MAYO - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE Other names used for site IGH THEME TOWNLAND(S) NEAREST TOWN/VILLAGE SIX INCH MAP NUMBER ITM CO-ORDINATES 1:50,000 O.S. SHEET No. 38 GIS Code MO095 Srahlea Bridge (Partry Mountains) Shralea IGH7 Quaternary Srahlea Leeanuan 98, 108 497870E 770520N (T-junction at western quarry) GSI BEDROCK 1:100,000 SHEET NOs. 10, 11

Outline Site Description

The kames to the south of Srahlea Bridge comprise an area of raised ground with green farm pastures that contrast with the browner peatland in the floor of the upper Erriff Valley and on the hillsides rising to the Maumtrasna and Partry mountains.

Geological System/Age and Primary Rock Type

The kames are associated with episodes of Quaternary (Late Midlandian) subaqueous sedimentation. Recent studies suggest that the sediments were deposited in a glaciomarine environment when the shoreline was *c*. 78m above present sea level. The low-lying peats abutting the kames are of Holocene (post-glacial) age.

Main Geological or Geomorphological Interest

The kame terraces at Srahlea are part of a near-continuous band of kames that run from Srahlea to Glenanane Bridge (near Aasleagh) at the southwest end of the Erriff Valley. The kames appear as irregular mounds and ridges *c*. 70-80m above sea level. Three quarries occur in close proximity on the outer edge of the large kame terrace on the east flank of the Erriff valley opposite Srahlea Bridge. The quarries are cut into a grey-brown coloured massive diamict (sediment deposit). The kames are up to 500m wide, with a thickness of 20-25m high along the outer (northern) margin. The thickness of the deposits declines rapidly upslope, and this corresponds to the rise of the bedrock surface underneath. The kames abut onto the margin of a large peat-filled basin through which the Derrycraff River flows. Quarries are cut into thick wedges of parallel- and cross-laminated sands, coarse sands, cobble and boulder gravel, and massive, clast-supported pebble gravel. The clasts are mostly local Ordovician sandstones with some Carboniferous and (possibly) Devonian erratics sourced from the NE. The glacial erratics and striations indicate ice movement towards the southwest. Palaeocurrent directions obtained from the sediments show flow directions to the west. Bedrock (exhibiting striations trending NE-SW) is exposed on the floor of the higher part of each quarry.

Site Importance – County Geological Site; recommended for Geological NHA

This County Geological Site is important in terms of the glacial history of County Mayo. The sediment layers exposed in quarries at Srahlea provide evidence for subaqueous sedimentation at the margin of a retreating ice-sheet flowing westwards from central Ireland and fronted by a large water-body to the west. It is an excellent educational site.

Management/promotion issues

As quarrying is carried out at the site, the site will continue to be impacted upon. Whilst legal quarrying continues, research into the easily accessible deposits should be encouraged, such as attempting to identify marine-fauna in the sediments to confirm a glaciomarine origin for the sediments. As a working quarry, the listing as a County Geological Site has no implications for the normal operation of the quarry, subject to standard permissions and conditions under planning and environmental legislation. The quarry is not suitable for any general promotion other than by express agreement and permission of the owners and operators. Further quarrying should not be permitted on the main kame body.



View of kames and quarries at Erriff – viewed from Derryilra looking south.



View of kames and eastern quarry at Erriff – viewed from Derryilra looking southeast.



Gravels and sands at the eastern quarry.



Thick deposits of sands and clay in middle quarry at Erriff.



View of Croagh Patrick from kame at Erriff .



Concrete Quarry at Erriff – the western-most quarry.

