

Volume 1 Non-technical summary

Proposed construction of landscape enhancement features using imported inert materials, together with the provision of public access and amenity; comprising revised landform and details to WSCC/029/18/SP

in respect of land at Knepp Castle Estate,
West Grinstead, West Sussex

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1. INTRODUCTION

- 1.1. This document comprises a Non-Technical Summary of an Environmental Statement that accompanies a full planning application for proposed construction of landscape enhancement features using imported materials, together with the provision of public access and amenity on land at Knepp Castle Estate, West Grinstead.
- 1.2. Knepp Castle Estate is located approximately 1km south of Southwater, and in total extends to an area of approximately 1,400 hectares (3,500 acres). This comprises Knepp Castle, Knepp Mill Pond, parkland, woodland, areas of the Knepp Estate Rewilding project, grazing land, farmhouses and cottages, rural offices and light industrial units, together with a polo club and polo fields.
- 1.3. This application comprises proposed amendments to a scheme that was substantively granted planing permission in October 2012 (Local Planning Authority Reference: WSCC/028/11/SP) and which was commenced in February 2014.
- 1.4. Since then, a number of planning applications have been submitted for amendments to the scheme. These primarily relate to changes to the phasing of the development and timescales for completion of the works.
- 1.5. More recently, in October 2018, planning permission was granted for an amendment to the proposed method of dredging the Mill Pond; revision to the location of deposition of the silt arisings from the dredging; consequential changes to the approved borrow pit to create a wetland habitat; importation of additional inert material in lieu of arisings from the borrow pit; and an extension of time for completion of works (WSCC/029/18/SP). This enables the completion of works to take place up until 30th April 2020.

2. CONSENTED SCHEME

- 2.1. The restoration and enhancement works substantively approved in October 2012 comprised 4 main elements:
- 2.2. Restoration of Knepp Mill Pond As a result of the natural siltation process, the Mill Pond has gradually reduced in size, and is now approximately 30% of the size of the Mill Pond that existing in 1754. This has impacted the setting of Knepp Castle, and causes ecologically impacts on the Mill Pond.
- 2.3. The scheme seeks to re-establish the role of Knepp Mill Pond, through dredging the lake and removing some 52,000m3 of silt.
- 2.4. **Excavation and Restoration of a Borrow Pit** The scheme included the digging of a 'borrow pit' on the eastern side of the Mill Pond. This would cover an area of 11,000m3 and result in the extraction of some 56,000m3 of material. This material would then be used to contribute to the creation of 'landscape enhancement features' (see below).
- 2.5. The silt from the Mill Pond would be 'suction dredged' and deposited in the borrow pit. It would then be allowed to regenerate as a 'wetland habitat'.

- 2.6. **Landscape Enhancement Features** The scheme included the creation of a series of 3 landscape enhancement features located close to, and broadly parallel with, the adjacent A24 dualled carriageway.
- 2.7. These would be landscape mounds formed to provide a visual and acoustic screen to improve the setting of Knepp Castle and Knepp Park. They would be constructed from the material excavated from the borrow pit and imported inert material. They would vary in height from about 2m to 10m above existing ground level.
- 2.8. Construction of the features would require a total of about 326,000m3 of material of which 270,000m3 would be imported and 56,000m3 would be from the creation of the borrow pit.
- 2.9. **Public Access and Amenity** included within the provision of the landscape enhancement features was creation of a permissive pathway over the land. This would run from an existing Public Right of Way (PRoW) to the south of Floodgates Farm in a generally northerly direction toward the A272. The scheme also included provision of a bird hide.
- 2.10. The alterations to the scheme approved in October 2018 had four main elements:
- 2.11. Amendment to Dredging Methodology instead of the originally proposed suction dredging to remove the silt, the latest amendment sought to drain the Mill Pond and remove the silt whilst it had a higher solid to water ratio. The proposals sought to dig the silt out by machines and remove it from the Mill Pond in 2 locations on the eastern side of the waterbody in dump trucks.
- 2.12. **Revisions to the location of silt arisings from the dredging** Once removed from the Mill Pond in the dump trucks, the silt was to be deposited it in 2 fields located on the east side of the Mill Pond, north of the Polo Field. These were previously grassland.
- 2.13. The material was to be spread at an initial depth of 400-500mm, after which, as the water ratio drops, the silt material was to reduce in size (and depth) by about 40%. The land would then eventually be cultivated and grass seeded.
- 2.14. Amendment to Approved Borrow Pit/Wetland Habitat Instead of creating a borrow pit, a bespoke designed wetland habitat was proposed to be created. This would cover the same footprint as the originally approved borrow pit, but only require the removal of some 7,000m3 of material. This would be moved to help create the Floodgates Farm Landscape Enhancement Feature.
- 2.15. The wetland habitat would be created following the design guidelines in the 'Million Ponds' project.

