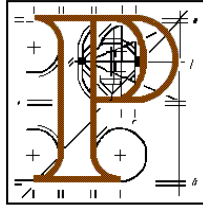


An Bord Pleanála



Inspector's Report

Development: Quarry, Cloonlagheen, Partry, Co. Mayo

Applicant: Colemans Quarry Limited

Planning Authority: Mayo County Council

Application Type: Application for Substitute Consent

Observers: A. and F. Kennedy

Date of Inspection: 17th February 2015

Inspector: Deirdre MacGabhann

1. INTRODUCTION

- 1.1 On 14th July 2014, Colemans Quarry Limited lodged an application for substitute consent with the Board in respect of a limestone quarry at Cloonlagheen, Partry, Co. Mayo. The application includes a remedial Natura Impact Statement.
- 1.2 This report provides an assessment of the application for substitute consent and sets out a recommendation for the Board in respect of the development.

2. SITE LOCATION AND DESCRIPTION

- 2.1 The quarry at Cloonlagheen lies approximately 2.5km southeast of the village of Partry, and c.7km north-west of Ballinrobe, Co. Mayo. The site lies c.100m east of the N84, a national secondary road between Galway and Castlebar. Access to the site is via a lane from the N84. The lane is a cul-de-sac and serves the quarry site and a larger Roadstone Wood quarry to the north of the site which has been largely disused since 1990 (16.QV.0257). Sightlines at the junction of the minor road and N84 are good in both directions.
- 2.2 The 3.0ha site comprises a small upper working area (western side of site) and a larger lower disused area (eastern side of site). In the upper area the site has been largely cleared of surface vegetation. Limestone has been extracted from the underlying bedrock and is stockpiled on site. To the north of this working area is a wheelwash. Immediately east of the working area are a number of small ponds (see photographs).
- 2.3 In the eastern part of the site more substantial extraction has taken place leaving a face c.2-4m in height, along the north-eastern boundary, and three water filled voids. The upper two of these ponds are reasonably shallow and are linked by an overland surface drain (photograph 20). The easternmost pond is the largest and deepest pond on site.
- 2.4 Lough Carra lies immediately east of the quarry. It is separated from the site by a bund or mound along the southern boundary of the site. Two residential properties lie in close proximity to the site, one to the southwest of the quarry, separated by an agricultural field, and one west of it, to the west of the lane providing access to the site. Along the N84 are a small number of one off houses.

3. APPLICATION FOR SUBSTITUTE CONSENT

- 3.1 The application for substitute consent includes a completed application form, copies of statutory notices, a remedial NIS, hydrogeological investigation, associated drawings and other supporting documentation. (Revised, annotated

plans and sections through the site submitted on the 7th August 2014 as requested by Board).

Description of Development

- 3.2 The application for substitute consent relates to a limestone quarry on a 3.0ha site. Currently, rock is extracted from the c.1m bedding planes by mechanical excavator, with loosened rock broken for use as building stone. Graded stone is stockpiled on site. Occasionally (approximately once a year) mobile processing plant is brought to the site to crush and screen the material that has accumulated and is unsuitable for building stone. No washing takes place on site.
- 3.3 Correspondence on file from the applicant states that the traditional method of extraction, prior to 2000, included blasting i.e. mechanical extraction from the more fractured and well jointed upper beds, and infrequent blasting of the underlying more consolidated beds.
- 3.4 The Hydrological Study states that at some point rock was extracted to a level below static water table, as evidenced by four ponds on site (Figure 1, Hydrological Survey). Pond 1 to the west of the site appears to receive rainfall only and is not in continuum with water table. Ponds 2 and 3 are stated to be shallow ponds with a maximum depth of 0.5 to 1.0m below water table respectively, formed with excavation by mechanical excavator along the bedding plane until groundwater seepages entered the minor void, at which time excavation ceased. Whilst this pattern is also observed in pond 4, the Survey states that towards the centre of this pond a steep vertical incline is evident, reflecting a deeper area (c.3-4m) of 0.2ha (60m x 35m). The Survey states that rock was lifted from this deeper void following blasting using mechanical excavator, a practice which has now ceased. The Hydrogeological Survey confirms that there is no surface water pathway between the site and Lough Carra during winter conditions and that no overtopping of the clay berm occurs. It states that ponds 2 to 4 appear to be in continuum with water table, with the up gradient head controlled by water level in the adjacent quarry and down gradient head controlled by Lough Carra water level. It also states that there is no evidence of pumping, and that there has never been any movement of groundwater within the site boundary or across the site boundary, by pumping.
- 3.5 The conceptual model of the site, presented in Figure 3, indicates that surface water flow is confined to within the site boundary and that no surface water flows enter or exit the site. Groundwater enters the site as seepage from the up-gradient quarry and leaves as subsurface flow to Lough Carra, at a rate controlled by lake water level. Groundwater flows are considered to be shallow, unconfined and low in volume due to the small up-gradient catchment. Pond 4 is considered to serve as a down gradient monitoring point.

