



Environmental Impact Statement Thorntons Recycling Facility Millennium Business Park



Volume 1 of 2 Non-Technical Summary



November 2007



**ENVIRONMENTAL IMPACT STATEMENT FOR
THORNTONS RECYCLING CENTRE,
MILLENNIUM BUSINESS PARK**

NON-TECHNICAL SUMMARY

VOLUME 1 OF 2

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Abstract: This is the non-technical summary for the Environmental Impact Statement (EIS) for a Materials Recovery Facility (MRF), capacity 100,000 tpa, for the recovery of dry recyclables and Construction and Demolition Wastes (C&D). This document is a summary of the main document, Volume 2 of 2, the main EIS prepared for the proposed development.

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1. NON TECHNICAL SUMMARY

1.1. Introduction

This Environmental Impact Statement (EIS) has been prepared for the proposed construction and operation of a Materials Recovery Facility (MRF) at Millennium Business Park, Cappagh Road, Townland of Grange, Dublin 11. The EIS is in two volumes, this volume, the Non-Technical Summary and Volume 2, which contains the main report and appendices.

The materials recovery facility is a processing plant which accepts non-hazardous, dry, non-food, mixed recyclable waste material and sorts it by mechanical means into separate recyclable fractions. These are then transported onwards for re-use or recycling. The site location is shown on Figure 1.1. The facility will be owned and operated by the established recycling and waste management company, Pdraig Thornton Waste Disposal Ltd., trading as *Thorntons Recycling* and will have a maximum processing capacity of 100,000 tonnes of material per annum. The waste types accepted at the facility will be dry-recyclable materials in two categories:

1. Dry Mixed Recyclable Material; Comprising of mixed separately collected non-hazardous dry recyclable fractions of municipal waste including paper, cardboard, plastics and metals.
2. Construction and Demolition Waste; Comprising of non-hazardous construction and demolition type wastes, collected from sites, commercial, industrial and domestic premises, mainly by means of waste skips.

The development comprises a metal clad process building having a plan area of 3,960 sq. metres with a maximum height of 14.2 metres; separate two storey office/welfare building of plan area 163 sq. metres with a maximum height of 8 metres; associated vehicle marshalling yard; 2 no. weighbridges with hut; 47 no. car parking spaces; truck wash; fuel storage area; water tank; all associated security fencing and site services including an electrical sub-station and site landscaping works.

1.2. Need for the Materials Recovery Facility

Thorntons Recycling operates waste collection services in the Dublin Region, the North East Region, the Midlands Region and in Counties Kildare, Galway and Wicklow. The facility is needed in order to recover recyclable materials from the increasing tonnage of material collected as part of the planned growth of the company.

The development of recycling initiatives has resulted in an increased volume of recyclable material being presented for recycling and recovery. Government policy, implementing European Commission policy on environmental protection is the key driver for increasing recycling rates. To achieve these high levels of recycling, processing, facilities such as the one proposed at Millennium Park are required to ensure that quality recyclable material is available for reprocessing. The key targets for government policy currently are:

- recycling at least 50% of construction and demolition waste within a five year period (2003), with a progressive increase to at least 85% over fifteen years (2013).
- Recycling of 35% of municipal waste
- Rationalisation of municipal waste landfills

The proposed facility is located within the Dublin waste management planning region in the functional area of Fingal County Council. The Waste Management Plan for the Dublin Region 2005 – 2010 advocates an increase in facilities to recycle construction and demolition waste. The plan also identifies that a further increase in recycling will require more materials recovery facility capacity within the region.

The Fingal County Development Plan 2005 – 2011, identifies specific policies and objectives for waste management in Fingal. It is stated in Policy UTP33 to

“...divert household waste from landfill and to promote the increased re-use and recycling of waste from all waste streams.”

It is policy that all development must have a plan for the management of all construction and demolition waste arising on site, shall make provision for the recovery or disposal of this waste to authorised facilities by authorised collectors.

1.3. Alternatives Considered

The need for such a development within the *Thorntons Recycling* organisation is clear from the current business volumes and the planned growth strategy for the company, if the company is to maximise the recycling/recovery potential of the materials collected. The processing methods being used are well established and are familiar to the organisation from their successful operation at their other facilities. The approach has a proven environmental record at other similar facilities operated by *Thorntons Recycling*.