 This seeks to create new, high quality water bodies throughout the country to replace lost ponds and improve bio-diversity.
- 2.16. Importation of Material in lieu of arisings from the borrow pit The proposed amendments resulted in a shortfall of some 49,000m3 of material from the borrow pit in comparison to the originally approved scheme. In order to compensate for this, and enable the landscape enhancement features to be built to the approved size and design, 49,000m3 more material was proposed to be imported to the site.
- 2.17. This would be delivered using HGV trucks, via the existing temporary access way, that leads onto the A272, a short way to the west of the junction of the A272 with the A24.

2.18. **Extension of time for completion of works** - In order to be able to complete the work, especially the dredging, a 12 month extension of time for the silt dredging and material importation was proposed, to allow work to continue 30th April 2020.

3. SCHEME IMPLEMENTATION

- 3.1. Implementation of the scheme commenced in February 2014 and has continued up to the present time. Much of the Buck Barn Landscape Enhancement Feature has been constructed, as has the northern part of the Hillhouse Lawn Landscape Enhancement Feature. The bird hide has been provided.
- 3.2. Dredging of the Mill Pond took place between May September 2019. Work in relation to cultivation and re-seeding of the silt deposition area is on-going.
- 3.3. Work on the creation of the wetlands habitat commenced in summer 2019. This work remains ongoing.
- 3.4. The provision of the Public Right of Way and associated interpretation boards has not yet been brought into effect. This can only occur following the completion of works
- 3.5. No work has yet commenced on the Floodgates Farm Landscape Enhancement Feature.

4. PROPOSED SCHEME CHANGES

- 4.1. The application now submitted seeks to deliver a number of changes to the approved scheme.

 These are:
- 4.2. **Revised form to the Buck Barn landscape enhancement feature** It is proposed to amend the design of the approved landscape enhancement feature to soften its appearance and create a more parkland form, rising to an amphitheatre landform that has been designed by the award winning Kim Wilkie. The overall height of the feature is to be increased, to a maximum height point of 31m AOD.
- 4.3. The works would require the importation of an additional 225,000m3 of material beyond that currently consented.
- 4.4. Revised form to the Floodgates Farm landscape enhancement feature Reflecting the wider design iterations of the Kim Wilkie scheme, it is proposed to amend the approved landform to create a more natural parkland appearance. The feature would not increase in maximum height, but its footprint would be expanded to accommodate more gradually sloping sides.
- 4.5. The works would require the importation of an additional 7,000m3 of material beyond that currently consented.
- 4.6. **Permanent retention of existing temporary access on to A272** The application seeks the permanent retention of the existing temporary construction access on to the A272 and for an access route to be constructed from this point in a broadly south-east then southerly direction, parallel and adjacent to the A24 to reach the Hill House Farm building group. In conjunction with this, the existing direct access on to the A24 would be permanently closed delivering significant,