- 3.6 A wheelwash is in place in the northern part of the site which contains collected rainwater. There is no toilet, canteen or watermain connection to the site.
- 3.7 The quarry employs one part-time employee (excavator operator). Output is intermittent and in general may amount to one or two lorries a week or one or two lorries a day.

Remedial NIS

- 3.8 The rNIS describes the current development taking place on the site and includes a flora and fauna survey of the site. It identifies no Annex I habitat or Annex II/IV species (Habitat Directive) or Annex I species (Birds Directive) or Red Data List Species on the site. It notes that there are no caves on the site which would be suitable for roosting Lesser Horseshoe Bat and given the general habitat present, it is likely that the general vicinity, and the hedgerow/treeline to the south of the site, has the potential to be of importance for a number of bat species. It identifies two invasive species, Japanese Knotweed, within the overall landholding, and Himalayan Knotweed, within the application area, which is considered to be indicative that dumping of contaminated material may have occurred. The rNIS considers that the development site is of significant ecological value owing to the nature of the site (quarry) and the habitats provided (re-vegetating areas; small ponds with well-developed emergent vegetation, *Chara* species (green algae); and invertebrates).
- 3.9 The rNIS states that there are numerous records of species of conservation interest in the 10km squares in and around the development site, although none were observed on the site. Of the more mobile species (e.g. Otter, Red Squirrel or Pine Martin), the rNIS states that whilst these may come within the vicinity of the site, the development has had no impact on these species.
- 3.10 The rNIS identifies 12 SACs and 2 no. SPAs, within 15km of the quarry site (Table 1 and Figures 11 and 12, rNIS). As the development is removed from any Natura 2000 site, no direct impacts are envisaged. An appropriate assessment screening exercise identifies potential impacts on Natura sites in the vicinity of the site arising from the operation of the quarry, in particular, from possible changes to hydrogeology and water quality, invasive species and as a result of disturbance.
- 3.11 The appropriate assessment concludes that having regard to the results of the hydrogeological assessment of the development, which indicated no significant impacts on hydrology, and given the implementation of appropriate mitigation and precautionary measures (in particular with regard to dealing with invasive species; retention of all scrub, hedgerow and mature trees (or comprehensive survey prior to removal); and further bird surveys if work is to be carried out in the vicinity of the ponds (due to the observed presence of Ringed Plover), the

development has had/will have no significant impact upon the Natura 2000 network.

Supporting Documentation

3.12 The application for substitute consent includes a short memorandum commenting on the Inspector's previous report in respect of the application made under section 261A(6) for a review of the planning authority's notification under section 261A of the Planning and Development Act 2000, as amended. In summary, the memorandum makes the following points:

- There has been no significant intensification of quarrying since 2000 (or increase in traffic). Working methods have been restricted since the imposition of conditions by the Board in 2007 (in particular the requirement to confine working to a level above the winter water line in the quarry).
- There has been no pumping of surface or groundwater from the quarry into the adjacent Lough Carra.
- There cannot have been any cumulative impact with respect to noise and dust during the appropriate period as the adjacent quarry has been closed since 1982.
- There is no limestone pavement on site and no evidence that limestone pavement has been removed.

4. PLANNING HISTORY

4.1 In May 2007, David Coleman appealed to the Board certain conditions imposed by the planning authority on the operation of the quarry, following the registration of the quarry under section 261 of the Planning and Development Act 2000 (as amended). In October 2007, the board decided to attach eleven conditions, amend seven, remove one and add one new condition (our ref. 16.QC.2054).

4.2 In August 2012, David Coleman applied to the Board for a review of the planning authority's Notice issued under section 261A(3)(a) of the Planning and Development Act, 2000 (as amended), which required that the owner/operator of the quarry submit an application for substitute consent to the Board, to be accompanied by a remedial EIS and remedial NIS. On the 27th January 2014 the Board set aside the planning authority's determination in respect of the requirement for a remedial EIA, but confirmed the determination in respect of a rNIS (our ref. 16.QV.0141). On 27th February 2014, the Board granted an extension of the period in which the owner/operator could apply for substitute consent, with the final date for making the application being the 16th July 2014 (our ref. 16.SH.0200).

4.3 Under our reference 16.QV.0257, the Board carried out a review of the planning authority's determination under section 261A in respect of the Roadstone Provinces Ltd quarry to the immediate north of the application site. In their decision (27th January 2014) the Board set aside the planning authority's determination in respect of EIA and AA for a number of reasons including the limited development of the quarry, if any, after 1990.

