

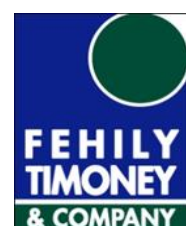
EIS FOR A PROPOSED WASTE SOILS RECOVERY FACILITY AND ECO-PARK AT PRETTY BUSH, KILCOOLE, CO. WICKLOW

VOLUME 2 OF 3 - MAIN REPORT

AUGUST 2016



Wicklow County Council
Comhairle Contae Chill Mhantáin



EIS FOR A PROPOSED WASTE SOILS RECOVERY FACILITY AND ECO-PARK AT PRETTY BUSH, KILCOOLE, CO. WICKLOW

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Abstract: Fehily Timoney and Company (FTC) was retained by Wicklow County Council to prepare an environmental impact statement (EIS) for the proposed development of a waste soils recovery facility and Eco-park at Pretty Bush, Kilcoole, County Wicklow. The potential impacts on the human environment, air and climate, roads and traffic, noise, ecology, geology, hydrogeology, hydrology and water quality, landscape, archaeology and cultural heritage and material assets are evaluated. This document comprises the main volume (Volume 2) of the Environmental Impact Statement (EIS) which accompanies the planning application to An Bord Pleanála for the proposed development.

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1 INTRODUCTION

This section of this environmental impact statement (EIS) introduces the proposed development and documents the procedure that was followed in preparing this EIS.

1.1 The Applicant

The applicant is Wicklow County Council (WCC) who are the owners of the site at Pretty Bush, Kilquade, Kilcoole, Co. Wicklow, which is known locally as “the Rocks” and is located within the townland of Priestsnewtown.

1.2 The Development in Summary

It is proposed to utilise this site for the deposition of up to 200,000 tonnes of surplus dredge spoil material, comprising silt, clay and gravel at a Wicklow County Council (WCC) owned site at Pretty Bush, Kilquade, Kilcoole, Co. Wicklow, arising from the flood defence works being carried on the River Dargle in Bray. The scheme works include deepening and widening of approximately 3.5 km of the river in Bray town, for a depth of approximately 1 m.

These flood defence works were authorised by An Bord Pleanála in 2008 and, as part of these works, it was identified that material not reused in the flood defence works would be “*removed off-site to suitably licensed disposal facility*”. The proposed development satisfies this requirement as the site will be required to hold a waste soils recovery facility licence from the EPA that approves the deposition of dredge spoil waste at the site.

Upon completion of the placement of riverbed spoil material, the site will be developed into an Eco-Park that will provide long term environmental and social benefits and recreational amenity for the local community.

The proposed works will comprise:

- site clearance of existing vegetation incorporating temporary drainage control measures
- redevelopment of existing entrance, incorporating boundary treatment
- placement of up to 200,000 tonnes of dredge spoil material
- importation of topsoil and re-grading of site
- development of temporary and permanent drainage works
- access improvement works on the L1042 at the site entrance and development of dedicated Council yard
- development of Pretty Bush Eco-park features including looped walking tracks, nature trails, waymarkers and information signage

The duration of the clearance and placement works is expected to be between 8- 15 months, while the development of the Pretty Bush Eco-park will occur in stages thereafter in line with appropriate planting seasons.

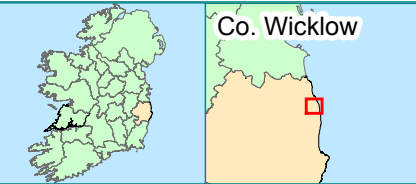
The existing site entrance will be developed initially to support the access and egress of the vehicles delivering material to and from the site and subsequently to facilitate the future access of users of the site. The entrance will comprise an appropriately designed entrance and boundary treatment.

The location of the site is shown in Figure 1-1 while an aerial view is provided in Figure 1-2.


