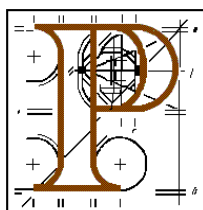

An Bord Pleanála



Ref.:

PL10.SU0122

Development:

Substitute Consent application in respect of an extension to an existing limestone quarry, at Bennettsbridge Limestone Quarry Kilree, Sheastown, Bennettsbridge, Co. Kilkenny.

Planning Application:

Planning Authority:

Kilkenny County Council

Applicant:

Eoin O'Carroll, Bennettsbridge Limestone Quarries Ltd.

Type of Application:

Substitute Consent (S.177)

Prescribed Bodies:

Inland Fisheries Ireland
NRA
An Taisce
GSI (for Dept. of Communications, Energy and Natural Resources)
HSE

Observers:

Ann Gibbons

Inspector

Conor McGrath

Date of Site Inspection:

03/02/2015

1.0 INTRODUCTION

This application arises from a decision of the Board on 17th February 2014, to confirm the determination of the planning authority under S.261A(2)(a)(i) & (ii) and S.261A(3)(a) of the Planning and Development Acts 2000-2010, in respect of an extension to an authorised limestone quarry at Kilree, Sheastown, Co. Kilkenny. The effect of the Board's order was to require the quarry owners to apply for substitute consent, which application was to be accompanied by a remedial EIS and remedial NIS. The Board order also set aside the determination of the planning authority in respect of the quarry development under S.261A(5)(a).

Two extensions of time in respect of the lodgement of this application for substitute consent were granted by the Board under ref. ref. SH0208.

2.0 SITE LOCATION AND DESCRIPTION

The application site is located in the townland of Kilree, Sheastown, Co. Kilkenny, approximately 1 km north-west of Bennettsbridge, and 5 km south of Kilkenny City. The surrounding agricultural area is characterised by large fields bounded by mature hedges and ditches. The main features in the wider landscape are the River Nore, which flows in a southerly direction through a shallow valley, and the M9 Motorway which runs northeast to southwest along the southern edge of the application site. The M9 crosses the River Nore approx. 1km east of the application site. The R700, between Kilkenny and Thomastown, via Bennettsbridge, passes to the east of the application site. There is a pattern of dispersed housing along the R700 in this area, while there are also a number of other quarries operating in the area.

The application site comprises part of a substantial limestone rock quarry on an overall landholding of 39.32 ha. The quarry is accessed from the R700 via a local road cul-de-sac / L26322. The local road was previously upgraded in order to separate access to the quarry from access to a number of residential properties located to the north-east of the quarry. This realignment was carried out under a previous planning application, PA ref. 03/75.

The overall extraction area is irregularly shaped, extending approx. 650m north to south and between 300 & 400m east to west. Administrative offices / portacabin, wheel wash and weighing station are clustered around the site entrance in the north-eastern corner. There are pre-cast concrete production facilities located at the northern end of the quarry void which are operated by a separate company, Eden Concrete, while Lagan Asphalt also operate a plant within the quarry under a lease from Bennettsbridge Limestone Quarries. This application relates to an area of 9.5 ha comprising the southern extent of the extraction area. These lands are bounded generally by the M9 to the south.

Extraction is by means of blasting and at time of inspection there was no activity being undertaken within the substitute consent application site. Excavations have extended to a reported level of 28m AOD or approx. 30m depth, advancing in a southerly and south-easterly direction. The highest point within the overall quarry site was approx. 64m AOD, in the southwestern corner of the substitute consent area, indicating that levels have been reduced by up to approx. 35-36m within the site.

There is a sump for ground and pluvial water centrally located on the eastern side of the overall quarry void. Water is pumped from the sump to two settlement ponds / lagoons located in the southeastern corner of the landholding. Following two stage settlement, including direction through an oil interceptor, water discharges to a stream (the Dunbell Little) which flows approx. 600m ,initially to the north and then in a generally easterly direction under the M9 and the R700, to the River Nore. It is understood that this stream, although modified in the vicinity of the quarry and M9, was an original and natural watercourse draining this area.

The closest dwelling to the substitute consent area lies approx. 90m north of the application site. This dwelling is bounded to the east and south by quarry lands. There are five houses located within 200m of the substitute consent application area and nine houses within 450m of the site. These houses were formerly located along the quarry access road and adjacent to the site entrance, prior to the realignment of the local road.

3.0 DESCRIPTION OF DEVELOPMENT THE SUBJECT OF THE APPLICATION

The application describes the development as relating to the extension of an existing permitted limestone quarry over an area of approximately 9.5Ha, which occurred between mid-2007 and mid-2014. The cumulative area of the original permitted quarry and the unauthorised area is 23.2 Ha. The development is described as involving the removal of approximately 270,000m³ of topsoil, and the quarrying of approximately 944,704m³ (1,747,702 tonnes) of rock up to 2013. It has been indicated that the boundary of the extended quarry area was established before July 3rd 2008.

The application states that between 2007 and 2009, a significant portion of the extracted soil and rock was utilised in the construction of the adjacent M9 Motorway. A summary of the volumes and distribution of materials exported from the quarry development is provided in Section 4.2 of the EIS. This identifies the peak years of quarry output as 2008 and 2009 when 400,000 and 500,000 tonnes of materials respectively were exported from the site. Production reduced significantly after these dates to approx. 190,000 tonnes per annum. The volume of material exported from the site between 2007 and 2014 is reported to be approx. 1,860,000 tonnes.

Applicant's correspondence advises that a future planning application will be lodged under Section 34 of the Planning and Development Acts (as amended) for permission to deepen the entire quarry by a further two benches. Such application would be accompanied by an Environmental Impact Statement which will consider the cumulative impacts of all permitted, completed and proposed developments.

Revised site layout and section drawings were requested from the applicants in October 2014 and received by the Board on 30/10/2014. These were circulated to prescribed bodies for comment.

4.0 RELEVANT PLANNING HISTORY

PA ref. 85/419: A 10 year permission was granted for a rock quarry on this landholding from 1987. Under PA ref. 433/89 permission was granted for the retention of office and ancillary development on the site.

Planning authority reports indicate that the unauthorised extension of quarrying activities beyond the site of PA ref. 85/419 resulted in enforcement action and the subsequent lodgement of the application under PA ref. 99/1161.

PA ref. 99/1161 ABP ref. PL10.120270: Permission granted in March 2001 for retention and extension of unauthorised quarrying. The application was accompanied by an EIS. Conditions included the following:

2. This permission shall be for the period until the 31st day of December 2018.
3. Quarrying shall not extend below a depth of 30 metres A.O.D.
5. (1) The relocated right of way laneway along the northern boundary of the site, from the existing entrance gates to the north western extremity of the site, shall be kept open for the unimpeded use of third parties. The relocated right of way/laneway shall be of at least equal standard with the laneway westwards of the site, in the context of the structure, width and surface.
6. Within six months of this order, a closure plan, incorporating restoration proposals shall be submitted to the PA.
7. (6) The final western and northern quarry faces shall be benched above the 40 metre OD level with typical benching being in the order of seven metres vertical to three metres horizontal.
12. During the period of quarrying of phase one (to 45 m A.O.D) a surface and ground water monitoring programme shall be put in place to assess the development of the cone of depression.

Within one year prior to the completion of phase one, a report on the likely effects from de-watering for the quarry development to 30 metres A.O.D, shall be submitted to the planning authority.

14. Noise levels generated during the operation of the quarry shall not exceed 50 dB(A) LAeq T when measured at any occupied house.
15. (1) The transmitted ground vibration arising from any blast shall not exceed a peak particle velocity of 6mm / second at any residential property for a maximum of 95 per cent of all blasts and 12 mm / second for any individual blast.
(2) The air overpressure arising from any blast, when measured outside the nearest inhabited house to the location of the blast, shall not exceed 125 dB (linear) at frequencies of two hertz or over.
17. (1) Dust deposition shall not exceed 130 mg / m² / day measured at the site boundaries and averaged over 30 days. Dust deposition monitoring shall be carried out monthly for the first 12 months and shall be subject to review by the planning authority thereafter.
23. The developer shall monitor and record ground water, noise, ground vibration, air overpressure and dust deposition levels. All data obtained shall be open to inspection by the planning authority. All recorded data shall be submitted to the planning authority on a monthly basis and shall be available to the public.
24. An Environmental Monitoring Committee (EMC) shall be established. The composition of the Committee shall be agreed with the planning authority.
26. The stilling pond and settlement lagoon shall be cleaned out on a regular basis. Settled solids in both tanks shall not be allowed to exceed 500mm in depth.
30. Improvement to the county road serving the site (LT 26322), shall be carried out, within three months of the date of this order.
31. Lodgement of a cash deposit, bond or other security in the sum of £580,000 to secure the satisfactory rehabilitation of all works and the implementation of the closure plan.