- and material improvements in the highway safety operation of the road network. This new access would also serve 1-4 Buck Barn Bungalows. These properties are currently accessed via a route that also serves the Service Station and MacDonalds to the east. This experiences congestion at peak times.
- 4.7. The closure of the existing access onto the A24, by virtue of a modest northward extension of the Hill House Farm landscape enhancement feature and the provision of an acoustic fence, would provide improved acoustic enhancements within this area.
- 4.8. Provision of access route from commercial yard adjacent to A24 The application proposes the provision of an alternative vehicular access route to serve an existing industrial unit that fall within the ownership fo Knepp Castle. This would extend immediately west from the existing industrial unit before turning south to run along the western side of the Hill House landscape enhancement feature, before turning southwest a short way to the north of Charleston House. It would then connect into the existing internal Estate access track that runs south to Floodgates Farm, to connect to Castle Lane. This then provides access on to the A24 both northbound, and southbound.
- 4.9. This access route would provide enhanced highway safety over the existing access arrangements serving the industrial unit.
- 4.10. **Provision of public car park** A new 12 vehicle car park is proposed at the southern end of the Floodgates Farm landscape enhancement feature. This car park would be accessed via Castle Lane, along the existing Estate access track.
- 4.11. The car park would be available for use by, inter alia, visiting members of the public.
- 4.12. **Re-routing of new Public Right of Way** In conjunction with the revised scheme, the previously approved Public Right of Way running along the Hill House and Buck Barn landscape enhancement features is proposed to be modified to enable the route to follow a section of the crest of the newly formed amphitheatre.
- 4.13. The revised alignment would provide a 360 degree panoramic view from the crest of the amphitheatre, including a vista looking southwest to Knepp Castle, across the northern edge of Knepp Mill Pond.
- 4.14. **Revisions to approved landscaping** As part of the amended works, the approved landscaping scheme would be amended. In particular, it would be extended to provide a greater level of planting within the Buck Barn landscape enhancement feature. It is proposed to provide additional planting along the outward facing slopes of the amphitheatre. This would provide improved habitat, and improved habitat connectivity between the existing landscaping works, and woodland. The additional landscaping areas would comprise new woodland and native tree planting, incorporating and reflecting the principles used in the delivery of the landscaping works to date.
- **4.15. Extension of time of implementation of works** It is envisaged that the proposed amendments will take an additional three years to complete beyond that currently approved. On this basis, thie application seeks approval of the works to be undertaken up to, and including, 30th April 2023.

5. ALTERNATIVES

5.1. In accordance with Government guidance consideration has been given to alternative locations and designs with respect to the proposed works. Taking into account the objective of the project to deliver restoration and future management of Knepp Park along with additional benefits in relation to heritage and landscape setting, highway safety and public amenity it is not feasible to consider an alternative location to Knepp Park and the location and design of the components of the enhancement works either are fixed or provide the optimum benefits.

6. ENVIRONMENTAL ISSUES

6.1. An Environmental Impact Assessment of the effects of the development as now proposed has been conducted by qualified specialists. A summary of the findings is presented below.

7. CULTURAL HERITAGE - ARCHAEOLOGICAL

7.1. Desk and field based assessments of the potential impacts on archaeological heritage assets have been undertaken. These conclude that the proposed development will not result in significant adverse effects on any archaeological heritage asset. Direct effects can be mitigated through the methodology proposed, and no adverse indirect effects are likely to occur. It is not considered there will be secondary, cumulative or transboundary effects either in the short, medium or long term.

8. CULTURAL HERITAGE - ARCHITECTURAL

- 8.1. A Cultural Heritage Assessment of the impacts of the proposed scheme on above ground heritage assets has been undertaken. This concludes that overall the scheme will have a positive direct and permanent effect on the registered Park. The amphitheatre feature would represent an addition to this, that is both sympathetic and not out of place. It would enclose the northeastwards vista from Knepp Castle House. The landscape enhancement features in their totality would represent an enhancement to the designated heritage of the landscape of the registered Park and the setting of the Grade II* listed building.
- 8.2. Notwithstanding the potential effects during the construction period, in the longer term, the landscape features will bring significant indirect benefits to the heritage assets by reducing the visual and noise intrusion of the A24 on the registered Park and listed buildings within and around it. The landscape enhancement features as amended would enable views of Knepp Mill Pond, the lake and Knepp Castle from a reorientated Right of Way created along the east side of the Park.
- 8.3. The proposals would be of greater benefit in cultural heritage terms, compared to the approved scheme. It would be an integral part of a wider design exercise to create new landscape outside the existing registered Park and reduce the impact on the A24 and its associated infrastructure. No harm will be caused to the significance of any designated heritage assets and the significance of the registered Park will be enhanced.

