ENVIRONMENTAL IMPACT STATEMENT

FOR AN INERT LANDFILL AT

BEAUMONT QUARRY

CORK

Volume 2 of 3 – Main Document

ORIGINAL

Prepared for:

Cork City Council,
City Hall,
Cork

Prepared by:

Fehily Timoney & Co.,
Core House,
Pouladuff Road,
Cork

May 2007

ENVIRONMENTAL IMPACT STATEMENT

FOR AN INERT LANDFILL AT

BEAUMONT QUARRY

CORK

Volume 2 of 3 – Main Document

DUPLICATE

Prepared for:

Cork City Council,
City Hall,
Cork

Prepared by:

Fehily Timoney & Co.,
Core House,
Pouladuff Road,
Cork

May 2007

ENVIRONMENTAL IMPACT STATEMENT

FOR

AN INERT LANDFILL

AT

BEAUMONT QUARRY

CORK

Volume 2 of 3 – Main Document

DOCUMENT CONTROL SHEET

User is Responsible for the Revision Status of this Document

Rev. Nr.	Description of Changes	Prepared by:	Checked by:	Approved by:	Date:
0	Revised Draft	ME			16.05.07

Client: Cork City Council

Keywords: Environmental Impact Statement, air quality, ecology, ground water quality, noise, traffic, landscape, public amenity.

Abstract: The subject of this Environmental Impact Statement (EIS) is a proposed re-development of Beaumont Quarry into a public amenity. To restore the site it will be necessary to infill the quarry floor with inert waste. This filling process will take two to three years. The filled quarry will then be landscaped appropriately and will be used as a public amenity area.

TABLE OF CONTENTS

Page

LIST OF FIGURES

PAGE

LIST OF TABLES

Page

GLOSSARY

A

Active Gas Collection	A technique that forcibly removes gas from a landfill by attaching a vacuum or pump to a network of pipelines in the landfill or surrounding soils to remove the gases.
Active Waste	Waste which will decompose in landfill sites.
Aquifer	A geological formation, group of formations, or portion of a formation capable of yielding significant quantities of groundwater to wells or springs.
Arisings	In relation to waste, sources of waste, e.g., industrial, agricultural, household , construction and demolition etc.
Attenuation	Depletion or dispersion of a chemical compound in this instance, often as it passes through layers of soil or rock.

B

BAT	*best available technique* The technology in question should be: **best** at preventing pollution **available** in the sense that it is procurable by the industry concerned **technique** itself is taken as the techniques and the use of the techniques, including training and maintenance, etc.
Bedrock	A general term for the rock, usually solid, that underlies soil or other unconsolidated material.
Berm	An artificial mound of soil.
Biodegradable material	Materials that can be broken down by micro-organisms into simple, stable compounds such as carbon dioxide and water. Most organic materials such as food scraps and paper are biodegradable.
Buffer Zone	An area that protects by intercepting or moderating adverse pressures or influences, in this case for the environment or public welfare. For example, a buffer zone is established between a composting facility and neighbouring residents to minimise to minimise odour problems.

C

CAPEX	The capital expenditure or cost for the establishment of a facility or service,
Capping	The top layer of a landfill, consisting of topsoil, subsoil, geomembranes and clay used to restore the landfill.
Commercial Waste	Waste from premises used wholly or mainly for the purposes of a trade or business, or for the purposes of sport, recreation, education or entertainment, but does not include household, agricultural or industrial waste.
Compacting	Closely packing materials together to ensure and efficient use of space.
Composite Liner	A landfill liner system composed of both natural soil liners and synthetic liners. The liner is laid on clay, and must be in direct and uniform contact with the clay.
Construction and Demolition Waste	Materials resulting from the construction, remodelling, repair or demolition of structures such as buildings, bridges, and pavements.
Cover Material	Material, either natural soil or geosynthetic material used in a landfill to cover the waste. This impedes water infiltration, landfill gas emissions and bird and rodent congregation. It is also used to control odours and make the site more visually attractive. There are three forms of landfill cover: daily cover, intermediate cover and final cover.

GLOSSARY cont'd

D

Daily Cover Material	Material, usually soil, used in a landfill to cover the waste after it has been compacted at the end of each day. The cover is placed mainly to ward off scavengers (birds and rodents) and for odour control.
Disposal	In relation to waste, generally refers to the final, controlled deposition of waste to land (or sea), or permanent impoundment or storage, or incineration; such waste could have been treated or untreated.

F

Facility	In relation to the recovery or disposal of waste, any site or premises used for such purpose.
Flaring	The burning of surplus and residual gases from a landfill through a flame pipe.
Fly-Tipping	Illegal dumping of rubbish in unauthorised places.

