

19th June 2014

Licensing Unit,
Office of Climate, Licensing and Resource Use
P.O. Box 3000
Environmental Protection Agency Headquarters
PO Box 3000
Johnstown Castle Estate
County Wexford

Our Ref: 501.00180.00089

Dear Sirs

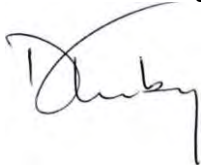
**RE: ROADSTONE LTD., MILVERTON, SKERRIES, CO. DUBLIN
WASTE LICENCE APPLICATION FOR INERT SOIL AND CONSTRUCTION AND
DEMOLITION WASTE RECOVERY FACILITY (REF. NO. W0272-01)**

Further to your letter dated 26 May 2014, please find enclosed a Natura Impact Assessment (NIS) / Appropriate Assessment (AA) Screening Report in respect of the proposed inert soil recovery facility proposed by Roadstone Ltd. at its site in Milverton, Skerries, Co. Dublin.

Two copies of the EIS are provided in hard copy (paper) format, with a further two copies in soft copy (electronic searchable .pdf) format on CD-ROM. All maps and drawings are A4 or A3 size.

Should you require any additional information or clarification in respect of this or any other aspects of the waste licence application, please contact the undersigned.

Yours sincerely
SLR Consulting Limited



Derek Luby
Technical Director

cc Shane Geraghty (Roadstone Ltd.)

Enc



global environmental solutions

**MILVERTON QUARRY
SKERRIES, CO. DUBLIN**

**WASTE LICENCE APPLICATION FOR
INERT SOIL RECOVERY FACILITY**

**NATURA IMPACT STATEMENT:
STAGE 1 SCREENING ASSESSMENT**

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JUNE 2014
SLR Ref: 501.00180.00089Rev0

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1.0 INTRODUCTION

1.1 Background

This report provides a Natura Impact Statement (NIS) and information to inform a Stage 1 Screening Assessment to identify any likely significant effects on Natura 2000 sites from the proposed operation of an inert waste recovery facility at a quarry void at Milverton, Skerries, Co. Dublin.

It has been prepared by SLR Consulting Ireland (SLR) on behalf of the quarry operator, Roadstone Limited in support of their Waste Licence Application (WLA) for a proposed inert waste recovery facility at the quarry at Milverton.

1.2 Appropriate Assessment Overview

The requirements for an Appropriate Assessment are set out under Article 6 of the EU Habitats Directive (92/34/EEC) transposed into Irish law through The European Communities (Birds and Natural Habitats) Regulations 2011 that require a Competent Authority to make an Appropriate Assessment of the implications for Natura 2000 sites in view of a site's conservation objectives, before deciding to undertake, or give consent, permission or other authorisation for, a plan or project which:

- i. is not directly connected with or necessary to the management of that site; and
- ii. is likely to have a significant effect thereon, either individually or in combination with other plans and projects in view of its conservation objectives.

The European Commission's methodological guidance¹ promotes a four stage process, as set out below, to complete an Appropriate Assessment:

- Stage 1 – Screening for Appropriate Assessment;
- Stage 2 – Appropriate Assessment;
- Stage 3 – Alternative Solutions; and
- Stage 4 – The 'IROPI Test' (Imperative Reasons of Overriding Public Interest).

A person applying for any such consent, permission or other authorisation must provide such information in Stage 1, as the Competent Authority may reasonably require, for the purposes of the assessment or to enable them to determine whether an Appropriate Assessment is required.

In considering whether a plan or project will adversely affect the integrity of any Natura 2000 site or sites, the Competent Authority should consider whether the effects of the proposal on the site or sites, either individually or in combination with other plans or projects, is likely to be significant in terms of the conservation objectives and in respect of each interest feature for which the site was designated a Special Area of Conservation (SAC) under Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats Directive), or classified a Special Protection Area (SPA) under Council Directive 2009/147/EC on the Conservation of Wild Birds (The Birds Directive) that codifies Directive 79/409/EEC, or a Ramsar site under the Ramsar Convention.

¹ European Communities (2002). *Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites. Methodological Guidance on the Provision of Article 6(3) and (4) of the Habitats Directive 92/43/EEC*. European Communities, Luxembourg.

In the light of the conclusions of the assessment, and in consideration of Imperative Reasons of Overriding Public Interest (IROPI), the Competent Authority may agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the Natura 2000 site.

1.3 Purpose of this Report

This report has been produced to provide a screening statement in respect of the proposed operation of an inert waste recovery facility at Milverton quarry, as required under Stage 1 of the Appropriate Assessment process, and includes all relevant information to the Competent Authority (in this case the Environmental Protection Agency (EPA)) in order for it to determine

- (i) whether the granting of a waste licence in respect of the proposed inert waste facility is likely to have a significant effect on the integrity of any Natura 2000 site, or sites, within its zone of influence and
- (ii) whether there is a requirement for an Appropriate Assessment (Stage 2 Assessment) to be undertaken.

1.4 Ecologist and Experience

The Screening Assessment has been conducted by Steve Judge who is a Senior Ecologist with 13 years' experience in ecological consultancy and a member of the Chartered Institute of Ecology and Environmental Management (CIEEM). All work produced is subject to technical review and Quality Assurance.

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2.0 METHODOLOGY

2.1 Baseline Data Collection

Baseline information was gathered through a combination of desk-based study, site visit and inspection made on 28th May 2014 and technical assessments consistent with current standard methodologies and published best practice guidelines, in order to provide relevant data to allow an assessment of likely significant effects of the operation of the inert waste recovery facility on any individual Natura 2000 site, or sites, within the zone of influence of this project.

The principal source of information on Natura 2000 sites and key qualifying features has been data publically available information published by the National Parks and Wildlife Service (NPWS)², with other relevant sources used to provide data on current baseline conditions at the site of the proposed development and within its potential zone of influence.

2.2 Assessment Likely Significant Effects

Under the Habitat Regulations, the first test that has to be considered is whether the development, either alone or in combination with other relevant projects and plans, would be likely to have a significant effect. Effects are judged to be significant where they affect the integrity of the site with respect to the conservation objectives of the features for which a Natura 2000 site was designated/classified as being of European importance.