PA ref. 03/75: Permission granted for the development of a pre-cast concrete manufacturing facility (production building, casting machine, batching plant, and associated works). The development included a new access road, separating residential and quarry traffic, and associated embankments, landscaping and planting.

PA ref. 03/1532: Permission granted for amendments and alterations to 03/75 pre-cast concrete manufacturing facility, including an extension to the production building and new adjacent building for concrete storage and curing.

PA ref. 05/127: Permission granted for retention of a landscaped screening mound adjacent to the quarry lagoon in a different location to that previously approved under Reg. Ref. 99/1161 (ABP P10.120270), and retention of constructed mound, concrete pathway and mechanical equipment installed on the eastern boundary.

PA ref. 04/1806: Permission granted for the creation of a new stockyard for the storage of precast concrete products, involving semi-hardcore covering approx. 4.75ha and the use of a mobile crane, along with associated site works and landscaping. This relates to an area of the subject Substitute Consent application site, to the west of the settlement lagoons.

Planning authority reports identify a history of unauthorised development at the site.

- **PA ref. ENF 14042:** This related to the S.261A process and is stated to remain open pending conclusion of the process.
- **PA ref. ENF 04159:** Unauthorised activity was regularised by planning register reference 05/127.

PA ref. QR095 ABP ref. PL10.QV.0244: On 17th February 2014, the Board decided to confirm the determination of the planning authority under s.261A(2)(a)(i) & (ii) and S.261A(3)(a) of the Planning and Development Acts 2000-2010, in respect of the quarry at Kilree, Sheastown, Co. Kilkenny. The effect of the Board's order was to direct the quarry owners to apply for substitute consent, which application was to be accompanied by a remedial EIS and remedial NIS. The Board order also set aside a decision of the planning authority in respect of the quarry development under S.261A(5)(a).

ABP ref. PL10.SH0208: Permission granted for an extension of the period within which to lodge the application for substitute consent.

ABP ref. WW10.WW.0411: This relates to a third party appeal by IFI in relation the County Council review of a licence for the discharge of trade effluent to Bennettstown Limestone Quarries Ltd. The Board allowed the appeal and amended conditions relating to the volume and character of the effluent being discharged from settlement ponds. The Board undertook AA of the proposed discharge in this case.

Adjoining Lands:

PA ref. 94/411: Permission granted to Edward and Catherine Hayes for a bungalow, septic tank and percolation area on a site off the residential access road to the northeast of the subject quarry.

PA ref. 03/1020: Permission granted to Lorraine Hayes & Peter Renehan for dormer bungalow and associated site works on the residential access roads, adjoining the R6700.

PA ref. 03/1051: Permission granted for construction of a domestic extension, at the corner of the residential access road and the R6700.

PA ref. 12/517: Permission granted to Rohan Dairies for a new milking parlour building, collection yard, open lagoon and underground slatted tank and associated works, on lands associated with Kilree House, approx. 380m west of the quarry. Access to this site was identified in the application as being along the laneway to the north of the quarry, which is referenced in the third party observation on this application.

5.0 PLANNING AUTHORITY SUBMISSION

The planning authority make the following comments on the application.

- Since the Board decision under ref. QV0244 in February 2014, 4 no. blasting notices have been served on the planning authority.
- Since July 2008 unauthorised extraction of c. 1.6m³ million of rock has occurred.
- Notwithstanding condition no. 31 of PL10.120270, no bond in respect of the restoration of the site was put in place.
- Application documentation does not refer to the most recent County Development Plan which came into effect in May 2014.
- The failure to submit site restoration proposals as part of this application is contrary to the requirements of that plan.
- The discharge of stormwater and groundwater to the River Nore is considered to be a direct discharge and is subject to a trade effluent discharge licence.
- This application and the Trade Effluent Discharge Licence review, currently on appeal, should be considered together.
- Having regard to the established use on the site, the planning history relating thereto and the provisions of the County Development Plan, the development would not be contrary to the proper planning and sustainable development of the area, provided it did not impact on the receiving environment.
- No objection subject to the conditions of the parent permission and the following recommended conditions.
 1. Update of conditions imposed under PL10.120270.
 2. Consistency with conditions attaching to the discharge licence WW0411.

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3. The licence should relate solely to trade effluent as licenced and specify appropriate ELV's, monitoring, reports etc.
 4. ELV's should be based on:
 - o Assimilative capacity of the receiving water.
 - o EC Environmental Objectives (Surface Waters) Regulations 2009
 - o EC (Quality of Salmonid Waters) Regulations 1998.
 - o EPA Guidance Document – Environmental Management in the Extractive Industry (2006).
 - o Potential impact of discharge on habitats and birds, including AA of the overall project.
 5. Environmental conditions based on EPA guidance for the extractive industry.
 6. Conditions to avoid environmental nuisance or pollution from dust.
 7. Noise, dust and vibration monitoring results should be submitted to the PA.
 8. Payment of development contributions.
 9. Lodgement of a bond in respect of site restoration.
 10. Restoration should be undertaken on an incremental basis, based on a restoration plan to be agreed prior to permission being granted.

6.0 PRESCRIBED BODIES

Submissions have been received from the following prescribed bodies:

6.1 Inland Fisheries Ireland:

- Concerns are raised in relation to the nature, quality and volume of discharge from the quarry, having regard to the concurrent appeal in respect of WW0411.
- Any decision of the Board should have regard to the standards set out in EC Environmental Objectives (Surface Water) Regulations 2009.
- In the event of a decision to grant substitute consent, the following conditions are recommended:
 - o When cast-in-situ concrete is required, such work shall be done in the dry and isolated from the tributary of the River Nore.
 - o Wash-out of concrete delivery vehicles shall be precluded close to the tributary of the River Nore or at any location discharging to surface waters.
 - o Cement shall be stored in a dry secure place.
 - o Stockpiling of sand, gravel, soils or other materials shall ensure no washout of fines.
 - o Run-off to the tributary of the River Nore shall be subject to silt-traps and other intercepting facilities.
 - o Oil and fuels shall be stored in a secure bunded area and spill kits provided.
 - o Temporary pumps shall be positioned within portable bunded units.
 - o No polluting or deleterious matter shall be stored in areas likely to flood. Activities shall be carried out to ensure no washout or loss to watercourses.

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- Surface waters, including drains, which have to be traversed during site works shall be effectively bridged.
 - Safe and secure access shall be provided for inspection by staff of IFI, NPWS and the County Council.

6.2 An Taisce

- The significance and extent of the unauthorised development and extraction which took place is noted.
- A grant of leave to apply for Substitute Consent, does not imply that such consent will be granted. Such unauthorised development should not be rewarded.
- There are no grounds for considering a remedial EIS in this case.
- Judgement under 215-06 provides that such should only be considered in exceptional circumstances, which do not apply in this case.
- The developer was aware of the extent of breach of the planning permission.
- A grant of substitute consent could result in judicial proceedings.

6.3 NRA

- The Authority is satisfied with the scope of analysis undertaken in this case.
- No objection to the findings presented.
- Any consent granted should safeguard the strategic function of the national road from quarry related operations, including potential dust and debris impacts.

A later submission from the authority commenting on the revised drawings submitted, requested that discharge from the holding pond, settlement lagoon be controlled to prevent risk of flooding on the motorway.

6.4 Geological Survey of Ireland

(On behalf of Dept. Of Communications, Energy and Natural Resources)

- No comment.

6.5 HSE

- Dwellings in the vicinity of the site are not clearly identified.
- It is unclear whether there was consultation with residents in preparing the rEIS.
- There are no details regarding the installation of oil interceptors on surface water drainage and their adequacy to cater for the increased flows from the application site or extreme rainfall events.
- The nature of blasting techniques used, or measures to obviate contamination of groundwater by explosive residues, are not clear.

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- There is no evidence of possible impacts on groundwater quality from the extended quarrying activities.
 - Breaches of the parameters contained in the discharge licence are noted.
 - No air over-pressure measurements are provided for before or after 2009.
 - No measures to mitigate the negative impacts of 2009 blasting activity on adjoining residential properties are identified apart from lower levels of working and reduced quarry output in later years.
 - No actual dust monitoring results are presented, only dispersion modelling results, which predict no exceedances.
 - Crushing, screening or blasting activities are not identified as potential dust sources.
 - It is not clear whether dust emissions from the permitted quarry operation along with the substitute consent activities are considered in combination.
 - Dust control mitigation measures are limited.
 - Although referenced in the EIS, there is no evidence of an Environmental Management System being in place, which should form part of the mitigation measures.
 - No site restoration plan has been provided.

Other prescribed bodies which were circulated but which did not make submissions on the application:

- Development Applications Unit,
- Fáilte Ireland,
- Heritage Council,
- Irish Water and
- An Chomhairle Ealaíon.

