# Spink Quarry, Knockbaun, Abbeyleix, Co. Laois

# **Spink Quarry**

**Environmental Impact Assessment Report** 

Appendix 4

**Responses from Statutory Consultees** 

2021



Prepared by:

J Sheils Planning & Environmental Ltd

31 Athlumney Castle, Navan, Co. Meath





J Sheils Planning & Environmental Ltd 31 Athlumney Castle Navan Co. Meath

23 June 2021

Re: Pre-application Consultation for reopening and continuance of Spink Quarry located at Knockbaun Townland, Abbeyleix, Co. Laois, with an extension of the extraction area.

Your Ref: JSPE\_280\_L03
Our Ref: 21/179

Dear John,

Geological Survey Ireland is the national earth science organisation and is a division of the Department of the Environment, Climate and Communications. We provide independent geological information and advice and gather various data for that purpose. Please see our <u>website</u> for data availability. We recommend using these various data sets, when conducting the EIAR, SEA, planning and scoping processes. Use of our data or maps should be attributed correctly to 'Geological Survey Ireland'.

With reference to your letter dated 19 May 2021, concerning the pre-application consultation for reopening and continuance of Spink Quarry located at Knockbaun Townland, Abbeyleix, Co. Laois, with an extension of the extraction area, Geological Survey Ireland would encourage use of and reference to our datasets. Please find attached a list of our publicly available datasets that may be useful to the environmental assessment and planning process. We recommend that you review this list and refer to any datasets you consider relevant to your assessment. The remainder of this letter provides more detail on some of these datasets with particular reference to the proposed development site.

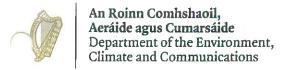
# Geoheritage

We are pleased to see consideration given to the presence of County Geological Sites within the scoping document and as correctly noted in that report we confirm that our records show that there are no CGSs in the vicinity of the proposed quarry development and extension. CGSs can be viewed online under the Geological Heritage tab on the online Map Viewer. The audit for Co. Laois was published in 2016. The full report details can be found here.

Geological Survey Ireland is in partnership with the National Parks and Wildlife Service (NPWS, Department of Housing, Local Government and Heritage), to identify and select important geological and geomorphological sites throughout the country for designation as geological NHAs (Natural Heritage Areas). This is addressed by the Geoheritage Programme of Geological Survey Ireland, under 16 different geological themes, in which the minimum number of scientifically significant sites that best represent the theme are rigorously selected by a panel of theme experts.

County Geological Sites (CGSs), as adopted under the National Heritage Plan, include additional sites that may also be of national importance, but which were not selected as the very best examples for NHA designation. All geological heritage sites identified by Geological Survey Ireland are categorised as CGS pending any further NHA designation by NPWS. CGSs are now routinely included in County Development Plans and in the GIS of planning departments, to ensure the recognition and appropriate protection of geological heritage within the planning system.

Geological Survey Ireland would request that the operator might assist our geological heritage goals with the following (and ideally this would be written into the restoration / closure plan) and be included as a condition of planning as deemed appropriate by the planning authority:





- Allowing access to quarry faces by appropriate scientists (upon request and with due regards
  to Health and Safety requirements) during quarrying to record any new or significant
  stratigraphies / relationships as they might become exposed and to establish if the quarry site
  is worthy of geoheritage recognition post extraction and through aftercare/restoration
  planning.
- 2. If deemed appropriate in (1) above, leaving a representative section of the quarry face at the end of the quarry life or inclusion of information panels to promote the geology to the public or develop tourism or educational resources if appropriate depending on the future use of the site. Natural exposures are few, or deeply weathered; this measure would permit on-going improvement of geological knowledge of the subsurface.

The Geoheritage Programme tries to promote a partnership between geological heritage and active quarrying, with such measures as those outlined in the 'Geological Heritage Guidelines for the Extractive Industry', which can be downloaded <a href="here">here</a>. This document, written in association with Irish Concrete Federation, acts as a comprehensive guide in the sustainable extraction of natural resources while preserving the geological heritage of Ireland. This document is referred to in the Laois County Development Plan objective RUR8, as noted in Section 8 of the scoping report.