5. PLANNING POLICY CONTEXT

5.1 Policies of the Mayo County Development Plan 2014-2020 refer to the traditionally strong extractive industry in the county and support its continued development subject to ensuring that development is carried out in a manner which minimises its effects on the environment, including the Natura 2000 network, amenities, infrastructure and the community, and has full regard to the principles of sustainability and compliance with the government's guidelines on Quarries and Ancillary Activities (DoEHLG, 2004). Development standards for quarry development are set out in Volume 2 of the Plan.

5.2 Policies of the plan afford protection to the environment, in particular, natural and cultural resources, air quality, water quality and the county's landscape resource. The quarry site falls within landscape policy area 4a of the Plan and within this policy area, it is considered that quarry development has *'Medium potential to create adverse impacts on the existing landscape character. Such developments are likely to be clearly discernible and distinctive, however with careful siting and good design, the significance and extent of impacts can be minimised to an acceptable level'*.

5.3 The quarry site does not lie within proximity to any designated scenic route or view.

6. SUBMISSIONS

Prescribed Bodies

6.1 The application for substitute consent was circulated by the Board to prescribed bodies. The following submissions were made:

- NRA – Any consent granted for the development should not result in any intensification of use of the existing direct access to the N84, a national secondary road, above permitted levels of extraction.
- DAHG – Consider the rNIS to be deficient in respect of description of project; impact of the quarry on the specific conservation objectives of European sites; analysis underpinning key findings of the rNIS; how the

hydrogeological study has informed the rNIS; impact of export of non-native species from the site; and ecological effects of quarrying.

- Environmental Health – Area is served by Lough Mask Public Water Supply. Rainwater falling from the quarry and groundwater seeping from the adjoining quarry discharges to ground and thereafter to Lough Carra which discharges to Lough Mask, the source of water for the PWS. Any ongoing operation should be controlled by conditions in respect of storage of pollutants and maintenance of plant/vehicles (water quality), occasional blasting (impact on residents), condition of the 200m stretch of unmade road from the N84 providing access to the site (noise/dust on nearby residents).

Third Parties

6.2 The following comments were made by third parties to the application:

- A. and F. Kennedy – Intensification of quarry activity commenced in 1999. In 2001 the third party went to court to try and contain the quarry in its current area, control operating time, blasting, intensification and health and safety issues. Quarry operating below water line for first time. Post court case, quarry changed hands and extended to land excluded by court hearing, encroaching on a buffer between quarry and their residential property. Quarry gives rise to dust (house, garden, cars), noise (proximity to house), machinery is visible from the N84, no proper fencing in place, boundary fence with Roadstone quarry is dangerous. Water was pumped from the quarry to the adjoining Roadstone quarry by the previous operator. Limestone pavement was present on the site. Since 1997/8 the quarry has intensified, expanded and since 2007 has been allowed to continue to operate without full compliance with irreversible effects.

7. PLANNING AUTHORITY'S REPORT

7.1 The planning authority has not submitted a Section 177I report in respect of the development.

8. FIRST PARTY RESPONSE

8.1 The first party responded to the observations made as follows:

Third parties

- Access road has been surfaced (tarred and chipped).

- No significant dust generating activities. Distance from site to nearest dwelling is such that there is no significant noise impact.
- Noise and dust monitoring carried out over a number of years shows that noise and dust levels are well within the guideline threshold. Observers' property is close to national road which would result in significant noise generation.
- Current and previous owner have confirmed that no pumping has taken place during their operation of the quarry. The hydrological report demonstrates that water in the quarry originates in the larger quarry. If at any time water was pumped from the site to the adjoining quarry, water would have been re-circulated.
- No limestone pavement has been removed from the site.
- Unclear regarding what the photographs are intended to illustrate.

DAHG

- Project description – The small quarry operation is fully described in the documents comprising the application for substitute consent.
- Deficiencies in rNIS:
 - The basis for conclusions reached in the rNIS are set out in section 3.2 of the rNIS.
 - The rNIS is entirely dependent on the findings of the hydrogeological assessment which found insignificant levels of risk with respect to hydrogeological impacts.
 - DAHG report indicates that the primary evidence of decline in ecological quality in Lough Carra is mostly likely associated with runoff from agriculture. The hydrogeological impact assessment did not indicate any potential impacts on nutrient status of the adjacent SAC, or habitats therein.
 - DAHG report states that the Lesser Horseshoe Bat is very sensitive to disturbance. The quarry has been in operation at the site over 60 years and it is unlikely that the species has been present at the site when it was used as a quarry. The presence/absence of the species prior to this time is impossible to scientifically ascertain.
 - No information is provided regarding the presence of limestone pavement on the site. It is not possible to determine from the ortho-photographs if the site supported Limestone Pavement or 'Annex-quality' limestone pavement.
 - The invasive species on site reproduce through rhizomes and vegetative propagation and both species are virtually genetically identical. It is therefore impossible to determine if material from the site has had any impact in any other location.

