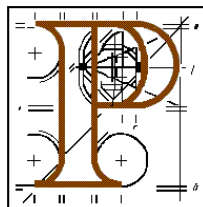


An Bord Pleanála



Inspectors Report

Development:

Use of land as a burrow pit for the extraction of stone and gravel from a parcel of land measuring 1.1ha, for use as fill material on the adjoining N17/N18 Gort to Tuam motorway which is currently under construction. The depth of extraction is up to 4.2m. Access to the burrow pit will be directly off the N17/N18 Gort to Tuam motorway and the land will be remediated and returned to agricultural grassland upon completion of the works at Greethill townland, Athenry, Co. Galway.

Planning Application

Planning Authority:	Galway County Council
Planning Authority Reg. Ref.	15/1546
Applicant:	John Sisk & Son
Type of Application:	Permission
Planning Authority Decision:	Refuse

Planning Appeal

Appellant(s):	John Sisk & Son
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Observers:	An Taisce DAU of D.EH&G
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Type of Appeal:	First Party
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Date of Site Inspection:	17/05/2016 and 18/05/2016
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Inspector:	Gillian Kane
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1.0.0 SITE LOCATION AND DESCRIPTION

1.0.1 The subject site is an elevated, greenfield site, in a remote locate approx. 5km south-west of Athenry in Co. Galway. The site is not directly accessible from the public road, access is currently via a temporary construction road off the local country road running to the east of the subject site and linking the R347 with the R446. The subject site is approx. 100m to the east of the currently under construction N17/M18 Gort to Tuam Road project.

1.0.2 The site is currently in overgrown grassland, with dense patches of hedgerow, a sparse belt of trees along the southern boundary, a number of access dirt tracks throughout and sections of stone wall along the boundaries. The site varies in height and vegetation - drawing no. S082/14/PLN/02 shows the ground level of the site to be 23.59 in the eastern most corner and dropping to a low of 19.77m in the north-western corner. An electricity transmission lines runs to the north of the subject site.

1.0.3 Photographs and maps in Appendix 1 serve to describe the site and location in further detail.

2.0.0 PROPOSED DEVELOPMENT

2.0.1 Permission was sought for the use of land as a burrow pit for the extraction of stone and gravel from a parcel of land measuring 1.1ha, for use as fill material on the adjoining N17/N18 Gort to Tuam motorway which is currently under construction. The depth of extraction is up to 4.2m. Access to the burrow pit will be directly off the N17/N18 Gort to Tuam motorway and the land will be remediated and returned to agricultural grassland upon completion of the works.

2.0.2 The application was accompanied by

- Ecological Assessment and AA screening report
- Letter of consent from landowner
- Archaeological Desktop Statement

2.0.3 No objections to the proposed development were submitted to the Council.

2.1.0 Reports on File following submission of application

2.1.1 **Environment Section:** No issues

2.1.2 **Planning Report:** Proposed development is within 300m of a flood risk area. Applicants AA screening report omits the Sliabh Aughty Mountains SPA and the Lough Fingall Complex SAC. Site adjoins woodland where bats may be present. Bat survey after dusk was not carried out. Valuable areas for roosting and nesting in woodlands to north, dedicated bird survey was not carried out. As proposed development involves extraction, disturbance to birds and mammals is possible impact. AA screening report concludes no significant impacts. Planning Authority notes potential hydrological connectivity between subject site and Galway Bay Complex SAC via the Clarin River. Given the size, scale and nature of proposed development, potential impact on groundwater and flood risk have not been satisfactorily addressed, Planning Authority is not satisfied that significant impacts on European Sites can be ruled out. Applicants were advised at pre-planning that cumulative impacts of proposed and adjoining development may require EIA. AA screening report does not address flood risk, only turloughs in the local landscape. Insufficient details regarding surface water on site. Insufficient details of proposed temporary compound and welfare facilities. Pre-construction site surveys should have been carried out prior to planning application. No reference made for concurrent application (for burrow pit 15/1547 refers) and 15/279 and numerous other applications to serve the N17/M18, the cumulative impacts of which bring the proposed development to over 5ha and therefore mandatory EIA. Hydrogeological survey required. Recommendation to refuse permission.

3.0.0 **PLANNING AUTHORITY DECISION**

3.0.1 By order dated 17/02/16 a notification of decision to **REFUSE** permission for the following 4no. reasons:

1. The subject site is located within a distance of 15km of 12 no. designated European sites for rare and threatened flora and fauna across the European Union (i.e. Natura 2000 network of sites), which are protected under the EU Habitats Directive (92/43/EEC) & EU Birds Directive (79/409/EEC, as amended by Directive 2009/147/EC) and the European Communities (natural Habitats) Regulations 1997, as amended by the European Communities (Birds and Natural Habitats) Regulations 2011. The protection of these European sites is further reinforced in the 2015-2021 Galway County Development Plan under policy NHB1, Objective NHB2, Objective NHB3 and DM Standard 40. Articles 6(3) and 6(4) of the Habitats Directive, set out the decision making tests for plans and policies likely to affect the

European Sites Annex I (Habitats) and Annex II (Species) and establishes the requirement for an Appropriate Assessment and the obligation of the Planning Authority, as the competent authority, to carry out screening for Appropriate Assessment (Stage 1) or a full Appropriate Assessment (Stage 2) of development proposals, if required, under Part XAB of the Planning and Development Act 2000, as amended. It is considered, that based on the information included with the planning application, the potential flood risk concerns, the absence of a hydrogeological assessment of the site, the lack of information provided with the application to rule out significant impacts on European Sites, and the application of the precautionary principle, that significant negative effects on the integrity and conservation of European sites cannot be ruled out, as a result of the proposed project. Therefore the development has the potential to have a significant negative impact on the qualifying criteria of the SAC and the SPA sites, which would contravene materially Policy NHB1, Objectives NHB1, NHB2, NHB3 and DM Standard 40 contained in the current Galway County Development Plan, and would therefore be contrary to the proper planning and sustainable development of the area.

2. Noting the nature of the proposed development (burrow pit), the scale of same overlaying a regionally important karstified aquifer with groundwater vulnerability indicated as extreme, and in the absence of a hydrogeological survey for the site of the proposed development, the Planning Authority is not satisfied that the development as proposed will not have a negative impact on the hydrogeological regime in the area or the underlying aquifers, therefore if permitted as proposed the development will materially contravene Objectives NHB12 and WS11 of the Galway County Development Plan 2015-2021.
3. The subject site is located within an identified pluvial flood risk area. Taking account of climate change considerations, the application of the precautionary principle and sequential approach set out in the Planning System and Flood Risk Management Guidelines and in the absence of a site specific flood risk assessment to address any flood risk concerns, the Planning Authority is not satisfied that the proposed site is not at risk of flooding or that development would exacerbate the risk of flood risk elsewhere, therefore if permitted as proposed the development would materially contravene Policy FL4, Objectives FL1 and FL4 of the Galway County Development Plan 2015-2021 and would be contrary to Ministerial Guidelines issued

under Section 28 of the Planning and Development Act 2000, as amended.

4. Taking account of the nature of the proposed development, its scale and cumulatively with other developments that have been permitted or pending decision, it is considered that the development as proposed requires a sub threshold EIA and therefore it is considered in the absence of this assessment, the proposal would constitute a substandard form of development incompatible with the surrounding area and would be contrary to the proper planning and sustainable development of the area.

