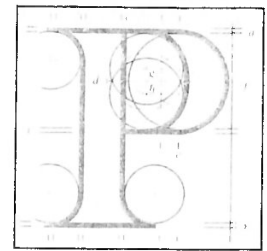


Ref: SU 07.SU00
Ref: QSP83
ar Ref:

P/S 226

D Daly

An Bord Pleanála



Development Applications Unit,
Department of Arts, Heritage and
The Gaeltacht,
Newtown Road,
Wexford.

12th March 2014

Application **Re:** Existing quarry operation and associated works.
Shannapheasteen, Co. Galway.

Dear Sir/Madam,

I have been asked by An Bord Pleanála to refer to the above mentioned application.

The Board is of opinion that, in the particular circumstances of this application, it is appropriate in the interests of justice to request you to make submissions or observations in relation to the enclosed submission dated 12th March, 2014 received from McCarthy Keville O'Sullivan Ltd in response to a notice issued by the Board (copy attached).

In accordance with section 131 of the Planning and Development Act 2000 you are requested to make any submissions or observations that you may have in relation to this enclosure on or before **1st April, 2014**. The Board cannot consider comments that are outside the scope of the matter in question. Your submission in response to this notice must be received by the Board not later than **5.30 p.m. on the date specified above**.

Please quote the above reference number in any further correspondence.

Yours faithfully,

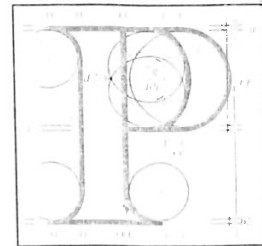
Muiriosa Cassells
Executive Officer
Direct Line: 01-8737135

Encls.
SC131

Registered Post

Our Ref: SU 07.SU0038
P.A.Reg.Ref: QSP83

An Bord Pleanála



The Secretary
Planning Section,
Galway County Council
Post Office Box No. 27,
County Hall,
Prospect Hill,
Galway.

12th March 2014

Application **Re:** Existing quarry operation and associated works.
Shannapheasteen, Co. Galway.

Dear Sir/Madam,

I have been asked by An Bord Pleanála to refer to the above mentioned application.

The Board is of opinion that, in the particular circumstances of this application, it is appropriate in the interests of justice to request you to make submissions or observations in relation to the enclosed submission dated 12th March, 2014 received from McCarthy Keville O'Sullivan Ltd in response to a notice issued by the Board (copy attached).

In accordance with section 131 of the Planning and Development Act 2000 you are requested to make any submissions or observations that you may have in relation to this enclosure on or before **1st April, 2014**. The Board cannot consider comments that are outside the scope of the matter in question. Your submission in response to this notice must be received by the Board not later than **5.30 p.m. on the date specified above**.

Please quote the above reference number in any further correspondence.

Yours faithfully,

Muiriosa Cassells
Executive Officer
Direct Line: 01-8737135

Encls.
SC131

Registered Post

File With _____

SECTION 131 FORM

Application No SU 038

Defer Re O/H ☐

TO:SEO

Having considered the contents of the submission dated/ received 12/3 from

McLenny Reille D'Sullivan

I recommend that section 131 of the Planning and Development Act, 2000

be/not be invoked at this stage for the following reason(s):

Resp. relates to SAC etc

E.O.: [Signature]

Date: 12/3/14

To EO: Ms Cassells

[Signature]

~~Section 131 not to be invoked at this stage.~~ ☐

Section 131 to be invoked – allow 3 weeks for reply. ☒

DAU + PA

S.E.O.: [Signature]

Date: 12/3/14

S.A.O.: [Signature]

Date: _____

M S Collin

Please prepare SL131 Amended - Section 131 notice enclosing a copy of the attached submission

to: P.A. + DAU

Allow 3 weeks – SU _____

EO: Muirios Cassells

Date: 12/3/14

A.A.: [Signature]

Date: 12.3.14

CORRESPONDENCE

Application No: SU 00 38Please treat correspondence received on 12/3 as follows:M S Collins

- (i) Update database with new agent _____
- (ii) Acknowledge with ~~SU~~ SC 20
- (iii) Keep copy of Board's letter Yes/No
- (iv) Other

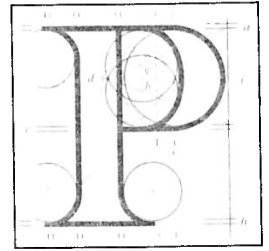
Comments

- (v) Attach to file
- (vi) Return to E.O.

M Casals E.O. Rashy Gell A.A.
12/3/14 Date 12-3-14 Date

Our Ref: SU 07.SU0038
P.A.Reg.Ref: QSP83
Your Ref: Connemara Granite Teoranta

An Bord Pleanála



McCarthy Keville O'Sullivan Ltd,
Block 1, G.F.S.C.
Moneenageisha Road,
Galway.

11th March 2014

Application **Re:** Existing quarry operation and associated works.
Shannapheasteen, Co. Galway.

Dear Sir/Madam,

I have been asked by An Bord Pleanála to refer to the above-mentioned application for substitute consent.

The Board has examined the application and is of the opinion that certain information is necessary for the purpose of enabling it to determine the application.

In accordance with section 132 of the Planning and Development Act 2000 you are required to submit, on or before **31st April, 2014** the following information:

Your specific comments on the submission from Department of Arts, Heritage and the Gaeltacht sent to you on 12th August 2013 and in particular confirmation that the quarry has not been extended into the SAC since its designation.

If the information required is not received before the end of the specified period, the Board will dismiss or otherwise determine the application without further notice to you in accordance with section 133 of the 2000 Act. Your submission in response to this notice must be received by the Board not later than **5.30 p.m. on the date specified above.**

Please quote the above reference number in any further correspondence.

Yours faithfully,

Muiriosa Cassells
Executive Officer
Direct Line: 01-8737135

SC 132

Registered Post

Muiriosa Cassells

From: procbordemail
Sent: 12 March 2014 11:18
To: Muiriosa Cassells
Subject: FW: 120417 - Connemara Granite - Quarry Substitute Consent - Ref: SU 07.SU0038
Attachments: 2013.08.27 S131 Eco Response to ABP.PDF

Importance: High

From: Bord
Sent: 12 March 2014 10:41
To: procbordemail
Subject: FW: 120417 - Connemara Granite - Quarry Substitute Consent - Ref: SU 07.SU0038
Importance: High

From: Mark Whittaker [<mailto:MWhittaker@mccarthykos.ie>]
Sent: 12 March 2014 10:21
To: Bord
Cc: Bernadette Rabbitt
Subject: 120417 - Connemara Granite - Quarry Substitute Consent - Ref: SU 07.SU0038
Importance: High

Dear Sirs

I refer to your letter dated 11th March 2014 in connection with a current substitute consent application for a quarry at Shannapheasteen, Co. Galway (Your Ref: SU 07.SU0038).

Please find attached our specific response to the comment raised by the Dept. Arts, Heritage & Gaeltacht, as requested in your letter.

This response has been incorporated into our earlier submission (see pages 3-10 of the attached) and the attached document represents our complete response in this case.

Please note that this is our full response to your letter and, therefore, we would ask that the assessment of the application is progressed.

I trust this is in order and look forward to hearing from you further.
Please confirm safe receipt of this correspondence.

Regards

Mark

Mark Whittaker
Senior Planner

McCarthy Keville O'Sullivan Ltd.
Planning & Environmental Consultants

Block 1, G.F.S.C. Moneenageisha Road, Galway.
T (091) 73 56 11 || F (091) 77 12 79 ||

This email and any attached files or emails transmitted with it are confidential and intended solely for the use of the individual(s) or entity to whom it is addressed. If the reader is not a representative of the intended recipient(s), any review, dissemination or copying of this message or the information it contains is prohibited. If you have received this email in error please notify the sender of the email and delete the material from any computer. McCarthy Keville O'Sullivan Ltd. does not represent or warrant that any attachment hereto is free from computer viruses or other defects. The opinions expressed in this e-mail and any attachments may be those of the author and are not necessarily those of McCarthy Keville O'Sullivan Ltd.

An Bord Pleanála

64 Marlborough Street
Dublin 1

27th August 2013

Our Ref: 120417

Your Ref: SU 07.SU0038

**Re: Application for Substitute Consent for Quarry at Shannapheasteen, Co. Galway
S.131 Correspondence – Submission from DAU (DAHG)**

Dear Sirs,

We refer to your letter dated 12th August 2013 in relation to the above application for substitute consent for a quarry operation at Shannapheasteen, Co. Galway. Your letter is seeking comments in relation to a submission received from the Development Applications Unit (DAU) of the Department of Arts, Heritage & the Gaeltacht (DAHG) in connection with the application.

On behalf of our clients, **Connemara Granite Teoranta** and **Stephen Larkin**, please find attached a response to the above submission prepared by Marie Louise Heffernan (M.Sc., MIEEM), Aster Environmental Consultants Limited. This response fully addresses the matters raised in the DAU's submission and, in particular, confirms that the quarry has not been extended into the Special Area of Conservation (SAC) since its designation. It also sets out an additional assessment of the impacts of quarrying on those habitats for which the SAC is designated and confirms that the conclusions of the remedial Natura and Environmental Impact Statements remain valid in that the quarrying has no significant impact on the conservation objectives of any Natura 2000 site.

Further to the above, we have also attached a further copy of the 5-year Environmental Management Plan for the quarry and the associated Compliance Report for 2012. These documents were previously submitted as an appendix to the Remedial EIS. Both these documents predate the Substitute Consent process and are considered to demonstrate our clients' positive attitude to meeting their environmental obligations and responsibilities. These documents are also relevant to the DAU's comments and, indeed, they have been the subject of meetings with senior staff of the National Parks and Wildlife Service and Inland Fisheries Ireland. Our clients are committed to the Environmental Management Plan and a key purpose of these meetings was to ensure that the Plan is relevant, effective and robust.

