APPENDIX F

The Ecological value of the "Leckhampton White Land"

The area proposed for development comprises a collection of semi-improved grassland meadows, several traditional orchards and small holdings bordered by numerous species-rich hedgerows and trees composed of native species (many of which are mature), with two streams traversing the area. As such these habitats provide a refuge for a variety of wildlife as frequently mentioned by local residents. A data search from the Gloucestershire Environmental Records Centre revealed numerous wildlife records within 1km of the site. These included numerous species of invertebrates, willow warbler, blue tit, great tit, cuckoo, goldfinch, yellow hammer, starling, song thrush, siskin, redwing, mistle thrush, kingfisher, kestrel, greenfinch, adder, grass snake, hedgehog and badger.

Hedgerows and traditional orchards are listed as Priority Habitats under the UK Biodiversity Action Plan (BAP) and the preservation/restoration of these habitats within the site is therefore promoted. The development proposals will result in the loss of the old orchards and the associated species assemblage of plants and wildlife that has developed over the years. It is therefore recommended that the orchards be preserved and enhanced rather than destroyed and new ones planted elsewhere with the resulting loss of associated ecological features. The site contains numerous species-rich hedgerows and many of the hedgerows are important under the Hedgerow Regulations 1997. The development will result in the loss of several species-rich hedgerows and hedgerows designated as important under the Hedgerow Regulations 1997. The hedgerows contain a mixture of native species of trees and shrubs and provide habitat for foraging and shelter for a variety of species including bats, dormice, woodmice and other small mammals (E.Pimley, pers. comm.), slowworms, grass snakes and a variety of bird species, some of which are of conservation concern.

During a LEGLAG bat walk this summer, several soprano and common pipistrelle bats were recorded flying along the hedgerows bordering Lott's Meadow and Kidnapper's Lane (E. Pimley, pers. comm.). More comprehensive bat activity transects have been undertaken by Hankinson Duckett Associates in 2010 and 2011, which recorded the following species: common pipistrelle, soprano pipistrelle, noctule, Natterer's and whiskered/ Brandt's bats. Most activity was recorded along linear features (hedgerows and tree lines etc.) especially those associated with tree lines/streams running north-south. Noctule and soprano pipistrelle bats are listed as a Priority Species under the UK Biodiversity Action Plan (UK BAP). The hedgerows not only provide valuable commuting routes for all bat species, but two hedgerows at the western end of the site support non-maternity summer roosts for pipistrelle and Natterer's bats (Hankinson Duckett Associates 2011). As all bat species are protected from deliberate killing, injury and disturbance and their roosts are protected from damage or destruction under Conservation of Habitats and Species Regulations 2010 and Wildlife and Countryside Act 1981(as amended) it is recommended that these hedgerows should be retained and strong artificial lighting along bat commuting routes be avoided.

The fields contain a number of mature trees, many of which have Tree Preservation Orders, and provide suitable features for roosting bats and should therefore be retained. For example, during an organized bat walk this summer, a common pipistrelle bat was recorded using one of the mature oak trees in Lott's Meadow as a roosting site (E.Pimley, pers. comm.). The bat surveys undertaken during 2010 and 2011 by Hankinson Duckett Associates recorded the majority of roosting sites for various bat species in the northern and southern ends of the site. These included: a small summer non-maternity roost for Natterer's and pipistrelle bats within ash trees on the north-west and northeast boundaries respectively; a small non-maternity summer roost for common pipistrelle bats in the old water tower on the southern edge of Berry's Nursery land adjacent to Lott's Meadow; and an unconfirmed noctule roost within trees associated with the Hatherley Brook.

The badger survey recorded low levels of badger activity within the site and two active badger setts

within the western part along Hatherley Brook (Hankinson Duckett Associates 2011). Over half the areas of highly suitable habitat for badgers (i.e. land to the east and west of Farm Lane) are targeted for development in the proposals. Badgers and their setts are protected under the Protection of Badgers Act 1992 and it would be advisable to retain the setts and areas of good foraging habitat in the development proposals.

The reptile survey undertaken by Hankinson Duckett Associates in 2011 reports a maximum count of eight slow-worms on any one occasion within the Leckhampton site, which constitutes a medium population of slow-worms. Local residents have reported one or two slow-worms in the field by the footpath on the east side of Kidnapper's Lane (E. Pimley, pers. comm.) The highest numbers of slow-worms were located in the north-eastern part of the site where the largest area of highly suitable slow-worm habitat is situated (Hankinson Duckett Associates 2011). However, this area is proposed for development as are other areas of good slow-worm habitat. Considering the limited degree of success of reptile translocations and the length of time needed for other less suitable areas of retained habitat to develop into really good slow-worm habitat, it would be advisable to retain the area of good habitat where the majority of slow-worms were found. All reptile species are protected from deliberate killing or injury under the Wildlife and Countryside Act 1981 (as amended) and slow-worms are a UK BAP Priority Species. It is also possible that the slow-worm population size may have been underestimated as only six instead of the recommended seven surveys_were carried out and a proportion of the reptile refugia were constantly disturbed by people, dogs and cattle thereby reducing the likelihood of reptiles using them and hence the number of reptiles recorded.

The wetland areas provided by the two streams and associated vegetation traversing the site provides suitable habitat for grass snakes and amphibians. Grass snake and common toad are Priority Species under the UK BAP. These wetland areas also provide some habitat, albeit suboptimal for water voles, which are fully protected from intentional killing, injury or capture and their places of shelter are protected from intentional or reckless damage, obstruction or destruction under the Wildlife and Countryside Act 1981 (as amended) and they are listed as a Priority Species under the UK BAP.

Several species of birds of conservation concern listed under the RSPB Red List were recorded on the site during the breeding bird surveys undertaken by Hankinson Duckett Associates in 2011, including skylark, song thrush, house sparrow and linnet, as well as 11 species listed under the RSPB Amber List. The loss of the orchards and hedgerows will reduce the available habitat for song thrush, house sparrow and linnet; while the loss of the semi-improved fields will result in a loss of habitat for skylark which require large areas of open space to nest thereby preventing further use of the fields by breeding skylark. While two breeding pairs were recorded within the site (Hankinson Duckett Associates 2011), as progressively more grassland fields are built on across the county and the UK, the available habitat for this declining species is diminishing with negative consequences for their long-term survival. Hence the pressing need to preserve areas of natural green open space such as the fields south of Leckhampton in order for the long-tem survival of this species.