4.0.0 PLANNING HISTORY

4.0.1 Site to the immediate south-west of the subject site:

Planning Authority reg. ref. **15/279**: Planning permission was sought for the permanent placement of soil and topsoil on a plot of land 0.82ha, fill depth between 0.3m and 2.3m over the land. Access via a temporary access off the N17/M18. Land to be reinstated for agricultural use after. Permission granted subject to 4 no. conditions.

4.0.2 Other projects connected to the N17/M18 road project, in the vicinity of the subject site:

- **PL073.ER2055 / PL07.CH2285**: N18 Oranmore to Gort Dual Carriageway
- **PL07F.MA0001 / PL07.HA005** Galway (Rathmorrissey) to Tuam M17 Motorway Scheme
- **PL07.CH2237** Galway County Council (N17 Tuam Bypass) Compulsory Purchase Order Planning Authority reg. ref.
- Planning Authority reg. ref. **15/86**: Planning permission granted for the temporary storage of subsoil and topsoil as a soil repository, on 4.22ha of land adjacent to the N17/N18 Gort to Tuam, motorway project.
- Planning Authority reg. ref. **15/61**: Planning permission granted for the temporary storage of soil and topsoil, as a soil repository on 2.71ha of land adjacent to the N17/N18 Gort to Tuam, motorway project.
- Planning Authority reg. ref. **15/100**: Planning permission granted for the permanent storage of soil and topsoil, as a soil repository on 6.9ha and 3.43 ha of land adjacent to the N17/N18 Gort to Tuam, motorway project
- Planning Authority reg. ref. **15/652**: Planning permission granted for the permanent storage of soil and topsoil, as a soil repository

on 1.83ha of land adjacent to the N17/N18 Gort to Tuam, motorway project

- Planning Authority reg. ref. **15/1547**: Planning permission refused for the use of land as a burrow pit for the extraction of stone and gravel from a parcel of land measuring 4.8ha for use as fill material on the adjoining N17/N18 Gort to Tuam Motorway. Permission was refused on AA grounds, on the impact of the proposed development on the regionally important karstified aquifer and the location of the subject site in an identified pluvial flood risk area.

5.0.0 NATIONAL POLICY

5.1.0 DofEH&LG Quarries and Ancillary Facilities Guidelines 2004

5.1.1 The Guidelines offer guidance to Planning Authorities on planning for the extractive industry through the development plan process and determining applications for planning permission for quarrying and ancillary activities. The guidelines recognise that the operation of quarries can give rise to land use and environmental issues which require to be mitigated and controlled through the planning system. The guidelines recognise that aggregates are a finite resource and must be used sustainably.

5.1.2 Chapter 3 refers to the environmental implications and outlines the range of potential environmental effects caused by quarries which need to be considered. The principal environmental impacts are listed as: noise and vibration, dust deposition / air quality, water supplies and ground water, natural heritage, landscape, traffic, cultural heritage and waste management. The chapter recognises the importance of water supplies and ground water, of natural heritage, the landscape, cultural heritage, traffic impacts and waste management.

5.1.3 Section 4.6 of the Guidelines refers to the assessment of planning applications and of EIS's, noting that the contents of an EIS must comply with Article 94 and schedule 6 of the regulations. Section 4.7 lists possible conditions that may be attached by the Planning Authority.

5.2.0 EPA Guidelines for Environmental Management in the Extractive Sector 2006

5.2.1 The environmental management guidelines represent a summary of current environmental management practices for quarries and

ancillary facilities (including manufacturing of concrete and bituminous mixes/asphalt products, and processing of dimension stone). Key environmental management issues are identified and addressed. The guidelines provide some background to environmental management practice and the benefits that can be achieved by good environmental practice. The use of environmental management systems (EMSs) is outlined together with the requirements for an EMS.

6.0.0 LOCAL POLICY

6.1.0 Galway County Development Plan 2015-2021

6.1.1 The subject site is located in an unzoned rural area of County Galway.

6.1.2 Section 6.21 of the plan outlines the Council's Mineral Extraction and Quarry policies and objectives. Of relevance to the subject development are:

- Policy EQ 1 – Environmental Management Practice
- Policy EQ 2 – Adequate Supply of Aggregate Resources.
- Objective EQ1 – Protection of Natural Assets
- Objective EQ 2 – Management of Aggregate Extraction

6.1.3 Section 9.9 of the plan outlines the Council's policies on natural heritage and biodiversity.

6.1.4 Section 6.10 of the development plan outlines the Council's water policies and objectives.

6.1.5 In relation to the extractive industry, **DM standard 37** of the development plan outlines the criteria that shall be considered central to the determination of any application for planning permission for extractive development. **DM standard 40** refers to Environmental Assessments and outlines the measures that shall be applied in respect of designated environmental sites.

6.1.6 Section 8.7 of the plan refers to flood risk management.
See Appendix 2 for full policies.

7.0.0 GROUNDS OF APPEAL

7.0.1 A first party appeal has been lodged by an Agent on behalf of the first party John Sisk & Son. The appeal is accompanied by the following:

- Submission to Galway CC on planning ref. 15/1546
- Hydrogeological Assessment
- Ecological Assessment and AA Screening Report
- EIA Screening Report

The grounds of the appeal can be summarised as follows:

7.1.0 Reason no. 1

7.1.1 The summary of the Ecological Assessment and AA Screening Report is

- No potential pathways for impacts on the listed Natura 2000 sites were identified
- No Annex I Habitats were found on the site
- No qualifying interest habitats (Galway Bay Complex SAC) or qualifying bird species were found within the area under survey
- No suitable bat roosting habitat was found within the site
- Site is not known to contain any red-listed birds or birds of higher conservation concern
- No wintering wildfowl recorded during the survey. No Annex I qualifying interests for Galway Bay Complex SAC occur. No suitable habitat for wildfowl.
- No rare, threatened or protected terrestrial species known to occur within the site. No pools, drains or other freshwater habitats within the study.
- No species listed on Annex II of the Habitats Directive found on site.

7.1.2 The AA screening report encompassed the findings of the Ecological Assessment report which had found no further assessment was required. The AA screening report included a detailed rationale for lack of impacts. The Council's first reason for refusal is incorrect as the Applicant has undertaken an Ecological Assessment and AA Screening and the proposed development complies with Policy NHB1, Objectives NHB1, NHB2, NHB3 and DM Standard 40 of the Galway County Development Plan 2015-2021.

7.2.0 Reason no. 2

7.2.1 A hydrogeological Report has been submitted with the appeal. The report finds that the proposed development will be worked at least 0.5m above the water table (between 12mOD and 17mOD). The report finds that there will be no reduction in groundwater flow to receptors during operation of the site. After reinstatement there will be minimum 1m depth of soil covering the extracted area. The report summarises that the proposed development will neither impact on the quantity or quality of groundwater nor impact on the potential receptors or sensitive habitats downstream. The proposed development will not cause or contribute to groundwater flooding.

7.2.2 The proposed development complies with Objective NHB12 as the site does not require dewatering or management of groundwater. Work will occur during the summer months during low rainfall so temporary management may be required. Full assessment of the impacts on soil / groundwater have been detailed with good working practices and mitigation measures proposed.

