

Appropriate Assessment for Land South of Ringwood Road, Alderholt (P/OUT/2023/01166)

This document represents the Habitats Regulations Assessment undertaken by Dorset Council as Competent Authority in accordance with the requirements of Regulation 63 of the Conservation of Habitats and Species Regulations 2017 and having due regard to its duties under Section 40(1) of the NERC Act 2006 to the purpose of conserving biodiversity.

HRA Screening

In accordance with *People Over Wind & Sweetman v Coillte Teoranta* (Case C-323/17), Dorset Council has concluded that, discounting any mitigation, the above application will have a likely significant effect on the Dorset Heaths, New Forest and River Avon European wildlife sites (see table below).

Designated site	LSE Y/N	Cause of Adverse effects
River Avon SAC	Y	<p>The Avon and its tributaries comprise a large, lowland river system running through chalk, greensand and clay, with transitions between them.</p> <p>The River Avon SAC supports floating vegetation which is dominated by water crowfoot. Five species are present, with stream water-crowfoot <i>Ranunculus penicillatus ssp. pseudofluitans</i> and river water-crowfoot <i>R. fluitans</i> the main dominants.</p> <p>The River Avon system also supports a diverse fish community. The bullhead <i>Cottus gobio</i> is an important component of this community, particularly in the tributaries. A healthy, stable population of brook lamprey <i>Lampetra planeri</i> occurs in the main river and a number of tributaries. There are also excellent examples of the features that the sea lamprey <i>Petromyzon marinus</i> needs for survival, including areas of sand and gravel where the species is known to spawn. The Avon also supports Atlantic salmon <i>Salmo salar</i> populations typical of a high-quality chalk stream.</p> <p>There is an extensive population of Desmoulin's whorl snail <i>Vertigo moulinsiana</i> along the margins and associated wetlands of the Rivers Avon, Bourne and Wylde.</p> <p><i>Water quality</i></p> <p>Elevated concentrations of phosphorus a river system can speed up the growth of certain plants and algae, disrupt natural processes and impact wildlife through the 'eutrophication' process.</p> <p>On 16th March, Natural England informed Dorset Council that the River Avon SAC was in unfavourable condition and advised the council to carefully consider the impacts of additional phosphorus from development proposals that have the potential to affect water quality in the River Avon SAC. The predominant source of the</p>

		<p>phosphorus in the River Avon catchment is believed to be domestic sewage and agricultural fertilizers.</p> <p>Dorset Council were advised by Natural England that development which results in a net increase in overnight accommodation, and therefore an increase in local population served by the wastewater system which discharges into the River Avon, should be considered to have a likely significant effect upon the River Avon SAC and require an Appropriate Assessment.</p> <p>In light of this, the proposed mixed use development, which includes the provision of up to 1,700 homes within the hydrological catchment of the River Avon, is considered likely to have a significant effect upon the River Avon European site.</p>
Dorset Heathlands SPA	Y	<p>The Dorset Heaths Special Area of Conservation (SAC) is designated on account of the rare and vulnerable wet and dry heathland habitats, which support the Southern damselfly <i>Coenagrion mercurial</i>.</p>
Dorset Heathlands Ramsar		<p>The Dorset Heathlands Special Protection Area (SPA) is notified on account of heathland bird species including nightjar <i>Caprimulgus europaeus</i>, Dartford warbler <i>Sylvia undata</i>, and Woodlark <i>Lullula arborea</i> during the breeding season, and Hen Harrier <i>Circus cyaneus</i> and Merlin <i>Falco columbarius</i> over winter.</p>
Dorset Heaths SAC		<p>The Dorset Heaths Ramsar site is designated on account of the high species richness, supporting nationally scarce wetland plant and invertebrate species, and high ecological diversity of wetland habitat types and transitions, with wet heaths and acid mire habitats present.</p> <p><i>Recreational pressure</i></p> <p>The intensification of residential development in Dorset and the resultant pressures placed upon the Dorset Heaths by the increase in population close to the protected areas has resulted in adverse impacts upon the Dorset Heaths. Various studies have found that public access to lowland heathland, from nearby development, has led to an increase in wild fires, damaging recreational uses, the introduction of incompatible plants and animals, loss of vegetation and soil erosion and disturbance by humans and their pets amongst other factors have an adverse effect on the heathland ecology.</p> <p>According to the Dorset Heathlands Planning Framework 2020-25, an adopted Supplementary Planning Document (SPD), residential development within 400m of the Dorset Heaths European Site is not permitted due to impacts upon the designation. Residential development within the area between 400m</p>

