An Bord Pleanála

Inspector's Report

06S. QD0004

Development:	Extend and continue quarry
Address:	Aghafarell, Mountseskin and Ballinascorney Upper, Brittas, Co Dublin
Planning Authority:	South Dublin County Council
Applicant:	Kilsaran Concrete t/a Kilsaran Build
Application Type:	Permission under Section 37L of the planning act
Observers:	1. Department of Arts, Heritage and the Gaeltacht 2. Geological Survey of Ireland 3. Inland Fisheries Ireland 4. The Dublin Mountain Conservation and Environment Group 5. John Healy 6. Joan Murphy 7. Michael J. McCoy 8. Geraldine Vance 9. Mary and Eamon Quirke 10. Paul Vance 11. Deirdre Byrne and Gary Glackin
Date of Site Inspection:	3rd May 2016
Inspector:	Stephen J. O'Sullivan

1.0 INTRODUCTION

1.1 This report deals with an application under 37L of the Planning and Development Act 2000-2015 for permission to continue and extend a quarrying operation in South County Dublin.

2.0 SITE

2.1 The site lies in an upland rural area in the Dublin Mountains on the Regional Road R114 c2.5km to the east of the village of Brittas. The stated area of the site is 42.9ha, within an overall landholding of 157ha. It contains the entire area of an existing quarry, including the ancillary facilities and the asphalt and aggregate processing plants that are associated with it, as well as an adjoining area to the east of grassland and coniferous forestry. The regional road at the front of the site runs along the 290m OD contour line. The highest contour line at the back of the site is c363m above OD. The summit at Knockannavea lies c800m to the south of the site at a height of 395m OD.

2.2 There is another quarry in operation to the south of the site on the other side of the Brittas River. There is a national school in the village of Brittas within the 50kph zone on the regional road. Speed control ramps have been installed on that road on either side of the school.

3.0 HISTORY

3.1 There is an extensive planning history relating to the existing quarry and the landholding on which it lies. An application for substitute consent for the existing quarry is currently before the board under Ref No SU06S. 0129. It concerns extraction that occurred in an area of 5.07ha that was stated to be outside the 25.2ha quarry that was authorised by planning permissions including that granted under Reg. Ref. 93A/0346. The site for the substitute consent application is included within the site for this application. I would refer the board to section 5.1 of the inspector's report on the substitute consent application and section table 2-1 of the EIS for a more detailed planning history of the applicant's landholding.

4.0 PROPOSAL

4.1 The proposed development would involve extending the extraction area of the quarry to 17.9ha and extracting the extended area to a depth of 276m OD. The extension to the working area would be towards to north and east from the existing quarry. The quarry would work hard rock through a process of blasting, crushing and screening, but not washing, to produce a range of aggregates. A geological assessment indicates that 500,000m^3 of reserves could be extracted each year for a period of 25 years. A further 1 or 2 years would be required to implement rehabilitation and aftercare measures.

4.2 The proposed development would involve stripping overburden of c225,000m^3 from the pastoral field into which the quarry would be laterally extended. 105,000m^3 of this would be formed into landscaped mound to the north and east of the quarry. Two options are proposed for the remaining 125,000m^3. Under plan A it would be stored on site and then deposited on the final quarry floor. Under plan B is could be deposited in the void in 'area Y', which is an area of 1.08ha of the applicant's land that is adjoins the current application site, and is stated to be part of the quarry authority by the 1993 permission Reg. Ref. 93A/346.

4.3 The existing site drainage system would be used. Rainfall runoff and groundwater seepage from the extended quarry would be directed to the existing southern pond, and thence to the main discharge point into the Brittas River. The discharge is subject to a licence from the county council. The quarry would continue to include a prefab office building, a weighbridge, a wheelwash, a septic tank and puraflo, a workshop, an ESB sub-station and aggregate storage areas.

4.4 A restoration plan is submitted. The final benches would be 18-20m high, 5-10m wide and a slopes of c80°. The void would be flooded. Screening berms would be retained, and ancillary areas re-graded. There would be tree planting of the bench around the void, and the natural recolonization by vegetation would be allowed.

4.5 The proposed development does not encompass the asphalt plant or the waste recovery facility that the applicant operates on the site.

5.0 POLICY

5.1 Guidelines for Planning Authorities on Quarries and Ancillary Activities were issued by the minister in 2004. They note the economic importance of quarries and envisages a sustained level of demand for aggregates to facilitate the provision of the infrastructure required to support continuing economic and social development and to maintain investment in the manufacturing and services sectors. Being a location based resource aggregates can only be worked where they occur and it is generally neither economically nor environmentally sustainable to transport them at any great distance to their market due to increased transport costs. Potential environmental impacts associated with quarries are outlined in chapter 3 and include noise and vibration, dust deposition/air quality, water supplies/groundwater including effects on the amount and quality of water, natural heritage, cultural heritage, landscape, traffic and waste management of material arising from the process. Reference is also made to the preparation of a well-prepared Environmental Management System (EMS) as a valuable tool to assist the ongoing operation of quarrying and assist in integrating environmental management into daily operations, long-term planning and other quality assurance systems

5.2 The South Dublin County Development Plan 2016-2022 comes into force on 12th June 2016. The site is in an area zoned under objective HA –DM 'To protect and enhance the outstanding natural character of the Dublin Mountains Area'. Extractive industry is open for consideration under this zoning up to the 350m contour at existing premises. Section 4.7 of the plan refers to mineral extraction. It states objectives to facilitate mineral extraction at suitable locations subject to the protection of amenity and environmental quality; to limit its operation in the HA zonings where with would prejudice the continuation of the county's built and natural heritage; and to ensure satisfactory reinstatement of disused quarries. Section 9.2.3 of the plan has objectives to restrict development in the Dublin Mountains to protect the area's amenity. Views and prospects from the R114 and from Vance's Lane in the vicinity of the site are protected. Section 11.3.8 of the plan deals with development control of extractive industry. It refers to the quarry guidelines and general planning considerations.