7.2.3 The proposed development complies with Objective WS 11. The hydrogeological report notes that soils and subsoils are of moderate permeability, no karst features, ponding or run off on the surface of the lands. GSI mapping shows the site is not at risk of groundwater and fluvial flooding. Land reinstatement up to 1m will result in a greater level of protection to the aquifer.

7.3.0 Reason no. 3

7.3.1 There is no evidence of conduit flow and therefore recharge from Greethill to the Clarinbridge River is likely to be diffuse, slow moving with significant dilution and mixing before reaching a potential receptor. Policy FL4 and Objectives FL1 and FL4 of the Development Plan have been fully assessed.

7.4.0 Reason no. 4

7.4.1 As part of the N17/M18 Gort to Tuam motorway site, the applicant has received planning permission for 5 no. sites for the filling of lands (pl. reg. ref.s 15/86, 15/61, 15/100 15/279 have commenced, 15/652 has not commenced). Planning Authority reg. ref. 15/1547 has been refused. The subject application is now the only proposed extractive development. The site at 1.1ha, in isolation, is below the 5ha EIA threshold. The EIA (Discretionary) Screening report submitted with the appeal shows that there is no requirement for a sub-threshold EIA as the screening assessment has shown that the effects would not be complex and there is no requirement

for a full EIA. The three assessment pillars of the 2003 guidance on sub-threshold EIA are as follows:

- characteristics of the proposed development: no additional transport movements, no impacts on local road network, no rock blasting. The N17/M18 has been environmentally assessed.
- location of proposed development: site is not located in an area of conservation or environmental sensitivity. Development has been assessed ecologically and for AA. Both reports show that there are no impacts on the site location is any Natura 2000 site within 15km of the site.
- characteristics of potential impacts: site is isolated, in a sparsely populated area and surrounded by woodland. Proposed development is small approx. one fifth of 5ha threshold. Characteristics of potential impacts would not be considered significant.

7.5.0 The Board is requested to grant permission subject to necessary conditions.

8.0.0 OBSERVATIONS

8.1.0 **An Taisce:** Response of 16.05.16. Concur with the concerns on potential effect on Galway Bay SAC and SPA and ground of refusal in potential; ecological risk, hydrology, flood risk and lack of EIA.

8.1.1 **An Taisce** Response of 23.05.16: Major legal issues to be addressed and resolved. Galway CC did perform adequate EIA screening. The development is part of a larger EIA level project to supply material to the N17/M18 Gort Tuam Motorway.

8.2.0 **DAU of D.EH&LG:** Key ecological and environmental issues appear to be:

1. Potential for development, alone or in combination with other plans and projects, to have significant effect on a European Site in view of its conservation objectives and is an AA required?

- No information on file to show Council carried out AA screening. Precautionary approach requires the Council to determine that an AA and the submission of an NIS were required.
- No information on file to show Council's assessment of the ecological report. Little or no information or analysis to show that the conservation objectives of the European sites are sensitive to hydrogeological effects, to determine the degree

of sensitivity of the specific conservation objectives to such effects or to determine if there was a realistic risk of significant effects on a European site arising from or being perpetuated by the development alone or in combination with other plans and projects.

- No information presented to show that the conservation objectives of the European sites and their sensitivities to impacts that could arise from quarrying in the area and from other plans and projects were taken into account in the applicants ecological assessment or included in the Council's screening report. No information in the screening report to support the use of a 15km distance for identifying sites at risk. The European sites noted in the screening report have groundwater dependant qualifying interest Annex I habitats which could be affected by destruction or disruption of ground water flow paths and changes in the pattern, quantity and quality of groundwater movement, eg Turloughs, alkaline fens and Calcareous fens with *Cladium mariscus* and species of *Caricion davallianae*.
 - Projects with potential to act in combination include the N17/M18 Gort to Tuam Road which is an amalgamation of three separate road schemes (under construction), the operational M6 motorway, the Dunkellin River and Aggard Stream Flood Relief scheme (permitted), the proposed Apple Data Centre, 15 no. planning applications, 9 of which have been granted and are directly connected with and integral to the construction of the N18/M17 road. The majority of the latter are for the placement of wastes (soil and subsoil) arising from the construction of the road on land for the purposes of agricultural. One of these 15/279 adjoins the current appeal site.
 - In addition to the information in the ecological screening assessment report, the Board should give consideration to the above
2. Potential for proposed development to have significant effect on the environment, taking direct, indirect and cumulative effects into account and is an EIA required?
- Information not available to show that screening for EIA was carried out to support Councils determination that EIA was required.
 - Due consideration should be given to the context of the overall road development (the amalgamation of three individual road schemes for which two separate EIS's were

prepared), including the additional land use requirements for the sourcing of natural resources and the elimination of natural inert wastes during construction. The Board is advised that an EIS should include a description of the physical characteristics of the whole proposed road development and the land use requirements during the construction and operational phases and a description of the likely significant effects of the proposed road development on the environment resulting from [among other things] the use of natural resources and the elimination of waste- European Communities EIA Regulations 189-2001.

- The cumulative effects on flora and fauna from the development and adjoining permitted infill site (15/279) and other recent (post 2010) site clearance and / or development appear to include permanent or lasting losses and further fragmentation of native or semi-natural woodland at Greethill. The ecological assessment has little baseline information on the site, the characteristics and ecological value of the habitats and vegetation communities present. Similarly the likely effects of the development on ecology, flora and fauna including on protected species are unclear. Habitats variously referred to as mainly woodland and mainly grassland.
 - The original EIS for the N18 Gort to Oranmore road scheme describes the Greethill area as *“hazel woodland, exposed calcareous rock, block of formerly coppiced hazel woodland on a rocky knoll with mature ash trees and a species rich ground flora, located 1km north of the N6. Bulk of woodland lies to the east of the scheme but smaller woodland areas are present to the west.”*
3. Potential for the proposed development to have adverse ecological effects not covered under questions 1 and 2 above, that should be taken into account – eg on legally protected species of flora and fauna and / or their breeding sites and resting places, or on natural habitats, or ecological corridors or stepping stones, including in the context of Article 10 of the Habitats Directive?
- Information in ecological assessment is not clear on the nature extent and significance of natural and semi-natural habitat losses, including woodlands
 - Absence of protected or other rare species of flora or fauna on site and surrounds cannot be deduced with confidence. No indication that botanical or faunal surveys were carried out for site and surrounds.

- It appears that the mitigation measure of an ecological survey of the site prior to commencement of works, as proposed in the ecological survey is to establish baseline conditions and not detect changes at the site.

9.0.0 RESPONSES

9.1.0 Planning Authority Response

9.1.1 No response on file.

9.2.0 Response of First Party to Observation of DAU of D.EH&LG

9.2.1 The response can be summarised as follows:

- A screening exercise to determine if EIS was required was carried out and found that an EIA was not required for activity at this site.
- The specific conservation objectives of all the Natura 2000 sites were considered. It was determined that there would be no realistic risk from the proposed works either alone or in combination with existing projects.
- The 15km limit for Natura 2000 sites is standard practice. This does not preclude sites outside the limit where there are obvious pathways or linkages.
- Projects with the potential to have in-combination effects were considered.
- The ecological assessment was sufficiently detailed and surveys included for protected and rare species of flora and fauna which were not found in the survey area.
- Mitigation measures include further survey work.