The purpose of the Stage 1 assessment is twofold, firstly to screen out those aspects of the proposal that can be considered not likely to have a significant effect, and secondly to screen the key qualifying features of the designation that are not likely to be significantly affected by the proposal.

In order to undertake an appropriate screening, the guidance produced by the NPWS in 2009³ has been followed in order to:

- characterise the potential impacts to the qualifying interests of any Natura 2000 site or sites that may result from the operation of the proposed inert waste recovery facility at Milverton;
- assess the likely significance of potential impacts on the qualifying interests of any Natura 2000 site or sites within the zone of influence of the proposed project; and
- assess the risk of an adverse effect on the integrity of the site or occurring to a qualifying interest feature for which the site has been designated as significant at European level.

The methodology for the assessment of impacts is derived from the guidelines published by the Chartered Institute of Ecology and Environmental Management (CIEEM)⁴. Impacts are characterised in terms of whether specific hazards emanating from the project are likely to have potential significant effects on the integrity of a defined ecosystem and/or conservation status of individual habitats or species for which a site is of European interest, and on site as a whole.

² <http://www.npws.ie>

³ NPWS (2009 revised February 2010). *Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities*. Department of the Environment, Heritage and Local Government, Dublin.

⁴ Institute of Ecology and Environmental Management (2006). *Guidelines for Ecological Impact Assessment in the United Kingdom*.

2.3 Ascertaining the Threat to Site Integrity

The Competent Authority will be required to determine whether the granting of a waste licence for the proposed inert waste recovery facility at Milverton would adversely affect the integrity of any Natura 2000 site, or sites, in light of the conservation objectives for that particular site or sites. The integrity of a site is defined as:

“the coherence of its ecological structure and function, across its whole area, which enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was designated/classified.”

Further to the above, an adverse effect on integrity can also be defined as one that is likely to prevent the site from making the same contribution to favourable conservation status for the relevant features as it did at the time of its classification/designation.

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3.0 DESCRIPTION OF THE PROJECT

3.1 Location and Setting

The site of the proposed inert waste recovery facility is located within a quarry operated by Roadstone Ltd. situated in the townland of Milverton approximately 1.5km south west of the town centre of Skerries, Co. Dublin (please refer to Figure 1).

The application site covers approximately 7.9 hectares (ha) and comprises a limestone quarry with perimeter screening / overburden mounds and some ancillary site infrastructure including offices, sheds, and hard-standing areas.

The surrounding landscape is characterised by agricultural land with hedgerow enclosed fields under both arable production and permanent pasture extending to the east coast and its associated beaches, islands and headlands. The town of Skerries is the largest urban area in the immediate vicinity, with other smaller rural settlements and isolated farmsteads scattered along the roads and lanes throughout this area.

3.2 Outline Description of Project

The proposed development essentially involves the importation of inert waste material including soils, stones and some limited volumes of pre-processed construction / demolition waste to infill the existing quarry void as part of the quarry restoration scheme, consented by Fingal County Council in 2009 as part of the quarry registration process undertaken in accordance with Section 261 of the Planning and Development Act of 2000 (Condition No. 13 of Planning Ref. Q/05/003).

The WLA provides for the placement and capping of approximately 1,300,000m³ of inert waste and rock. Up to 1,000,000m³ (1.9 million tonnes) of inert materials to be backfilled and recovered at this facility will be sourced from pre-approved construction / demolition sites. The remaining 300,000m³ (570,000 tonnes) will be sourced from existing soil and subsoil stockpiles and mounds within the quarry site.

All non-inert construction / demolition waste, for example metal, timber and plastics, unintentionally imported to site will be separated and removed off-site to authorised waste disposal or recovery facilities.

Topsoils and subsoils will be temporarily stockpiled pending their re-use as cover material for phased restoration of the site. On completion of the final restoration phase, a cover layer of 350mm of subsoil and 150mm of topsoil will be placed and graded across the backfilled area and sown with grass.

It is envisaged that the operational life of the facility will be in the region of 7.5 years, based on an average waste material importation rate of 250,000 tonnes per annum.

The site will operate from 07:00 to 18:00hrs Monday to Friday and 07:00 to 13:00hrs on Saturdays. No operations will take place outside these times.

Full details of the proposed development are provided within the Chapter 2 of the Environmental Impact Statement (EIS) submitted in support of the waste licence application, and to which this document provides supporting information.

3.3 In-built Design Mitigation Measures

The following mitigation measures have been in-built with the proposed operation of the inert waste recovery facility at Milverton and will be implemented during the operational lifetime of the site.

3.3.1 Surface Water Management

At the present time, groundwater level in the quarry void is approximately -2mOD and the water body is approximately 10m deep. Prior to commencement of backfilling activities and the proposed site restoration works, the quarry void will be dewatered, with all dewatered groundwater discharged to the Mill Stream which flows immediately north of the application site and outflows into the Irish Sea at Skerries.

As backfilling of the quarry proceeds over the short-to-medium term, surface water run-off into the quarry will be minimised by the construction of drainage channels around the edge of the quarry. These channels will collect and divert surface water run-off via temporary attenuation / settlement ponds and a hydrocarbon interceptor before being discharged to the Mill Stream.

During each restoration phase, the upper surface of the backfilled materials will be graded so as to ensure that surface water run-off is diverted to a sump at a temporary low point within the backfilled materials. Water will be pumped from the temporary sumps to the settlement ponds and interceptor as and when required before being discharged off-site.

In the longer term, during and after the final phase of the quarry backfilling works, ground contours and/or drainage channels will be modified as necessary to ensure that surface water run-off across the restored site is directed to boundary ditches, existing site drainage infrastructure or to the proposed closed depression to be created in front of the eastern quarry face. It is envisaged that the final landform will be permanently drained by installing a buried pipeline which will provide for gravity drainage (via an interceptor or settlement ponds) to the Mill Stream.

3.3.2 Control of Contaminated Waste

Any imported waste which, it is suspected, may not comply with waste acceptance criteria for the waste recovery facility, will be transferred to a covered shed before being removed off-site by permitted waste collectors to an authorised waste disposal or recovery facility.