G

Gas control and Recovery System	A series of vertical wells or horizontal trenches containing permeable materials and perforated piping under negative pressure. The systems are designed to collect landfill gases for treatment or for use as an energy source.
Gate Fee	Cost per tonne of waste disposed to a waste facility.
Generation Rate	The amount of waste that is produced over a given amount of time. For example, a district could have a generation rate of 100 tonnes per day.
Greenhouse Gases	Collective term for gases that have an influence on the Greenhouse Effect, i.e., chlorofluorocarbons (CFCs), carbon dioxide, methane, water vapour, etc.
Groundwater	Water that occupies pores and crevices in rock and soil, below the ground and above a layer of impermeable material.

H

Hazardous Waste	Waste which can have a harmful effect on the environment and on human health.
HGV	Heavy goods vehicle.
Household Waste	Waste produced within the curtilage of a building or self-contained part of a building used for the purposes of living accommodation.
Hibernacula	A protective case, covering, or structure, such as a plant bud, in which an organism remains dormant for the winter, the shelter of a hibernating animal.

I

Industrial Waste	Materials discarded from industrial operations or derived from manufacturing processes.
Inert Waste	Non-reactive wastes, e.g., rubble, brick, soils, etc.
Inorganic Waste	Waste composted of matter other than plant or animal (i.e., contains no carbon).
Impacts	• *Positive Impact* – A change which improves the quality of the environment ; of improving reproductive capacity of an ecosystem, or removing nuisances or improving amenities • Neutral Impact – A change which does not affect the quality of the environment • *Negative Impact* – A change which reduces the quality if the environment (for example, lessening species diversity or diminishing the reproductive capacity of an ecosystem; or damaging health or property or cause nuisance • *Short-term impact* – Impact lasting one to seven years • *Medium-term Impact* – Impact lasting seven to fifteen years • *Long-term Impact* – Impact lasting fifteen to sixty years • *Permanent Impact* – Impact lasting over sixty years • *Temporary Impact* – Impact lasting one year or less • Cumulative Impact – The addition of many small impacts to create one larger, more significant, impact • An *Imperceptible Impact* is one that is capable of measurements but without noticeable consequences • A *slight impact* is an impact which cause noticeable changes in the character of the environment in a manner that is consistent with existing and emerging trends • A *moderate impact* alters the character of the environment in a manner that is consistent with existing and emerging trends • A *significant impact* is by character, magnitude, duration or intensity alters a sensitive aspect of the environment • A *profound impact* obliterates sensitive characteristics
Isopleth	A line drawn on a map through all points of equal value of some measurable quantity

L

Landfill	A method of disposing of waste by burying in sites, licenced by the EPA, which have been engineered to prevent contamination of the surrounding area and water table; also refers to the sites used for such disposal.
Landfill Gas	A mixture of primarily methane and carbon dioxide that is generated in landfills by the anaerobic decomposition of organic wastes.
Landfill Tax	Tax on all waste entering landfills intended to encourage waste recovery.
Leachate	Any liquid percolating through deposited waste and emitted from or contained within a landfill.
Liner	A system of low-permeability soil and/or geosynthetic membranes used to collect leachate and minimise contaminant flow to groundwater.

M

Magnetic Separation	A system to remove ferrous metals from other metals in a mixed municipal waste stream. Magnets are used to collect the ferrous materials
Mass-Burn System	A municipal waste combustion technology in which solid waste is burned in a controlled system without prior sorting or processing.
Materials Recovery Facility (MRF)	A facility which recovers recyclable material from waste. A clean MRF is a facility which separates dry recyclables into separate recycling streams. A dirty MRF is a facility which separates both the dry recyclable fraction and the organic fraction of waste.
Mechanical Separation	The separation of waste into components using mechanical means, such as cyclones, trommels and screens.
Mechanical-Biological Treatment (MBT)	This is a combination of mechanical separation and biological treatment of municipal solid waste. In the context of this plan, it means the mechanical separation and biological treatment of the residual municipal solid waste. The residual MSW is the remaining waste fraction after separation at source of the dry materials and biological fractions, (normally by means of a 3-bin system). It is not a replacement technology for 3-bin source separation.
Methane	An odourless, colourless, flammable, explosive gas produced by municipal solid waste undergoing anaerobic decomposition. Methane is emitted from municipal solid waste landfills.
Municipal Solid Waste (MSW)	Waste from households, shops, offices and some industrial waste, generally handled by local authorities or large waste management firms.