- The rNIS assumes that all mitigation/precautionary measures in the rNIS will be implemented.

9. ISSUES AND ASSESSMENT

9.1 When considering applications for substitute consent, the Board is required to consider the proper planning and sustainable development of the area having regard to matters set out in Section 177K of the Planning and Development Act, 2000 (as amended) which include, the provisions of the development plan, the remedial NIS, the significant effects of the development on the environment, or on a European site, and submissions or observations made on the application.

9.2 Having regard to these requirements, I comment below on three substantial matters:- the provisions of the development plan; the effects of the development on a European site and whether or not the development is consistent with the proper planning and development of the area.

9.3 With regard to the environmental effects of the development, these have been considered by the Board in their determination of history files in respect of the quarry, in particular the conditions imposed following the registration of the quarry under our reference 16.QC.2054 and the Board's decision under 16.QV.0141 in respect of environmental impact assessment. I note that observations have been made in this application on the on-going operation of the quarry and compliance with conditions of the permission. However, these are matters for enforcement as the environmental effects of the quarry operation have been deemed to be acceptable, subject to compliance with the conditions imposed.

County Development Plan

9.4 Policies of the Mayo County Development Plan support the development of the extractive industry in the county subject to protection of the environment, including the effect of development on the Natura 2000 network, and the principles of sustainability. It has previously been determined that the environmental effects of the development are acceptable subject to compliance with conditions imposed after the registration of the quarry. Within this policy context therefore, I consider that the principle of development is acceptable on the site, subject to a satisfactory assessment of the effect of the development on European sites.

Effect of the Development on European Sites – Appropriate Assessment

9.5 Within 15km of the quarry are 15 Natura 2000 sites; 13 Special Areas of Conservation and 2 Special Protection Areas (see Table 1, Figure 11 and 12, rNIS). The nearest Natura 2000 sites lie immediately south and east of the site and comprise the Lough Carra/Lough Mask Complex SAC (site code 001774) and the Lough Carra Special Protection Area (site code 004051).

9.6 The rNIS screening exercise concludes that the development has no direct effects on any of the Natura 2000 sites as it is removed from them, but that there is potential for secondary and indirect impacts on several Natura 2000 sites, primarily due to changes in water quality and hydrology, disturbance and impacts of invasive species. As a consequence each Natura 2000 site is carried forward for detailed assessment.

9.7 The European Commission's advice on appropriate assessment¹ and the Department of Environment's guidance document on appropriate assessment² suggest the following structure for an Appropriate Assessment.

Description of the Project

9.8 The operation of the quarry has been described above. In brief, it has comprised the extraction of limestone from a site of 3.0ha using mechanical means, infrequent blasting and occasional crushing. Quarrying has created a series of ponds on the site, as described in sections 2 and 3 of this report.

Characteristics of the European Site

9.9 The characteristics of the following European sites, lying within 15km of the quarry, are described in the rNIS:

¹ Assessment of Plans and Projects Significantly Affecting Natura 2000 sites, EC, 2001

² Appropriate Assessment of Plans and Projects in Ireland, Department of Environment, Heritage and Local Government, 2009

- Lough Carra/Mask Complex SAC .
- Lough Mask SPA.
- Lough Carra SPA.
- Ardkill Turlough SAC.
- Carrowkeel Turlough SAC.
- Clyard Kettle-holes SAC.
- Kilglassan/Caheravoostia Turlough SAC.
- Skealaghan Turlough SAC.
- Mweelrea/Sheefry/Erriff Complex SAC.
- Ballinafad SAC.
- Towerhill House SAC.
- River Moy SAC.
- Kildun Souterrain SAC.
- Greaghans Turlough SAC.
- Moore Hall (Lough Carra) SAC.

9.10 Lying closest to the site, immediately south and east of it, are the Lough Carra/Mask Complex SAC (site code 001774) and the Lough Carra SPA (site code 004051).

9.11 Lough Carra/Mask Complex SAC is a large site centred on the two loughs. Lough Carra lies immediately to the east of the quarry and is the smaller and shallower of the two. Lough Mask lies to the south west. Lough Carra is connected to Lough Mask via the Keel River. The eastern side of Lough Mask is edged by a mosaic of limestone pavement, scrub and woodland. The western side is backed by high mountains. Lough Carra is surrounded by limestone pavement. Both lakes have many islands and the two loughs are hydrologically linked. The complex is ecological importance for the occurrence of scarce and specialised habitats, animal and plant species. Conservation objectives are to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected; Hard Water Lakes; Dry Heath; Orchid-rich Calcareous Grassland; *Cladium* Fens; Alkaline Fens; Limestone Pavements; Alluvial Forests; Lesser Horseshoe Bat; Otter and Slender Green Feather-moss.

