Environmental Protection Agency guidance.

The Main Contractor is encouraged to reuse and recycle any waste materials as far as is reasonably practicable.

In respect of any liquid Disposal including underground water, The Contractor shall carry out appropriate environmental chemistry testing in order to determine whether the liquid is contaminated or not. The test regime shall be agreed with the receiving disposal facility and the testing shall be carried out by an accredited laboratory.

The Main Contractor shall manage and carry out the works in accordance with best environmental practice and in accordance with the requirements of Local Authority, EPA and all requirements as specified in this document.

5. Appointment of Construction Waste Manager

A Construction Waste Manager shall be appointed from the Contractor's Staff and have overall responsibility for the implementation of the project Waste Management Plan (WMP) during the construction plot. The Construction Waste Manager will be appropriately trained and assigned the authority to instruct all site personnel to comply with the specific provisions of the WMP. At the operational level, a designated person from the main contractor and from each sub-contractor on the site shall be assigned the direct responsibility to ensure that the operations stated in the WMP are performed on an on-going basis.

Copies of the Waste Management Plan will be made available to all relevant personnel on site. All site personnel and sub-contractors will be instructed about the objectives of the Waste Management Plan and informed of the responsibilities which fall upon them as a consequence of its provisions. Where source segregation, selective demolition and material reuse techniques apply, each member of staff will be given instructions on how to comply with the Waste Management Plan. Posters will be designed

to reinforce the key messages within the Waste Management Plan and will be displayed prominently for the benefit of site staff.

6. Construction Record Keeping

Details of all arisings, movement and treatment of construction waste shall be recorded as part of the Waste Auditing regime.

It is the duty of the Construction Waste Manager to ensure that necessary licenses have been obtained as needed. Each consignment of construction waste taken from the site will be subject to documentation which will conform with Table 6.3 along with Transportation Dockets to ensure full traceability of the material to its final destination.

Table 3.: Details of materials taken from site

Detail	Particulars
Project of Origin	Rathmullan Road, Drogheda, Co. Meath
Material being Transported	Soil, Construction waste etc.
Quantity of Material	TBC
Date of Material Movement	TBC
Name of Carrier	TBC
Destination of Material	TBC
Proposed Use	TBC

7. Topsoil

In the case of topsoil, because it is quite sensitive, careful planning and on-site storage will be employed to ensure that this resource is reused on-site as much as possible. In this respect it is:.

- important that topsoil is kept completely separate from all other construction waste as any crosscontamination of the topsoil can render it useless for reuse.
- important to ensure that topsoil is protected from all kinds of vehicle damage and kept away from site-track, delivery vehicle turning areas and site plant and vehicle storage areas.

If topsoil is stored in piles of greater than two metres in height the soil matrix (internal structure) can be damaged beyond repair. It should also be kept as dry as possible and used as soon as possible to reduce any deterioration through lengthy storage and excess moving around the site. The storage of excavated material will be away from the River Boyne so as to prevent the possibility of run-off of slit or contaminants to the protected SPA. Please refer to Resource Waste Management Plan for the exact location where topsoil and excavated material will be stored on site.

Records of topsoil storage, movements and transfer from site will be kept by the Construction Waste Manager.

8. Earthworks – Fill Policy

- The quantity of fill materials to be imported into the site will be greatly reduced, by establishing levels of the proposed building which minimise the volume of fill.
- The infill material that will be imported to site during construction will comprise of one of the following two products:
- 1. Quarried product i.e. stone, sand and gravel, aggregates, and related fill products, including overburden from quarries (i.e. the material covering the rock to be quarried), which is permitted to be exported as a product as part of the quarry's planning permission.
- 2. Materials that have been approved as by-product by the EPA in accordance with the EPA's criteria for determining a material as a 'by-product' as per the provision under article 27(1) of the European Communities (Waste Directive) Regulations, 2011

6. Construction Traffic Routes

Deliveries and access to the construction site will mainly be via M1, and onto the Donore Road, then turn into the Marley's Road and enter into the construction site via the Rathmullan Road as shown in Figure 2. Given the fact that these roads, are all two-way roads, they can be used for the route both to and from the site.

A restriction on using any of the surrounding residential roads for Construction traffic will be put in place.

Due regard will be paid to minimising any impacts by construction vehicles on the existing developments in the area. Should routes become an issue, then the position will be reviewed by the Project Team and changes made.

Figure 2: Construction Access Route



All delivery vehicles will be co-ordinated as required by a flagman on duty at the relevant access point. All large concrete pours will be carefully co-ordinated with the roads department at Meath County Council.

The main contractor will be required to schedule delivery of materials on a daily basis. If necessary, the main contractor will be required to provide a secure material staging compound on the site.

7. Deliveries

Deliveries and access to the construction site as described in section 6 above.

In the event that large concrete pours are required which may result in congestion at the entrance to the site, the deliveries will be organised such that concrete trucks will queue at a pre-determined staging point and will then be called in by radio as appropriate to the site, via a pre-determined route and to the required access gate.

