



OUTLINE PLAN

Demolition of Health Centre & Community Centre,
Emmet Road, Inchicore.

Demolition & Waste Management Plan

February 2021

GARLAND
Concepts Realised

TABLE OF CONTENTS

EXECUTIVE SUMMARY	3
1.0 INTRODUCTION	4
2.0 POLICY & LEGISLATION.....	4
3.0 PROPOSED DEVELOPMENT	5
4.0 CONSTRUCTION PLANNING AND PHASING.....	6
5.0 SITE ESTABLISHMENT	6
6.0 DEMOLITION WASTE.....	8
7.0 HOURS OF WORK.....	9
8.0 CONSTRUCTION TRAFFIC.....	10
9.0 MITIGATION MEASURES.....	11
10.0 ROAD MAINTENANCE & REINSTATEMENT.....	14

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EXECUTIVE SUMMARY

Construction and demolition waste arising from construction, renovation and demolition activities form the second largest waste stream in Ireland. In order to achieve the National Re-cycling target of 85% outlined in “*Changing our Ways – Quality Statement*” published by the Department of the Environment Heritage and Local Government 1998 it is essential that material resources are used more efficiently to reduce the amount of waste required in the final disposal. The National Waste Hierarchy identifies how residual waste should be dealt with in order to achieve a sustainable development.

The appointed contractor shall prepare Construction and Demolition Waste Management Plan which shall be in full compliance with the “*Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects*” published by the Department of the Environment Heritage and Local Government (DoEHLG, July 2006) and also Dublin City Council Waste Management Guidelines. They also comply with the Best Practice Recommendations for Sustainable Waste Management both nationally and inter nationally.

The implementation of this plan will minimise waste delivered to land fill and will result in a high level of re-cycling and the recovery of waste from this development which shall ensure the National Recycling Target of 85% of Construction and Demolition Waste is achieved.

1.0 INTRODUCTION

This Demolition & Waste Management Report has been prepared to ensure that the waste arising from the Demolition of two existing buildings at Emmet Road, Inchicore will be handled, recovered or disposed of, in accordance with Waste Management Legislation, Recognised Best Practice and Guidelines, and National and Local Waste policies.

The report will ensure that waste movement within the development takes place in a manner which complies with relevant legislation and has a minimum impact on nearby existing commercial and residential areas. This strategy will ensure that the development as a whole will operate in a more economic and environmentally sustainable manner, thereby enhancing the environment of the development and the local community.

2.0 POLICY & LEGISLATION

The Department of the Environment Heritage and Local Government published “*Best Practice Guidelines on the Preparation and Waste Management Plans for Construction and Demolition Projects*” in July 2006. The Guidelines encourage the diversion of waste from landfill and give advice on the planning for construction and demolition waste management. The Guidelines outline that a waste management plan should be prepared where “*demolition / renovations / refurbishment projects generating in excess of 100 m³ in volume, C & D waste*”.

To comply with these Guidelines a Construction and Demolition Waste Management Plan will be written and implemented by the Project Construction Contractor. The implementation of this plan will ensure that the proposed development exceeds the National Recycling Target of 85% as outlined in the Government policy document “*Changing our Ways – a Policy Statement*” published by the Department of Environment Heritage and Local Government 1998.

3.0 PROPOSED DEVELOPMENT

The project consists of the demolition of two buildings at the northern end of what was the former St. Michael's Estate, fronting onto Emmet Road, Inchicore. The demolition will include the St. Michael's Community Centre, the Health Services Executive building, the remains of a former halting, and all internal fences, walls, ancillary structures and the removal of all waste, hazardous materials and hardstanding.

The location of the site is identified in Figure 1, below:

