Waste Licence Application Form

EPA Ref. Nº: *(Office use only)*	

This document does not purport to be and should not be considered a legal interpretation of the provisions and requirements of the Waste Management Acts 1996 to 2003.

Environmental Protection Agency
P.O.Box 5000, Johnstown Castle Estate, County Wexford
Telephone: 053-60600 Fax: 053-60699

Environmental Protection Agency
Application for a Waste Licence

WASTE MANAGEMENT ACTS 1996 to 2003

CONTENTS

INTRODUCTION

A valid application must contain the information prescribed in the Waste Management (Licensing) Regulations 2004 (SI No. 395 of 2004). **The applicant is <u>strongly</u> advised to read the *Application Guidance Notes* for Waste Licensing, available from the EPA.**

The applicant must conform to the format set out in the guidance notes for applications. Each page of the completed application form must be numbered, e.g. *page 5 of 45*, etc. Also duplicated pages from the application form should be uniquely numbered, e.g. page 5(i) of 45, etc. **The basic information should for the most part be supplied in the spaces given in application form** and any supporting documentation should be supplied as attachments, as specified. Consistent measurement units must be used throughout.

The applicant should note that the application form has been structured so that it requires information to be presented in an order of progressive detail.

When it is found necessary, additional information may be provided on supplementary attachments which should be clearly cross referenced with the relevant sections in the main document.

While all sections in the application form may not be relevant to the activity concerned, the applicant should look carefully through all aspects of the form and provide the required information, in the greatest possible detail.

All maps/drawings/plans must be no larger than A3 size and scaled appropriately such that they are clearly legible. In exceptional circumstances, where A3 is considered inadequate, a larger size may be requested by the Agency.

Information supplied in this application, including supporting documentation will be put on public display and open to inspection by any person. Should the applicant consider information to be confidential, this information should be submitted in a separate enclosure bearing the legend " In the event that this information is deemed not to be held as confidential, it must be returned to .....". In the event that information is considered to be of a confidential nature, then the nature of this information, and the reasons why it is considered confidential (with reference to the " Access to Information on the Environment" Regulations) should be stated in the Application Form, where relevant.

It should be noted that it will not be possible to process or determine the application until the required documents have been provided in sufficient detail and to a satisfactory standard.

CHECKLIST

Articles 12 and 13 of the Waste Management (Licensing) Regulations, 2004 (S.I. No. 395 of 2004) set out the information which must, in all cases, accompany a waste licence application. In order to ensure that the application fully complies with the legal requirements of Articles 12 and 13 of the 2004 Regulations, all applicants should **complete** the following.

In each case, refer to the attachment number(s) of your application which contain(s) the information requested in the appropriate sub-article.

Article 12(1) In the case of an application for a waste licence, the application shall -

(a) give the name, address and, where applicable, any telephone number and telefax of the applicant (and, if different, the operator of the facility concerned), the address to which correspondence relating to the application should be sent and, if the applicant or operator is a body corporate, the address of its registered office or principal office,

LOCATION	Form B.1. Attachment A	
CHECKED	**Applicant** ☒	**Official** ☐

(b) give the name of the planning authority in whose functional area the relevant activity is or will be carried on,

LOCATION	Form B.1. Attachment A	
CHECKED	**Applicant** ☒	**Official** ☐

(c) in the case of a discharge of any trade effluent or other matter (other than domestic sewage or storm water) to a sewer of a sanitary authority, give the name of the sanitary authority in which the sewer is vested or by which it is controlled,

LOCATION	Not Applicable	
CHECKED	**Applicant** ☒	**Official** ☐

(d) give the location or postal address (including where appropriate, the name of the townland or townlands) and the National Grid reference of the facility or premises to which the application relates,

LOCATION	Form B.2. Attachment A	
CHECKED	**Applicant** ☒	**Official** ☐

(e) describe the nature of the facility or premises concerned, including the proposed capacity of the facility or premises, and in the case of application in respect of a landfill of waste, the requirements specified in Annex 1 of the Landfill Directive,

LOCATION	Form B.7. Attachment A1	
CHECKED	**Applicant** ☒	**Official** ☐

(f) specify the class or classes of activity concerned, in accordance with the Third and Fourth Schedules of the Act, and in the case of an application in respect of the landfill of waste, specify the class of landfill in accordance with Article 4 of the Landfill Directive,

LOCATION	Form B.7.1. Attachment A1 & B7	
CHECKED	**Applicant** ☒	**Official** ☐

(g) specify, by reference to the relevant European Waste Catalogue codes as presented by Commission Decision 2000/532/EC of 3 May 2000, the quantity and nature of the waste or wastes which will be treated, recovered or disposed of,

LOCATION	Form H.1. Attachment H1	
CHECKED	**Applicant** ☒	**Official** ☐

(h) specify the raw and ancillary materials, substances, preparations, fuels and energy which will be utilised in or produced by the activity,

LOCATION	Form G. Attachments A & G	
CHECKED	**Applicant** ☒	**Official** ☐

(i) describe the plant, methods, processes, ancillary processes, abatement, recovery and treatment systems and operating procedures for the activity,

LOCATION	Form D2 Attachments A1, D2, H2, H3, J.	
CHECKED	**Applicant** ☒	**Official** ☐

(j) provide information for the purpose of enabling the Agency to make a determination in relation to the matters specified in paragraphs (a) to (g) of section 40(4) of the Act,

LOCATION	Attachment A & L	
CHECKED	**Applicant** ☒	**Official** ☐

(k) give particulars of the source, location, nature, composition, quantity, level and rate of emissions arising from the activity and, where relevant, the period or periods during which such emissions are made or are to be made,

LOCATION	Form E. Attachments A & E	
CHECKED	**Applicant** ☒	**Official** ☐

(l) give details, and an assessment of the effects, of any existing or proposed emissions on the environment, including any environmental medium other than those into which the emissions are, or are to be made, and of proposed measures to prevent or eliminate or, where that is not practicable, to limit or abate such emissions,

LOCATION	Form I. Attachments A & I	
CHECKED	**Applicant** ☒	**Official** ☐

(m) identify monitoring and sampling points and indicate proposed arrangements for the monitoring of emissions and the environmental consequences of any such emissions,

LOCATION	Form F. Attachments A & F	
CHECKED	**Applicant** ☒	**Official** ☐

(n) describe any proposed arrangements for the prevention, minimisation and recovery of waste arising from the activity concerned,

LOCATION	Attachments A & H3	
CHECKED	**Applicant** ☒	**Official** ☐

(o) describe any proposed arrangements for the off-site treatment or disposal of solid or liquid wastes,

LOCATION	Attachments A & H3	
CHECKED	**Applicant** ☒	**Official** ☐

(p) describe the existing or proposed measures, including emergency procedures, to prevent unauthorised or unexpected emissions and minimise the impact on the environment of any such emission,

LOCATION	Attachment J	
CHECKED	**Applicant** ☒	**Official** ☐

(q) describe the proposed measures for the closure, restoration, remediation or aftercare of the facility concerned, after the cessation of the activity in question,

LOCATION	Attachment K	
CHECKED	**Applicant** ☒	**Official** ☐

(r) in the case of an application in respect of the landfilling of waste, give particulars of –

(i) such financial provision as is proposed to be made by the applicant, having regard to the provisions of Articles (7)(i) and (8)(a)(iv) of the Landfill Directive and section 53(1) of the Act, and

LOCATION	Not Applicable	
CHECKED	**Applicant** ☒	**Official** ☐

(ii) such charges as are proposed or made having regard to the requirements of section 53A of the Act,

LOCATION	Not Applicable	
CHECKED	**Applicant** ☒	**Official** ☐

(s) state whether the activity is for the purposes of an establishment to which the European Communities (Control of Major Accident Hazards involving Dangerous Substances) Regulations, 2000 (S.I. No. 476 of 2000) apply,

LOCATION	Not Applicable	
CHECKED	**Applicant** ☒	**Official** ☐

(t) in the case of an activity which gives rise or could give rise to an emission into an aquifer containing the List I and II substances specified in the Annex to Council Directive 80/68/EEC of 17 December 1979, describe the existing or proposed arrangements necessary to give effect to Articles 3,4,5,6,7,8,9 and 10 of the aforementioned Council Directive,

LOCATION	Not Applicable	
CHECKED	**Applicant** ☒	**Official** ☐

(u) include a non-technical summary of information provided in relation to the matters specified in paragraphs (a) to (t) of this sub-article,

LOCATION	Attachment A	
CHECKED	**Applicant** ☒	**Official** ☐

Article 12(4) Without prejudice to Article 13(1) and (2), an application for a licence shall be accompanied by -

(a) a copy of the relevant page of the newspaper(s) in which the notice in accordance with article 6 has been published,

LOCATION	Attachment B6	
CHECKED	**Applicant** ☒	**Official** ☐

(b) a copy of the text of the notice or notices erected or fixed in accordance with article 7,

LOCATION	Attachment B6	
CHECKED	**Applicant** ☒	**Official** ☐

(c) where appropriate, a copy of the notice given to a local planning under article 9,

LOCATION	Attachment B6	
CHECKED	**Applicant** ☒	**Official** ☐

(d) a copy of such plans (appropriately scaled and no larger than A3 size), including a site plan or plans and location map or maps, and such other particulars, reports and supporting documentation as are necessary to identify and describe, as appropriate -
(i) the position of the notice in accordance with article 7,

LOCATION	Attachment B2 & B6	
CHECKED	**Applicant** ☒	**Official** ☐

(ii) the point or points from which emissions are made or are to be made, and

LOCATION	Form E. Appendix E	
CHECKED	**Applicant** ☒	**Official** ☐

(iii) the point or points at which monitoring and sampling are undertaken or are to be undertaken,

LOCATION	Form F. Appendix F	
CHECKED	**Applicant** ☐	**Official** ☐

(e) such fee as is appropriate having regard to the provisions of articles 40 and 41.

INCLUDED Y/N	Yes	
CHECKED	**Applicant** ☒	**Official** ☐

Article 12(5)(a) & (b) An application shall comprise 1 signed original of the application and 2 copies in hardcopy format plus 2 copies of all files in electronic searchable PDF format on CD-Rom.

HARDCOPIES PROVIDED Y/N	Yes	
CHECKED	**Applicant** ☒	**Official** ☐

CD OF PDF FILES PROVIDED? Y/N	Yes	
CHECKED	**Applicant** ☒	**Official** ☐

Article 13 Where a development requires an Environmental Impact Assessment to be carried out, 1 signed original and 2 copies in hardcopy format of the environmental impact statement plus 16 copies in electronic searchable PDF format on CD-ROM should accompany this application.

EIA REQUIRED ? Y/N	Yes	
CHECKED	**Applicant** ☒	**Official** ☐
3 HARD COPIES OF EIS INCLUDED ? Y/N	Yes	
CHECKED	**Applicant** ☒	**Official** ☐
16 CD versions of EIS, as PDF files, PROVIDED? Y/N	Yes	
CHECKED	**Applicant** ☒	**Official** ☐

PROCEDURES

It is recommended that pre-application consultations with the Agency are undertaken before a formal submission of the waste licence application.

The procedure for making and processing of applications for waste licences, and for the processing of reviews of such licences, appear in the Waste Management (Licensing) Regulations 2004 (S.I. No. 395 of 2004) and are summarised below. The application fees that shall accompany an application are listed in the Second Schedule to the Regulations.

Prior to submitting an application the applicant must publish in a local newspaper, and erect on site, a notice of intention to apply. An applicant, other than a local authority in whose functional area the development is located, must also notify the Local Planning Authority, in writing, of their intention to apply.

An application for a licence must be submitted on the appropriate form (available from the Agency) with the correct fee, and should contain relevant supporting documentation as attachments. The application should be based on responses to the form, supporting written text and the appropriate use of tables and drawings. Where point source emissions occur, a system of unique reference numbers should be used to denote each emission point. These should be simple, logical, and traceable throughout the application.

The application form is divided into a number of sections of related information. The purpose of these divisions being to facilitate both the applicant and the Agency in the provision of the information and its assessment. Attachments should be clearly numbered, titled and paginated and must contain the required information as set out in the application form. Additional attachments may be included to supply any further information supporting the application. Any references made should be supported by a bibliography.

All questions should be answered. No waste management facility is exactly the same and hence each application will require different information. It is therefore possible that some of the sections of this application form may not be relevant to the activity concerned. **Where information is requested in the application form, which is not relevant to the application, the words "not applicable" should be clearly written on the form. The abbreviation "N/A" should not be used.**

Additional information may need to be submitted beyond that which is explicitly requested on this form. Any references made should be supported by a bibliography. The Agency may request further information if it considers that its provision is material to the assessment of the application. Advice should be sought from the Agency where there is doubt about the type of information required or the level of detail.

Information supplied in this application, including supporting documentation will be put on public display and be open to inspection by any person. **Should the applicant**

consider information to be confidential, then the nature of this information, and the reasons why it is considered confidential should be clearly stated in an attachment to the Application Form. This information should be submitted in a separate enclosure bearing the legend "In the event that this information is deemed not to be held as confidential, it must be returned to (representative of the applicant)".

Applicants should be aware that a contravention of the conditions of a waste licence is an offence under Section 39 of the Waste Management Acts 1996 to 2003.

The provision of information in an application for a waste licence which is false or misleading is an offence under Section 45 of the Waste Management Acts 1996 to 2003.

Note: Drawings. The following guidelines are included to assist applicants:

- *All drawings submitted should be titled and dated.*
- *They should have a **unique reference number** and should be signed by a clearly identifiable person.*
- *They should indicate a scale and the **direction of north**.*
- *All drawings should, generally, be to a scale of between 1:20 to 1:500, depending upon the degree of detail needed to be shown and the size of the facility. Drawings delineating the boundary can be to a smaller scale of between 1:1000 to 1:10560, but must clearly and accurately present the required level of detail. Drawings showing the site location can be to a scale of between 1:50 000 to 1:126 720. All drawings should, however, be A3 or less and of an appropriate scale such that they are clearly legible. Provide legends on all drawings and maps as appropriate.*

The provision of information in an application for a waste licence, which is false or misleading, is an offence under s45 of the Acts.

SECTION A NON-TECHNICAL SUMMARY

A Non-Technical Summary is to be submitted. The summary should include information on those aspects outlined in the Guidance Note and must comply with the requirements of Article 12 (1) (u) of the Waste Management (Licensing) Regulations, S.I. 395 of 2004.

The Non-Technical Summary should form **Attachment A.1**. TOBIN

See Attachment A.

SECTION B GENERAL

B.1 Applicant's Details

Name*:	MCR Personnel Limited t/a MCR Environmental
Address:	1-3 The Capel Building
	Mary's Abbey
	Dublin 7
Tel:	01 8899100
Fax:	01 4811500
e-mail:	Conor.walsh@mcr.ie

* This should be the name of the applicant which is current on the date this Waste Licence Application is lodged with the Agency. It should be the name of the legal entity (which can be a limited company or a sole trader). A trading/business name is not acceptable.

Name and Address for Correspondence

Only application documentation submitted by the applicant and by the nominated person will be deemed to have come from the applicant.

Name:	MCR Environmental
Address:	1-3 The Capel Building
	Mary's Abbey
	Dublin 7
Tel:	01 8899100
Fax:	01 4811500
e-mail:	Conor.walsh@mcr.ie

Address of registered or principal office of Body Corporate (if applicable)

Address:	MCR Personnel Ltd
	1-3 The Capel Building
	Mary's Abbey
	Dublin 7
Tel:	01 8899100
Fax:	01 4811500
e-mail:	Conor.walsh@mcr.ie

If the applicant is a body corporate, the following information must be attached as **Attachment B1**:

a) a Certified Copy of the Certificate of Incorporation or Memorandum and Article of Association;
b) the Company's Registration Number from the Companies Registry Office; and
c) a list of the Company Directors.

State the interest of the applicant in the land which is subject to the application. The applicant is (please check):

Landowner	☐
Lessee	☐
Prospective Purchaser	☐
Other (please specify)	Prospective Lessee (long lease)

Name and address of all occupiers of the land on which the Activity is situated (if different from applicant named above).

Name:
Address:

Not Applicable

Tel:
Fax:
e-mail:

Name and address of the current* owner(s) and lessees of the land, buildings and ancillary plant on which the activity is or will be situated (if different from applicant named above).
An appropriately scaled drawing(≤A3) showing the above details should be included in **Attachment B1.**

Name: Airscape Ltd.
Address: 18-19 Harcourt Street
Dublin 2

Tel: 01-4753928
Fax: 01-4753943
e-mail: rogerdineen@harcourthouse.com
*Current at the time the application is submitted

B.2 Location of Activity

Name: MCR Environmental MRF
Address*: Blocks L & K
Premier Business Park,
Cappoge,
Dublin 11
Tel:
Fax:
e-mail:
* Include any townland

National Grid Reference (8 digit 4E,4N)	3179 2398

Location maps (≤A3), appropriately scaled, with legible grid references should be enclosed in **Attachment B.2.** The site boundary must be outlined on the map in colour.

B.3 Planning Authority

Give the name of the planning authority in whose functional area the activity is or will be carried out.

Name:	Fingal County Council
Address:	Planning Department
	Grove Road
	Blanchardstown
	Dublin 15
Tel:	(01) 870 8476
Fax:	(01) 870 5832

Has the Planning Authority received written notification from the applicant of the application to The Environmental Protection Agency for a Waste Licence under Article 9 of the Waste Management (Licensing) Regulations?

Planning Authority notified	**Yes** ☒
	No ☐

Planning Permission relating to this application:

has been obtained	☐
is being processed	☒
is not yet applied for	☐
is not required	☐

Local Authority Planning File Reference Nº:	F07A/1551

The planning application Ref F07A/1551 was submitted in November 2007 and is the permission to which this waste licence application relates.
Harcourt Developments received planning permission Ref F05A/1363 for Premier Business Park in May 2006.

Attachment B.3 should contain ***the most recent*** planning permission, including a copy of ***all*** conditions, and the required copies of any EIS should also be enclosed. For existing activities, **Attachment B.3** should also contain copies of the most recent waste licence and any permits in force at the time of submission. Where planning permission is not required for the development, provide reasons, relevant correspondence, *etc.*

B.4 Sanitary Authority

In the case of a discharge of any trade effluent or other matter (other than domestic sewage or storm water) to a sewer of a sanitary authority or other body, give the name of the sanitary authority in which the sewer is vested or by which it is controlled and the waste water treatment plant (if any) to which the sewer discharges.

Name:	
Address:	Not Applicable: No Trade Effluent to be discharged
Tel:	
Fax:	

The applicant must enclose, as **Attachment B.4,** a copy of any effluent discharge licence and/or agreement between the applicant and the body with responsibility for the sewer.

B.5 Other Authorities

The applicant should tick the appropriate box below to identify whether the activity is located within the Shannon Free Airport Development Company (SFADCo.) area.

Within SFADCo. Area	**Yes** ☐	**No** ☒

The applicant should indicate the **Health Board Region** where the activity is or will be located.

Name:	Health Service Executive – Northern Area
Address:	Swords Business Campus, Balheary Road,
	Swords,
	County Dublin
Tel:	(01) 8908728
Fax:	(01) 8131882

B.6 Notices and Advertisements

Articles 6 and 7 of the Waste Management (Licensing) Regulations 2004 requires all applicants to advertise the application in a newspaper and by way of a site notice. See *Guidance Note.*

Attachment B.6 should contain a copy of the site notice and an appropriately scaled drawing (≤A3) showing its location on site. **The original application must include the complete newspaper in which the advertisement was placed**. The relevant page of the newspaper containing the advertisement should be included with the original and three copies of the application.

B.7 Type of Waste Activity, Tonnages & Fees

Specify the class or classes of activity in Table B.7.1, in accordance with the Third Schedule or Fourth Schedule to the Waste Management Acts 1996 to 2003, to which the application relates (check the relevant box(es) and mark the principal activity with a 'P').

Attachment B.7 should identify the principle activity and include a brief technical description of each of the other activities specified. **There can only be one principal activity.**

TABLE B.7.1 THIRD AND FOURTH SCHEDULES OF THE WASTE MANAGEMENT ACTS 1996 TO 2003

Waste Management Acts 1996 to 2003			
THIRD SCHEDULE Waste Disposal Activities	**Y/N**	**FOURTH SCHEDULE Waste Recovery Activities**	**Y/N**
1. Deposit on, in or under land (including landfill).	N	1. Solvent reclamation or regeneration.	N
2. Land treatment, including biodegradation of liquid or sludge discards in soils.	N	2. Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological processes).	**Y**
3. Deep injection of the soil, including injection of pumpable discards into wells, salt domes or naturally occurring repositories.	N	3. Recycling or reclamation of metals and metal compounds.	**Y**
4. Surface impoundment, including placement of liquid or sludge discards into pits, ponds or lagoons.	N	4. Recycling or reclamation of other inorganic materials.	**P**
5. Specially engineered landfill, including placement into lined discrete cells which are capped and isolated from one another and the environment.	N	5. Regeneration of acids or bases.	N
6. Biological treatment not referred to elsewhere in this Schedule which results in final compounds or mixtures which are disposed of by means of any activity referred to in paragraphs 1 to 5 or paragraphs 7 to 10 of this Schedule.	N	6. Recovery of components used for pollution abatement.	N
7. Physico-chemical treatment not referred to elsewhere in this Schedule which results in final compounds or mixtures which are disposed of by means of any activity referred to in paragraphs 1 to 5 or paragraphs 8 to 10 of this Schedule (including evaporation, drying and calcination).	N	7. Recovery of components from catalysts.	N
8. Incineration on land or at sea.	N	8. Oil re-refining or other re-uses of oil.	N
9. Permanent storage, including emplacement of containers in a mine.	N	9. Use of any waste principally as a fuel or other means to generate energy.	N
10. Release of waste into a water body (including a seabed insertion).	N	10. The treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system.	N
11. Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule.	**Y**	11. Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule.	N
12. Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.	**Y**	12. Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule.	**Y**
13. Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.	**Y**	13. Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced.	**Y**

TABLE B.7.2 MAXIMUM ANNUAL TONNAGE

The maximum annual tonnage of waste to be handled at the site should be indicated and the year to which the quantity relates indicated.