3.3.3 Storage of Fuels and Oils

All fuel will be stored in appropriately constructed and bunded fuel storage tanks. All other chemicals and petroleum-based products will be stored under cover at the site in designated containers at the maintenance sheds.

A small bunded tank for waste oils will be provided at the maintenance shed and emptied at intervals by a permitted waste contractor and disposed off-site at an authorised waste facility.

3.3.4 Maintenance and Refuelling of Mobile Plant and Equipment

All plant and equipment will be regularly maintained and inspected daily for leaks of fuels, lubricating oil or other contaminating liquids/liquors.

Mobile plant and machinery will be serviced / maintained at the maintenance sheds or on the hard-standing refuelling area to minimise the risk of uncontrolled release of polluting liquids to groundwater.

All mobile plant and equipment undertaking quarry backfilling works will be refuelled from mobile, double skin fuel bowzers at a dedicated bunded hard-standing area for refuelling or at the maintenance sheds. Oil and lubricant changes and servicing of wheeled or tracked plant will be undertaken at the maintenance sheds.

Spill kits will be kept on-site to stop the migration of any accidental spillages of fuel and oils, should they occur.

3.3.5 Environmental Monitoring

Environmental monitoring of noise, dust, surface water and groundwater will be undertaken for the duration of the site restoration works.

Laboratory testing of soil, surface water, groundwater and soil water percolate (leachate) will be undertaken off-site at an ILAB / UKAS accredited geo-environmental laboratory. Any validation testing and laboratory testing required for the confirmation of inert classification of waste soil will also be undertaken by the same laboratory. All samples taken on-site will be forwarded to the laboratory on the same day and test results will typically be forwarded to site in seven to ten working days.

It is anticipated that groundwater and surface water sampling and testing will be undertaken on a bi-annual basis (i.e. six monthly) at predefined locations.

Following completion of the restoration and site decommissioning works, provision will be made for further, short-term (<1year) environmental monitoring of air, surface water and groundwater.

4.0 NATURA 2000 SITES

There are nine Natura 2000 sites within a 15km radius of the application site for the inert waste recovery facility at Milverton. These sites are listed Table 1 and their locations in relation to the development site shown in Figure 1.

Table 1: Natura 2000 Sites within a 15km of the Proposed Project

Natura 2000 Site	Site Code	Location at Closest Point to Project Site
Skerries Islands SPA	004122	1.9km east northeast
Rockabill to Dalkey Island SAC	003000	3.1km east
Rockabill SPA	004014	4.2km northeast
Rogerstown Estuary SAC	000208	5.5km south
Rogerstown Estuary SPA	004015	5.5km south
Lambay Island SPA	004069	9.4km southeast
Malahide Estuary SAC	000205	10.2km south
Malahide Estuary SPA	004025	10.2km south
River Nanny Estuary and Shore SPA	004158	11.2km northwest

4.1 Potential Zone of Influence of Project and Screening of Natura 2000 Sites

Based on the size and nature of the proposed project at Milverton, it is considered that the maximum distance for which the project should be evaluated in terms of Natura 2000 sites is up to a maximum radius of 2km from the application site unless there are any potential source-pathway-receptor links between the proposed inert waste recovery facility at Milverton and any Natura 2000 site(s) outside this distance.

At a distance greater than 2km, and in the absence of any potential source-pathway-receptor link, none of the Natura 2000 sites, identified in Table 1, would be affected by any direct loss of habitat or impacted upon by any effects arising from disturbance (i.e. noise, vibration and human and visual disturbance), the effects of dust deposition or traffic emissions.

Given the distances of the Natura 2000 sites, the only potential source-pathway-receptor link between the inert waste recovery facility at Milverton and any of the Natura 2000 sites is via the hydrological pathway created through a discharge of dewatered groundwater and surface water run-off from the quarry site to the Mill Stream that outflows into the Irish Sea at Skerries. Based on the size and nature of this discharge, it is considered that only the Skerries Islands SPA is relevant for this assessment, unless it is shown that any discharge would have a significant detrimental effect on coastal water quality with implications for any qualifying species that may require the other marine Natura 2000 sites to be screened back in for further assessment.

Based on the above, it is considered that all of the following Natura 2000 sites can be screened out from any further assessment at this stage as there will be no source-pathway-receptor link between the project and these Natura 2000 sites:

- Rockabill to Dalkey Island SAC;
- Rockabill SPA;
- Rogerstown Estuary SAC
- Rogerstown Estuary SPA;
- Lambay Island SPA;
- Malahide Estuary SAC;
- Malahide Estuary SPA; and
- River Nanny Estuary and Shore SPA.

4.2 Skerries Islands SPA

4.2.1 Site Description

Skerries Islands SPA (217.21ha) encompasses three small low-lying and uninhabited islands off the north Dublin coastline, namely Shenick's Island, St. Patrick's Island and Colt Island, and the seas surrounding the islands to a distance of 200m. St. Patrick's Island and Colt Island have low cliffs, while Shenick's Island has more extensive expanses of intertidal rocky shore and sand flats and also a shingle bar that is exposed and connected to the mainland at low tides. The islands are of importance for both breeding seabirds and wintering waterfowl. A copy of the site synopsis is provided in Appendix A.

4.2.2 Qualifying Interests

The Skerries Islands qualifies under Article 4 of the Birds Directive as a SPA because it regularly supports populations of European importance including:

- breeding:
 - Herring Gull (*Larus argentatus*);
 - Shag (*Phalacrocorax aristotelis*); and
 - Cormorant (*Phalacrocorax carbo*).
- over winter:
 - Turnstone (*Arenaria interpres*);
 - Light-bellied Brent Goose (*Branta bernicla hrota*);
 - Purple Sandpiper (*Calidris maritima*);
 - Herring Gull (*Larus argentatus*); and
 - Cormorant (*Phalacrocorax carbo*).

4.2.3 Conservation Objectives

The overarching conservation objective for the Skerries Islands SPA is to maintain or restore the favourable conservation status of a bird species of Special Conservation Interest for this SPA⁵.

