



Roinn Cumarsáide, Gníomhaithe
ar son na hAeráide & Comhshaoil
Department of Communications,
Climate Action & Environment

An Bord Pleanála,
64 Marlborough Street,
Dublin 1,
D01 V902

Re: N6 Galway City Ring Road 2018.

Your Ref: 223985-00

Our Ref: 18/136

A chara,

With reference to the letter and the EIAR received on the 31 October, 2018, concerning the proposed development of the N6 Galway City Ring Road, Geological Survey Ireland (a division of Department of Communications, Climate Action and Environment) would like to make the following comments.

The EIAR has identified the impacts of the proposed development under Section 9 Soil and Geology and Section 10 Hydrogeology. The EIAR has referenced GSI as part of its assessment process. Geological Survey Ireland provides information on all aspects of the geology of Ireland on our Map Viewer available on the GSI website www.gsi.ie. There are multiple layers of data available including Geology, Groundwater, Quaternary, Landslides, and Geological Heritage. Our newest map is the Physiographic Units map and this is especially designed to give information on land use. We would encourage the use of our [Map Viewer](http://www.gsi.ie) when preparing an EIAR.

Geoheritage

Geological Survey Ireland (GSI) is in partnership with the National Parks and Wildlife Service (NPWS, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs) 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 Irish Geoheritage Programme (IGH) of GSI, 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 (CGS), 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 GSI are categorised as CGS pending any further NHA designation by NPWS. CGS 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.

County Geological Sites in audited and unaudited counties can now be viewed online under the Geological Heritage tab on the Geological Survey Public Data Online Viewer at: [Geological Survey's Online Viewer](http://www.gsi.ie) or via a direct link at: [Geoheritage Online Viewer](http://www.gsi.ie).

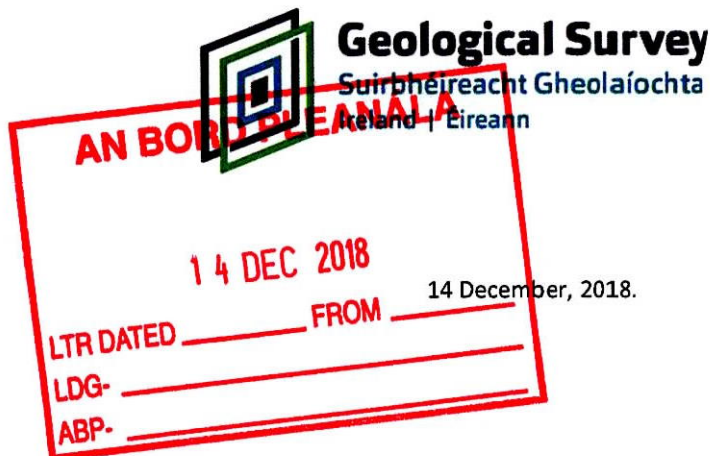
There are three CGSs within 2km of the proposed development, which have been identified by the EIAR. The County Audit for Galway was completed in 2017/18, but the results have not been published yet on our map viewer. For additional information, please contact Sarah Gatley at [REDACTED] or Siobhán Power at [REDACTED]

- **Roadstone Quarry on the Tuam Road**, Co Galway (Central ITM: 133000, 229000) Registered under the IGH8 Lower Carboniferous theme. A currently active limestone quarry that also produced aggregates.
- **Mushroom Rock: Menlough**, Co Galway (Central ITM: 128440, 228980) Registered under IGH1 Karst theme. This stone, and others in the vicinity, have been interpreted as marking the former lake margins of Lough Boora.
- **Knocknagreana, Co Galway** (Central ITM: 120880, 222425) Registered under IGH11 Igneous Intrusion theme.

Geological Survey Ireland, Beggars Bush, Haddington Road, Dublin D04 K7X4, Ireland.

Suirbhéireacht Gheolaíochta Éireann, Tor an Bhacaigh, Bóthar Haddington, Baile Átha Claith D04 K7X4, Éire.

T [REDACTED] LoCall / LóGhlao [REDACTED] www.gsi.ie Fáiltítear roimh comhfhreagras i nGaeilge





With the current plans, there is no envisaged impact on the integrity of County Geological Sites by the proposed developments. However, if the proposed development plan is altered, please contact Siobhán Power at [redacted] for further information and possible mitigation measures if applicable.

Groundwater

It should be noted that according to the Groundwater layer on our Map Viewer, the site is located within an area where the Groundwater Vulnerability has been deemed Extreme. This should be taken into account when undertaking planning.

Recommendations

Should development go ahead, all other factors considered, Geological Survey Ireland would much appreciate a copy of reports detailing any site investigations carried out. Should any significant bedrock cuttings be created, 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 GSI'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, Land Mapping Unit, at [redacted]

Other Comments

Geological Survey Ireland is the national earth science agency and has datasets on Bedrock Geology, Quaternary Geology, Geological Heritage Sites, Mineral deposits, Groundwater Resources and the Irish Seabed. These comprise maps, reports and extensive databases that include mineral occurrences, bedrock/mineral exploration groundwater/site investigation boreholes, karst features, wells and springs. Please see our [website](#) for data availability.

I hope that these comments are of assistance, and if we can be of any further help, please do not hesitate to contact me, or one of my colleagues in the Geoheritage Programme (Sarah Gatley at [redacted] or Siobhán Power at [redacted]).

Le meas,

Dylan Potter
Contract Geologist
Geoheritage Programme
Geological Survey Ireland