10.0.0 ASSESSMENT

10.0.1 On reading of all documentation submitted with the appeal, I consider the issues to be:

- Principle of the Proposed Development
- Ground Water and Flood Risk
- EIA
- Appropriate Assessment

10.1.0 Principle of the Proposed Development

10.1.1 In the first party appeal, the agent for the applicant stated that the proposed development is to serve the construction of the Sisk portion of the N17/M18 motorway which immediately adjoins the subject site. A target date for completion of earthworks is 10/2016

and project completion date of 10/2017. The appeal notes that permission has been granted to the south west of the subject site for the permanent placement of soil and topsoil on 0.82ha under Planning Authority reg. ref. 15/279. The appellant states that the proposed 1.1ha burrow pit is for the extraction of natural inert material - stone and gravel - for use as fill material to serve the adjoining N17/M18 motorway project only. Depth of extraction not to exceed 4.2m with approx. 1,050m³ of fill material removed and stockpiled for later reinstatement. Approx. 30,000m³ of fill material will be extracted. The land will be remediated and returned to agricultural grassland upon completion of works, using the stockpiled material.

- 10.1.2 Details submitted with the application states that a 2m exclusion zone will be set up around the proposed extraction and that all boundaries will remain in-situ. An access road will be opened from the adjoining N17/M18 road scheme to the west so that materials removed from the site will not be transported on the public road network. Extraction will occur during operation of the road and no works will take place in wet weather to avoid pollution of surface or groundwater. A temporary site compound will be erected on the road scheme site.

10.2.0 Ground Water and Flood Risk

- 10.2.1 A hydrogeological assessment was submitted with the appeal. The assessment states that the site is located entirely within a regionally important karstified aquifer (Burren Formation). The report states that due to the high recharge capacity and thin overlying cover, there can often be a lack of surface water features. The Clarinbridge River, to the east of the subject site receives ground water from the Burren Formation along its length and also controls groundwater level in the region.

- 10.2.2 The assessment report states that as the subject site is elevated (above 20mOD), it is not associated with any flooding of the ground water table. The assessment estimates the ground water table to be below 17mOD, based on the lowest point in the local topography in the area being 17mOD. It notes that information presented in the EIS for the N17/N18 project, the Greethill water table is expected to be between 9mOD (summer) and 15mOD (winter). The assessment states that the subject site is not at risk of flooding, based on the data provided in the OPW flood maps for Ireland (historical flooding occurs in low lying areas, less than 12mOD) and the Galway Stage 1 FRA (low lying areas east of

Greethill at risk of ground water and fluvial flooding but not Greethill itself). It notes the thin subsoil and the lack of surface ponding - which indicates permeability - at Greethill which affords minimal protection to the underlying aquifer. No karst landforms or features were identified on site or on GSI records for the site.

- 10.2.4 The assessment details the many karst features in the wider area, from turloughs, caves, swallow holes, wells and enclosed depressions. The assessments states that the potential receptors for recharge at Greethill are the Clarinbridge River, the Millmount Turlough (1.25km to the south-east, adjacent to the Clarinbridge River), the Ballinillaun Turlough (3.25km to the southwest) and any domestic and agricultural wells.
- 10.2.5 Drawing no. S082/14/PLN/02 shows the ground level of the site to be 23.59 in the eastern most corner and dropping to a low of 19.77m in the north-western corner. Section 2 of the assessment states that the proposed works will excavate to a maximum depth of 4.2m below ground level – i.e. of 18mOD. The assessment states that given the normal range of 9mOD to 15mOD of the ground water table, if excavation occurs during the summer, it is likely that there will be up to 5m unsaturated bedrock between the base of the excavation and the water table. The assessment notes that the removal of vegetation will increase recharge rates slightly (from the average 160mm to 180mm, or 14.5m³/d to 16.2m³/d). This 11% daily increase is said to be slight and within natural seasonal variation. The summary of the assessment is that pathways to potential receptors is by diffuse fracture flow rather than conduit flow, that all works will occur over the water table and the that the increase in runoff will be slight.
- 10.2.6 I have some concerns about the findings presented in the assessment. I note that no evidence has been submitted to support the finding that the limestone bedrock underlying the subject site is not karstified. While the GSI bedrock maps provide an indication of the type of aquifer in the vicinity, this is a starting point only and conditions can vary significantly locally. Consequently, it is not possible to rely solely on a desk study, or existing regional information to determine the groundwater regime relevant to the specific site and the surrounding area. This should be informed by the site specific detailed investigations. In limestone areas it is of crucial importance to determine whether or not there are significant karst conduits present, the size of these conduits, and the extent to which the conduits are part of a network of linked conduits that can

carry large volumes of water very quickly. The degree of karstification also affects the potential for ground water pollution. Surface water run-off can permeate the soil and sub-soil layers and move down through karst conduits to deep water tables quickly. That 5m of unsaturated rock possibly exists above the water table is not relevant. A single open conduit system will effectively short circuit the slow percolation and bring pollutants to the groundwater flow system in a short period of time.

10.3.0 EIA

10.3.1 An EIA screening report was submitted with the appeal. The screening report states that the small scale of the proposed development, the fact that other extraction proposals are not being pursued and the prediction that the cumulative impact of the proposed and other developments will not be bigger result in a conclusion that there will not be likely significant effects on the environment. The proposed development therefore not necessitate a sub-threshold EIA

10.3.2 Class 2(b) of Schedule 5 of Part 2 of the Planning and Development Regulations sets the EIA threshold for the extractive industry at 5ha. The subject burrow pit has an overall area of 1.1ha and is therefore below this threshold. Section 103(2) of the Regulations states that where a planning application for sub-threshold development is not accompanied by an EIS, and the development would be located on, or in, or have the potential to impact on a European site the Planning Authority shall in determining whether the development would or would not be likely to have significant effects on the environment, have regard to the likely significant effects of the development on the site. In arriving at that determination the Planning Authority must have regard to the criteria set out in schedule 7 of the regulations, which are the same as the criteria set out in the codified Directive 2011/EU/92.

10.3.3 In assessing the location of the proposed development, the environmental sensitivity of the area likely to be affected by the project must be considered. In the subject case, the landscape is not of historical, cultural or archaeological significance. The existing agricultural land use of the subject site is not rare or unusual, nor designated for protection at EU, national or local level. I note and I share the concerns of the DAU however, that no faunal or botanical surveys were carried out to confirm the absence of species or habitats, breeding sites, resting places or other ecological corridors.