5.3 The site is not subject to designation for nature conservation under the Natura 2000 network or otherwise.

6.0 SUBMISSIONS

6.1 The report from **the planning authority** can be summarised as follows:

- The planning authority has no comment on the appropriate assessment screening report submitted with the application.

- The Roads Section of the council has reservations about the proposed development. Access would be from a narrow, steep road to the north-east of the site that is unsuitable for HGVs, or else through the village of Brittas past a primary school. The number and weight of heavy vehicle movements that would allowed should be specified by any permission granted. Specific conditions should also restrict the times in which they may occur in order to avoid the start and end of the school day at the national school in Brittas. A specific contribution should be required for traffic calming in the vicinity of the school.

- The authority recognizes some locational merit in extending the existing quarry. However the proposed development may exceed the carrying capacity of the environment. The site is highly visible in the landscape, particularly from the opposite side of the valley to the south.

- The contribution scheme adopted by the planning authority under section 48 of the planning act specifies a levy from commercial developments of €78.68 per square metre of floorspace.

- A list of conditions that might be imposed on a permission are provided. It does not include conditions of the type recommended by the Road Section of the council.

6.2 The submission from the **Department of Arts, Heritage and the Gaeltacht** recommended that archaeological monitoring be required by condition.

6.3 The submission from the **Geological Survey of Ireland** stated that the development was unlikely to affect the Brittas Gravel Complex, a nearby feature that had been identified as being on geomorphological interest. Chapter 6 of the EIS adequately addresses the potential impact of the development on groundwater.

6.4 The submission from **Inland Fisheries Ireland** stated that the site was within the catchment of the Brittas River, which was a salmonid river with brown trout. The mitigation measures set out in sections 6.124 to 6.127 of the EIS must be implemented. The drawdown zone of the quarry should be monitored to ensure that was no impact of the flow of the river. The monitoring required by condition no. 5 of the discharge licence granted to the existing quarry should be reviewed in light of the zero BOD recorded in the receiving waters according to table 6.4 and 6.5 of the EIS.

From other persons

6.5 The other submission on the application objected to the proposed development on several grounds which can be summarised as follows-

- The works and blasting that form part of the proposed development would have a negative effect on the quality and quantities of groundwater in the area which would affect private supplies for houses and farms in the area. They would also threaten the source of Dublin's supply at the Poulaphouca reservoir/

- The quarry gives rise to emissions of dust that have a negative impact on residential amenity and the health of nearby residents.

- The proposed development would damage an important landscape and the character of an area that is designated as being of high amenity, particularly in cumulation with the other quarries in the area, including those whose operations have ceased but whose sites have not be rehabilitated.

- The use of explosives would give rise to vibrations that would threaten the structure of houses in the vicinity.

- The road network in the area is not capable of safely accommodating the heavy traffic that would be generated by the development, which would therefore give rise to traffic hazard. The village of Brittas is not suitable for such traffic, nor is the narrow and twisting R114 to the north-east of the site, which crosses a narrow bridge over the Dodder.

- A protected species of crayfish is present in the Brittas River which the development threatens. It would therefore contravene the 1976 Wildlife Act.

- The existing quarry is unauthorised and no permission to retain it has been sought. The applicant is operating a quarry of 31.4ha and had failed to seek permission for an extension of 6.2ha.. The applicant has failed to comply with the conditions that were imposed on its operation with regard to extraction, hours of operation, traffic, noise and dust. The present application contravenes Irish and European law regarding environmental impact assessment, Seveso sites and the protection of habitats and species, as well as the public's right to participate in environmental decision making. There is an existing judicial review in the High Court and the present application should not proceed while it is pending.

- The noise generation on the site is heard over a wide area due to high winds

- No quarry should be given permission for 25 years.

Responses

6.6 The **applicant** was given the opportunity to respond to the submissions from the planning authority and prescribed bodies. In response to the planning authority it stated that articulated trucks from the quarry did not turn left onto the R114 because of the narrow bend at the bridge over the Dodder. There was no rational basis to ban such vehicle from turning left from the quarry. The school in Brittas village is within the 50kph zone. It has attended crossings and traffic calming has been carried out there. An annual extraction limit was feasible for a quarry, but not a daily one as there was sharp variations in demand for its products across the year. The applicant is competent to carry out maintenance along the R114 in lieu of financial contributions. .

In response to Inland Fisheries Ireland it stated that it considered that the water quality status of the Brittas River below the discharge point from the quarry should be categorised as Q3, the same as that above the discharge point, as

Group B taxa were present. Therefore it was unlikely that the quarry was having a significant effect on surface water quality.

7.0 APPROPRIATE ASSESSMENT

7.1 The proposed development would not be on or immediately adjacent to any Natura 2000 site. It could not have a direct effect on such site. The proposed development would not be located upstream of a Natura 2000 site such that it could have an indirect effect on any such site by virtue of its impact on the quality of waters. An SPA is designated at the Wicklow Mountains c5.3km south-east of the site for which the qualitifying species are Merlin and Peregrine, and another at the Poulaphouca Reservoir c7.5km to the south-west of the site for Greylag Goose and the Lesser Black-Backed Gull. The proposed development would not involve significant loss or fragmentation of habitats that might support the population of such species within the SPAs in either foraging, breeding or migration. The activity in the proposed quarry extension would be similar in intensity to that in the previously authorised quarry and would be at a substantial distance from the SPAs, and so would not cause significant disturbance to the populations there. It is therefore concluded that the proposed development would not be likely to have significant effects on any Natura 2000 site either by itself or in combination with any other plan or project. This conclusion is consistent with the screening report submitted with the application. It is also consistent with the determination on 24th June 2014 by the board under 06S. QV0154 that the development that took place at the existing quarry after 26th February 1997 would not have required appropriate assessment and so a Natura Impact Statement was not required with the application for substitute consent that is before the board.