9.12 Lough Carra SPA is of considerable ornithological importance for wintering birds. In particular, conservation objectives seek to maintain and restore the favourable conservation condition of bird species listed as Special Conservation Interest for the SPA; the Common Gull.

9.13 Approximately 1.5km to the west and south west of the quarry is the Lough Mask SPA (site code 004062). Lough Mask SPA is similarly important for water birds. Conservation objectives are twofold: to maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interest; Tufted Duck, Black-headed Gull, Common Gull, Lesser Black-backed Gull, Common Tern, Greenland White-fronted Goose, and to maintain or restore the favourable conservation condition of the wetland habitat at Lough Mask SPA as a resource for the regularly-occurring migratory waterbirds that utilise it.

- 9.14 Approximately 5km to the north east of the quarry is Moore Hall (Lough Carra) SAC (site code 000527), c. 1.3km to the north east of Moore Hall, Towerhill House SAC (site code 002179) and c.12km to the north east of the application site is Ballinafad SAC (site code 002081). Moore Hall consists of a series of buildings within 1km of the shore of Lough Carra which are used at various times throughout the year by the Lesser Horseshoe Bat. Towerhill House comprises the ruins of Towerhill House, surrounding woodlands, Lough Beg and its associated swamp vegetation. The Lesser Horseshoe Bat uses a man-made stone underground passage, which runs around the ruins of Towerhill House, for winter hibernation. Ballinafad consists of a large building which was formerly used as an agricultural college. Lesser Horseshoe Bats use the roof space as a roosting site. Conservation objectives for all three SACs are to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the site has been selected, namely Lesser Horseshoe Bat.
- 9.15 Approximately 10km to the north east of the site is a southern tributary of the River Moy which is designated as part of the River Moy SAC (site code 002298). This extensive SAC comprises almost the entire freshwater element of the River Moy and its tributaries, including both Lough Conn and Lough Cullin. Conservation objectives are to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the site has been selected; Active Raised Bog, Degraded Raised Bog, Rhynchosporion Vegetation, Alkaline Fens, Old Oak Woodlands, Alluvial Forests, White-clawed Crayfish, Sea Lamprey, Brook Lamprey, Atlantic Salmon and Otter.
- 9.16 Lying more than 10km to the east and south east of the quarry, to the east of Lough Carra and Lough Mask are five turloughs each designated as an SAC; Carrowkeel Turlough SAC (site code 000475), Greaghans Turlough SAC (site code 000503), Kilglassan/Caheravoosta Turlough Complex SAC (site code 000504), Skealaghan Turlough (site code 000541) and Ardkill Turlough (site code 000461). Conservation objectives for each of these SAC's is to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the site has been selected, namely Turloughs.
- 9.17 Approximately 12km to the south east of the site is the Clyad Kettle Holes SAC (site code 000480) and c.14km to the south south east of the site is Kildun Souterrain SAC (site code 002320). The Clyad Kettle Holes comprise a number of small lakes and turloughs developed between stony hillocks, with some lakes connected with each other but others appearing to fill and empty by subterranean means. Conservation objectives are to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected; Turloughs and *Cladium* Fens. Kildun Souterrain is situated in an area of hazel and ash woodland which contains an important hibernation site of the Lesser Horseshoe Bat. Conservation objectives

are to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected; Lesser Horseshoe Bat.

9.18 Approximately 17km to the west of the site is the eastern limit of the Mweelrea/Sheefry/Erriff Complex SAC (site code 001932). This extensive site covers a large area of the scenic hills of south County Mayo. Conservation objectives are maintain or restore the favourable conservation condition of the numerous Annex I habitat(s) and/or the Annex II species for which the SAC has been selected, which include for example, Coastal Lagoons, Atlantic Salt Meadows, Oligotrophic Waters, Dystrophic Lakes, Active Blanket Bog, Alkaline Fens, Freshwater Pearl Mussel, Atlantic Salmon (see section 3.2.8 of rNIS for a full listing).

Impact Prediction

9.20 Potential impacts arise from the quarry at Partry as a result of:

- Land take and therefore the direct and indirect impacts of habitat loss.
- The operation of the quarry and the indirect effects of noise, dust, traffic etc. on habitats and species.
- The extraction of material below the water table and the potential for changes to hydrogeology and water quality and the consequences of these for related water dependent habitat and species.
- The presence of invasive species within the quarry and the risks posed to habitats and species by these.
- Cumulative impacts, with the adjoining quarry.