The favourable conservation status of a species is achieved when:

- the population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

⁵ NPWS (2011). *Conservation Objectives for Skerries Islands SPA [004122]*. Generic Version 4.0. Department of Arts, Heritage & the Gaeltacht.

4.2.4 Site Vulnerabilities

The site vulnerabilities, including any key pressures or trends within and around the Skerries Island SPA that have been identified as impacting upon the site, may be summarised as:

- leisure and tourism:
 - walking, horse-riding and non-motorised vehicles.

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5.0 HAZARDS AND POTENTIAL EXPOSURE (SCREENING ASSESSMENT)

This section identifies the potential hazards (i.e. the pathways through which the inert waste recovery facility at Milverton could affect interest features of the Skerries Islands SPA) and whether the exposure to a particular hazard is likely to have a significant effect.

The main purpose of this stage is to screen out those aspects of the project that can be considered not likely to have a significant effect, as well as those qualifying features of the relevant Natura 2000 sites that are not likely to be significantly affected from the exposure to a potential hazard and/or pathway. This is essentially a risk assessment to decide whether a more detailed assessment is required, and if so, the scope of the issues and features to be addressed. If it cannot be concluded with confidence that adverse effects are unlikely, then under the precautionary principle, it is assumed that the issue requires more detailed consideration.

Significant effects are defined in terms of changes to the baseline conditions of one or more the qualifying interest features for which Skerries Islands SPA was classified, whether negative or positive, and which are likely to be directly and indirectly attributable to the proposed inert waste recovery facility at Milverton, either alone or in-combination with other plans or projects.

5.1 Hazard Identification and Potential Exposure

A review of the potential hazards, based on the proposed development and vulnerabilities of the Skerries Island SPA, that might affect the interest features for which the site was designated and the potential exposure of the interest features from the proposed inert waste recovery facility at Milverton, has identified the following potential hazards:

- changes to surface water quality in the Mill Stream that outflows into the Irish Sea at Skerries.

5.1.1 Assessment of Potential Effects on Surface Water Quality

A discharge is considered likely to have an adverse effect if it can be shown that it has the potential to cause, or is likely to be attributable to, the failure of environmental water quality standards for the receiving coastal waters at Skerries.

Where the environmental water quality standards are already being failed in the receiving waters, it is important that any alteration in water quality caused by a discharge is considered, whether this is a deterioration or improvement of water quality. A significant effect is considered likely where any of the discharges would lead to a deterioration of, or improvement of, water quality >1% of any environmental water quality standards. It is important to note that the alteration in water quality is measured at the relevant Natura 2000 site and not at the point of discharge.

The coastal waters at Skerries including the waters around the Skerries Islands are assessed as being 'high' quality under the Water Framework Directive (WFD).

The Mill Stream is assessed as being of 'good' quality under the WFD but is not routinely monitored for its water quality by the EPA.

The quarry at Milverton is licensed to discharge waters to the Mill Stream under a discharge licence (Discharge Licence No. WPW/F/074 issued on May 2011). Under this licence Roadstone Limited is permitted to discharge trade effluent, subject to a number of conditions. A copy of the Licence to Discharge is presented at Appendix B.

Water quality samples taken from the Mill Stream (SW01 and SW02) and from the flooded quarry void (SW03) indicate that water quality in the flooded quarry void is generally of good quality. Slightly elevated levels of chloride are attributed to the coastal location of the site and elevated nitrates to agricultural practices. Table 2 presents the results of samples taken in 2009, 2010 and 2014.

Table 2: Water Quality Sampling Results

Parameters	Sampling Locations						
	08/01/2009	26/11/2010			28/05/2014		
	SW01	SW01	SW02	SW03	SW01	SW02	SW03
Field Tests							
Temperature °C	1.33				12.5	12.6	16.1
Conductivity µS/cm	300				578	580	534.7
pH	8.59				8.66	8.71	8.71
Dissolved Oxygen %	14.94				31.8	32.6	36.2
Laboratory Tests							
Total Hardness (mg/l)	354				360	318	180
Total Alkalinity (mg/l)	300				295	380	160
Dissolved Solids (mg/l)		463	453	338	517	513	357
COD (mg/l)		11.6	9.54	<7	<7	<7	<7
TOC (mg/l)	-				381	3.98	4.1
BOD (mg/l)	4	1.15	1.11	1.43	<1	<1	2.19
DRO (µg/l)	<10				-	-	-
PRO (µg/l)	<10				-	-	-
EPH (C10-C40) (ug/l)					<46	<46	<46
Mineral Oil (µg/l)	<10				<10	<10	<10
Benzene (µg/l)	<10				<7	<7	<7
Toluene (µg/l)	<10				<4	<4	<4
Ethylbenzene (µg/l)	<10				<5	<5	<5
Total Xylene (µg/l)	<10				<8	<8	<8
TPH / oil and Greases (mg/l)		<1	<1	<1			

Parameters	Sampling Locations						
	08/01/2009	26/11/2010			28/05/2014		
	SW01	SW01	SW02	SW03	SW01	SW02	SW03
Sulphide (mg/l)					<0.01	<0.01	<0.01
Dissolved Aluminium (ug/l)					14.5	8.34	<2.9
Dissolved Sodium (mg/l)	21.9				20.6	19.4	23.3
Dissolved Potassium (mg/l)	2.7				1.88	2.12	6.85
Dissolved Calcium (mg/l)	119.3				138	132	65.2
Dissolved Iron (ug/l)	40				0.0717	0.0581	<0.019
Dissolved Magnesium (mg/l)	13.69				13.8	13	12.2
Dissolved Manganese (ug/l)	<1				34	17.5	84.4
Chloride (mg/l)	50	37.5	37.6	37	41.4	42.2	42.3
Ammoniacal-N (mg/l)	<0.2	0.496	0.156	0.122	<0.2	<0.2	<0.2
Nitrite (mg/l)	0.11				0.089	0.091	0.124
Nitrate (mg/l)	45.3	30.5	30.5	25.2	24.1	24.9	10.4
Sulphate (mg/l)	62	60.9	62	53.7	49.8	50.3	50
Phosphate (ortho) (mg/l)	0.07				0.214	0.209	<0.05
Phosphorus (infiltered) (ug/l)		99.7	195	<20			
Total Suspended Solids (mg/l)		8	7.5	<2	9	6	2

Based on the sampling results, it is considered that the discharge of groundwater from dewatering operations will be largely compliant with the conditions of the existing discharge licence and is not anticipated to result in any significant deterioration in the water quality of the Mill Stream. It is considered that the inert waste recovery facility will not necessitate any submission for a change in the discharge licence in respect of volume or consented limits and/or exceedance of existing quality limits for any dewatering operations.