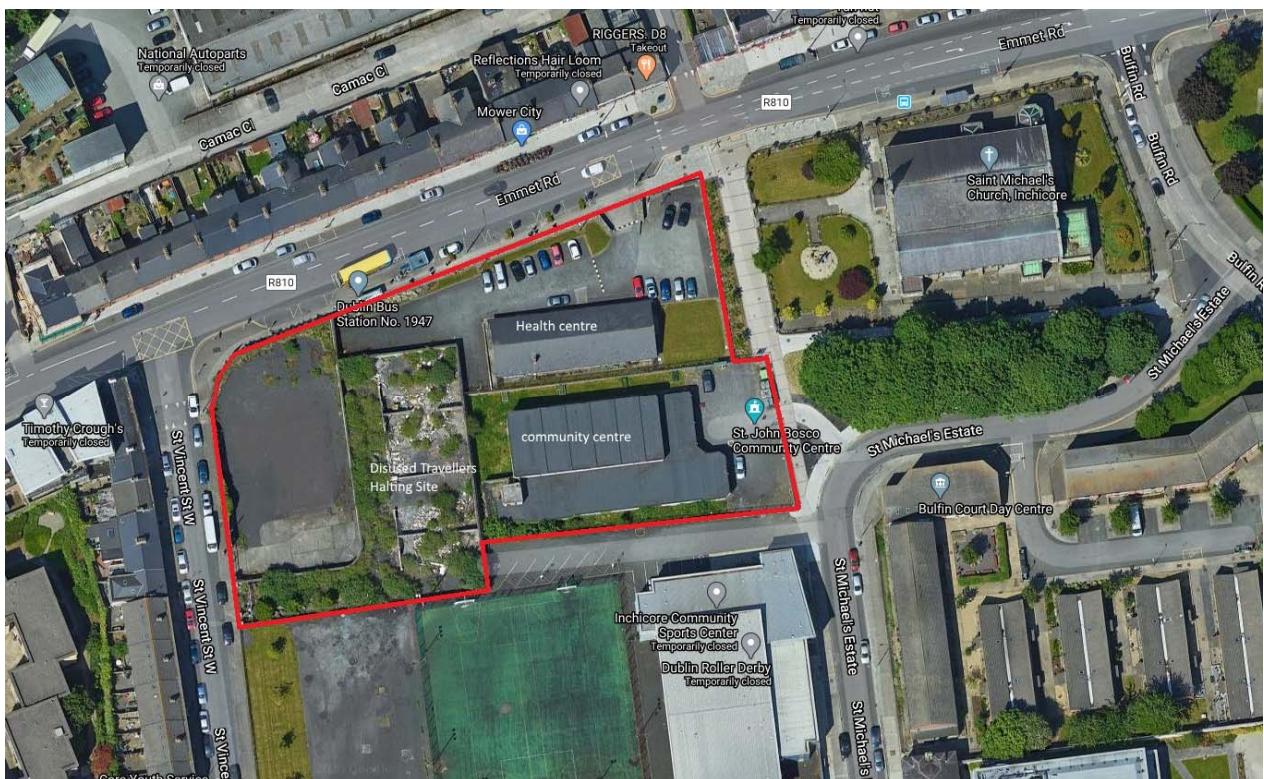


Figure 1: Site Location Map

4.0 CONSTRUCTION PLANNING AND PHASING

Subject to a successful grant of planning permission, it is intended the works will commence within 3 months of same.

The development is likely to proceed as follows:

Demolition:

- Demolition of Health Centre; demolition to commence and spoil to begin to be removed from site; material to be recycled to be stockpiled on site and covered.
- Demolition of Community Centre; demolition to commence and spoil to begin to be removed from site; material to be recycled to be stockpiled on site and covered.
- Demolition of existing hard-standings areas and disused Traveler's Halting Site; demolition to commence and spoil to begin to be removed from site

5.0 SITE ESTABLISHMENT

The site is currently accessed via Emmet Road.

For the duration of the demolition works, all construction traffic shall enter and leave the site using a new entrance formed on St. Vincent's Street West.

5.1 Invasive Species Management

An Invasive Species inspection has been undertaken on the site. No such species were identified and as such there is no requirement for associated control measures.

5.2 Perimeter Hoarding

Perimeter hoarding will be provided around the perimeter of the site to provide a barrier against unauthorised access for the public. Controlled access points to the site, in the form of gates or doors, will be kept locked for any time that these areas are not monitored (e.g. outside working hours).

The hoarding will be well-maintained, and will be painted to select colours.

5.3 Integrated Pest Management (IPM)

An Integrated Pest Management (IPM) to be established in accordance with best practice within the guidelines for the campaign for responsible rodenticide use (CRRU Ireland – Wildlife Aware).

Rodent pest control technicians will have completed their training and have been included on the register of ‘pest management trained professional users’ (PMUs) maintained by the Department of Agriculture Food and the Marine are fully equipped to implement best practice in the delivery of rodent pest management services, based upon consideration of the risk hierarchy and implementation of an Integrated Pest Management (IPM) approach.

Records of the conclusions and decisions reached by PMUs and by professional users on site will be maintained for management purposes and to facilitate auditing and compliance inspections by regulatory authorities.