You will also recall that we responded to an earlier Section 131 request on 16th July 2013, in relation to a submission from Ms. Catherine O Ceoinin. We understand that our response to the Board was copied to Ms. O Ceoinin and, indeed, we have received a further letter direct from this third party. In this regard, we are happy to note that Ms. O Ceoinin has no objection to the subject quarry development. We would request that this letter be placed on the public record and, in the event that Ms. O Ceoinin's letter was not copied to the Board, we have enclosed a copy. However, Ms. O Ceoinin continues to suggest a link between our clients and Larkin Quarries. We would

again reiterate that Connemara Granite has no relationship or connection with Larkin Quarries. Jimi Larkin was never a shareholder or owner of Larkin Quarries and Connemara Granite Teo is not an offshoot of Larkin Quarries. We also note that Ms. O Ceainin's remarks about Galway County Council and its councillors are unsubstantiated and, we believe, without foundation.

We look forward to hearing from you further in due course.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'Mark Whittaker', with a long horizontal flourish extending to the right.

Mark Whittaker B.Sc. (Hons) TP, MIPI
Senior Planner
McCarthy Keville O'Sullivan Ltd

Encls:

- Sheannapheasteen Quarry Environmental Management Plan 2011-2015
- Sheannapheasteen Quarry Environmental Management Plan Compliance Report 2012
- Letter dated 19th August 2013 from Ms. Catherine O Ceoinin.



Rusheenduff, Renvyle Co. Galway,

095 43090 / 086 8278031

www.aster.ie

The NPWS observations and recommendations can be summarised in 4 sections

1. NPWS are seeking a timeline of ecological impacts in relation to the directives on EIA (1990) and designation of Connemara Bog Complex SAC (1997).
2. NPWS states that orthophotographs show that quarrying has extended into the designated Areas. They express concern of direct loss of Annex I habitats within the SAC over time as well as indirect impacts on the surrounding habitat function and structure.
3. NPWS seeks additional assessment (RNIS) on the impacts of quarrying for those habitats for which the SAC is selected.
4. NPWS requests that the works at Glenicmurrin Lough be assessed under in-combination effects.

1. Timeline of Ecological impacts

Given that no baseline ecological studies exist which predate the quarry such an assessment is a predictive assessment based on the limited retrospective information as well as current landscape and ecology. Such an assessment is by its nature limited. In the REIS it is acknowledged that the opening of a quarry here would have had historical impacts on flora and habitats and that these may be classified as permanent significant negative impacts. The habitats and species lost at that time are assumed to be similar to those in the adjacent landscape.

The only available evidence of the ecological impact of the quarry in the period requested are the OSI aerial photographs of 1995 and 2000. The 1995 photograph is post EIA directive and is black and white and of poor quality and the subsequent aerial photographs are colour and post directive. However it is clear that Quarry operations changed little between 1995 and 2000. The Quarry expanded its overall area between 2000 and 2005 and the most recent orthophotographs 2010 show little or no expansion since that time. It is estimated that between 2000 and 2005 the quarry expanded its worked area by c1ha. The expansion was within the already worked area with the main area of additional expansion into the area of cutover bog and spoil heaps to the north. During this time from 1997 until 2006 the SAC boundary was the river to the south of the site (blue boundary on NPWS maps).

2. Quarry has been extended into SAC since designation.

The blanket bog area identified on the habitat map was included in the quarry area in error as this area is not part of the area for which substitute consent is applied. Whilst this area is within the REIS study area, it does not form part of the application site area. No quarrying activities ever have taken place in this area. It is accepted that part of the quarry edge towards the river is within the current SAC designation. This area is calculated as two areas 40m² and 60m² in size, together 100m² or 0.1ha.

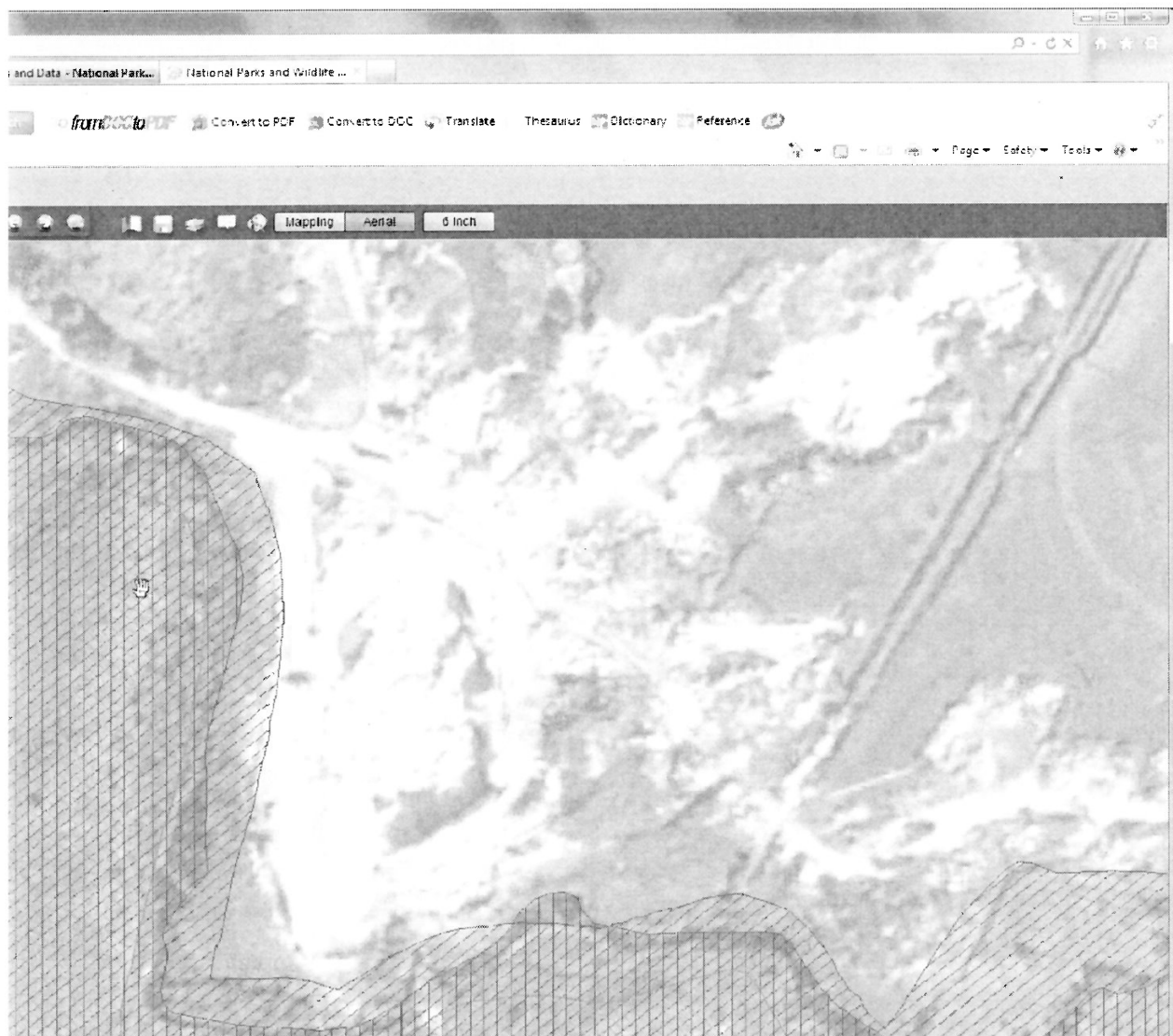
Looking at the aerial photographs from 1995, 2000 and 2005 and the NPWS viewer it can be seen that the quarry has not expanded towards the river during this period, but that the designation has been extended towards the quarry from 2006 onwards for Salmon and Bird Protection.

The Connemara Bog Complex was proposed for designation as a Special Area of Conservation under the Habitats Directive in 1997. The boundary was extensively surveyed and mapped in 1995. This mapping can be seen as the blue boundary on the NPWS map viewer (see extract over).

The Connemara Bog Complex SAC was proposed for extension in 2006 to protect Salmon rivers (red diagonal hatching) and it was at this time that all salmon SACs were extended to include a buffer zone along the river and so at this time the boundary moved from the original SAC edge a further c20m towards the quarry. Buffers on salmonid rivers were not surveyed by the NPWS on the ground; instead a buffer was applied digitally a set distance from the river edge. Surveyed Natura 2000 site boundaries are always easily recognised on the ground as they follow fences, hedges, ditches, rivers and tree lines. Clearly here the boundary is not following features on the ground but is a set distance from the original blue boundary which would have been mapped on a 6 inch map to follow the river. The 2006 SAC boundary also has been selected to encompass a small stream feeding into the river.

The SPA Connemara Bog Complex was proposed for designation in 2011 and this is indicated by the vertical red lines shown on the extract map (over). This boundary is for bird protection and it follows the line of the river as seen on the aerial photographs.

Therefore, the Quarry has not expanded into the SAC, rather the SAC has expanded towards the Quarry. The Quarry was the same extent that it is now in 2005 and the designations have extended towards the quarry in recent years. The Quarry owners are very aware of the nature conservation value of the surrounding land and wish to maintain its conservation value through good management practice. In 2010 a management plan was prepared in consultation with NPWS and Inland fisheries with a view to protection of the SAC and the adjacent river system. This plan was appended to the substitute consent application and a further copy of it and the 2012 Compliance report is attached herewith.