Set procedures and designated wash-out areas will be provided, or alternatively vehicle wash-out will be prohibited if a suitable wash-out area is not identified.

All delivery vehicles will be co-ordinated as required by a flagman on duty at the relevant access point. All large pours will be carefully co-ordinated with the roads department at Meath County Council.

The fill material will be classified in accordance with the NRA Specification for Roadworks. All material delivered to the site will be visually inspected prior to placement. A record of the locations chosen on site for the delivered material will be kept. GPS trackers on delivery vehicles will be used to confirm both the source and delivery destination.

8. Parking and Storage

A small amount of parking will be available on site. The closest bus stop near the area is Stop ID: 126311 and Stop ID 126191, c. 550 m away and serviced by Bus Eireann, route 173 every 60 minutes on the Drive Rathmullan Road and on Rathmullan Road.

Site management will organise additional off-site parking and shared car arrangements if required.

For those who wish to cycle to and from the development, dedicated cycle parking will be provided for the duration of the works within the site. Shower facilities and lockers will also be provided, and cycle links will be maintained at all times.

A Construction Stage Mobility Plan will be prepared by the contractor alongside the Construction Management Plan before starting on site.

The main contractor will be required to schedule delivery of materials on a daily basis. If necessary, the main contractor will be required to provide a secure material staging compound on the site. See the attached Waterman Moylan drawing No. RAT-WMX-PH2-00-DR-C-P420 for further details of Site Compound Location.

9. Hours of Operation

9.1 Proposed Working Hours

The proposed working hours for the development are set out below:-

Monday - Friday : 08h00 – 19h00
 Saturday : 09h00 – 13h00

9.2 Mitigation Measures

In order to mitigate the impact of construction activities both during and after trading hours, the following measures are proposed:

- Scheduling of deliveries to avoid interference with the peak hour of traffic movement
- · Co-ordination of deliveries to site with adjoining developments;
- · Scheduling of noisier activities as early as possible and if possible, on a weekday;
- · Noise mitigation measures as Section 10.2 of this Plan; and
- Vibration mitigation measures as per Section 10.3 of this Plan.

10. Control of Noise & Vibration

This section should be in conjunction with the Noise and Vibration Chapter of the EIAR.

10.1 Existing Noise Sources

The dominant source of noise in the area of the site is M1 to the west of the site and the Rathmullan Road to the east of the site.

10.2 Construction Noise Management

In the absence of any statutory Irish guidance relating to the maximum permissible noise level that may be generated during the construction plot of a project, the construction works will incorporate:

- Best practice measures relating to the control and minimisation of as set out in in British Standard BS 5228 (2009 + A1:2014) Code of Practice for Control of Noise and Vibration on Construction and Open Sites Parts 1 and 2 noise during all plots of the work;
- Selection of quiet plant including proprietary acoustic enclosures to compressors and generators;
- Control of noise sources including reduction of resonance effects by stiffening and / or the application of damping compounds to panels and / or cover plates;
- Control of rattling and grinding noises by fixing resilient materials between the contact surfaces.
- Screening by demountable enclosures;
- The siting of mechanical plant as far away from residential areas as possible; and
- · Regular maintenance of all plant;

Ref: British Standard BS 5228 (2009): Code of Practice for Control of Noise and Vibration on Construction and Open Sites Part 1: Noise.

10.3 Construction Vibration Management

In the absence of any statutory Irish guidance relating to the maximum permissible vibration level that may be generated during the construction plot of a project, the construction works will incorporate:

- · Selection of quiet plant with low vibration emissions;
- Provision of anti-vibration mounts on reciprocating plant;
- Limitation of vibration from construction activities to the levels recommended in BS 5228;
- · Strip and pad foundations in lieu of piling;
- · Materials to be lowered rather than dropped; and
- · Resilient materials to be provided on surfaces onto which materials are being lowered.

Ref: British Standard BS 5228 (2009): Code of Practice for Control of Noise and Vibration on Construction and Open Sites Part 2: Vibration.

11. Environmental Effects

11.1 Site Control Measures

The designated and operational on-site control measures, which will be established and maintained at this site, will include:

- · Designated hard routes through site;
- Each departing vehicle to be checked by banksman;
- Road sweeper/sweeping facility at egress point;
- · Provision and facilities to cover lorry contents as necessary;
- · Controlled loading of excavated material to minimise risk of spillage of contents;
- Spraying/damping down of excavated material on site by dedicated crews;
- · Use of known routes for lorries to monitor impact on local area; and
- Facility to clean local roads if mud or spillage occurs.
- Hazardous materials to be stored in a designated area on site with appropriate drip trays/bunding and fire extinguishers to contain any spillages.

11.2 Control of Dirt and Dust

The main consideration will be to combat dirt and dust at source so as not to let it adversely affect the surrounding areas. The objective will be to contain any dirt or dust within the site, which is large enough for comprehensive control measures.