Maximum Annual Tonnage (tpa)	300,000
Year	2009

B.7.3 FEES TOBIN

State each class of activity for which a fee is being submitted as per Part I of the Second Schedule of the Waste Management (Licensing) Regulations 2004, S.I. No. 395 of 2004. Note: two fees are required if disposal and recovery are to occur.

Waste Activity	**Fee (in €)**
Disposal of Waste (appropriate disposal activity 1.1 – 3.3)	**€ 20, 000**
Recovery of Waste (4)	**€ 10, 000**

B.7.4 - NOT APPLICABLE

TABLE B.7.4 (FOR A LANDFILL APPLICATION)

STATE WHICH OF THE FOLLOWING IS RELEVANT TO THE CURRENT APPLICATION.

(a) landfill for hazardous waste	☐
(b) landfill for non-hazardous waste	☐
(c) landfill for inert waste	☐

B.8 SEVESO II DIRECTIVE

State whether the activity is for the purposes of an establishment to which the European Communities (Control of Major Accident Hazards involving Dangerous substances) Regulations, 2000 (S.I. No. 476 of 2000), apply.

Regulations Apply	Yes ☐	No ☒

If yes, **Attachment B.8** should include the relevant details**.** Supporting information, as well as copies of any Hazardous Operation Studies (HAZOP) carried out for the site, should also be included in the attachment.

SECTION C MANAGEMENT OF THE FACILITY

Advice on completing this section is provided in the *Guidance Note*.

C.1 Technical Competence and Site Management

This information should form **Attachment C 1**.

Details of the applicant's experience and qualifications, along with that of other relevant employees, should be summarised as shown below. Statements of duties, responsibilities, experience and qualifications should be submitted for each position named below. Additional information, including the management structure and an organisational chart, should be included in **Attachment C 1.**

Name	Position	Duties and Responsibilities	Experience /Qualifications
		See Attachment C1	

C.2 Environmental Management System

Attachment C 2 should contain the Environmental Management System (EMS) details required.

C.3 Hours of Operation

Attachment C 3 should contain details of hours of operation for the waste facility, civic waste facilities and other facilities.

(a) Proposed hours of operation.
(b) Proposed hours of waste acceptance/handling.
(c) Proposed hours of any construction and development works at the facility and timeframes (required for landfill facilities).
(d) Any other relevant hours of operation expected.

C.4 Conditioning Plan

Address as **Attachment C 4,** in the case of a LANDFILL Application, and only for the review of a Landfill Waste Licence.

SECTION D INFRASTRUCTURE & OPERATION

D.1 Infrastructure

Complete the following table detailing the site infrastructure. **Attachment D 1** should contain the appropriate documentation. Information provided should follow the sequence, and use the headings, established in Table D.1. Additional advice on completing this section is provided in the application *Guidance Note*.

Table D.1. Infrastructure		**y/n**	**Comments**
D.1.a	**Site security arrangements including gates and fencing**	Y	Attachment D.1.a
D.1.b	**Designs for site roads**	Y	Attachment D.1.b
D.1.c	**Design of hardstanding areas**	Y	Attachment D.1.c
D.1.d	**Plant**	Y	Attachment D.1.d
D.1.e	**Wheel-wash**	*N*	*Not Proposed*
D.1.f	**Laboratory facilities**	*N*	*Not Proposed*
D.1.g	**Design and location of fuel storage areas**	Y	Attachment D.1.g
D.1.h	**Waste quarantine areas**	Y	Attachment D.1.h
D.1.i	**Waste inspection areas**	Y	Attachment D.1.i
D.1.j	**Traffic control**	Y	Attachment D.1.j
D.1.k	**Sewerage and surface water drainage infrastructure**	Y	Attachment D.1.k
D.1.l	**All other services**	Y	Attachment D.1.1
D.1.m	**Plant sheds, garages and equipment compound**	Y	Attachment D.1.m
D.1.n	**Site accommodation**	Y	Attachment D.1.n
D.1.o	**A fire control system, including water supply**	Y	Attachment D.1.o
D.1.p	**Civic amenity facilities**	*N*	*Not Proposed*
D.1.q	**Any other waste recovery infrastructure**	Y	Attachment D.1.q
D.1.r	**Composting infrastructure**	*N*	*Not Proposed*
D.1.s	**Construction and Demolition waste infrastructure**	Y	Attachment D.1.s
D.1.t	**Incineration infrastructure (if applicable).** **Provide information to fulfil Article 4 (2) & (3) of the Incineration of Waste Directive**	*N*	*Not Proposed*
D.1.u	**Any other infrastructure**		Attachment D.1.u

D.2 Facility Operation

In **Attachment D 2** describe the plant, methods, processes and operations of the waste facility, as required by the *Guidance Note*.

Attachment included	**yes** ☒	**no** ☐	**not applicable** ☐

LANDFILLS

The following Sections D3 to D7 should only be completed for Landfill Applications. Reference should be made to the Agency landfill manual 'Landfill Site Design (2000)' when completing this section.

D.3 Liner System

Complete the following table regarding the liner system to be used for the landfill/landfill extension and detail the information requested as **Attachment D.3**. ***Items D3c to D3g should only be completed for immediate projects only (ie Years 1 & 2).*** A schedule of Liner construction activities for the medium to long term need only be listed in item D3a below, since Condition 3 of any licences granted will provide reporting requirements for any future projects.

TABLE D.3 LINER SYSTEM

		y/n	Comments
D.3.a	**Provide information to fulfil Annex 1 of the Landfill Directive**		
D.3.b	**What type of liner system is specified?**		
D.3.c	**Has a Quality Control Plan been specified?**		
D.3.d	**Has a Quality Assurance Plan been specified?**		
D.3.e	**Have independent, third-party supervision, testing and controls been specified?**		
D.3.f	**Have basal gradients for all cells and access ramps to the cells been designed?**		
D.3.g	**Has a leak detection survey been specified?**		

D.4 Leachate Management

Complete the following table detailing leachate management arrangements. Further information should be included in **Attachment D.4.**

TABLE D.4.1 LEACHATE MANAGEMENT ARRANGEMENTS

		y/n	Comments
D.4.a	**Is there a Leachate Management Plan?**		
D.4.b	**Have annual quantities of leachate been calculated?**		
D.4.c	**Has the total quantity of leachate been calculated?**		
D.4.d	**Have the size of the cells been specified taking account of the water balance calculations?**		
D.4.e	**Has a leachate collection system been specified?**		
D.4.f	**Has a leachate storage system been specified?**		
D.4.g	**Has a system for monitoring the level of leachate in the waste been designed?**		
D.4.h	**Is leachate recirculation proposed/practised?**		
D.4.i	**Has leachate treatment on-site been specified?**		
D.4.j	**Has leachate removal been specified?**		

D 5 Landfill Gas Management

All landfill sites should have suitable arrangements for the management of landfill gas. **Attachment D.5** should contain the appropriate documentation. Information provided should follow the sequence, and use the headings, established in Table D.5. ***Items D5g to D5m should only be completed for immediate or current gas collection projects only (ie Years 1 & 2).*** A schedule of gas management aspects for the medium to long term need only be listed in item D5f below, since Condition 3 of any proposed decision/licence will provide reporting requirements for any future projects.

Table D.5. Landfill Gas Management

		y/n	Comments
D.5a	**Is there a Landfill Gas Management Plan?** **Provide estimates of the volumes of landfill gas which will be produced by the waste disposed of in the site for the next 20 years, and compare to the EPER list for methane:**		
D.5b	**Is there a passive venting system?**		
D.5c	**Does the passive system cover all of the filled area?**		
D.5d	**Have gas alarm systems been installed in the site buildings?**		
D.5e	**Have measures been installed to prevent landfill gas migration (e.g. barriers)?**		
D.5f	**Has a time-scale been proposed for the installation of landfill gas infrastructure?**		
D.5g	**Is gas flaring undertaken at the site?**		
D.5h	**Is there an active (i.e., pumped) landfill gas extraction system?**		
D.5i	**Does the active system cover all of the filled area?**		
D.5j	**Is landfill gas used to generate energy at the site?**		
D.5k	**Have emissions from the flarestack and utilisation plant been assessed for source, composition, quantity and level and rate?**		
D.5l	**Has a maintenance programme for the control system been specified?**		
D.5m	**Has a condensate removal system been designed?**		

D.6 Capping System

Complete the following table detailing the design of the capping system. **Attachment D.6** should contain the appropriate documentation. ***Items D6e to D6k should be completed for immediate projects only (ie Years 1 & 2).*** Condition 10 of any proposed decision/licence will provide reporting requirements for capping requirements beyond this timeframe.

Table D.6 Capping System

		y/n	Comments
D.6a	**Has the daily cover been specified?**		
D.6b	**Has the intermediate cover been specified?**		
D.6c	**Has the temporary capping been specified?**		
D.6d	**Has the Capping System been designed and does it meet the requirements of the Landfill Directive Annex 1 (3.3)?**		
D.6e	**Does the Capping System include a flexible membrane liner?**		
D.6f	**Have all capping materials been specified?**		
D.6g	**Has a Method Statement for construction been produced?**		
D.6h	**Has a Quality Control Plan been produced?**		
D.6i	**Has a Quality Assurance Plan been produced?**		
D.6j	**Has a programme for monitoring landfill stability been developed?**		
D.6k	**Has a programme for monitoring landfill settlement been developed?**		

SECTION E EMISSIONS

Give particulars of the source, location, nature, composition, quantity, level and rate of emissions arising from the activity and, where relevant, the period or periods during which such emissions are made or are to be made.

The applicant should address in particular any emission point where the substances listed in the Schedule of S.I. 394 of 2004 are emitted.

E.1 Emissions to Atmosphere

Details of all point emissions to atmosphere should be supplied. Table E.1.(i) (for Landfill Gas Flare emissions) must be completed for all landfills with a flare. Complete Table E.1(ii) and E.1(iii) for all other main emission points, including stack sources (incinerator stacks, landfill gas utilisation plants, air handling unit emissions etc.). Complete Table E.1(iv) for minor/fugitive/ground emission points.

E.2 Emissions to Surface Waters

Attachment E.2 Tables E.2(i) and E.2(ii) should be completed where relevant.

E.3 Emissions to Sewer

Attachment E.3 Tables E.3(i) and E.3(ii) should be completed, where relevant.

E.4 Emissions to Groundwater

Describe the existing or proposed arrangements necessary to give effect to Articles 3,4,5,6, and 7 of Council Directive 80/68/EEC of 17 December 1979 on the protection of groundwater against pollution by certain dangerous substances.

Table E.4(i) should be completed, as relevant, for each source.

Supporting information should form **Attachment E.4**

E.5 Noise Emissions

Give particulars of the source, location, nature, level, and the period or periods during which the noise emissions are made or are to be made.

Table E.5(i) should be completed, as relevant, for each source.

Supporting information should form **Attachment E.5**

E.6 Environmental Nuisances

Attachment E.6 should contain the appropriate documentation. Information provided should follow the sequence, and use the headings as relevant established in Table D.6. Additional advice on completing this section is provided in the *Guidance Note*.

TABLE E.6 ENVIRONMENTAL NUISANCES

Bird Control	**Control method specified**	**yes** ☐	**no** ☐	**not applicable** ☒
	Attachment included	**yes** ☐	**no** ☐	**not applicable** ☒
Dust Control	**Control method specified**	**yes** ☒	**no** ☐	**not applicable** ☐
	Attachment included	**yes** ☒	**no** ☐	**not applicable** ☐
Fire Control	**Control method specified**	**yes** ☒	**no** ☐	**not applicable** ☐
	Attachment included	**yes** ☒	**no** ☐	**not applicable** ☐
Litter Control	**Control method specified**	**yes** ☒	**no** ☐	**not applicable** ☐
	Attachment included	**yes** ☒	**no** ☐	**not applicable** ☐
Traffic Control	**Control method specified**	**yes** ☒	**no** ☐	**not applicable** ☐
	Attachment included	**yes** ☒	**no** ☐	**not applicable** ☐
Vermin Control	**Control method specified**	**yes** ☒	**no** ☐	**not applicable** ☐
	Attachment included	**yes** ☒	**no** ☐	**not applicable** ☐
Road Cleansing	**Control method specified**	**yes** ☒	**no** ☐	**not applicable** ☐
	Attachment included	**yes** ☒	**no** ☐	**not applicable** ☐

SECTION F CONTROL & MONITORING

F.1: Treatment, Abatement and Control Systems

Describe the proposed technology and other techniques for preventing or, where this is not possible, reducing emissions from the installation/facility. Details of treatment/abatement systems (air and effluent emissions) should be included, together with appropriately scaled schematics (≤A3) as appropriate.

For each Emission Point identified complete Table F.1 of the Annex, and include detailed descriptions and appropriately scaled schematics (≤A3) of all abatement systems.

Attachment F.1 should contain any supporting information.

F.2- F. 9. Monitoring and Sampling Points

Programmes for environmental monitoring should be submitted as part of the application. These programmes should be provided as **Attachments F.2 to F.6** and meet the advice published by the Agency in the relevant BAT Note. For Landfills the additional **Attachments F.7 to F.8** should be completed. Furthermore for a landfill application the applicant must refer to the Agency *Landfill Monitoring Manual (2003)* for further details on monitoring requirements for proposed facilities.

Include details of monitoring/sampling locations and methods.

F.2 Air

Monitoring Arrangements specified	**yes** ☒	**no** ☐	**not applicable** ☐
Monitoring points identified, (plus 12-figure grid references)	**yes** ☒	**no** ☐	**not applicable** ☐
Attachment included	**yes** ☒	**no** ☐	**not applicable** ☐

F.3 Surface Water

Monitoring of surface water shall be carried out at not less than two points, one upstream from the waste facility and one downstream.

Monitoring Arrangements specified	**yes** ☐	**no** ☐	**not applicable** ☒
Monitoring points identified, (plus 12-figure grid references)	**yes** ☐	**no** ☐	**not applicable** ☒
Attachment included	**yes** ☐	**no** ☐	**not applicable** ☒

F.4 Sewer Discharge

Monitoring of sewer discharge shall be carried out at the point specified by the local authority/Agency.

Monitoring Arrangements specified	**yes** ☐	**no** ☐	**not applicable** ☒
Monitoring points identified, (plus 12-figure grid references)	**yes** ☐	**no** ☐	**not applicable** ☒
Attachment included	**yes** ☐	**no** ☐	**not applicable** ☒

F.5 Groundwater

Groundwater monitoring is required at all landfill facilities; and certain other waste facilities depending on waste activities and the underlying aquifer vulnerability.

Monitoring Arrangements specified	**yes** ☐	**no** ☐	**not applicable** ☒
Monitoring points identified, (plus 12-figure grid references)	**yes** ☐	**no** ☐	**not applicable** ☒
Attachment included	**yes** ☐	**no** ☐	**not applicable** ☒

F.6 Noise

Monitoring Arrangements specified	**yes** ☒	**no** ☐	**not applicable** ☐
Monitoring points identified, (plus 12-figure grid references)	**yes** ☒	**no** ☐	**not applicable** ☐
Attachment included	**yes** ☒	**no** ☐	**not applicable** ☐

F.7 Meteorological Data

Monitoring Arrangements specified	**yes** ☐	**no** ☐	**not applicable** ☒
Monitoring points identified, (plus 12-figure grid references)	**yes** ☐	**no** ☐	**not applicable** ☒
Attachment included	**yes** ☐	**no** ☐	**not applicable** ☒

Application for Landfills require the additional Attachments F.7 to F.8, to be completed:

F.8 Leachate

Monitoring Arrangements specified	**yes** ☐	**no** ☐	**not applicable** ☒
Monitoring points identified, (plus 12-figure grid references)	**yes** ☐	**no** ☐	**not applicable** ☒
Attachment included	**yes** ☐	**no** ☐	**not applicable** ☒

F.9 Landfill Gas

Complete each of the following tables to show whether information has been included on aspects of landfill gas monitoring. **Attachment F.9** should also contain information to show whether the data given in Tables F.9.(a) and F.9(b) below represents actual or anticipated data. Complete Table F.9 as follows:

Table F.9 (a)Landfill Gas Monitoring for existing landfill gas flares / utilisation plants

Parameter	Concentration (mg/Nm^3)	Proposed Frequency of Analysis	Information Included Y/N	Method of Analysis	Information Included Y/N
Inlet					
Methane (CH_4) % v/v					
Carbon dioxide (CO_2) %v/v					
Oxygen (O_2) % v/v					
Outlet	**NOT APPLICABLE**				
Volumetric Flow Rate					
SO_2					
Nox					
CO					
Particulates					
TA Luft Class I, II, III organics					
Hydrochloric acid					
Hydrogen Fluoride					

Table F.9(b) Landfill Gas Monitoring

Parameter	**Proposed Frequency of Analysis**		**Information Included Y/N**	**Method of Analysis**	**Information Included Y/N**
	Gas boreholes / vents/ wells/ perimeter locations	Facility Office			
Methane (CH_4) % v/v					
Carbon Dioxide (CO_2) % v/v	**NOT APPLICABLE**				
Oxygen (O_2) % v/v					
Atmospheric Pressure					
Temperature					

Table F.9 (c) Landfill Gas Infrastructure

Equipment	**Monitoring Frequency**	**Information Included Y/N**	**Monitoring Action**	**Information Included Y/N**
Gas Collection System				
Gas Control System				
	NOT APPLICABLE			

Monitoring Arrangements specified	**yes** ☐	**no** ☐	**not applicable** ☒
Monitoring points identified, (plus 12-figure grid references)	**yes** ☐	**no** ☐	**not applicable** ☒
Attachment included	**yes** ☐	**no** ☐	**not applicable** ☒

SECTION G RESOURCES USE & ENERGY EFFICIENCY

G.1 Raw Materials, Substances, Preparations and Energy

Attachment G.1 should contain a list of all raw, product and ancillary materials, substances, preparations, fuels and energy which will be utilised in or produced by the activity. Information on any insecticides, herbicides or rat poisons etc. should also be provided with their respective data and safety sheets. The Standard Forms, provided in Annex 1, should be used in the description of these materials, substances, etc., where relevant. Additional advice on completing this section is provided in the *Guidance Note*.

Attachment included	**yes** ☒ **no** ☐ **not applicable** ☐

G.2 Energy Efficiency

A description of the energy used in or generated by the activity must be provided in **Attachment G.2**.

Attachment included	**yes** ☒ **no** ☐ **not applicable** ☐

SECTION H MATERIALS HANDLING

H.1 Waste Types and Quantities – Existing & Proposed

Provide an estimation of the quantity of waste likely to be handled in relation to each class of activity applied for. This information should be included in Table H.1(a).

TABLE H.1(A). QUANTITIES OF WASTE IN RELATION TO EACH CLASS OF ACTIVITY APPLIED FOR

Waste Management Act 3rd Schedule (Disposal) Activities			Waste Management Act 4th Schedule (Recovery) Activities		
Class of Activity Applied For		Quantity (tpa)	Class of Activity Applied For		Quantity (tpa)
Class 1		0	Class 1		0
Class 2		0	Class 2		75,000
Class 3		0	Class 3		16,000
Class 4		0	Class 4		122,000
Class 5		0	Class 5		0
Class 6		0	Class 6		0
Class 7		0	Class 7		0
Class 8		0	Class 8		0
Class 9		0	Class 9		0
Class 10		0	Class 10		0
Class 11		50,000	Class 11		0
Class 12		50,000	Class 12		37,000
Class 13		50,000	Class 13		250,000

In Table H. 1 (B) provide the annual amount of waste handled/to be handled at the facility. Additional information should be included in **Attachment H.1.** The tonnage per annum should be given of that expected for the life of the licence, with at least the next five years tonnages provided. For Landfill Review applications provide an estimate of the quantity of waste already deposited in (i) lined cells; (ii) unlined cells.

TABLE H.1(B) ANNUAL QUANTITIES AND NATURE OF WASTE

Year	Non-hazardous waste (tonnes per annum)	Hazardous waste (tonnes per annum)	Total annual quantity of waste (tonnes per annum)
2008	150,000	0	150,000
2009	300,000	0	300,000
2010	300,000	0	300,000
2011	300,000	0	300,000
2012	300,000	0	300,000

A detailed inventory of the types and quantities of wastes currently handled at the site and proposed to be handled should be submitted as Table H.1 (C).

TABLE H.1 (C) WASTE TYPES AND QUANTITIES

WASTE TYPE	TONNES PER ANNUM (existing)	TONNES PER ANNUM (proposed)	TOTAL (over life of site) tonnes
Household	0	30,000 (bulky)	Site life not defined
Commercial	0	80,000	Site life not defined
Sewage Sludge	0	0	0
Construction and Demolition	0	170,000	Site life not defined
Industrial Non-Hazardous Sludges	0	0	0
Industrial Non-Hazardous Solids	0	20,000	Site life not defined
Hazardous ***(Specify detail in Table H 1.2)**	0	0	0
Inert Waste imported for restoration purposes	**COMPLETE FOR LANDFILL & CONTAMINATED LAND FACILITIES ONLY**		

*** TABLE H.1.2 HAZARDOUS WASTE TYPES AND QUANTITIES**

HAZARDOUS WASTE	DETAILED DESCRIPTION * REFERENCE SHOULD BE MADE TO THE RELEVANT EUROPEAN WASTE CATALOGUE CODES AS PRESENTED BY COMMISSION DECISION 2000/532/EC	Tonnes Per Annum (Existing)	(Tonnes Per Annum Proposed)
Waste Oil	Not Applicable		
Oil filters	Not Applicable		
Asbestos	Not Applicable		
Paint and Ink	Not Applicable		
Batteries	Not Applicable		
Fluorescent Light Bulbs	Not Applicable		
Contaminated Soils	Not Applicable		
OTHER HAZARDOUS WASTE (APPLICANT TO SPECIFY)			
	Not Applicable		

Attachment H.1 should contain any relevant additional information.

It should be noted that an applicant may be issued with a licence which restricts the type of wastes which may be deposited.