1.3 Planning History

A number of previous applications have been made that relate to proposals for development within the proposed site boundary:

- 015286** In October 2001, Wicklow County Council under took a 'Part 8' process for land development and re-instatement and construction works at the site, which was approved in December 2001 but which did not proceed.
- 041109** The Electricity Supply Board (ESB) applied for the diversion of a section of the existing Fassaroe – Greystones/Kilcoole 38 Kv line in the townland of Priestnewtown in June 2004, for which permission was granted by Wicklow County Council in August 2004.
- 041253** Eircom applied to Wicklow County Council for the development of an 89 sq.m single storey telephone exchange and site works, including underground cable ducts/chambers, vehicle access from the Kilquade road, the provision of 2 no. car parking spaces and security railings and gates, in July 2004. Permission was refused on the grounds of sufficiency of rights to carry out the development.

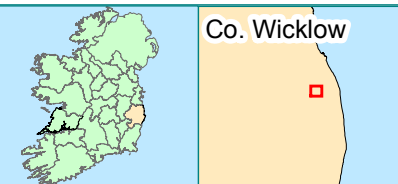


Legend

 Study Boundary


Date	20/01/2016	
Name Of Client	Wicklow County Council	
Name Of Job	Waste Licence, Planning & EIS for Waste Soils Recovery Facility	
Title Of Figure	Site Location Map	
Scale Used	1:25,000 @ A4	
Figure No.	1.1	Rev A

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Co. Wicklow

Legend

 Study Boundary

Date 20/01/2016

Name Of Client
Wicklow County Council

Name Of Job
Waste Licence, Planning & EIS for
Waste Soils Recovery Facility

Title Of Figure
Aerial View of Site

Scale Used 1:5,000 @ A4

Figure No.	1.2	Rev	A
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1.4 The Requirement for Environmental Impact Assessment and the Planning Application Process

Directive 2011/92/EEC as amended, on the Assessment of the Effects of Certain Public and Private Projects on the Environment requires that certain developments undertake an environmental impact assessment (EIA) before planning permission can be granted. In this instance, an Environmental Impact Statement (EIS) must accompany a planning application.

Parts 1 and 2 of Schedule 5 of the Planning and Development Regulations 2001 – 2015 sets out certain projects that require an EIS. With respect to waste disposal sites, Part 2 (11) (b) states that:

11. Other projects:

(b) Installations for the disposal of waste with an annual intake greater than 25,000 tonnes not included in Part 1 of this Schedule.

where the reference to 'disposal' is also taken to refer to recovery facilities, as demonstrated by case law e.g. CJEU Commission v Italy (C-486/04 & C-255/05).

As this application relates to the recovery of waste, through the placement of this material at the site where greater than 25,000 tonnes of material will be accepted over a 12-month period, the identified threshold value is exceeded and an EIS is required to accompany the application.

Section 175 of the Planning and Development Act 2000, as amended, addresses the environmental impact assessment of certain development carried out on behalf of local authorities. Such development is determined by An Bord Pleanála, who assess the potential for impact on the environment, based on the information provided as part of the EIS, as well as information from other sources. The Board may refuse or approve the development, with or without modifications.

Appropriate Assessment (AA) screening has been undertaken, which has determined the requirement for AA. A Natura Impact Statement has been prepared and submitted to accompany the planning application and EIS, in accordance with Section 177AE of the Planning and Development Act 2000, as amended. Further detail is provided in Section 11.

1.5 Requirement for a Waste Licence

Large inert waste facilities accepting natural soils and sub-soils for deposition on land must be approved by the EPA. These natural soils/sub-soils infilling activities are considered waste recovery activities rather than disposal activities.

Waste soils recovery facilities which exceed the thresholds for waste facility permits (as set out in the Third Schedule of the Waste Management (Facility Permit and Registration) Regulations 2007, as amended by the Waste Management (Facility Permit and Registration) (Amendment) Regulations, 2008), require EPA waste licences rather than local authority waste facility permits.

The threshold outlined in Class 5 of the Third Schedule to the Regulations is as follows:

Class 5: Recovery of excavation or dredge spoil, comprising natural materials of clay, silt, sand, gravel or stone and which comes within the meaning of inert waste, through deposition for the purposes of the improvement or development of land, where the total quantity of waste recovered at the facility is less than 100,000 tonnes.

Therefore, at up to 200,000 tonnes of riverbed material to be deposited at the development site, the relevant threshold of 100,000 tonnes is exceeded and a waste licence application is required.

1.6 Technical Difficulties

There were no technical difficulties encountered during the preparation of this environmental impact statement.