The storage of excavated material will be away from the River Boyne so as to prevent the possibility of runoff of slit or contaminants to the protected SPA. Please refer to Resource Waste Management Plan for the exact location where topsoil and excavated material will be stored on site.

The main problems, which may arise during the early part of construction, will be controlled, if and when it proves necessary, by the measures described above and by the following measures:

- The use of hardcore access route to work front:
- A regime of 'wet' road sweeping will be set up to ensure the roads around the immediate site are as clean and free from dirt / dust arising from the site, as is reasonably practicable. This cleaning will be carried out by approved mechanical sweepers.
- Footpaths immediately around the site will be cleaned by hand regularly, with damping as necessary.
- High level walkways and surfaces such as scaffolding will be cleaned regularly using safe 'wet' methods, as opposed to dry methods.
- Vehicle waiting areas or hard standings will be regularly inspected and kept clean by brushing or vacuum sweeping and will be regularly sprayed to keep moist, if necessary.
- Vehicle and wheel washing facilities will be provided at site exit(s) where practicable. If necessary vehicles can be washed down before exiting the site.
- Netting will be provided to enclose scaffolding in order to mitigate escape of air borne dust from the demolition.

- Vehicles and equipment shall not emit black smoke from exhaust system, except during ignition at start up.
- Engines and exhaust systems will be maintained so that exhaust emissions do not breach stationary emission limits set for the vehicle / equipment type and mode of operation.
- Servicing of vehicles and plant will be carried out regularly, rather than just following breakdowns.
- Internal combustion plant will not be left running unnecessarily.
- Exhaust direction and heights will be such as not to disturb dust on the ground and to ensure adequate local dispersal of emissions.
- · Where possible fixed plant such as generators will be located away from residential areas.
- The number of handling operations for materials will be kept to a minimum in order to ensure that dusty material is not moved or handled unnecessarily.
- The transport of dusty materials and aggregates will be carried out using covered / sheeted lorries.
- Material handling areas will be clean, tidy and free from dust.
- Vehicle loading will be dampened down and drop heights for material to be kept to a minimum.
- Drop heights for chutes / skips will be kept to a minimum.
- Dust dispersal over the site boundary will be minimised using static sprinklers or other watering methods as necessary.
- Stockpiles of materials will be kept to a minimum and if necessary, they should be kept away from sensitive receptors such as residential areas etc.
- Stockpiles, where necessary, should be sheeted or watered down.
- Methods and equipment will be in place for immediate clean-up of spillages of dusty material.
- No burning of materials will be permitted on site.
- Earthworks excavations will be kept damp where necessary and where reasonably practicable.
- Cutting on site will be avoided where possible by using pre-fabrication methods to facilitate any temporary works that may be required to enable the demolition.
- Equipment and techniques for cutting / grinding / drilling / sawing etc, which minimise dust emissions and which have the best available dust suppression measures, will be employed.
- Prior to commencement, the main contractor will identify the demolition operations which are likely
 to generate dust and to draw up action plans to minimise emissions, utilising the methods
 highlighted above. Furthermore, the main contractor will prepare environmental risk assessments
 for all dust generating processes, which are envisaged.
- The main contractor will allocate suitably qualified personnel to be responsible for ensuring the generation of dust is minimised and effectively controlled.
- Demolition works to incorporate water spray to reduce dust.

11.3 Water

The excavations for the drainage pipes, water supply, utilities and foundations are not anticipated to affect the sites groundwater as no ground water was recorded in the Boring Records and Trial Pit Records as per the Site Investigation Report.

In the event that groundwater is present on-site during construction, the quality of the water will be improved through the provision of settlement tanks and will be regularly monitored visually for hydrocarbon sheen and suspended solids. Periodic laboratory testing of discharge water samples will be carried out in accordance with the requirements of Meath County Council before discharge to the surrounding drainage network.

Appropriate discharge licenses will be acquired from Meath County Council in respect of discharges from dewatering operations.

12. Duties and Responsibilities

12.1 Standards

Insofar as the construction of this development may impact on the surrounding road network, the development and associated roadworks shall be undertaken in compliance with the requirements of Meath County Council issued by the Transportation Department and any other requirements that the County Council may impose during the course of the works.

12.2 Project Team

It shall be the duty of the Project Team to provide the main Contractor in good time with all necessary designs, details, drawings and specifications so that the Contractors can, in conjunction with the Project Team prepare detailed proposals and programmes for the execution of the works for submission to Meath County Council as specified in of "Guidance for the Control and Management of Traffic at Roadworks".

It shall also be the duty of the Project Team to ensure that the Contractors proposals are reasonable and that they are implemented in a safe and competent manner.

12.3 Main Contractor

It shall be the duty of the Main Contractor in conjunction with the Project Team to prepare detailed construction and traffic management proposals for the implementation of the works.

The Contractor shall give adequate and timely notice to Meath County Council as specified in of "Guidance for the Control and Management of Traffic at Roadworks".

The Contractor(s) shall also be responsible for implementing the traffic management proposals in a safe and competent manner on an ongoing basis.

UK and Ireland Office Locations