H.2 Waste Acceptance Procedures

Procedures for checking waste loads as they arrive at the facility must be included. These should follow the requirements of the Agency's Waste Acceptance Manual. A copy of these procedures and other associated documentation should be included as **Attachment H.2.**

H.3 Waste Handling

Waste handling and the operating procedures used at the facility including waste treatment processes should be described in **Attachment H.3**. Included in the attachment should be information on the plant used on site and on the methods and processes for handling waste on-site. Special requirements hold for contaminated soil facilities, see *Guidance Note*.

In addition, an application for a Landfill requires Section H.3.a to be completed:

H.3a Waste Handling at the Landfill Facility

State whether all waste will be subject to treatment prior to landfilling. Provide information as to the quantities of biodegradable municipal waste and how the targets of the Landfill Directive (1999/31/EC) relating to that waste type are to be achieved. In particular describe how the following will be achieved:

(a) a reduction by 16/07/06 to 75% by weight of the total amount of biodegradable municipal waste produced in 1995 or the latest year before 1995 for which standardised Eurostat data is available;

(b) a reduction by 16/07/09 to 50% by weight of the total amount of biodegradable municipal waste produced in 1995 or the latest year before 1995 for which standardised Eurostat data is available;

(c) a reduction by 16/07/16 to 35% by weight of the total amount of biodegradable municipal waste produced in 1995 or the latest year before 1995 for which standardised Eurostat data is available;

(d) Evidence should be provided to show that energy will be used efficiently.

H.4 Waste Arisings

Waste Arisings should be considered for all contaminated soil applications. Details of all waste materials generated on the site including, name, description and nature as well as the source(s) should be identified. The quantities of each type of waste generated on an annual/monthly basis should be calculated and stated in Tables

H.1(i) and H. 1(ii) of the application form. Applicants should also provide conversion factors used to relate volume (m^3) and tonnage (t) for their waste stream.

SECTION I EXISTING ENVIRONMENT & IMPACT OF THE FACILITY

Detailed information is required to enable the Agency to assess the existing environment. This section requires the provision of information on the ambient environmental conditions at the site prior to the commencement of waste management activities or prior to the receipt of a review application.

Where development is proposed to be carried out, being development which is of a class for the time being specified under Article 24 (First Schedule) of the Environmental Impact Assessment Regulations, the information on the state of the existing environment should be addressed in the EIS. **In such cases, it will suffice for the purposes of this section to provide adequate cross-references to the relevant sections in the EIS.**

I.1.Assessment of atmospheric emissions

Describe the existing environment in terms of air quality with particular reference to ambient air quality standards.

Provide a statement whether or not emissions of main polluting substances (as defined in the Schedule of S.I. 394 of 2004) to the atmosphere are likely to impair the environment.

Give summary details and an assessment of the impacts of any existing or proposed emissions on the environment, including environmental media other than those into which the emissions are to be made.

Attachment I.1 should also contain full details of any dispersion modelling of atmospheric emissions from the activity, where required.

I.2. Assessment of Impact on Receiving Surface Water

Describe the existing environment in terms of water quality with particular reference to environmental quality standards or other legislative standards. Table I.2(i) should be completed

Provide a statement whether or not emissions of main polluting substances (as defined in the Schedule of S.I. 394 of 2004) to water are likely to impair the environment.

Give summary details and an assessment of the impacts of any existing or proposed emissions on the environment, including environmental media other than those into which the emissions are to be made.

Full details of the assessment and any other relevant information on the receiving environment should be submitted as **Attachment I.2.**

I.3. Assessment of Impact of Sewage Discharge.

Give summary details and an assessment of the impacts of any existing or proposed emissions on the environment, including environmental media other than those into which the emissions are to be made.

Full details of the assessment and any other supporting information should form **Attachment I.3.**

I.4 Assessment of impact of ground/groundwater emissions

The scope and detail of this assessment will depend to a large extent on the extent and type of ground emissions at any site, which in turn are related to the risk. Details should be included in **Attachment I.4**. Comprehensive guidelines are contained in the *Application Guidance Note,* and include particular requirements for landfill and brownfield facilities.

Describe the existing groundwater quality. Tables I.4(i) should be completed.

I.5 Ground and/or groundwater contamination

Summary details of known ground and/or groundwater contamination, historical or current, on or under the site must be given.

Full details including all relevant investigative studies, assessments, or reports, monitoring results, location and design of monitoring installations, appropriately scaled plans/drawings (≤A3), documentation, including containment engineering, remedial works, and any other supporting information should be included in **Attachment I.5**.

I.6 Noise Impact.

Give details and an assessment of the impacts of any existing or proposed emissions on the environment, including environmental media other than those into which the emissions are to be made.

Ambient noise measurements
Complete Table I.6(i) in relation to the information required below:

(i) State the maximum Sound Pressure Levels which will be experienced at typical points on the boundary of the operation. (State sampling interval and duration)

(ii) State the maximum Sound Pressure Levels which will be experienced at typical noise sensitive locations, outside the boundary of the operation.

(iii) Give details of the background noise levels experienced at the site in the absence of noise from this operation.

Prediction models, appropriately scaled maps (≤ A3), diagrams and supporting documents, including details of noise attenuation and noise proposed control measures to be employed, should form **Attachment I.6.**

I.7 Assessment of Ecological Impacts & Mitigation Measures

The ecology of the site and the surrounding area should be assessed in the vicinity of the largescale waste facilities such as landfill or incinerator developments. An assessment of the ecology should form **Attachment I.7.** Comprehensive guidelines are contained in the *Application Guidance Note*

SECTION J ACCIDENT PREVENTION & EMERGENCY RESPONSE

Describe the existing or proposed measures, including emergency procedures, to minimise the impact on the environment of an accidental emission or spillage.

Also outline what provisions have been made for response to emergency situations outside of normal working hours, i.e. during night-time, weekends and holiday periods.

Describe the arrangements for abnormal operating conditions including start-up, leaks, malfunctions or momentary stoppages.

Supporting information should form **Attachment J.**

Attachment included	**yes** ☒	**no** ☐	**not applicable** ☐

SECTION K REMEDIATION, DECOMMISSIONING, RESTORATION & AFTERCARE

Describe the existing or proposed measures to minimise the impact on the environment after the activity or part of the activity ceases operation, including provision for post-closure care of any potentially polluting residuals.

For Landfill Applications, capping proposals are required, and reference should be made to the *Landfill Manual on 'Restoration and Aftercare'* published by the Agency, when completing this section.

Attachment included	**yes** ☒	**no** ☐	**not applicable** ☐

SECTION L STATUTORY REQUIREMENTS

L. 1 Section 40(4) WMA

Indicate how all the requirements of Section 40(4)[(a) to (f)] of the Waste Management Acts 1996 to 2003 will be met.

Applicants should also describe how the proposed facility will comply with the requirements of BAT. In particular reference should be made to the considerations referred to in Annex IV of Council Directive 96/61/EC concerning integrated pollution prevention and control.

Attachment L.1 should contain the documentation requested above, along any relevant additional information.

Attachment included	**yes** ☒	**no** ☐	**not applicable** ☐

L.2 Fit and Proper Person

The WMA in Section 40(4)(d) specifies that the Agency shall not grant a licence unless it is satisfied that the applicant (if the applicant is not a local authority) is a fit and proper person. Section 40(7) of the WMA specifies the information required to enable a determination to be made by the Agency.

- Indicate whether the applicant or other relevant person has been convicted under the Waste Management Acts 1996 to 2003, the EPA Act 1992 and 2003, the Local Government (Water Pollution) Acts 1977 and 1990 or the Air Pollution Act 1987.

- Provide details of the applicant's technical knowledge and/or qualifications, along with that of other relevant employees (Link to Section C.1 of the application).

- Provide information to show that the person is likely to be in a position to meet any financial commitments or liabilities that may have been or will be entered into or incurred in carrying on the activity to which the application relates or in consequence of ceasing to carry out that activity (Link to Section K of the application).

Supporting information should be included as **Attachment L 2** with reference to where the information can be found in the application.

Attachment included	**yes** ☒ **no** ☐ **not applicable** ☐

SECTION M DECLARATION

Declaration

I hereby make application for a licence / revised licence, pursuant to the provisions of the Waste Management Acts 1996 to 2003 and Regulations made thereunder.

I certify that the information given in this application is truthful, accurate and complete.

I give consent to the EPA to copy this application for its own use and to make it available for inspection and copying by the public, both in the form of paper files available for inspection at EPA and local authority offices, and via the EPA's website. This consent relates to this application itself and to any further information, submission, objection, or submission to an objection whether provided by me as Applicant, any person acting on the Applicant's behalf, or any other person.

Signed by : Doug Taylor **Date :** 14/12/2007
(on behalf of the organisation)

Print signature name: DOUGLAS TAYLOR

Position in organisation : MANAGING DIRECTOR

Company stamp or seal:

MCR GROUP
UNIT 1 THE CAPEL BUILDING
DUBLIN 7
TEL: 01 8899100 FAX: 01 8146952

ANNEX 1 STANDARD FORMS

Standard forms are provided in this section for the recording and presentation of environmental monitoring and site investigation results

Table E.1(i) LANDFILL GAS FLARE Emissions to Atmosphere

Emission Point:

Emission Point Ref. Nº:	
Location :	
Grid Ref. (12 digit, 6E,6N):	**NOT APPLICABLE**
Vent Details Diameter: Height above Ground(m):	
Date of commencement of emission:	

Characteristics of Emission :

CO		mg/m^3
Total organic carbon (TOC)		mg/m^3
NOx		mg/Nm^3 0ºC. 3% O_2(Liquid or Gas), 6% O_2(Solid Fuel)
Maximum volume of emission		m^3/hr
Temperature	ºC(max) ºC(min) ºC(avg)	

(i) Period or periods during which emissions are made, or are to be made, including daily or seasonal variations (*start-up/shutdown to be included):*

Periods of Emission (avg)	_____min/hr _____hr/day _____day/yr

Table E.1(ii) MAIN Emissions to Atmosphere

(1 Page for each emission point)

Emission Point Ref. N^{o}:	
Source of Emission:	
Location :	**NOT APPLICABLE**
Grid Ref. (12 digit, 6E,6N):	
Vent Details Diameter: Height above Ground(m):	
Date of commencement:	

Characteristics of Emission :

(i) Volume to be emitted:			
Average/day	m^3/d	Maximum/day	m^3/d
Maximum rate/hour	m^3/h	Min efflux velocity	$m.sec^{-1}$
(ii) Other factors			
Temperature	^{o}C(max)	^{o}C(min)	^{o}C(avg)
For Combustion Sources: Volume terms expressed as : ☐ wet. ☐ dry. _____%O_2			

(iii) Period or periods during which emissions are made, or are to be made, including daily or seasonal variations (*start-up /shutdown to be included):*

Periods of Emission (avg)	_____min/hr _____hr/day _____day/yr

TABLE E.1(iii): MAIN EMISSIONS TO ATMOSPHERE

Chemical characteristics of the emission (1 table per emission point)

Emission Point Reference Number: _____

Parameter	Prior to treatment[1]				Brief description of treatment	As discharged[1]					
	mg/Nm^3		kg/h			mg/Nm^3		kg/h.		kg/year	
	Avg	Max	Avg	Max		Avg	Max	Avg	Max	Avg	Max
NOT APPLICABLE											

1. Concentrations should be based on Normal conditions of temperature and pressure, (i.e. 0^{o}C,101.3kPa). Wet/dry should be the same as given in Table E.1(ii) unless clearly stated otherwise.

TABLE E.1(iv): EMISSIONS TO ATMOSPHERE

- Minor /Fugitive

Emission point Reference Numbers	Description	Emission details[1]				Abatement system employed
		material	mg/Nm$^{3(2)}$	kg/h.	kg/year	
NOT APPLICABLE						

1 The maximum emission should be stated for each material emitted, the concentration should be based on the maximum 30 minute mean.
2 Concentrations should be based on Normal conditions of temperature and pressure, (i.e. 0°C101.3kPa). Wet/dry should be clearly stated. Include reference oxygen conditions for combustion sources.

TABLE E.2(i): EMISSIONS TO SURFACE WATERS

(One page for each emission)

Emission Point:

Emission Point Ref. N^{o}:	**NOT APPLICABLE**
Source of Emission:	
Location :	
Grid Ref. (10 digit, 5E,5N):	
Name of receiving waters:	
Flow rate in receiving waters:	_____ $m^3.sec^{-1}$ Dry Weather Flow _____ $m^3.sec^{-1}$ 95%ile flow
Available waste assimilative capacity:	kg/day

Emission Details:

(i) Volume to be emitted			
Normal/day	m^3	Maximum/day	m^3
Maximum rate/hour	m^3		

(ii) Period or periods during which emissions are made, or are to be made, including daily or seasonal variations (*start-up /shutdown to be included):*

Periods of Emission (avg)	_____min/hr _____hr/day _____day/yr

TABLE E.2(ii): EMISSIONS TO SURFACE WATERS

- **Characteristics of the emission** (1 table per emission point)

Emission point reference number : **NOT APPLICABLE**

Parameter	Prior to treatment				As discharged				% Efficiency
	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	
NOT APPLICABLE									

Table E.3(i): Emissions to Sewer

(One page for each emission)

Emission Point:

Emission Point Ref. N^{o}:	**NOT APPLICABLE**
Location of connection to sewer :	
Grid Ref. (10 digit, 5E,5N):	
Name of sewage undertaker:	

Emission Details:

(i) Volume to be emitted			
Normal/day	m^3	Maximum/day	m^3
Maximum rate/hour	m^3		

(ii) Period or periods during which emissions are made, or are to be made, including daily or seasonal variations (*start-up /shutdown to be included):*

Periods of Emission (avg)	_____min/hr _____hr/day _____day/yr

TABLE E.3(ii): EMISSIONS TO SEWER

- **Characteristics of the emission** (1 table per emission point)

Emission point reference number : **NOT APPLICABLE**

Parameter	Prior to treatment				As discharged				% Efficiency
	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	
NOT APPLICABLE									

Table E.4 (i): Emissions to GROUNDwater

(1 Page for each emission point)

Emission Point or Area:

Emission Point/Area Ref. Nº:	
Emission Pathway: (borehole, well, percolation area, soakaway, landspreading, etc.)	
Location :	**NOT APPLICABLE**
Grid Ref. (10 digit, 5E,5N):	
Elevation of discharge: (relative to Ordnance Datum)	
Aquifer classification for receiving groundwater body:	
Groundwater vulnerability assessment (including vulnerability rating):	
Identity and proximity of groundwater sources at risk (wells, springs, etc):	
Identity and proximity of surface water bodies at risk:	

Emission Details:

(i) Volume to be emitted			
Normal/day	m^3	Maximum/day	m^3
Maximum rate/hour	m^3		

(ii) Period or periods during which emissions are made, or are to be made, including daily or seasonal variations (*start-up /shutdown to be included):*

Periods of Emission (avg)	_____min/hr _____hr/day _____day/yr

Table E.5(i): NOISE EMISSIONS

- **Noise sources summary sheet**

Source	Emission point Ref. No	Equipment Ref. No	Sound Pressure[1] dBA at reference distance @ 1m	Octave bands (Hz) Sound Pressure[1] Levels dB(unweighted) per band									Impulsive or tonal qualities	Periods of Emission
				31.5	63	125	250	500	1K	2K	4K	8K		
SIZER			86dB				N/A						N/A	24Hr
SERIES 3 TROMMEL			80dB				N/A						N/A	24Hr
FLIP FLOP			65dB				N/A						N/A	24Hr
SINGLE DRUM SEPARATOR			68dB				N/A						N/A	24Hr
WASTE SCREEN			75dB				N/A						N/A	24Hr
WINDSHIFTER			60dB				N/A						N/A	24Hr
BAILER			85dB				N/A						N/A	24Hr
DOUBLE DRUM SEPARATOR			70dB				N/A						N/A	24Hr

1. For items of plant sound power levels may be used.

TABLE F.1: Abatement / treatment control

Emission point reference number : **NOT APPLICABLE**

Control[1] parameter	Equipment [2]	Equipment maintenance	Equipment calibration	Equipment back-up
NOT APPLICABLE				

Control[1] parameter	Monitoring to be carried out[3]	Monitoring equipment	Monitoring equipment calibration

[1] List the operating parameters of the treatment / abatement system which control its function.
[2] List the equipment necessary for the proper function of the abatement / treatment system.
[3] List the monitoring of the control parameter to be carried out.

TABLE F.2 to F.8 : EMISSIONS MONITORING AND SAMPLING POINTS

TABLE F.2 Air Monitoring

- (1 table per media)

Emission Point Reference No(s). : **NOT APPLICABLE**

Parameter	Monitoring frequency	Accessibility of Sampling Points
NOT APPLICABLE		

- (1 table per media)

TABLE F.3 Surface Water

Emission Point Reference No(s). :**_____NOT APPLICABLE_____**

Parameter	Monitoring frequency	Accessibility of Sampling Points
NOT APPLICABLE		

- (1 table per media)

TABLE F.4 Sewer

Emission Point Reference No(s). : **NOT APPLICABLE**

Parameter	Monitoring frequency	Accessibility of Sampling Points
NOT APPLICABLE		

- (1 table per media)

TABLE F.5 Monitoring of Groundwater

Emission Point Reference No(s). : **NOT APPLICABLE**

Parameter	Monitoring frequency	Accessibility of Sampling Points
NOT APPLICABLE		

- (1 table per media)

TABLE F.6 Noise Monitoring

Emission Point Reference No(s). : LN1 LN2 LN3 LN4

Parameter	Monitoring frequency	Accessibility of Sampling Points
Noise Level dB (A)	Twice A Year	Fully Accessible. No Restrictions

- (1 table per media)

TABLE F.7 Ecological Monitoring

Emission Point Reference No(s). : **NOT APPLICABLE**

Parameter	Monitoring frequency	Accessibility of Sampling Points
NOT APPLICABLE		

- (1 table per media)

TABLE F.8 Storm Water

Emission Point Reference No(s). : **STM 1**

Parameter	Monitoring frequency	Accessibility of Sampling Points
COD	Twice a year	Ground Level. Manhole cover, flush to the surface
pH	Twice a year	Ground Level. Manhole cover, flush to the surface

TABLE Ff: Fugitive ENVIRONMENT MONITORING & SAMPLING LOCATIONS

(1 table per media)

Monitoring Point Reference No : LD1, LD2, LD3

Parameter	Monitoring frequency	Accessibility of Sampling point
Depositional Dust	3 Times Per Year	Ground Level. Poles with dust jars erected at top.

Table G.1 Details of Process Related Raw Materials, Intermediates, Products, etc., used or generated on the site

Ref. Nº or Code	Material/ Substance[1]	CAS Number	Danger[2] Category	Amount Stored (tonnes)	Annual Usage (tonnes)	Nature of Use	R[3] - Phrase	S[3] - Phrase
	NOT APPLICABLE							

Notes: 1. In cases where a material comprises a number of distinct and available dangerous substances, please give details for each component substance.
2. c.f. Article 2(2) of SI Nº 77/94
3. c.f. Schedules 2 and 3 of SI Nº 77/94

TABLE H.1(i): WASTE

- **Hazardous Waste Recovery/Disposal**

Waste material	EWC Code	Main source[1]	Quantity		On-site Recovery/Disposal (Method & Location)	Off-site Recovery, reuse or recycling (Method, Location & Undertaker)	Off-site Disposal (Method, Location & Undertaker)
			Tonnes / month	m^3 / month			
NOT APPLICABLE							

[1] A reference should be made to the main activity / process for each waste

TABLE H.1 (ii) WASTE

- **Other Waste Recovery/Disposal**

Waste material	EWC Code	Main source[1]	Quantity		On-site recovery/disposal[2]	Off-site Recovery/ reuse/ recycling	Off-site Disposal
			Tonnes / month	m^3 / month	(Method & Location)	(Method, Location & Undertaker)	(Method, Location & Undertaker)
Stone	17 05 01	C&D C&I	5,000 **t/month**	N/A	Recovery. Attachment H1	Recycling. See Appendix 5	
Soil	17 05 01	C&D	4,750 **t/month**	N/A	Recovery. Attachment H1	Recycling. See Appendix 5	
Wood	17 02 01	C&D C&I	4,000 **t/month**	N/A	Recovery. Attachment H1	Recycling. See Appendix 5	
Ferrous Metal	12 01 02	C&D C&I	1,000 **t/month**	N/A	Recovery. Attachment H1	Recycling. See Appendix 5	
Plasterboard		C&D	333 **t/month**	N/A	Recovery. Attachment H1	Recycling. See Appendix 5	
Cardboard	15 01 01	C&D C&I	833 **t/month**	N/A	Recovery. Attachment H1	Recycling. See Appendix 5	
Non- Ferrous Metal	12 01 03	C&D C&I	333 **t/month**	N/A	Recovery. Attachment H1	Recycling. See Appendix 5	
Plastic	15 01 02	C&D C&I	666 **t/month**	N/A	Recovery. Attachment H1	Recycling. See Appendix 5	
Paper	15 01 01	C&D C&I	583 **t/month**	N/A	Recovery. Attachment H1	Recycling. See Appendix 5	
Tetrapack		C&D C&I	83 **t/month**	N/A	Recovery. Attachment H1	Recycling. See Appendix 5	
Glass	17 02 02	C&D	8.3 **t/month**	N/A	Recovery. Attachment H1	Recycling. See Appendix 5	
Polysytrene		C&D	83 **t/month**	N/A	Recovery. Attachment H1	Recycling. See Appendix 5	
RDF		C&D C&I	3083 **t/month**	N/A	Recovery. Attachment H1	Recycling. See Appendix 5	
Waste		C&D C&I	4167 **t/month**	N/A	Recovery. Attachment H1	Not applicable	**Disposal to a licensed waste disposal facility**

1 A reference should be made to the main activity/ process for each waste.
2 The method of disposal or recovery should be clearly described and referenced to Attachment H.1
3 These are estimated amounts. The tonnes/month are approximated from annual values.