	<p>and 5km from the Dorset Heaths will result in a likely significant effect which must be adequately mitigated in order to avoid an adverse effect upon integrity of the designation.</p> <p>The proposed mixed use development includes the provision of up to 1,700 homes, resulting in an increase in local population adjacent and to the north of the designated heathland at Cranborne Common, with the Verwood Heaths beyond at a distance of approximately 2.3km. Therefore, the proposed development is considered likely to have a significant effect upon the Dorset Heaths European site as a result of recreational pressure.</p> <p><i>Air Quality</i></p> <p>The deposition of airborne nitrogen-based pollutants may result in the enrichment of soils within the heathland habitat. This favours faster growing plants and the spread of species not normally found on heathlands which outcompete and inhibit the recovery of the heathland habitats. Ammonia and nitrogen oxides also have direct toxic effects on plant communities.</p> <p>Therefore, emissions to air of nitrogen-based pollutants may result in the degradation of the heathland habitat and contribute to the European Site being in an unfavourable condition.</p> <p>There are multiple sources of airborne nitrogen-based pollutants, including agriculture and vehicle exhaust emissions.</p> <p>The proposed mixed use development includes the provision of up to 1,700 homes, a business park with 10,000m² of employment space, and a village centre with associated retail, commercial and community facilities. Given the potential for additional traffic within close proximity of the Dorset Heaths, the proposed development is considered likely to have a significant effect upon the Dorset Heaths European site as a result of air quality.</p> <p><i>Functionally linked land/supporting habitat</i></p> <p>The loss, deterioration, or compromise of supporting habitat or functionally linked land, which is defined as habitat outside of the boundary of a European site which is critical or necessary for the function of qualifying features within the designated site, may affect the integrity of a European site.</p> <p>This is particularly true for more mobile species, such as birds. The Dorset Heathlands SPA supports rare and vulnerable heathland bird species, including nightjar <i>Caprimulgus europaeus</i>, Dartford warbler <i>Sylvia undata</i>, and Woodlark <i>Lullula arborea</i> during the</p>
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		<p>breeding season, and Hen Harrier <i>Circus cyaneus</i> and Merlin <i>Falco columbarius</i> over winter.</p> <p>Natural England advise that there is a requirement for competent authorities to consider the potential impacts of functionally linked land when assessing new projects.</p> <p>Given the scale of the proposed development and proximity to the Dorset Heathlands European Site, there is the potential for the loss of habitat which supports the function of SPA bird species. Therefore, a likely significant effect upon functionally linked land has been identified.</p>
New Forest SAC	Y	<p>The New Forest European site supports an extensive and complex mosaic of habitats including wet and dry heaths and associated bogs and mires, wet and dry grasslands, ancient pasture woodlands, ponds and a network of streams and rivers.</p> <p>These habitats support an exceptional variety of flora and fauna including internationally important populations of breeding birds (Dartford Warbler <i>Sylvia undata</i>; Honey Buzzard <i>Pernis apivorus</i>; Nightjar <i>Caprimulgus europaeus</i>; and Woodlark <i>Lullula arborea</i>) and over-wintering birds (Hen Harrier <i>Circus cyaneus</i>) and other notable species such as southern damselfly, stag beetle and great crested newt.</p> <p>Studies indicate that nightjar, woodlark and Dartford warbler densities are notably low and potentially declining further, and suggest that damage is occurring to the SAC features¹.</p> <p><i>Recreational pressure</i></p> <p>According to studies by Footprint Ecology, it is believed that the high footfall may be affecting the breeding success of SPA birds and resulting in adverse effects upon the SAC and Ramsar habitats through impacts including²:</p> <ul style="list-style-type: none"> • Disturbance to birds: leading to avoidance of breeding habitat, physiological impacts, and reduced breeding success; • Fire: resulting in direct mortality, removal of breeding habitat, and long term changes to vegetation structure; • Contamination: litter; nutrient enrichment through dog fouling; pollution from dogs entering water courses; greywater from campervans; and • Trampling/wear: soil compaction, erosion, direct damage to breeding or wintering sites,
New Forest SPA		
New Forest Ramsar		