8.0 ASSESSMENT WITH REGARD TO PUBLIC POLICY

8.1 The proposed development would involve quarrying up to but not beyond the natural line of the 350m contour. It would therefore be open for consideration under the HA – DM zoning objective applied to the site by the county development plan. The existence of a quarry on the landholding establishes some locational rationale for the proposed development, as stated by the planning authority. The ministerial guidelines advise that reserves for aggregate will generally have to be worked where they occur. In this context a quarry on the site may be regarded as in keeping with the zoning of the site, the general provisions of the county development plan and the minister's guidelines. The principle of the proposed development is therefore acceptable. However its particular impacts and likely effects would have to be considered and assessed before a conclusion was made as to whether the particular development proposed in this case was actually in keeping with the proper planning and sustainable development of the area.

9.0 ENVIRONMENTAL IMPACT ASSESSMENT

9.1 The following assessment draws on the environmental impact statement and other submissions made by the applicant, prescribed bodies and members of the public during the course of the application. It seeks to identify, describe and assess the direct and indirect effects of the proposed development on the environment with regard to the following factors -

- Human beings, including the impact from noise and vibration
- Flora and fauna
- Soil
- Water
- Air, including the effects of dust, and climate
- The landscape
- Cultural heritage
- Material assets, including the impact on roads and traffic
- The interaction of the foregoing

It also considers the adequacy of the environmental impact statement, including the outline of the main alternatives studied by the developer and an indication of the main reasons for this choice that he is required to provide.

9.2 The assessment considered the cumulative effects of the proposed development in combination with other relevant projects, in particular the previous quarrying on the landholding and that which is the subject to the concurrent application for substitute consent, as well as the asphalt plant and waste recovery facility on the landholding that are separately authorised. This assessment does not consider the effects of other developments and works which are not authorised.

Human beings, including effects from noise and vibration

9.3 The area around the site is rural. There are 24 houses within 1km of the site, 2 of which are within 250m and another 4 within 500m, as illustrated in figure 3.4 of the EIS. The village of Brittas lies c2km to the west. It had a population of 171 at the 2011 census. Chapter 9 of the EIS deals with noise and vibration. It notes the limits applied to the existing quarry in this regard by the conditions 6 and 7 imposed when the quarry was registered under section 261 of the planning act – a noise limit of 55dB(A) 1 hour Laeq from 0800 to 2200, otherwise 45dB(A); and ground borne vibration with a ppv of no more than 12m/s and air overpressure of no more than 125dB Lin max peak; all as measured at the nearest sensitive receptor. The results of noise monitoring at 2 locations on the edge of the quarry are set out in appendix 9-B. Exceedances of 55dB(A) were recorded on several occasions at one of the locations on the south-western edge of the quarry. Given the separation distance from that location to the nearest house, the EIS states that it is not likely that the recorded noise from the quarry would have led to a breach of the noise limit at any sensitive receptor. The results of blast monitoring at the

nearest two houses were submitted in appendix 9-C, which indicate that the limits on vibration were not exceeded. Potential sources of noise from the proposed development include the operation of plant and machinery during overburden stripping and stone extraction, and from the proposed blasting and the drilling to facilitate it. Noise emissions would be reduced during stone extraction by the screening from the quarry face and berms above it. However such screening would not be available when overburden was stripped from the site. The stripping would occur once or twice a year for two to three weeks at a time. The EIS provides predictions of the likely impact of noise at the nearby sensitive receptors. Major impacts from noise are predicted during overburden stripping at the two nearest houses, R9 and R25, where the noise level would increase by 12.2dB to 63dB(A) Laeq 1 hour and by 10.2dB(A) to 61 dB(A) Laeq 1 hour respectively. Significant impact during extraction operation is not predicted. Based on the monitoring results of previous blasting operations that are similar to those proposed, it is predicted that exceedances of the limits set down in the guidelines with respect to vibration would not occur. The EIS describes mitigation measures, including the erection of berms that was assumed in the prior noise predictions, as well as proper maintenance of plant, machinery, vehicles and internal roads. The outer berms in the vicinity of the house at R9 would be constructed before other operations in order to screen noise from them. It is therefore predicted noise there would not exceed a limit of 70dB(A) Laeq 1 hour, which is appropriate for noise from temporary construction works. The EIS also refers in a general way to limiting the occasion and duration of particularly noisy operations. The perceived impact of blasting would be mitigated by carrying them out during working hours on specified days with advance notice.

9.4 The description of the likely effects arising from noise and vibration set out in the EIS is considered to be reasonable and reliable, given the similarity of the proposed works with those that have been carried out on the site and the monitoring results of those works which are available. The proposed development would have the potential for negative effects on human beings due to noise and vibration, but these can be mitigated to an extent that would comply with the advice and standards set out in the minister's guidelines, and so significant negative residual effects are not likely, provided suitable controls were placed on the stripping of overburden at the margins of the extended quarry that are closest to houses.