Table I.2(i) SURFACE WATER QUALITY

(Sheet 1 of 2) Monitoring Point/ Grid Reference: _____**NOT APPLICABLE**___

Parameter	**Results (mg/l)**				**Sampling method[2] (grab, drift etc.)**	**Normal Analytical Range[2]**	**Analysis method / technique**
	Date	**Date**	**Date**	**Date**			
pH							
Temperature							
Electrical conductivity EC							
Ammoniacal nitrogen NH_4-N							
Chemical oxygen demand							
Biochemical oxygen demand							
Dissolved oxygen DO							
Calcium Ca							
Cadmium Cd							
Chromium Cr							
Chloride Cl							
Copper Cu							
Iron Fe							
Lead Pb							
Magnesium Mg							
Manganese Mn							
Mercury Hg							

Surface Water Quality (Sheet 2 of 2)

Parameter	Results (mg/l)				Sampling method (grab, drift etc.)	Normal Analytical Range	Analysis method / technique
	Date	Date	Date	Date			
Nickel Ni							
Potassium K							
Sodium Na							
Sulphate SO_4							
Zinc Zn							
Total alkalinity (as $CaCO_3$)							
Total organic carbon TOC							
Total oxidised nitrogen TON							
Nitrite NO_2							
Nitrate NO_3							
Faecal coliforms (/100mls)							
Total coliforms (/100mls)							
Phosphate PO_4							

Table I.4(i) GROUNDWATER QUALITY

(Sheet 1 of 2) Monitoring Point/ Grid Reference: _____**NOT APPLICABLE**_____

Parameter	**Results (mg/l)**				**Sampling method (composite etc.)**	**Normal Analytical Range**	**Analysis method / technique**
	Date	**Date**	**Date**	**Date**			
pH							
Temperature							
Electrical conductivity EC							
Ammoniacal nitrogen NH_4-N							
Dissolved oxygen DO							
Residue on evaporation (180^oC)							
Calcium Ca							
Cadmium Cd							
Chromium Cr							
Chloride Cl							
Copper Cu							
Cyanide Cn, total							
Iron Fe							
Lead Pb							
Magnesium Mg							
Manganese Mn							
Mercury Hg							
Nickel Ni							
Potassium K							
Sodium Na							

GROUNDWATER QUALITY (SHEET 2 OF 2)

Parameter	Results (mg/l)				Sampling method (composite, dipper etc.)	Normal Analytical Range	Analysis method / technique
	Date	Date	Date	Date			
Phosphate PO_4							
Sulphate SO_4							
Zinc Zn							
Total alkalinity (as $CaCO_3$)							
Total organic carbon TOC							
Total oxidised nitrogen TON							
Arsenic As							
Barium Ba							
Boron B							
Fluoride F							
Phenol							
Phosphorus P							
Selenium Se							
Silver Ag							
Nitrite NO_2							
Nitrate NO_3							
Faecal coliforms (/100mls)							
Total coliforms (/100mls)							
Water level (m OD)							

Table I.6(i) Ambient Noise Assessment

Third Octave analysis for noise emissions should be used to determine tonal noises

	National Grid Reference	Sound Pressure Levels		
		$L(A)_{eq}$	$L(A)_{10}$	$L(A)_{90}$
1. SITE BOUNDARY				
Location 1:	E31075, N23981	67.1-69	-	58.9-59.9
Location 2:				
Location 3:				
Location 4:				
2. NOISE SENSITIVE LOCATIONS				
Location 1:	E31022, N23983	58.5-59.6		50-56.2
Location 2:	E31094, N23991	64.7-65.9		61.8-62.8.
Location 3:				
Location 4:				

NOTE: All locations should be identified on accompanying drawings.
NOTE: Refer to drawing No.9 Monitoring Locations

WASTE LICENCE APPLICATION FOR THE PROPOSED MATERIALS RECOVERY FACILITY BLOCK L & K, PREMIER BUSINESS PARK, BALLYCOOLIN ROAD, CAPPOGE, DUBLIN 11

DECEMBER 2007

TOBIN CONSULTING ENGINEERS

ATTACHMENTS TO WASTE LICENCE APPLICATION

Prepared on behalf of:
MCR Personnel Ltd trading as MCR Environmental
1-3 The Capel Building,
Mary's Abbey,
Dublin 7

Prepared by:
TOBIN Consulting Engineers
Block 10-4
Blanchardstown Corporate Park
Dublin 15

DOCUMENT AMENDMENT RECORD

Client:	MCR Environmental
Project:	Material Recovery Facility, Premier Business Park, Ballycoolin Road, Cappoge, Dublin 11
Title:	Attachments to Waste Licence Application

Project Rp: 4039		**Document Ref:**		4039 Rp0002	
Final	Attachments to Waste Licence Application	OMcA	MH	DG	19/12/07
Revision	Purpose / Description	Originated	Checked	Authorised	Date
					TOBIN Consulting Engineers

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Appendices

Attachment B: General

B.1 Applicant's Details

Drawing 1 shows the Site Ownership Plan and is located in Appendix 1. The Company's Registration Number is 279514. A copy of the Certificate of Incorporation is located in Appendix 2.

B.2 Location of the Activity

The facility will be located at national grid reference 3179E, 2398N as shown in Drawing 2, Regional Site Location and in Drawing 3 Site Location Plan, located in Appendix 1. The address of the facility is:
MCR Environmental MRF, Block L & K, Premier Business Park, Ballycoolin Road, Cappoge, Dublin 11.

B.3 Planning Authority

The planning application submitted to Fingal Co Co in November 2007 is located in Appendix 3.

B.4 Sanitary Authority

No discharges to any Local Authority sewers are proposed for the site.

B.5 Other Authorities

The address for relevant Heath Services Executive region is given in part B5 of the application form.

B.6 Notices and Advertisements

The locations at which the site notices are placed are shown on Drawing 5 located in Appendix 1. Copies of the site notice and newspaper advertisement are located in Appendix 4. For the original Waste Licence Application the complete copy of the relevant newspaper has been included. For the additional copies of the application, the relevant page of the newspaper has been included. A copy of the letter sent to the planning authority is included in Appendix 4 also along with a letter of consent from the site lessor to allow the waste licence application to be made.

B.7 Type of Activity

As defined by the Waste Management Act (1996), the principal activity undertaken at the site is Class 4 of the Fourth Schedule of the Waste Management Act (1996), namely:

Principal Activity

Fourth Schedule, Class 4 - "Recycling or reclamation of other inorganic materials."

Remaining classes covered by proposed activities at the facility

Third Schedule, **Class 11** – "Blending or mixture, prior to submission to any activity referred to in a preceding paragraph of this Schedule".

Third Schedule, Class 12 – "Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule".

Third Schedule, **Class 13** – "Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced."

Fourth Schedule, **Class 2** – "Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes)."

Fourth Schedule, **Class 3** – "Recycling or reclamation of metals and metal compounds."

Fourth Schedule, **Class 12** – "Exchange of waste for submission to any activity referred to in any preceding paragraph of this Schedule"

Fourth Schedule, Class 13 – "Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced."

Attachment C: Management of the Facility

C.1 Management Structure, Qualifications & Quality Systems

Drawing 6 gives a flow diagram of the company organisational structure and is located in Appendix 1.

Details of the current MCR Environmental staff who will be directly involved at the site are provided here:

- Douglas Taylor, Managing Director, MCR Personnel Ltd.
- Conor Walsh, Technical Advisor, MCR Environmental.
- John Sheehan, Financial Director, MCR Personnel Ltd.

Summary Curricula Vitae for these persons are given on page 13.

Key management staff to be employed the facility include the following:

- Site Manager
- Operations Manager
- Environmental Manager
- Health & Safety Manager

In the event that the plant is operated on a single shift per day at a reduced capacity, the key management personnel in relation to waste licence compliance will be reduced by two persons; the Assistant Site Manager and the Assistant Environmental Manager. In that scenario, the roles of the other five key managers will be extended to cover these areas.

Table C.1 below contains the proposed Management Chart for the facility operating at full capacity, on a 24 hour/day operation, incorporating 2 shifts. The key management personnel in relation to waste licence compliance, in this scenario, will comprise the following:

Table C.1 Technical Competence and Site Management

Name	Position	Duties and Responsibilities	Experience /Qualifications
To Be Appointed	Site Manager	Responsible for all aspects of site operation and compliance with legislation.	Commensurate with this very responsible position. Typically, in excess of 5 years experience in managing an industrial plant.
To Be Appointed	Assistant Site Manager	Responsible for all aspects of site operation and compliance with legislation when Site Manager is off-site.	Typically, in excess of 5 years experience working in a management role at an industrial plant.
To Be Appointed	Operations Manager	Responsible for site operations, reporting to the site manager.	Typically, in excess of 3 years experience working in an operations role at an industrial plant.
To Be Appointed	Environmental Manager	Responsible for site compliance with the waste licence and all other environmental legislation.	Typically, an Environmental Science or equivalent degree and in excess of 3 years experience working in the environmental field.
To Be Appointed	Assistant Environmental Manager	Responsible for site compliance with the waste licence and all other environmental legislation when the Environmental Manager is off-site.	Typically, an Environmental Science or equivalent degree.
To Be Appointed	Health and Safety Manager	Responsible for site compliance with all health and safety legislation.	Typically, in excess of 3 years experience working in health and safety plus a relevant qualification.
To Be Appointed	Maintenance Manager	Responsible for maintenance of all plant and machinery on site.	Typically, in excess of 5 years experience working in plant maintenance.

Summary Curricula Vitae

Douglas Taylor

Douglas Taylor developed the MCR Group over the last decade from a standing start to a company with annual turnover of €60 million in 2006. He is Managing Director and 100% owner of MCR Personnel Ltd. and all other companies in the Group. He manages 50 in-house employees and 1500 employees placed on construction sites around Ireland. The Group continues to grow under Mr. Taylor's leadership and has a predicted turnover of €80 million for 2007.

Conor Walsh B.Sc., PGeo., MCIWM

Experience:	Current Position	Technical Advisor, MCR Environmental
	2002-2007	Environmental Director, Thorntons Recycling
	1990-2002	Environmental Consultant, White Young Green (pre-2001 K.T. Cullen & Co. Ltd.)
	1988-1990	Field Geologist, Arcon International (previously Conroy Petroleum & Natural Resources PLC)
Academic Qualification:		Bachelor of Science, UCD, 1988. (BSc.)
Professional Qualifications:		Professional Geologist (PGeo.)

Professional Member of the Chartered Institute of Wastes Management (MCIWM)

John Sheehan FCCA

Experience:	Jan 04	Present Financial Director MCR Group
	June 01 – Jan 04	Financial Controller MCR Building Services Ltd
	Sept 00 – June 01	Financial Controller ADT Ireland
	April 97 – Sept 00	Financial Controller Graphite HRM Ltd
	Nov 96 – April 97	Bar Manager Sydney Australia (Career Break)
	May 95 – Nov 96	Financial Controller "The Clarence Hotel"
	Jan 94 – May 95	Financial Accountant with Jury's Hotels

Professional Qualification	FCCA (Chartered Association of Certified Accountants).
	Qualified in December 1993

C.2 Environmental Management System

MCR Environmental recognises the environmental responsibilities associated with all aspects of its operations and as a matter of policy seeks to avoid, reduce and mitigate any potential adverse effects on the environment. MCR is committed to the integration of environmental considerations into decision making at all levels of the organisation.

MCR Environmental has adopted the following principles to implement this policy for all its site operations:

- Complying with all relevant environmental legislation and regulatory requirements, and developing relationships with the environmental regulators, our contractors and neighbours;

- Designing, constructing and operating our facilities to minimise and monitor our environmental impacts;

- Communicating this environment policy to all our staff, in order to foster environmental responsibility, providing relevant training where necessary and encouraging initiative and involvement with our environmental programmes;

- Being open and responsive to the environmental concerns of our staff, regulatory bodies and the general public by providing relevant information about our environmental policy and the environmental impacts of all our operations;

- Adopting sound environmental management as an integral part of our total quality commitment and applying the principles and practices of continuous improvement

Environmental Management System (EMS)

The facility will establish and maintain an Environmental Management System (EMS) supported by the appropriate organisation and procedures as specified in EN ISO 14001:1996 Environmental Management Standards and the European Commission's Eco Management and Audit Scheme (EMAS).

In establishing these systems, the main objectives will be:

to develop an efficient and cost effective EMS, which compliments the EPA Waste Management Licence;

to implement an EMS by reference to proposed procedures and systems;

to achieve effective environmental risk management for each facility, having regard to existing and future environmental legislation;

to provide a framework for establishing and reviewing environmental targets and objectives for each facility.

The EMS will be based around the "Plan, Do, Check, Act" type management system, i.e.:

1. Plan what each facility is going to do;
2. Do it;
3. Check that they have done what they had planned to do;
4. Review what they have done and act to improve it; and
5. Go back to 1 with improvements in place.

The facility will achieve the management system through the following:

The "Plan" part of the system will be made up of the Environmental Policy Statement, along with the environmental aspects, legal and other requirements, objectives and targets and the Environmental Management Programme;

The "Do" part of the system will be made up of procedures relating to staff structure and responsibility, training, awareness and competence, communication, documentation and document control, operational control and emergency preparedness and response;

The "Check" part of the system will be covered by monitoring and measurement, non-conformance and corrective and preventative actions, records and the audit system;

The "Act" part of the system will be covered by the management review process.

C.3 Hours of Operation

The proposal is for a Materials Recovery Facility. The facility will operate 24 hours per day, seven days per week. Processing will be carried out in two shifts per day with time allowed for cleaning and maintenance. Shifts will include from 5am to 3pm and 3pm to 1am. Office hours will be 8am to 6pm.

Attachment D: Facility Design

D.1 Infrastructure

(a) **Security**

The site will be enclosed by a 2.4 metre (m) high pallisade fence with secure gates. MCR Security, a sister company of MCR Environmental will provide site security when the site is closed. A system of surveillance cameras will be in stalled around the site and these will be monitored from the control room at all times. The site activity boundary is outlined in red as shown on Drawing 3. There will be gated access to the site at the south eastern corner of the site and south western corner of Block L as marked on Drawing 3, which is located in Appendix 1.

(b) **Access Roads**

The development will have separate accesses for cars and HGVs. Staff and visitors travelling by car will access the car parking areas directly from the internal estate road. Heavy goods vehicles will use a dedicated entrance, thus keeping cars/pedestrians and HGVs separate.

The proposed landscaping along the internal estate road at the proposed entry and exit points of the facility has been designed to allow good visibility for vehicles exiting the facility. The kerb radii have been designed to allow easy access and egress for heavy goods vehicles to the facility from the estate road.

The facility will have a separate entry and exit on both sides of the building for HGVs, working as a one- way system with entry on the east side and exit on the west side. All plant and machinery will operate inside buildings and all materials will be kept indoors at all times. Vehicles importing materials to the facility will unload and turn within the building. Access roads within the business park be concreted.

The specification for the road surface is as follows: 20 mm precoated chippings on 45mm 30% asphalt wearing course (14mm nominal size aggregate) on 45mm dense bitumen macadam basecourse (20mm size nominal size aggregate) on 100 mm dense bitumen macadam roadbase (40 mm nominal size aggregate) with 150mm CL 804 subbase and 500mm CL616 capping layer.

(c) **Hardstanding**

All hardstanding areas within the activity boundary outside of the site building will be concreted. Footpaths will be finished with 100mm concrete brush finish on 125mm hardcore of rolled formation. Concrete will be poured in 3625mm bays with every 2nd joint to match the joint in cladding, with bullnosed trowel finish to edges.

(d) **Items of Plant**

The site equipment is expected to consist of the following items:

Fixed plant

- Weighbridges (2No.)
- Feed hopper.
- Shredder
- Industrial magnets (3 No.)
- Trommel screen
- Flip-flop screen
- Windshifter
- Single drum separator
- Double drum separator
- Ballistic separator
- Baler
- Picking stations (2 No.)
- Cascade screener (or similar)
- Conveyor belts (approximately 30 No.)

Mobile Plant

- Grab machines (3 No.)
- Loading Shovels (2 No.)
- Bobcat
- Teleporter
- Forklift
- Shunter (for moving trailers)

(e) **Wheel Cleaner**

Given that all floors in the building and yards will be comprised of concrete surfaces and given the dust control system, there will be no requirement for a wheelwash on site.

(f) **Laboratory**

It is not proposed to install a laboratory.

(g) **Fuel Storage**

Fuel will be stored in diesel tanks in a bunded area in the yard area to the back of the site. This will consist of two cylindrical steel road diesel tanks (55,000 litres each) and a smaller steel gas-oil tank (10,000 litres) for the mobile plant. Initially only one road diesel tank will be installed. The second will be added as the company's fleet of trucks grows.

The tanks will be contained in a mass concrete bund, with 110% the volume of the largest tank, i.e. minimum 60.5m^3. The internal dimensions of the bund will be 11m long, 5m wide and 1.5m high. Tarpaulin sheeting will be used to minimise rainwater entry to the bunded area.

Fuel will be dispensed to vehicles and plant via fuel pumps located adjacent to the tanks in bunded areas. The nozzles from the pumps will require active hand pressure and will not dispense fuel unless the handle is actively squeezed. In the event of severance or other damage, the pumps will not dispense fuel. The inlet valves for the tanks will be contained within the bunded area. Run-off from the fuel dispensing area will be directed to a Class 1 full-retention interceptor.

(h) **Waste Quarantine area**

The waste quarantine procedure is described in Attachment H.2.
This area is shown on the Site Infrastructure and Operation Plan as per Drawing No 7.0 (Appendix 1) and is located in the south west corner of the building.

(i) **Waste Inspection area**

The waste inspection procedure is described in Attachment H.2 and H.3.
The Site Infrastructure and Operation Plan is shown in Drawing No 7.0, which is located in Appendix 1.

(j) **Traffic Control**

Analysis of the junctions with the Premier Business Park in place shows that the road network will have sufficient capacity to cater for the future traffic demands of the Business Park.

Access to Premier Business Park will be by means of a 9-metre wide access road, which will join the external road network at the existing 3-arm, 60m ICD, Ballycoolin Road – Stadium Business Park Roundabout. The proposed development will be accessed from a 10-metre wide internal estate road, which includes on-road cycle tracks. HGV access from the internal estate road into the facility has been designed (using the AutoTrack computer program) to cater for the largest vehicles that will use the facility. A layout showing the truck turning plan is shown in Drawing No 4.0, located in Appendix 1.

The facility will have a separate entry and exit on both sides of the building for HGVs, working as a one- way system with entry on the east side and exit on the west side. The staff/visitor car park will be accessed via a third separate entrance at the front of the building. All plant and machinery will operate inside buildings and all materials will be kept indoors at all times. Vehicles importing materials to the facility will unload and turn within the building.

The proposed landscaping along the internal estate road at the proposed entry and exit points of the facility has been designed to allow good visibility for vehicles exiting the facility. The kerb radii have been designed to allow easy access and egress for heavy goods vehicles to the facility from the estate road.

(k) **Underground services**

Underground services are shown in Drawing No 4.1, located in Appendix 1.

(l) **Sewerage and Surface Water Infrastructure**

Underground services are shown in Drawing No 4.2, located in Appendix 1.

The office canteen, showers and toilets will be connected to the sewerage system that services the industrial estate, which in turn feeds into Fingal County Council's sewerage network. There will be no trade effluent discharged from the site. The floor of the building and the yard will be cleaned with a mobile roadsweeper. A dust extraction system will be incorporated into the process at all points where dust could be generated.

(m) **Plant sheds and garages**

The waste license application is being made for the area shown in Drawing 3, Site Layout Plan (Appendix 1), including Block L and Block K. Site Operations are proposed to take place in Block L as per the Site Infrastructure and Operational Plan, Drawing No 7.0. Phase 1 will be undertaken in Block L, which will have a ground floor area of 4,765m^2 and a maximum external height of 16.5m. Minimum internal height will be approximately 13m. The Materials Recovery Facility will be constructed as a two-bay portal steel frame. The bays will each be 39m wide and the columns will be generally 6m apart.

The perimeter walls of the building will be mass concrete to a height of 4.0m in locations where material will be stockpiled against them and blockwork to a height of 2.4m at other locations. Kingspan cladding will be installed from ground level to roof height outside the perimeter walls. There will be a series of internal walls along the central row of steel columns between the two portal frames. The internal walls will be constructed of mass concrete and their height will be generally 4m but may vary to facilitate the positioning of recycling equipment over them.

The floor of the building will be designed to a specification suitable for the plant and for stockpiles of soil, stone, wood and C&D waste (approximately 72KN). All door openings will be ramped to a height of 250mm to ensure adequate containment of spillages or fire-water.The roof will contain 10% clear panels to allow infiltration of natural light. The roof will also contain smoke vents that will be controlled from the control room and other appropriate remote locations. The smoke vents will be used to vent diesel fumes from the building as well as for clearing smoke in the event of a fire.

Vehicular access to the Materials Recovery Facility will be from the yard area via four roller shutter doors, two for entering the building and two for exiting. The roller shutter doors will each be 6m wide and 6m high. A smaller roller shutter door (4.0m wide, 4.5m high) will be installed in the northeast corner of the building to directly access the spare parts storeroom. Fire doors and fire tunnels will be provided at regular intervals around the Materials Recovery Facility. These are subject to change at the request of the local fire officer during the fire certification process.The front of the Materials Recovery Facility will contain a two-storey office block. Lockers, canteen, medical room, training room, toilets and wash facilities will be provided for the factory floor staff.

(n) **Site accommodation**

Site accommodation structures will include an office, medical room, training room, board room and workers welfare facilities.

(o) **Fire Control**

Fire Control is outlined in Attachment J, Item 4.

(p) **Civic Amenity area**

This is not applicable to this application.

(q) **Other Waste Infrastructure**

The site infrastructure will also comprise of the Site Hut and the Weighbridge. Vehicles will approach the weighbridge via an on-site queuing lane that can accommodate between 4 and 10 vehicles, depending on the vehicle types. The weighbridge operator will check the waste using a camera situated above the vehicle where possible. Any non-conforming loads will be rejected at this point.

(r) **Composting Infrastructure**

This is not applicable to this application.

