County: Dorset **Site Name: Upwey Quarries and Bincombe Down**

District: West Dorset; Weymouth and Portland

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981, as amended.

Local Planning Authority: Dorset County Council; West Dorset District Council; Weymouth & Portland Borough Council

National Grid Reference: SY 672853 **Area:** 6.47 (ha) 16.0 (ac)

Ordnance Survey Sheet 1:50,000: 194 **1:10,000:** SY 68 NE

Date Notified (Under 1949 Act): – **Date of Last Revision: –**

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

Other Information:
A new site listed in the Geological Conservation Review. Part of the site lies within the Dorset Area of Outstanding Natural Beauty (AONB).

Description and Reasons for Notification:
The ancient Upwey Quarries expose a sequence through the lower half of the Purbeck Beds, from the basal Dirt and Cap beds to the Cherty Freshwater and Cinder beds: making this the thickest sequence in Dorset away from the coastal sections of the Lulworth–Durlston outcrop. Of particular note, above the very variable basal units and the 'Cypris Freestone', are the 'Soft Cockle Beds' and adjacent Lower and Upper Insect Beds described in the mid 1800's by Fisher. These beds have yielded numerous insect specimens of interest. Recent re-excavation of this sequence makes this one of the best man-made exposures of the Purbeck Beds in the country.

The most westerly outcrop (landslipped) of proven Wealden, is clearly present in the railway cutting immediately to the north of the A354. Here it appears to belong solely to the Wessex Formation Sandstones and the Coarse Quartz Grit Member (like those of the Dorset coast) and the detritus is predominantly Cornubian in origin (high K-feldspar, tourmarline and fine aggregates, etc.). The clays contain appreciable kaolinite, and show pedogenic features. Dinosaur bones have been reported as common at the base. This could be important because they are much more rarely found in Dorset than in the Isle of Wight. The basin-marginal position and vertebrate potential of this site make it a key locality in Wealden studies.

The disused pit at Bincombe Down exposes Eocene sediments containing large, poorly-abraded pebbles and cobbles of Chalk flint and Upper Greensand chert, together with fewer Jurassic and Palaeozoic clasts. The

principal importance of the site is the evidence it provides for intra-Eocene, syn-sedimentary movement on the Ridgeway Fault. Bincombe Down is a key site for both its Tertiary deposits and its bearing on the tectonic history of Southern England.