As the dewatering operations are not anticipated to result in any significant deterioration in water quality of the Mill Stream, the current baseline water quality of the coastal waters at Skerries will not be affected by off-site discharges. Therefore no significant effects are predicted on any of the qualifying birds of the Skerries Islands SPA, in light of the conservation objectives for these features, or on the integrity of this Natura 2000 site from any dewatering operations at Milverton.

The operation of the inert waste recovery facility is not anticipated to significantly alter the chemical composition of any waters that will be discharged from the site to the Mill Stream but has the potential to result in an increase in levels of suspended solids entering the Mill Stream and has an increased risk of pollution from the accidental spillages of fuel and oils.

However, through the provision of settlement lagoons and a hydrocarbon interceptor as part of the surface water management system that will be installed as part of the in-built design of the inert waste recovery facility, the levels of suspended solids are expected to achieve compliance with the conditions as set out in the Discharge Licence and the risk of pollution is negligible and no adverse impact on the coastal water quality is predicted.

No significant effects are therefore predicted on any of the qualifying birds of the Skerries Islands SPA, in light of the conservation objectives for these features, or on the integrity of this Natura 2000 site from any off-site water discharges during the operation of the inert waste recovery facility at Milverton.

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6.0 ASSESSMENT OF EFFECTS OF THE PROPOSED PROJECT

Based on the screening of potential hazards outlined above in Section 5.0, the operation of an inert waste recovery facility at Milverton is not likely to have any significant stand-alone adverse effects on the integrity of the Skerries Islands SPA, or on any of the qualifying birds for which this site has been classified as being of European importance. It is therefore considered that no further assessment is required for the proposed granting of a waste licence for this project as a stand-alone project.

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7.0 AVOIDANCE AND MITIGATION

As no effects are predicted on the Skerries Islands SPA or on any qualifying birds, no other specific avoidance and mitigation measures are proposed in respect of this project over and above those measures included within the overall scheme design.

Notwithstanding this, Roadstone Limited will ensure the operation of the inert waste recovery facility is undertaken in accordance with “best practice” and appropriate guidelines for example the Department of the Environment, Heritage and Local Government (DoEHLG) Quarries and Ancillary Activities – Guidelines for Planning Authorities⁶ and the EPA’s Environmental Management in the Extractive Industry guidelines⁷ and in a sensitive manner and with all due regard to current wildlife legislation in respect of European sites and their qualifying habitats and species.

Under the existing discharge licence WPW/F/074, Roadstone Limited will monitor water quality of any water discharged from the quarry site as per the requirements of the Discharge Licence No. WPW/F/074, to ensure compliance with the parameters set under the conditions of the licence.

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⁶ Department of the Environment, Heritage and Local Government (2004). *Quarries and Ancillary Activities – Guidelines for Planning Authorities*. DoEHLG.

⁷ Environmental Protection Agency (2006). *Environmental Management Guidelines – Environmental Management in the Extractive Industry (Non-Scheduled Minerals)*. EPA, Wexford.

8.0 IN-COMBINATION ASSESSMENT

It is a requirement of The European Communities (Birds and Natural Habitats) Regulations 2011 that, when considering whether a plan or project will adversely affect the integrity of a Natura 2000 site that it must take into account in-combination effects with other current or reasonably foreseeable plans and projects.

There is no single agreed method for addressing the issue of in-combination effects, however, current practice and available guidance suggests a staged approach which takes into account the following:

- i. if it can be clearly demonstrated that the plan or project will not result in any effects at all that are relevant to the integrity of a Natura 2000 site then the plan or project should proceed without considering the in-combination test, further; or
- ii. if there are identified effects arising from the plan or project even if they are perceived as minor and not likely to have a significant effect on the integrity of a Natura 2000 site alone, then these effects must be considered 'in-combination' with the effects arising from other plans and projects.

From the screening assessment undertaken here, it is considered that it can be clearly demonstrated that the inert waste recovery facility at Milverton is not likely to result in any measureable effects on the coastal waters at Skerries and which would impact upon the qualifying birds of the Skerries Islands SPA as a stand-alone project.

It is therefore considered that there is no requirement in this case to undertake any further assessment of in-combination effects with other plans and projects.

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9.0 SUMMARY AND CONCLUSIONS

This Natura Impact Assessment has considered the potential effects associated with the operation of an inert waste recovery facility at Milverton on Natura 2000 sites within a 15km radius of the proposed project.

The assessment has concluded that the operation of an inert waste recovery facility will not have an adverse effect on the integrity of any Natura 2000 site, or on any of the qualifying habitats and/or species for which a site has been designated/classified as being of European importance, either as a stand-alone development or in-combination with other plans or projects.

Based on the findings from this assessment, it is considered there is not a requirement to proceed to a Stage 2 Appropriate Assessment for the waste licence application for the proposed inert waste recovery facility at Milverton.

9.1 Natura Impact Statement –Summary

A summary of the NIS and findings of no significant effects in line with the methodology set out in the 'Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites Methodological Guidance on the Provision of Article 6(3) and (4) of the Habitats Directive 92/43/EEC' is provided in Table 3 below.