### Groundwater

Geological Survey Ireland's <u>Groundwater and Geothermal Unit</u>, provides advice, data and maps relating to groundwater distribution, quality and use, which is especially relevant for safe and secure drinking water supplies and healthy ecosystems.

Proposed developments need to consider any potential impact on specific groundwater abstractions and on groundwater resources in general. We recommend using the groundwater maps on our <u>Map viewer</u>, which should include: wells; drinking water source protection areas; the national map suite - aquifer, groundwater vulnerability, groundwater recharge and subsoil permeability maps. For areas underlain by limestone, please refer to the karst specific data layers (karst features, tracer test database; turlough water levels (gwlevel.ie). Background information is also provided in the Groundwater Body Descriptions. Please read all disclaimers carefully when using Geological Survey Ireland data.

The Groundwater Data Viewer indicates two aquifers classed as a 'Locally Important Aquifer - Bedrock which is Generally Moderately Productive' and a 'Poor Aquifer - Bedrock which is Generally Unproductive', underlie the proposed quarry development and extension. The Groundwater Vulnerability map indicates the area covered is classed as 'Extreme' and 'Rock at or near Surface'. We would therefore recommend use of available datasets on our groundwater Map Viewer to assess potential impacts to groundwater in your EIAR.

Our records show that there is a Public Water Scheme (PWS) /groundwater drinking water abstraction (<u>Swan Water Supply Scheme</u>) with a zone of contribution/source protection area 1.5km from the proposed quarry development and extension.

The Groundwater Protection Response overview and link to the main report is here: https://www.gsi.ie/enie/programmes-and-projects/groundwater-and-geothermal-unit/projects/protecting-drinking-water/what-is-drinking-water-protection/county-groundwater-protection-schemes/Pages/default.aspx.

# **Geological Mapping**

Geological Survey Ireland maintains online datasets of bedrock and subsoils geological mapping that are reliable and accessible. We would encourage you to use these data which can be found <a href="https://example.com/here">here</a>, in your future assessments.

### Geohazards

Geohazards can cause widespread damage to landscapes, wildlife, human property and human life. In Ireland, landslides, flooding and coastal erosion are the most prevalent of these hazards. We recommend that geohazards be taken into consideration, especially when developing areas where these risks are prevalent, and we encourage the use of our data when doing so.





Geological Survey Ireland has information available on landslides in Ireland via the National Landslide Database and Landslide Susceptibility Map both of which are available for viewing on our dedicated <u>Map Viewer</u>. Associated guidance documentation relating to the National Landslide Susceptibility Map is also available.

### Geochemistry of soils, surface waters and sediments

Geological Survey Ireland provides baseline geochemistry data for Ireland as part of the Tellus programme. Baseline geochemistry data can be used to assess the chemical status of soil and water at a regional scale and to support the assessment of existing or potential impacts of human activity on environmental chemical quality. Tellus is a national-scale mapping programme which provides multi-element data for shallow soil, stream sediment and stream water in Ireland. At present, mapping consists of the border, western and midland regions. Data is available at <a href="https://www.gsi.ie/en-ie/data-and-maps/Pages/Geochemistry.aspx">https://www.gsi.ie/en-ie/data-and-maps/Pages/Geochemistry.aspx</a>. This page also hosts Geochemical Mapping of Agricultural and Grazing Land Soil of Europe (GEMAS) and lithogeochemistry (rock geochemistry) from southeast Ireland datasets. Geological Survey Ireland and partners are undertaking applied geochemistry projects to provide data for agriculture (Terra Soil), waste soil characterisation (Geochemically Appropriate Levels for Soil Recovery Facilities) and mineral exploration (Mineral Prospectivity Mapping).