(s) **Construction & Demolition Infrastructure**

Drawing No 7.0 shows the Infrastructure and Operational Plan. Drawing No 8.0 shows a Process Flow Diagram for the facility. The drawings are located in Appendix 1. The infrastructure for the construction and demolition activities are also outlined in the items of plant mentioned in (d) above. A description of the processes involving the C&D specific equipment is given in the response to section H of the application form, on waste handling, and in the attachment associated with that section.

(t) **Incineration Infrastructure**

This is not applicable to this application.

(u) **Any Other Infrastructure**

Included above.

D.2 Description of Processes, Methods & Operations

(a) Unit Operations

The unit processes are described in Attachments H.2 and H.3.
Individual process flow diagrams for both the C&D and the C&I processes are given in Drawing 8.1 and Drawing 8.2.

(b) Flow Process Diagram

The final design of the process for the facility will be agreed with the Agency prior to construction of the facility. Proper and regular maintenance will be carried out on all mechanical equipment on site to ensure the equipment is in safe working order and does not pose a threat to the health and safety of either workers or members of the public.

An overall process flow chart for the site operations is given in Drawing No 8.0, in Appendix 1.

(c) Potential Emissions

The potential emissions identified from the activity are Depositional Dust and Noise Emissions. Details on these are given in Attachment E.

(d) Laboratory Facilities

This is not applicable to this application.

(e) Incineration

This is not applicable to this application.

Attachment E: Emissions

E.1 Emissions to Atmosphere

Baseline Dust concentrations

Table E.1 Total depositional dust levels at each monitoring location

Sample Reference	Sampling period	Total Dust Deposition (Summer sampling period) (mg/m^{2}day)
D1	21st Aug to 17th Sept 2007	71
D2	21st Aug to 17th Sept 2007	182
EPA recommended Limit value	-	350

Monitoring results for the dust survey show concentrations of 182 mg/m2/day at the southern site boundary and 71 mg/m2/day at the eastern site boundary. These values are typical of those associated with an urban environment. The concentration at D2 is higher and may be affected by the close proximity of the M50 motorway.

Dust sources and levels

The materials will be delivered and removed from the site via vehicular traffic. Vehicle movement within the site is an additional activity with the potential to be a source of depositional dust.

Regarding operations at the proposed development, the activities proposed during operations are material recovery activities within the facility building. No scheduled emission point will occur to atmosphere.

The facility will be operated to Best Practice and a cleaning and maintenance schedule will form part of the site operations. However, there may be dust emissions from the facility due to the processing and sorting of the waste materials within the building. There is still some potential for the escape of dust from the building and for the dust to be transferred outside to increase the background depositional dust levels.Measures to be employed for Dust Control are given in Attachment E.6.

E.2 Emissions to Surface Waters

There will be no emissions to surface water.

E.3 Emissions to Sewers

There will be no trade effluent emissions to sewers, and only sewage will be discharged to the sewer.

E.4 Emissions to Groundwater

There will be no emissions to groundwater.

E.5 Noise Emissions

There may be noise emissions from the plant and machinery operating the facility. Noise emissions will be generated from the crushing, sorting and stockpiling of material. The proposed Materials Recover Facility is intended to operate on a 24 hour basis and as such shall be operated in a manner so as to ensure adherence to the EPA Guidance Note For Noise In Relation To Scheduled Activities which outlines a limit of a free-field LAr,T value of 55dB by daytime (08:00 – 22:00), at any noise sensitive location. During night-time (22:00 – 08:00), the noise attributable to on-site activities should not exceed a free-field LAeq, T value of 45 dB. Rigorous efforts shall be made to avoid clearly audible tones and impulsive noise at all sensitive locations, particularly at night.

The existing ambient noise levels in the area are some 10dB above the daytime 55dB LAeq value, and some 18dB above the 45dB LAeq nightime value. It is considered highly unlikely that the proposed facility would reach these levels, even in a worst-case scenario. Section E of the application forms provides tabulated levels for noise emissions monitored during baseline EIS monitoring. With regard to noise generated from on site activity this will be composed of typical Material Recovery Facility machinery as described in Table E.5.

Table E.5.1 Plant Operational noise at closest receptors

Operational Phase Noise Predictions (sources within buildings)		
BS5228 Calculations	Estimated Operational noise levels at varying distances LAeq 1 hour	
	N1	N2
Distance to receptor (m)	530m	100m
Sizer	20	38
Series 3 Trommel	14	32
Flip-flop	-	17
Single Drum Separator	2	20
Ballistic separator	9	27
Waste Screen	9	27
Double Drum Separator	4	22
Windshifter	-	12
Bailer	19	37
Combined Level LAeq 1hour	**23dB**	**42dB**

The Clifton Scannell Emerson Associates Limited (CSEA) road traffic assessment provided the input data for the traffic noise assessment of the proposed Materials Recovery Facility. Heavy road traffic on the Ballycoolin Road and the M50 motorway, both of which the site is bordered by, were noted to be the completely dominant noise sources at the proposed Materials Recovery Facility location, and for surrounding, noise sensitive receptors.

Noise Impacts and Mitigation

The design of the site has been laid out so as to minimise noise impact on the surrounding environment. This design provides noise mitigation to reduce the noise level reaching the noise sensitive receptors and the site is constrained to facilitate this design.

All of the major noise producing plant associated with the proposed Materials Recovery Facility will be situated within the purpose built buildings associated with the development. A very conservative 25dB attenuation value has been used in all calculations for plant situated inside buildings. In line with Best Practice items of plant identified as potential significant sources of noise will be sited as far away from sensitive properties as permitted by the site constraints.

Equipment will be procured and operated per BAT, such that all equipment used will be of the highest modern standards, will be manufactured by a reputable manufacturer, incorporating elements such as a high degree of power efficiency and noise abatement.

Table E.5.1 gives a list of predictive emissions below for plant and equipment proposed to be located at the site when licensed.

Worst case operational noise levels are predicted to comfortably comply within the EPA Guidance Note For Noise In Relation To Scheduled Activities which outlines a limit of a free-field LAr, T value of 55dB by daytime (08:00 – 22:00), at any noise sensitive location and one of 45dB for night operations.

These limit values in themselves are significantly below the existing ambient noise levels as shown by the day and night period baseline surveys. As such, no further mitigation is required for the operational phase of the development.

An assessment of the effects of a potential noise impact due to road traffic noise was carried out using a road traffic noise model built on the UK's Department of Transport (Welsh Office) 'Calculation of Road Traffic Noise' Document (1988). This took the form of an assessment of the road traffic for the base year (2007) the proposed opening year (2008) and the design year (2023), and their effects on sensitive receptors closest to the proposed development.

The results of the road traffic noise model are presented in below.

Table E.5.2 Predicted Road Traffic noise impacts

N1	Do Minimum	Do Something	Variation
Base Year	73.3 dB	n/a	n/a
Opening Year	74.3 dB	74.3 dB	-0.03 dB
Design Year	77.1 dB	77.1 dB	-0.02 dB
N2	Do Minimum	Do Something	Variation
Base Year	68.6 dB	n/a	n/a
Opening Year	74.1 dB	74.0 dB	-0.04 dB
Design Year	76.9 dB	76.9 dB	-0.02 dB

There is no predicted increase in Road traffic derived noise due to the proposed development at the nearest sensitive receptors, as the peak hour traffic numbers are predicted to decrease. Hence road traffic impact is not considered to be significant.

Residual Impact

On completion of all construction/installation works, and full commissioning of the proposed facility it is anticipated that there will be a slight, permanent noise impact to the local noise climate as a result of the proposed Materials Recovery Facility.

The operational noise output from the facility will not be significant in terms of the existing ambient baseline noise levels, and shall be in full accord with all relevant criteria. Road traffic noise associated with the operational phase of the proposed facility is not expected to be significant in terms of a predicted decrease in overall existing heavy road traffic volumes on the surrounding road network. The total residual noise impact is predicted to be slight and permanent.

E.6 Environmental Nuisances

Dust Control

It is not anticipated that dust will be a significant problem during the operation of the development. All recycling activities will be carried out within the facility building. Localised dust extraction and abatement will be provided on recycling plant and equipment with air recirculated internally to prevent the release of dust to the headspace of the building.

For the commissioning of the facility, the hard standing surface along with all roads will be tarmacadamed/concreted. In order to ensure that no dust nuisance

occurs, a series of measures will be implemented. Site roads shall be regularly cleaned and maintained as appropriate. In periods of dry weather when the potential for the transfer of dust would be greatest, a road sweeper, which would also dampen the road, may be employed in order to prevent the dust becoming airborne and transferring off site to sensitive receptors.

Emissions of pollutants from road traffic can be controlled by either controlling the number of road users or by controlling the flow of traffic. For the majority of vehicle-generated pollutants, emissions rise as speed drops. Emissions are also higher under stop-start conditions when compared with steady speed driving. The free flow of the traffic in the vicinity of the proposed development is essential in order to minimise the generation of traffic related pollutants. It is anticipated that the air quality may improve slightly in future years due to improvements in engine technology and greater controls on petrol, diesel, coal and gas composition and purity.

Fire Control

Details of fire control at the site are given in Attachment J, Item 4.

Litter Control

The waste activities proposed to take place at the site, as indicated in Attachment B.6, will be carried out within the curtilage of the building. The Environmental Manager will be responsible for ensuring the completion of daily litter checks at the site to prevent the potential of nuisance from litter. The use of a vehicular sweeper will be employed. The frequency of sweeping will be dependent on the waste tonnage throughput at the site and will be used as required and reviewed on a weekly basis.

Traffic Control

A traffic impact assessment was completed as part of the environmental impact assessment. Analysis of the junctions with the Premier Business Park in place shows that the road network will have sufficient spare capacity to cater for the future traffic demands of the Business Park.

It is proposed that shift hours and break times will be organised so that vehicle movements to and from the facility are kept to a minimum during the peak hours on the surrounding road network. Thus the impact of the proposed development in the road network will be negligible.

Vermin Control

The waste activities proposed to take place at the site, as indicated in Attachment B.6, will mean that the waste type to be handled is not likely to attract vermin. As a precautionary measure a vermin contractor will be engaged as required.

Road Cleansing

The Environmental Manager will be responsible for ensuring the maintenance of internal roads such to prevent the potential of nuisance from road dirt associated with the activity and with site vehicles. In a similar manner to the control of litter, the use of a vehicular sweeper will be employed. The frequency of sweeping will be dependent on the waste tonnage throughput at the site and will be used as required and reviewed on a weekly basis.

Attachment F: Proposed Environmental Monitoring

F.1 Abatement Programmes for Water and Air

There are no process controls for the water and air.

F.2 Air Monitoring Programme

Dust sampling will be carried out at 3 No. monitoring locations LD1, LD2 and LD3 as per Drawing 9, located in Appendix 1. Monitoring will be conducted on three times a year.

Bergerhoff gauges will be used to determine total dust deposition, as specified in the German Engineering Institute VDI 2119 document “Measurement of Dustfall Using the Bergerhoff Instrument (Standard Method).

An INAB accredited laboratory will be used for the analysis of the dust monitoring (e.g., Alcontrol Geochem Laboratories, Blanchardstown or another INAB accredited laboratory).

There are no stacks, flues or process emissions points proposed at the facility. A daily site odour check will be completed on site and recorded. In order that the efficiency of the carbon filter may be assessed, the following procedure will be employed. The odour control unit will be fitted with an odour sniff port as fitted on other waste facility OCU's. This will be directed to outside the building. The environmental manager every day will perform a sniff assessment of the sniff port so as to allow for determination of odours in the exhaust gas. They will grade the odours as per EA Guidance document for Odour Management from Waste treatment facilities. If a waste odour is detected in the exhaust gas the OCU will be stopped, and the media will be changed out. This will take approximately 2 hours to perform. In addition, this procedure will be incorporated into the overall environmental management system for the site and be reviewed every quarter for the first year of operation.

F.3 Surface Water Monitoring Programme

There will be no emissions to surface water. It is not proposed to monitor surface water.

F.4 Sewer Monitoring Programme

There will be no trade effluent emissions to sewers, and only sewage will be discharged to the sewer. It is not proposed to monitor the sewer.

F.5 Groundwater Monitoring Programme

There will be no emissions to groundwater. It is not proposed to monitor groundwater.

F.6 Noise Monitoring Programme

Noise monitoring will be conducted at 4 No. monitoring locations (LN1, LN2, LN3 and LN4) as per Drawing 9 (Appendix 1). It is proposed to monitor Noise emissions twice a year.

At each of the monitoring points a Sound Level Meter (SLM) will determine environmental noise levels using the A-weighted network and fast-response. The Sound Level Meter will be mounted on a tripod so that the microphone would be maintained at 1.5 metres above ground level and at least 3.5 metres from any potential noise reflecting surfaces. The survey will be carried out in accordance with the EPA document, "Guidance Note for Noise in relation to Scheduled Activities, 2nd Edition" (2006). The SLM will be manned throughout the survey period and notes regarding the main noise sources will be taken to aid interpretation of the data. With regard to noise levels, the following data will be recorded:

L(A)eq: Equivalent Continuous A-weighted Sound Level. The continuous steady noise level, which would have the same total A-weighted acoustic energy as the real fluctuating noise measured over the same period of time.

L(A)10: The noise level that is equalled or exceeded for 10% of the measurement period.

L(A)90: The noise level that is equalled or exceeded for 90% of the measurement period.

The results for each monitoring period in the form of 30 minute intervals will be tabulated for L(A)eq, L(A)10 and L(A)90. One third octave band analysis will also be undertaken to examine the frequency and identify tonal emissions if present.

F.7 Meteorological Monitoring Programme

There will be no external holding of waste materials outside of the building. It is not proposed to monitor meteorological conditions.

F.8 Storm Water Monitoring Programme

It is proposed to monitor storm water twice a year. Monitoring will be carried out at a single location, STM 1 as per Drawing 9 (Appendix 1). Storm water samples will be taken as 'Grab samples' from the designated monitoring point on site by submerging the 'grab' container beneath the surface of the water. It is proposed to monitor the storm water for COD and pH.

Standard QA/QC sampling techniques will be employed. Samples will be collected into laboratory-supplied bottles, and delivered in suitably chilled cool boxes (4°C) to an INAB accredited laboratory.

Attachment G: Resource Use and Efficiency

G.1 Raw Materials and Product

The table below presents an estimate as to the annual consumption of materials likely to be used on-site. The actual materials used will be presented to the EPA in the Annual Environmental Reports for the facility.

Table G.1 Raw Materials

Material/ Resource	Estimated Use per annum	Amount Stored
Electricity	2,500,000 kilowatt hours	None (substation provided)
Hydraulic Oil	10,000 litres	1,000 litres
Coolant and Antifreeze	2,000 litres	300 litres
Road Diesel	1,500,000 litres	110,000 litres (2 tanks)
Gas Oil (Green Diesel for on-site use)	250,000 litres	10,000 litres
Water	1,000,000 litres	55,000 litres (rainwater from roof)

G.2 Energy Efficiency

Energy efficiency during the operation of the facility will be stimulated by efficiency in the use of resources consuming fuel oil and electrical energy. Guidelines in the use of raw materials and energy will be given to staff as part of their environmental and health and safety training.

The office buildings will be well insulated to prevent unnecessary loss of heat. Office staff will be educated in energy efficient habits such as switching off computers and other electrical equipment when not in use. The use of air-conditioning will be monitored and minimised. The responsibility for education of staff in this regard and in waste prevention and minimisation will fall within the remit of the Environmental Manager at the site.

The roof of the recycling building will include 10% clear panels to allow infiltration of natural light and reduce the lighting requirements.

When fully operational, the processes at the site are designed to produce 37,000 tonnes of refuse derived fuel (rdf) per annum. This fuel is will be used, subject to contract, in cement kilns and/or power plants to replace traditional fossil fuels such as coal, oil, peat and gas.

In addition, the plant is designed to recover 213,000 tonnes per annum of material for recycling. While energy is used in the MRF to recover these materials, the recycling process produces secondary raw materials that replace primary raw materials. The energy that would have been used to produce these primary raw materials is saved in this scenario. The energy savings vary depending on where the raw materials are sourced, examples are as follows:

- Quarrying for soil, sand and stone,
- Deforestation for wood,
- Pulping for cardboard and paper,
- Using oil to manufacture plastics,
- Mining and extracting metals from ore,
- Mining gypsum to produce plasterboard,

Clearly, these activities require significant energy loadings and so significant energy savings will be made by recycling such a large volume of material at the site.

Attachment H: Materials Handling

H.1 Waste Types and Quantities – Existing & Proposed

Tables H1(A), H1(B) and H1(C) have been completed based on the following predicted inputs and outputs at the site:

MCR Ballycoolin Road expected Inputs

Commercial and Industrial Waste = 100,000 t/a

Construction and Demolition waste = 200,000 t/a

(including bulky household wastes collected in skips)

Premier Business Park Expected Outputs

Material Output	C&D t/a	C&I t/a	Total t/a	Percentage	Recovery/Disposal Schedule
Stone	57,000	3,000	60,000	20.0%	R4,R13
Soil	57,000	0	57,000	19.0%	R4,R13
Wood	35,000	13,000	48,000	16.0%	R2, R13
Ferous metal	5,000	7,000	12,000	4.0%	R3, R13
Plasterboard	4,000	0	4,000	1.3%	R4,R13
Cardboard	2,000	8,000	10,000	3.3%	R2, R13
Non-ferous metal	2,000	2,000	4,000	1.3%	R3, R13
plastic	2,000	6,000	8,000	2.7%	R2, R13
paper	2,000	5,000	7,000	2.3%	R2, R13
tetrapak	0	1,000	1,000	0.3%	R2, R13
Glass	1,000	0	1,000	0.3%	R4,R13
Polystyrene	1,000	0	1,000	0.3%	R2, R13
RDF	12,000	25,000	37,000	12.3%	R12, R13
Waste	20,000	30,000	50,000	16.7%	D11, D12, D13
Total	200,000	100,000	300,000	100.0%	

The predictions made on both the inputs and the outputs are unlikely to be exact, so flexibility is requested in the waste licence to allow for variations on the inputs and outputs within the overall limits applied to the maximum tonnage.

H.2 Waste Acceptance Procedures

The waste will be delivered to the site by MCR vehicles and third parties with the appropriate waste collection permits. All vehicles will be enclosed, covered or appropriately netted. Third parties without the appropriate waste collection permits or with uncovered vehicles will be refused entry. MCR drivers that breach procedures will be reprimanded.

Entry to the facility is via a one-way system at the Materials Recovery Facility. Vehicles will approach the weighbridge via an on-site queuing lane that can accommodate between 4 and 10 vehicles, depending on the vehicle types. The entrance road also has a by-pass lane that will allow maintenance vehicles, fuel tankers, emergency service vehicles, etc, to access the facility without delay. The weighbridge operator will check the waste using a camera situated above the vehicle where possible. Any non-conforming loads will be rejected at this point.

After de-netting or the removal of covers, vehicles will unload inside the Materials Recovery Facility by tipping onto the concrete floor. The waste will be examined at this point by a waste checker. The waste checker will direct the loading shovel driver or bobcat driver to consign material as follows:

- Non-conforming items will be removed (by bobcat or by hand) to the quarantine area where they will be stored in an appropriate manner prior to removal to a suitably licensed waste disposal or recovery site. Quarantined liquids, sludges, batteries, etc. will be stored on bunded pallets to prevent spillage of potentially polluting substances.
- Odorous waste will be directed to a bay where it will be contained by a retractable tarpaulin cover and the odorous air treated with a localised activated carbon treatment system. This material will not be processed and will be removed within 24 hours to a licensed landfill or other suitable licensed site, such as a Mechanical Biological Treatment (MBT) plant.
- Construction and demolition (C&D) waste is expected to be rich in clay, stone, wood and metals and will be directed to the C&D waste processing line which is described in detail below.
- Commercial and industrial (C&I) waste is expected to be rich in cardboard, wood and plastics and this material will be directed to the C&I waste processing line, which is also described in detail below.
- Bulky municipal waste (household and commercial skips) will be examined for content and directed to the most suitable line.
- Skips exclusively containing soil & stone, wood or metal will be directed to designated bays rather than mixed with other wastes.
- Dry recyclables will be directed to the C&I waste processing line.

H.3 Waste Handling

Waste will be processed in two separate processing lines described in the following paragraphs and shown in the Infrastructure and Operation Plan, Drawing No.7.0 and in the Process Flow diagram, Drawing No. 8.0

Control Room

A control room will be incorporated into the northeast corner (Block L) of the materials recovery building at a high level. This position will be manned at all times during operation of the facility. The controller will have a view of operations directly through windows and through a series of strategically placed cameras. The controller will have appropriate computer software that will give him (or her) direct control of all machinery and all conveyor belts. Emergency stop buttons, strategically placed around the processing lines will be able to over-ride the control room in the event of an emergency.

C&D Waste Processing Line

A Grab machine will be used to remove large items from the construction and demolition waste prior to processing. This is likely to include recyclables such as metal and wood as well as non-recyclable items such as mattresses and carpets. These bulky objects will be stored in pre-sort bays near the entrance to the waste recovery building.

The Grab machine will then feed the material to a hopper which will feed via an incline conveyor to a pre-sort picking platform. Plasterboard, polystyrene and glass will be hand-picked by personnel that will be issued with appropriate personal protection equipment to ensure their health and safety. Removing these materials will protect physical and chemical quality of the clay fines produced later in the process. These pickers will also watch for items with the potential to damage the shredder that may have been missed by the Grab operator.

The material will then pass into the shredder where it will be broken down to fractions that will be less than 100mm in diameter. From the shredder, the material will be raised to a high level (approximately 11m) using a slat conveyor (40 degrees).

The material will then pass under an in-line industrial magnet where ferrous metals will be removed to a short conveyor belt where a manual picker will control quality by removing contaminants. The ferrous metals will fall from the short conveyor to a bay or an appropriate container on the factory floor.

The material will then pass into a rotating drum (trommel) screen where the >40mm fraction will be separated from the <40mm fraction. The finer fraction will be further

processed by passing over a flip-flop screen. This 8mm screen will allow soil particles to pass through as a product.