7.0 THIRD PARTY OBSERVATION: Ann Gibbons

The observer makes the following observations on the application:

- Significant additional quarrying activity has been carried out since the previous Board determination under QV.0244 in October 2012.
- The extent of such works is such that the provisions of S.261A cannot be properly applied in this instance.
- Since July 2008, 91 no. blasting notices have been issued by the operators, including blasting on 23rd Sept. 2014, 7 days prior to lodgement of this application.
- Fifteen blasts occurred after the PA determination in August 2012.
- Based on aerial photography and the number of blasts recorded between July 2008 and May 2009, it is contended that the majority of the site was not being actively quarried in July 2008.

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- Having regard to the area involved, the volumes of rock extracted since July 2008 and the number of blasts undertaken, the unauthorised development would have required EIA and AA. The applicants cannot now rely upon S.261A or S.177E.
 - The EIS and application documentation are deficient.
 - Application is invalid and does not comply with the requirements of the regulations due to the lack of a location map outlining the site in red.
 - There are inconsistencies with regard to the area of the application site.
 - A right-of-way through the quarry owners lands to the observer's property, is not identified in the application drawings.
 - There are inconsistencies in the application regarding the identity of the applicant.
 - The EIS is flawed as it fails to recognise or assess impacts on the observer's property, to the northwest of the quarry, which is a protected structure. There is a precedent for refusing permission on these grounds under PL10.226764.
 - The operation constitutes a risk to water quality and the application is premature pending a determination of the Water Discharge Licence review appeal under WW0411.
 - The EIS clearly identifies breaches of limit values for noise, vibration and air over-pressure specified under PL10.120270 with acknowledged negative impacts on the nearest sensitive locations.
 - Substitute consent should be refused on this basis.
 - The health and safety implications of blasting in close proximity to the motorway, and issues such as fly-rock, dust, vibration are not assessed in the EIS.
 - There is an area of unauthorised development to the north of the main quarry, which is not addressed in this application.
 - The main entrance to the quarry has been widened without permission and a large gate has been erected across the right-of-way which was to be maintained accessible under PL10.120270.
 - The application contains no site remediation or restoration proposals on the assumption that substitute consent and S.34 permission for further deepening of the quarry, will be granted.

8.0 APPLICANTS COMMENT ON SUBMISSIONS:

The applicants make the following comments on submissions received by the Board:

8.1 Kilkenny County Council:

- The conclusion of the planning authority is welcomed.
- Since the current owners took possession of the site in 2001, one enforcement file on the site has been closed, while a second file relates to this current application.
- The facility is otherwise well managed and operated and is of regional significance.

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- With regard to site restoration, it is intended to apply for permission for further development on the site, involving quarrying up to two benches below the existing quarry floor.
 - That application will be subject to EIS, NIS and a full site restoration plan.
 - The application has regard to previous County Development Plans due to the retrospective nature of the Substitute Consent process.
 - This case should be considered together with the trade effluent discharge licence appeal.
 - The discharge is not considered to be a direct discharge. The settlement pond discharges to a naturally occurring historical stream and not a drainage channel.
 - Regard should be had to submissions to the Board in respect of the discharge licence review appeal, under ref. WW0411.
 - Any development contributions applied in this case should be considered in calculating contributions in respect of future planning applications.

8.2 Inland Fisheries Ireland

- Regard should be had to the later submissions to the Board in respect of the discharge licence review appeal, under ref. WW0411, including the NIS.
- It is acknowledged that a reduction in SS concentrations would be appropriate.
- The recommended conditions are acceptable.

8.3 Observer, Ann Gibbons

- The observer made no submissions to the Board on the review under S.261.
- It is refuted that the site had not been developed before July 2008. No new areas were opened up after that date.
- The decision of the Board under QV.0244 determined that the limited extent of quarry development which took place after July 2008 would not in itself have required EIA, AA, or a determination with regard to same.
- The substitute consent application relates to 9.5ha. Reference to 13.7ha relates to the extent of the authorised quarry.
- The laneway referenced in the observation is not a registered wayleave and is not therefore highlighted in yellow on the drawings. The drawings submitted are in compliance with Article 227(2)(b)(iii).
- A previous agricultural gate on the lane has been replaced with a more secure gate. There is unrestricted access to the laneway at all time, which lane provides access to the rear of the observers property.
- There are no inconsistencies in the identity of the applicants.
- The quarry has been in existence since 1987, while the observer's property was added to the RPS as part of the 2014 County Development Plan. The referenced precedent case (PL10.226764) is not relevant to this case.

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- A decision on Discharge Licence appeal WW.0411 has been made and the Board conducted AA in that case.
 - There is no evidence of impacts on water quality from this facility which has been operating since 1987.
 - Negative impacts from noise and vibration levels arose in 2009. The absence of complaints from residents during blasting events suggests, however, that the significance of such impacts was low and not sufficient to cause nuisance or amenity impacts.
 - To address negative impacts, experienced blasting contractors were engaged and since 2009, noise and vibration emissions have been within specified criteria.
 - Health and safety concerns are fully considered in preparing for each blast event.
 - Based on recorded data, the rEIS demonstrates that there were no significant environmental impacts on the surrounding area.
 - The area of unauthorised development to the north of the quarry is not included in the application boundary and no activity is carried out in this area.
 - Future planning applications on the lands will include fully detailed restoration plans, however, there will be full compliance with the Board in respect of this application. References to future plans are made in the interests of transparency.

9.0 PLANNING POLICY CONTEXT

9.1 Kilkenny County Development Plan 2014 – 2020

Chapter 6 notes the economic importance of the extractive industry. It is important to facilitate development with due regard to mineral reserves so that inappropriate development does not impinge on the viable exploitation of the resource.

Section 6.4.2 identifies Development Management Standards, including;

- A requirement to adhere to the EPA Guidelines for the Extractive Industry.
- All workings shall be rehabilitated and future workings shall facilitate proper landuse management.
- Development may be phased along with rehabilitation.
- Restoration programmes shall be submitted with applications

This area is identified as being of Very High Potential for Granular Aggregate and Crushed Rock Aggregate. An extract from the relevant section of the development plan is appended herewith (Section 6.4).

Chapter 9 contains general objectives to control noise and dust emissions as well as the protection of ground and surface waters from pollution.

The application site is located within the lowlands area, Landscape Character Area F2 – Kilkenny Western Basin. The Nore Valley South is identified as a highly scenic / visually pleasing area.

Activities the subject of this application took place during the currency of the previous County Development Plan 2008 – 2014. The relevant provisions of that plan are generally consistent with the those of the current plan.

9.2 Quarries and Ancillary Activities, Guidelines for Planning Authorities (2004)

The guidelines note the economic importance of aggregates and note that there will be a sustained level of demand in support of infrastructure provision. They can only be worked where they occur and pits and quarries tend to be located close to urban areas where construction occurs.

Chapter 2 identifies appropriate development plan policies and indicates that heavy traffic should not be permitted on unsuitable roads unless suitable upgrading or improvement is carried out.

Chapter 3 identifies environmental issues associated with quarries and associated activities, and best practice / mitigation measures for each. These include:

- Noise.
- Dust / air quality.
- Water supplies and groundwater.
- Natural Heritage.
- Landscape.
- Traffic Impacts.
- Cultural Heritage, and;
- Waste Management.

Environmental Management Systems are recommended as a quality assurance system to measure a company's operations against environmental performance indicators.

Chapter 4 addresses the assessment of planning applications and environmental impact statements and identifies possible planning conditions. Chapter 5 deals with implementation of Section 261 of the Planning and Development Act 2000.

10.0 ASSESSMENT

10.1 Legal and Procedural Matters:

The application relates to the extension of an authorised quarry. Under case ref. QV0244, the Board previously determined that development works were carried out post-1990 which would have required EIA and AA or a determination that such were required, but that no EIA or AA, or determination in respect of same was made. The Board decided, however, that development which occurred post-July 2008 would not in itself have required an EIA, AA or a determination for same.

This application follows from that decision of the Board to confirm the determinations of the planning authority in this regard. The application is accompanied by a remedial

Environmental Impact Statement and a remedial Natura Impact Statement. This is not an application under Section 261A and while the submission of the observer is noted, it is not considered that the previous determination of the Board under QV0244 is subject to review under this application. The matters raised in this regard are considered to lie outside the remit of this report.

The substitute consent process relates to development that has already taken place. It does not allow permission to be granted for future or prospective development and the subject application can therefore only result in the equivalent of permission for quarrying activity already undertaken on the site. The documents and drawings submitted with the application, including the rEIS, restrict the area of the application to the disturbed area of the landholding and associated works areas. The application does not refer to an area of alleged unauthorised development to the north of the overall quarry referenced in the observer's submission. Similarly, issues relating to the right of way to the north of the quarry remain outside the scope of this application. These matters should be the subject of separate investigation and where necessary enforcement proceedings by the planning authority.

