County: Cornwall Site Name: Coverack Cove and Dolor Point

District: Kerrier

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and

Countryside Act, 1981, as amended.

Local Planning Authority: Cornwall County Council

Kerrier District Council

National Grid Reference: SW 783185 and SW 785181 **Area:** 5.63 (ha) 13.91 (ac)

Ordnance Survey Sheet 1:50,000: 204 1:10,000: SW 71 NE

Date Notified (Under 1949 Act): 1951 Date of Last Revision: 1972

Date Notified (Under 1981 Act): 1992 Date of Last Revision: –

Other Information:

The site is within the Cornwall Area of Outstanding Natural Beauty. The site was formerly notified as part of 'Coverack Cliffs' SSSI.

Description and Reasons for Notification:

The Lizard Complex consists of a large serpentinised peridotite body, largely enclosed by amphibolites, and cut by later gabbros, basic dykes and granitic veins. Recent interpretations consider the Complex to represent the tectonically juxtaposed remnants of a disrupted ophiolite complex.

The Coverack beach section is one of the most famous geological localities in Cornwall, and provides an almost continuous section across a palaeo-Moho, or mantle-crust boundary.

The oldest rocks are exposed in the southern part of the section and consist of the serpentinised peridotites and harzburgites of mantle character. The serpentinites are replaced northwards by a transition zone, consisting of complexly interdigitated peridotites, troctolites and gabbros, which in turn gives way to dominant gabbro. All of the rock-types are cut by later basaltic dykes.

The field relations at Coverack provide critical evidence as to the relative age of the Lizard igneous rocks. The peridotites are the oldest, followed by the transition zone ultramafics, then the main Lizard gabbro with the basaltic dykes as the youngest intrusives present at the locality.