A large number of different sites were examined by *Thorntons Recycling*, with such criteria as planning zone, accessibility and transport links and environmental criteria being taken into account as a part of the assessment criteria. Sites were examined across the Dublin region, as Dublin is the centre of waste creation for *Thorntons Recycling Waste Collections*.

This site was chosen because it has suitable zoning in the Fingal County Development Plan, because the transport links to the site are good and are getting better with the improvement works to the Cappagh Road, is within the Dublin region – the centre of waste generation for the site and while there are residences near the

site, it is located within a largely industrial area, suitable to this type of development. Overall of the available sites, this site was the most suitable in terms of development plan zoning, access and environmental criteria.

1.4. Descriptions of the development

The site of the proposed development is located in Millennium Business Park, Cappagh Road, in the Townland of Grange, Dublin 11. The site is located just off the Cappagh Road, near Ballycoolin, north of the M50 and West of the N2. The site is adjacent to a cement batching plant and a quarry, as well as established commercial and industrial facilities. There are other waste management facilities in the vicinity, including a waste permitted site (Dublin Waste Permit No. WPT 95) and a non-hazardous waste recycling and transfer facility (EPA Waste Licence W0183-01). The site is a greenfield site, currently uncultivated, but was formerly agricultural land. The proposed capacity of the MRF is 100,000 tonnes of material per annum. The waste types accepted at the facility will be dry-recyclable materials and C&D.

All materials will be brought to the facility for sorting, processing and recovery as recyclables. Skips will be delivered to the facility containing mixed and unsorted materials.

The proposed layout of the site is shown on Drawing No. GA-01. The building will occupy approximately 35% of the site. The remainder of the site is hardstanding and will be used for traffic ways, an office building, parking, truck wash, fuel storage and weighbridges.

Trucks will enter the site from the Millennium Business Park roadway through the site entrance onto one of the two weighbridges that will be located directly inside the site entrance. Cars will be directed to one of the parking spaces and trucks carrying waste materials will be directed to the materials recovery building. Trucks that will transport processed materials off site will enter the site via the entry weighbridge. All waste handling activities will take place within the building. There is an existing electricity pylon on site, with a buried 38kv line crossing under the southern section of the site.

