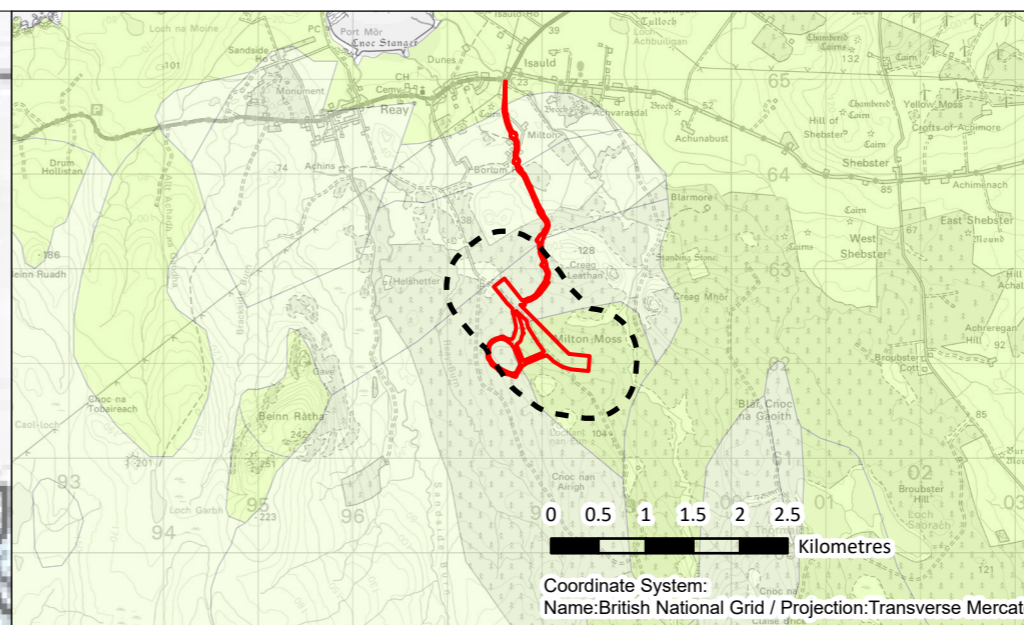
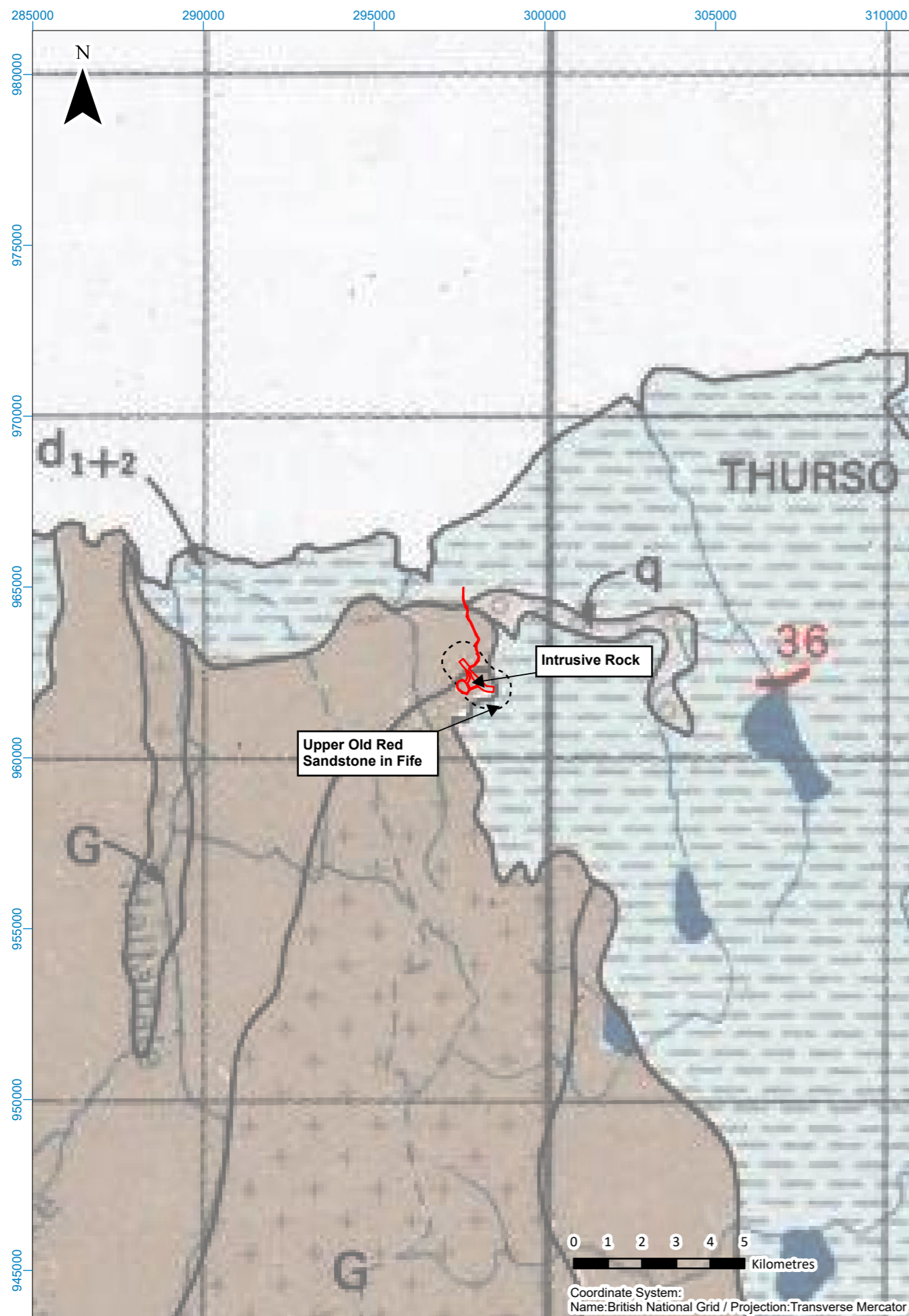