Table 3: Finding of No Significant Effects Report

Name of project or plan	Operation of an inert waste recovery facility providing for the backfilling and restoration of a quarry void at Milverton, Skerries, Co. Dublin
Name and location of Natura 2000 site(s)	<p>The following sites lie within a 15km radius of the proposed development site:</p> <ul style="list-style-type: none"> • Skerries Islands SPA [004122], 1.9km east northeast at closest point; • Rockabill to Dalkey Island SAC [003000], 3.1km east; • Rockabill SPA [004014], 4.2km northeast; • Rogerstown Estuary SAC [000208], 5.5km south; • Rogerstown Estuary SPA [0004015], 5.5km south; • Lambay Island SPA [004069]; 9.4km southeast; • Malahide Estuary SAC [000205], 10.2km south; • Malahide Estuary SPA [004025], 10.2km south; and • River Nanny Estuary and Shore [004158], 11.2km northwest. <p>Of the above sites, only the Skerries Islands SPA has been deemed relevant to this project</p>
Description of the project/plan	Importation of inert waste material including soils, stones and some limited volumes of pre-processed construction/demolition to infill the existing quarry void as part of the overall proposed quarry restoration scheme, as approved by Fingal County Council (under Condition No. 13 of Planning Ref. Q/05/003).
Is the project or plan directly connected with or necessary to the management of the site?	No

Are there other projects or plans that together with the project or plan being assessed could affect the site? No

The assessment of significance of effects

Describe how the project or plan (alone or in combination) is likely to affect the Natura 2000 sites No direct impacts are predicted on the integrity of the Skerries Islands SPA and on any individual qualifying birds for which this site is classified as being of European importance.

The inert waste recovery facility will contribute to an existing consented discharge to the Mill Stream that outflows into the Irish Sea at Skerries. Any changes in the water quality of the Mill Stream as a result of any dewatering of the flooded quarry void and discharge of surface water run-off during the operation of the inert waste recovery facility at Milverton has the potential to affect coastal water quality at Skerries that may indirectly affect the qualifying birds of the Skerries Islands SPA.

Explain why the effects are not considered significant

All water discharged from the site to the Mill Stream either from dewatering operations or through the operation of the inert waste recovery facility is expected to be in compliance with an existing and consented discharge licence (WPW/F/074 issued by Fingal County Council) that has prescribed discharge limits on a number of parameters in respect to water quality.

The dewatering of the quarry void and operation of the inert waste recovery facility is not predicted to result in any significant deterioration of water quality in the Mill Stream or on the current baseline water quality of the coastal waters at Skerries, given the measures to manage and treat any dewatered groundwater or run-off before its discharge off-site (for example installation of settlement lagoons and hydrocarbon interceptor).

Therefore, no significant effects are predicted on any of the qualifying birds of the Skerries Islands SPA, on the conservation objectives or the integrity of this Natura 2000 site, from any dewatering operations or from the operation of an inert waste recovery facility at Milverton.

List of agencies consulted: provide contact name and telephone or e-mail address None.

Response to consultation Not applicable

Data collected to carry out the assessment

Who carried out the assessment	Sources of data	Level of assessment completed	Where can full results of the assessment be accessed / viewed?
Steve Judge Senior Ecologist MCIEEM and employee of SLR	NPWS, EPA and Eastern River Basin District	Stage 1 – Screening Assessment Review of desk-top information relating to the Natura 2000 sites and qualifying features. The assessment is qualitative, based on best practice and professional experience.	This document and supporting documentation including Environmental Impact Statement presented as part of the Waste Licence Application

10.0 CLOSURE

This report has been prepared by SLR Consulting Ireland with all reasonable skill, care and diligence, and taking account of the manpower and resources devoted to it by agreement with the client. Information reported herein is based on the interpretation of data collected and has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of Roadstone Limited, no warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.

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Skerries Islands SPA Site Synopsis

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APPENDIX A

SITE NAME: Skerries Islands SAC

SITE CODE: 004122

The Skerries Islands are a group of three small uninhabited islands situated between 0.5 km and 1.5 km off the north Dublin coast. Shenick Island and St. Patrick's Island are of similar size, with Colt Island being somewhat smaller. Shenick Island is of most interest geologically, being composed of Ordovician volcanic siltstones and shales on the boundary between the Carboniferous and the Silurian. All are lowlying islands, with maximum heights from 8 m to 13 m above sea level. There are the remains of a Martello Tower on Shenick Island and an early christian church on St. Patrick's.

St Patrick's Island and Colt Island have low cliffs, while Shenick Island has more extensive expanses of intertidal rocky shore and sand flats. Shenick also has a shingle bar and is connected to the mainland at low tides. The vegetation of the islands is dominated by rank grasses, brambles and species such as hogweed (*Heracleum sphondylium*). The seas surrounding the islands, to a distance of 200 m, are included in the site.

The islands are of importance for both breeding seabirds and wintering waterfowl.

A survey of breeding seabirds on St Patrick's Island, the main seabird island, in 1999 recorded the following: Fulmar (10 pairs), Cormorant (558 pairs), Shag (100 pairs), Lesser Black-backed Gull (1 pair), Herring Gull (150 pairs) and Great Black-backed Gull (50 pairs). Shenick Island has breeding Fulmars (25 pairs in 1999), Herring Gulls (120 pairs in 1996) and Great Black-backed Gulls (25 pairs in 1996). Large gulls also breed on Colt Island but there has been no census in recent years. The Cormorant population, which was only established in the early 1990s, is of National Importance and when taken together with the nearby associated colonies on Lambay and Ireland's Eye, this group comprises about 35% of the total Irish population and is of International Importance. The Shag population is also of National Importance as are the Herring Gull and Great Black-backed Gull populations. Other breeding birds include Shelduck, Ringed Plover and Oystercatcher (several pairs of each).

In winter, the islands regularly support a range of waterfowl species. The following counts are the average annual peaks over the five winters 1995/96 to 1990/00: Cormorant (391), Brent Goose (242), Wigeon (205), Mallard (240), Oystercatcher (463), Ringed Plover (66), Golden Plover (240), Grey Plover (15), Lapwing (238), Purple Sandpiper (46), Dunlin (42), Snipe (27), Curlew (327), Turnstone (242), Black-headed Gull (110), Herring Gull (560), Great Black-backed Gull (250). The Brent Goose population is of International Importance, while the populations of Cormorants, Purple Sandpiper and Turnstone are of National Importance. The islands are also a regular wintering site for Short-eared Owls, with several recorded in most winters.