# Geophysical data

Geological Survey Ireland produces high-resolution geophysical data (Magnetic field, electrical conductivity, natural gamma-ray radiation) of soils & rocks as part of the <u>Tellus programme</u>. These data currently cover approximately 75% of the country and provide supporting geological information on a regional scale useful for assessing environmental impact and risk. The <u>Tellus programme</u> provides expertise to the Environmental Protection Agency (EPA) for the determination of radon risk. The data is used in mineral exploration or is useful in aiding site investigation works for large scale projects.

## Other Comments

We note reference to geological site assessments by SLR including geological interpretation of the bedrock formations. Geological Survey Ireland would much appreciate a copy of current and future reports detailing any site investigations carried out should the proposed quarry extension go ahead. This information would be used to further our understanding of the underlying geology and the geological history of this part of Ireland. Should any significant bedrock exposures be indentified, we would ask that they will be designed to remain visible as rock exposure rather than covered with soil and vegetated, in accordance with safety guidelines and engineering constraints. In areas where natural exposures are few, or deeply weathered, this measure would permit on-going improvement of geological knowledge of the subsurface and could be included as additional sites of the geoheritage dataset, if appropriate. Alternatively, we ask that a digital photographic record of significant new excavations could be provided. Potential visits from Geological Survey Ireland to personally document exposures could also be arranged.

The data would be added to Geological Survey Ireland's national database of site investigation boreholes, implemented to provide a better service to the civil engineering sector. Data can be sent to Beatriz Mozo, Geological Mapping Unit, at <a href="mailto:Beatriz.Mozo@gsi.ie">Beatriz.Mozo@gsi.ie</a>, 01-678 2795.

I hope that these comments are of assistance, and if we can be of any further help, please do not hesitate to contact me Clare Glanville, or my colleague Trish Smullen at <a href="mailto:GSIPlanning@gsi.ie">GSIPlanning@gsi.ie</a>.

Yours sincerely,

Clare Glanville
Senior Geologist

**Geological Survey Ireland** 

Enc: Table - Geological Survey Ireland's Publicly Available Datasets Relevant to Planning, EIA and SEA processes.



# Geological Survey Ireland's Publicly Available Datasets Relevant to Planning, EIA and SEA processes felevant to Planning and Development (Environmental Impart Assessment) Regulations 2018 (\$1. No. 296 of 2018)