The 8mm to 40mm fraction will pass over the flip-flop screen and be further treated by a single drum separator (SDS) that will use an air classification technique to separate the material by density. The heavy fraction from the windshifter will consist of a stone product, whereas the light fraction will consist of residual waste to be sent off site to a licensed disposal facility.

The > 40mm fraction emanating from the end of the Trommel screen will be conveyed into a Double Drum Separator (DDS). This machine will use an air classification technique to separate three fractions based on their density. The heavy fraction will emerge first and will consist of stone product. The stone will be monitored for quality by a manual picker as it is conveyed to feed directly into trailers. When trailers are full or unavailable the stone will fall into a storage bay on the factory floor from where it will be later fed into trailers using a loading shovel.

The medium density (mid-heavy) fraction will emerge second from the DDS and will consist of wood, hard plastics, non-ferrous metals, cardboard, etc. This material will be conveyed to a ballistic separator that will separate by shape, density and hardness. The materials will be thrown onto the ballistic separator, which comprises of a number of paddle boards attached to two cam shafts. Materials have a range of trajectories when impacted by paddle boards in this way.

Flat low density materials such as cardboard, plastic and magazines will be conveyed up the machine and be separated from heavier 3-dimensional objects such as chunks of wood, which will roll down the machine. In addition, the paddle boards will be perforated allowing fines to drop through and be separated as a third fraction. These fines will primarily consist of clay that had been attached to the wood fraction but is released by the action of the paddle boards in the ballistic separator. The fines will be examined prior to a decision on their suitability for recovery or disposal.

The wood emerging from the ballistic separator will be checked for quality control by a number of hand pickers and the clean wood will be conveyed to a bay on the floor. The lighter flatter fraction will merge with the light fraction from the DDS and be conveyed to a picking station for further segregation.

C&I Waste Processing Line

The C&I waste will be processed on a separate line to the C&D waste. The material will be fed into a Cascade Screener (or similar) that will vibrate on springs to agitate the material and present it evenly on a conveyor. The screen will allow fines of <75mm through to a lower belt and these will pass under an industrial magnet where the ferrous metals will be removed. The remainder of the <75mm fraction will be

conveyed to a bay where it will be examined for content prior to a decision on further processing or removal for landfill disposal.

The >75mm fraction will be conveyed up an incline conveyor belt and pass under an industrial magnet which will remove ferrous metals. The material will then merge with the lights from the C&D line and these will be conveyed together to the picking station. Materials such as cardboard, plastic, wood, paper, tetra-pak and non-ferrous metals will be hand-picked by 8 or 10 pickers. Materials with no potential for recycling will also be removed for disposal.

The picking station will be enclosed and equipped with air conditioning and all pickers will be issued with Personal Protection Equipment (PPE). The materials will be dropped into chutes that will feed onto reversal belts in contained sections perpendicular to the picking belt. These reversal belts will be fitted with load cells to determine the weight of material in each contained section. When a contained section holds enough material, the control room operator will dispatch this material onto another belt to feed directly to the baler.

The baled products will be loaded from the baler by forklift to trailers located adjacent to loading bays located outside the door of the materials recovery building. A storage area is available in the southwest corner of the building for excess bales.
Un-picked materials that pass through the picking station will be re-circulated via a series of conveyor belts and will be presented to the pickers a second or third time to ensure maximum recovery levels of all materials.

Refuse Derived Fuel (RDF)

There is good potential to manufacture RDF at the facility. Currently there are no outlets for RDF within Ireland but this situation may change in the near future. The light waste fraction, comprising of small fractions of plastic and paper would be targeted for RDF. A windshifter will be installed close to the picking station to extract these materials. The light fractions extracted from the double drum separator and the single drum separator, both on the C&D line would also be ideal for use as RDF.

Attachment I: Existing Environment & Impact of the Facility

The Guidance document notes, "The information in the EIS should meet the *EPA Guidelines on the information to be Contained in Environmental Impact Statements* (2002). In such cases, it will suffice for the purposes of this section to provide adequate cross-reference to the relevant sections in the EIS.

I.1 Impacts on Air Quality

See Section 10.1 to 10.5 of the EIS.

I.2 Impacts of Discharges on Surface Water Quality

There will be no discharges released to surface water.

See Section 8.1 to 8.3 of the EIS.

I.3 Impacts of Discharges on Sewer

There will be no discharge of trade effluent to sewer. Only sewage from the site facility buildings will be discharged to the sewer, and a trade effluent discharge will not be required.

See Section 2.2.12 of the EIS.

I.4 Impacts of Operations on Groundwater

See Section 8.1 to 8.3 of the EIS.

I.5 Impacts of Operations on Ground Conditions/Contamination

See Section 7.3 of the EIS.

I.6 Noise Impact

See Section 11.1 to 11.5 of the EIS.

I.7 Ecological Impact

See Section 6.1 to 6.4 of the EIS.

Attachment J: Accident Prevention & Emergency Response

Current Public Liability insurances taken out by MCR Environmental are located in Appendix 5.

The Health and Safety Manager will develop policies in relation to accident prevention and emergency response. The Environmental Manager will incorporate environmental procedures into the emergency response procedures. Details of these policies will be agreed with the Agency during the first 6 months of operation. The facility will comply with all Environmental and Health & Safety Regulations.

The MCR Group's current safety statement does not extend to the operation of a Materials Recovery Facility, so a specific health and safety management system will be devised and operated prior to the commencement of operations at the site. A health and safety officer will be appointed by the Group and will have responsibility for these matters.

In general terms, the key health and safety issues that have been incorporated into the design of the facility are as follows:

- Traffic will flow in a one-way system through the site to minimise the potential for collisions.
- Reversing of vehicles will be minimised as the vehicles will drop their load and drive forward through the building.
- Some reversing will be inevitable and reverse warning alarms will be fitted on all plant and trucks operating in or using the facility.
- Platforms with handrails will be provided to facilitate the manual removal of covers or nets from skip lorries.
- Grab machines and loading shovels that will operate constantly inside the recovery building will be fitted with air-conditioning to ensure clean air for the operators.
- Grab machines, operating in the vicinity of large volumes of flammable materials such as cardboard, plastic, woodchips, etc. will be fitted with fire suppression systems that will be designed to quench a fire before it has a chance to spread.

- Fire extinguishers will be located at strategic points in the materials recovery building and the offices.
- More comprehensive fire extinguishing equipment will be installed proximal to areas where flammable materials such as cardboard, plastic and wood will be stockpiled.
- Fire escape routes have been incorporated into the design of the materials recovery building and the offices and these routes are subject to approval by the fire officer with responsibility for the area. The building cannot be constructed prior to the granting of a fire certificate by the local fire officer.
- Smoke vents will be incorporated into the design of the roof. These will be opened remotely to vent smoke (in an emergency) or diesel fumes from the materials recovery building. The building will be adequately vented to ensure clean air for all personnel.
- Dust extraction and containment at appropriate locations is incorporated into the design of the plant.
- All personnel on the site will be issued with personal protection equipment (PPE) appropriate to their job function and all employees and visitors will be required to wear appropriate PPE.
- All manual pickers will operate in secure areas off the floor of the building and where practicable, in air-conditioned picking cabins.
- Access to picking stations from the office building, lockers and toilet facilities, will be via stairs and walkways that are protected from mobile plant and traffic. All high level walkways will be fitted with handrails and will be protected from moving parts on the processing lines.
- All personnel likely to come into physical contact with waste materials will be vaccinated against potential ailments such as tetanus.
- Hazardous materials such as asbestos, contaminated soil or volatile compounds will be rejected prior to entry to the facility. In the event that such materials escape the attention of the initial checks and enter a process line, the plant will be shut down immediately and the hazardous material removed in an appropriate and safe manner.

- Emergency stop buttons will be strategically placed around the facility.
- All personnel will receive appropriate health and safety training prior to working on the site.
- Appropriate health and safety signage will be strategically placed around the facility.
- Load-bearing pillars will be protected from impact by concrete and steel bollards and other appropriate structures.
- A training room has been provided to facilitate formal training of site operatives.
- A medical room has been provided and will be adequately stocked to provide immediate medical attention in the event of personal injury.

MCR Personnel holds the following insurances:

- Public/Products Liability Insurance – Limit of Indemnity €6.5 million
- Employers Liability Insurance - Limit of Indemnity €13 million
- Motor Fleet Policy – Third Party Property Damage Limit €6.5 million

A letter from MCR's insurance brokers confirming these levels of insurance cover is included in Attachment J.

Contingency procedures will be put in place for the following events:

1. Operational failure of plant and equipment;
2. Breakdown of transport system;
3. Industrial action by operational staff;
4. Fire in the facility;
5. Personal injury on site;
6. Discovery of hazardous material;
7. Spill of potentially polluting compound;
8. Response provisions out of normal working hours.

The details of each contingency are dealt with in more detail below.

1. Operational Failure of Plant and Equipment

It will be the responsibility of the Operations Manager to arrange for the inspection and maintenance of all plant and equipment on a daily basis. In the event of operational failure, the Operations Manager will assess the time-frame required to resolve the issue and will inform the Environmental Manager, who is responsible for licence compliance, of the seriousness of the problem.

The facility contains a store room that will be stocked with all essential parts, so the operational failure should be fixed within a few hours. The facility is designed with storage capacity to cope with a downtime in excess of 12 hours. In the event of a breakdown likely to exceed 12 hours, arrangements will be made to divert incoming waste to other appropriate facilities. Any incidents of this nature will be recorded and reported to the Agency.

2. Breakdown of Transport System

It will be the responsibility of the Site Manager to arrange for regular maintenance of all grabs, loading shovels, bobcats, teleporters, forklifts and haulage trailers to ensure that all are in good condition.

In the event of a breakdown of a vehicle, the site manager will source a replacement vehicle from off-site plant contractors. The site is designed with adequate storage capacity for products to ensure that the breakdown of a vehicle would not lead to the need to divert incoming waste.

3. Industrial Action By Operational Staff

In the event of industrial action by operational staff at the facility, incoming waste will be diverted to other appropriate facilities. Any incidents of this will be recorded and reported to the Agency.

4. Fire in the Facility

In the event of a localised fire on-site, the fire will be controlled as per the Fire Fighting Procedures in the Safety Statement to be prepared by the Health & Safety Manager. For a major fire at the facility, the local fire-fighting emergency service will be called to control the fire, and the facility will remain closed until it has been deemed that it is safe to operate again.

Any fire-water generated will be retained within the building, which is designed for containment with ramps on all doors. The firewater will be tested for parameters to be agreed with the Agency. Two pump-sumps are provided near the main facility doors from where the firewater will be pumped to the main sewer or removed by tanker to a suitable treatment facility, subject to agreement with the EPA and the Local Authority.

Fire water retention requirements are calculated as follows:

The floor area of the Materials Recovery Facility is 4970m^2. Containment ramps are provided at all doors to the MRF to provide fire-water containment to a depth/height of 250mm. The retention capacity of the building is therefore 1,242.50m^3. In a worst-case scenario it is estimated that 40% of the floor contains material and is therefore unavailable for storage of fire-water. The retention capacity would then be reduced by 497m3 to 745.50m^3.

The fire-fighting duration of a worst-case fire is estimated at 90 minutes. At a typical hydrant rate of delivery of 135m^3/hr, a total of 202.50m^3 of firewater can be expected. In the worst-case scenario of a 24 hour heavy rainfall event, estimated at 50mm, coinciding with a fire with the roof of the MRF destroyed, the volume of rainfall falling on the MRF is calculated as 248.50m^3. Therefore in the worst case scenario, a total of 451m^3 of potentially polluting water would require containment. The building is designed to have excess containment capacity of 294.5m^3 in this worst-case scenario.

Firewater Retention Calculations for Block L, Premier Business Park.

Ref	Dimension	Calculated Capacity
A	Area of Building	4,970 m^2
B	Bund Height	0.25 m
C	Containment	1,242.5 m^3
D	Material (40% of Floor)	497 m^3
E	Available containment (C-D)	**745.5 m^3**
F	Time of Fire	1.5 hours
G	Hydrant rate of delivery	135 m^3/hour
H	Firewater	202.5 m^3
I	Rainfall 24 hrs	0.05 m
J	Rainfall volume	248.5 m^3
K	Total potentially contaminated water (H+J)	**451 m^3**
L	Excess Capacity (E-K)	**294.5 m^3**

5. Personal Injury on-site

The Health and Safety Manager will be responsible for ensuring that an employee trained in first aid is available on site at all times when the facility is operating. Minor personal injuries will be treated in the Medical Room. In the event of a more serious injury, the emergency services will be contacted and the Health and Safety Manager

will make a decision on moving the injured party to the Medical Room or leaving them in-situ until the emergency services arrive.

All personal injuries will be fully documented and investigated. Such incidents will be reported to the Health and Safety Authority (HSA), as required by HSA Guidance.

6. Discovery of Hazardous Material

Hazardous material will be rejected from the site. However, it is recognised that hazardous material could be hidden amongst non-hazardous material and could theoretically enter the waste processing lines. The Health and Safety Manager in cooperation with the Environmental Manager will prepare material specific procedures to deal with such events.

7. Spill of potentially polluting compounds

The diesel tanks at the site will be installed inside a mass concrete bund that is designed to contain greater than 110% the volume of the largest tank. This will ensure that any accidental diesel spill from this area will be contained and handled in an appropriate manner in consultation with the EPA.

Hydraulic oils, coolants, anti-freeze and detergents will each be stored on bunded pallets in the storeroom to ensure containment of accidental leaks or spills of these compounds.

Hydrocarbon leaks from trucks or plant will be contained with spill kits containing absorbent material. The spill kits will be stored in the trucks and plant as well as the storeroom.

Any non-conforming wastes, such as batteries or barrels of liquid waste, discovered within conforming wastes will be placed carefully on bunded pallets in the quarantine area within the MRF. As soon as practicable after receipt, these materials will be consigned to facilities that have the appropriate waste licence or permit to handle them.

8. Procedures Outside Normal Operating Hours

The site will operate 24 hours per day, 7 days per week, subject to approval by the relevant authorities, so site personnel will be available to handle emergencies at all times including nights and weekends. In the event that the site is closed, MCR Security, a sister company of MCR Environmental will monitor the site and will be fully instructed in the procedures to deal with emergency situations and will be furnished with the contact details of key personnel.

Attachment K: Remediation, Decommissioning, Restoration & Aftercare

Emissions of noise and depositional dust are those emissions identified as being the main environmental impacts of consequence arising as a result of the operation of the MCR Environmental Materials Recovery Facility.

The potential emissions of noise and dust will cease concurrently to any future cessation of the operation. As operations will have ceased, it will not be necessary to continue to monitor noise levels or to monitor depositional dust. The future decommissioning of the site will not leave potentially polluting residuals remaining on site post closure. In addition, the buildings will be fully decommissioned of any operating plant, of materials used on site and of any other remnants of the activity, such that the site will be left remaining in the condition existing prior to operation of the facility, and fit for the purpose of the future potential occupier.

Attachment L: Statutory Requirements

Compliance with Section 40(4) of the WMA 1996 to 2003

The activity will be carried out in such a manner so as to comply with environmental standards and legislation and will be carried out by a fit and proper operator; MCR Environmental as per paragraphs (a) to (g) of Section 40 (4) of the Act;

(a) All site processes, materials handling and waste recovery will be carried out without the contravention of emission limits values, environmental standards and any enactments

(b) The activity will be carried out in compliance with environmental standards, any permitted licence conditions and will not cause pollution

(c) In all aspects of the management of the Materials Recovery Facility, MCR Environmental are committed to the principle of 'Best Available Techniques (BAT)'. All waste handling operations will take place on hardstand areas. Each facility will be kept clean at all times and there will be regular checks for any evidence of litter outside all the main buildings. With respect to subsection (c)(c) The facility is consistent with the objectives of the Waste Management Plan for the Dublin Region and the National Hazardous Waste Management Plan

(d) The operator, MCR Environmental and none of its personnel have been convicted of an offence under the Act

(e) The applicant is a financially sound operator and has financial competence to discharge it's duties in the operation of the facility and in its future proper closure.

(f) MCR Environmental are committed to the operation of the facility according to BAT and practices, such that reductive and efficiency measures with respect to consumption of energy and raw materials will that can be undertaken where possible

(g) All equipment will be manufactured to the highest modern standards by a reputable manufacturer, incorporating elements such as a high degree of power efficiency and noise abatement

Fit and Proper Person

- **Compliance with WMA**
  MCR Personnel Ltd. (including related companies and subsidiaries) has no legal offences or convictions to date under the Waste Management Acts 1996-2003.

- **Technical Competence and Site Management**
  Details of the current MCR Environmental staff who will be directly involved at the site are provided here:

- Douglas Taylor, Managing Director, MCR Personnel Ltd.
- Conor Walsh, Technical Advisor, MCR Environmental.
- John Sheehan, Financial Director, MCR Personnel Ltd.

Summary Curricula Vitae for these persons are located on Page 13.

Key management staff to be employed the facility include the following:

- Site Manager
- Operations Manager
- Environmental Manager
- Health & Safety Manager

Details on exact qualifications of future staff, along with statements of duties, responsibilities and experience of relevant employees shall be submitted to the EPA on realisation of the facility.

The Environmental Manager will attend Certified Training Programmes, such as those offered by the FAS Environmental Training Unit.

The exact qualifications of personnel employed at the site are not known as of yet but the following guidelines will apply.

The exact qualifications of personnel employed at the site are not known as of yet but the following guidelines will apply.

Site Managers will be responsible for the day to day operation and supervision of each facility and will be trained in EPA waste acceptance and handling procedures, and in the Environmental Management of the facility.

The site operatives, who will also receive training in waste acceptance and handling procedures who will be responsible for operating the weighbridge and logging vehicles.

Each site manager will hold a copy of the following documents:

- Waste Licence Application
- Waste Licence Conditions as set down by EPA and
- Facility Environmental Management Plan.

Training and awareness among facility staff will be achieved through external and in-house training as well as through prominent posting of environmental awareness material within each site office.

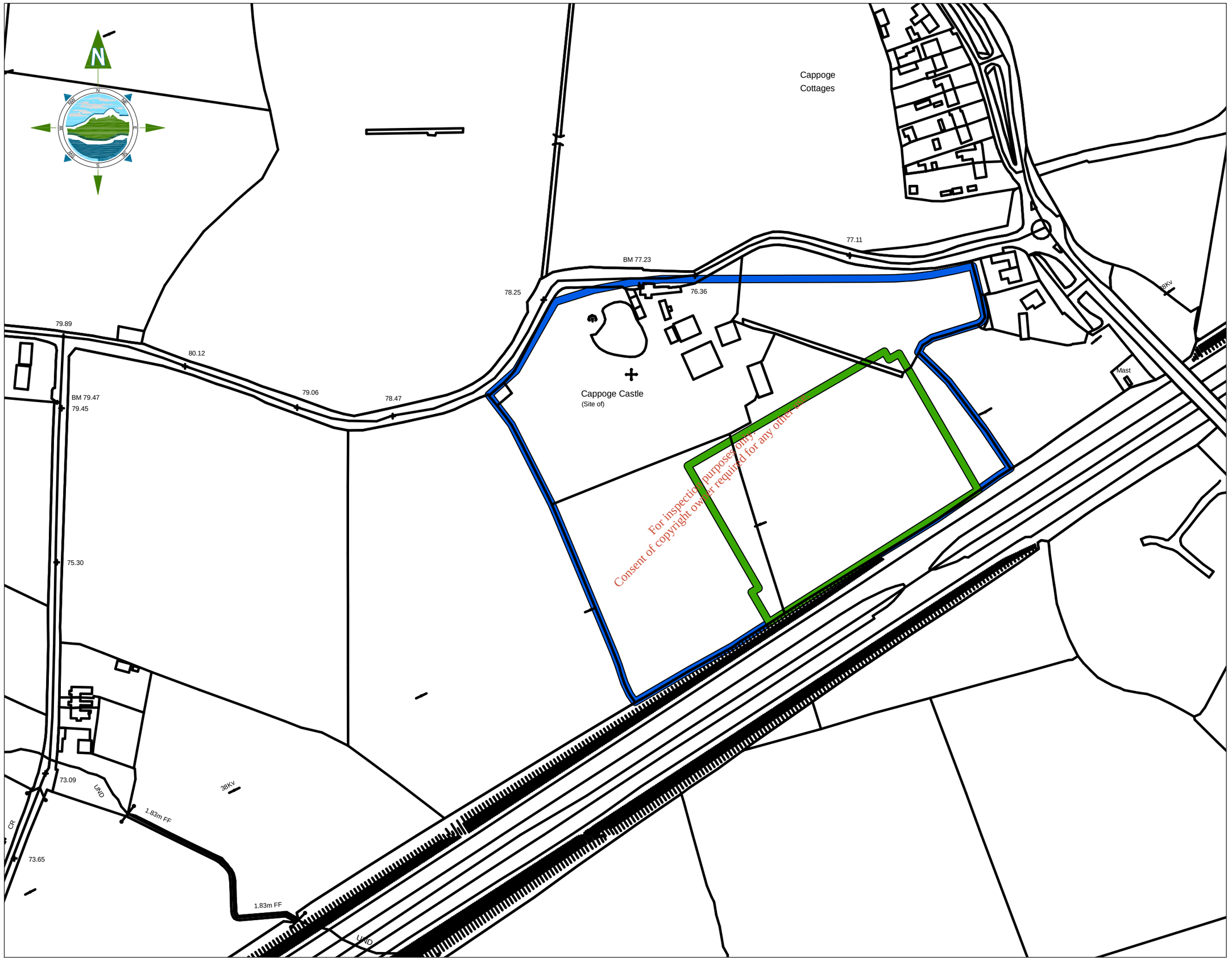
- **Financial Competence**

  MCR Personnel Limited is a financially secure and viable organisation. It is totally committed to all proposed measures at the Materials Recovery Facility as outlined in this application and has the capability to finance them and to finance any clearance of the site post-closure.