- 10.3.4 In assessing the characteristics of the subject proposal, the size at 1.1ha is not significant, likewise the use of natural resources at 30,000m³ of fill material is not significant. Waste production and the risk of accidents should be minimal due to the small scale and relatively simplicity of the proposed operation. The possibility of pollution and nuisances has not been excluded however (see section 10.2 above and section 10.4 below).
- 10.3.5 I do not agree with the findings of the screening report. No evidence has been submitted to support the predictions, conclusions or findings of the report. As noted above, no faunal or botanical surveys were carried out to confirm the absence of species or habitats, breeding sites, resting places or other ecological corridors. Likewise, and as noted in section 10.2.6 above, no evidence has been submitted to support the finding that the subject site has no evidence of karst bedrock and that flow pathways are via diffuse fracture flow rather than conduit flow. The prediction that cumulative impacts are not significant is not supported by any assessment of other projects in the area in terms of characteristics magnitude, probability and significance.
- 10.3.6 The Planning Authority note that the subject site immediately adjoins a site (reg. ref. 15/279 refers) for which permission was granted for the permanent placement of up to 2.3m soil and topsoil. The DAU note that up to nine permissions have been granted that have the potential to act in combination with the proposed development. These include the three road schemes that together form the N17/M18 road project, the Dunkellin River and Aggard Stream Flood Relief scheme. I concur with the submission of the DAU that there should be due consideration of the current proposal in the context of the overall road development. In relation to the submission of the DAU that the 'whole road development' must be described in an EIS, I note that each element of the road proposal (PL07.ER2055, PL07.MA0001 and PL07.CH2237) was assessed against the requirements of the EIA Directive and found to be satisfactory by the Board. There is no requirement to revisit those findings in the subject appeal.
- 10.3.7 The in-combination effects of the proposed and other developments must be assessed and the potential significant effects of projects must be considered, in accordance with the schedule 7. In considering the magnitude and complexity of the impacts on designated sites, it has not been shown that such impacts are not likely, both alone and in combination with the

significant and large scale projects occurring in the immediate and wider vicinity of the subject site. It is considered that the environmental sensitivity of the subject site, in light of the possibility of significant impacts on designated sites, both alone and in combination are such that a sub-threshold EIS is required.

10.4.0 Appropriate Assessment

- 10.4.1 An Environmental Consultant has submitted a submission to the Board, as part of the first party appeal. The submission states that, in response to reason for refusal no. 1 the Ecological Impact Assessment and AA screening exercise carried out by the Consultant confirms that the subject site is not located in a designated site but that 12 no. designated sites are within 15km of the subject site. The nearest of these Rahasane Turlough SAC and SPA (site codes 000332 and 004089) are 4.8km from the subject site. The submission states that “therefore no direct impacts on these may be expected”. The submission states that no potential pathways for impacts have been identified that would make indirect impacts likely and none of the qualifying interests of either site occur within the subject site. The conclusion of the report is that the likely potential for impacts on the sites or interest is not considered to be significant.
- 10.4.2 The application and appeal are accompanied by an Ecological Assessment and AA Screening Report. The report carried out by the same consultant referred to above, states that a desktop study of the subject site was carried out. The screening report identifies 12 no. Natura 200 sites within 15km of the proposed works (distances vary from 4.8km to 12.4km) and states that no potential pathways for impacts were identified. Of the closest sites Rahasane Turlough SPA and SAC (4.8km) from the site, the screening report states that there is no potential for the proposed works to impact the site or its conservation interests due to the distance and the lack of hydrological conductivity between the two sites and the limited nature and small scale of the proposed works.
- 10.4.3 The screening report notes that field studies were undertaken to establish the baseline ecological conditions. A dedicated bird survey was not undertaken but any species noted were recorded. The site is described as being entirely scrub, that the previous hazel woodland was cut some years ago. Two small areas of hazel woodland exists in the north-western corner. No drains or watercourses were recorded. No Annex I habits or Annex II species were found on the site, nor were any rare, threatened or protected

species or flora found. None of the qualifying interests of the Galway Bay Complex SAC or SPA were found within survey area.

- 10.4.4 The potential impacts arising from the proposed development during construction are listed as neutral and medium term slight negative impact (habitat loss) and a short term slight negative impact on bird disturbance. Best practice construction measures are proposed including a pre-construction site survey to confirm the screening report findings. The screening report (table 7) identifies the likely direct, indirect or secondary impacts, alone and in combination with other plans and projects on any Natura 2000 sites. The screening report concludes that there will be no significant impact on any Natura 2000 site as a result of the proposed development due to the distance between the development site and the nearest Natura 2000 site, to the small scale of the proposed development and to the fact that no works will take place in a Natura 2000 site and no qualifying interests will be affected.
- 10.4.5 As noted in section 8.2.0 above, the Development Applications Unit of the DofEH&LG submitted an observation to the Board on the key ecological and environmental issues of the proposed development. The submission notes that the applicants ecological report does not indicate that the conservation objectives of the European sites and their sensitivities to impacts from quarrying were taken into account. The Board is requested to note that the European sites listed in the applicants ecological report have ground water dependant qualifying interest Annex I habitats which could be affected by destruction or disruption of ground water flow paths and changes in pattern, quantity and quality of ground water movement. The submission also notes that the nature, extent and significance of habitat losses are unclear and that with no botanical or faunal survey information presented the absence of protected or other rare flora or fauna cannot be determined.
- 10.4.6 There are a number of Natura 2000 sites in proximity of the subject site. As identified by the various parties to the appeal they are:
- Rahasane Turlough SPA and SAC (5km)
 - Galway Bay Complex SAC (6km)
 - Inner Galway Bay SPA (7km)
 - Creganna Marsh SPA (6km)
 - Monivea Bog SAC (12km)
 - Lough Corrib SAC (11km)

- Lough Fingall Complex SAC (9km)
- Castletaylor Complex SAC (9km)
- Ardahan Grassland SAC (11km)
- Slieve Aughty Mountains SPA (14.5km)
- Peterswell Turlough SAC (15km)
- Kilternan Turlough SAC (10km)

10.4.7 The Rahasane Turlough SAC (000322) and SPA (004089) are the closest designated sites to the subject site, at approx. 5km to the south.

10.4.8 According to the NPWS synopsis the Rahasane Turlough SAC consists of two basins which are connected at times of flood but separated as waters decline. The qualifying interest for the SAC is Turlough. The synopsis states that Rahasane Turlough was formerly the natural sink of the Dunkellin River, but now an artificial channel takes some of the water further downstream. Water escapes the artificial channel to sweep around the northern basin, and again in the west, where it flows into an active swallow-hole system. The main swallow-holes here are constantly changing, but reach 5m in diameter and 2-3m deep. Some minor collapses are found elsewhere in the turlough, as well as a small number of more permanent pools. Rahasane Turlough is of major ecological significance as one of only two large turloughs in the country which still function naturally. It is the most important turlough in Ireland for birdlife. In a relatively recent national survey, it was also rated very highly for its vegetation, and supports two rare species listed in the Irish Red Data Book. Turloughs are a rare habitat type and are given priority status under Annex I of the E.U. Habitats Directive.

10.4.9 The objective for the Rahasane Turlough SAC is “to maintain or restore the favourable conservation condition of the Annex I habitat for which the SAC has been selected”. Favourable conservation status of a habitat is achieved when:

- its natural range, and area it covers within that range, are stable or increasing, and
- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- the conservation status of its typical species is favourable.

The favourable conservation status of a species is achieved when:

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

10.4.10 The subject site overlies a regionally important karstified aquifer of extreme vulnerability. The site is covered with a thin subsoil of moderate permeability. The DAU have submitted to the Board that the Annex 1 habitat of the SAC could be affected by destruction or disruption of ground water flow paths and changes in pattern, quantity and quality of ground water movement. It is noted that the findings of the hydrogeological assessment that the underlying bedrock of the site is not karst are based on a walkover study (section 1.1.2 refers) and GSI records rather than site investigations, surveys and assessments. As noted in section 10.3.6 above GSI bedrock maps provide an indication of the type of aquifer in the vicinity as a starting point only and it is not appropriate to rely solely on a desk study, or existing regional information to determine the groundwater regime relevant to the specific site and the surrounding area. Findings must be informed by the site specific detailed investigations. In limestone areas it is of crucial importance to determine whether or not there are significant karst conduits present, the size of these conduits, and the extent to which the conduits are part of a network of linked conduits that can carry large volumes of water very quickly.