Section 177F sets out the requirements of a remedial Environmental Impact Statement, namely:

- a statement of the significant effects, if any, on the environment, which have occurred or which are occurring or which can reasonably be expected to occur because the development the subject of the application for substitute consent was carried out;
- details of—
 - (i) any appropriate remedial measures undertaken or proposed to be undertaken by the applicant for substitute consent to remedy any significant adverse effects on the environment;
 - ii) the period of time within which any proposed remedial measures shall be carried out by or on behalf of the applicant;
- such information as may be prescribed under Section 177N of the Act.

Section 177G sets out the requirements of a remedial Natura Impact Statement, namely:

- a statement of the significant effects, if any, on the relevant European site which have occurred or which are occurring or which can reasonably be expected to occur because the development the subject of the application for substitute consent was carried out;
- details of—
 - (i) any appropriate remedial or mitigation measures undertaken or proposed to be undertaken by the applicant for substitute consent to remedy or mitigate any significant effects on the environment or on the European site;

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- (ii) the period of time within which any such proposed remedial or mitigation measures shall be carried out by or on behalf of the applicant;
 - such information as may be prescribed under section 177N;
 - and may have appended to it, where relevant, and where the applicant may wish to rely upon same: (i) a statement of imperative reasons of overriding public interest; (ii) any compensatory measures being proposed by the applicant.

Section 177K(1) of the Planning and Development Act 2000 as amended, identifies those matters to be considered by the Board when making its decision in relation to the application

10.2 Compliance with Development Plan Policy

The current development plan for the area came into effect on the 20th May 2014, prior to lodgement of the current application for substitute consent. This plan is not referenced in application documentation, however, the applicants indicate that the assessment of the previous development plans prevailing during the carrying out of extraction activities on the site is appropriate, given the retrospective nature of the application. Notwithstanding this position, I note that the provisions of the 2002 – 2008 County Development Plan and the 2008 – 2014 County Development Plan, in place during the period of unauthorised extraction, largely reflect the provisions of the current County Development Plan. The main difference is an increased emphasis on the restoration of extraction sites in the current plan. I note also the addition of Kilree House, to the RPS as part of the 2014 Plan, which lies approx. 700m to the east of the application site.

There have been quarrying activities undertaken on these lands over a considerable period and there is a history of planning permissions granted for extraction and processing activities thereon. The development would appear to be in accordance with the overall provisions of the current and previous development plans for the area and I note the report of the planning authority on the application in this regard. While the current development plan requires the submission of site restoration programmes with planning applications, no such proposals have been submitted in this case. I note that the submission of site restoration plans have been the subject of condition in previous decisions of the Board for Substitute Consent in accordance with S.177K(3)(b) of the Act, and do not consider that this omission represents a fatal flaw in the application. This development is therefore considered to be generally in accordance with the provisions of the development plan for the area.

10.3 Remedial Environmental Impact Assessment

10.3.1 Human Beings

A quarry has operated at this location since the late-1980's and I note that there are a number of other quarries operating in the area. There is a cluster of residential properties to the northeast of the site, accessed from the R700 via the local road. Quarry traffic was removed from this road with the creation of a dedicated quarry access road and landscaped berms in order to separate quarry traffic from these residential properties.

The rEIS describes the socio-economic impact of the quarry operation, including the employment of 13 out of a total of 30 no. employees at the quarry, as well as indirect economic impacts. There were no additional health and safety impacts beyond those relating to the authorised element of the site, and mitigation strategies are similar to those approved as part of the previous EIS. Similarly, the rEIS identifies no post-development health and safety impacts from a secure, managed on-going quarry. No negative effects identified and no mitigation measures are proposed.

Impacts on residential amenity from quarry activities are most likely to arise from noise, vibration and dust emissions. These aspects are considered in more detail elsewhere in the rEIS.

10.3.2 Flora and Fauna

Surveys of the site were undertaken in September 2008 and July 2009, which post-dated clearance of overburden from the site. No flora or fauna of conservation interest were identified. There are no records of bat roosts in the area and the development site is classified as being of negligible local ecological value. The closest conservation site of interest is the River Barrow and River Nore SAC, located approx. 500m to the east / southeast. The application is accompanied by a Remedial NIS, which considers impacts on the water quality and qualifying features of this site arising from the development.

No impacts on the adjoining SAC, or on other conservation sites in the area are identified, since quarrying commenced. The rEIS notes that the operation of a comprehensive Environmental Management System is such that impacts on any species listed as rare or scarce are unlikely and that there will be no effect on annexed species.

Section 6.3.1 of the rEIS states that there has been no loss of the hedgerow habitat, as works were confined to an area inside the boundary line. This does not reflect the fact that, based on aerial photography, approx. 700m+ of internal hedgerows were removed from the area of the substitute consent application. Based on file correspondence, it is understood that these works occurred prior to July 2008. Within

the wider landscape, such loss of hedgerows may not be considered to be significant and I note the description of the ecological character of these lands in the previous 1999 EIS and the current rEIS in this regard. Appropriate migratory works in this regard would, however, include additional planting along site boundaries and on adjoining lands including the area around the settlement ponds.

It is indicated that the maintenance of external hedgerows provided a continued source of shelter and feeding for birds and mammals, and they will have had access to identical habitat in the adjacent fields. There was ongoing activity on adjoining lands prior to the carrying out of the subject works and fauna will have become accustomed to disturbance.

No permanent negative impacts on fauna are identified. Impacts are described as being of negligible ecological significance and of similar magnitude to the existing authorised quarry. Identified mitigation measures include maintenance and enhancement of site boundaries, water management, and rehabilitation and restoration of the quarry. It is argued that decommissioning and rehabilitation of the quarry may result in increased bio-diversity. In this regard, it is indicated that a restoration plan in this regard will be developed at a later date. No negative residual effects are identified. Section 11.0 addresses the issue of appropriate assessment.

Impacts on the SAC are most likely to have arisen in terms of water quality and groundwater flows. The trade effluent licence relating to this operation has been subject to a recent decision of the Board which sets revised ELV's for discharge from the settlement ponds to the Dunbell Little stream and thence to the River Nore. Subject to compliance with the identified limit values, negative impacts on the site are not expected. Impacts on ground water flows are considered separately under the heading of hydrogeology.

10.3.3 Soils and Geology

Overburden (topsoil and subsoil) in the Substitute Consent area was stripped prior to extension of quarrying into this area. While some of the material was removed off site, the remainder was deposited in existing stockpiles at the eastern end of the quarry site in order to minimise impact in terms of compaction or sealing of soil. No increased geo-hazard risk due to rock face collapse or landslide due to the increased extent of quarrying is identified.

Standard mitigation measures are identified to obviate drainage issues, dust generation and wash-out from the site, including the design and operation of the water management systems and appropriate soil management. No evidence or record of soil contamination is identified. Residual impacts on cessation of extraction activities include a safety risk arising for a large excavation and a risk of rock face collapse.

There is an increased hydrological vulnerability. The exposed rock will act as a potential educational resource.

10.3.4 WATER, HYDROLOGY AND HYDROGEOLOGY

Arising from the planning history on the lands and the requirement to adhere to the requirements of a Trade Effluent Discharge Licence, there are historic records relating to water levels and quality at this site, which form the basis of the assessment contained in the rEIS.

In terms of water quality, the River Nore is classified as being of 'Moderate' status and is 'at risk of not achieving Good status'. There appear to be issues with nutrient loading in the river in particular. Full implementation of the WFD measures is expected to correct this, however it is estimated that the River Nore in the vicinity of the development site will not achieve Good Status until 2021.

The Quarry overlies a Regionally Important Aquifer (diffuse, Rfd) of high to extreme vulnerability. The yield of the majority of wells in the surrounding area are classified as poor. The groundwater body has 'Good Status' but it is described by the EPA as being '1a – at risk of not achieving good status' by 2015.

The rEIS reports that based on a 1972 Geological Survey, it is estimated that natural ground water levels in the area are in the range of 40-70m AOD. The 1999 EIS identified the 40m groundwater contour running through the centre of the site, falling from the west, with 10m drawdown. By 2003, it is reported that drawdown had increased to 15m and by 2008 had increased to 25m, when the quarry floor had been deepened to 28m AOD. A drilling programme carried out in 2008 recorded groundwater at levels of approx. 37-38m AOD. I note that condition no. 3 of PL10.210270 restricted the floor level of the quarry to 30m AOD.

The water level in the River Nore at Bennettsbridge, a distance of about 1,200m to the southeast, is reported to be approximately 34m AOD. Groundwater monitoring over the life of the quarry shows that a large cone of drawdown has developed beyond the northern, western and southern boundaries of the quarry. It is indicated, however, that a change in rock type and the presence of the River Nore restricted drawdown to the east.

Ground and surface water is collected in a sump on the eastern edge of the quarry void, from where it is pumped to the settlement ponds on the eastern side of the site. The discharge from the settlement ponds flows into a small watercourse, the Dunbell Little stream, which joins the River Nore within a few hundred metres. The discharge of waters is subject to a trade effluent discharge licence. Records from Q2 2007 to mid-2014 indicate that average discharge rates were generally less than 15,000 m³/d, but increasing to up to 55,000 m³/d during inclement weather events in 2009. The

results of water quality monitoring between 2002 and January 2007 were generally consistent, with a spike in total suspended solids in December 2007, attributed to heavy rainfall and high discharge at that time, with the limit for clear water exceeded on seven occasions.