O

OPEX	Operational costs associated with operating a facility or service.
Organic Material (Organic Waste)	Materials containing carbon. The organic fraction of MSW includes paper, wood, food scraps, plastics and yard trimmings.

P

Particulate Matter (PM)	Tiny pieces of matter, especially associated with atmospheric pollution, generally resulting from the combustion process. PM can have harmful health effects when breathed.
Percolate	To ooze or trickle through a permeable substance.
Permeability	A measure of how well a liquid moves through the pores of a solid. Applied to landfills in terms of how quickly water moves through soil: It is typically expressed as meters per second.
Phasing	A system of running a project in more than one step (phase). Each phase is generally independent of the others, which offers more flexibility in management and operation.
Polluter Pays Principle	The idea that parties causing pollution bear the costs of their actions.
Prevention	The reduction of the quantity and of the harmfulness for the environment of waste products.

R

Re-use	The use of a product more than once in its same form for the same purpose, e.g., a soft drink bottle is re-used when it is returned to the bottling company for refilling.

S

Solid Waste	Any refuse or sludge from a waste water treatment plant, water supply treatment plant or air pollution control facility, and other discarded material, including solid, liquid, semi-solid, or contained gaseous material resulting from domestic, commercial, industrial, or community activities
Swale	A natural or formed depression or wide shallow ditch used to temporarily convey, store, or filter surface water runoff

W

Waste Management	Any systematic method of handling and disposing of waste.
Waste Minimisation	The re-design of a product to reduce or minimise both the amount of raw materials used and subsequent waste.
Waste Water	Water that is generated, usually as a by-product of a process, that cannot be released into the environment without treatment.
Water Table	The level below the earth's surface at which the ground becomes saturated with water. Landfills and composting facilities are designed with respect to the water table to minimise potential contamination.
White Goods	Large household appliances such as refrigerators, cookers, air conditioners and washing machines.

PREAMBLE

The subject of this Environmental Impact Statement (EIS) is the development of an inert landfill at Beaumont Quarry, in the townlands of Ballintemple and Ballinlough, Cork.

The proposed site covers a total area of approximately 3.5 ha and is zoned for "Public Open Space". This site was quarried during the 1960's for limestone rock. There has been no restoration of the site and consequently the quarrying activities have left a void, some 10 to 12 m below the surrounding ground level. The quarry is bound on three sides by vertical or near vertical rock faces.

Cork Corporation (now Cork City Council) was issued with a waste licence (Licence Register No. 141-1) by the Environmental Protection Agency in 2001 for the landfilling of 250,000 tonnes of inert waste at Beaumont Quarry to restore this site for use as a public amenity. This was to be carried out over a 2-3 year period.

The licence was not activated by Cork Corporation within the 3 year period specified in the 1996 Waste Management Act. As a consequence the licence has expired. In accordance with the legislation in force at that time, the original waste licence for Beaumont Quarry also incorporated the planning permission for the site. Therefore the planning permission for the site expired when the waste licence expired.

Cork City Council is now applying for a new licence as well as planning permission (to An Bórd Pleanála) to infill the site with 250,000 tonnes of inert waste. The inert waste will consist of construction and demolition waste which will be sourced from various developments around Cork City. Inert waste is defined in the Landfill Directive (99/31/EC) as *"waste that does not undergo any significant physical, chemical or biological transformations. Inert waste will not dissolve, burn or otherwise physically or chemically react, biodegrade or adversely affect other matter with which it comes into contact in a way likely to give rise to environmental pollution or harm human health. The total leachability and pollutant content of the waste and the ecotoxicity of the leachate must be insignificant, and in particular not endanger the quality of surface water and/or groundwater".*

The waste accepted at the site will be in accordance with Annex II of the Landfill Directive (99/31/EC).

Format of the EIS

This EIS has been prepared using the "Grouped Format Structure" as recommended in the *Guidelines on the Information to be Contained in Environmental Impact Statement (2002) is* published by the EPA.

Using the grouped format structure, an EIS is prepared in a format which examines each topic as a separate section referring to the existing environment, the proposed development, impacts and mitigation measures (i.e. ecology and the extended use, ecology in the existing environment, impacts on ecology, mitigation measures for ecology, etc.).

In accordance with the Planning and Development Regulations 2001, this EIS will be submitted to An Bórd Pleanála for approval.

The EIS is subdivided into three volumes, as follows:

- Volume 1: Non-Technical Summary. This document presents a condensed version of the main EIS. It details the major aspects of the operations and the principle measures proposed to mitigate against any potential environmental impacts.