Flora and Fauna

9.5 Chapter 4 of the EIS describes the likely effects of the proposed development on flora and fauna. It includes the results of habitat and bat surveys. The predominant habitat on the overall site is active quarry. The area into which the proposed development would extend excavation is mostly dry grassland, with some bare ground and conifer plantation. The surrounding area is a mix of grassland and conifer plantation. No evidence of badger activity was recorded during the habitat survey. 17 bird species were recorded on the site, listed in

table 4-6 of the EIS. None of those species appear in Annex I of the Birds Directive. A dawn and a dusk activity survey for bats was carried out in September 2015. Activity by four species was recorded – the lesser noctule, common pipistrelle, soprano pipistrelle and the brown long-eared bat. The part of the site outside the existing quarry is described as providing a medium quality foraging habitat. There are negligible roosting opportunities, apart from the disused building immediate to the south of the proposed quarry extension along the R114. The Brittas River was inspected for white tailed crayfish 100m above and below the discharge point, but none were recorded. The EIS stated that the site provides habitats that are ubiquitous and anthropogenic. The habitats are suitable for common and widespread species and it is unlikely that it provide it is important for any species given the similar alternative habitats available. The ecological value of the site is given as local (higher). Potential impacts from habitat loss and fragmentation, disturbance, dust deposition and impacts on drainage and water quality during the operation of the quarry are described. None of these are deemed likely to be significant. Nevertheless, certain mitigation measures are proposed, including the reseeding of the overburden storage area to mitigate the loss of grassland habitats, and the maintenance of a 145m buffer between quarrying operations and the derelict buildings to the south that provide roosting opportunities for bats. The significance of any residual effects on flora and fauna range from imperceptible to insignificant. The description and classification of the habitats on the site and its vicinity that is provided in the EIS is consistent with the observations at the time of inspection. The description of the species that would occur on the site is also regarded as likely to be accurate and reliable. The site does not accommodate species or habitats of particular ecological value. The proposed development would not be likely, therefore, to have a significant direct effect on flora and fauna. Given the conclusions of this assessment with regard to the effects from dust emissions and upon water, it is not unlikely that it would have significant indirect effects on flora and fauna either.

Soil

9.6 According to chapter 5.14 of the EIS the subsoils around the site are thin with rock close to the surface or exposed. They comprise glacial till derived from sandstone and shale. The quarry and its extension lie within the outcrop of the Aghafarrell Formation of greywackes, siltstones and shales intruded by an intense dolerite swarm resulting in thermal metamorphism of slivers of sedimentary rock. C. 230,000m^3 of overburden would be removed to allow the proposed quarry extension. 105,000m^3 would be placed in a storage mound over a number of years. Silt fences and drainage channels would be installed down-gradient of the mound prior to its construction. Excavated overburden would be placed in layers and compacted to ensure stability. Topsoil would then be placed upon it and seeded with grass. Two options for the deposition of excess overburden at the end of the quarrying activity are described in the EIS. Plan A involves placing in on the quarry floor within the application site. Plan B is to place it a previously deepened area denoted 'Y' outside the

application site on the landholding. Plan B is stated to be favourable as it would restore more dry ground with the backfill going into a confined void with steep vertical faces, while plan A involves the backfilling of an area with an open space on the quarry side. Mitigation measures are outlined which involve good practice in soil handling: soils will be placed at a safe angle of repose; screening berms will be vegetated; rehandling of soil will be minimised; silt fences and cut-off drains will be installed around the final overburden storage area; the existing topsoil from the storage area will be used to restore that area; and all such measures will be carried out in accordance with a specific method statement. The proposed development would have a direct impact on the soil on the site and the bedrock beneath it. It would not affect the geological heritage of the area. The proposed development would not have indirect effects on the soil outside the application site. The description of the likely effects of the proposed development with regard to soil and the mitigation measures contained in the EIS are considered well founded and reasonable. This assessment concludes that, subject to the implementation of those measures, the proposed development is not likely to have significant environmental effects with respect to soil.

Water

9.7 Chapter 6 of the EIS gives a description of the surface and ground water regime in and around the site. Rainfall around the site runs to ditches and drains along field boundaries and there is no surface water inflow into the quarry. There is a high run-off coefficient due to a low groundwater recharge acceptance rate of the area's geology, so the flow in the Brittas River is rather flashy. The river flows through a deep channel beside the site and is well below the level of the quarry floor. Monitoring of the river by the EPA on the Brittas River indicates that water quality is moderate and at possible risk of not achieving good status. The applicant has a licence for the discharge from the existing quarry to the Brittas River which includes regular monitoring of water quality above and below the outfall. Results are set out in tables 6-4, 6-5 and 6-6 of the EIS. The quality of the discharge is described as good with a pH between 6.3 and 7 and low levels of hydrocarbons and suspended solids. The authorised quarry floor is below the water table and there minor seeps into the void. The groundwater levels on the site are controlled by the southern pond, whose level is somewhat below the quarry floor. The bedrock in the area is a poor aquifer. The GSI classifies the area as having extreme groundwater vulnerability status. Groundwater levels are monitored at four wells on the site. The monitoring results at well GW1 indicate that the zone of influence of the quarry on the water table extends for less than 200m from the quarry face. Wells within 2km of the site were surveyed and mapped in figure 6-5. The nearest is 400m south-east of the proposed extraction area.

9.8 Chapter 6 describes the water management system that is in place on the site and that will be used for the proposed extension. Potable water is supplied from a well on the site, while effluent from the staff kitchen and toilet is via a

puraflo waste water treatment system on the site. These facilities would continue to be used in the proposed extension. Aggregate is screened on the site but not washed, so the water requirements for processing relate to dust suppression, wheel washing and staff facilities. Groundwater and surface water from the quarry void is pumped to the southern pond on the site which allows for primary treatment by the settlement of suspended solids. Local sumps on the working quarry floor are used on a temporary basis as required Runoff from the yard drains to a hydrocarbon interceptor before reaching the pond. The discharge from the pond to the Brittas River is via a v-notch weir, which is subject to monitoring and licencing by the county council. Fuel and chemical storage on the site occurs in the quarry workshop under cover and over mass concrete bunds. The proposed drainage measures for the overburden storage areas are described under the heading *Soils* above.