3. NPWS seeks additional assessment (RNIS) on the impacts of quarrying for those habitats for which the SAC is selected.

Habitat Type	Conservation Status	Conservation Assessment
Blanket Bog (*Active Only) [7130]	It is calculated that 66% of Connemara Bog Complex is designated as Active Blanket Bog. Much of the area surrounding the Quarry is included in the designation . The Connemara Bog Complex is 48,997.95ha A vast area of lowland Atlantic blanket bog, providing one of the best examples of this habitat type in Ireland. Much of this habitat is intact fragmented by housing at the edges and large tracts of forestry.	According to the Natura 2000 form the blanket bog on this site is an excellent example and scores and is classified as an A rated example in all four categories of the assessment these being REPRESENTATIVITY RELATIVE SURFACE CONSERVATION STATUS GLOBAL ASSESSMENT
Depressions on Peat substrates of the Rhychosporion [7150]	Only 1% of Connemara Bog Complex is classified under this habitat type. This habitat type can occur in pockets on cutover bog. There is evidence of peat cutting in the surrounding area.	According to the Natura 2000 form this habitat on site is in good condition and representative and is classified as an A rated example in three of four categories of the assessment these being REPRESENTATIVITY CONSERVATION STATUS GLOBAL ASSESSMENT It rates as a class B in terms of RELATIVE SURFACE area due to just 1% of the site being classified as this habitat type.
Northern Atlantic Wet Heaths with Erica tetralix [4010]	Only 2% of Connemara Bog Complex is classified under this habitat type. Most of this site is deep Blanket bog and wet heath appears where the bogs become shallower at edges of roads and lakes. As a result of its positioning and shallower nature it is often more prone to development.	According to the Natura 2000 form the wet heath on site classified as an B rated example in all four categories of the assessment these being REPRESENTATIVITY RELATIVE SURFACE CONSERVATION STATUS GLOBAL ASSESSMENT
Oligotrophic waters containing very few materials of sandy plains (Littorelletalia uniflorae) [3110]	It is estimated that 13% of Connemara Bog Complex is classified under this habitat type. Connemara is of particular interest for its aquatic habitats and species.	According to the Natura 2000 form the oligotrophic waters on this site are an excellent example of this habitat type and scores and is classified as an A rated example in all four categories of the assessment these being REPRESENTATIVITY RELATIVE SURFACE CONSERVATION STATUS GLOBAL ASSESSMENT

Table 1: Conservation assessment of Habitats within Zone of Influence of Sheannapheasteen Quarry

Habitat	Historical Impact Pre Designation		
	Direct	Indirect	Cumulative
Blanket Bog (*Active Only) [7130]	Possibly some small loss of blanket bog habitat during quarry establishment in the 1930s	Changes in the hydrology of the area would have resulted in more run off from the bare exposed surfaces and edge effects on remaining habitats resulting in drying out and subsequent ecological change. This change may have been significant .	Sheanapheasteen Quarry opened in the 1930s and there were few roads into Connemara at that time the quarry would supplied stone for road building with subsequent impacts for the ecology of the wider area.
Northern Atlantic Wet Heaths with Erica tetralix [4010]	Given the location of the quarry beside the stream and roadway it would seem likely that the main habitat lost over the years would be Wet Heath	Changes in the hydrology of the area would have resulted in more run off from the bare exposed surfaces and edge effects on remaining habitats resulting in drying out and subsequent ecological change. This change may have been significant .	
Depressions on Peat substrates of the Rhychosporion [7150]	There are no houses evident in this area in the 1900s when the 6inch map was prepared therefore it is assumed there would have been little or no peat cutting in the 1930s and thus little or none of this habitat type would have been present in the area.	N/A	N/A
Oligotrophic waters containing very few materials of sandy plains (Littorelletalia uniflorae) [3110]	There is no evidence that the impact directly on the watercourses over its history	In the past it is likely that quarrying resulted in sedimentation entering the river.	The building of roads in the area would probably have had a negative cumulative impact in the past.

Table 2: Impacts on the qualifying interest habitats pre designation

Habitat	Original SAC boundary in 1997 – 2006 Originally Designated to the River (blue line on NPWS viewer)	
	Direct	Indirect
Blanket Bog (*Active Only) [7130]	<p>No direct habitat loss within the quarry area. As the entire quarry at this stage was outside the designated area.</p> <p>The excluded area of blanket bog to the north of the quarry within the boundaries was at this time being cut for turf. Cutting here had been on going for decades.</p>	No changes to quarry operations or status during that period therefore no indirect impacts on ecology of the area.
Northern Atlantic Wet Heaths with <i>Erica tetralix</i> [4010]	<p>No direct habitat loss within the quarry area. as the entire quarry at during this period was outside the designated area.</p> <p>The quarry expanded during this period according to the aerial photographs but this expansion was entirely outside the designated area.</p>	The areas in which the quarry expanded did not border the SAC and no significant indirect impacts are suspected
Depressions on Peat substrates of the <i>Rhychosporion</i> [7150]	No direct habitat loss within the quarry area. as the entire quarry at during this period was outside the designated area.	N/A
Oligotrophic waters containing very few materials of sandy plains (<i>Littorelletalia uniflorae</i>) [3110]	No interference with the watercourses occurred during this period	The quarry operations during this period may have resulted in some siltation reaching the river. This was most likely not significant as the river was known to be used by the Annex II species Otter and Salmon throughout this period

Table 3: Impacts on the qualifying interest habitats post SAC salmon extension designation

Habitat	Current SAC boundary including 2006 Salmon Extension (Red hatching) and SPA designation 2011 (red vertical lines on NPWS viewer) Note: Based on Substitute Consent Map.	
	Direct	Indirect
Blanket Bog (*Active Only) [7130]	No direct habitat loss within the quarry area.	No changes to quarry operations in the vicinity of the blanket bog or status during that period therefore no indirect impacts on ecology of the area.
Northern Atlantic Wet Heaths with Erica tetralix [4010]	<p>The area of wet heath grading to grassland (mainly wet grassland) bordering the river is now included in the designated area and thus there are some direct impacts where the active quarry area (unchanged) overlaps the designated area. The overlap is calculated at 0.1 ha.</p> <p>This area has been subject to management actions in 2011 to protect the river in particular the laying of a terram screen. These management actions were approved as part of a 5 year management plan by NPWS.</p>	No indirect impacts.
Depressions on Peat substrates of the Rhychosporion [7150]	No direct habitat loss within the quarry area a the entire quarry at during this period was outside the designated area.	N/A
Oligotrophic waters containing very few materials of sandy plains (Littorelletalia uniflorae) [3110]	No direct interference with the watercourses occurred during this period	<p>The water management on site is carefully regulated and a water management plan is now in place since 2011 to protect the watercourse from siltation and sedimentation.</p> <p>The river invertebrate (Q value) survey indicate that upstream and downstream of the quarry was classified as ecologically unpolluted. Therefore no significant effects.</p>

Table 4: Impacts on the qualifying interest habitats currently in relation to SAC and SPA

In summary, the more detailed assessment does not change the conclusions or findings of the REIS or RNIS that no significant impacts resulting from the quarry on the Conservation Objectives of the Natura 2000 sites were found.

4. NPWS requests that the works at Glenicmurrin Lough be assessed under incombination effects.

Appropriate Assessment requires consideration of the proposed Substitute Consent for Sheanapheasteen Quarry in combination with other plans or projects, which may give rise to cumulative impacts affecting a Natura 2000 site. Plans and projects in place or proposed for the study area are identified in the RNIS. The works at Glenicmurrin Lough however were not assessed.

According to the 2007 EIS prepared by Tobin engineering this project is planned to supply water to the Village of Costello. The project is substantial in scale involving a regulating weir at the lake with a treatment system in place at Cashla. This lake is within the SAC and the project. The main impacts identified were a threat to water quality due to use of concrete and other materials during construction. Also risk of increased sediments and siltation within the system. Any interference with hydrology has the potential to impact on the species associated with that system. In this case the species are Otter and Salmon in particular as these are Annex II species of the habitats directive.

Given that the potential impacts identified at the Sheanapheasteen quarry are being effectively and successfully mitigated (as evidenced by Q Values) no cumulative impacts are anticipated on Connemara Bog Complex SPA and SAC arising as a result of the Glenicmurrin Lough Water scheme.

Yours Sincerely,

Marie Louise Heffernan



Sheannapheasteen Quarry



5 Year Plan

Environmental Management Plan 2011-2015

Marie Louise Heffernan, MSc, MIEEM, CEnv

Rusheenduff, Renvyle Co. Galway,

095 43090 / 086 8278031

www.aster.ie



Summary

As part of the planning process for a proposed machinery shed, canteen toilet and associated works by Connemara Granite Teo, Galway County Council requested an Appropriate Assessment under the Habitats Directive. Although proposed works in themselves will not have a significant impact on the SAC (see screening report) there is already a probable negative impact on the SAC through the existence of the quarry at this location so close to a salmon river. Appropriate Assessments deal with proposed rather than existing projects and so it was proposed that a management plan with the objective of protecting the SAC be prepared.

The quarry in its present form exists whether or not it is worked or managed. In its current state it requires significant man power to manage water on site and to take actions necessary to revegetate the loose rock and fine material piled up at quarry edges. This management plan represents a clear opportunity to improve the environmental performance of this quarry and to put in place a permanent solution to its risk to the adjacent salmon river.

Main conservation objectives of Sheanapheasteen Quarry Management Plan

- To maintain the Annex II species, in the adjacent river, for which the cSAC has been selected at favourable conservation status: Salmon; Otter.
- To maintain and enhance the water quality of the adjacent river within the SAC Connemara Bog Complex 2034
- To maintain and enhance the ecological value of the other SAC habitat within the land parcel boundary.

Main management issues

There is a risk of silt entering the adjacent salmon river as a result of operations in the quarry.

Main strategies to achieve objectives

The main strategies are water management on site and consolidation and revegetation of loose material.

Table of Contents

1.0 Background to the Management Plan.....	4
2.0 Location Including Site Boundaries	6
3.0 Ownership and legal status	6
4.0 Designated Natura 2000 site Information.....	8
5.0 Description of Activities.....	11
6.0 Environmental Information.....	12
7.0 Management Framework.....	15
8.0 Zoning	23

1.0 Background to the Management Plan

Connemara Granite sought planning permission ref 10/702 to build the following;

- Industrial Building for storage and dry cutting granite
- A building with office, canteen, toilet and changing rooms and car parking place.
- Kingspan Envirocare treatment system proposed together with percolation area and petrol interceptor.
- Bridge with weighing and washing arrangements as well as any related services proposed by the quarry, QY No83 (gross space Floor 299.15sqm)
- Proposed amendment to the entrance of existing access road.

In response to the request for further information from Galway County Council (see below) Aster was commissioned by Connemara Granite to prepare an Appropriate Assessment Report.