The birds of the Skerries Islands have been monitored regularly since the 1980s. Shenick Island became a BirdWatch Ireland Reserve in 1987 and some management for the benefit of the birds has taken place.

The Skerries Islands SPA is of high ornithological importance for both breeding seabirds and wintering waterfowl, with six species having populations of National Importance. In addition there is an internationally important population of Brent Goose. Golden Plover and Short-eared Owl, EU Birds Directive Annex I species, occur regularly in winter.

10.11.2003

**Copy of Licence to Discharge Trade Effluent
(Discharge Licence No. WPW/F.074)**

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Received
9/5/11.

Comhairle Contae Fhine Gall Fingal County Council



Environment Business and Enterprise Department
Fingal County Council
County Hall
Main Street
Swords
Co Dublin

Tel No 8905961

Fax No 8905758

Environment Department
P.O. Box 174,
County Hall,
Swords,
Fingal,
Co. Dublin

Roadstone Wood Ltd
Fortunestown
Tallaght
Dublin 24

4th May 2011

An Roinn Seirbhísi Comshaoil
Bosca 174,
Áras an Chontae,
Sord,
Fine Gall,
Contae Átha Cliath

Ref No. in Register WPW/F/074

Enclosed please find Licence permit Ref No WPW/F/074. If you have any queries please contact Jim Kavanagh at 8905963 or email jim.kavanagh@fingalcoco.ie

Yours faithfully

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Telephone
01 890 6280
Facsimile
01 890 6243
Email
envserv@fingalcoco.ie
www.fingalcoco.ie

JIM KAVANAGH
Pollution Officer

Enc



COMHAIRLE CONTAE FINE GALL
FINGAL COUNTY COUNCIL
LICENCE TO DISCHARGE TRADE EFFLUENT TO WATERS

To: Roadstone Wood Ltd.,
Fortunestown,
Tallaght,
Dublin 24.

Ref. Number in Register: **WPW/F/074**

Fingal County Council (hereinafter referred to as "the Council") in exercise of the powers conferred on it by the Local Government (Water Pollution) Acts 1977 and 1990, hereby grants a Licence, Reference Number WPW/F/074 to Roadstone Wood Ltd., (hereinafter referred to as "Licensee") to discharge trade effluent to waters from their premises at Milverton Quarry, Milverton, Skerries, Co. Dublin subject to the following conditions:-

1. The temperature of the treated effluent shall not exceed **25 degrees Centigrade**, or **ambient temperature** if it exceeds **25 degrees Centigrade**.
2. The **pH** of the treated effluent shall lie in the range **6.0 to 9.0**.
3. Over any 24 hour period, the mean concentration of **biochemical oxygen demand (B.O.D.)** in the effluent shall not exceed **10 mg/litre O₂** and the maximum concentration of **B.O.D.** shall not exceed **15 mg/litre O₂**. The total quantity of biochemical oxygen demand discharged in this period shall not exceed **12.96 Kgs**.
4. Over any 24 hour period, the mean concentration of **chemical oxygen demand (C.O.D.)** in the effluent shall not exceed **35 mg/litre** and the maximum concentration of **C.O.D.** shall not exceed **50 mg/litre**. The total quantity of chemical oxygen demand discharged in this period shall not exceed **45.36 Kgs**.
5. Over any 24 hour period, the mean concentration of suspended solids in the effluent shall not exceed **20 mg/litre** and the maximum concentration of **suspended solids** shall not exceed **30 mg/litre**. The total quantity of suspended solids discharged in this period shall not exceed **25.92 Kgs**.
6. The concentration of **Ammonium (as N)** in the effluent shall not exceed **1 mg/l as N**.
The total quantity of Ammonium discharged per day shall not exceed **1.30 Kg as N**.
7. The concentration of **Nitrate** in the effluent shall not exceed **10 mg/l as N**. The total quantity of Nitrate discharged per day shall not exceed **12.96 Kg as N**.
8. The concentration of **Phosphates (as PO₄-P)** in the effluent shall not exceed **1 mg/l as P**.
The total quantity of **Phosphates** discharged per day shall not exceed **1.3 Kg as P**.

9. The concentration of **Total Petroleum Hydrocarbons (TPH's)** in the effluent shall not exceed **5 mg/l**.
The total quantity of **TPH** discharged per day shall not exceed **6.48 Kg**.
10. Over any 24 period, the maximum volume of effluent discharged shall not exceed **1,296 cubic metres**.
11. Other wastewaters (including firewater, accidental spillages etc.) arising on the site shall not be discharged to waters without prior authorisation of Fingal County Council.
12. The effluent discharged shall be of the same nature and composition as described and conditioned in this licence. The effluent shall contain no other substances in such a concentration, nor to be discharged in such a manner as to be harmful or detrimental to public health or to domestic, commercial, industrial agricultural or recreational uses of the receiving waters.
13. All storage tanks for fuel and or chemicals shall be surrounded by a bund capable of retaining 110% of the volume of the largest single tank within the banded area. The intake and outlet for the tanks shall be positioned inside the bund. Provision shall be made to remove and dispose of the rainwater so as to ensure the specified volume is always available within the bund. The bund shall be constructed and maintained by the Licensee to specifications agreed with Fingal County Council.
14. The Licensee shall keep records, in such form as required, of volume, rate of discharge, nature and composition of the trade effluent discharged and these shall be available at all reasonable times for inspection by duly authorised persons as defined in Section 28(9) of the Local Government (Water Pollution) Acts 1977 & 1990. Copies of such records shall be sent to the Council on demand.
15. A record or log-book of cleaning, maintenance and performance of each settling tank shall be kept and made available for inspection at all times by duly authorised persons as defined in Section 28(9) of the Local Government (Water Pollution) Acts 1977 & 1990.
16. The Licensee shall display in a prominent position a notice to the effect that in the event of an accidental discharge, spillage or deposit of any polluting matter which enters or is likely to enter any waters or a sewer, the person responsible shall notify the Council as soon as practicable after the occurrence and the and that failure to do so is an offence under Section 14, Local Government (Water Pollution) Acts 1977 & 1990.
17. A fee of €205.00 per sample collected by the Fingal County Council representative for compliance monitoring is payable to Fingal County Council, this charge covers the cost of sample collection and chemical analysis and is payable on demand.