Impact on Conservation Objectives

a. Direct and indirect impacts of habitat loss

9.21 The quarry, whilst operating in close proximity to Lough Carra/Lough Mask Complex SAC and Lough Carra SPA does not result in any direct loss of habitat from the sites. Prior to quarrying, the site would have formed part of the natural hinterland of Lough Mask and possibly the feeding or foraging area for species of conservation interest in the adjoining sites e.g. waterbirds, Lesser Horseshoe Bat, otter.

9.22 There is limited information on file regarding the habitats on the quarry site prior to the development, the ecological value of these or their possible importance to species of conservation interest. However, reflecting the habitats in the local area, aerial photographs indicate that in 1995 the south-eastern part of the site was in operation as a quarry with the northwest part comprising some pasture and hedgerows. Since 1995, the quarry has expanded in particular to

the north-west resulting in the loss of some pasture and short lengths of hedgerow. The Roadstone Wood quarry to the north of the site comprises substantial areas of limestone pavement (a priority habitat under the EU Habitats Directive), immediately adjoining the quarry site, and it is possible that part of the site, adjoining land to the north, was host to some limestone pavement and that this also has potentially been lost. (However, it is not possible to make any robust conclusion on this matter).

- 9.23 The flora and fauna survey of the application site observed no species of conservation interest of the nearby Natura 2000 sites utilising the application site. However, the study considers that the hedgerows around the boundary of some of the development site are likely to be of high local importance to bats. It also notes that there is a great deal of habitat in the immediate vicinity of the application site and an extensive network of hedgerows and mature trees which is almost certainly utilised by foraging, commuting and roosting bats.
- 9.24 Whilst the quarry has resulted in the loss, therefore, of habitat which forms part of the wider landscape of the Lough Carra/Lough Mask Complex SAC and Lough Carra SPA, including possibly limestone pavement, the area affected by the quarry post 1997 is very modest and the habitats affected are in abundance in the vicinity of the site. In addition, I note that all sites supporting the Lesser Horseshoe Bat are considerably removed from the application site (see 'Disturbance' below). I would conclude therefore that the quarry is unlikely to have impacted on the qualifying interests of the nearby Natura 2000 sites by virtue of habitat loss or fragmentation.
- 9.25 I note that the quarry to the north of the application site ceased operation prior to 1990, however, the application site would have contributed to a small extent to the cumulative loss of natural habitat in the local area. This loss should be balanced by the creation of the diverse habitat on the quarry site to the north, which has developed since 1990.

b. Disturbance

- 9.26 The quarry at Partry has traditionally been a small scale operation, extracting limestone by mechanical means, with occasional blasting. The effect of noise arising from quarrying activity, vehicles and human activity has not been assessed in the rNIS in terms of the impact of this disturbance on the mobile species of conservation interests of the nearby Natura 2000 sites, i.e. Lesser Horseshoe Bat, Otter, Common Gull and waterbirds identified as of conservation interest in the Lough Mask SPA (for example, the sensitivity of these species to disturbance). Instead, the rNIS states that given the current land-use in the area (primarily agriculture) and the fact that the nesting birds are likely habituated to indirect disturbance by humans, the development is unlikely to have had any significant impact through disturbance.

- 9.27 I note that the Roadstone quarry to the north of the site was in operation prior to the application site and I accept that bird species and otter will therefore have been habituated to human disturbance (and also that no cumulative impacts would have arisen from the concurrent operation of the quarries). I note that the NPWS Site Synopsis does not indicate that quarrying poses a risk to any of the conservation interests of the SAC and that that important populations of Lesser Horseshoe Bat occur to the south east of the site, to the west of Ballinrobe (at Curramore House) and near Clonbur (Ballyklyne). Both are substantially removed from the application site (>7km).
- 9.28 Four other SAC's within 15km of the site also support populations of Lesser Horseshoe Bat and the conservation objectives for the sites are to maintain or restore the favourable conservation condition of this species (Moore Hall, Towerhill, Ballinafad and Kildun Souterrain SACs). All four sites are considerably removed from the application site i.e. lying at least 5km from the quarry. Whilst very sensitive to disturbance, Lesser Horseshoe Bat normally forage within 3km of the maternity roost (but they can be greater and up to 5km), with the quality and concentration of suitable foraging habitat affecting foraging distances. Given the distance of the quarry site from the roosts and the presence of Lough Carra or Lough Mask separating the site from the roosts³, it would seem highly unlikely that the quarry has had any direct or indirect impact on bat species roosting at these sites or the conservation objectives of the SACs.