“The planning authority is concerned regarding the potential of the development to have adverse effects on the Connemara Bog Complex cSAC , which is a designated European site that forms part of Natura 2000 and which is protected under the EU Habitats Directive (Council Directive 92/43/EEC) and the European Communities (natural Habitats Regulations 1997 (as amended)).

The proposed development site is bordered to the south and to the east by the Connemara Bog Complex cSAC. The southern boundary is a freshwater stream located within the cSAC, which flows into the Fermoyle Lough/Glenicmurrin Lough System, all of which is located within the Connemara Bog Complex SAC, there is a risk that it may have a negative impact on the local freshwater ecology of the cSAC.

Therefore a full appropriate assessment is required and shall be undertaken in compliance with the Directive and regulations and in accordance with the relevant guidance outlined above. The assessment shall be undertaken by a suitably qualified person and shall be informed by an adequate level of ecological expertise. It is also advised to consult with the National Parks and Wildlife Service regarding the scope and contents of the assessment and to include any relevant information in the submitted documentation...”

1.1 Consultation

National Parks and Wildlife Service

A meeting took place with the regional manager Dr Noel Kirby on September 27th 2010 at NPWS offices Clifden and again on November 10th at the same location to discuss proposed plans and current issues on site.

The NPWS Conservation Ranger Aonghus O'Domhaill was contacted to source any additional information on the designated areas.

Inland Fisheries Ireland

The Senior Fisheries Environmental Officer Kevin Rogers carried out a site visit on the 6th October 2010.

The consultation revealed that there was general concern regarding activity in the quarry including water management, as well as the management of formerly worked and exposed areas.

1.2 Scope

An Appropriate Assessment is required under the Habitats Directive 92/43/EEC, Article 6(3) and (4), where it is identified that a proposed plan or project could have significant impact on a Natura 2000 site. The proposed works screened out for Appropriate Assessment (see screening report) as it was deemed that their impact on the adjacent SAC would not be significant.

However, these works are within an operational quarry next to an important Salmonid River and as such the quarry in itself is an ongoing potential risk to the river. Thus it was proposed that as well as carrying out a screening for Appropriate Assessment of the proposed works that a management plan with the objective of protecting the SAC in the long term be prepared.

This management plan is split into various sections

1. Location and boundaries
2. Ownership legal and status
3. Relationship to the SAC
4. Current and previous land use
5. Environmental Information
6. Management Framework
7. Zoning for Management

2.0 Location Including Site Boundaries

2.1 Location

Shannapheasteen Quarry is located in Connemara, Co. Galway. It is situated approximately 10km south west of Oughterard.

Grid Ref.: M 039 329

Area: 14.84 ha

Altitude Range: 0 m to 5 m

Townland: Shannapheasteen

2.2 Site Boundaries

The site includes the active quarry itself, formerly worked areas of the quarry as well as the active soakaway and areas proposed for new buildings. This is the area that the management plan will deal with. This is a slightly larger area than the legal boundary of Quarry (see map) but encompasses all the area that may impact on the adjacent river.

3.0 Ownership and legal status

3.1 Ownership

The land is owned by Stephen Larkin, Shanapheasteen Co. Galway.

3.2 Quarry Licence status

Quarry is registered as QY 83 under Section 261 of the Planning & Development Act 2000. Please see Map (attached) for Quarry area boundaries.

3.3 Rights Pertaining to the Site

Costello & Fermoye Fisheries have Salmon and trout fishing rights in the river adjacent to the site.

3.4 Government Departments and Agencies

The following agencies have some jurisdiction either within the land parcel or adjacent to it.

Planning Authority	Galway County Council specifically refer to the following guidelines in respect of quarries.
Galway County Council	Guidelines Compliance with the provisions and guidance, as appropriate, contained within Section 261 of the Planning and Development Act 2000 (as amended), the DoEHLG <i>Quarries and Ancillary Facilities Guidelines 2004</i> and the <i>EPA Guidelines for Environmental Management in the Extractive Sector 2006</i> . These guidelines have been consulted in drawing up this plan.
National Parks & Wildlife Service (NPWS) of the Department of Environment, Heritage and Local Government (DEHLG)	NPWS is responsible for maintaining the nature conservation value of the SAC (part of the land parcel is within the SAC). The site is patrolled by local Conservation Rangers, with input from other staff as necessary. The Local Conservation Ranger is Aonghus O'Domhnaill
Inland Fisheries Ireland	Inland fisheries have responsibility for maintaining the Fisheries interest of the adjacent river. The Senior Fisheries Officer for the area is Kevin Rogers.

3.5 National Policy

Planning and Development Act, 2000 contains both mandatory and discretionary development plan objectives.

Mandatory objectives (section 10) of most relevance to quarries include:

- The conservation and protection of the environment including, in particular, the archaeological and natural heritage and the conservation and protection of European sites and any other sites (such as Natural Heritage Areas - NHAs) which may be prescribed;

Relevant discretionary objectives in the First Schedule of the Act include:

- Regulating, promoting or controlling the exploitation of natural resources;
- Protecting and preserving the quality of the environment, including the prevention, limitation, elimination, abatement or reduction of environmental pollution and the protection of waters, groundwater, the seashore and the atmosphere;
- Preventing, remedying or removing injury to amenities arising from the ruinous or neglected condition of any structure or from the objectionable or neglected condition of any land.

The main objective of this management plan is to protect the adjacent European Natura 2000 site (Connemara Bog Complex 2034).

4.0 Designated Natura 2000 site Information

The proposed development is located in close proximity to Connemara Bog Complex SAC (2034). Details of Connemara Bog Complex SAC, including site characteristics, qualifying interest, potential pressures and threats and conservation objectives are set out in the following sections.

This of key relevance to the preparation of the quarry management plan as the objectives for the management plan will be based on the conservation objectives for the adjacent SAC.

4.1 Description of the Designated Site

The Connemara Bog Complex is a large site encompassing the majority of the south Connemara lowlands, Co. Galway. Extensive tracts of western blanket bog form the core interest, but there are also areas of heath, woodland, lakes, rivers and streams.

The Connemara Bog Complex is underlain predominantly by various Galway granites, with small areas along the northern boundary of Lakes Marble, schist and gneiss.

The site is a candidate SAC selected for active blanket bog and lagoons, both priority habitats on Annex I of the E.U. Habitats Directive. The site is also selected as a candidate SAC for floating river vegetation, wet and dry heath, alkaline fen, transition mires, lowland oligotrophic lakes, dystrophic lakes, Rhynchosporion, old Oak woodlands, *Molinia* meadows and reefs, all habitats listed on Annex I of the E.U. Habitats Directive.

The site is also selected for the following species listed on Annex II of the same directive - Atlantic Salmon, Otter, the plant Slender Naiad and the Marsh Fritillary butterfly.

The main habitat within this site is lowland Atlantic blanket bog. Most of the area is covered by blanket peat greater than one metre in depth. The Connemara Bog Complex is characterized by areas of deeper peat surrounded by rocky granite outcrops, covered by heath vegetation. The deeper peat areas are often covered by lakes and river systems.

Nine legally protected plant species occur within this site (Flora (Protection) Order, 1999): Forked Spleenwort (*Asplenium septentrionale*), Parsley Fern (*Cryptogramma crispa*), Bog Hair-grass (*Deschampsia setacea*), Slender Cottongrass (*Eriophorum gracile*), Bog Orchid (*Hammarbya paludosa*), Slender Naiad (*Najas flexilis*), Heath Cudweed (*Omalotheca sylvatica*), Pillwort (*Pilularia globulifera*) and Pale Dog-violet (*Viola lactea*). The rare and threatened species, Dorset Heath (*Erica ciliaris*), Mackay's Heath (*Erica mackaiana*) and Green-winged Orchid (*Orchis morio*) also occur within this site. All the above species are listed in the Irish Red Data Book and Slender Naiad is listed on Annex II of the EU Habitats Directive.

The site is of national importance for wintering populations of Greenland Whitefronted Geese. Small flocks (up to 30) are nowadays found on Roundstone Bog. There is an internationally important breeding area for Cormorants at Lough Scannive with 218 pairs present in 1985 in a colony which is known to have existed pre-1968. Golden Plover, a species listed on Annex I of the EU Birds Directive, nests at up to four locations in the site, with a maximum of two pairs noted at any one location. Another Annex I species known to be present in the site is Merlin. Lough Naskanniva is an important inland breeding site for Common Terns (up to 60 pairs in 1977 and 1992) and Choughs,

both of which are also Annex I species under the EU Birds Directive. Atlantic Salmon, listed under Annex II of the E.U. Habitats Directive occurs in many of the rivers within the site.

Arctic Charr occurs in a number of lakes within the site: Arctic Charr is listed in the Irish Red Data Book as being threatened. Otter has been recorded as occurring in the Connemara Bog Complex.

In summary, the Connemara Bog Complex encompasses a large area of relatively undamaged lowland Atlantic blanket bog of high conservation significance to Ireland as well as Europe. The site has nine protected and threatened Irish Red Data Book plant species. The site is internationally important for Cormorants and nationally important for Greenland White-fronted Geese and contains nesting sites for Golden Plover. The site supports several bird species listed on Annex I of the EU Birds Directive and a range of plant and animal species listed on Annex II of the EU Habitats Directive.

4.2 Conservation Objectives for Connemara Bog Complex SAC

The integrity of a Natura 2000 site is determined based on the conservation status of the qualifying features of the SPA as set out above. Once each site has been designated, it is required that a management plan should be drawn up for the Natura 2000 site which sets out the objectives for the site in order to maintain the favourable conservation status of these qualifying features and prevent in as far as possible threats and impacts on these habitats and species. A management plan has not yet been prepared for the Connemara Bog Complex SAC. In the absence of a NPWS Management Plan for the site, the following general conservation objectives are assumed for this designated site. These are based on general conservation principles and existing management plans for other SACs in Ireland.

Conservation Objectives Connemara Bog Complex

Objective 1: To maintain the Annex I habitats for which the cSAC has been selected at favourable conservation status: Coastal lagoons; Reefs; Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*); Natural dystrophic lakes and ponds; Water courses of plain to montane levels with the *Ranunculus fluitantis* and *Callitriche-Batrachion* vegetation; Northern Atlantic wet heaths with *Erica tetralix*; European dry heaths; *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinia caerulea*); Blanket bog; Transition mires and quaking bogs; Depressions on peat substrates of the *Rhynchosporion*; Alkaline fens; Old sessile oak woods with *Ilex* and *Blechnum* in British Isles.