1.7 Contributors to this EIS

Fehily Timoney and Company (FTC) is a consultancy based in Cork and Dublin, specialising in civil and environmental engineering, and environmental science. FTC is well established as a leading consultancy in waste management in Ireland. The company has established a professional team specialising in waste management infrastructure development.

FTC was responsible for the project management and preparation of the number of section of this EIS, with input from other contributors as identified:

- Fehily Timoney & Company (FTC):
 - Section 1: Introduction
 - Section 2: Environmental Impact Assessment Methodology
 - Section 3: The Development
 - Section 4: Policy & Planning Context
 - Section 5: The Need for the Development & Alternatives Considered
 - Section 6: EIS Scoping, Consultation and Key Issues
 - Section 7: Human Beings – Socio Economic, Land Use & Amenity
 - Section 8: Human Beings – Air Quality & Climate
 - Section 9: Roads, Traffic & Transportation
 - Section 10: Human Beings – Noise
 - Section 11: Flora & Fauna
 - Section 12: Soils, Geology & Hydrogeology
 - Section 13: Surface Water Quality & Drainage
 - Section 14: Landscape & Visual Impact (partial)
 - Section 16: Material Assets – Infrastructure
 - Section 17: Inter-relationships & Interactions
- TKFM Limited
 - Preliminary Design relating to Section 3 – The Development
- DH Design
 - ZTV Analysis for Section 14: Landscape & Visual Assessment
- Dermot Neilis Archaeology:
 - Section 15: Material Assets – Archaeology, Architecture & Cultural Heritage

1.8 Viewing and purchasing the EIS

Any member of the public can inspect the application, the EIS and the NIS free of charge or purchase a copy, on payment of a specified fee, during public opening hours for a period of six weeks from the advertised date at the:

- Offices of Wicklow County Council, Greystones Municipal District, Civic Offices, Mill Road, Greystones, Co. Wicklow
- Offices of Wicklow County Council, Bray Municipal District, Civic Offices, Main Street, Bray, Co. Wicklow

Submissions or observations may be made only to An Bord Pleanála (the Board), 64 Marlborough Street, Dublin 1 within 6 weeks of the advertised date relating to:

- (i) The implications of the proposed development for proper planning and sustainable development in the area concerned
- (ii) The likely effects on the environment of the proposed development
- (iii) The likely significant effects of the proposed development on a European site, if carried out

Submissions/observations must be accompanied by a fee of €50.

2 ENVIRONMENTAL IMPACT ASSESSMENT METHODOLOGY

The environmental impact statement (EIS) is a statement of the effects, if any, which a proposed development, if carried out, would have on the environment. The EIS provides the competent authorities and the public with a comprehensive understanding of the project, the existing environment, the impacts and the mitigation measures proposed. The environmental impact assessment (EIA) process is undertaken by the relevant regulatory authorities.

The primary objective of an EIA is to ensure that projects which are likely to have significant effects on the environment are assessed and impacts avoided, where possible. This assessment process aims to achieve the most sustainable and environmentally friendly integration of a development with the local environment.

Firstly, the planning context, the background to the project including the need for the development, the alternatives assessed and the existing and proposed development is described. This sets the reader in context as to the practical and dynamic process undertaken, in order to arrive at the layout and design of the proposed development that will cause least impact on the environment.

Subsequent sections deal with specific environmental topics, for example, human beings, air, water, noise, etc. These sections may involve specialist studies and evaluations. The methodology applied during these specific environmental assessments is a systematic analysis of the proposed development in relation to the existing environment. The broad methodology framework for these assessments is outlined below and is designed to be clear and concise and allow the reader to logically follow the assessment process through each environmental topic. In some instances, more specific topic related methodologies are outlined in the relevant sections of the EIS.

The broad methodology framework used in all sections includes:

- Introduction
- Assessment Methodology
- Existing Environment
- Summary of Key Possible Impacts
- Mitigation Measures
- Predicted Impacts after Mitigation i.e. 'residual' impacts
- Monitoring
- Conclusion and Summary

The advantage of using this framework is that it is easy to investigate each environmental topic and it facilitates easy cross-reference to specialist studies undertaken in the preparation of the EIS.