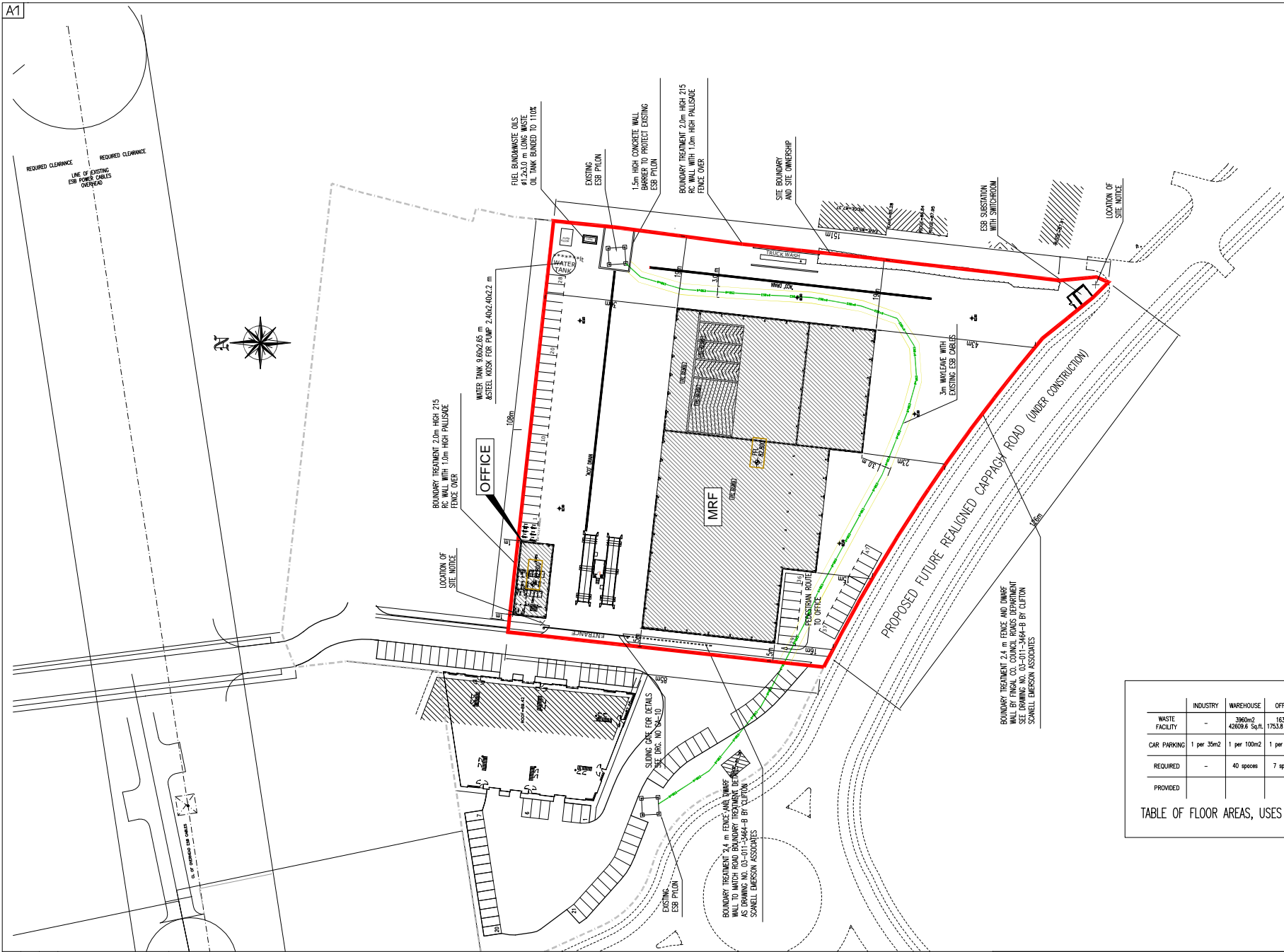
Potential impacts and proposed mitigation measures relating to construction of the facility are discussed in the environmental sections of this EIS. The site is currently a greenfield site. The entire site will be developed as a hardstanding area and 2 no. buildings will be constructed on top of the slab, the materials recycling facility and the office/canteen building. The materials recovery building will take up approximately 35% of the area of the site. Site fencing and gates will be installed.

Existing Site Infrastructure

Located within Millennium Business Park, the site is accessed via the Cappagh Road, (which is currently being upgraded), the site is accessed by a hard topped road in the business park. It is the last site on the eastern side of the road. The only infrastructure on site pre-development is an ESB pylon, a timber post fence and 1 no. well. A dwelling previously located on the site has been demolished under an existing planning permission for the site.



Map Legend
■ Site Boundary



	INDUSTRY	WAREHOUSE	OFFICE	TOTAL
WASTE FACILITY	-	3962m ² 42609.6 Sq.ft.	163m ² 1753.8 Sq.ft.	4125m ² 44363.4 Sq.ft.
CAR PARKING	1 per 35m ²	1 per 100m ²	1 per 25m ²	-
REQUIRED	-	40 spaces	7 spaces	47 spaces
PROVIDED	-	-	-	47 spaces

TABLE OF FLOOR AREAS, USES & CARPARKING

Mark	Date	By	Rev.

Job No.
**THORNTONS RECYCLING CENTRE,
MILLENNIUM BUSINESS PARK**

Architect/Client
THORNTONS

Drawing Title
**FIGURE No. 1.2
SITE LAYOUT**

Drawing Status
PLANNING

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©

1.5. Waste Acceptance & Handling

All waste accepted at the facility will be subject to EPA approved waste acceptance procedures, whereby it will be checked to ensure it complies with the waste licence. Only waste from hauliers with applicable waste collection permits will be accepted at the site. Details of all waste loads will be recorded by the weighbridge software. Acceptable loads will be directed to the materials recovery facility. Skip wastes will enter the materials recovery facility mixed and unsorted and materials contained within these skips will be mechanically and manually sorted at the facility to recover and recycle as much as possible. All remaining waste materials will be sorted by weight.

Processing of waste in the facility will occur between 07h00 and 22h00. As waste collections occur throughout the night across the city, the facility will accept waste on a 24-hour basis.