  The Financial Statements for MCR Personnel Limited for financial years 2005 and 2006, together with Directors' and Auditors' Reports, are located in Appendix 5.

Appendix 1 Drawings

Drawing No1: Site Ownership Plan
Drawing No2: Regional Site Location
Drawing No3: Site Layout Plan
Drawing No4.0: Truck Turning Plan
Drawing No4.1: Underground Services
Drawing No4.2: Drainage
Drawing No5: Location of Site Notices
Drawing No6: Organisational Structure
Drawing No7.0: Operational and Infrastructural Plan
Drawing No.7.1: Equipment Design
Drawing No.8.0: Flow Process Diagram
Drawing No 8.1: Flow Diagram C&D processes
Drawing No 8.2: Flow Diagram C&I processes
Drawing No 9: Monitoring locations



LEGEND

- Prospective Lessee Boundary (MCR Environmental)
- Landownership Boundary (Airscape)

0 12.5 25 50 75 100
Metres

NOTES

1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING
2. ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE
3. ENGINEER TO BE INFORMED OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES
4. ALL LEVELS RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

Issue	Date	Description	By	Chkd.
A	27-11-07	Issued	A.G.	M.H.

Client:
MCR ENVIRONMENTAL

Project:
BALLYCOOLIN ROAD MATERIALS RECOVERY FACILITY
WASTE LICENCE APPLICATION

Title:
SITE OWNERSHIP PLAN

Scale @ A3: 1:2,500

Prepared by:	Checked:	Date:
A.Gruschka	M. Hogan	Nov 2007

Project Director: D. Grehan

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fax:+353-(0)1-8030409
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4039
Drawing 1
A

SITE NOTICE LOCATION

SITE NOTICE LOCATION

BH1

BH2

BH3

BH4

11000

River Tolka

Under Construction

Ordnance Survey Ireland Licence No EN 0016007 © Ordnance Survey Ireland and Government of Ireland

LEGEND

- Site Activity Boundary
- Premier Business Park

Environmental Monitoring Points

- EPA Monitoring Station
- GSI Borehole

0 0.125 0.25 0.5 0.75 1

Kilometres

NOTES

1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING
2. ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE
3. ENGINEER TO BE INFORMED OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES
4. ALL LEVELS RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

Issue	Date	Description	By	Chkd.
A	04-12-07	Issued	A.G.	M.H.

Client: MCR ENVIRONMENTAL

Project: BALLYCOOLIN ROAD MATERIALS RECOVERY FACILITY WASTE LICENCE APPLICATION

Title: REGIONAL SITE LOCATION

Scale @ A3: 1:20,000

Prepared by: A.Gruschka | Checked: M.Hogan | Date: Nov 2007

Project Director: D. Grehan

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4039 A

Drawing 2

GENERAL LEGEND

[redacted]

SITE NOTICE LOCATION

X

NOTES

1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING
2. ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE
3. ENGINEER TO BE INFORMED BY THE CONTRACTOR OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES
4. ALL LEVELS SHOWN RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD
5. 6" OS SHEET NO: DUBLIN 14

10m 0 10m 20m 30m

Rev	Date	Description	By	Chkd.
A	03-12-07	ISSUED FOR WLA	MN	MH

Client: MCR ENVIRONMENTAL

Project: BALLYCOOLIN ROAD MATERIALS RECOVERY FACILITY WASTE LICENCE APPLICATION

Title: SITE LAYOUT PLAN

Scale @ A1: 1:500

Prepared by: M. Nolan | Checked: Mairead Hogan | Date: November 2007

Project Director: Damien Grehan

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Drawing No.: Drawing 3 | Revision: A

Articulated Vehicle with Tail Steered Unit

WAREHOUSE
Block K

WAREHOUSE
Block L

WEIGHBRIDGE

WEIGHBRIDGE

KIOSK

Gated Access

73 spaces

2.4m high pallisade

2.4m high pallisade

NOTES

1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING

2. ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE

3. ENGINEER TO BE INFORMED BY THE CONTRACTOR OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES

4. ALL LEVELS SHOWN RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

Rev	Date	Description	By	Chkd.
A	16.12.07	ISSUED FOR WLA	N.V.	O.McA

Client: MCR Environmental

Project: Waste Licence Application

Title: Autotrack Truck Turning Plan

Scale @ A3: 1:500

Prepared by: Noel Vennard | Checked: Orla McAlister | Date: 14.12.07

Project Director: Damien Grehan

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Drawing No.: Drawing 4

Revision: A

NOTES

1. Figured dimensions only to be taken from this drawing.
2. All dewings to be checked by The Contractor on site.
3. The Engineer to be informed by The Contractor of any discrepancies before any work commences.
4. All levels shown relate to ordnance survey datum at Malin Head.

Rev	Date	Description	By	Chkd.

Client:
MCR ENVIRONMENTAL

Project:
MATERIALS RECOVERY FACULITY
BALLYCOOLIN ROAD,
WASTE LICENCE APPLICATION

Title:
UNDERGROUND SERVICES

Scale @ A3:

Prepared by: MK | Checked: | Date: 07.12.2007

Project Director:

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Drawing No.: Drawing 4.1

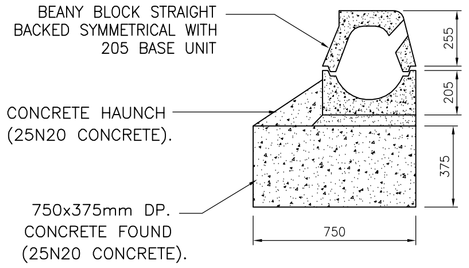
Revision:

NOTE:-
1) RAINWATER PIPE CONNECTIONS TO BE 150 ø PVC 90°.
2) SLOW RADIUS BENDS TO BE USED ON ALL 150ø RWP's
3) DRAINS CLEANING/RODDING EYES TO BE PROVIDED AT 1m ABOVE GROUND LEVEL

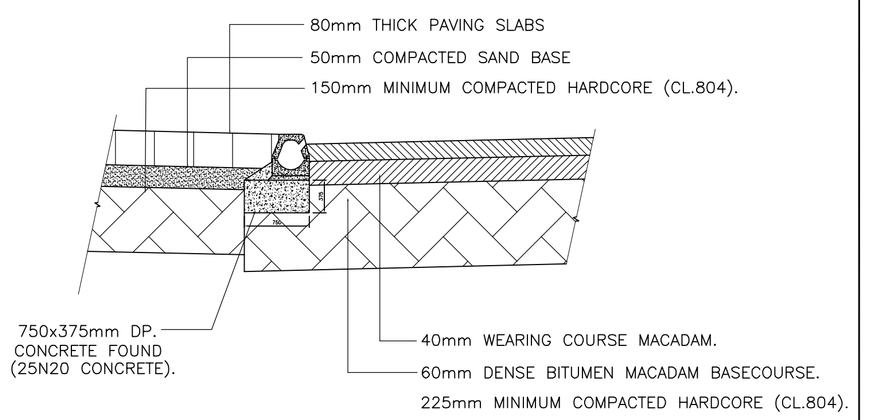
LEGEND

EXISTING SURFACE WATER

PROPOSED SURFACE WATER



BEANY BLOCK KERBING DETAIL SECTION
Scale: 1/20



TYPICAL SECTION THRU BEANY BLOCK KERBING
Scale: 1/50

Drawing Status: PLANNING
Date: DEC. 2007
Issued By: CSEA

Revision	Description	Initials	Date
D	GENERAL REVISION	DL	17/12/2007
C	GENERAL REVISION	DL	14/12/2007
B	PETROL INTERCEPTOR NOTE REVISED AS CLOUDED & SAMPLING MH ADDED	PM	14/12/2007
A	SURFACE WATER REVISED AS CLOUDED	AMS	06/11/2007

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Consulting Engineers
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Carew Kelly Associates

Architect

Client: MCR Environmental

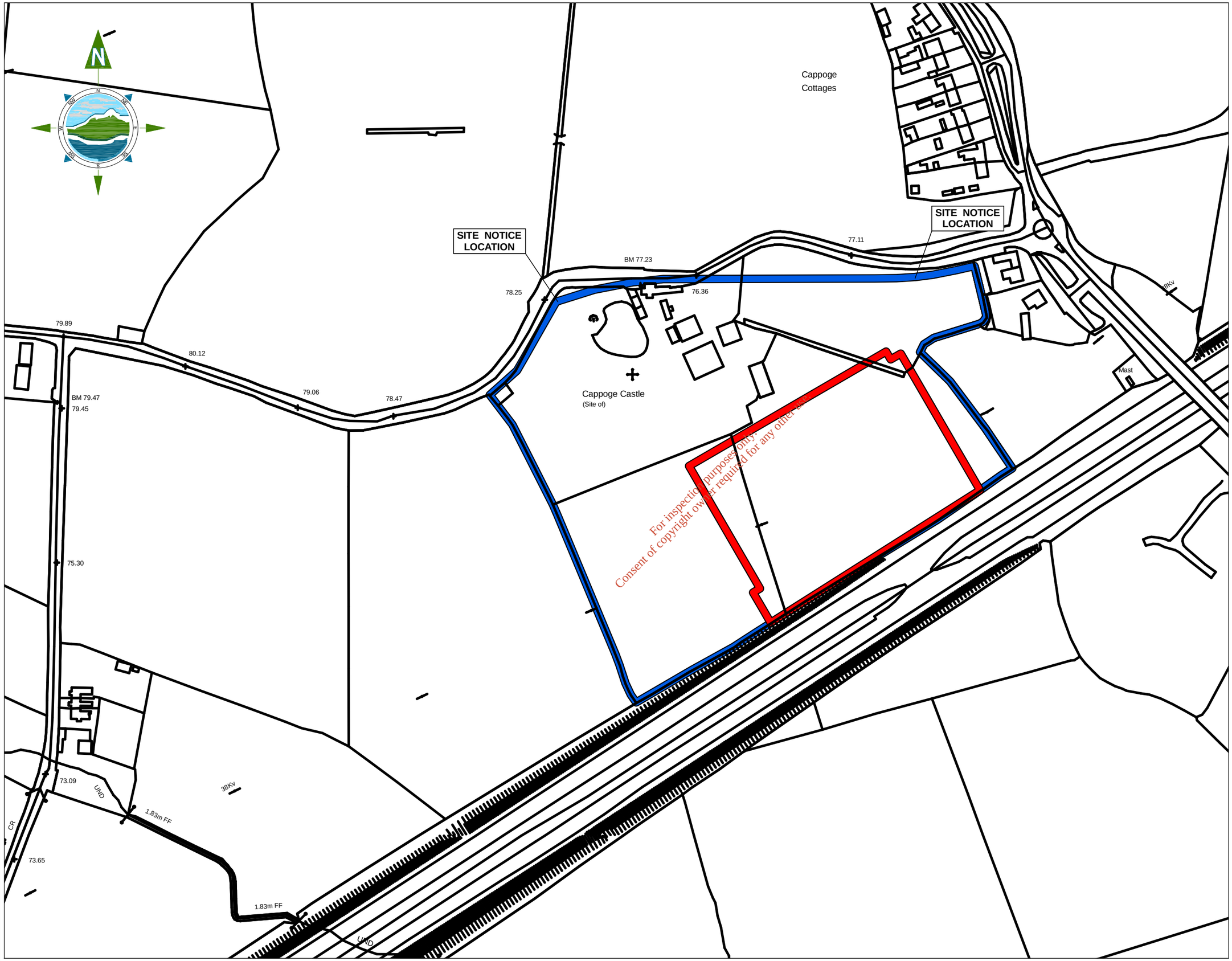
Project: Premier Business Park

Dwg. Title: Block L & Block K Surface Water Layout

Drawn By: AMS Date: November 2007

Checked by: PM Scale: 1:500

Dwg. No.: 03_076_9203-D Dwg. No. 4.2



LEGEND

- Site Activity Boundary (MCR Environmental)
- Landownership Boundary (Harcourt Developments)

0 12.5 25 50 75 100
Metres

NOTES

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3. ENGINEER TO BE INFORMED OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES
4. ALL LEVELS RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

Issue	Date	Description	By	Chkd.
A	27-11-07	Issued	A.G.	M.H.

Client:

MCR ENVIRONMENTAL

Project:

BALLYCOOLIN ROAD MATERIALS RECOVERY FACILITY
WASTE LICENCE APPLICATION

Title:

LOCATION OF SITE NOTICES

Scale @ A3: 1:2,500

Prepared by:	Checked:	Date:
A.Gruschka	M. Hogan	Nov 2007

Project Director: D. Grehan

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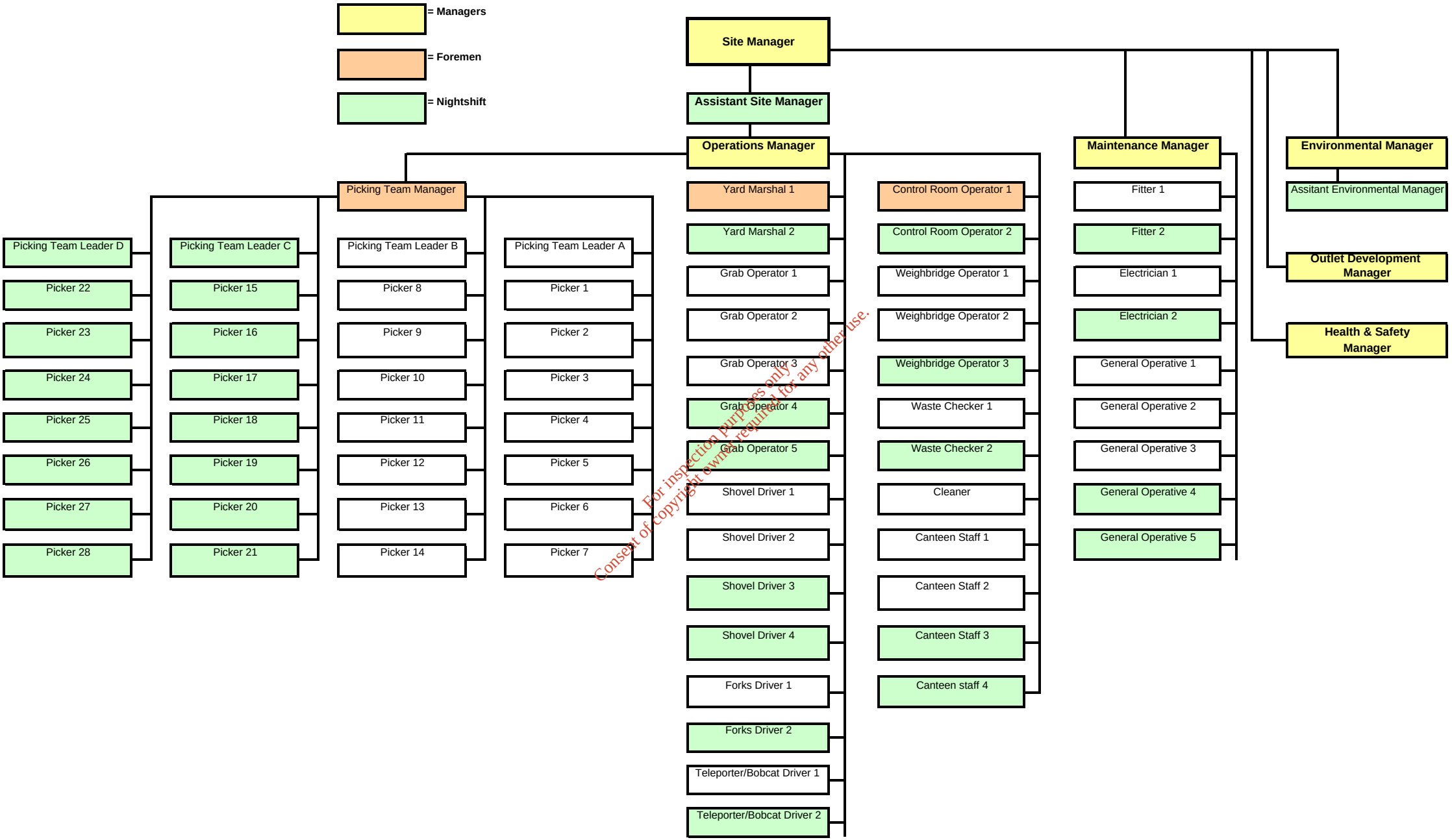
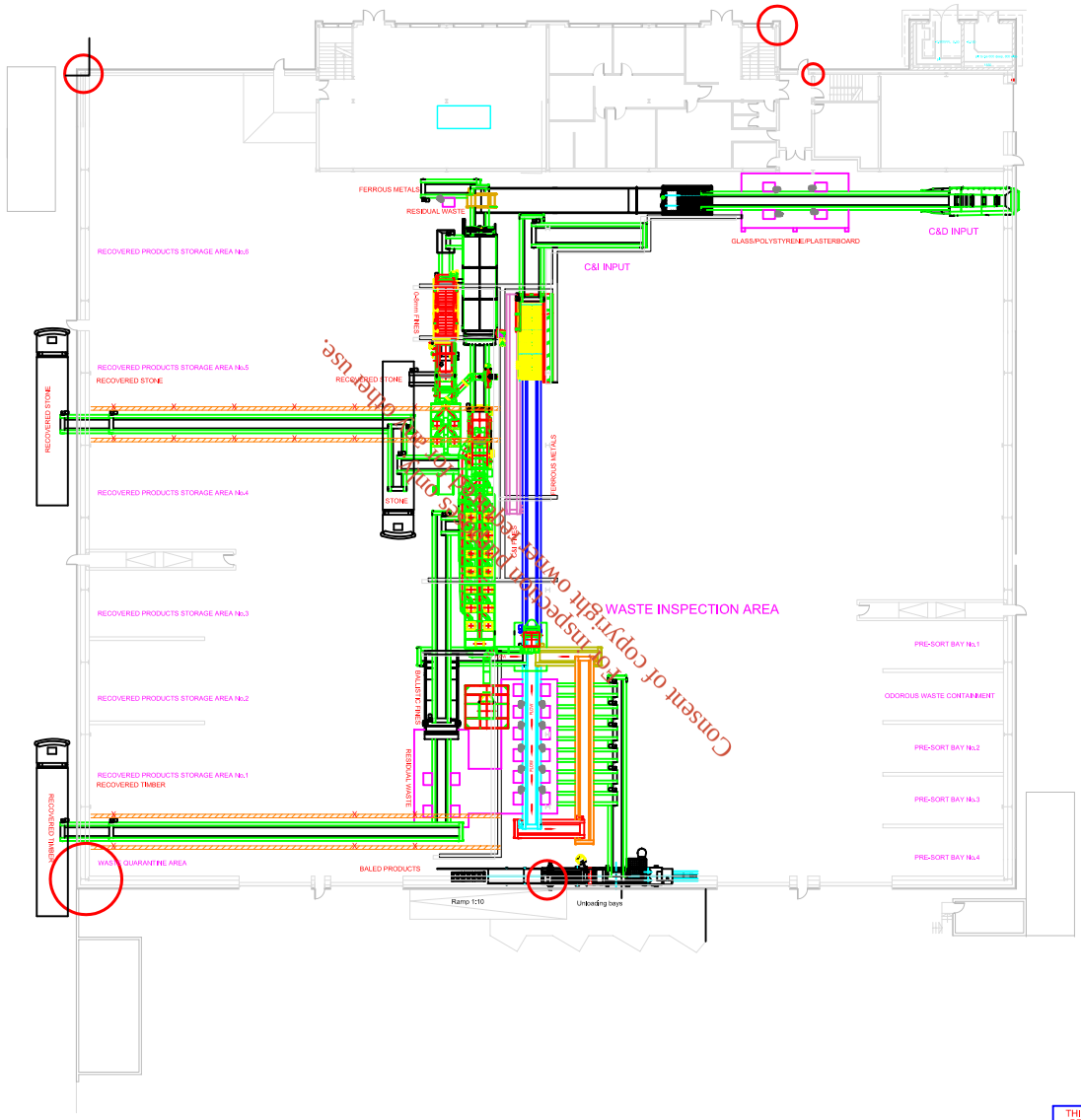
Drawing 5