- Volume 2: The main EIS volume contains:

    - Section 1 is the introductory section.
    - Section 2 gives a description of the design and operation of the landfill site.
    - Sections 3 to 11 describe the various impacts of the operations on the existing environment, and outline proposals to mitigate the potential impacts of the development.

- Volume 3: The Appendices, which offer supporting information on the main EIS.

Fehily Timoney & Co. (FTC) prepared this Environmental Impact Statement on behalf of Cork City Council.

1. INTRODUCTION

1.1. Introduction

This section describes the main planning, waste and legislative policies that relate to the proposed development and the surrounding area.

Figure 1.1 shows the location of the proposed development.

1.2. Background to the Request for an Extension of the Operational Life of the Landfill

Planning and Waste Licence History

Cork Corporation (now Cork City Council) applied for a waste licence to the EPA to operate an inert landfill at the Beaumont site in June 2000 which was granted in November 2001. This licence allowed the Corporation to fill the site with 250,000 tonnes of inert waste over a 3 year period.

Cork City Council did not proceed with the project as there was inadequate tonnage of suitable wastes for the facility at that time. In 2006, the City Council contacted the EPA with the hope of activating the licence. However, the EPA advised the Council that as no substantial activities took place at the site during the life of the licence, the licence was deemed to have expired. This is in accordance with Section 49 of the 1996 Waste Management Act (as amended by the Protection of the Environment Act 2003) which states that:

"Where the activity to which a waste licence relates has not been substantially commenced within the period of 3 years beginning on the date on which the licence was granted……then the licence shall cease to have effect on the expiry of the said period".

In accordance with the legislation in force at that time, the original waste licence for Beaumont Quarry also included planning permission for the site. Accordingly, the planning permission for the site expired with the waste licence. Therefore, Cork City Council is now required to submit an application for approval to An Bord Pleanála in accordance with Part 10 of the Planning and Development Regulations 2001. The Planning and Development Regulations also require that the application is accompanied by an Environmental Impact Statement.

Cork City Council is also preparing a new waste licence application which will be submitted to the EPA for approval. The EIS will also be submitted with the Waste Licence application.

SITE LOCATION

Rev.	Drawn	Chk'd	App'd		
A	KL	ME	CM	Cork 14.05.07	ISSUE FOR PLANNING
Revision History				Rev Origin / Date	Description
A					

Name of Client

CORK CITY COUNCIL

Name of Job

EIS FOR
BEAUMONT QUARRY

Title of Drawing

LAND OWNERSHIP
PLAN

Scales Used
A3-1:10000, A4-1:20000

Dwg. No.	Rev.
2006-011-09-FIG1.1	A

O:\ACAD\2006\011\09\2006-011-09-FIG1.1

FEHILY TIMONEY & COMPANY
CONSULTANTS IN ENGINEERING & ENVIRONMENTAL SCIENCES
Core House, Pouladuff Rd, Cork, Ireland.
T:+353-21-4964133, F:+353-21-4964464
Mill House, Ashtown Gate, Navan Rd, Dublin 15, Ireland.
T:+353-1-6583500, F:+353-1-6583501
W: www.fehilytimoney.ie, E: info@ftco.ie

Scale 1:10000

ORIGINAL DRAWING SIZE A1 - (841 x 594)

NATURAL SCALE

1.3. National Policy on Waste Management

There are numerous legislative and policy documents for the waste management sector which set targets for waste prevention, recycling, recovery, establishment etc and which are relevant to the proposed development at Beaumont. The main ones are summarised below:

1.3.1. Waste Management – Changing Our Ways 1998

Government policy in relation to waste management is set out in the policy statement entitled *Waste Management: Changing Our Ways* published by the Minister for the Environment and Local Government in September 1998.

The Minister's policy statement highlights the need for major change in the planning, financing and operation of waste management by local authorities. It outlines a clear commitment to reduce dependency on landfill as a primary waste disposal route and encourages the development of a smaller number of well-designed and managed landfills for the receipt of *residual* waste, i.e. waste which has undergone some form of treatment to remove recyclable material or to further process the waste in order to achieve a volumetric reduction.

The policy document *Changing Our Ways* outlines ambitious targets for waste management:

- A diversion of 50% of overall household waste away from landfill
- A minimum 65% reduction in biodegradable wastes consigned to landfill
- The development of waste recovery facilities employing environmentally beneficial technologies as an alternative to landfill, including the development of composting and other feasible biological treatment facilities capable of treating up to 300,000 tonnes of biodegradable waste per annum nationally
- Recycling of 35% of municipal waste
- Recycling at least 50% of C & D waste within a five year period, with a progressive increase to at least 85% over fifteen years
- Rationalisation of municipal waste landfills, with progressive and sustained reductions in numbers, leading to an integrated network of some 20 state-of-the-art facilities incorporating energy recovery and high standards of environmental protection; and
- An 80% reduction in methane emissions from landfill, which will make a useful contribution to meeting Ireland's international obligations.