1.6. Human Beings

Millennium Business Park is located in an industrialised zone, there are a large number of commercial and industrial units in the area. Also neighbouring the site are a quarry, a materials recovery facility on the Cappagh Road and an electricity generation station just under 2 km east. The land use at the site to date has been agricultural and residential, with a previous residence demolished under an existing planning permission for development at the site. The distances for each of the existing houses in relation to the proposed site are listed below:

Table 1.1 Property Records within 1 km of the proposed site boundary

House No.	Approximate distance from the proposed site (m)
1	14
2	80
3	187

The nearest major residential zones are Finglas West and Corduff. Finglas West is located approximately 1.5 km south west of the proposed development and Corduff is approximately 2 km south east.

There are no hospitals, schools or hotels within 1 km of the site. The nearest hospitals are Cappagh National Orthopaedic Hospital (1.36 km to the southeast), James Connolly Memorial Hospital (2.1 km to the southwest of the site). There are several schools in Finglas, Cabra, Castleknock, Blanchardstown, St. Margaret's, each one greater than 2 km from the proposed development.

The nearest units in the Millennium Business Park are a concrete batching plant owned by Cemex, a Materials Recovery and Transfer Facility and a light industrial unit currently at low levels of occupation.

It is not anticipated that the construction or the operation of a Materials Recovery Facility will cause any significant negative impacts to human beings. Potential impacts on health and safety have been addressed in the mitigation measures. A Safety and Health Plan will be prepared and used during the design and construction

phases. The operation of the facility will be subject to a separate Safety Statement. Potential impacts from noise, traffic and dust are dealt with in separate sections of this EIS.

1.7. Landscape and Visual Impact

This section considers the potential impact that the proposed development may have on the existing landscape, and the consequent visual impacts. The proposed development comprises of the construction of one larger building containing the material recycling equipment and a separate office and staff facility, along with some smaller auxiliary structures.

The site for the proposed development is located in Grange townland, in an industrial zone located between the N2 and N3 national primary routes, 3 km north-east of Blanchardstown. The M50 runs west to east, located 1.1 km to the south of the site. Analysis of the potential visibility of the proposed development was carried out by an on site survey in the area and by digital modelling and photomontage. The proposed development will be most visible from the Cappagh Road, but views are limited to the section of road adjacent to the facility. The nearest residential location is adjacent to the eastern boundary of the site.

The industrial-commercial landscape of the development site is of low landscape value with no distinctive character. The construction stage may result in a temporary visual impact due to the various construction structures such as scaffolding and site hoarding. The development is considered to be appropriate to the general industrial zoning of the site and surrounding region. The facility will not have a significant negative impact on landscape character.

1.8. Ecology

A desktop study was carried out to identify designated (sites with statutory protection) sites within 5 km of the proposed development site, such as Natural Heritage Areas, Special Areas of Conservation and Special Protection Areas. The site of the proposed development was carefully walked during the ecological survey to ascertain the presence of mammals, habitats and birds. The proposed development area is not part of any designated site. There are two proposed National Heritage Area within 5 km of the proposed development site. Historical records show that a number of protected flora and fauna species have been recorded within 10km of the proposed development site.

Three dominant habitat types were identified at the site and two were identified adjacent to the site. The proposed development site is dominated by Dry Meadows and Grassy Verges and contains a large area of Recolonising Bare Ground along the western boundary of the site. A treeline of immature trees forms the eastern boundary of the site. The site is surrounded on three sides by Buildings and Artificial Surfaces including a public road to the south of the site. The proposed development site is located in a heavily developed area and is the only remaining 'green area' in the immediate vicinity.

A total of three mammal species (excluding bats) were recorded on the site. The habitats on the site are not favourable for badger sett construction. In general mammal activity on the site was low, as would be expected in an isolated site of such small size. The small size of the site means that many of the species recorded will only use the site on a transient basis. Bat activity was very low on the site with only one individual Soprano Pipistrelle recorded. Bird activity was generally low on the site, as would be expected in an open grassland site with urban surroundings.

No species of conservation concern in Ireland were recorded at the site. The mammal species recorded are common and widespread in Ireland and are unlikely to be impacted by the proposed development. Bat activity was very low on the site suggesting the site is of low value to bats. The avian community at the site is entirely typical of the habitats present. No species of conservation concern were recorded. With the application of suitable mitigation measures the proposed development will not have an adverse impact on the local bird populations.

1.9. Soils and Geology

The geology of the site was determined by means of an intrusive site investigation undertaken in September 2007. The nature of the site proposed poses a low risk to groundwater, with there being no significant quantities of pollution material stored on the site. A waste quarantine area will be provided in the materials recovery building.

