**Attachment I.4 Assessment of Impacts on Groundwater.**

Existing Conditions

The soil maps prepared by Teagasc indicates that the subsoil type beneath the site is a till derived from Namurian Shales and Sandstones (TNSSs). The 2009 site investigation confirmed the subsoils comprise a brown clay to approximately 1 m, which is underlain by a grey/black clay. The groundwater well logs indicate that the subsoils are at least 10-12m deep.

The bedrock underlying the site is part of the Balrickard Formation, and is classified by the GSI as a bedrock aquifer that is generally unproductive except for local zones (Pl). The aquifer beneath the site is part of the Donore Groundwater Body as designated in the ERBD Plan.

The condition of a water body is defined by its chemical and quantitative status, whichever is worse, and groundwater quality is ranked in one of two status classes: Good or Poor. The Donore Groundwater Body is categorised as being of 'Good' status and is 'Probably Not At Risk' of retaining this status.

Assessment of Impacts

The proposed development does not involve the provision of any additional hard surfaces that would reduce groundwater recharge within the site boundaries, supply and will not result in any new emission to groundwater. Therefore, there will be no impact on either the quantitative or qualitative status of the bedrock aquifer.