The EIS has been prepared in accordance with Schedule 6 of the Planning and Development Regulations 2001, as amended, which sets out the contents of an EIS. In addition, in the preparation of this EIS, the contents of Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment were also considered (the 2014 EIA Directive).

The following sections outline the methodology used during the preparation of this EIS which has been undertaken in accordance with best practice guidelines:

- *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)
- *Directive 2011/92/EU Consolidation*
- *European Commission Guidance on Integrating Climate Change and Biodiversity into Environmental Impact Assessment, EU 2013*

Note that at the time of submission of this EIS, these Guidelines and Advice Notes are being revised by the EPA. In early September 2015, the EPA published revised draft Guidelines and Advice Notes¹ in relation to EISs, inviting consultation by mid October 2015 and indicating publication of finalised revised guidance in 2016.

¹ <http://www.epa.ie/pubs/consultation/reviewofdrafteisguidelinesadvicenotes/#.VfLOgRFVikp>

In any event, cognisance has been paid to the draft, revised guidance in the preparation of this EIS.

2.1 EIS Structure

This document has been structured according to the grouped format structure as set down in the Environmental Protection Agency's (EPA) *Guidelines on the Information to be Contained in Environmental Impact Statements* (2002) (and draft revised Guidelines).

The EIS is broken down into the following sections:

- A description of the existing and proposed development
- Subsequent sections deal with specific environmental topics for example, human beings, air, water etc. The grouped format examines each topic as a separate section referring to the existing environment, impacts of the proposed development and mitigation measures
- A concluding section which provides a summary of the key impacts and mitigation measures and provides an overall conclusion to the EIS.

The advantages of using this type of format are that it is easy to examine each environmental topic and it facilitates easy cross-reference to specialist studies undertaken as part of the assessment.

The EIS comprises of three volumes:

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

2.2 Environmental Assessment Methodology

2.2.1 Introduction

This section generally introduces the environmental topic to be assessed and the areas to be examined relating to the topic.

2.2.2 Assessment Methodology

Specific topic related methodologies are outlined in this section. This will include the methodology used in describing the existing environment and assessing impacts. It is important that the methodology is documented so that the reader understands how the assessment was undertaken. This can also be used as a reference if future studies are required.

2.2.3 Existing Environment

An accurate description of the existing environment is necessary to predict the likely significant impacts of a new development. Existing baseline environmental monitoring data can also be used as a valuable reference for the assessment of actual impacts from a development once it is in operation.

To describe the existing environment, desktop reviews of existing data sources are undertaken for each specialist area. These reviews rely on published reference reports and datasets to ensure the objectivity of the assessment. Desktop studies are also supplemented by specialised field walkovers or studies in order to confirm the accuracy of the desktop study or to gather more baseline environmental information for incorporation into the EIS.

The existing environment is evaluated to highlight the character of the existing environment that is distinctive and what the significance of this is. The significance of a specific environment can be derived from legislation, national policies, local plans and policies, guidelines or professional judgements. The sensitivity of the environment is also described.

2.2.4 Summary of Key Possible Impacts

In this section, individual specialists predict how the receiving environment will interact with the proposed development. The full extent of the proposed development's effects and emissions before the proposed mitigation measures are introduced is outlined here. Impacts from both the construction and operation phases of the proposed development are outlined. Interactions and cumulative impacts with other environmental topics are also included in this assessment, where relevant. The evaluation of the significance of the impact is also undertaken.

Where possible, pre-existing standardised criteria for the significance of impacts will be used. Such criteria can include Irish legislation, international standards, EPA guidelines or good practice guidelines. Where appropriate criteria do not exist the assessment methodology section states the criteria used to evaluate the significance.

Impact Description

Potential impacts from the proposed development can be described in a number of ways including:

- 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 sections of this EIS, the following concepts are applied:

- an *imperceptible impact* is one that is capable of measurement 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 one which by character, magnitude, duration or intensity alters a sensitive aspect of the environment
- a *profound impact* obliterates sensitive characteristics.

2.2.5 Mitigation Measures

If significant impacts are anticipated, mitigation measures are devised to minimise impacts on the environment. Mitigation measures by avoidance, by reduction and by remedy can be outlined.