Objective 2: To maintain the Annex II species for which the cSAC has been selected at favourable conservation status: Marsh Fritillary, Salmon; Otter; Slender Naid.

Objective 3: To maintain the extent, species richness and biodiversity of the entire site.

Objective 4: To establish effective liaison and co-operation with landowners, legal users and relevant authorities

4.3 Relationship to Designated Sites Designations

The quarry borders the river. The Special Area of Conservation designation includes a buffer zone averaging 5m along the river boundary inside the current berm. In addition, part of the land parcel is within the SAC and is located to the south east comprising 1.03 ha in size.

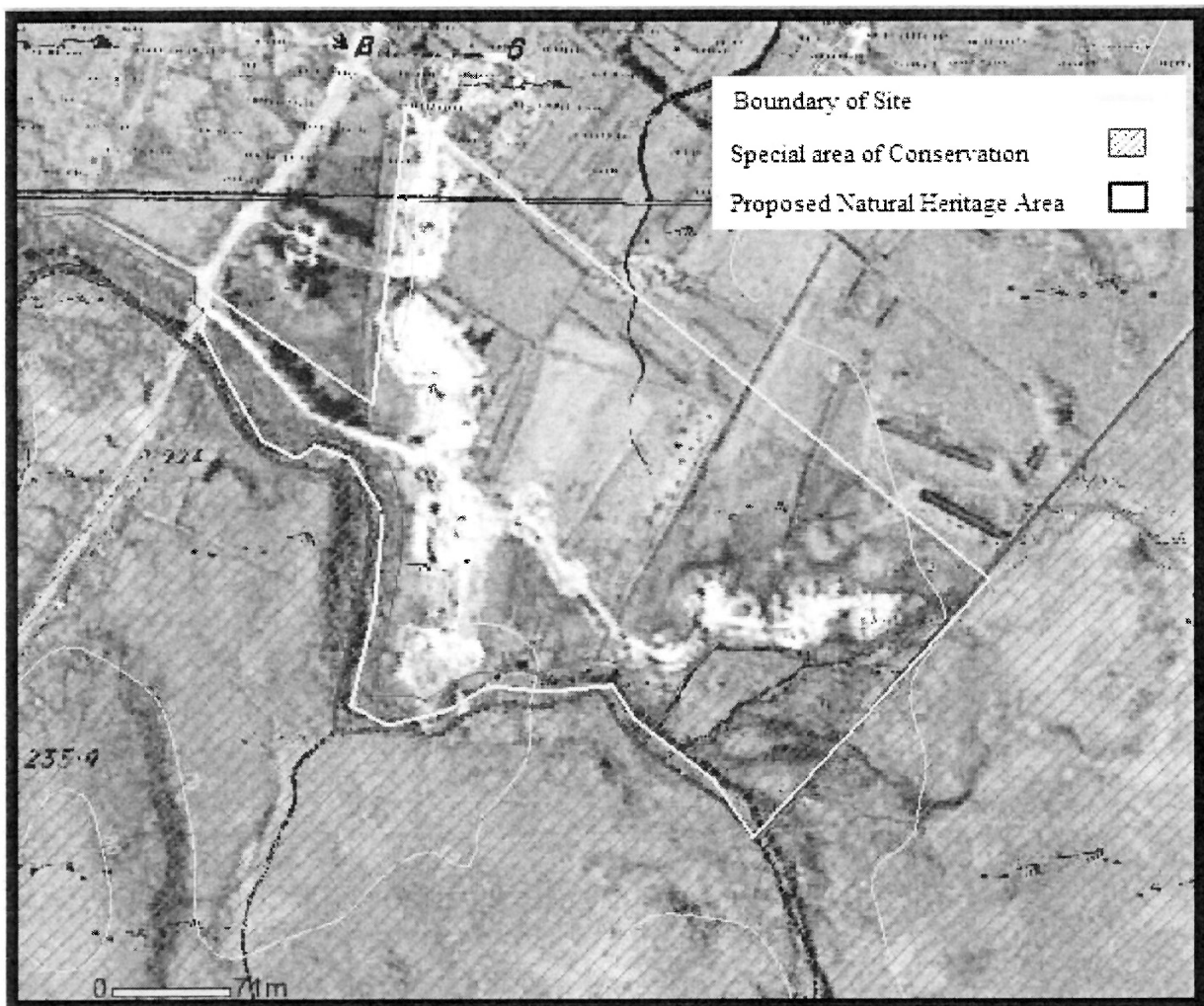


Photo 1: Proposed Site relative to designated area (NPWS.ie)

5.0 Description of Activities

5.1 Past human use

The Larkin Family have quarried Galway Granite and sand in Shanapheasteen since the 1930s. It was this quarry that supplied granite stone and sand that enabled the construction of the road and bridge into this townland and later was used for construction of houses. During the 1930s and 40s the County Council used the stone and daub to build roads into the bog roads nearby into Finnaun. The quarry also was the source of material for the forestry roads built during the 1950s. The quarry was leased out during the 1960s by the Larkins and this arrangement lasted in to the 1970s. During the oil crises in the 1970s Gaeltarra Éireann funded the local Co-Op na nOileáin to build new roads into the Fionnaun turf cutting area and the quarry was used as a supply area for stone. Joe Larkin (father of the present owners) took over the quarrying in the 1980s supplying crushed rock for sites in the region he continued until he passed the quarry to his sons in the 1990s.

5.2 Current activities

The current business plan is to supply high quality building and cut stone products. Products include garden ornaments and artistic stonework.

The current method of extraction current quarrying is carried out using expanding plugs in order to get a clean break of rock. The maximum extracted in a single year is estimated at 10,000 tonnes or 500 loads. Many large boulders are already quarried and on site a significant part of the work can be carried out on previously quarried materials. The surface of the quarry is being worked and an area 50m (length) * 30m (depth) * 3m width is estimated as the area that will be quarried annually over the next 5 year period.

5.3 Proposed Development

Connemara Granite in 2010 sought planning permission to build the following; Industrial Building for storage and dry cutting of granite and a building with office, canteen, toilet and changing rooms and car parking place. The aim is to provide improved conditions for the two employees as stone shaping and cutting could subsequently be carried out indoors and the canteen and office space will allow them facilities to eat and carry out office work in line with existing health and safety regulations.

6.0 Environmental Information

6.1 Ecological Features

6.1.1 Habitats

The habitats found on site are classified based on walkover surveys. The habitats recorded are classified in accordance with the guidelines set out in 'A Guide to Habitats in Ireland' (Fossitt, 2000), which classifies habitats based on the vegetation present and management history. The habitats found within and adjacent to the proposed works are listed below

Active quarries and mines ED4

The main quarry surfaces, piles of loose rock and associated roadways and work areas are classified in this category. Here levels of disturbance are so high that colonisation by plants and animals is almost entirely prevented.

Recolonising bare ground ED3

This category is used where bare or disturbed ground, derelict sites or artificial surfaces of tarmac, concrete or hard core have been invaded by herbaceous plants. In this case the recolonising bare ground is mainly being colonised by rushes (*Juncus* spp).

HH3 Wet heath /PB3 Lowland blanket bog

The majority of the land to the north and east of the site is wet heath grading to blanket bog. Here it is dominated by Purple Moor-grass (*Molinia caerulea*) Other common species found include Heathers (*Calluna vulgaris*), Bell Heather (*Erica cinerea*). Bog Asphodel (*Narthecium ossifragum*), White Beaksedge (*Rhynchospora alba*) and *Sphagnum* mosses. Some of this area has been formerly cut for turf.

6.1.2 Flora and Fauna

The following information is sourced from published information and from the NPWS conservation ranger Aonghus O'Domhnaill

Flora

No plant species of importance are known from the 10sqkm within which this proposed development is sited.

Fauna

The general area is important for birds of conservation concern

- Greenland White-fronted Geese an Annex I species of the Birds Directive are known from the Connemara Bog Complex SAC. These are not associated with the Shanapheasteen townland but are mainly concentrated further south at Tullynasleeog and Glenachmurach.
- Red Grouse are present throughout the area but in low concentrations.
- Merlin an Annex I species of the Birds Directive are known breeding in the general area.

The adjacent river is of key ecological importance. It is known to support populations of Salmon and Trout. Otter are common in the area and would be expected to use this river system.

The Otter and Salmon are listed on Annex II of the EU Habitats Directive

4.1.3 Significance of Ecological Findings

The main finding of significance is that protection of the River is paramount as it supports population of the Annex II species Salmon and Otter.

6.2 Physical Features

Climate

The area experiences a mild oceanic climate that can be summarised as wet and windy, with an annual temperature range of about 8°C. The close proximity to the Atlantic Ocean gives rise to high precipitation. The number of rain days (1mm or more) is approximately 193 mm (per year), with more than 5mm of rainfall falling 80 days a year. The mean annual rainfall is in the region of 1600mm of rain.

Geology & Geomorphology

The geology of the area is dominated by Blue Granite.

Soils & Soil Processes

The soil is mainly peat based grading to slightly more mineral in the area designated as SAC within the site boundary.

6.3 Hydrology and Water quality

Hydrology/ water quality

The EPA does not monitor the adjacent river (www.EPA.ie). This river adjacent to the quarry is an Abhainn Bhuí tributary of the Cashla River. It flows from Lough Aclogher south to Lough Charraig into Lough Fermoye which is a salmonid fishery.

Lough Fermoye is monitored by the EPA it was last sampled in 2003 and is classified as unpolluted or Oligotrophic. It is a recognised game fishery.

Flooding

A search of the Office of Public Works National Flood Hazard Mapping website, www.floodmaps.ie, was performed to obtain information on flooding history in the vicinity. No flooding events were recorded in the vicinity of the site.