While measures to comply with these targets are being put in place, it is recognised that landfill will continue to play an important role in providing waste disposal facilities and thereafter will play a lesser but significant role in waste management.

With reference to Beaumont Quarry, '*Changing Our Ways*' calls for the increasing recycling of C&D waste. The restoration of Beaumont Quarry to create a public amenity will require the beneficial re-use of over 250,000 tonnes of inert (C&D) waste.

1.4. The Cork City Waste Management Plan 2004 - 2009

The Cork City Waste Management Plan 2004-2009 sets out the waste management strategy for Cork City. With reference to construction and demolition (C&D) waste, the Plan estimates that C&D waste arisings for the Cork region are approximately 500,000 tonnes per annum. The plan further states "*it is difficult to estimate the quantity of C&D waste arisings in Cork City as the quantity of arisings varies enormously from year to year according to the scale and type of development taking place in the area. Cork City Council generally require (through the planning process) that any new development which involve demolition of old buildings, preferably crush and re-use demolition waste on-site or alternatively dispose of it to an approved facility*."

In section 5.4.3 of the Plan, Beaumont Quarry is listed as a facility which has been licensed for the acceptance of 250,000 tonnes of construction and demolition waste. The plan further states that "*Cork City Council is currently seeking expressions of interest from private companies for the operation of this facility*".

There are no other licensed facilities for the landfilling of inert waste listed within the Plan.

The development of Beaumont Quarry will result in a much needed outlet for the beneficial re-use of C&D waste generated within Cork City.

1.5. Cork City Development Plan 2004

Section 10 – Suburban Areas specifically refers to the development of Beaumont Quarry "*Beaumont Quarry located in the heart of the South East area provides a good opportunity to create a valuable amenity area that could serve the wider area. Proposals for the site include partially filling the quarry to create a safe and attractive park linked to the recreational facilities to the west*".

Policy S13 is:

"*To develop Beaumont Quarry into an amenity park to serve the adjoining residential community*".

1.6. Need for the Proposed Development

The principal need for the development of Beaumont quarry is to restore the site and create a much needed public amenity. At present the site is overgrown and is associated with anti-social behaviour which is becoming an issue for local residents. The 2004 City Development Plan has highlighted the need to develop public amenity areas within the city and the Plan specifically refers to the restoration of Beaumont Quarry.

This proposal is in keeping with the national policy document "*Waste Management – Changing Our Ways*" as it promotes the beneficial re-use of inert waste thus preserving the natural resources of the Cork Region.

In addition, the Cork region is currently generating approximately 500,000 tonnes of construction and demolition waste. This tonnage is said to increase over the next few years with the commencement of a number of large scale developments within the City Centre. These include the Docklands and Academy Street Developments.

The development of Beaumont Quarry will therefore have a dual role in providing a state of the art facility for the beneficial re-use of inert waste while allowing the restoration of a disused quarry to create a much needed public amenity.

1.7. Alternatives Considered

Consideration of alternatives is an important process within an environmental assessment of a project. The assessment of alternatives conducted as part of this EIA indicates the main reasons for choosing a particular site.

1.7.1. Alternative Locations

The principal objective of developing Beaumont quarry is to restore the site to a public amenity. Historic quarrying at the site has left a void in the landscape which is now covered in dense scrubland. This site is now associated with anti-social behaviour which is becoming an issue for local residents. Therefore, an alternative site was not considered for this application.

1.7.2. Do-Nothing Alternative

If Beaumont Quarry is not restored, the site will continue to be used for anti-social activities and the full potential of the much needed amenity will not be realised.

In addition, if the proposed facility is not developed, there will be a shortfall within the City for major developments wishing to dispose of inert waste.

1.8. Environmental Impact Statement (EIS) Requirements

Cork City Council is submitting this EIS in accordance with the following legislation:

- S.I. No. 600 of 2001 - Planning and Development Regulations, 2001

With reference to the development, S.I. No. 600 of 2001 (Fifth Schedule, Part 11(b)), states that an Environmental Impact Statement is required for the:

"*Installation for the disposal of waste with an annual intake greater than 25,000 tonnes not included in Part 1 of this Schedule*".