¹ Site Improvement Plan New Forest, Natural England (2014)

² Recreation Use of the New Forest SAC/SPA/Ramsar: Impacts of Recreation and Potential Mitigation Approaches (Ref: 499); Footprint Ecology (2019)

	<p>expansion of path networks, churning up sediment in water bodies.</p> <p>The studies undertaken by Footprint Ecology show that residential development within 13.8km of the New Forest European Site will result in a likely significant effect upon the New Forest European Site.</p> <p>However, further reports by Footprint Ecology³ indicate that the mitigation provided through the Dorset Heathlands Planning Framework, such as SAMM and HIPS, are sufficient to address the impacts upon the New Forest European Site where there is overlap in the 13.8km New Forest buffer zone and the 400m-5km Dorset Heathland buffer zone.</p> <p>Given the scale of the proposed development, which includes the provision of 1700 dwellings approximately 3km to the west of the New Forest European Site, a likely significant effect as a result of recreational pressure has been identified.</p> <p><i>Air quality</i></p> <p>Air pollution from additional traffic as a result of new development may affect the condition of the New Forest European site.</p> <p>The deposition of airborne nitrogen-based pollutants may result in nutrient enrichment of soils, affecting particularly the grassland and heathland habitats within the New Forest designation which typically require a low nutrient environment. This nutrient enrichment encourages faster growing plants to outcompete the heathland and grassland plant communities.</p> <p>It may also result in the toxic contamination of plant species.</p> <p>There are multiple sources of airborne pollutants, including vehicle exhaust emissions which are typically deposited within 200m of the point of emission.</p> <p>The proposed mixed use development includes the provision of up to 1,700 homes, a business park with 10,000m² of employment space, and a village centre with associated retail, commercial and community facilities. Given the potential for additional traffic within the New Forest European site, 3km to the east of the site, the proposed development is considered likely to have a significant effect upon the New Forest European site as a result of air quality.</p>
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Appropriate Assessment

The HRA screening identified likely significant effects upon the River Avon, Dorset Heath and New Forest European Sites as a result of additional recreational pressure,

³ Visitor use of the New Forest by residents of Dorset and implications for the Dorset Local Plan (ref: 658); Footprint Ecology (2022)

effects upon functionally linked land, and impacts upon air and water quality. Therefore, an Appropriate Assessment is required to determine whether the proposal would result in an adverse effect upon the integrity of these European sites (see table below).

Designated site affected	Confirmation that adverse effects on integrity are avoided for <u>all</u> features with avoidance/mitigation secured by adherence to the SPD Y/N
River Avon SAC	<p><i>Water quality</i></p> <p>On 16th March 2022, Natural England asked Dorset Council to consider whether development proposals which have the potential to affect water quality in River Avon may have an adverse effect upon the integrity of a European Site and therefore require mitigation, for example through nutrient neutrality. Given this advice, Dorset Council consider that proposals for overnight accommodation must deliver mitigation to avoid an adverse effect upon the integrity of the River Avon SAC.</p> <p>The proposed development is for 1700 dwellings. Since the proposal will result in an increase in overnight accommodation, it will contribute to additional phosphorus entering the River Avon SAC. Please note that the commercial, retail and community elements of the scheme are exempt from the requirement to demonstrate nutrient neutrality. This is because it is generally accepted that overall the people visiting these facilities also live in the same catchment, and their contribution is already accounted for through proposals for new overnight accommodation. This prevents the double counting of nutrients.</p> <p>Alongside the advice from Natural England on 16th March, a calculator was provided to determine the phosphorus generated by a new development. The applicant has used this calculator to determine that the proposed development will result in an additional 228.87kg/year of phosphorus entering the River Avon SAC⁴.</p> <p>The information provided by the applicant explains that the CIRIA guidance on the use of SuDS is yet to be published and that there would be a recalculation of the nutrient budget once this information is available. The CIRIA guidance⁵, published in December 2022, may be used to recalculate the phosphorus budget.</p> <p>There may also be upcoming changes to the performance of sewage treatment works being delivered through the Levelling Up and Regeneration Bill which is currently passing through parliament.</p>