There are no direct emissions to ground planned from the facility. The aspects of the proposed development that could impact on geology and hydrogeology during the construction and the operation phases of the development are accidental spillages or leaks of pollution materials on site, such as diesel. The nature of the site proposed poses a low risk to groundwater, with there being no significant quantities of pollution material stored on the site. As a result the site poses little risk to groundwater and there are no significant impacts predicted for the operational phase.

The diesel and other fuels and lubricants which pose a pollution risk will be stored in sealed bunds, to contain spillages. Monitoring of oil usage and water quality in the interceptors will alert site management to leaks.

1.10.Surface Water

This section addresses hydrology and surface water runoff in the existing environment, identifies potential impacts of the proposed development and outlines measures to avoid, reduce and mitigate potential impacts. A number of walkover surveys of the site were carried out between June and October 2007. There are no streams or water courses on site or in the surrounding area.

The proposed development site is located in the Eastern River Basin District. The proposed development site is located just within the Mayne-Santry Coastal Area. There are no surface water features in the immediate vicinity of the site. It is proposed to discharge surface water runoff from the proposed development into the Millennium Business Park drainage system.

Construction Impacts and Mitigation

The construction activities to be conducted or that are likely to occur, at the site that could potentially impact upon surface water include suspended solids emissions from run-off during excavations and fuel spillages or leaks. Protection of surface water from cement run-off will also be required. Suitable temporary treatment in the form of settlement tanks will be put in place for the duration of the excavations. A surface water protection procedure will be put in place for concrete handling activities. The washing out of cement lorries will be carried out subject to controls to protect surface water. The construction impacts present a relatively short-term impact.

During the operational phase the potential for generation of foul water will be from the wash down of floors and waste receptacles. Washing of vehicles using the facility will also generate foul water. This water will be contained in a separate foul water drainage network for discharge to the municipal foul water sewer network. Spill kits will be maintained on site.

To supplement the water requirement at the Materials Recovery Facility, it is proposed to provide a rainwater harvesting facility to harvest the clean surface water runoff from the roof. To conserve water, all clean rain-water from the site (roof and traffic area) will flow to a water tank for use on the site in low grade operations such as washing down.

There are no surface water features in the vicinity of the site. The proposed waste materials are dry recyclables and construction & demolition waste. These waste materials will be dry and will not contain odorous material. All waste handling will take place indoors. Leachate will not be generated on site. The potential impact to surface water from this facility is not anticipated to be significant. Appropriate mitigation measures have been proposed to prevent any negative impacts.

1.11. Air Quality

The proposed site is located adjacent to a road, a quarry and a cement batching plant. These are separated from the site by hedgerows. The baseline levels measured on site vary significantly across the site. Existing dust levels recorded at the south of the site were extremely high, likely as a result of construction activities being currently under taken at the southern boundary of the site. Based on the baseline results recorded, and the reasons for the high levels discussed, the most conservative approach is to consider that the lowest dust levels recorded on site, at the northern boundary the point furthest from the construction activities, are most representative of baseline dust levels on the site.

Construction Impacts and Mitigation

In terms of construction dust generation, the greatest potential will be during the initial site works, excavation works, preparation of ground for foundations and other preparatory works. The following measures are proposed to mitigate the potential for dust generation during construction activities. The site is currently grassed. Grass will only be removed from the site as necessary during construction. Any loose soil materials (during construction phase only) will be sprayed during periods of dry weather in order to suppress dust migration from the site. The access road to the site will be cleaned regularly during the construction period.

Operational Impacts and Mitigation

There are potential impacts to staff working in the facility and to the environment surrounding the facility. The facility will accept C&D waste inside the building for sorting and processing as recyclable material. Sorting and recovery of the dry recyclables material will also have the potential to generate dust. This will be mitigated by ensuring that all waste handling activities take place indoors. There will be local extraction fans on the equipment which will collect dust, and will capture it in bag filters. The entire site will be hardstanding, thereby minimising the potential for dust generation. A monitoring programme at the site will be implemented to measure dust in accordance with the conditions of the waste licence. Similar sites are currently operated by *Thorntons Recycling* within the limits set by the EPA for dust emissions.