The settlement lagoon has capacity of greater than 40,000m³/day, and an additional 15,000m³/day can be stored away from the lagoon if necessary. There were no reported overruns of the lagoon during the Substitute Consent period. I note that the lagoon lies substantially below the level of the M9 such that potential flooding of the road does not arise.

Impacts:

Groundwater monitoring indicates that there is no evidence of on-going decreases in groundwater levels as a result of the dewatering. The model indicates that there is an insignificant impact at distance to the river and a negligible impact on groundwater wells. The reduction in the natural groundwater movement to streamflow during the subject works was compensated for by the discharge of abstracted water to the watercourse that flows into the River Nore, thereby maintaining the base flows to the watercourse. Discharge of water abstracted from the deeper aquifer may in fact result in an increase in discharge to the River Nore.

The rEIS reports that the monitoring of water discharge quality during the substitute consent phase did not show any reduction in water quality compared to the baseline water quality pre-substitute consent works. There were no spillages or leakages of polluting matter reported during this period. Residual impacts are identified as the risk of contamination of groundwater within the excavation void. There is anticipated to be a quick rebound of groundwater levels with dewatering ceases. The potential for contamination of groundwater by explosives residue is not addressed in the EIS. I note, however, that water quality monitoring data of the discharge from the settlement ponds, contained in file ref. WW0411 does not suggest that this has been an issue.

Since lodgement of this application and drafting of the rEIS, the Board have made a determination with regard to the review of the Trade Effluent Discharge licence, under ref. WW0411. This has revised the water quality discharge parameters from the settlement ponds and amended the permissible volumes of discharge. Based on the information presented in this case and in respect of the appeal under WW0411, it is not considered that the development has had a negative impact on the ground or surface water regimes or quality in the area. I note the submission of IFI in this case and consider that the decision of the Board under ref. WW0411 adequately addresses those concerns.

10.3.5 AIR QUALITY (INCLUDING CLIMATE AND LIGHTING)

The rEIS notes that the potential for severe dust impacts is generally greatest within 100m of dust generating activities, although residual impacts can occur beyond this

distance. The area surrounding the application site is described as an area with a low population density with only a small number of sensitive locations which can be affected by dust deposition. I note that the nearest house is approx. 30m from the quarry void, however, this is approx. 100m from the area of extraction in the substitute consent site. There is no data from dust deposition monitoring provided in the rEIS, although I did observe dust collection points around the perimeter of the quarry during my site visit.

The impact assessment assumes a standard or typical open country deposition level of 39 mg/m²/day as a the background level for this location. Assumed values for annual average background concentrations of 12 µg/m³ for PM10 and 7.8 µg/m³ for PM2.5 are used. These are described as conservative estimates.

The assessment of impacts is based on an annual extraction rate of 500,000 tonnes, which equates to the busiest period of production at the facility in 2009. In the worst case scenario, it is estimated there was a maximum of 248 truck movements in and 250 truck movements out of the site per day / 41 truck movements per hour. The rEIS identifies the following operations as the main dust generating sources or activities at the quarry:

- Movement of empty trucks along paved public roads
- Movement of empty trucks along unpaved haul roads
- Extraction of material
- Loading of material
- Movement of full trucks along unpaved haul roads
- Movement of full trucks along paved public roads.

There is no reference to the processing of materials, crushing or screening activities within the site, as possible sources of dust. It is not clear what works were considered as extraction. Crushing and processing plant are located with the authorised area of the quarry. At time of inspection, crushing activities were being undertaken using stockpiled reserve material. These activities were generating relatively large volumes of dust, however, this appeared to be largely contained within the quarry void. IN this context, however, the assumption of an average background level for an area of open countryside in this case, and not actual baseline dust deposition levels for this location adjoining an operational quarry, is questionable.

Combined with the assumed background levels, dust deposition at the quarry boundary is estimated in the rEIS to peak at 114.7 mg/m²/day. The combined annual PM10 concentration peaks at 51% of the annual limit value and 58% of the 24-hour limit value. The annual PM2.5 concentration peaks at 35% of the annual limit value. The actual basis for these calculations is not given, however and I note that the values set out in Table 9.3 refers to dust deposition levels in 2007, rather than 2009, which is to be the modelled peak year or at any other date in the operational period of the

substitute consent quarry. Similarly, estimated impacts for PM10 and PM2.5 are identified in Tables 9.4 & 9.5 for the years 2004 – 2007.

The EIS submitted in 1999 in respect of PL10.120270 identified baseline dust deposition rates around the site of between 16.7 – 63mg/m²/day. At further information stage, dust deposition levels of up to 121 mg/m²/day in the vicinity of the agricultural lime plant were recorded, significantly greater than the baseline levels assumed in the rEIS. I note that conditions no. 17 and 23 of PL10.120270 identified a dust deposition limit of 130 mg / m² / day measured at the site boundaries, averaged over 30 days, with monthly reporting to the planning authority. This permission expires in December 2018. It is not clear that these conditions have been complied with or that the planning authority have sought to enforce them. These deposition levels are lower than the standard set out in the Planning Guidelines and the EPA Guidelines. I note also that the company website states that “As part of the Environmental Management System, regular independent monitoring of noise, vibration, dust and water emissions is undertaken to ensure compliance with planning and legislative requirements”. There should, therefore, be some recorded levels of dust deposition on which to base the modelling undertaken in the rEIS.

Standard mitigation measures for extraction sites are identified and no residual impacts are anticipated in the rEIS. I consider, however, that there are deficiencies in the approach taken to the identification of impacts arising from the substitute consent operations, particularly having regard to the proximity of receptors to the works area. The analysis assesses the impacts of the substitute consent activities over assumed rural background dust deposition levels. There is no acknowledgement of the existing quarry operation and concrete manufacturing plant on the site and the more likely elevated levels of background dust deposition around the site. I conclude that this aspect of the rEIS is deficient and that the impacts of the substitute consent activities have not been adequately assessed.

Notwithstanding these deficiencies in the assessment of dust impacts, I note that no third party observations on grounds of dust impacts have been received on this application. While the inspection was undertaken in damp conditions, I did not observe particular evidence of dust deposition in the vicinity of the quarry, I note that dust was a significant issue in the consideration of the appeal under PL10.120270, however, this appears to have related largely to the operation of a lime processing plant at the quarry. It is acknowledged that extraction activities have now ceased and that there are currently no operations within the substitute consent site. Any future extraction and processing activity at the site would be subject to a separate grant of planning permission and associated conditions.

The rEIS concludes that due to the size and nature of the activities at the Bennettsbridge Limestone Quarry, CO₂ and N₂O emissions have a negligible impact

on climate. Odour from the asphalt plant was evident in the surrounding area at time of inspection, however, this plant is not within the remit of this application.

Having regard to the foregoing and the current status of activities on the site, it is not considered therefore that further mitigation measures are required at this time.

10.3.6 NOISE AND VIBRATION

Operational Noise

Noise surveys were conducted in October 2013, at four locations concentrated to the north east of the site. Survey point N3 is located on the local road (old quarry road) adjacent to the nearest noise sensitive receptor to the east of the site. The rEIS identifies the following processes as noise generating activities at the site during the substitute consent period:

- Removal of overburden material and construction of perimeter screen berms.
- Drilling blast holes.
- Loading of the blast holes with industrial explosives and detonation.
- Crushing blasted rock into a crusher to reduce fragment sizes and screening.
- Batching of concrete and pouring of precast concrete products.
- Cutting of precast concrete products.

Noise levels at the nearest receptor (N3) were in the range of 46 dB to 48 dB LAeq and 44 to 47 LA90. Noise sources included crushing activities and traffic movement on the quarry access road and the R700. An additional allowance is made for activities which occurred in the past including cutting of precast concrete and full operation of the screening plant, which are calculated to increase a total noise levels at this location to 49dB LAeqT. The results appear to be supported by operational noise surveys from 2009. The rEIS also indicates that acoustic screening provided by quarry rock walls and bunds result in insignificant noise impact from on-site vehicles. The modelled noise levels are within the noise criterion of 50dB LAeq,T, which was the limit set for the authorised quarry (pre-2007) in condition no. 14 of ABP ref. PL10.120270.

The rEIS concludes that the relative increase in HGV traffic movements on the R700 during peak operation of the quarry would not have resulted in a significant noise impact. While traffic on the quarry access road would have resulted in potentially significant noise level increases, the daytime noise level at the nearest noise sensitive location along the access road is calculated as 48dB LAeq,1hr, which is within the criterion of 50dB LAeqT set under ref. PL10.120270.