Figure 10.2 : Regional Hydrogeology



INDEX AND EXPLANATION

1. Aquifers in which intergranular flow is significant

- a. Highly productive aquifers (not extensive)
 - Permian at Thornhill
 - Upper Old Red Sandstone in Fife
- b. Locally important aquifers
 - Recent: Blown sand
 - Quaternary sands and gravels
 - Permian in North West Grampian

2. Aquifers in which flow is dominantly in fissures and other discontinuities

- a. Highly productive aquifers (not extensive)
 - Permian
 - Carboniferous: Dinantian and Namurian
 - Upper Old Red Sandstone
- b. Locally important aquifers
 - Triassic and Permian
 - Carboniferous: Westphalian
 - Lower and Middle Old Red Sandstone

3. Concealed aquifers, aquifers of limited potential, regions without significant groundwater

- a. Concealed aquifers; aquifers with limited or local potential
 - Quaternary: coastal and river alluvium
 - Jurassic
 - Permian at Stranraer
 - Cambro-Ordovician and Precambrian Limestones
- b. Regions underlain by impermeable rocks, generally without groundwater except at shallow depth
 - Silurian and Ordovician
 - Precambrian
 - Extrusive rocks
 - Intrusive rocks

Surface water features

- Perennial river or stream
- Perennial river or stream in which the chloride ion concentration is known to exceed 1000 mg/l under low flow conditions
- Stream gauging station with mean annual runoff in m³/s, over catchment area in km²
- Hydrometric area boundary
- Freshwater loch, reservoir or standing water
- Loch or standing water in which the chloride ion concentration is known to exceed 1000 mg/l

Groundwater features

- Recognised mineral water spring or borehole with less than 1000 mg/l total dissolved solids.
- Spa water spring or well with greater than 1000 mg/l total dissolved solids
- Areas where the chloride ion concentration exceeds 1000 mg/l above -80 m O.D.
- Sources of known abstraction (licences are not required):**
 - a) 10-19 l/s
 - b) 20-29 l/s
 - c) > 29 l/s
- Springs
- Springs used for public supply
- Wells and boreholes
- Sources of public supply
- Artesian boreholes
- Artesian boreholes used for public supply

- River or loch intake for public supply with ≥ 10 MI/d capacity

Artificial works

- Impounding reservoir with design yield ≥ 10 MI/d (figures in MI/d)
- Canal
- Hydroelectric station

Geological symbols

- Geological boundary
- Geological boundary beneath cover
- Fault
- Contours on the surface of the Old Red Sandstone in m relative to O.D.

Legend:

- Proposed Site Boundary
- Study Area (Developable Area 500 m Buffer)
- Aquifer Classification**
- Moderately Productive Aquifer
- Low Productivity Aquifer

Title	
Regional Hydrogeology	
Project:	
Limekiln Battery Energy Storage System (BESS)	
Source:	
Credits: © Crown copyright [and database rights] (2025) AC0000808122 OS OpenData. BGS © UKRI - Contains OS Data © Crown Copyright 2025	
Client:	
Boralex	
Drawn by:	Checked:
MM	DB
Date:	Figure:
08/07/2025	10.2
Scale:	Revision No.
1:150,000	0