7.0 Management Framework

In order to write a management plan for this site the main conservation objectives have first to be identified. These have been identified relative to the Special Area of Conservation which lies both within and adjacent to this land parcel.

7.1 Main conservation objectives

1. To maintain the Annex II species, in the adjacent river, for which the cSAC has been selected at favourable conservation status: Salmon; Otter.
2. To maintain and enhance the water quality of the adjacent river within the SAC Connemara Bog Complex 2034
3. To maintain and enhance the ecological value of the SAC habitat within the land parcel boundary.

7.2 Main management issues

1. There is a risk of pollutants entering the adjacent salmon river as a result of activities within the land parcel.
2. Risk of water pollution from unvegetated heaps of spoil over a large portion of the site.
3. Water management on site is key to preventing water pollution in the river.

7.3 Management Strategies

There are three main management elements that are applicable to this quarry. Many of the management elements such as noise and dust prevention and control are not applicable as blasting is no longer practised as part of the operations.

Surface Water Control

The current mechanism for managing water on site is to collect it within the active area of quarrying where it collects as this is the lowest point within the land parcel and water naturally drains to this point. The water is pumped by pipe unto a large area of wet heath/blanket bog. Most of this water enters the "drain" on the map (B2). This drain is overgrown and water observed leaving this drain was clear in appearance.

Strategy 1: To manage and control all flows of surface water

- In line with current practice no water will be abstracted from the river.
- In line with current practice no water will be used in the quarry operations.
- No excavation below the water table is proposed.
- Water which may contain silt / other pollutants will be collected in a single area at the quarry base and pumped into the soakaway. Areas either side of the main drain will be alternately used as a soakaway area. This drain is now completed vegetated and forms part of the area used for filtration.
- There will be control of run-off from pits, quarries, spoil heaps, embankments and all other parts of sites, including access roads and wheel-wash facilities. All water will be collected at quarry base and directed to the existing soakaway.
- Clean water which has been filtered through the peat soakaway must be piped under the roadway so as to remain clean reaching the river (C4)
- A petrol interceptor will be put in place within the water collection area (this forms part of planning ref 10/702)
- Sewage treatment will be provided on site as per planning application 10/702
- The operators will comply with the requirements of the Water Pollution Acts, 1977-1990. The relevant local authority, Fisheries Board and the Department of Environment, Heritage and Local Government will be consulted about any alterations to existing practices.

Landscape and restoration

Erosion of soil (and any other material) should be limited by rapidly vegetating exposed areas, planting the surfaces of overburden and topsoil mounds, progressively restoring worked-out areas (where practical) and limiting the areas of topsoil/overburden stripping exposed at any one time. Adequate margins/buffer zones should be left around watercourses, river corridors and other sensitive areas; spoil heaps should be designed to be stable in periods of very wet weather.
DoEHLG 2004

Only a small proportion of this site is being actively worked. A large area has been worked in the past and daub removed for road building by various bodies. There is a significant area which is unworked and requires restoration. These areas are exposed gravel and peat and are a potential pollution source.



Photo 2: Exposed rock, gravel heap

Strategy 2: To consolidate and revegetate spoil heaps.

Spoil heaps will be consolidated to reduce their surface area. Reduction of the surface area would limit their capacity to potentially cause pollution. Depressions in existing recolonised spoil heaps may be filled.

Vegetation that has colonised this loose ground is valuable in stabilising this material. Before any movement of earth is undertaken the vegetation should be removed and put to one side. After consolidation of material this vegetation should be used as a covering to help the long term restoration of these areas. Vegetation cover will protect from run off in the long term.

Strategy 3: To import soil where required

Throughout much of this quarry the spoil heaps are mainly of daub and small rocks. There is little soil cover to facilitate revegetation. Soil will need to be imported to enable vegetation to establish. This work must be carried out in dry weather so as to reduce the risk of pollution to the river. Reseeding may be carried out where required.

Care must be taken when importing soil for restorative purposes that it is taken from a source free of invasive species such as Japanese knotweed, Rhododendron and Gunnera.

Protection of the River

Extraction and quarrying activities have the potential to impact on areas of valuable habitat, including (Habitats Directive) Annex I priority habitats...Habitats outside the quarry site can be impacted on indirectly by dust deposition, alteration to groundwater or surface water supplies, or as a result of run-off or siltation. In each case, it is imperative that the developer has given appropriate consideration to designated habitats, and has designed the workings in an environmentally sensitive manner. DoEHLG 2004

In this case the Quarry existed long before the river was designated an SAC. The developer wants to ensure that the quarry operations have no negative impact on the river and the following strategies and measures are being undertaken with that objective in mind.

Strategy 4: Extend the Berm to protect the SAC river

The main berm is partly constructed at present. It is very close to the river in places it is less than 5m from the river bank.

The proposal is to reduce the berm in height and reduce the steepness of slope as this may contribute to run off. The large boulders at the base are to be removed as these will fail to become vegetated. Some soil may need to be imported to accelerate vegetation of this berm.

The berm is to be extended as indicated on the map. A Terram screen is to be put in place between the berm and the river to catch silt while the berm becomes vegetated (see attached drawings). The Terram screen must be put in place before any works on the berm commence.



Photo 2: Berm in Oct 2010 (note proximity to the river and steepness)

Strategy 5: Fill in of pond and construction of second mini berm

There is small holding pond as indicated on the map (C3). The overflow from this pond enters a small stream which is the boundary of the SAC and this ultimately discharges into the river. During dry weather it dries and at this stage it may be filled. A Terram screen may need to be put in place to prevent run off and siltation.

A small or mini berm already exists in this location opposite this pond. Currently overflows, from this pond, cut through a breach in this berm to enter the drain. This “berm” will be repaired and extended so that water can be directed towards the main collection point for eventual filtration through the soakaway (C5).

Protection of the SAC land within the Land parcel

Many SAC rivers have buffer zones as a measure to regulate activities in that area and to ultimately protect the river.

Strategy 6: Non intervention

The SAC lands will not be interfered with in any way. Nor will they be used for any activity or purpose.

Ecological Monitoring

Success of a project can only be judged relative to its baseline information therefore monitoring before and during a project is critically important.

Strategy 7: Monitor Q values and Annex II species

This river is known to be a salmon river but it is not monitored by the EPA. The Q Value system describes the relationship between water quality and the macro-invertebrate community in numerical terms. Q5 waters have high diversity of macro-invertebrates and good water quality, while Q1 have little or no macro-invertebrate diversity and bad water quality. Intermediate values, Q1-2, 2-3, 3-4 etc denote transitional conditions (source EPA.ie). This river should have its Q value measured at a minimum of 4 points along its length. Points of study are indicated on map. This must be carried out twice during the period of the management plan at the beginning and end of the 5 year period.

Ideally, Salmon and Otter use of the river should be established during the period of the plan. This may be achievable in cooperation with statutory bodies NPWS and Fisheries Board.

Waste Management Policy**Strategy 8: Continue to implement Waste Management Policy****Connemara Granite Teo.**

- All waste generated in quarry is segregated to appropriate bins as directed by Connemara Granite Teo. on a day to day basis. Do not contaminate segregated bins (wood, metal, etc) with mixed waste. The site and surrounding areas will not be littered.
- No storage fuel tanks will be retained in the quarry; all plant must be refuelled and serviced on a designated Hard Standing Area.
- Our quarrying processes will be dry so we do not require water, so no dirty water will be created in processing or splitting of stone.
- Documentation to be supplied to Connemara Granite Teo. detailing the carrier and destination of any waste removed off site by waste contractors.
- No burning will be allowed at any time.
- All containers will be labelled to identify contents.
- Only properly certified, self bunded metal units will be used for lubricants.
- All liquid containers, static and mobile fuel units, generator and associated hoses will be contained in proper impermeable bund, or contained in spill pallet / tray
- Appropriate hard standing area to be used when refuelling.
- An "Oil Only" Spill Kit and a 1 ton stockpile of sand will be retained and available near all fuelling points AND near water sump for use in the event of an emergency spillage.
- A specific bin for "Oily Rags" must be used for disposal of oily materials in the quarry. Only waste contractor can dispose of these and must supply documentation.
- Servicing of machines must only take place in designated area
- Housekeeping and storage to be maintained to a high standard at all times.
- All site machinery to be shut down when not in use.
- All haul roads will be maintained in a clean and sound state and be subject to strict speed limits.
- Wheel-wash water will not be allowed to flow uncontrolled, will be directed to a petrol interceptor treatment facility in order to remove contaminants and render it suitable for the receiving environment. It will be then directed to a settlement pond within the impermeable quarry floor for stilling as required to facilitate efficient sedimentation of solids out of all soiled water.
- Water pumped from settlement ponds will be screened and filtered.
- When not in use, all equipment (lights, heaters, plant and equipment) will be switched off.
- Purchase only necessary materials to the proper specification.

Environmental Management Systems (EMS)

A well-prepared Environmental Management System is recognised by Connemara Granite Teo as a valuable tool to assist them to meet current and future environmental requirements and challenges.

Strategy 9: Continue to develop EMS

Connemara Granite will continue to work on Quality Control Systems and to develop their Environmental Management System on site. They will seek expertise where required.

Planting

No planting should be carried out within the SAC and this area should be allowed develop natural vegetation.

Strategy 10: Planting for Screening

Otherwise suitable trees are Alder, Ash and Willow sourced locally or derived from suitable native seed sources from within Ireland. Large scale ground preparation should not be carried out the recommended method is pit planting of trees. No fertilisers should be used.

Implement plan

This management plan has been written on the assumption that there will be no blasting for period of the plan.

Connemara Granite will seek to ensure that the aims of this conservation plan are achieved through: liaison with the relevant authorities, experts and interested parties.

8.0 Zoning

Zoning is the division of a land parcel into a number of sub-units. There are four types of zones identified A, B, C and D within the site. Zone E is an indicator of location of monitoring points selected for baseline study. The relevant strategies are listed for each.