It is relevant to note that current guidance contained in the EPA Environmental Management Guidelines for the Extractive Industry and the Quarry and Ancillary Activities Guidelines for Planning Authorities, identify a daytime noise limit of 55dB(A)

Laeq (1 hour). In this regard, the limits set previously under PL10.120270 would be more onerous and no significant impacts in this regard are identified.

Blasting:

Condition no. 15 of An Bord Pleanála decision PL10.120270 set the following emission limit values:

- (1) The transmitted ground vibration arising from any blast carried out on the site shall not exceed a peak particle velocity of six millimetres per second at any residential property for a maximum of 95 per cent of all blasts and 12 millimetres per second for any individual blast.
- (2) The air overpressure arising from any blast carried out on the site, when measured outside the nearest inhabited house to the location of the blast, shall not exceed 125 dB (linear) at frequencies of two hertz or over.

Current guidance, in place since 2004, establishes the following ELV's, however:

- Vibration should not exceed a peak particle velocity of 12 mm / second as measured at a receiving location when blasting occurs at a frequency of once per week or less. In the event of more frequent blasting, the peak particle velocity should not exceed 8 mm/ second.
- Blasting should not give rise to air overpressure values at the nearest occupied dwelling in excess of 125 dB(Lin) max peak. 95% of all levels shall conform to the specified limit value and no individual air overpressure value should exceed the limit value by more than 5 dB(Lin).

The limit values set out in condition no. 15 of PL10.120270, against which the rEIS assesses the development are therefore more onerous.

The results of historical blast monitoring from 2009, which was the peak year of extraction, are presented in the rEIS. These indicate that in 2009, 28% of all blasting works exceeded the 6.0 mm/s criteria, while no blasting events during 2009 exceeded the 12mm/s criteria. I note that the submitted vibration monitoring results are within the relevant EPA guidance limits, however.

In terms of blast over-pressure, 11 out of 28 events (40%) exceeded the EPA limit value. One event was >5dB greater than the limit value and two events were 5dB greater than the limit of 25dB. It is stated that subsequent years showed decreases in measured blast overpressure, however, no monitoring results for these years are provided, notwithstanding the monitoring requirements of PL10.120270.

Mitigation

The rEIS indicates that outside of blasting operations the quarry is expected to have had an insignificant noise impact on the nearest sensitive location. No mitigation measures are identified. Based on available records and predicted levels of noise, this is not considered to be an unreasonable conclusion for the rEIS. Having regard to

the current status of activity on the substitute consent application site, no further mitigation measures are required.

Blasting activities are stated to have had a negative impact on the nearest sensitive location in 2009. The rEIS indicates that the reduction from 2009 peak production and the lowering of the working face in the quarry itself has provided sufficient mitigation in itself to allow the site to operate within the specified planning conditions. In response to the Observers submission, the applicants indicate that in order to mitigate those negative impacts, specialist blasting contractors were engaged from 2009 onwards and that subsequent activities were within the identified emission limits. While there is no data to support this position, I note the lack of contrary evidence or submissions on the file. No blasting is currently undertaken on the site such that no residual impacts are occurring. This is a retrospective application and any future activities on the site would be subject to a separate grant of planning permission and further conditions and monitoring. I do not consider that further mitigation is required in this regard.

10.3.7 LANDSCAPE AND VISUAL IMPACT

Views to the application site from the surrounding area are generally limited. The main view to the site is from the M9 on the approach from the northeast, where the road descends toward to the River Nore. From this location a section of the rock face is visible. Screen planting of the elevated ground to the west of the settlement ponds would be appropriate in this regard. Close to the site, the only element that is readily visible from the motorway is the settlement pond and the associated grassed mounds. These elements are visually similar to the attenuation and settlement ponds which are provided along the length of the national motorway network and not out of character with this location. Some items of plant within the existing authorised quarry site are visible from the R700.

The site does not occur within any sensitive landscape nor are adjoining or overlooking roads listed in Appendix H, nor shown as 'Protected Views on Map 8.2 of the Kilkenny County Development Plan 2014. The site lies about 1 km to the west of the River Nore which is noted as a 'Visually Pleasing' landscape. There is no visual linkage between the site and the Nore valley.

The rEIS assesses four views toward the development from the surrounding road network. It concludes that no aspect of the development contrasts with the appearance of established landscape features and that no significant impacts on the landscape character or visual amenities of the area occur. The rEIS therefore proposes no additional mitigation measures. I would generally concur with the conclusions of the rEIS in this regard and subject to the planting and landscaping of the area to the west of the settlement ponds, I do not consider that significant residual impacts on the landscape character or visual amenities of the area arise.

The application contains no proposals with regard to the restoration or rehabilitation of the site and it does not appear that conditions attaching to PL10.120270 have been complied with. While correspondence from the applicants refers to the possibility of a future application for further extraction works at the site, such proposals cannot be relied upon in this case. I note the precedent of other substitute consent cases before the Board, where restoration proposals were to be prepared as a condition of consent granted, as provided for under S.177K(3)(b), subject to a time limit for agreement. I consider that this approach would be satisfactory in this instance.

10.3.8 MATERIAL ASSETS

This chapter of the rEIS deals with impacts on utilities, including water supply, waste water, surface water, waste and power (electricity, gas and diesel). No additional demands are identified and the rEIS notes that the unauthorised part of the quarry did not necessitate the incorporation of additional mitigation measures or protocols.

The issue of surface water management is considered in more detail elsewhere in the rEIS.

10.3.9 ROADS, TRAFFIC AND TRANSPORTATION

The realignment of the local access road (L26322) was previously undertaken to separate quarry traffic from the adjoining residential traffic. These works have generally provided a satisfactory standard of access and the junction of the residential access road with the main quarry access road is set back approx. 65m from the R700. The R700 is of a good standard in the vicinity of the site and is provided with a right-turn lane for southbound traffic at the junction with the L26322.

Peak hour traffic counts were carried out in October 2008 and September 2013 and the rEIS also uses NRA recorded data in its assessment. Based on the volumes of material exported from the site 2007 – 2013, the assessment estimates 2009 and 2013 Annual Average Daily Traffic (AADT) volumes, with and without the quarry development in place

Roads serving the site operated within capacity during the substitute consent period and there is no evidence of negative traffic or transportation impacts arising from operations at the site. No residual impacts are expected. I note the submission of the NRA and the planning authority on the application and do not consider that significant traffic impacts arose from the subject development.

Observers have raised the issue of impacts of further blasting operations on the adjoining motorway. This Substitute Consent application is a retrospective process and does not authorise or otherwise permit future extraction activities at the site. There is no evidence on the file of any impacts of the nature suggested to date and I note the submissions on the file from the NRA in this regard. Any future development

or extraction activity would be subject to a separate application for planning permission, under which these aspects of the development would be assessed.

10.3.10 ARCHAEOLOGY AND CULTURAL HERITAGE

There are no recorded monuments within the development site, with the nearest monuments being 500m-700m from the site. A number of archaeological sites were detected and excavated in the townland as part of the construction of the adjacent M9/M10 motorway. It is reported that a lime kiln identified on historic mapping to the north of the settlement lagoon, is no longer evident on the site. This lies outside the development area. A walk-over survey of the site in 2013 identified no features of interest and in this context the rEIS concludes that no direct impacts would have occurred from the development.

I note that conditions attaching to PL10.120270 required archaeological monitoring of site clearance works on the site, however, the results of such monitoring are not referenced in the rEIS. The stripping of over-burden from the site would have removed any previously unrecorded material of archaeological interest. Much of this over-burden material is stored in berms around the site, within which possible archaeological material may still be contained. The future restoration and rehabilitation of the site, using soil material from these berms may therefore require appropriate archaeological supervision.

I note the comments of the observer with regard to impacts on Kilree House, a protected structure, located approx. 650m to the west of the site. This property is not identified in the rEIS. While a quarry has operated at this location since the late 1980's, Kilree House was added to the RPS under the 2014 County Development Plan. Excavations at the site have progressed in a generally southerly direction and I do not consider that the subject works would have resulted in any greater impact on the character or setting of the protected structure than previous authorised extraction works.

10.3.11 Adequacy of remedial Environmental Impact Statement

The requirements under S.177F differ from, and are less prescriptive than, the requirements for the information to be contained in an EIS under article 94 and schedule 6 of the Regulations 2001, as amended. There is no stated obligation under Part XA for a remedial EIS to follow the requirements of the said Regulations and I note that the department's 'Guidelines for Planning Authorities and An Bord Pleanála on carrying out EIA' makes no reference to remedial EIS.

As the competent authority for decision making, however, the Board is required to carry out an environmental impact assessment of the application for substitute consent i.e. to identify, describe and assess the direct and indirect effects of a proposed development, in accordance with Articles 4 to 11 of the EIA Directive, on the following:

- Human beings, flora and fauna,
- Soil, water, air, climate and the landscape,
- Material assets and cultural heritage, and
- The interaction of the foregoing.

I confirm that the rEIS address the impacts of the development under these topics.