1.12. Climate

This section presents details on climate within the existing environment in the vicinity of the proposed site. The nearest synoptic meteorological station to the Millennium Business Park is located at Dublin Airport which is located approximately 7 km east north east of the site. The proposed development will have no direct significant negative impact on climate. There may be some indirect net positive impacts on climate change through the recovery of material for reprocessing. However this is difficult to quantify precisely, as methods for its calculation differ depending on the exact end use to which the recovered material is put.

1.13. Noise

A noise survey was carried out in the vicinity of the proposed development site to determine ambient noise levels in the existing environment and at local noise sensitive locations. Baseline measurements were taken at each of the noise sensitive locations near the proposed facility and at the site boundary to determine the existing noise levels. Each of the major noise sources on the site was identified and reference sound level data for each source has been identified and used with a computer model to predict operational noise levels. In addition to assessing the impact of the facility on baseline noise levels, Environmental Protection Agency noise guidelines have been used as the appropriate noise impact criteria in establishing the significance of impacts.

The site is located in an industrial estate, with a mixed variety of existing uses including, an existing materials recovery facility, a concrete batching plant and commercial units. During the daytime monitoring period, the main noise source was the Cappagh Road, which runs adjacent to the site's southern boundary. Night-time noise consisted mainly of road traffic noise from the Cappagh Road and from distant roads (M50). The passing jet aeroplanes taking off and landing at nearby Dublin Airport are also a significant noise source in the area.

A site wide noise model was used to calculate the noise contribution from the operational phase activities at the site. The noise impacts associated with stationary (or minimal movement) sources, as well as on-site traffic movements, at the processing facility were predicted.

The construction phase of this project will consist of earthworks and building construction. Construction noise will be temporary. Construction phase mitigation measures shall include best practice methods (e.g. BS 5228:1997 Noise and Vibration Control on Construction and Open Sites). Control of construction noise will include measures to control noise from construction plant, equipment, and activities at source. Noise monitoring will be carried out as necessary during the construction phase to ensure the site is operating with undue noise impact.

The impact assessment of the predicted noise levels from the operation of the facility shows that there is not likely to be any significant impacts on the noise environment from the site. To ensure that the noise levels from the site are minimised a number of features will be incorporated during the detailed design and management of the facility.

All trucks delivering waste to the site will unload waste in the indoor waste reception halls. All of the processing operations at the site will occur indoors.

During the night period (22h00 – 07h00) no waste handling activities except deliveries will happen at the site.

The impact assessment has shown that the development will not have a significant impact on the noise or vibration environment. The existing noise in the region is typical of an industrial area, with locations close to roads showing higher noise due to traffic levels.

1.14. Traffic and Roads Infrastructure

The existing Millennium Business Park currently serves several industrial and warehousing units together with an existing licensed waste management facility. There is a cement batching plant north of the site. The boundary to the south is the existing Cappagh Road.

For the duration of these road re-alignment works, traffic is restricted to one-way flow (from south to north) along the stretch of Cappagh Road between the Ballycoolin Road Roundabout and the Kilshane Road/Mitchelstown Road Roundabout. Consequently traffic is not permitted to enter the Cappagh Road at the Kilshane Road/Mitchelstown Road Roundabout. Notwithstanding the above, there is available traffic count data at the Ballycoolin Road Roundabout and the Kilshane Road/Mitchelstown Road Roundabout which was recorded in 2005. These surveys were commissioned to establish baseline traffic conditions for a nearby application for a materials recovery facility on the Cappagh Road. This data has been used, with suitable growth factors, to predict impacts. The indicative annualised average daily traffic flow for the Cappagh Road is the range of 6,000 to 8,000 vehicles.

The proposed facility will accept a mixture of dry recyclables and skip waste, comprising of construction and demolition materials. It is considered that the loading characteristics of vehicles transporting materials to and from existing materials recovery facilities, which are similar to the proposed development, are likely to reflect those which will be manifest at the proposed development. Construction and demolition waste is typically brought to waste recovery facilities in relatively small heavy good vehicles carrying skips, trailers and hook loaders. The forecasted traffic generation by the facility has been calculated, and the results are presented in Table 1.2 and Table 1.3 below.