The EIS was prepared having regard to guidelines issued by the Environmental Protection Agency, namely:

- '*Guidelines on the information to be contained in Environmental Impact Statements',* (EPA, 2002)
- *Advice notes on Current Practice (in the preparation of Environmental Impact Statements) (EPA, 2003).*

The document has been structured according to the grouped format structure. The guidelines recommend that EIS documents be kept as concise as possible.

The report is submitted in three volumes:

Volume 1: Non-Technical Summary
Volume 2: Main Report
Volume 3: Appendices.

1.9. Pre-submission Consultations

The scoping of this EIS was prepared in consultation with the EPA.

Written submissions were requested by letter on 27th July 2006 from statutory bodies, non-government organisations and public representatives as outlined in Table 1.1. Copies of the letter of consultation, and the written responses received, are included in Appendix 1.

Table 1.1: List of Written Consultees

Name	Organisation
Mr. Ian Lumley	An Taisce
Mr. Paddy Matthews	The National Heritage Council
Mr. Michael McCarthy	Department of Environment, Heritage & Local Government
Secretary	Department of Community, Rural and Gaeltacht Affairs
Mr. John Wayne	Department of Communications Marine & Natural Resources
Ms. Niamh Twomey	Cork City Council – Heritage
Ms. Ciara Brett	Planning & Development Directorate – Cork City Council
Mr. Danny O'Keeffe	National Parks & Wildlife Service
Mr. Tony Smyth	Office of Public Works
Dr. Stephen Newton	BirdWatch Ireland
Ms. Sarah Fields	Irish Wildlife Trust
Mr. Jervis Good	Department of Environment, Heritage & Local Government
Mr. Fionn O'Grada	Department of Arts, Sport & Tourism
Mr. Martin Towey	Irish Aviation Authority
Secretary	Health & Safety Authority
Secretary	Health Service Executive
Dr. Ronnie Creighton	Geological Survey of Ireland
Mr. Sylvester Murphy	Department of Agriculture and Food
Mr. Dan Buggy	Cork City Council
Mr. Kevin Terry	Planning & Development Directorate
Mr. Gerard O'Beirne	Director of Services, Environment - Cork City Council
Mr. Joe Kennelly	Recreation Amenity & Culture Directorate – Cork City Council
Cllr Jerry Buttimer	RAC Strategic Policy Committee - Cork City Council
Cllr Dara Murphy	RAC Strategic Policy Committee - Cork City Council
Cllr Ciaran Lynch	RAC Strategic Policy Committee - Cork City Council
Cllr Tony Fitzgerald	RAC Strategic Policy Committee - Cork City Council
Cllr Jonathan O'Brien	RAC Strategic Policy Committee - Cork City Council
Cllr Tom O'Driscoll	RAC Strategic Policy Committee - Cork City Council
Cllr John Kelleher	Environment Strategic Policy Committee – Cork City Council
Cllr Mary Shields	Environment Strategic Policy Committee - Cork City Council
Cllr Donal Counihan	Environment Strategic Policy Committee - Cork City Council
Cllr Mick Barry	Environment Strategic Policy Committee - Cork City Council
Cllr Colm Burke	Environment Strategic Policy Committee - Cork City Council
Cllr Patricia Gosch	Environment Strategic Policy Committee - Cork City Council
Cllr Deirdre Clune	Cork City Councillor for Cork South East Local Electoral Area
Cllr Brian Bermingham	Cork City Councillor for Cork South East Local Electoral Area
Cllr Jim Corr	Cork City Councillor for Cork South East Local Electoral Area
Cllr David McCarthy	Cork City Councillor for Cork South East Local Electoral Area
Cllr Tim Brosnan	Cork City Councillor for Cork South East Local Electoral Area
Cllr Gary O'Flynn	Cork City Councillor for Cork South East Local Electoral Area
Cllr Damien Wallace	Cork City Councillor for Cork South East Local Electoral Area
Cllr Terry Shannon	Cork City Councillor for Cork South East Local Electoral Area
Cllr Fergal Dennehy	Cork City Councillor for Cork South East Local Electoral Area
Cllr Sean Martin	Cork City Councillor for Cork South East Local Electoral Area
Cllr Chris O'Leary	Cork City Councillor for Cork South East Local Electoral Area
Cllr Michael Ahern	Cork City Councillor for Cork South East Local Electoral Area
Ms Mary Williamson	Chair Beaumont Residents Association

1.9.1. Written Submissions Received

A total of 11 written submissions were received in relation to the proposed development at Beaumont Quarry. A summary of the main points of the submissions received are outlined below.