10.4.11 The Clarinbridge River is approx. 1km to the east of the subject site. The river receives groundwater from the Burren Formation / regionally important aquifer of extreme vulnerability underlying the subject site. The Clarinbridge River ultimately discharges to the Galway Bay Complex SAC (000268). The Galway Bay Complex SAC is described by the NPWS as comprising the inner, shallow part of a large bay which is partially sheltered by the Aran Islands. The Burren karstic limestone fringes the southern sides and extends into the sublittoral. West of Galway city the bedrock geology is granite. There are numerous shallow and intertidal inlets on the eastern and southern sides, notably Muckinish, Aughinish and Kinvarra Bays. A number of small islands composed of glacial deposits are located along the eastern side. The qualifying interests for the site are as follows:

- Tidal Mudflats and Sandflats
- Coastal Lagoons*
- Large Shallow Inlets and Bays
- Reefs
- Perennial Vegetation of Stony Banks
- *Salicornia* Mud
- Atlantic Salt Meadows
- Mediterranean Salt Meadows
- Turloughs*
- Juniper Scrub
- Orchid-rich Calcareous Grassland*
- *Cladium* Fens*
- Alkaline Fens
- Otter (*Lutra lutra*)
- Common (Harbour) Seal (*Phoca vitulina*)

10.4.12 The conservation objectives for the site are to maintain or restore the favourable conservation condition of each of the listed qualifying interests, measured against set targets (see appended Conservation Objective Series). Threats to the SAC, according to the site synopsis include sewage effluent and detritus of the aquaculture industry which could be deleterious to benthic communities, eutrophication, and the general threat to the turlough and fen habitats from drainage.

10.4.13 The relationship between groundwater and dependant ecosystems such as turloughs is a particularly complex one. The possibility of a hydrogeological direct source pathway receptor route between the subject site and the Clarinbridge River or through groundwater conduits to the Rahasane Turlough has not be excluded in light of the best scientific information in the field - the threshold for AA screening. No bore holes, trial holes or other testing methods were carried out to support the finding that the subject site has no evidence of karst bedrock and that flow pathways are via diffuse fracture flow rather than conduit flow. The findings of the report are based on a walkover survey, details of which were not submitted to the Board. Given the proximity of the subject site to a number of other ongoing construction projects, the in-combination effects of the proposed development require complete, precise and definitive findings and conclusions, in the light of the best scientific knowledge in the field. Insufficient information has been presented to the Board on which to carry out such an assessment. It is considered, given that there is a real rather than a hypothetical risk

to the ground water, that in the absence of a Natura Impact Statement, the information submitted to the Board is not sufficient to dispel any reasonable scientific doubt in accordance with the provisions of s177U(1) of the Planning and Development Acts, about the adverse effects on the integrity of the European site, in light of the site's Conservation Objectives, which is to maintain or restore the favourable conservation condition of Annex I habitats for which the Rahasane Turlough SAC and the Galway Bay Complex SAC have been designated

11.0.0 RECOMMENDATION

11.0.1 I have read the submissions on file, visited the site, and have had due regard to the provisions of the Galway County Development Plan 2015 -2021, the Guidance for Consent Authorities regarding Sub-threshold Development issued by the Department of the Environment, Heritage and Local Government in August, 2003, the Guidelines for Quarries and Ancillary Facilities issued by the Department of the Environment, Heritage and Local Government in 2004, the site history, the planning history of the wider area. It is considered that the proposed development of a 1.1ha burrow pit with an excavation of up to 4.2m, has not been shown to be in accordance with the policies of the Galway County Development Plan in relation to protection of ground water and that in the absence of an NIS and a sub-threshold EIA that the environmental impacts of the proposed development cannot be adequately assessed by the Board. The proposed development is therefore considered to be contrary to the proper planning and sustainable development of the area. I recommend permission be REFUSED for the following reasons:

1. On the basis of the information provided with the application and appeal and in the absence of a Natura Impact Statement the Board cannot be satisfied that the proposed development individually, or in combination with other plans or projects would not be likely to have a significant effect on European site no.s 000322 and 000268, or any other European site, in view of the site's Conservation Objectives. In such circumstances the Board is precluded from granting approval/permission.
2. The proposed development which involves extraction of top soil and soil of moderate permeability over a regionally important karstified aquifer of extreme vulnerability, is not in accordance with the Policy NHB4 of the Galway County Development Plan which

seeks to protect, conserve and enhance the water resources of the County, including, rivers, streams, lakes, wetlands, springs, turloughs, surface water and groundwater quality and Objective EQ1 which seeks to protect areas of geo-morphological interest, groundwater and important aquifers, important archaeological features Natural Heritage Areas and European Sites from inappropriate development. The proposed development is not in accordance with the proper planning and sustainable development of the area.

3. Having regard to the size of the site upon which the proposed extractive development is proposed, to the thresholds set down in Classes 2 (a) of Part 2 of Schedule 5 to the Planning and Development Regulations 2001-2011, to the criteria set out in Schedule 7 of those Regulations, to the advice in paragraphs 5.8 to 5.12 of the Guidance for Consent Authorities regarding Sub-threshold Development issued by the Department of the Environment, Heritage and Local Government in August, 2003 and to the cumulative impact of the development in conjunction with previous and other proposed development in the area, it is considered that the proposed development would be likely to have significant effects on the environment and should be subject to an environmental impact assessment within the meaning of Part X of the Planning and Development Act, 2000 to 2011. The proposed development would, therefore, require an Environmental Impact Statement which should contain the information set out in Schedule 6 of the said Regulations. In these circumstances, it is considered that the Board is precluded from giving further consideration to the granting of permission for the development the subject of the application.

Gillian Kane
Planning Inspector
24/06/16

APPENDIX II Galway County Development Plan 2015-2021

Of relevance to the subject proposal are:

Policy EQ 1 – Environmental Management Practice Have regard to evolving best environmental management practice as set out in Environmental Protection Agency (EPA) Guidelines *Environmental Management in the Extractive Industry: Non Scheduled Minerals* and to the recommendations of the EU guidance document *Undertaking Non-Energy Extractive Activities in Accordance with Natura 2000 Requirements*.

Policy EQ 2 – Adequate Supply of Aggregate Resources Ensure adequate supplies of aggregate resources to meet future growth needs within County Galway, facilitate the exploitation of such resources where there is a proven need and market opportunity for such minerals or aggregates, and ensure that this exploitation of resources does not adversely affect the environment or adjoining existing land uses.

Objective EQ1 – Protection of Natural Assets Protect areas of geo-morphological interest, groundwater and important aquifers, important archaeological features Natural Heritage Areas and European Sites from inappropriate development.