Table 1.2 Forecast Construction Programme and Traffic Generation

Number of HGV Deliveries				
Description of Activity	Duration (Months)	Monthly Average	Daily Average	TOTAL
Construction of MRF Building	6	40	2	240
Administration Building	3	20	1	60
Site works/Landscaping/Boundary	4	20	1	80
Entry/Exit Works	2	20	1	40
Total Deliveries	6	140	7	420

Table 1.3 Forecast Upper Bound Daily HGV Generation

Type of Trip	Trips Per Weekday (For Busiest Month)	
	Opening Year (70,000 t/a)	Ultimate Capacity (100,000 t/a)
Delivery	57	80
Removal	18	26
Total	75	106

At any section on the Cappagh Road the proposed development is estimated to contribute in the region of 1% of the total daily traffic. Taking the proposed infrastructural improvements into account the results show that the local road network should function satisfactorily up to the assessment year of 2014 and beyond. It is nonetheless forecast that the capacity of the two roundabouts which were included in the assessments may eventually and perhaps inevitably be reached in the year of 2024.

This is likely to occur, not as a result of the proposed development, but rather due to the full realisation of the future committed developments in the local vicinity. These results are not intended to highlight the failure of the local road network to accommodate already committed developments. Rather they can be used a tool to identify the actual impact associated with the proposed development, when viewed in context with those committed developments. The capacity of the roundabouts has been shown to be exceeded in 2024, nonetheless this may not actually be the case since the assessments herein are robust for the following reasons:

- A robust traffic growth rate year by year in line with that of national primary roads was adopted.
- The assumption that the development peak would occur at the same time as the network peak.
- The omission of the New Mitchelstown Road link from the traffic model (as a result of no available accurate traffic data) compounds forecasts of traffic conditions at the Cappagh Road/Mitchelstown Road/Kilshane Road Roundabout.
- The traffic estimates from the future committed developments take no consideration of the future Metro Link to the Ballycoolin area. Clearly this, in line with the conditions of planning which were imposed by the Local Authority for the developers to administer a Mobility Management Plan will involve a reduction in traffic being generated by this development, which is considered the most significant traffic generator of all committed developments.

1.15. Cultural Heritage

There are no known archaeological features within the site boundary. The operation of the facility will have no impact on the features of cultural heritage located within the vicinity of the facility.

1.16. Cumulative Impacts

The nature of the existing development and the planned future development of the area is largely commercial and industrial, with associated offices and service activities. There are already two similar material recycling activities operating in adjacent lots in the Business Park.

The development of the site is not likely to lead to significant adverse impacts on the region, considering the scale of the development in the context of the wider industrial area. The cumulative traffic impacts of the development have been dealt with in detail in the traffic chapter, which concluded that the cumulative impacts will be negligible.

There are no further significant cumulative impacts anticipated for Human Beings, Ecology, Geology, Soils, Surface Water, Air Quality, Climate Change and Noise from the Development.

The following Table shows a summary of the findings of the environmental impact statement.

Table 1.4 Summary of Primary Impacts Evaluation

Resource	Component	Source of Change	Significance	Mitigation Required
Human Beings	Population density	-	-	-
	Employment	Construction and operational employment	Small	Not required
	Lifestyle & Amenity	-	-	-
	Health & Safety	Construction health & safety	Small	Yes
	Housing	-	-	-
Landscape and Visual Impact	Landscape Character	Visibility of Buildings	Small/ Negligible	No
	Landscape Quality	Visibility of Buildings	Small/ Negligible	No
	Protected Landscapes	-	-	-
Ecology	Habitat Type	Vegetation Removal	Small/ Negligible	Yes
	Communities	Vegetation Removal	Negligible	Yes
	Individual Species	Vegetation Removal	Negligible	Yes

Resource	Component	Source of Change	Significance	Mitigation Required
Soils and Geology	Geology/ Geomorphology	Small Risk of Fuel Spillages on site	Negligible	Yes
	Mineral resources	-	-	-
	Residues to land	-	-	-
Surface Water Quality	Quality	Small Risk of Fuel Spillages on site	Negligible	Yes
	Hydrology	Hard standing increasing run-off	Small	Yes
Air Quality	Quality	Dust	Small	Yes
Climate		No impact	-	-
Noise	Environmental noise levels	Noise Emissions	Negligible	Yes
Traffic	Volumes, Capacity	1 % increase in traffic volumes	Negligible	No
Cultural Heritage	Architecture / Buildings	No impact	-	-
	Archaeological / monuments	No impact	-	-