1. Health Service Executive

The Principal Environmental Health Officer of the Health Service Executive raised the following points in relation to the proposed development in his submission of the 30th August 2006:

- Pest Control – major earthworks pose serious risk of pest infection (rats, mice etc.). A pest control plan should be put in place with regular site checks.
- Groundwater – risk of contamination. Proper handling and storage of fuels is essential as well as the use and availability of spill kits. For the operational stage the application of herbicides should be controlled.
- Water Quality – drinking water quality should not be compromised. Published water quality data and other information regarding foul sewerage services, drainage and water supply should be examined as part of the water environment assessment.
- Noise – Key factor in the construction phase. Avoid night time work. Site noise should comply with EPA standards. Temporary screening should be used during noisy activities such as infilling. Local residents should be given regular up dates on the works and progress.
- Dust – A dust control plan should be employed so locals are not impacted by construction dust.

These issues have been addressed in Section 2 (Nuisance Control), Section 3 (Noise) and Section 4 (Hydrogeology) of the EIS.

2. Cork City Council – Planning & Development Directorate

Ms. Ciara Brett, an Executive Archaeologist raised the following issues in her submission of the 16th August 2006:

- Ballintemple Graveyard is listed in the RMP and is afforded protection under the National Monuments Legislation. The Zone of Archaeological Potential for this graveyard falls partially within the proposed development site.
- Beaumont House was on the quarry site. A feature of these country houses was icehouses. There is an icehouse indicated on the O.S. map (1850's) in the northern portion of Beaumont Quarry.
- Townland Boundary runs through the site. If this boundary is still in existence then it is recommended that it be fully recorded prior to its removal. There have been considerable changes to the landscape within the proposed development site since the 19th century due to the quarrying, however there may be some areas of the site with have not been disturbed and so would require archaeological monitoring.
- Details submitted were insufficient to give a detailed response - will there be ground disturbance? Is it planned to infill the entire site?
- The Cultural Heritage section of the EIS should deal with the above concerns.

The issues raised in this submission have been addressed, where appropriate in Section 7 (Architectural Archaeology and Cultural Heritage) and Section 9 (Landscape). The latter details the restoration programme for the site.

3. Department of Agriculture & Food

The Department of Agriculture and Food response (dated the 23rd August 2006) stated that the proposed development will not impact on agriculture and therefore they had no comment.

4. An Taisce – The National Trust For Ireland

A submission was received from the Heritage Officer of An Taisce on the 16th August 2006 in which he stated that "*Information should be sought and provided on the Planning and Waste Management Act compliance record of all parties involved in this proposal*".

Cork City Council is the applicant for the development. The Council have not received any prosecutions under the Waste Management Act and associated legislation.

5. Cllr. Jim Corr

A submission was received from Cllr Jim Corr on the 11th August 2006 in which the following points were raised:

- The infilling of the site should be monitored very closely so it doesn't have an adverse affect on the local residents.
- The public must be made fully aware of what constitutes "inert wastes" so that acrimony does not surface during the operation.

These issues have been addressed in Sections 1, 2 and 3 of the EIS.

6. Health and Safety Authority

A submission was received from the Health and Safety Authority on the 6th September 2006. The Authority had no issues with the proposed development.

7. Valerie Lewis (Local Resident)

A submission was received from Ms. Valerie Lewis on the 17th August 2006 in which the following issues were raised:

- Access to the quarry for both work carried out and public access
- Timeframe for activities at the site
- What inert waste consists of

Ms. Lewis also requested that a copy of the relevant documentation/maps be forwarded to her.

These issues have been addressed within the EIS. Local residents were also consulted during the preparation of the EIS.

8. Cork City Council – Planning & Development Directorate

A submission was received from Ms. Niamh Twomey – Heritage Officer of Cork City Council on the 14th August 2006 in which she requested a copy of the plans for this proposal.

The Environment Section of the City Council has liaised with both the Parks and Recreational and Heritage Section for the Council during the preparation of the final restoration plan for the site.

9. Department of Arts, Sport and Tourism

A submission from the Department of Arts, Sport and Tourism was received on the 28th July 2006 in which it was stated that that the Department would warmly welcome the provision of a new public leisure facility.

10. Irish Aviation Authority

A submission was received from the Irish Aviation Authority on the 27th July 2006. They had no observations on the proposals.

11. David Kennedy Snr (Local Resident)

A submission was received from David Kennedy on the 17th August 2006. Mr. Kennedy had no objections in principle to the proposed infilling of the quarry but would welcome adequate information on the development.