Objective EQ 2 – Management of Aggregate Extraction The Council shall require the following in relation to the management of authorised aggregate extraction -

- (a) All quarries shall comply with the requirements of the *EU Habitats Directive*, the *Planning and Development (Amendment) Act 2010* and by the guidance as contained within the DoEHLG *Quarries and Ancillary Facilities Guidelines 2004*, the EPA Guidelines *Environmental Management in the Extractive Industry: Non Scheduled Minerals 2006* (including any updated/superseding documents) and to DM Standard 37 of this Development Plan;
- (b) Require development proposals on or in the proximity of quarry sites, to carry out appropriate investigations into the nature and extent of old quarries (where applicable). Such proposals shall also investigate the nature and extent of soil and groundwater contamination and the risks associated with site development works together with appropriate mitigation;
- (c) Have regard to the *Landscape Character Assessment of the County* and its recommendations including the provision of special recognition to the Esker areas as referenced in Galway County Council *Galway's Living Landscapes – Part 1: Eskers*;
- (d) Ensure that any quarry activity has minimal adverse impact on the road network;

- (e) Ensure that the extraction of minerals or aggregates does not adversely impact on residential or environmental amenity;
- (f) Protect all known un-worked deposits from development that might limit their scope for extraction.

Objective EQ 3 – Sustainable Reuse of Quarries Encourage the use of quarries and pits for sustainable management of post recovery stage construction and demolition waste, as an alternative to using agricultural land, subject to normal planning and environmental considerations.

Objective EQ 4 – Compliance with Article 6(3) of the EU Habitats Directive Ensure that all projects associated with the mineral extractive industry carry out screening for Appropriate Assessment in accordance with *Article 6(3) of the Habitats Directive*, where required.

Policy NHB 1 – Natural Heritage and Biodiversity: It is the policy of Galway County Council to support the protection, conservation and enhancement of natural heritage and biodiversity, including the protection of the integrity of European sites, that form part of the Natura 2000 network, the protection of Natural Heritage Areas, proposed Natural Heritage Areas Ramsar Sites, Nature Reserves, Wild Fowl Sanctuaries and Conamara National Park (and other designated sites including any future designations) and the promotion of the development of a green/ecological network within the plan area, in order to support ecological functioning and connectivity, create opportunities in suitable locations for active and passive recreation and to structure and provide visual relief from the built environment.

Policy NHB 4 – Water Resources: Protect, conserve and enhance the water resources of the County, including, rivers, streams, lakes, wetlands, springs, turloughs, surface water and groundwater quality, as well as surface waters, aquatic and wetland habitats and freshwater and water dependant species and seek to protect and conserve the quality, character and features of inland waterways by controlling developments close to navigable and non-navigable waterways.

Policy NHB 8 – National Parks and Wildlife Service (NPWS) Management Plans It shall be the policy of the Council to ensure that development takes into account any relevant Management Plans prepared by NPWS for SACs and SPAs.

Objective NHB 1 – Protected Habitats and Species Support the protection of habitats and species listed in the Annexes to and/or

covered by the EU Habitats Directive (92/43/EEC) (as amended) and the Birds Directive (2009/147/EC), and regularly occurring-migratory birds and their habitats and species protected under the Wildlife Acts 1976-2000 and the Flora Protection Order.

Objective NHB 2 – Biodiversity and Ecological Networks

Support the protection and enhancement of biodiversity and ecological connectivity within the plan area, including woodlands, trees, hedgerows, semi-natural grasslands, rivers, streams, natural springs, wetlands, stonewalls, geological and geo-morphological systems, other landscape features and associated wildlife where these form part of the ecological network and/or may be considered as ecological corridors or stepping stones in the context of Article 10 of the Habitats Directive.

Objective NHB 3 – Water Resources Protect the water resources in the plan area, including rivers, streams, lakes, wetlands, springs, turloughs, surface water and groundwater quality, as well as surface waters, aquatic and wetland habitats and freshwater and water dependant species in accordance with the requirements and guidance in the *EU Water Framework Directive 2000 (2000/60/EC)*, the *European Union (Water Policy) Regulations 2003* (as amended), the *Western River Basin District Management Plan 2009-2015*, *Shannon International River Basin Management Plan 2009-2015* and other relevant EU Directives, including associated national legislation and policy guidance (including any superseding versions of same) and also have regard to the *Freshwater Pearl Mussel Sub-Basin Management Plans*.

Policy NHB 4 – Water Resources Protect, conserve and enhance the water resources of the County, including, rivers, streams, lakes, wetlands, springs, turloughs, surface water and groundwater quality, as well as surface waters, aquatic and wetland habitats and freshwater and water dependant species and seek to protect and conserve the quality, character and features of inland waterways by controlling developments close to navigable and non-navigable waterways.

Objective NHB 6 – Protection of Bats and Bats Habitats Seek to protect bats and their roosts, their feeding areas, flight paths and commuting routes. Ensure that development proposals in areas which are potentially important for bats, including areas of woodland, linear features such as hedgerows, stonewalls, watercourses and associated riparian vegetation which may provide migratory/foraging uses shall be subject to suitable assessment for potential impacts on bats. This will include an assessment of the cumulative loss of habitat or the impact on bat

populations and activity in the area and may include a specific bat survey. Any assessment shall be carried out by a suitably qualified professional and where development is likely to result in significant adverse effects on bat populations or activity in the area, development will be prohibited or require mitigation and/or compensatory measures, as appropriate.

Objective NHB 12 – Soil/Ground Water Protection

Developments shall ensure that adequate soil protection measures are undertaken, where appropriate, including investigations into the nature and extent of any soil/groundwater contamination.

Objective WS 11 – Regionally and Locally Important Aquifers

Protect the regionally and locally important aquifers within the County from risk of pollution and ensure the satisfactory implementation of the groundwater protection schemes and groundwater source protection zones, where data has been made available by the Geological Survey of Ireland.

DM standard 37 of the development plan states that the following shall be considered central to the determination of any application for planning permission for extractive development:

a) Guidelines Compliance with the provisions and guidance, as appropriate, contained within Section 261 of the *Planning and Development Act, 2000* (as amended), by Section 74 and Section 75 of the *Planning and Development (Amendment) Act 2010*, the DoEHLG *Quarries and Ancillary Facilities Guidelines* 2004 and the *EPA Guidelines for Environmental Management in the Extractive Sector* 2006. Where extractive developments may impact on archaeological or architectural heritage, regard shall be had to the *DAHG Architectural Conservation Guidelines 2011* and the *Archaeological Code of Practice 2002* (including any updated/superseding documents) in the assessment of planning applications. Reference should also be made to the *Geological Heritage Guidelines for the Extractive Industry 2008* (including any updated/superseding documents).

b) Land Ownership The extent of land ownership. Details should be submitted showing the proposed site in relation to all lands in the vicinity in which the applicant has an interest.

c) Deposits The nature of all deposits. Details to be submitted to include: depths of topsoil, subsoil, over burden and material, at various points on the site; an indication of the type of minerals, which it is intended to extract; a statement as to whether the parent rock from which the mineral is extracted is suitable for other uses;

and the estimated total quantity of rock and mineral, which can be extracted commercially on the site.

d) Methods The methods of excavation and machinery to be used. Details to be submitted to include all proposed site development works, including; the proposed method of working; any existing or proposed areas of excavation; stages of work proposed; locations of any settling ponds, waste material and/or stockpiling of materials; methods for removing and storing topsoil, subsoil and overburden; etc.