⁴ Calculator inputs and outputs presented in Appendix 3 of Appendix 9.2 to the Environmental Statement

⁵“Using SuDS to reduce phosphorus in surface water runoff (C808F)”, published by Ciria December 2022 (Available for download here: Item Detail (ciria.org))

	<p>The applicant suggests that the phosphorus output will be offset through a 'proportionate in-perpetuity nutrient off-setting solution' elsewhere in the catchment, which will be secured by means of Grampian-type condition or a suitable planning obligation.</p> <p>Natural England have commented that the applicant has not provided sufficient detail to provide certainty that a deliverable mitigation mechanism has been secured and agreed. Therefore, Natural England have advised that the Council cannot be certain that the necessary measures have been secured and therefore should not conclude that there will not be an adverse effect on the integrity of River Avon European Site.</p>
Dorset Heathlands SPA	<p><i>Recreational pressure</i></p> <p>The proposed site is adjacent and to the north of Cranborne Common which is designated as Dorset Heathlands SPA, SAC and Ramsar.</p>
Dorset Heathlands Ramsar	<p>According to the Dorset Heathlands Planning Framework 2020-25, residential development within 400m of the Dorset Heathlands European Site is not permitted due to impacts upon the designation. Residential development within the area between 400m and 5km from the Dorset Heathlands will result in a likely significant effect which must be adequately mitigated in order to avoid an adverse effect upon integrity of the designation. Smaller scale residential development of typically less than approximately 40-50 dwellings is considered to have an 'in-combination' effect when considered with other development in the area. This 'in-combination' effect may be mitigated against through a contribution towards Strategic Access Management and Monitoring (SAMM). Larger scale development of typically 50 or more dwellings will have an 'alone' impact and will require bespoke mitigation through a Heathland Infrastructure Project (HIP).</p>
Dorset Heathlands SAC	<p>Whilst the site boundary is adjacent to the Dorset Heathlands, and therefore within the 400m of the heathland and within an area where development is not permitted, the areas adjacent to the heath will be dedicated to greenspace rather than built development. The nearest built development to the Dorset Heathlands will be approximately 675m to the north of the designated site, within the 400m to 5km buffer zone.</p> <p>The proposed development of 1,700 homes would result in a population increase of 4,080 people. According to the information submitted by the applicant, this may result in an additional 62,900 visits to the heathland per year from these additional residents, without mitigation.</p> <p>Therefore, given the scale and location of the proposed development, both a SAMM and a HIP will be required.</p> <p>A contribution towards Strategic Access Management and Monitoring (SAMM) will also be collected, in accordance with the Dorset Heathlands Planning Framework SPD, through a S106 agreement.</p>

	<p>The applicant is proposing a HIP in the form of a Suitable Alternative Natural Greenspace (SANG) occupying an area of approximately 53.4ha. This equates to a SANG provision rate of approximately 13ha per 1,000 population. The SANG comprises three components:</p> <ul style="list-style-type: none"> • Cross Roads Plantation (20.2ha); • Alderholt Common (23.5ha); and • Harbridge Drove (9.7ha). <p>Information on the SANG design is presented in the SANG Habitat Creation and Management Plan⁶ and Ecological Mitigation and Enhancement Strategy⁷. Details relating to the delivery and management of the SANG would be secured via planning obligation.</p> <p>Natural England have confirmed that the SANG area of 53.4ha is suitable for the proposed development, with the Cross Roads Plantation SANG compartment being particularly well placed to intercept existing public pressures.</p> <p>Natural England have objected to the proposals for the following reasons:</p> <ul style="list-style-type: none"> • More detail is required on the SuDS and other water bodies within the SANG to ensure that safety of residents and pets; • Further information required on reduction of pine woodland cover at the Cross Roads Plantation SANG; • More detail on the plan for phasing the delivery of the three SANG components alongside the development; • Confirmation on the mechanisms by which the SANG will be secured and maintained in perpetuity; and • The proposed development will result in improved cycle and pedestrian links from the site to Ringwood Forest, Cranborne Common and Verwood, encouraging further recreational use of the Dorset Heaths site. <p>Given the objections of Natural England, which centre around the need for further information and detail on the mitigation provided, and a strong objection due to improved access to Cranborne Common, Dorset Council conclude that the proposed development will result in an adverse effect upon the integrity of the Dorset Heathlands European Site as a result of recreational pressure.</p> <p><i>Air quality</i></p> <p>The adopted Dorset Heathlands Interim Air Quality Strategy 2020-25 SPD provides an approach to addressing the adverse effects of airborne nitrogen upon the Dorset Heathlands European Site.</p> <p>The strategy suggests a series of mitigation measures, paid for through developer contributions. The types of measure include direct measures targeting vehicle emissions adjacent to</p>
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⁶ presented in Technical Appendix 9.3 of the Environmental Statement