5.4 Dust Prevention

From the outset of the project, the dampening down measures will be enforced to reduce dust generated from the site.

6.0 DEMOLITION WASTE

The project involves the demolition of two buildings, internal site walls, grubbing up of all foundations and removal of hard surfacing.

The calculation of the material is based upon site inspections undertaken. These calculations shall be verified by the Contractor prior to commencement. The project will endeavour to reuse / recycle as much demolition waste as possible during the demolition phase.

The buildings are predominately dense concrete block and concrete / brick construction. The roof of the Health Centre is a timber truss roof with a slate finish. The timber forms the majority of the material expected to be recovered from this building. The Community Centre has precast roof slabs bearing onto blockwork.

Steel railings around the perimeter of the site shall be sent for recycling and forms the expected majority of the metal to be recovered. Concrete, brick, metal and asphalt / macadam surfaces (mixed with sub-base material) are expected to form the majority of the demolition waste streams.

The following table is a preliminary estimate of the demolition waste generated by the development:

Item	Concrete / Concrete Blocks / Brick / Plastics	Metal Tonnes	Asphalt / Macadam Tonnes
Health Centre	681	0.8	8
Community Centre	1266	0.8	Nil
Hardstand Areas	Nil	Nil	1896

Table 1: Demolition Waste Quantity Estimate

Table 2 give predictions of the recycle / reuse targets for the development. No on-site crushing will be permitted.

Predicted Demolition Waste Targets					
Waste Type	Totals	Recycle		Disposal	
		%	Tonnes	%	Tonnes
Concrete / Concrete Block / Plastics	1947	20	389.4	80	1557.6
Metals	1.6	80	1.28	20	0.32
Asphalt / Macadam	1904	10	190.4	90	1713.6
Totals	3852.6		581.08		3271.52

Table 2: Predicated Demolition Waste Targets

Demolition waste will be removed by licenced contractors under Waste Management Act 1996, the Waste Management Regulations of 1998 and the Waste Collection Permit Regulations of 2001. All construction waste shall be disposed of appropriately to a fully licenced waste facility.

7.0 HOURS OF WORK

Construction operations on site will generally be between the hours of 7am and 6pm, Monday to Friday, and 8am to 2pm on Saturdays, subject to planning authority limitations. However, it may be necessary for some construction operations to be undertaken outside these times. Such works will be agreed in advance with Dublin City Council.

Similarly, deliveries of materials to site will be generated between the hours of 7am and 6pm, Monday to Friday, and 8am to 2pm on Saturdays, subject to planning authority limitations.

The construction times will ensure construction traffic will have limited impact on the traditional peak periods of 08:00-09:00 in the morning and 17:00-18:00 in the evening.

8.0 CONSTRUCTION TRAFFIC

8.1 Site Access

As outlined previously, the construction site will be accessed via St. Vincent's Street West. The temporary parking of delivery vehicles will not be permitted on the public road network. We believe the site to be large enough to accommodate all construction staff traffic and necessary machinery.

8.2 Construction Parking

Limited construction parking will be available on the construction site for the demolition phase to cater for key staff and visitors. These will be provided on a temporary surface within the site hoarding.

In general, construction personnel will not be provided with parking on the site and a strict no parking regime on adjacent roadways shall be enforced by the Main Contractor. The site is well serviced by public bus routes.

8.3 On-Site Construction Vehicle Staging Area

Construction traffic will be managed and scheduled in such a way that construction vehicles do not queue on St. Vincent's Street West or Emmet Road. An on-site vehicle staging area will be provided to facilitate awaiting vehicles.

8.4 Estimation of Vehicle Movements During Demolition

Approximately 3850 tonnes of demolition material will be removed off-site for reuse and/or recovery at an authorized facility in accordance with the waste hierarchy and relevant waste legislation. Transportation of the material will be by licensed haulers over an approximate 8 week period.

8.5 On-Site Accommodation

On-site accommodation will consist of:

- Adequate materials drop-off and storage areas
- Internal turning areas of trucks
- Limited dedicated staff and visitor parking within the confines of the site hoarding
- Staff welfare facilities, toilets, etc.

9.0 MITIGATION MEASURES

9.1 Dust

It is probable that the demolition activities on site will generate some dust emissions which would be in addition to any dust generated naturally by the urban activity in the vicinity, including traffic flows. The extent of dust generation under demolition activities been carried out is dependent on environmental factors such as rainfall, wind speed and wind direction.