The Licensee shall monitor the discharge of treated effluent to ensure compliance with the conditions of this licence. Representative samples of the **treated final effluent and the upstream and downstream receiving waters** shall be taken by the Licensee and tested for the chemical and physical characteristics conditioned in this licence using standard methods. The frequency of sampling shall be as necessary but shall not be less than **12 times per year (monthly)**.

The costs of all such tests shall be borne by the Licensee.

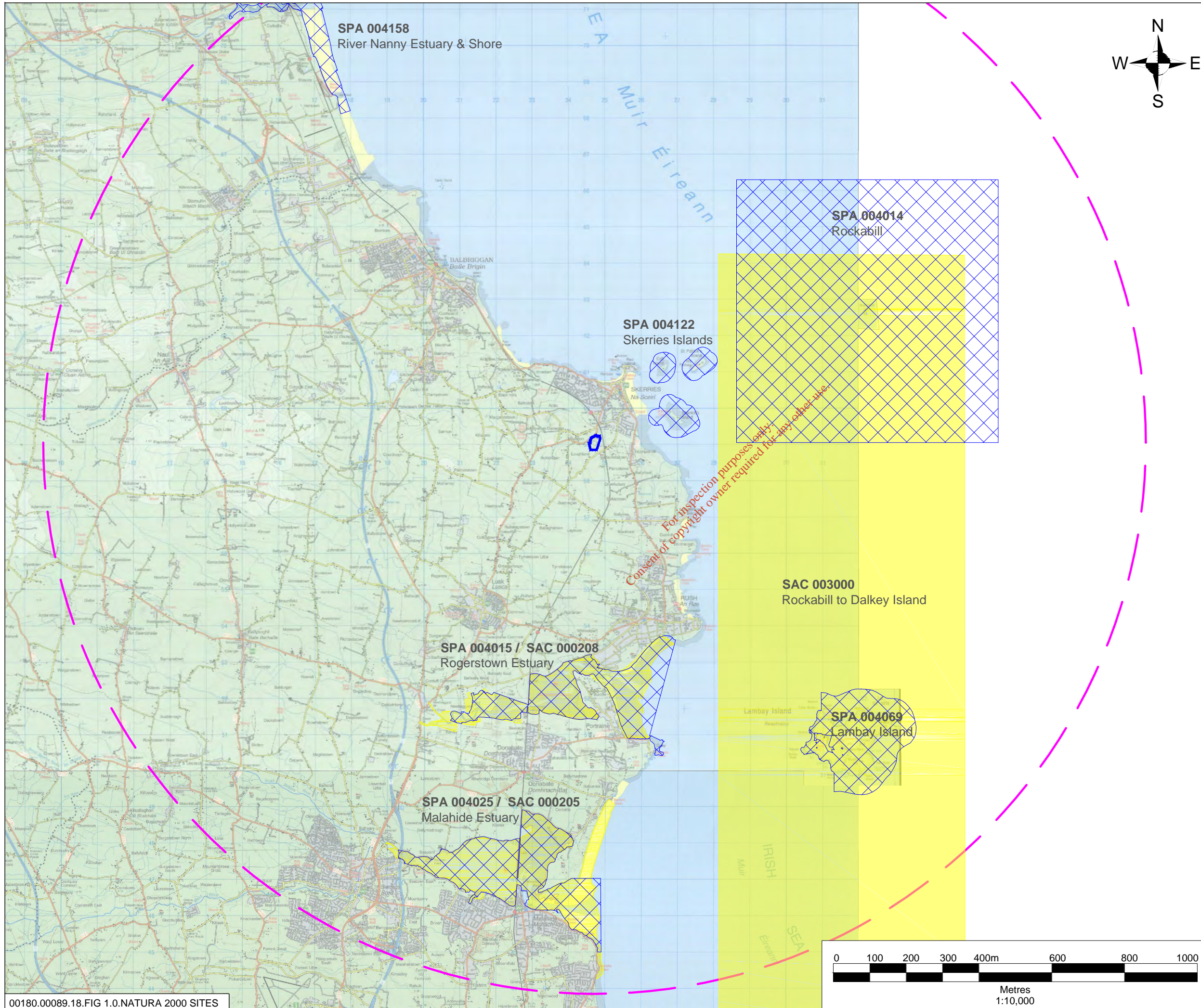
18. The applicant shall permit authorised persons as defined in Section 28(9) of the Local Government (Water Pollution) Acts 1977 & 1990 as Amended, to inspect, examine and test, at all reasonable times, any works and apparatus installed in connection with the trade effluent and to take samples of the trade effluent.
19. The Licensee shall submit monitoring results to Fingal County Council on a quarterly basis.
20. Failure to comply with any of these conditions will result in prosecution under section 16(9) of the Local Government (Water Pollution) Acts 1977 & 1990. A conviction could result in substantial fines (up to €5,000) and/or imprisonment.
21. The Licensee shall notify Fingal County Council on receipt of the EPA Waste Management Act licence. This licence issued under the Water Pollution Act will then be revoked by Fingal County Council.



Authorised Officer

Dated this 29th day of April 2011

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NOTES

1. Based on OSi 25inch Dublin Sheet No. 5 & 5a
2. Ordnance Survey of Ireland Licence No. SU 0000714 (c) Ordnance Survey of Ireland & Government of Ireland

LEGEND

	Applicant's Land Interest (c. 8.6ha)
	Waste Licence Application Area (c. 7.9ha)
	Special Area of Conservation (SAC)
	Special Protection Area (SPA)
	15km Radius from the Site

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ROADSTONE LTD.
WASTE LICENCE APPLICATION

WASTE RECOVERY FACILITY,
MILVERTON, SKERRIES, CO. DUBLIN

NATURA 2000 SITES
Appropriate Assessment
Screening Report (Stage 1)

FIGURE 1

Scale: 1:10,000 @ A3 Date: JUNE 2014