Retrospective assessment of the nature required in this instance has evident limitations, particularly with regard to the availability of data and measurements of the impacts arising. I have already commented on the adequacy of the assessment of air quality impacts from the substitute consent operations. In the context of such shortcomings, however, the rEIS can be generally considered to be consistent with the requirements of section 177F of the Planning and Development Act 2000.

There is limited consideration of alternatives in the rEIS, however, having regard to the particular nature of the development, this is not regarded as a significant issue. Chapter 15 identifies the interactions and cumulative impacts. The rEIS is also accompanied by a non-technical summary. I am satisfied therefore that the rEIS is adequate to enable the Board to make a decision on the application for substitute consent.

11.0 APPROPRIATE ASSESSMENT

The application is accompanied by a Remedial Natura Impact Statement. The document indicates that the same report was submitted to the Board in respect of wastewater discharge licence application appeal ref. WW10.WW0411. That case was determined by the Board in January 2015.

Description of the Project

The project is described in section 3.0 of the report above.

Natura Sites of Interest

The distance from the quarry site to the closest conservation site, the River Barrow and River Nore SAC (002162), is over 500m and the fluvial distance from the settlement pond to the River Nore is approximately 650m. This Natura Site covers an extensive area, and includes the River Barrow and the River Nore, as well as many tributaries of both rivers. Twelve habitats, listed in Annex I, and twelve species listed in Annex II of the Habitats Directive are identified as Qualifying Interests, which must be maintained in favourable conservation status.

Qualifying Species	Qualifying Habitats
Vertigo moulinsiana	Estuaries
Freshwater pearl mussel	Mudflats and sandflats not covered by seawater

(Margaritifera margaritifera)	at low tide
White-clawed crayfish (Austropotamobius pallipes)	Salicornia and other annuals colonizing mud and sand
Sea lamprey (Petromyzon marinus)	Spartina swards (Spartinion maritimae)
Brook lamprey (Lampetra planeri)	Atlantic salt meadows (Glauco-Puccinellietalia maritimae)
River lamprey (Lampetra fluviatilis)	Otter (Lutra lutra)
Allis shad (Alosa alosa)	Mediterranean salt meadows (Juncetalia maritimi)
Twaite shad (Alosa fallax fallax)	Killarney fern (Trichomanes speciosum)
Salmon (Salmo salar)	Pearl mussel (Margaritifera durrovensis)
	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation
	European dry heaths
	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels
	Petrifying springs with tufa formation (Cratoneurion)
	Old sessile oak woods with Ilex and Blechnum in British Isles
	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)

The site synopsis (NPWS 01/04/2014) identifies the main threats and current damaging activities to the site as high inputs of nutrients from agricultural run-off and sewage plants, over-grazing within woodland areas, and invasion by non-native species. The water quality of the site remains vulnerable. Good quality water is necessary to maintain the populations of the Annex II animal species and is dependent on controlling fertiliser use and treatment of sewage.

The rEIS notes that other Annex I or II species may occur within the potential zone of impact of the development, which are not otherwise qualifying interests of the SAC. In this regard, the rNIS considers the potential presence of Kingfisher downstream of the site.

The proposed development is not directly connected with or necessary for the management of the Natura 2000 site and, as such, does not undertake measures for the site's conservation management.

Assessment of habitats:

Immediately downstream of the settlement pond, water quality in the Dunbell little stream is determined to be of Good Ecological Status, Q4. Prior to its confluence with

the River Nore, however, the stream is assigned Q3 status, Poor Ecological Status. The rEIS attributes this decline in quality to eutrophication from an intervening farmyard and run-off from the R700. The stream bed is also reported to be heavily calcified. My observations on site support this description. The NIS notes that EPA sampling from 2013, classified the Nore as being of Good Ecological Status, Q4, for the biological element. The river is otherwise classified under the WFD as being of Moderate Status, with an objective of being restored to good status by 2021.

Qualifying Habitats:

In terms of Qualifying Habitats, the rNIS notes the following points:

- Floating River Vegetation (Code 3260): The river contains some water crowfoot, which could be classified as the Annex I habitat type “Water courses of plain to montane levels with the Ranunculus fluitans and Callitriche-Batrachium vegetation”.
- Eutrophic Tall Herbs (Code 6430): Tall herb fringes occur along the banksides of the River Nore downstream, in sections where the river is slow-flowing and trees do not overhang the bank.

Habitats identified as not being present in the potential impact zone include:

- Petrifying Springs (Code 7220)
- Old Oak Woodlands (Code 91A0) and Dry Heath (Code 4030).
- Alluvial Wet Woodlands (Code 91E0).

Habitats found in saline conditions, over 20km downstream, include:

- Estuary (Code 1130),
- Tidal Mudflats & Sandflats (Code 1140),
- Salicornia Mudflats (Code 1310),
- Atlantic Salt Meadows (Code 1330),
- Mediterranean Salt Meadows (Code 1140)
- Spartina swards (Code 1320):

Qualifying Species

In terms of Qualifying species, the rNIS notes the following points:

- Desmoulin's Whorl Snail: No records of this species in the catchment downstream of Kilkenny City. The stream habitat is not suitable for this species.
- Freshwater Pearl Mussel: Habitats and water quality in the Nore are currently unsuitable and the status of the freshwater pearl mussel as a qualifying species for the SAC is currently under review.

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- **Nore Freshwater Pearl:** This sub-species only occurs in a 10km stretch of the main channel of the River Nore, 37km upstream of the quarry. In living memory, live freshwater pearl mussels have not been found below Ballyragget (29km upstream). While this section of the river is not within a designated FPM catchment, negative impacts on the salmonid populations of the river could indirectly affect the Nore freshwater pearl mussel.
 - **Twaite Shad and Allis Shad:** Adult shad are known to occur in the lower tidal parts of the River Nore. Regular breeding of Twaite shad has not been confirmed in recent years. It is possible that both shad species spawn in the lower parts of the River Nore.
 - **Sea, Brook and River Lamprey:** Sea lamprey usually spawn in the lower reaches of the River Nore between Thomastown and Inistioge, but sometimes as far up as Ballyragget. Sea lamprey could spawn in stony substrata downstream of the weir in Bennettsbridge.
The stream from the quarry is unsuitable for lamprey spawning. Brook and river lampreys are widespread throughout the Nore system. Migratory river lamprey must pass upstream to spawn and some brook lamprey are probably also present downstream.
 - **Atlantic Salmon:** The Nore is a Salmonid Water. The stream from the quarry is unsuitable for salmonid spawning. Adult salmon must migrate upstream past the confluence, while smolts must migrate downstream, past the site.
 - **White-Clawed Crayfish:** A decline in the crayfish population was first noted in 2001 and more recent surveys since have not recorded any crayfish. While the Nore population of this species could recover, it can be presumed that crayfish are not present downstream of the site.
 - **Otter:** While no signs of otters were found in the vicinity of the site of the stream, it can be presumed that otters are present along this stretch of the river.
 - **Killarney Fern:** Does not occur within the potential impact zone.
 - **Other EU Protected Species**
Kingfisher (Birds Directive Annex I): Have been recorded in this part of the river

In summary, the rEIS identifies the following habitats and species as present, or possibly present within the zone of potential impact (to 5km downstream):

- Floating River Vegetation.
- Eutrophic Tall Herbs
- Atlantic Salmon.

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- Sea Lamprey.
 - River Lamprey.
 - Brook Lamprey.
 - Otter.
 - Kingfisher.

Potential Impacts

The rNIS identifies the zone of potential impact as the site of the development and the downstream aquatic habitat, particularly 5km downstream of the site. It is also the case, however, that development could result in a barrier to movement of species which would also have upstream impacts. Having considered the information contained in the remedial EIS accompanying this application, the separation between the quarry site and the SAC, and the particular qualifying interests of the SAC, it is not considered that noise or air emissions would be likely to have impacted on the conservation objectives of this European Site and accordingly could be screened out. It is therefore considered that the primary impact of concern in terms of the Habitats Directive, is the impact of waters discharging from the quarry operation on the SAC and its qualifying interests. Dewatering of the quarry is also a potential threat to the SAC.

Potential Impacts are identified as follows:

Suspended Solids: The rNIS notes that having regard to the results of water quality monitoring close to the point where it exits the site, and EPA recorded good ecological conditions (Q4) in the River Nore both upstream and downstream of the quarry discharge, the existing quarry is not seen to be negatively impacting on water quality or the Qualifying Interests of the SAC. This remains a potential impact. I note the revised ELV's imposed under the discharge licence review appeal under ref. WW0411 in this regard. Subject to compliance with these emission limit values, impacts on the qualifying interests of the SAC appear to be unlikely.

Hydrocarbons: Water management systems in place between the two settlement ponds prevent hydrocarbon contamination of the discharge. Monitoring of water quality does not indicate impacts in this regard. The rNIS screens out potential impacts on the Qualifying Interests of the SAC from hydrocarbons.