c. Impact on the Water Environment

- 9.29 Whilst limestone has been extracted from the quarry at Partry primarily by mechanical means and from surface layers, extraction has also taken place below the prevailing water table. The Hydrogeological Study provides a conceptual model of surface water and groundwater movement within the site. It concludes that surface water is contained within the site and that groundwater enters the site via seepage from the up gradient quarry and leaves as subsurface flow to Lough Carra at a rate controlled by lake water levels. Groundwater flows are considered to be shallow, unconfined and low in volume due to the small up gradient catchment.
- 9.30 The conclusions of the Study seem reasonable and consistent with the observed features on site e.g. tiered levels of ponds, limited extent of seepage into the site, no observed surface water outflows from the site. It would appear therefore that the quarry has had a very local impact on groundwater flows (even if water was pumped from the lower void and discharged within the site or

³ Where habitats are fragmented, linear features such as hedgerows form important corridors between roosts and foraging areas. With Lough Carra/Lough Mask separating the quarry site from these roosts there is an absence of linear features to facilitate foraging.

the adjoining site). Having regard to this conclusion, it is unlikely that the quarry has adversely impacted on any of the turloughs in the vicinity of the site, all of which are substantially removed from it and separated from the site by Lough Carra, or for the same reasons River Moy SAC and the Mweelrea/Sheefry/Erriff Complex SAC.

- 9.31 From the material on file it would appear that soils on the site were very thin providing little protection for groundwater. However, with the removal of surface layers and exposure of groundwater, the risk of contamination would have been increased. Since 1997 it would appear that the quarry has been operated by mobile plant (excavator, crushing and screening equipment) and has involved occasional blasting. There have been and are no offices or staff facilities on site and no storage of hydrocarbons or lubricants etc. Potential sources of water pollution would have been confined to dust and increased sedimentation in surface water runoff, any residues from blasting and any spills during refuelling of machinery.
- 9.32 Surface water is confined within the site and any sediment in Pond 4 is likely to be filtered by the remaining layers within the quarry void. Sampling of water carried out in June 2014 indicated good quality water in Pond 4 and no evidence of hydrocarbons and low levels of orthophosphate. The hydrological impact assessment carried out did not therefore indicate any potential impacts on the nutrient status of the adjacent SAC. Further, DAHG report on the status of Hard oligo-mesotrophic waters indicates that water quality in Lough Carra is most at risk from agriculture and urban development (increasing phosphorus concentrations). I would conclude therefore that the quarry at Partry, on the basis of the scientific information available, currently and historically has not adversely impact on either surface or groundwater water quality.
- 9.33 Notwithstanding the above conclusions, I consider that it would be prudent that surface water/groundwater levels and water quality is regularly monitored to ensure that no adverse impacts arise in the future, based on the past operation of the quarry.

d. Invasive Species

- 9.34 The survey of flora and fauna on the quarry site identified two aggressive alien species, Himalayan Knotweed and Japanese Knotweed, within the quarry site. The rNIS states that there is potential for these species to spread from the site to the surrounding Natura 2000 sites and recommends that a management plan is drawn up with the goal of eradicating these species. I note that these species spread through rhizomes and vegetative propagation (underground root system and cut stems) and that any impacts outside the site would have to come through the actual movement of soil/plant material, of which there was no evidence outside the immediate confines of the site. In view of this, I consider

that it is appropriate that the invasive species are eradicated and that the methodology for doing so is approved by the DAHG in order to ensure no secondary effects on designated sites (e.g. through the use of pesticides).

e. Cumulative Impacts

9.35 Whilst the quarry operates immediately south of a more substantial Roadstone quarry, cumulative impacts of the two quarries working simultaneously post 1997 are very unlikely given that the Roadstone quarry ceased operation prior to 1990.

Mitigation Measures

9.36 Mitigation measures are set out in the recommendations of the Flora and Fauna study, in the general ecological recommendations of the rNIS and Hydrogeological Study. Relevant to the past operation of the quarry, these include retention of all hedgerows and mature trees (or comprehensive survey prior to removal and clearance outside of the breeding season); 5m buffer from hedgerows; further bird surveys if work is to be carried out in the area of the ponds; and eradication of invasive species. These measures generally seem reasonable and if implemented will minimise any further adverse impacts on flora/fauna. However, in view of the sensitive location of the site, I would recommend two further conditions to the Board, one which requires the retention of all hedgerows and mature trees on site and one which requires the restoration of the site on completion, in a manner which maximises the nature conservation value of the site.

Conclusion

9.37 In conclusion, having regard to the limited scale of the quarry at Partry, the nature of its operation, the absence of concurrent activity with the quarry to the north of the site and subject to the implementation of the mitigation measures which are proposed in the application for substitute consent, and subject to further conditions regarding the monitoring of water (levels and quality), retention of landscape features and restoration, I consider that post 1997 development which has taken place on site has not, is not and will not adversely affect the integrity of any European site in the vicinity of the site, in view of the sites' conservation objectives.