2.2.6 Predicted Impacts after Mitigation

The likely impacts that will occur after the proposed mitigation measures have been put in place are identified. These impacts are described in detail and assessment of their significance undertaken.

2.2.7 Monitoring

This section outlines specific monitoring programmes for the individual environmental topic to be undertaken to ensure the effectiveness of mitigation measures put forward in the EIS.

Monitoring results can be compared with baseline monitoring undertaken as part of the EIS or with other regulatory standards, planning conditions, IPPC or waste licence conditions, etc.

2.2.8 Conclusion and Summary

An overall summary of the assessments undertaken, specific impacts predicted, mitigation measures outlined and final residual impacts is provided in this section.

2.2.9 References

Reports, guidelines and other data sources referred to in the specific sections are provided in this section.

2.3 EIS Conclusion: Development and its Impacts in Context

This section provides a summary of the key impacts and mitigation measures associated with the proposed development. It also discusses cumulative impacts and interactions and inter-relationships between environmental topics. This section provides an overall conclusion to the EIA.

2.4 Cumulative Assessment

Cumulative assessment assesses the impact of a proposed development in conjunction with other existing or proposed development located nearby or in the vicinity of the development in question, such that the potential combined environmental impacts can be accurately assessed in the event of the proposed development proceeding.

Cumulative impacts are defined in an EU guidance document² on the matter as “*Impacts that result from incremental changes caused by other past, present or reasonably foreseeable actions together with the project.*”

The requirement for cumulative assessment is a direct requirement of Directive 2011/92/EU (and also required under Directive 2014/52/EU) where Annex IV of 2011/92/EU requires that a description of the likely significant effects of the project be given, where the description “*should cover the direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the project*”.

In the context of an EIS, cumulative effects can relate to two different aspects of a development.

Firstly, the various impacts of a particular individual project can interact in a manner which causes additional effects, which when taken together are greater than they appear when documented under separate topic headings.

Secondly, a project may magnify impacts already associated with other built development, or other development proposed to be built. This may mean that, when a development is proposed at a greenfield location which is devoid of other significant built development, its impact is acceptable; by contrast, where it is proposed in conjunction with other built or proposed development, the cumulative effect may be much greater. In some cases, the impacts of these multiple developments collectively may exceed that which is tolerable.

² Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions; available from: <http://ec.europa.eu/environment/eia/eia-studies-and-reports/pdf/guidel.pdf>

In order to determine whether there are any other projects of scale proposed in the vicinity of the development site, a search of the Wicklow County Council Planning portal online was undertaken in June 2016, which identified the following projects:

Table 2-1: Sizeable projects proposed/ongoing in the vicinity of the proposed development site

Planning Ref:	Project	Address	Distance from site	Comment
066101	Construction of 861 no. residential units	Season Park & Monalin, Newtownmountkennedy, Co. Wicklow	c. 4.5 km	Understood to be currently under construction at rate of 30/40 house per annum
071352	Mixed use development of > 40,000m ² of employment/office/commercial development & 260 houses	Charlesland, Greystones, Co. Wicklow	< 1 km	Not commenced
141505	Provision of a residential development comprising 43no. dwellings	Convent Road, Delgany, Co. Wicklow	c. 1km	Under construction
141031	Construction of: 187 no. houses	Chapel Road, Blacklion, Greystones, Co. Wicklow	c. 2km	Under construction
141925	Residential scheme comprising 130 no. 2 storey houses and a 2 storey creche	Blacklion, Greystones, Co. Wicklow	c. 2 km	Not commenced
15190	450 pupil two storey post primary school & 24 classroom, two storey, part three storey, primary school	Former Bray Golf Club Lands, Bray, Co. Wicklow	c. 5 km	Due for commencement in 2016

Projects such as those identified in Table 2.1 may have the potential to result in a magnified impact in a number of environmental media due to their construction activity nature i.e. noise, air quality (dust) and traffic.

These project have been taken into consideration in the following sections where potential cumulative impacts have been assessed:

- Section 8: Human Beings – Air Quality & Climate
- Section 9: Roads, Traffic & Transportation
- Section 10: Human Beings – Noise
- Section 11: Flora & Fauna