The most likely sources of dust generation include demolition, soil stripping and excavation of foundations. It is anticipated that the dust that will be generated will be at its peak during periods of dry weather.

Dust Control Measures

1. Perimeter hoarding will be provided around the perimeter of the site. This acts as a dust barrier to a height of approximately 2.4m.
2. The contractor will spray water on the surface of all roads in the vicinity of the development in order to minimise dust generation from the construction activities. Water spray will increase in frequency during dry weather in order to maximise dust suppression.
3. The wheels of all vehicles leaving the construction site will be washed to ensure that dirt and dust is not transferred unto the public roadway.
4. Restrict vehicle speeds to 20kph as high vehicle speeds rise dust.

5. Tarpaulin covers are to be provided over stockpiles when high wind and dry weather are encountered.

6. Locate stockpiles away from site perimeters, in areas which are sheltered from the winds.

9.2 Noise & Vibration

The demolition will involve the use of noise generating construction plant and will also result in vibrations. There will also be an increase in noise relating to delivery of materials to site. It is intended that noise from the construction phase of the development will be kept to a minimum in accordance with "5228: Code of Practice for Noise and Vibration Control On Construction and Open Sites". Construction work will not be performed at night and will usually be limited to the hours indicated on the planning permission.

It is also proposed that communications be maintained between the Contractor, the Local Authority and Local Residents throughout the construction phase of the works to ensure that noise emission are maintained at a low level and that any possible complaints can be rectified speedily.

Noise Control Measures:

It is proposed that the following noise control measures be put in place:

1. The selection of construction plant with low potential for generating noise.
2. The siting of noisy construction plant as far from residential properties as possible.
3. The erection of temporary barriers around items such as generators or compressors if required.

9.3 Minimise Demolition Vehicle Movements

Construction vehicle movements shall be minimised through:

1. On-site employees will generally arrive before 08:00, thus avoiding the morning peak hour traffic. These employees will generally depart after 18:00.
 2. Consolidation of delivery loads to/from the site and the restriction of large deliveries on site to off-peak times.
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9.4 Compound Facilities / Parking

On-site facilities will consist of:

- Adequate materials drop-off and storage areas
- Internal turning areas for trucks
- Limited dedicated staff and visitor parking within the confines of the site hoarding
- Site offices, Staff welfare facilities, toilets, etc.
- It is not foreseen that cooking facilities will be available on site. The subject site is in close proximity to delicatessens, super-markets, cafes and restaurants.
- Wheel wash facilities shall be provided
- All potentially hazardous materials shall be securely stored on site.
- Spill kits shall be kept in these areas in the event of spillages.
- All waste containers (including all ancillary equipment such as vent pipes and refuelling hoses) shall be stored within a secondary containment system (e.g. a bund for static tanks or a drip tray for mobile stores and drums). The bunds shall be capable of storing 110% of the tank capacity. Where more than one tank is stored, the bund shall be capable of holding 110% of the largest tank of 25% of the aggregate capacity (whichever is greater). Drip trays used for drum storage shall be capable of holding at least 25% of the drum capacity. Where more than one drum is stored, the drip tray shall be capable of holding 25% of the aggregate capacity of the drums stored.
- Waste fuels and materials shall be stored in designated areas that are isolated from surface water drains or open waters (e.g. excavations). Skips shall be closed or covered to prevent materials being blown or washed away and to reduce the likelihood of contaminated water leakage. Hazardous wastes such as waste oil, chemicals and preservatives, shall be stored in sealed containers and kept separate from other waste materials while awaiting collection by a registered waste carrier. Fuelling, lubrication and storage areas and site offices shall not be located within 25m of drainage ditches, surface waters or open excavations. Fuel interceptor tanks shall be installed on the site to treat any runoff.
- The site shall be secured with adequate level of security fencing.

10.0 ROAD MAINTENANCE & REINSTATEMENT

The following measures will be undertaken to ensure that the site and the surrounding areas are kept clean and tidy:

- A regular program of site tidying will be established to ensure a safe and orderly site.
- Food waste will be strictly controlled on all parts of the site.
- Mud spillages on roads and footpaths outside the site will be cleaned regularly and will not be allowed to accumulate.
- Wheel-wash facilities will be provided for vehicles exiting the site.
- In the event of any fugitive solid waste escaping the site, it will be collected immediately and removed to storage on-site, and subsequently disposed of in the appropriate manner.
- All on-site waste storage areas shall be covered.

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