Geological Sur Suithlefreacht Cheolalochra Ireland i Éfreann

Geological Suprementation						
Programme	Dataset		Relevant EIA Topic	Coverage	Description / Notes	Link to Geological Survey freeland man ylower
Geohazards	Landslide: National landslide database and landslide susceptibility map	silde susceptibility map	Land & Soll/Climate/Landscape	e coite	Associated guidance documentation relating to the National Landslide	
			adentification (see a see a se	wattorial	Provide information of historic flooding hoth surface makes	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=b68cf1e4a9044a5981f950e9b9c5625c
		}			groundwater. [A lack of flooding presented in any specific location of the	
					map only indicates that a flood has not been detected. It does not	
Geohazards	Groundwater Flooding (Historic)	`	Water	Beginnal	indicate that a flood cannot occur in that location at present or in the	
					Provides information on the prohability of fattern local	https://dcenr.maps.arcgis.com/apps/webappwiewer/index.html?id=848f83c85799436b808652f9c735b1cc
		<b>3</b>			Provides information on the probability of future karst groundwater flooding (where available). The maps do not, and are not intended to, constitute advice, Professional or speciality advice should be south to	
Geohazards	Groundwater Flooding (Predictive)		Water	and in a	before taking, or refraining from, any action on the basis of the flood	
Geohazards	Radon Map		Land & Soils/Air	National	Codon	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=848f83c85799436b808652f9c735b1cc
						linky//www.cha.ic/adiatoli//dodrimap/
Geoheritage	County Geological Sites as adopted by National h	County Geological Sites as adopted by National Heritage Plan and listed in County Development Pla Land & Solis/Landscape	Pla Land & Soils/Landscape	Regional	All geological heritage sites identified by Geological Survey Ireland are categorised as CGS pending any further NHA designation by NPWS.	https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=a30af518e87a4c0ab2fbde2aauc3c228
Geological Mapping	Bedrock geology:		Land & Soils	National	1:100,000 scale and associated memoirs.	https://dcen.maps.arcgis.com/apps/webappwiewer/index.html?id=de7012a99d7748aa9116e7ae116-bakers.cralu=n
Geological Mapping	Bedrock geology:		Land & Soils	Regional	1:50,000 scale	UTIES://dcent mans arrais, com/anns/unehanniawerlades https://dcent mans arrais, com/anns/unehanniawerlades https://dcent.mans.arrais.com/anns/unehanniawerlades https://dcent.arrais.com/anns/unehanniawerlades h
Geological Mapping	Quaternary Reology: Sediments		7			mental decreases by the party mental mental intervention of the party
Geological Mapping	Quaternary geology: Geomorphology		Land & Soils	National	1:50,000 scale 1:50,000 scale	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=de7012a99d2748ea9106e7ee1b6ab8d5&scale=0
					e	intps//uceiiiidps.ditgs.com/dpps/webappviewer/index.html/id=de/U12399d2748ea9106e7ee1b6ab8d5&scale=0
Geological Mapping	Physiographic units:		Land & Soils	National	Broad-scale physical landscape units mapped at 1:100,000 scale in order to be represented as a cartographic digital map at 1:250,000 scale	https://dcen.maps.arcpls.com/apps/webagoviewer/index.html?id=sfa76=s70f=54877843=sash-c175=50h
Geological Mapping	GeoUrban: Spatial geological data for the greater Dublin and Cork areas	r Dublin and Cork areas	Land & Soils	Regional	includes 3D models	https://dear.more.areair.com/ane/Luckhamidiafradisfradisfradis
Geological Mapping	Geotechnical database		silvo 6 box		Digitised geotechnical and Site Investigation Reports and boreholes which	meteory occurrentees a ligoroung apply wedsplaytewer/ index.ntmirld=9766146196079416U9366621736SUGE6Kscale=0
Goldmine	Historical data sets including geological memoirs and 6" to 1 mile geological mapping records	and 6" to 1 mile geological mapping records	land & Soils/Water	National	can be accessed through online downloads	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=a2718be1873d47a585a3f0415b4a724c
Groundwater & Gaotherms						nttps://secure.dccae.gov.ie/goldmine/index.html
35	Groundwater resources (adulters)		Water	National	-	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?\d=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Groundwater recharge.		Water	National	Data limited to 1:40,009 scale; sites should be investigated at local scale; long term annual average recharge	https://dcen.maps.arceis.com/aaas/webaanviewer/Index html?id=24849002011504687-6444670-104740-4
Groundwater & Geothermal	Groundwater vulnerability.		Water	National		HARVEN AND THE TRANSPORTED TO A STATE OF THE TRANSPORTED THE TRANSPORTED TO A STATE OF THE TRANSPORTED THE TRA
Groundwater & Geothermal	Group scheme and public Supply source protection areas	areac no			VS have SPZ / ZoC, Check with JW / coco / NFGWS for	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?ld=7e8a202301594687ab14629a10b748eF
	Transfer to the state of the st	on greas.	Water	National		https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Groundwater Protection Schemes Catchment and WED management units		Water	National		https://dcenr.maps.arcels.com/apps/webanpulewer/index_btm1/2/e=7a8a2072201sQasg7ab14c0casa
	Company of the compan		Water	National		https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geotherma	karst specific data layers		water	National	For areas underlain by limestone, includes karst features, tracer test database; turiough water levels (ewlevel in)	https://done.man.econf.
$\overline{}$	wens and springs		Water	National	ed wells and springs	msspay over minimparandja.com/appa/wedappwiewer/ moex.html?id=/e8a2U2301594b8/ab14629a10b748ef https://dcenr.maps.arcgis.com/apps/webappwiewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Groundwater & Geothermal Groundwater hody Descriptions				Not exhaustive; only those in designated SACs; could be other GWDTEs;	https://www.gsi.je/en-je/orogrammsc-and-a-rojerts/oromorkustos-and-mork-assis-ja-si-
	210201200000000000000000000000000000000		Water	National		ireland-groundwater/Pages/Groundwater-bodies.aspx
Groundwater & Geothermal	Geothermal Suitability maps		land & Soils/Water	National	Also, noadridp for a Policy and Regulatory Framework for Geothermal Energy, November 2020	https://dear mane arrais even/news/newshammilands.hemilal.o. 151.00.151
	CHERISH - Coastal change project (Climate, Heritage and Fourtnesses of Books, Islands, States)	ogramme; providing key baseline data for Ireland	's Water	National		https://secure.dcae.gov.ie/GSI/INFOMAR_VIEWER/
		and cristian of neers, Islands, and nead	ale water	Regional	П	http://www.cherishproject.eu/en/
Marine & Coastal Unit	Coastal Vulnerability Index (CVI).		water /Land & Soils	Regional		https://www.gsi.le/en-ie/grogrammes-and-projects/marine-and-coastal-unit/projects/Pages/Coastal-Vulnerability- Index.aspx
	Aggregate potential		Land & Soile/Material Access	New York	neral resources and potential resources as a material or explicitly recognised within the environmental	
Minerals	Active quarries		Land & Soils	National	assessment process	https://dcenr.maps.arcgis.com/apps/webappwiewer/index.html?id=ee8c4c285a49413aa6f1344416dc9956
					manny and Birk flam flowing 2000 coules	THE THE PROPERTY OF THE PROPER
Minerals	Historic mines Geochemical data: multi-element data for challous coil stream endiament and	in the state of th	Land & Soils/Cultural Heritage	National	Geological Survey Ireland (DECC).	nttos/Los epolis/EPAMaps/default/easting=?&northing=?&iid=EPA:\EMA_Facilities_Extractive_Facilities_ https://www.epa.ie/enforcement/mines/
	Airborne Reophysical data including radiometrics	electromagnetics and magnetics	Land & Soils	Regional		https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=6304e122b733498b99642707ff72f754
Tellus	urban geochemistry mapping (Dublin SURGE project),	ect).	Land & Soils	Regional	A national mapping programme	https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=6304e122b733498b99642707ff72f754
			Lealin & series	Regional		https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=6304e122b733498b99642707f72f754