e) Production The quantification of production in a given time. Details to be submitted to include the proposed production process to be employed, all requirements for water, electricity and/or other inputs to the production process and any proposals for chemical or other treatments.

f) Mitigation Methods to reduce environmental impact. Details to be submitted to include an assessment of potential impacts on water resources, residential and visual amenity (including noise, dust and vibration impacts), biodiversity and any other relevant considerations together with appropriate proposals for their mitigation. Proposals for development, where appropriate should be accompanied by: • A Surface Water Baseline Study of water courses in the vicinity of the site; • A Hydro-Geological Assessment of the impact of groundwater flows in the area and the impact of well waters supplies in the area.

g) Access Vehicle routes from site to major traffic routes and the impact on the adjoining road networks. Details should be included on the mode, number and weight of trucks or other vehicles being used to transport materials and any truck sheeting or washing proposals. The Council may require a Traffic Impact Assessment and Road Safety Audit (to be prepared by an approved assessor) for all new development. The Council may require a Special Contribution in accordance with Section 48 of the *Planning and Development Act, 2000*, as amended, for upgrade/improvement works along the route corridor of the quarry, to facilitate the proposed development.

h) Rehabilitation A scheme of rehabilitation and after care. Details to be submitted should include a report with plans and sections detailing: the anticipated finished landform and surface/landscape treatments, both of each phase and the whole excavation; quality and condition of topsoil and overburden; rehabilitation works proposed; the type and location of any vegetation proposed; proposed method of funding and delivery of restoration/reinstatement works; etc. The Council will require that

all proposals for development are accompanied by a detailed restoration plan and aftercare proposals which shall be progressed on a phased basis. The restoration plan shall ensure the landscape is restored with regard to its original character and with reference to the Landscape Character Assessment for County Galway 2002 and as incorporated within this plan. The restoration plan shall be accompanied by a detailed costing of the work by a qualified quantity surveyor. The Council will apply a bond, as appropriate for the satisfactory completion of the restoration works. The site may be adapted for a variety of uses depending on the level of extraction and shall be in agreement with the Planning Authority and consideration of the local community.

i) Environmental Impact Study (EIS) Any Environmental Impact Study including any remedial EIS required by statute. An EIS should ensure that all impacts in relation to heritage, environment, biodiversity, groundwater protection, etc. are clearly addressed and appropriate mitigation measures are included.

j) Proximity Proximity to other developments. Details to be submitted to include location of all existing developments in the vicinity of the site that might be affected by site development works, extractive operations and/or traffic movements generated.

k) Landscaping and Screening Landscaping and screening proposals. Details to be submitted to include an indication of existing trees or other screening to be retained or removed and any proposed screening, grassing or planting of trees or shrubs and proposals for their maintenance.

l) Heritage and Biodiversity Proposals in relation to heritage and biodiversity would include any recommendations for the site to be considered as part of the geological heritage of the County and any proposed measures with regard to the protection and promotion of the environment and biodiversity, including any proposals for rehabilitation. The Council will require an Ecological Impact Assessment for all proposals within or in the vicinity of an SPA, SAC or NHA. Where a quarry development falls within a conservation designation, the developer is advised to consult with the DECLG prior to making an application. Evidence of such consultation should be submitted to the Planning Authority at application stage. It shall also be a requirement that all new proposals that are likely to have an impact on SAC or SPA shall be screened for the need to undertake a Habitats Directive. The Council will require that the operator of the quarry shall put in place an Environmental Monitoring System, to monitor all environmental standards (noise, dust, blasting etc.) on an on-going basis.

m) Security of the Site Security boundary/fence. Full details regarding securing the perimeter boundary of quarries shall be submitted and agreed by the Planning Authority as part of the planning process.

DM standard 40 refers to Environmental Assessments and states that the following measures shall be applied in respect of designated environmental sites:

The following measures shall be applied in respect of designated environmental sites:

a) Appropriate Assessment Screening for Appropriate Assessment and/or Appropriate Assessment will be required with all applications where it is considered that the proposed development may impact (directly and indirectly), or in combination with other projects, on a Natura 2000 designated site i.e. a Special Area of Conservation (SAC) or a Special Protection Area (SPA), to inform decision making. The appropriate assessment shall be carried out in accordance with Article 6 of the Habitats Directive and the *European Communities (Birds and Natural Habitats) Regulations 2011* and shall identify and evaluate the direct and indirect effects, which the development would be likely to have upon the designated site.

b) Ecological Assessment An Ecological Assessment may be required for small scale projects in other areas e.g. (proposed) Natural Heritage Areas, Ramsar Sites, Nature Reserves, National Parks) that may be considered environmentally sensitive and may have direct/indirect impacts on the natural heritage value of the area. The need for an ecological assessment should be discussed with the Planning Section prior to the submission of an application. The assessment should include consideration of impacts in relation to biodiversity, ecological linkages, water quality and drainage.

c) Environmental Impact Statement/Assessment Under the EIA Directive the assessment of the effects of certain public and private projects on the environment is required. The thresholds for such an assessment are listed in the *Planning and Development Regulations 2001* (as amended). An EIS may also be required for development proposals below the statutory thresholds; *EIA Guidance for Consent Authorities on Sub Threshold Development* (2003) is available in this regard. The Planning Authority may require the submission of an Environmental Impact Statement (EIS) in accordance with the provisions of Part 10 of *Assessment the Planning and Development Regulations 2001* (as amended).

Policy FL 3 – Improvement and/or Restoration of Natural Flood Risk Management Functions Where resources are available and subject to compliance with the Habitats and Birds Directives, the Council will contribute towards the improvement and/or restoration of the natural flood risk management functions of flood plains.

Policy FL 4 – Principles of the Flood Risk Management Guidelines The Council shall implement the key principles of flood risk management set out in the Flood Risk Management Guidelines as follows: (a) Avoid development that will be at risk of flooding or that will increase the flooding risk elsewhere, where possible; (b) Substitute less vulnerable uses, where avoidance is not possible; and (c) Mitigate and manage the risk, where avoidance and substitution are not possible. Development should only be permitted in areas at risk of flooding when there are no alternative, reasonable sites available in areas at lower risk that also meet the objectives of proper planning and sustainable development. Development in areas which have the highest flood risk should be avoided and/or only considered in exceptional circumstances (through a prescribed Justification Test) if adequate land or sites are not available in areas which have lower flood risk.

Objective FL 1 – Flood Risk Management and Assessment Comply with the requirements of the DoEHLG/OPW *The Planning System and Flood Risk Management-Guidelines for Planning Authorities* and its accompanying *Technical Appendices Document 2009* (including any updated/superseding documents). This will include the following: (a) Avoid, reduce and/or mitigate, as appropriate in accordance with the Guidelines; (b) Development proposals in areas where there is an identified or potential risk of flooding or that could give rise to a risk of flooding elsewhere will be required to carry out a Site-Specific Flood Risk Assessment, and justification test where appropriate, in accordance with the provisions of *The Planning System and Flood Risk Management Guidelines 2009* (or any superseding document); (c) Development that would be subject to an inappropriate risk of flooding or that would cause or exacerbate such a risk at other locations shall not normally be permitted; (d) Galway County Council shall work with other bodies and organisations, as appropriate, to help protect critical infrastructure, including water and wastewater, within the County, from risk of flooding.