Nutrient Enrichment: While the rNIS identifies some nutrient enrichment of the Dunbell Little stream at its entry point to the River Nore, it is stated that the quarry was not the source of this problem. The quarry operation does not add any nutrients to the groundwater pumped from the site and the rNIS screens out potential impacts from nutrient enrichment on the Qualifying Interests of the SAC due to the quarry operation.

I note the analysis undertaken in respect of ABP ref. WW0411 and the reduced nutrient limit values set in the approved discharge licence. Subject to compliance with these emission limit values, impacts on the qualifying interests of the SAC appear to be unlikely.

Water Volume: The median recorded discharge volume from the quarry for the period 2005-2013 is approximately 11,000m³/day. The rNIS notes that the stream exiting the quarry was in existence prior to the development of the quarry and that higher flows in wet weather conditions are therefore natural. It is argued that increased water volumes would not impact on the Qualifying Interests of the SAC and would dilute the nutrient enrichment occurring further downstream. Impacts arising from the volume of water discharged are therefore screened out in the rNIS.

I note the revised ELV's imposed under the discharge licence review appeal under ref. WW0411 in this regard. Subject to compliance with these emission limit values, impacts on the qualifying interests of the SAC appear to be unlikely.

The potential impact of dewatering on water levels in the River Nore are not considered to be significant. Modelling of ground water flows indicates that the drawdown from existing dewatering does not impact on the river. It is also the case that water extracted from the quarry is discharged back into the river via the Dunbell Little stream, ensuring that base flows are maintained. Modelling also indicates that the drawdown of deeper groundwaters may in fact result in an increased input to the river than would otherwise be the case.

Assessment of Significance

The proposed development will not result in any loss or fragmentation of habitats for which the SAC is designated. Having regard to the potential impact on water quality, in particular the impact of suspended solids on fish populations and river vegetation, and potential indirect impacts on other species, such as pearl mussel, Kingfisher and otter, it is considered that the development has the potential to have a significant impact on the SAC and that stage II appropriate assessment is therefore required.

Cumulative Impacts

The rNIS notes the presence of two other limestone quarries in the vicinity. Biological water quality monitoring for 2013 indicates that there is no significant negative impact from any quarry, either singly or in combination, on the River Nore. The rNIS indicates that before it reaches its confluence with the River Nore, the Dunbell Little stream passes a farmyard and passes under the R700 from which it receives, potentially contaminated, run-off. Water quality in the River Nore upstream and downstream of the confluence with the stream has been recorded as Q4, indicating "Good Ecological Status. Despite its unsatisfactory quality where it enters the Nore, the stream is too small to have a significant negative impact on the larger river.

Mitigation:

NPWS publication, "Appropriate Assessment of Plans and Projects in Ireland, Guidance for Planning Authorities" defines mitigation measures as follows:

"..... measures aimed at minimising, cancelling out or ideally avoiding the negative impact of a plan or project before, during or after its completion or implementation. Mitigation measures may be an integral part of the specifications of a plan or project, or an add-on. They may be proposed by the plan or project proponent and/or required by the competent authorities.

If mitigation is possible that enables a risk to be avoided fully, then subject to other necessary approvals, the project or plan may proceed."

The ground and surface water management system including settlement ponds and oil interceptor, is an integral part of the overall quarry development. The operation of the water management and settlement system is the primary measure in mitigating potential impacts on the SAC. Discharge from the settlement lagoons is subject to a trade effluent licence, which licence was the subject of a recent review. The determination of the Board in that case has resulted in more stringent emission limit values than were previously applied. In determining that case, the Board undertook an Appropriate Assessment of the discharge and determined that the mitigation of potential impacts would be appropriately addressed by the revised ELV's specified in its decision. It was therefore concluded that the licensed discharge, individually and in combination with other plans or projects, would not adversely affect the integrity of the SAC in view of the site's conservation objectives.

The subject application was circulated to the Development Applications Unit, however, no submissions have been received.

AA Conclusion

I consider it reasonable to conclude on the basis of the information available, that the development the subject of this substitute consent application, either individually and in combination with other plans or projects has not adversely affected the integrity of the European sites, River Barrow and River Nore SAC in view of the site's conservation objectives.

10.0 RECOMMENDATION

Having regard to the foregoing, I recommend that substitute consent be granted in this instance for the reasons and considerations and subject to the conditions set out below:

Reasons and Considerations:

The Board had regard, inter alia, to the following:

- (a) the provisions of the Planning and Development Acts, 2000 to 2011, as amended, and in particular Part XA,
- (b) the 'Quarries and Ancillary Activities, Guidelines for Planning Authorities', issued by the Department of the Environment, Heritage and Local Government, April 2004,
- (c) the provisions of the Kilkenny County Development Plan 2014-2020,
- (d) the remedial Environmental Impact Statement submitted with the application for substitute consent,
- (e) The remedial Natura Impact Statement submitted with the application for substitute consent,
- (f) the report and the opinion of the planning authority under section 177I of the Planning and Development Act 2000, as amended,
- (g) the submissions made in accordance with regulations made under section 177N of the said Act, as amended,
- (h) the report of the Board's Inspector, including in relation to potential significant effects on the environment,
- (i) the planning history of the site,
- (j) the decision of the Board in relation to a licence for the discharge of trade effluent under ref. 10.WW0411,
- (k) the pattern of development in the area, and
- (l) the nature and scale of the development the subject of this application for substitute consent.

Appropriate Assessment

The Board had regard to the remedial Natura Impact Statement submitted with the application and the mitigation measures contained therein, the submissions on file and the Inspector's assessment, and submissions in relation to the appeal under ref. 10.WW0411, and completed an appropriate assessment of the impacts of the development on nearby Natura 2000 sites. The Board concluded that, on the basis of the information available, the subject development, either individually or in combination with other plans or projects, has not had, and does not give rise to, adverse impacts on the integrity of any European site, having regard to the conservation objectives of those sites.

Environmental Impact Assessment

The Board considered the nature and scale of the development, the remedial Environmental Impact Statement submitted by the applicant and the Inspector's report. The Board completed an Environmental Impact Assessment in relation to the development in question and concluded that the remedial Environmental Impact Statement submitted identified and described adequately the direct and indirect effects on the environment of the development. The Board considered that the Inspector's report was satisfactory in addressing the environmental effects of the development and also agreed with its conclusions in relation to the acceptability of mitigation measures proposed and residual effects and that the subject development would not be likely to have had, or have significant effects on the environment.

Conclusion

Having regard to the acceptability of the environmental impacts, as set out above, it is considered that subject to the conditions set out below, the subject development would not be likely to have had or have significant effects on the environment and is not, contrary to the proper planning and sustainable development of the area.

Conditions:

1. (a) This grant of substitute consent shall be in accordance with the plans and particulars submitted with the application on the 30th September 2014, as amended by the further plans and particulars submitted on the 30th day of October 2014, other than as provided for in condition 1 (b) herein.
- (b) This grant of substitute consent relates only to works undertaken, as described in the application, within the site of 9.5 hectares as outlined in red in the submitted drawings and maps and does not authorise any future extraction or associated development on the said site.

Reason: In the interest of clarity.

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2. All environmental mitigation measures identified within the Remedial Environmental Impact Statement and the Remedial Natura Impact Statement shall be implemented in full, save as may be required in order to comply with other conditions attaching to this order.

Reason: To protect the environment and amenities of the area and to ensure the proper planning and sustainable development of the area.

3. A detailed restoration plan for the site shall be submitted to and agreed in writing with the planning authority within three months of the date of this order. Matters to be addressed in the restoration plan shall include the following:
 - (a) Proposals for the re-use of the quarry and identified site safety measures, to include any necessary regrading of quarry faces.
 - (b) A scheme of landscaping and tree planting to provide for the re-vegetation of the site where suitable.
 - (c) A timescale for implementation of the plan and proposals for an aftercare programme of five years.
 - (d) The archaeological monitoring of the use of overburden material from screen bunds and mounds erected around the site.

Reason: In the interest of the pollution control, to enhance the visual amenities of the area, to enhance ecological value and to ensure public safety.

3. Screen planting shall be carried out within the elevated grassed area to the west of the settlement lagoons in order to screen the quarry from views from the M9. Such planting shall consist of native or naturalised tree species and varieties and shall be protected from grazing animals by stock-proof fencing. Any trees which, within a period of 5 years from the completion of the development die, are removed or become seriously damaged or diseased, shall be replaced within the next planting season with others of similar species, unless otherwise agreed in writing with the planning authority. Details of such screen planting shall be submitted to and agreed in writing with the planning authority within three months of the date of this order.

Reason: In order to screen the development, in the interest of visual amenity.

4. Within three months of the date of this decision, 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 completion of the development.

5. Within three months of the date of this order, the developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to the Board to determine the proper application of the terms of the Scheme.

Reason: It is a requirement of the Planning and Development Act 2000 that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission.

Conor McGrath

10/03/2015