⁷ presented in Technical Appendix 9.4 of the Environmental Statement

	<p>heathland. These include projects to encourage modal shift to other forms of transport, reduce vehicle speeds adjacent to heathlands, encourage the use of zero emission vehicles and through heathland management alongside roads. The strategy also addresses wider measures to reduce nitrogen deposition from agricultural land near to heathlands, or the re-siting or cleaning up of certain operations that generate emissions.</p> <p>Since the proposed development will not contribute through the Community Infrastructure Levy (CIL), there will be a requirement to provide a bespoke contribution towards the strategy through a S106.</p> <p><i>Supporting habitat</i></p> <p>The applicant has provided information on the behaviour of nightjar, stating that GPS tracking research shows that Nightjar forage extensively away from their core breeding territories on the heath, commuting an average distance of 1.5km to foraging locations.</p> <p>The bird surveys at the site indicate that Woodlark, Hen Harrier and Merlin were not recorded during the surveys. A single Dartford Warbler call was recorded on the western boundary of the Site, located within the adjacent heathland. No other calls were heard over the course of the surveys. The Site does not therefore provide supporting habitat for these species, and the potential for likely significant effects arising from habitat loss can therefore be screened out.</p> <p>The survey work indicated that Nightjar were recorded foraging across the western and northern fields (with the western half of the Site the most frequently used) and flying along the hedgerows within the Site. The development site therefore provides supporting habitat for Nightjar breeding within the heathland at Cranborne Common to the west of the Site.</p> <p>The applicant has overlaid the recorded sightings of nightjar against the baseline habitats, which are predominantly arable and improved grassland, but also include smaller areas of woodland, neutral grassland and wetland (pond and small area of rush pasture).</p> <p>The applicant has also overlaid the sightings of Nightjar against the proposed land use types. This shows that all of the potential supporting habitat which the Nightjar appear to target for the purpose of foraging, which extends to approx. 52ha, is located within areas proposed as SANG, other semi-natural green infrastructure and as a potential location for solar arrays. Therefore, there will be no loss of potential supporting habitat to built development.</p> <p>The applicant has claimed that the habitats in the SANG and other green infrastructure areas, which are used by the nightjar as foraging habitat, would be significantly enhanced⁸. The</p>
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⁸ Please see SANG Habitat Creation and Management Plan proposals and the Ecological Mitigation and Enhancement Strategy, presented in Appendix 9.3 and 9.4 of the Environmental Statement respectively, for further details.