9.9 Given the limited porosity and permeability of the bedrock, as demonstrated by the results from the monitoring of the boreholes and wells by the applicant, it is not likely that the proposed development would have a significant impact on the groundwater regime outside the site or the supply of water from wells in the vicinity. However there is a shallow water supply serving the house immediately to the east of the quarry identified as W7 on figure 6-5 whose yield may be effected by the proposed development. There would be no overall decrease in groundwater flows to receiving waters. The temporary sumps on the quarry floor and the attenuation provided by the southern pond would control the release of surface water so that the risk of flooding on or downstream of the site would not be exacerbated by the proposed development. Untreated runoff from the site has the potential to effect the quality of receiving surface waters, while the removal of overburden would increase the vulnerability of groundwater quality.

9.10 Mitigation measures stated at paragraph 6.140 of the EIS include those comprising the existing water management system at the quarry: primary treatment by settlement in the pond; recycling water from the wheel wash; suitable storage and bunding of hydrocarbons and chemicals; diversion of runoff from the roads, car park and yard via hydrocarbon interceptors; and drainage of effluent from the staff facilities via a puraflo system. Additional measures include the monitoring of groundwater levels in the four boreholes across the site and the provision of a replacement water supply if the existing supply at W7 or W8 is effected by the proposed development. The EIS predicts no significant residual effects on water from the proposed development.

9.11 The proposed development involves activity of a similar nature and scale to that which occurs on the site, and the implementation of similar mitigation measures and results are available to demonstrate the limited which this has had on water. The prediction of similar insignificant effects from the proposed development that is stated in the EIS is therefore considered reasonable and well founded. This assessment concludes that, subject to the implementation and monitoring of the various mitigation measures set out in the EIS, the

proposed development is not likely to have significant adverse effects on the environment with respect to water.

Air and climate

9.12 The proposed development has the potential to effect air quality through dust emissions arising from traffic on unpaved surfaces; stripping and handling of overburden; the extraction, handling and processing of rock. Chapter 8 of the EIS notes that fractions of dust greater than 10µm are not covered by the Air Quality Standards Regulations 180/2011, but that a dust deposition limit of 350mg/m^2/ day is imposed on the existing quarry by condition no. 8 of the quarry's registration. The results of three dust monitoring stations on the edge of the existing quarry are submitted in figure 8-1 which indicate that this limit is not breached. The chapter predicts that, having regard to the prevailing winds, dust emissions from the site are not likely to have a significant potential impact at any ecological or human receptors, apart from house no. 9, where a slight adverse impact from dust could occur. Mitigation measures are described, principally working below the surrounding ground level which would inhibit dust blowing off the site. Water sprays would be fitted to fixed processing plant; a water bowser would be used on internal tracks in dry weather; the screening berms would be planted; a wheel wash is installed at the entrance to the quarry; soil would not be handled in dry windy weather; stockpiling of soils will be minimised; areas of exposed soil shall be minimised; and mobile water bowsers would be used to dampen stockpiles as required. The EIS states that the implementation of such measures should reduce the impact of dust emissions at all receptors to an insignificant level. Given the similarity of the proposed activity to that which already occurs, and the available monitoring results, this conclusion is acceptable as reasonable and likely to be accurate, in preference to the assertions from observers regarding the likely negative impact of dust from the quarry. It is therefore considered that the proposed development would not be likely to have significant negative residual effects on air quality that would breach the limits advised in the ministerial guidelines. The proposed development is not likely to have a significant effect on the climate.

The landscape

9.13 Chapter 10 of the EIS refers to the effects of the proposed development on the landscape. It notes that the application site is not visible in the prospects whose protection is an objective of the development plan. The quarry is largely screened in the majority of views from the east and west due to its outline perpendicular to the rising contours and the screening berms along its sides. Open views are available from the other site of the valley to the south. Road users and local residents would be receptors with views of the proposed development, as described in table 10-2 of the EIS. The proposed development would involve the removal of 6.5ha of grassland and 1ha of forestry, would alter the landforms on the site and would involve the raising of an overburden storage mound, all of which would affect the landscape. The

value attached to the landscape value of the wider area is described as fairly high, while the agricultural land and coniferous forestry that would be removed by the proposed development are common habitats is not of such value. Given the presence of an existing quarry, the sensitivity of the landscape to the proposed development is categorised as medium, with those particular features on the site having low sensitivity. The scale and nature of the proposed development are such that the magnitude of its effects would be moderate. Its impact on the landscape is therefore described as moderate/minor, which is not a significant effect. A similar level of impact is predicted on particular visual receptors in the area. The seeding of the overburden storage mound is described as a mitigation measure, as are the restoration plan whereby parts fo the quarry void would be filled and others flooded. Significant residual adverse impact on the landscape are not predicted in the EIS. Given that the use of part of the site as a quarry is established; that the proposed development would not impinge on the crest of the Knockannavea and so would not alter the skyline from most views; and that the grassland and coniferous forest landcover that would be lost is widespread and unremarkable; it is considered that the description of the likely effects of the proposed development on the landscape stated in the EIS is acceptable. The proposed development it would not have a significant adverse impact on the landscape, although it would be visible from a considerable area on the other side of the Brittas River valley.

Cultural heritage, including archaeological and architectural heritage

9.14 There is a recorded monument DU024-040, a mound, to the north of the area where extraction is proposed. It would not be effected by the proposed development. Another possible feature was recorded during archaeological investigations in 2006 closer to the area of the proposed works. This feature will be preserved in situ with a fenced buffer zone 20m in radius. There are no other known items of importance to cultural heritage on the site. In these circumstances it is not likely that the proposed development would have a significant adverse impact on cultural heritage.