The following points were raised in his submission:

- Ascon Ltd was using Churchyard Lane as an access road to the quarry for Cork Main Drainage, many near misses between residents and heavy machinery. he requested that this entrance would not be used for any activities and remain permanently closed.
- Trees to rear of houses between houses and quarries provide a screen from the quarry. Would request that these would not be removed as they are scenic and also would screen any noise disturbance from the infill activities.
- Infilling activities to be carried out Monday to Friday 9am – 5pm with no Saturday or Sunday work. He would like a respite from activities in the evenings and weekends and feels that this would be due consideration for the residents who live in close proximity to the quarry.
- Existing quarry is frequented by large groups of youths at night and that an allowance is made when designing the quarry as a public amenity space that a border fence will be erected at the border of the quarry and Murphy's Lane.
- Would like to be informed of the plans for the public amenity space – layout, finished levels etc.

The issues raised by Mr. Kennedy have been addressed, where appropriate, in various sections of the EIS.

1.9.2. Public Open Forum

A presentation outlining the proposed development was made to Local Councillors in December 2006.

This was followed by a public consultation night at the Beaumont Boys National School from 7:00 pm to 8:45 pm on the 12th December 2006 where the public were invited to view a public display. Representatives from Cork City Council, FTC and John Ketch & Associates (Landscape architects) were present on the night to answer questions from the general public. Members of the public in attendance were encouraged to record their names, addresses and comments/observations in a log book.

A summary of the main issues raised are summarised below:

In general, the development was welcomed but that the following comments were received:

- Existing infrastructure such as nearby sheds and gardens should be considered in the overall design of the park
- The end use of the restored site should allow for the provision of a play area for children i.e. playground etc.
- An area should be preserved as a wildlife sanctuary in its natural existing state.

There were also a number of objections to the development and theses were based on the grounds of:

- A more "natural" type of park rather than the manicured type proposed
- The infilling the quarry floor would lead to the loss of the dramatic rock faces and the significant depths etc.

1.10. Scoping

The scoping process determines the areas or aspects, which are likely to be important during the EIA and eliminate those that are less so. The level of work carried out for each topic reflects the potential impact on that aspect of the environment, as identified during the scoping process.

An initial scoping of possible impacts of the proposed development was carried out in accordance with the Sixth Schedule of the Planning & Development Regulations 2001.

The Schedule lists 11 areas, which should be addressed in the EIS:

- Landscape and visual impact
- Noise
- Hydrology
- Air and climate
- Geology/Hydrogeology
- Traffic
- Cultural heritage
- Ecology
- Land use
- Material assets
- Interaction of the foregoing

The scoping process was based on:

- Consultation with interested parties, including consultation with the EPA, local residents and relevant departments within Cork City Council.
- Examination of environmental impact statements for developments in similar circumstances, which were deemed to be of an acceptable standard by the relevant authorities.
- Experience of the consultants in preparing environmental impact statements for waste management facilities.

The areas identified during the scoping process as being the most significant issues were air quality, traffic, visual impact and amenity. However all the topics listed above are addressed within the EIS.

1.10.1. Impact Description

This EIS provides for an assessment of a range of potential impacts from the proposed development. In accordance with Schedule 6 of S.I. No. 600 of 2001, Planning and Development Regulations, these include:

- Direct impacts
- Indirect impacts
- Secondary impacts
- Cumulative impacts
- Short-term impacts
- Medium-term impacts
- Long-term impacts
- Permanent impacts
- Temporary impacts
- Positive impacts
- Negative impacts

For the purposes of this EIS the following is applied:

- An *Imperceptible Impact* is one that is capable of measurements but without noticeable consequences
- A *slight impact* is an impact which cause noticeable changes in the character of the environment in a manner that is consistent with existing and emerging trends
- A *moderate impact* alters the character of the environment in a manner that is consistent with existing and emerging trends
- A *significant impact* is by character, magnitude, duration or intensity alters a sensitive aspect of the environment
- A *profound impact* obliterates sensitive characteristics.

Descriptions of potential impacts as well as relevant and appropriate mitigation measures are presented within the individual sections. A summary of impacts, both positive and negative based on the findings of the impact assessments is presented within Section 12.

1.10.2. Technical Constraints

There are a number of caves on the southern section of the site. For health and safety reasons some of these caves were not assessed during the ecological survey. However, no infilling of the caves is proposed and the internal topography of the caves will not be altered in any way during the proposed construction or operation phases. A full bat survey was conducted as part of the ecological assessment. It is proposed in Section 8 of the EIS that a winter bat survey be conducted to assess the importance of the caves as hibernacula.

1.11. Contributors to the Environmental Impact Statement

Fehily Timoney & Co. (FTC) prepared the Environmental Impact Statement. The traffic survey was conducted by Abacus Transportation Surveys. Section 9 – Landscape was prepared by John Ketch & Associates.