	<p>These enhancements and in perpetuity management will increase the biodiversity value of the habitat, which in turn will increase the diversity and abundance of invertebrate prey, making them more suitable for foraging Nightjar.</p> <p>Since Nightjar are largely active at night, light disturbance from the proposed development could adversely affect the population of foraging Nightjar.</p> <p>Natural England advise that a Lighting Strategy which accords with the Bat Conservation Trust Lighting Standards is produced by the applicant and approved by the local planning authority to avoid impacts upon foraging nightjar.</p> <p>A Lighting Strategy, which aims to minimise light obtrusion from the development, has been submitted by the applicant. The strategy does not present any direct measures to minimise the effects upon Nightjar, and Nightjar are not mentioned under the bracket of sensitive receptors in the report.</p> <p>Dorset Council's Street Lighting Team have noted that Roads and footpaths, adoptable as public highway and hence requiring street lighting, on the periphery or outside of the estate should be avoided or minimised where possible. Instead, adoptable roads and footpaths should be kept to within the built area, using the blocking effect of the houses to reduce outward light pollution, the overall visibility of the estate from a distance at night and its impact upon bats and other species.</p> <p>It is recommended that a planning condition is added to ensure that a suitable lighting strategy is secured and agreed to prevent an adverse effect upon the integrity of the Dorset Heaths as a result of damage to supporting habitat.</p>
New Forest SAC	<i>Recreational pressure</i>
New Forest SPA	The provision of 1,700 new dwellings from the proposed development would result in a local population increase of approx. 4080 people, at a distance of approx. 3km from the New Forest European Site.
New Forest Ramsar	<p>Natural England have advised that the recreational impacts upon the New Forest European site are similar to those upon the Dorset Heathlands SPA/Ramsar and Dorset Heaths SAC.</p> <p>It follows therefore that the mitigation provided through the Dorset Heathlands Planning Framework 2020-25, such as SAMM and HIPS, are sufficient to address the impacts upon the New Forest European Site where there is overlap in the 13.8km New Forest buffer zone and the 400m-5km Dorset Heathland buffer zone. This is supported by a report from Footprint Ecology⁹.</p> <p>Given the scale of the proposed development and proximity to the designated site, mitigation in the form of an infrastructure</p>

⁹ Visitor use of the New Forest by residents of Dorset and implications for the Dorset Local Plan (ref: 658); Footprint Ecology (2022)

	<p>project is required to prevent an adverse effect upon the integrity of the New Forest European Site.</p> <p>The applicant is proposing a 53.4ha SANG, to which Natural England have objected on the grounds of further information on the mitigation being required and the improved cycle and pedestrian links encouraging access to Cranborne Common¹⁰. Therefore, it is not possible to conclude that the mitigation will be effective in preventing an adverse effect upon the integrity of the New Forest European Site.</p> <p><i>Air quality</i></p> <p>The applicant has suggested that there is no viable impact pathway with respect to air quality at the New Forest European Site as a result of the reasoning provided in the Air Quality Assessments in New Development SPD, adopted by New Forest District Council in June 2022.</p> <p>The SPD states that while there is no evidence of current negative effects from traffic related air pollution, uncertainty remains about whether the air pollution effects of in-combination traffic growth could adversely affect the integrity of New Forest European site. The document explains that the New Forest authorities are carrying out ongoing air quality monitoring using developer contributions. If air quality monitoring identifies that significant adverse effects are occurring or likely, legal agreements or other appropriate mechanisms will be put in place to ensure that applications for new development would be required to make reasonable and proportionate developer contributions for air quality management or mitigation.</p> <p>The SPD does not provide a strategy for addressing the effects of new development upon air quality.</p> <p>Natural England commented that the current air pollution modelling is inadequate to allow a conclusion that there will not be a likely significant effect on the designated sites, either alone or in-combination with a number of significant development coming forward around Fordingbridge.</p> <p>Natural England advise that the authority is unable conclude that there will not be an adverse effect on the designated sites listed above either alone or in-combination based upon the lack of evidence submitted.</p> <p>In light of this, it is concluded that the proposed development will result in an adverse effect upon the integrity of the New Forest European Site as a result of impacts upon air quality.</p>
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Having concluded that the application will have a likely significant effect in the absence of avoidance and mitigation measures on the above European sites, this document represents the Appropriate Assessment undertaken by Dorset Council as Competent Authority in accordance with requirements under Regulation 63 of the Conservation of Habitats and Species Regulations 2017 and having due regard to its

¹⁰ For further information, please see Dorset Heaths section of this table.

duties under Section 40(1) of the NERC Act 2006 to the purpose of conserving biodiversity.

The Appropriate Assessment concluded that the proposed development will result in an adverse effect upon the integrity of a European Site. Therefore, in accordance with Regulation 63(5) of the Conservation of Habitats and Species Regulations 2017, Dorset Council as competent authority may not give planning consent for the proposed development.