Material assets, including the likely effects on the road network

9.15 The most significant likely impact from the proposed development upon material assets would be on the road network in the area. For clarity, all likely effects arising from the traffic generated by the proposed development are considered here. Chapter 13 of the EIS provides a description of the existing traffic generated by the quarry, which is given as 45,000 truck movements per annum with an average load of c19.5 tonnes and an annual extraction rate of c402,000 tonnes. There is an average of 165 truck movements per working day. Traffic counts on the R114 were taken in October 2015 by the site entrance and at the primary school in Brittas. The average daily flow along the R114 was 1,448 vehicles westbound and 1,487 eastbound, with peak flows occurring during commuting hours. The westbound flow of HGVs was an average of 69 per day, and 88 eastbound. The EIS calculates that HGV

movements from the quarry operation generates on 2.6% of the weekday traffic flow to the east of the site access and 3.4% to its west, with non-HGV traffic from the quarry accounting for another 1% of traffic on the R114. Traffic counts at the quarry access indicate that 51% of the HGV movements along the R114 were generated by the quarry on the site. The traffic survey at the school showed that 2,826 traffic movements occurred at the school over a 12 hour period from 0700 to 1900. 159 HGVs passed, 64 of which were from quarry on the current site. The pedestrian crossing at the school was attended between 0830 - 900, 1330-1345 and 1415-1445. The rate of extraction for the proposed development would be 500,000 tonnes per annum with the same operating hours as the existing quarry. The number of truck movements that would be generated would therefore be 55,874, which equates to 205 movements per working day. The development traffic would split west-east in the ratio of 60:40. It should be noted, however, that a subsequent submission from the applicant stated that only rigid trucks used the route along the R114 to the east of the site, due to the difficulties in negotiating the bridge over the Dodder. The EIS predicts that the traffic generated by the development would not give rise to capacity issues at any of the junctions along the R114. As a mitigation measure it if proposed that the warning signs on the approaches to the quarry are refurbished. The roads maintenance carried out by the applicant and further financial contributions to this end that were made under the conditions of the quarry's registration are also mentioned.

9.16 The proposed development would only result in a marginal increase in the heavy traffic on the road network in the vicinity, as is indicated by the figures supplied in the EIS. It is not considered, therefore, that it would be likely to have serious negative effects on the condition or the safe use of that material asset. In particular it is not considered that the traffic would give rise to a traffic hazard at the school in Brittas provided drivers exercised the standard level of care and consideration as they are legally obliged to do in any event. However various measures to mitigate the impact of the proposed development on roads and traffic were described in different ways in the EIS and submissions from the applicant, including annual limits on the overall traffic generated by the proposed development; the restriction on articulated vehicles from the quarry travelling east on the R114 across the bridge over the Dodder; and roads maintenance works and financial contributions for same. It would therefore be prudent that such matters were subject to further control by the planning authority by the conditions attached to any grant of permission. Subject to this, the proposed development would be acceptable in terms of traffic safety and convenience.

Interaction of the foregoing

9.17 There is extensive interaction of the likely effects of the proposed development on the foregoing factors. The impact of the proposed development upon air, in the form of dust emissions, also effects human beings in the vicinity of the site. The effect of the development upon soil has implications for its effects upon

water quality, which in turn has an impact on flora and fauna. The impact of the proposed development on the material asset that is the road network in the area has an effect on the human beings who use it. Conversely the impacts upon human beings from noise, vibration and dust has an impact upon the material assets which are the houses which the people occupy. This assessment has been cognisant of these interactions.

Adequacy of the EIS

9.18 Section 2 of the EIS gave an outline of the main alternatives considered by the developer and the main reasons for his choice. In this case it stated that there was no practicable alternative to the current land based sources of construction aggregate. It the developer were to close and restore the existing quarry, then a new greenfield quarry would be required to serve the Dublin market. No site for such is available to the developer. Other quarries would be likely to have longer haul routes than the one at Ballinascorney. With respect to the alternatives for the uses of excess overburden, the filling of site Y by condition is considered more beneficial because it would create the larger area of dry ground with more opportunities for recolonization than a lake. This section of the EIS fulfils the requirement for a developer to outline alternatives to the proposal and the main reasons for his choices, which is not a particularly onerous requirement in any event. This application involves an extension to an existing quarry whereby the location and nature of the proposed activity would be similar to that which already occurs, although its intensity would be increased somewhat. The predictions of the likely effects of the proposed development can therefore be informed from monitoring results of the existing quarry. This increases the reliability of the predictions set out in the EIS, which are largely accepted by this assessment. The statement includes adequate descriptions of the site, or the proposed development, of its likely effects on the environment, and of measures proposed to mitigate such effects. It provides the information set out in schedule 6 of the planning regulations, and complies with the article 94 of the regulations and section 172 of the planning act.

10.0 OTHER ISSUES

10.1 The description of the proposed development in the EIS provides reasonable grounds for a grant of permission for a period of 25 years to complete extraction, with a further 2 years to complete restoration of the site. There is an extensive planning history pertaining to the site, including a current application for substitute consent. However there is no inconsistency in the manner in which the proposed development was described in relation to other development on the site that is the subject of the other application or previous grants of permission which would support a conclusion that the current application was invalid or incapable of consideration in the normal course set down in the planning act.

11.0 CONCLUSION

11.1 The proposed development would be in keeping with the provisions of the development plan and the Guidelines for Planning Authorities and Ancillary Activities issued by the minister. It would not be likely to have significant negative effects on the environment. It would not be likely to have significant effects on any Natura 2000 site. It would not seriously injure the character of the areas. It would be acceptable in terms of traffic safety and convenience. It would therefore be in keeping with the proposed planning and sustainable development of the area.

12.0 RECOMMENDATION

12.1 I recommend that permission be granted subject 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 Act, 2000, as amended, and in particular Section 37L,

(b) the 'Quarry and Ancillary Activities, Guidelines for Planning Authorities issued by the Department of the Environment, Heritage and Local Government in April 2004,

(c) the provisions of the South Dublin County Development Plan 2016-2022,

(d) the Environmental Impact Statement submitted with the application for further development,

(e) the report and the opinion of the planning authority under section 37L(12)(a),

(f) the submissions made in accordance with regulations made under Article 270(1) of the Planning and Development (Amendment) (No. 2) Regulations 2015,

(g) the report of the Board's Inspector, including in relation to potential significant effects on the environment,

(h) the planning history of the site,

(i) the pattern of development in the area,

(j) the nature and scale of the development the subject of this application for further development, and

(k) Ref. 06S. SU129 - application for substitute consent at the subject site.