Notes:

1. The maps and data listed above are available on the Geological Survey freland map viewer https://www.gsi.ie/en-ie/data-and-maps/Pages/default.aspx
2. Please read all disclaimers carefully when using Geological Survey freland data
3. Geological Survey Ireland and frish Concrete Federation published guidelines for the treatment of geological heritage in the extractive industry in 2008.

Re: An Taisce Pre-application Consultation - Lagan (|Breedon Group) - Spink Quarry, Knockbaun Townland, Abbeyleix, Co. Laois

Phoebe Duvall <planning@antaisce.org>

Mon 24/05/2021 13:54

To: John Sheils <jsheils@jspe.ie>

Hello John,

Received with thanks.

All the best, Phoebe Duvall

On Fri, 21 May 2021 at 11:14, John Sheils < jsheils@jspe.ie > wrote:

To whom it concerns,

Please find attached copy of request for pre-application (informal) consultation with respect to preparation of a Planning Application including Environmental Impact Assessment Report and Natura Impact Statement for the reopening and continuance of Spink Quarry located at Knockbaun Townland, Abbeyleix, Co. Laois, with an extension of the extraction area to the southeast and at depth.

We would be grateful if you could acknowledge receipt of our submission and look forward to hearing from you in due course.

Kindest regards,

John Sheils MSCSI/MRICS

J Sheils Planning & Environmental Ltd

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Phoebe Duvall

www.antaisce.org

Planning and Environmental Policy Officer An Taisce - The National Trust for Ireland The Tailors' Hall, Back Lane, Dublin 8, Ireland Phone: 01 454 1786 Company Reg. No. 12469 | Charity Ref. No. CHY4741 | Charity Regulator No. 20006358

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Join at <a href="https://www.antaisce.org/membership">www.antaisce.org/membership</a>

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