10. CONCLUSION AND RECOMMENDATION

10.1 Having regard to the nature and scale of quarrying which has taken place on the subject site, the proposed arrangements for mitigation and subject to further conditions set out below in respect of water, retention of landscape features and restoration of the site, I consider it is reasonable to conclude on the basis of the information on the file, which I consider to be adequate in order to carry out a Stage 2 Appropriate Assessment, that the subject development, individually or in combination with other plans or projects, has not, is not and will not adversely affect the integrity of any European site in the vicinity of the site, in particular the Lough Carra/Lough Mask Complex SAC (sited code 001774); Lough Carra SPA (site code 004051) and Lough Mask SPA (site code 004062), having regard to the conservation objectives of those sites. Having regard to the acceptability of these environmental impacts, I consider that subject to compliance with the conditions set out below, the subject development is not contrary to the proper planning and sustainable development of the area and I would recommend that that the application for substitute consent be granted.

REASONS AND CONSIDERATIONS

The Board agreed with the screening report and conclusion carried out in the Inspector's report that the Lough Carra/Lough Mask Complex SAC (sited code 001774); Lough Carra SPA (site code 004051) and Lough Mask SPA (site code 004062) in particular, are the European sites for which there is a likelihood of significant effects.

The Board considered the Natura Impact Statement and all other relevant submissions and carried out an appropriate assessment of the implications of the proposed development for European Sites in the vicinity of the site and in particular for Lough Carra/Lough Mask Complex SAC (sited code 001774); Lough Carra SPA (site code 004051) and Lough Mask SPA (site code 004062), in view of the sites' Conservation Objectives. The Board considered that the information before it was adequate to allow the carrying out of an Appropriate Assessment.

In completing the assessment the Board considered, in particular:

- i. the information contained within the remedial NIS and the application for substitute consent,
- ii. the nature and scale of the development,

- iii. the absence of concurrent activity with the adjoining quarry to the north of the site,
- iv. the submissions made in accordance with Regulations made under section 177N of the 2000 Act, as amended,
- v. the provisions of the Mayo County Development Plan 2014-2020,
- vi. the provisions of the Planning and Development Acts, 2000 to 2014, and in particular Part XA,
- vii. the Quarry and Ancillary Activities, Guidelines for Planning Authorities, issued by the Department of Environment, Heritage and Local Government in April, 2004,

In completing the AA, the Board accepted and adopted the Appropriate Assessment carried out in the Inspector's report in respect of the potential effects of the proposed development on European sites in the vicinity of the site, in particular the aforementioned European Sites, having regard to the sites' Conservation Objectives.

In overall conclusion, the Board was satisfied that the proposed development would not adversely affect the integrity of any European sites in view of the sites' Conservation Objectives.

Having regard to the acceptability of the environmental impacts set out above, it is considered that subject to compliance with the conditions set out below, the subject development is not contrary to the proper planning and sustainable development of the area.

CONDITIONS

1. This grant of substitute consent shall be in accordance with the plans and particular submitted to An Bord Pleanála with the application on the 14th July 2014 and the 7th August 2014. The grant of consent relates only to development undertaken as described in the application and does not authorise any future development on this site.

Reason: In the interest of clarity.

2. All environmental mitigation identified in the remedial Natura Impact Statement shall be implemented in full, save as may be required in order to comply with the conditions attaching to this order. A timescale for implementation shall be submitted to the planning authority, for written agreement, within 3 months of the date of this order.

Reason: In the interest of nature conservation.

3. A detailed restoration scheme for the site shall be submitted to the planning authority for written agreement within three months of the date of this order. The restoration scheme shall be agreed with the Department of Arts, Heritage and the Gaeltacht and shall include:

(a) The retention of all hedgerows and mature trees on site.

(b) Measures to enhance the nature conservation value of the site, having regard to its proximity to the nearby Lough Carra/Lough Mask SAC, Lough Carra SPA and Lough Mask SPA.

(c) A timescale for implementation.

Reason: In the interest of visual amenity, public safety and nature conservation.

4. Within three months of the date of this order, details of arrangements for the monitoring of ground and surface water quality and levels, including a time frame for implementation, shall be submitted to, and agreed with the planning authority, in writing.

Reason: To ensure protection of groundwater and surface water.

5. Within three months of the date of this order, details plans for the eradication of invasive species, including the timeframe for implementation, shall be submitted to, and agreed with the planning authority, in writing. The eradication plan shall be agreed with the Department of Arts, Heritage and the Gaeltacht.

Reason: In the interest of nature conservation.

6. Within three months of the date of this order, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or other security to secure the provision and satisfactory restoration of the site, coupled with an agreement empowering the local authority to apply such security or part thereof to the satisfactory completion of any part of the development. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.

Reason: To ensure the satisfactory restoration of the site.

Deirdre MacGabhann
Planning Inspector

19th March 2015