A



Drawing 6 Organisational Structure



THIRD ANGLE PROJECTION

DRAWN/DATE	BT	06-12-2007
CHECKED/DATE	CW	06-12-2007
APPROVED/DATE		

DIMENSIONS
MILLIMETRES

INSPECTION DIMENSION

TOLERANCES EXCEPT AS NOTED
X.X+/-0.1
X.XX+/-.01 <+/- 1/2 DEGREE

BREAK ALL EDGES, REMOVE ALL BURRS

TURMEC

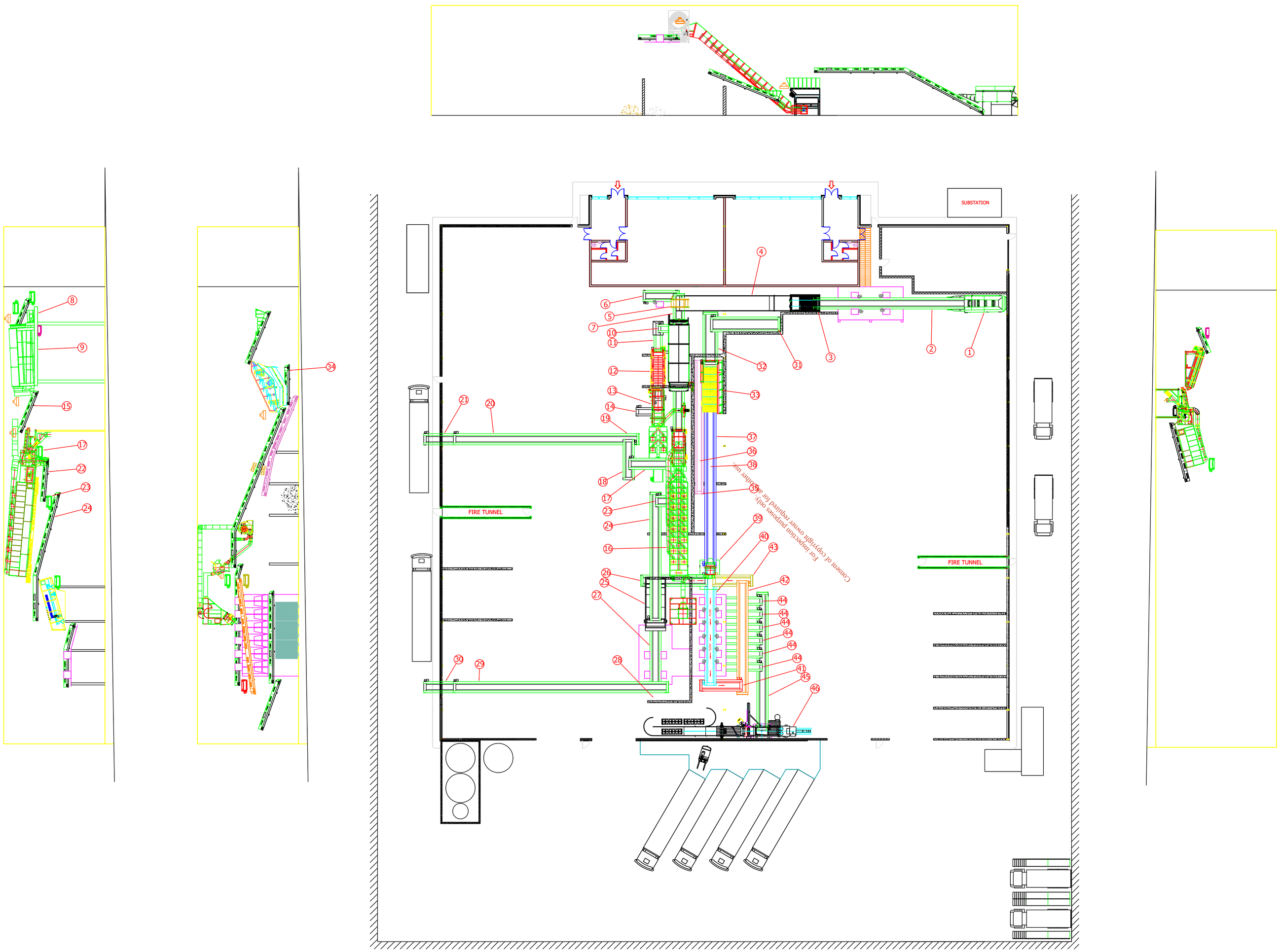
TITLE:- Infrastructure & Operational Plan

CLIENT:- MCR ENVIRONMENTAL

SCALE:- NTS

DWG.No. Drawing No.7

REV

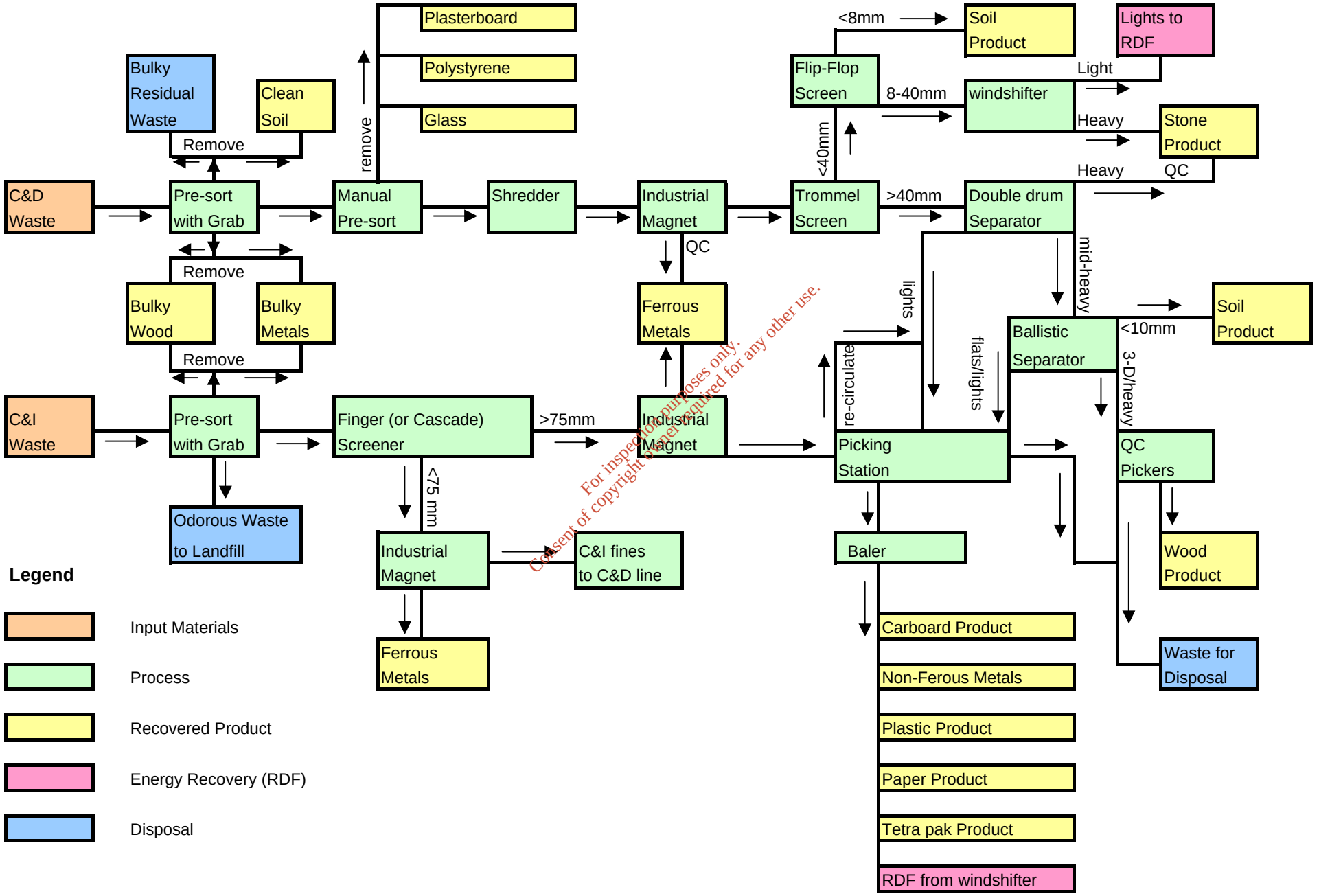


Motor List:

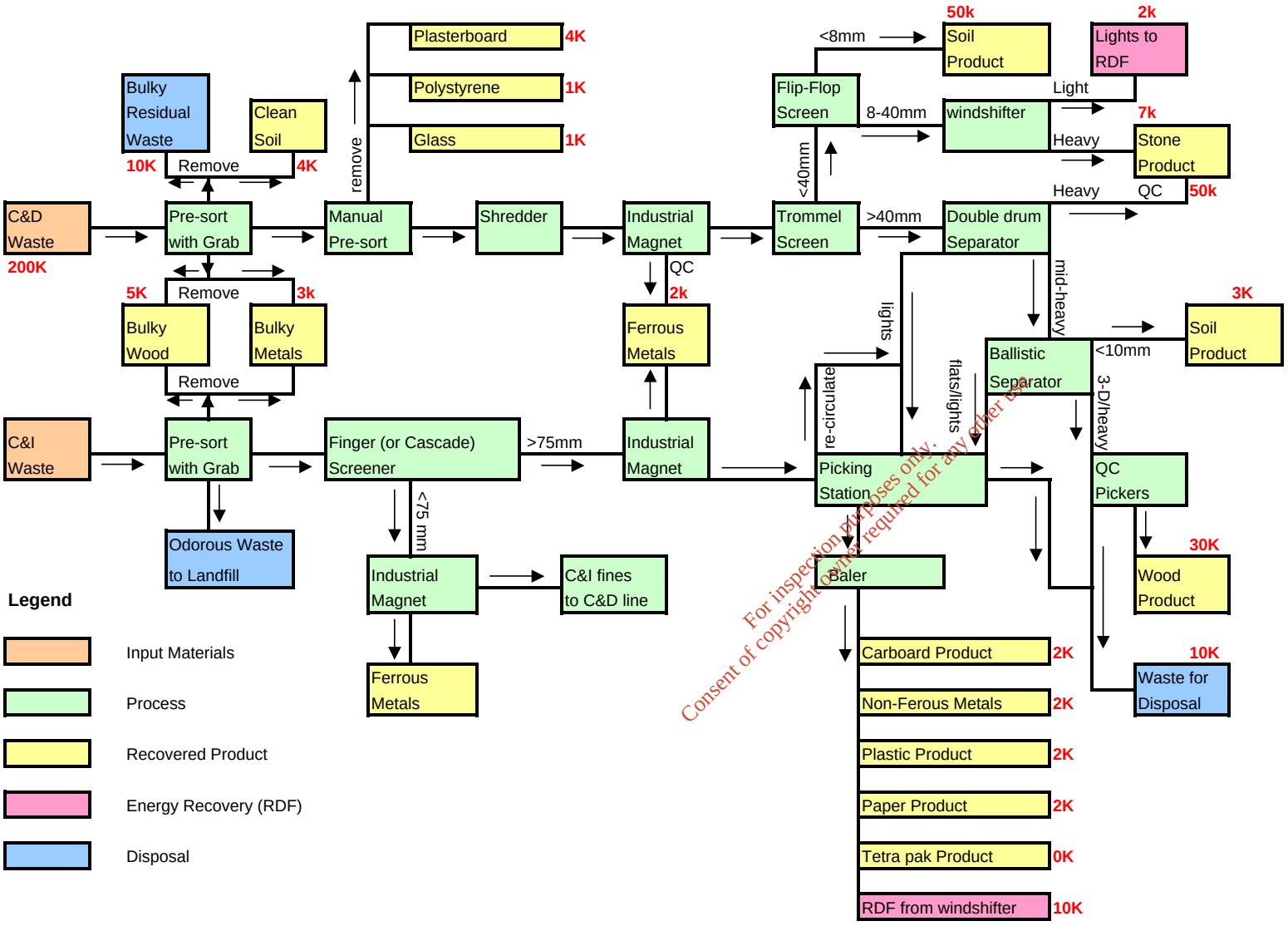
1. Belt Feeder Conveyor
2. Incline Conveyor
3. Sizer
4. Incline Slat Conveyor
5. Overband Magnet
6. Metals Conveyor
7. Trommel Feeder Conveyor
8. Series 3 Trommel
9. Trommel Collection Conveyor
10. Fines Discharge Conveyor
11. Flip Flop Feeder Conveyor
12. Flip Flop
13. Single Drum Separator
14. SDS Heavy Discharge Conveyor
15. Trommel Discharge Conveyor
16. Double Drum Separator
17. Heavy Discharge Conveyor
18. Heavy Transfer Conveyor
19. Bucket Elevator Conveyor
20. Stone Transfer Conveyor
21. Stone Discharge Conveyor
22. Mid-Heavy Discharge Conveyor
23. Mid-Heavy Transfer Conveyor
24. Ballistic Feeder Conveyor
25. Ballistic Separator
26. Lights Discharge Conveyor
27. Ballistic Picking Conveyor
28. Timber Bucket Elevator
29. Timber Transfer Conveyor
30. Timber Discharge Conveyor
31. Waste Screen Conveyor No.1
32. Waste Screen Conveyor No.2
33. Waste Screen
34. Fines Collection Conveyor
35. Fines Discharge Conveyor
36. Fines Overband Magnet
37. Oversize Discharge Conveyor
38. Oversize Overband Magnet
39. Windshifter (Combi-Separator)
40. Picking Station Conveyor
41. Loop Conveyor No.1
42. Loop Conveyor No.2
43. Loop Conveyor No.3
44. Picking Station Slat Conveyor (x6)
45. Baler Feeder Conveyor
46. Baler

THIRD ANGLE PROJECTION	THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION AND SUCH INFORMATION MAY NOT BE DISCLOSED TO OTHERS FOR ANY PURPOSE,NOR USED FOR MANUFACTURING PURPOSES WITHOUT WRITTEN PERMISSION.		TURMEC
	DRAWN/DATE	BT 12-12-2007	TITLE:- EQUIPMENT DESCRIPTION
DIMENSIONS MILLIMETRES	CHECKED/DATE		
	APPROVED/DATE		
INSPECTION DIMENSION	TOLERANCES EXCEPT AS NOTED X.X+/-0.1 X.XX+/-.01 <+/- 1/2 DEGREE		CLIENT:- MCR ENVIRONMENTAL
	BREAK ALL EDGES, REMOVE ALL BURRS		SCALE:- NTS DWG.No. Drawing 7.1 REV

Diagram 8.0 Process Flow Diagram for Ballycoolin site

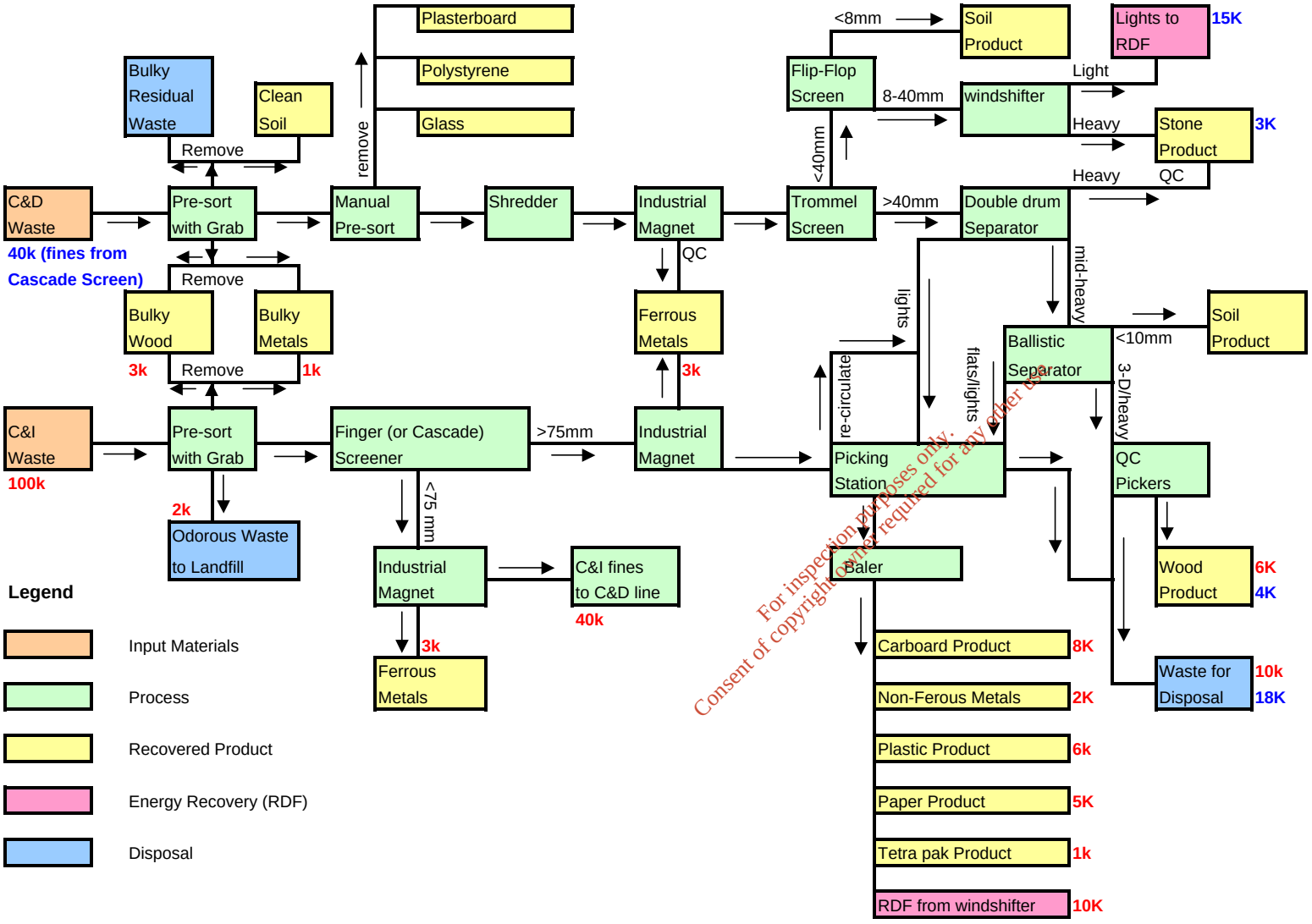


Drawing 8.1 C&D Process Flow Diagram for Ballycoolin site

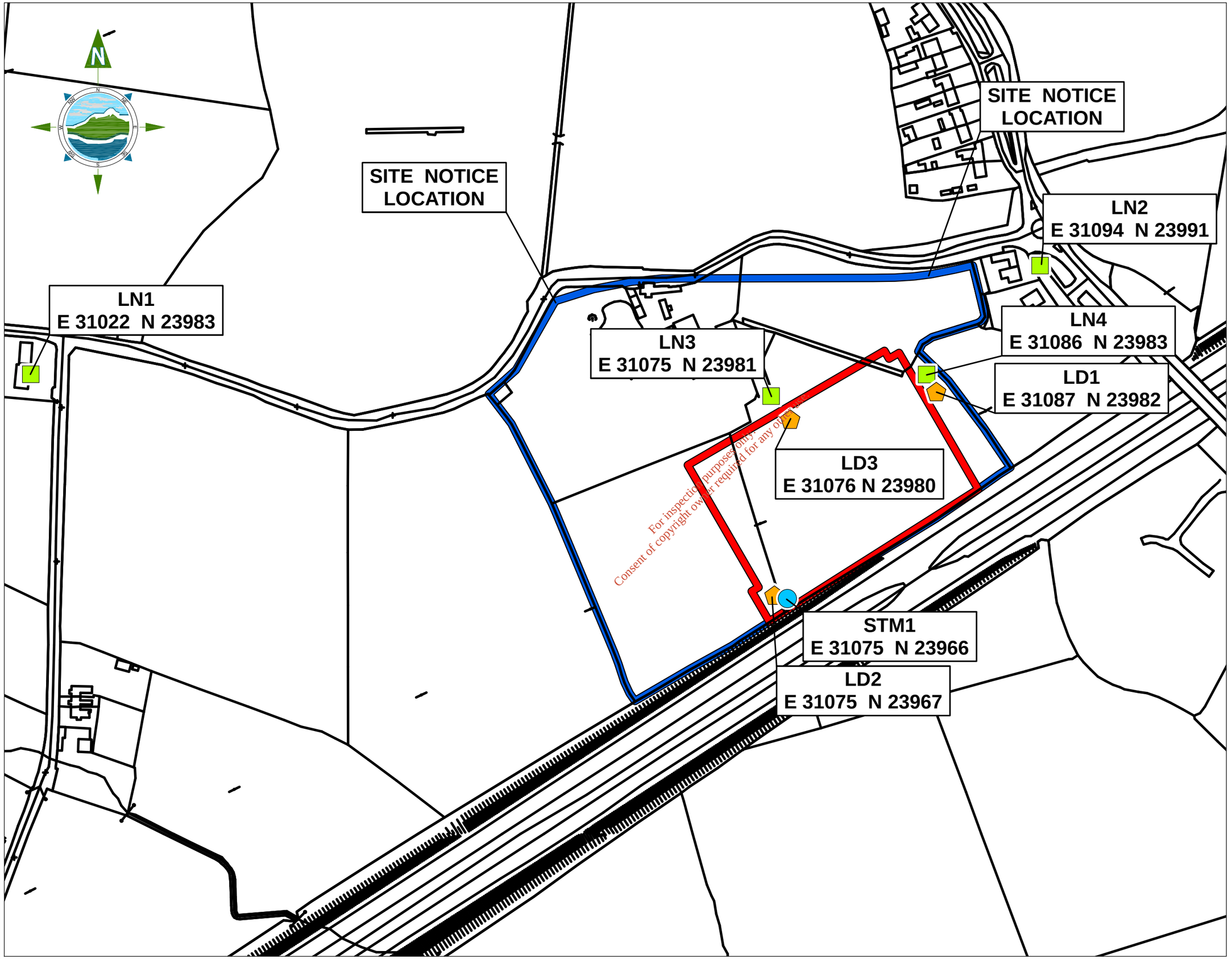


Material	Tonnes/Annum	
Output		
Stone	57,000	
Soil	57,000	
Wood	35,000	
Ferous metal	5,000	
Plasterboard	4,000	
Cardboard	2,000	
Non-ferous metal	2,000	
plastic	2,000	
paper	2,000	
Glass	1,000	
Polystyrene	1,000	
RDF	12,000	
Waste	20,000	
Total	**200,000**	
Input =	200,000	100 %
Recycled =	168,000	84 %
Recovered =	12,000	6 %
	180,000	90 %
Disposal =	20,000	10 %

Drawing 8.2 C&I Process Flow Diagram for Ballycoolin site



Material	Tonnes/Annum	
Output		
Cardboard	8,000	
Wood	13,000	
Ferous metal	7,000	
Non-ferous metal	2,000	
plastic	6,000	
paper	5,000	
stone	3,000	
tetrapak	1,000	
RDF	25,000	
Waste	30,000	
Total	**100,000**	
Input =	100,000	100 %
Recycled =	45,000	45 %
Recovered =	25,000	25 %
	70,000	70 %
Disposal =	30,000	30 %



LEGEND

- Site Activity Boundary
- Landownership Boundary (Harcourt Developments)
- Licensed Noise Monitoring Point
- Licensed Dust Monitoring Point
- Licensed Storm Water Monitoring Point

0 12.5 25 50 75 100
Metres

NOTES

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4. ALL LEVELS RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

Issue	Date	Description	By	Chkd.
A	23-11-07	Issued	A.G.	M.H.

Client:
MCR ENVIRONMENTAL

Project:
BALLYCOOLIN ROAD MATERIALS RECOVERY FACILITY
WASTE LICENCE APPLICATION

Title:
PROPOSED ENVIRONMENTAL MONITORING LOCATIONS

Scale @ A3: 1:2,500

Prepared by: A.Gruschka | Checked: M. Hogan | Date: Nov 2007

Project Director: D. Grehan

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DRAWING 9 A