

The geology of the Chilterns and the impact of HS2

The Chiltern Hills are underlain by Chalk, predominantly what was traditionally called the Middle Chalk (now the lower part of the White Chalk Group) capped by the Top Rock - Chalk Rock complex. It is this series of chalk hardgrounds which effectively forms the spine of the Chiltern Escarpment. The Chalk dips gently into the London Basin, and the overlying basal Tertiary succession provides minor outliers around this northern rim of the basin. The other major geological event we have to recognise in this area is the re-routing of the Proto-Thames River during and following the Anglian glaciation, some 450,000 years ago. This created the landscape we currently see in much of the southern parts of the Chilterns.

The planned route of the HS2 fast rail link passes straight across the Chilterns Area of



Dr. Haydon Bailey Geological Adviser, The Chiltern Society Outstanding Natural Beauty (AONB) and the geology underlying this region needs to be considered carefully because of the potential impact of tunnelling; some concerns will be raised regarding the tunnelling proposed under the Chilterns, the geology it will encounter and its impact on the surrounding AONB.