Appropriate Assessment

The Board noted that the proposed development is not directly connected with or necessary to the management of a European Site. In completing the screening for Appropriate Assessment, the Board accepted and adopted the screening

assessment and conclusion carried out in the Inspector's report in respect of the identification of the European sites which could potentially be affected, and the identification and assessment of the potential likely significant effects of the proposed development, either individually or in combination with other plans or projects, on these European sites in view of the site's Conservation Objectives. The Board was satisfied that the proposed development, either individually or in combination with other plans or projects, would not be likely to have a significant effect on European Site Nos. 004040 and 004063, or any other European site, in view of the sites' Conservation Objectives.

Environmental Impact Assessment

The Board considered that the Environmental Impact Statement submitted with the application, the report, assessment and conclusions of the Inspector with regard to this file and other submissions on file, was adequate in identifying and describing the direct and indirect effects of the proposed development. The Board completed an environmental impact assessment, and agreed with the Inspector in his assessment of the likely significant effects of the proposed development, and generally agreed with her conclusions on the acceptability of the mitigation measures proposed and residual effects. The Board generally adopted the report of the Inspector. The Board concluded that, subject to the implementation of the mitigation measures proposed, the proposed development would not be likely to have significant effects on the environment.

CONDITIONS

1. The development shall be carried out in accordance with the plans and particulars lodged with the application submitted to An Bord Pleanála on the 30th day of November, 2015 including the mitigation measures described in the EIS, except as may otherwise be required in order to comply with the following conditions. Where such conditions requires points of detail to be agreed with the planning authority, these matters shall be the subject of written agreement, and shall be implemented in accordance with the agreed particulars. In default of agreement, the matters in dispute shall be referred to An Bord Pleanála for determination.

   Reason: In the interest of clarity.

2. No more than 500,000 tonnes of material may be extracted from the site in any period of 12 months regardless of whether such extraction is authorized by this

permission or by any other consent, approval or permission. Quarry works shall cease on the site within a period of 25 years from date of this order. The site restoration works described in the EIS shall be completed within 2 years of the cessation of quarrying on the site.

Reason: To clarify the scope of the permission in accordance with the details submitted in connection with the application

3. Overburden storage and quarry restoration shall be carried out on the applicant's landholding in accordance with plan B described in chapter 2 of the EIS.

Reason: To achieve a greater level of restoration of the landholding after the operation of the quarry there ends with more opportunity for ecological recolonization

4. The development shall be operated and managed in accordance with an Environmental Management System (EMS), which shall be submitted by the developer to, and agreed in writing with, the planning authority prior to the commencement of development under this permission. This shall include the following:

   a. Proposals for the suppression of on-site noise.
   b. Proposals for the on-going monitoring of sound emissions at dwellings in the vicinity.
   c. Proposals for the suppression of dust on site
   d. Details of safety measures for the land above the quarry, to include warning signs and stock proof fencing.
   e. Management of all landscaping
   f. Monitoring of ground and surface water quality, levels and discharges.
   g. Details of site manager, contact numbers (including out of hours) and public information signs at the entrance to the facility.

   Reason: In order to safeguard local amenities.

5. The quarry, and all activities occurring therein, shall only operate between 0600 hours and 2000 hours, Monday to Friday and between 0600 hours and 1400

hours on Saturdays. No activity shall take place outside these hours or on Sundays or public holidays. .

Reason: In order to protect the amenities of property in the vicinity.

6. During the operational phase of the proposed development, the noise level from within the boundaries of the site measured at noise sensitive locations in the vicinity, shall not exceed:

- an LArT value of 55 dB(A) during 0800 and 2000 hours. The T value shall be one hour

- an LAeqT value of 45 dB(A) at any other time. The T value shall be 5 minutes

Reason: In order to protect the amenities of property in the vicinity.

7. (a) Blasting operations shall take place only between 1000 hours and 1800 hours, Monday to Friday, and shall not take place on Saturdays, Sundays or public holidays. Monitoring of the noise and vibration arising from blasting and the frequency of such blasting shall be carried out at the developer's expense by an independent contractor who shall be agreed in writing with the planning authority.

(b) Prior to the firing of any blast, the developer shall give notice of his intention to the occupiers of all dwellings within 500 metres of the site. An audible alarm for a minimum period of one minute shall be sounded. This alarm shall be of sufficient power to be heard at all such dwellings.

Reason: In the interest of public safety and residential amenity

8. (a) Vibration levels from blasting shall not exceed a peak particle velocity of 12 millimetres/second, when measured in any three mutually orthogonal directions at any sensitive location. The peak particle velocity relates to low frequency vibration of less than 40 hertz where blasting occurs no more than once in seven continuous days. Where blasting operations are more frequent, the peak particle velocity limit is reduced to eight millimetres per second. Blasting shall not give rise to air overpressure values at sensitive locations which are in

excess of 125 dB (Lin)max peak with a 95% confidence limit. No individual air overpressure value shall exceed the limit value by more than 5 dB (Lin).

(b) A monitoring programme, which shall include reviews to be undertaken at annual intervals, shall be developed to assess the impact of quarry blasts. Details of this programme shall be submitted to, and agreed in writing with, the planning authority prior to commencement of any quarrying works on the site. This programme shall be undertaken by a suitably qualified person acceptable to the planning authority. The results of the reviews shall be submitted to the planning authority within two weeks of completion. The developer shall carry out any amendments to the programme required by the planning authority following this annual review.

Reason: To protect the residential amenity of property in the vicinity.