A Natural Zone – no change required (Green)

Strategies	Areas Zoned in this manner
<u>Strategy 6: Non intervention</u>	SAC

A1: SAC Area to the south of the Site

A2: SAC buffer on river

A3: Wet heath /blanket bog

B Semi natural Zone – no change required (black)

Strategies	Areas Zoned in this manner
<u>Strategy 1: To manage and control all flows of surface water</u>	Soakaway

B1: Soakaway

B2: Main drain for filtration

B3: Semi disturbed area close to workings

C Intervention Zone - requiring specific action (Red)

Strategies	Areas Zoned in this manner
<u>Strategy 2: To consolidate and revegetate spoil heaps.</u> <u>Strategy 3: To import soil where required</u> <u>Strategy 4: Extend the Berm to protect the river</u> <u>Strategy 10: Planting for screening</u>	Spoil heaps Pool Berm
<u>Strategy 5: Fill in of pond and construction of second mini berm</u>	Mini Berm

C1: Spoil heap consolidation

C2: drain/culvert under road

C3: Standing water pond

C4: Berm

C5: Mini Berm

D Industrial zone – requiring ongoing management (Blue)

Strategies	Areas Zoned in this manner
<u>Strategy 1: To manage and control all flows of surface water</u> <u>Strategy 8: Continue to implement Waste Management Policy</u> <u>Strategy 9: Continue to develop EMS</u>	Quarry (active faces and water collection area)

D1: Main area being quarried

D2: Buildings

E Monitoring points on River (outside Site) Red arrows

Strategies	Areas Zoned in this manner
<u>Strategy 7: Monitor Q values and Annex II species</u>	River

E 1-4 Sampling points for Q values

REFERENCES

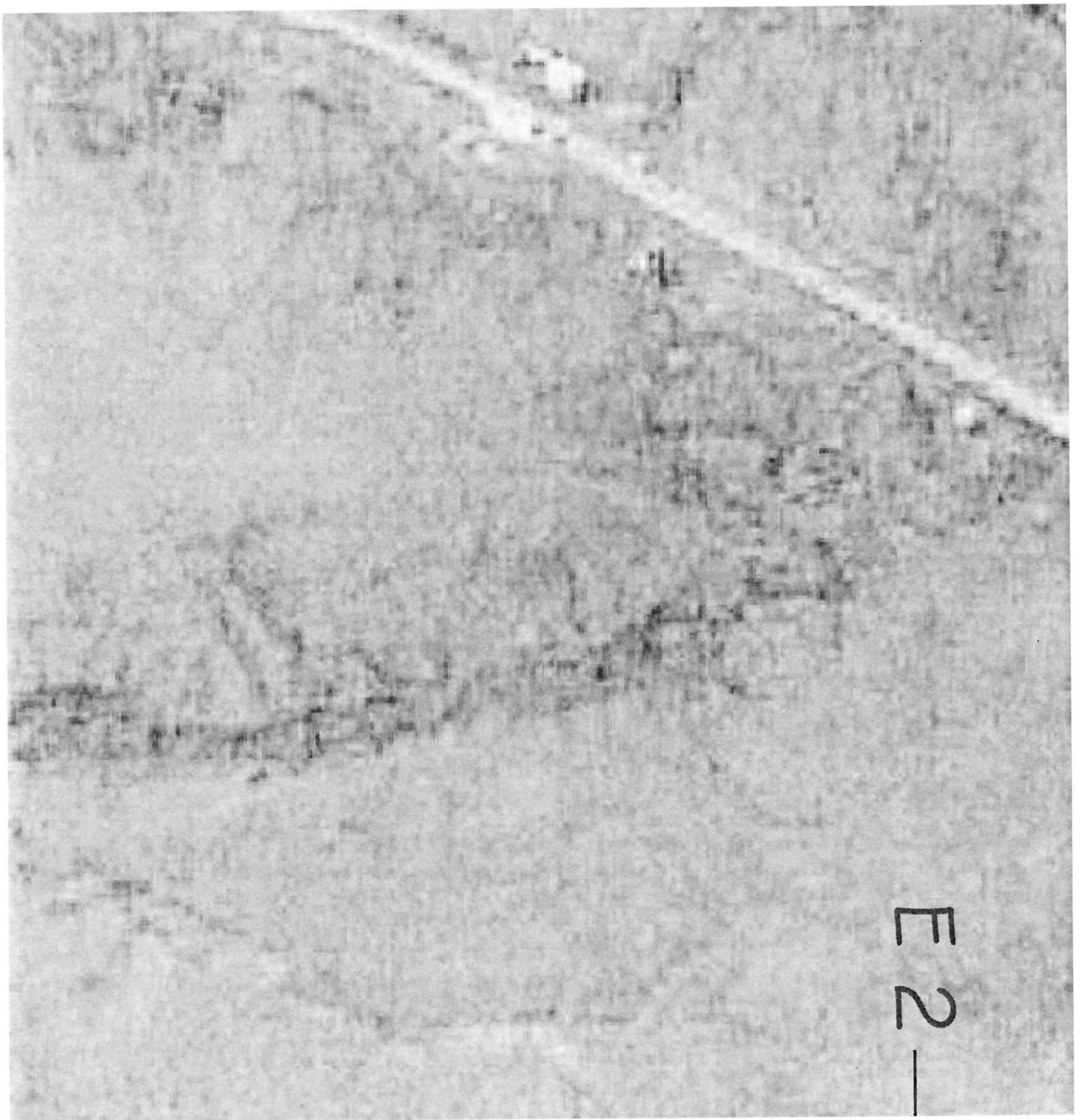
- Curtis, T.G.F. and McGough, H.N (1988). The Irish Red Data Book 1 Vascular Plants, Wildlife Service Ireland, The Stationery Office.
- Department of the Environment, Heritage and Local Government (2010) Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities.
- Department of the Environment, Heritage and Local Government, 2004. Quarries and Ancillary Activities Guidelines for Planning Authorities. Dublin.
- EPA, 2006. Guidelines for Environmental Management in the Extractive Sector.
- European Commission (2002) Management of Plans and Projects significantly affecting Natura 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. Office for Official Publications for the European Communities, Luxembourg.
- Fossit, J. A. 2000. A Guide to Habitats in Ireland. The Heritage Council.
- Toner P., 2004 Water Quality in Ireland 2001-2003 Environmental Protection Agency, Johnstown Castle, County Wexford, Ireland

Appendix SITE SYNOPSIS SITE NAME: CONNEMARA BOG COMPLEX SITE CODE: 002034

The Connemara Bog Complex is a large site encompassing the majority of the south Connemara lowlands, Co. Galway. The site is bounded to the north by the Galway- Clifden road and stretches as far east as the Moycullen-Spiddal road. Because of its large size the site contains a wide range of habitats. Extensive tracts of western blanket bog form the core interest, but there are also areas of heath, woodland, lakes, rivers and streams. The Connemara Bog Complex is underlain predominantly by various Galway granites, with small areas along the northern boundary of Lakes Marble, schist and gneiss. The Roundstone bog area has a diverse bedrock geology composed mainly of the basic intrusive rock, gabbro. An area of rock, possibly Cambrian in age, called the Delaney Dome Formation occurs in the north-west of this area. Gabbro also occurs in the Kilkieran peninsula and near Cashel. The whole area was glaciated in the last Ice Age which scoured the lowlands of Connemara. The site is a candidate SAC selected for active blanket bog and lagoons, both priority habitats on Annex I of the E.U. Habitats Directive. The site is also selected as a candidate SAC for floating river vegetation, wet and dry heath, alkaline fen, transition mires, lowland oligotrophic lakes, dystrophic lakes, Rhynchosporion, old Oak woodlands, *Molinia* meadows and reefs, all habitats listed on Annex I of the E.U. Habitats Directive. The site is also selected for the following species listed on Annex II of the same directive - Atlantic Salmon, Otter, the plant Slender Naiad and the Marsh Fritillary butterfly. The main habitat within this site is lowland Atlantic blanket bog. Most of the area is covered by blanket peat greater than one metre in depth. The Connemara Bog Complex is characterized by areas of deeper peat surrounded by rocky granite outcrops, covered by heath vegetation. The deeper peat areas are often covered by lakes and river systems. A mosaic of different communities therefore exists. These include, hummock/hollow systems, inter-connecting pools, Atlantic blanket bog pools, flushes, transition and quaking mires, freshwater marshes, lakeshore, lake and river systems. The key plant species of lowland blanket bog are Black Bog-rush (*Schoenus nigricans*), Purple Moor-grass (*Molinia caerulea*), Cross-leaved Heath (*Erica tetralix*), Deergrass (*Scirpus cespitosus*), Common Cottongrass (*Eriophorum angustifolium*), Bog Asphodel (*Narthecium ossifragum*), White Beak-sedge (*Rhynchospora alba*) and Bog Moss (*Sphagnum*) species. Small patches of deciduous woodland and a large number of oligotrophic lakes add to the habitat diversity of the site. Also occurring within the site are several lagoons (a type of brackish lake) which display considerable variations in size, depth and salinity, resulting in a diverse assemblage of floral and faunal communities. Nine legally protected plant species occur within this site (Flora (Protection) Order, 1999): Forked Spleenwort (*Asplenium septentrionale*), Parsley Fern (*Cryptogramma crispa*), Bog Hair-grass (*Deschampsia setacea*), Slender Cottongrass (*Eriophorum gracile*), Bog Orchid (*Hammarbya paludosa*), Slender Naiad (*Najas flexilis*), Heath Cudweed (*Omalotheca sylvatica*), Pillwort (*Pilularia globulifera*) and Pale Dog-violet (*Viola lactea*). The rare and threatened species, Dorset Heath (*Erica ciliaris*), Mackay's Heath (*Erica mackaiana*) and Green-winged Orchid (*Orchis morio*) also occur within this site. All the above species are listed in the Irish Red Data Book and Slender Naiad is listed on Annex II of the EU Habitats Directive. The site is of national importance for wintering populations of Greenland Whitefronted Geese. Small