9. (a) Dust levels at the site boundary shall not exceed 350 milligrams per square metre per day averaged over a continuous period of 30 days (Bergerhoff Gauge). Details of a monitoring programme for dust shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. Details to be submitted shall include monitoring locations, commencement date and the frequency of monitoring results, and details of all dust suppression measures.

(b) A monthly survey and monitoring programme of dust and particulate emissions shall be undertaken to provide for compliance with these limits. Details of this programme, including the location of dust monitoring stations, and details of dust suppression measures to be carried out within the entire quarry complex, shall be submitted to, and agreed in writing with, the planning authority prior to commencement of any quarrying works on the site. This programme shall include an annual review of all dust monitoring data, to be undertaken by a suitably qualified person acceptable to the planning authority. The results of the reviews shall be submitted to the planning authority within two weeks of completion. The developer shall carry out any amendments to the programme required by the planning authority following this annual review.

Reason: To control dust emissions arising from the development and in the interest of the amenity of the area.

10. Prior to the commencement of development the developer shall submit and agree in writing with the planning authority a scheme to control the traffic generated by the proposed development and its impact on the public road. The scheme shall include details of the following:

- The number and type of vehicular movements to and from the quarry
- The routes taken by various vehicles coming and going from the site, and in particular restrictions on the type and weight of vehicles using the bridge over the Dodder on the regional road R114
- Restrictions upon the timing, direction and type of vehicular movements from the quarry in order to mitigate the impact of those travelling to and from the school at Brittas
- Repair and maintenance that the developer may carry out upon public roads in lieu of the special contribution required under condition no 14 below

The details agreed under the scheme shall be incorporated into an agreement between the developer and the planning authority for the regulation of the development and use of the site that is authorised by this permission made under section 47 of the Planning and Development Act 2000 (as amended).

Reason: For the safety and convenience of road users

11. Within three months of the date of this order the developer shall submit to the planning authority a digital terrain model of the site and the entire landholding that meets the specifications of the planning authority. A revised model shall be submitted every four years thereafter.

Reason: To facilitate the enforcement of the terms and conditions of this permission.

12. (a) The developer shall monitor and record groundwater, surface water flow, noise, ground vibration, and dust deposition levels at monitoring and recording stations, the location of which shall be agreed in writing with the planning authority prior to commencement of development. Monitoring results shall be submitted to the planning authority at [monthly] intervals for groundwater, surface water, noise and ground vibration.

(b) On an annual basis, for the lifetime of the facility (within two months of each year end), the developer shall submit to the planning authority [five] copies of an environmental audit. Independent environmental auditors approved of in writing by the planning authority shall carry out this audit. This audit shall be carried out at the expense of the developer and shall be made available for public inspection at the offices of the planning authority and at such other locations as may be agreed in writing with the authority. This report shall contain:

(i) A written record derived from the on-site weighbridge of the quantity of material leaving the site. This quantity shall be specified in tonnes.

(ii) An [annual] topographical survey carried out by an independent qualified surveyor approved in writing by the planning authority. This survey shall show all areas excavated and restored. On the basis of this a full materials balance shall be provided to the planning authority.

(iii) A record of groundwater levels measured at monthly intervals.

(iv) A written record of all complaints, including actions taken in response to each complaint.

(c) In addition to this annual audit, the developer shall submit quarterly reports with full records of dust monitoring, noise monitoring, surface water quality monitoring, and groundwater monitoring. Details of such information shall be agreed in writing with the planning authority. Notwithstanding this requirement, all incidents where levels of noise or dust exceed specified levels shall be notified to the planning authority within two working days. Incidents of surface or groundwater pollution or incidents that may result in groundwater pollution, shall be notified to the planning authority without delay.

(d) Following submission of the audit or of such reports, or where such incidents occur, the developer shall comply with any requirements that the planning authority may impose in writing in order to bring the development in compliance with the conditions of this permission.

Reason: In the interest of protecting residential amenities and ensuring a sustainable use of non-renewable resources.

13. The developer shall facilitate the preservation, recording and protection of archaeological materials or features that may exist within the site. In this regard, the developer shall -

(a) notify the planning authority in writing at least four weeks prior to the commencement of any site operation relating to the disturbance or removal of topsoil,

(b) employ a suitably-qualified archaeologist who shall monitor the stripping of topsoil, and

(c) provide arrangements, acceptable to the planning authority, for the recording and for the removal of any archaeological material which the authority considers appropriate to remove.

In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.

Reason: In order to conserve the archaeological heritage of the site and to secure the preservation and protection of any remains that may exist within the site.

14. The developer shall pay to the planning authority a financial contribution as a special contribution under section 48(2) (c) of the Planning and Development Act 2000 in respect of maintenance and restoration works to the public road network in the area necessitated by the proposed development. The amount of the contribution shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to the Board for determination. The contribution shall be paid in such phased payments as the planning authority may facilitate and shall be updated at the time of payment in accordance with changes in the Wholesale Price Index – Building and Construction (Capital Goods), published by the Central Statistics Office.

Reason: It is considered reasonable that the developer should contribute towards the specific exceptional costs which are incurred by the planning authority which are not covered in the Development Contribution Scheme and which will benefit the proposed development.

15. 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 and Development Act 2000, as amended. The contribution shall relate to the greenfield area of the site which has not to date been excavated and shall be paid prior to commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. 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 An Bord Pleanála to determine the proper application of the terms of the Scheme.

Reason: It is a requirement of the Planning and Development Act 2000, as amended, 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.

16 Within three months of the date of this order, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to the planning authority, to secure the satisfactory reinstatement of the site, coupled with an agreement empowering the planning authority to apply such security or part thereof to such reinstatement. 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 the Board for determination.

Reason: To ensure the satisfactory restoration of the site in the interest of visual amenity.

_____

Stephen J. O'Sullivan
31st May 2016