flocks (up to 30) are nowadays found on Roundstone Bog and also use the bogs between Recess and Maam Cross. In April 1989 a synchronised ground and air census of the Connemara bogs located 7 flocks of White-fronts, totalling 134-137 birds. In 1991/93 wintering numbers were considered to be not much more than 60 birds. There is an internationally important breeding area for Cormorants at Lough Scannive with 218 pairs present in 1985 in a colony which is known to have existed pre-1968. Golden Plover, a species listed on Annex I of the EU Birds Directive, nests at up to four locations in the site, with a maximum of two pairs noted at any one location. Another Annex I species known to be present in the site is Merlin. Lough Naskanniva is an important inland breeding site for Common Terns (up to 60 pairs in 1977 and 1992) and Choughs, both of which are also Annex I species under the EU Birds Directive. Atlantic Salmon, listed under Annex II of the E.U. Habitats Directive occurs in many of the rivers within the site. The Cashla and Ballynahinch systems are good examples of western acidic spate rivers which support the species. Good spawning and nursery grounds for the species occur in these systems. Arctic Charr occurs in a number of lakes within the site: Ballynahinch Lake, Glenicmurrin Lough and Lough Shindilla. The species has also been reported from Lough Oorid and Lough Glendollagh in the past, but has not been recorded from these lakes in recent years. Arctic Charr is listed in the Irish Red Data Book as being threatened. Otter has been recorded as occurring in the Connemara Bog Complex. Irish Hare, another mammal listed in the Red Data Book, occurs on the site. Common Frog breeds on the site. It is listed in the Irish Red Data Book as internationally important and on Annex V of the EU Habitats Directive. The main damaging operations and threats in the Connemara Bog Complex are peatcutting, overgrazing and afforestation. Extensive peat extraction using 'Difco' machines has become common in the region in recent years and cutting by excavator and hopper is also increasing. The handcutting of peat is less threatening as it is usually on a much smaller scale but it still needs to be controlled within the site. Afforestation also threatens the site. Forestry affects habitat uniformity, lake and river catchments, nesting and feeding habitats for animals, and landscape integrity. Overgrazing and poaching by sheep and cattle is a widespread problem within the site, with erosion of peat ensuing. The above operations are the most extensive but other threats and potentially damaging operations include land drainage and reclamation, fertilization, quarrying and dumping. In summary, the Connemara Bog Complex encompasses a large area of relatively undamaged lowland Atlantic blanket bog of high conservation significance to Ireland as well as Europe. The site has nine protected and threatened Irish Red Data Book plant species. The site is internationally important for Cormorants and nationally important for Greenland White-fronted Geese and contains nesting sites for Golden Plover. The site supports several bird species listed on Annex I of the EU Birds Directive and a range of plant and animal species listed on Annex II of the EU Habitats Directive. 13.12.2005

E 2 —





Sheannapheasteen Quarry Management Plan Compliance Report

To be Read in Conjunction with

The 5 Year Management Plan for
Sheannapheasteen
Quarry 2011-2015

August 2012



Marie Louise Heffernan, MSc, MIEEM, CEnv
Rusheenduff, Renvyle Co. Galway,
095 43090 / 086 8278031
www.aster.ie

Overall Summary

In summary the management strategies for Sheannapheasteen Quarry as specified under the five year management plan are currently being implemented. It is estimated that 70-80%% of the actions specified in were complete or underway at the site inspection July 2012. Progress is ongoing and all actions are expected to be completed well ahead of the 2015 target.

Surface Water Control

Strategy 1: To manage and control all flows of surface water

Complete

- Water which may contain silt / other pollutants is now collected in a single area at the quarry base and pumped into the soakaway. Areas either side of the main drain are alternately used as a soakaway area. This drain is now completed vegetated and forms part of the area used for filtration. (Note 1)
- Clean water which has been filtered through the peat soakaway has been piped under the roadway so as to remain clean on reaching the river (C2 – see attached map)



Photo 1: Clean water piped under road.

Ongoing

- There will be control of run-off from pits, quarries, spoil heaps, embankments and all other parts of sites, including access roads and wheel-wash facilities. All water is collected at quarry base and directed to the existing soakaway.

- The operators are complying with the requirements of the Water Pollution Acts, 1977-1990. The relevant local authority, Fisheries Board and the Department of Environment, Heritage and Local Government will be consulted about any alterations to existing practices.

Planned (subject to Planning)

- A petrol interceptor will be put in place within the water collection area
- Sewage treatment will be provided on site as per planning application

10/702

Note 1: The Inland Fisheries Board, since preparation of the management plan, has requested that the main drain is divided into a series of ponds to enhance settlement of suspended solids; this is ongoing.

Landscape and restoration

Strategy 2: To consolidate and revegetate spoil heaps.

Complete and ongoing

Spoil heaps have been consolidated to reduce their surface area (C1). Depressions in existing recolonised spoil heaps have been filled. Existing vegetation has been used to stabilise mounds where possible. Approximately 70% of this work has been carried out since early 2011. Heaps have been consolidated and vegetation is beginning to establish.



Photo 2: Spoil heaps have been levelled to reduce run off.

Strategy 3: To import soil where required

Planned

No soil has been imported to date but where there is excess topsoil/peat in areas of the site this has been carefully used to help re-establish vegetation.

Protection of the River

Strategy 4: Extend the Berm to protect the SAC river

Complete

The main berm (C5) has been greatly reduced in height as per management plan, thus the steepness of the slope has been reduced and the large boulders at the base have been removed. This will help reduce run off from the berm.



Photo 3: Note the lowered height of the berm

A terram screen has been put in place between the berm and the river to catch silt while the berm becomes vegetated.

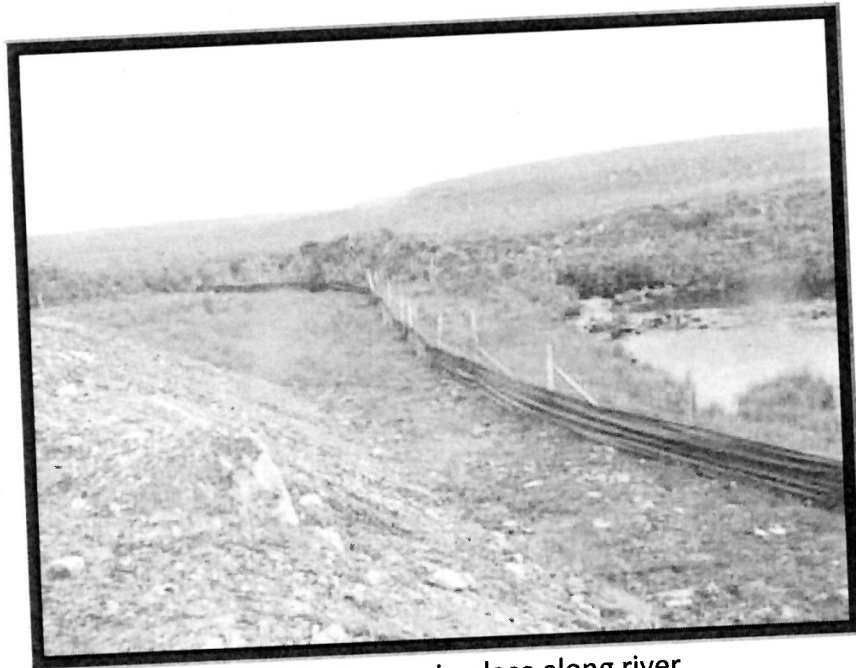


Photo 4: Terram in place along river

Planned

Some soil may need to be imported to accelerate vegetation of this berm. The berm is to be extended as indicated on the map.

Strategy 5: Fill in of pond and construction of second mini berm**Complete**

The small pond indicated on the map (C3) has been filled and the surrounding area levelled.

Planned

A Terram screen may need to be put in place to prevent run off and siltation reaching the river. A small or mini berm already exists in this location opposite this pond. Currently overflows, from this pond, cut through a breach in this berm to enter the drain. This "berm" will be repaired and extended so that water can be directed towards the main collection point for eventual filtration through the soakaway(C4).

Protection of the SAC land within the Land parcel**Strategy 6: Non intervention****Ongoing**

The SAC lands will not be interfered with in any way (A1 and A2). Nor will they be used for any activity or purpose. The zone A3 will also be managed by non intervention

Strategy 7: Monitor Q values and Annex II species**Planned**

The Q values are to be measured at 4 points along the river.

Waste Management Policy

Strategy 8: Continue to implement Waste Management Policy

Ongoing

The waste management policy is integral to the workings of the Quarry and is ongoing.

Environmental Management Systems (EMS)

A well-prepared Environmental Management System is recognised by Connemara Granite Teo as a valuable tool to assist them to meet current and future environmental requirements and challenges.

Strategy 9: Continue to develop EMS

Connemara Granite will continue to work on Quality Control Systems and to develop their Environmental Management System on site. They will seek expertise where required.

Planting

No planting should be carried out within the SAC and this area should be allowed develop natural vegetation.

Strategy 10: Planting for Screening

Planned

No planting has taken place to date

Connemara Granite will continue to ensure that the aims of this conservation plan are achieved through: liaison with the relevant authorities, experts and interested parties.

Rusheenamunagh,

Cornac,

Co. Galway.

19. 8. 2013

Mr. Mark Whittaker,
Senior Planner,
McCarthy Keville O'Sullivan Ltd,
Galway.

Ref: 1204.17

A chosa,

Thank you for your letter of 16th July. If Connemara Granite is on land owned by Mr. Stephen Harkin, then I have no objection to the development.

Since the announcement about "substitute consent" of quarries was made by Mr. Jim Harkin of Harkin Quarries, then it could be assumed Connemara Granite Teo. was an offshoot of Harkin Quarries - which was involved in legal proceedings taken by owners of commonage.

I did not have the opportunity
to see whether Connemara Granite would
adversely affect environment.

As for Galway Co. Co. giving
a "positive recommendation" for the development
- this would not carry any weight with
people who are familiar with workings
of same Council. In 2012 Galway Co. Co.
sent a completely inaccurate report
on Rusheenamagh commongage
quarry to an Bord Pleanála. When
the mistakes were pointed out - half
were amended - so they said. And
we have Co. Councillors who assure
voters they can get the Planning Office
in Galway Co. Co. to do anything they
ask! So assurances from Galway
Co. Co. on planning matters are not
v. credible.

Catherine Ó Ceóimín
(Penning)