9. LANDSCAPE VISUAL IMPACT

- 9.1. An assessment of the landscape character and quality in the vicinity of Knepp Park together with an assessment of the visibility of the development site from the surrounding area has been undertaken for the proposed development.
- 9.2. It is concluded that the proposals will have major beneficial impacts, reinstating the parklands principle historic vista, improving local amenity and public enjoyment, enabling greater tranquility and a greater perception of 'space' within/across the park and the long term enhancement of an area of countryside. Strengthening the park perimeters by landform and planting will also help guard the landscape park from the depredation of the adjacent major transport routes, ensuring a measure of 'robustness' to the historic and newly fashioned landscapes.

10. BIODIVERSITY

- 10.1. Ecological surveys have been conducted on an intermittent basis since 2009 to establish the presence or otherwise of important or protected habitat and species at Knepp Castle Estate. As assessment of the potential effects of the proposed works consent that there would be no permanent negative significant effects.
- 10.2. Conversely, the proposed works provide an opportunity to significantly improve the biodiversity of the area including through tree planting, additional ponds, and wetlands, hedgerow creation and areas left to natural succession. The scheme will create habitat corridors and wildlife havens, providing ecological niche, and an overall high net biological gain over the present habitats and the wider area.
- 10.3. Disturbances will be temporary and suitably compensated and mitigated through the development phase.

11. ARBORICULTURE

- 11.1. An Arboricultural Impact Assessment of the proposed scheme has been prepared. This identifies all the trees present on the site and notes the small number of specimens required to be removed; tree protection measures for those trees designated for retention; and extensive proposed tree and shrub planting.
- 11.2. The proposed scheme, in its totality, will deliver a net gain in the arboricultural value and character of the site.

12. HYDROLOGY WATER RESOURCES AND FLOOD RISK

- 12.1. The geology, hydrology and hydrogeology at the site has been assessed. A flood risk assessment has also been undertaken.
- 12.2. It is concluded that the proposed development will not impede or significantly alter flood flows at the site or increase the risk of flooding to the site and surrounding areas.

12.3. Surface water drainage proposals have been included within the development masterplan in order to mitigate against any risks associated with the flow of surface water to offsite receptors. Additionally, the excavation and the creation of the wetland habitat will increase the flood storage capacity within the vicinity of the site.

13. TRANSPORT NETWORK AND TRAFFIC MOVEMENTS

- 13.1. A Transport Statement has been prepared to accompany the planning application.
- 13.2. The report notes that the number of heavy goods vehicle movements associated with the additional quantum of material to be imported would be in line with that previously permitted and that there are no issues linked with the existing site operations in terms of impact on the highway network.
- 13.3. The proposed access alterations are noted to represent an enhancement to the existing situation in terms of highway safety and will not result in additional vehicle movements on the local highway network.
- 13.4. The provision of a public car park for users of the existing and proposed Public Right of Way is not considered to result in any material adverse effect on highway safety, but would encourage use of non-car modes of travel.
- 13.5. It is concluded that that there is no reason why the proposals should be resisted on traffic or transportation grounds.

14. NOISE

- 14.1. Background noise measurements were previously obtained at several locations around Knepp Park.

 Using these previous readings a Noise Impact Assessment using computer noise modelling software has been carried out to determine the likely impact to noise sensitive receptors.
- 14.2. In carrying out the remainder of the works to complete the site by 2023, there are likely to be time limited and temporary impacts to two different residential receptors. The use of good site management, as well as focused mitigation measures will ensure that, where practicable, the noise impact on residential receptors is kept to a minimum.
- 14.3. Based on the assessment carried out, there are no significant impacts which cannot be mitigated against.
- 14.4. The landscaping works will however, provide acoustic screening with a reduction in noise levels up to 5dB(A) depending on the location of the observer in Knepp Park.

15. SOIL AND GROUND CONDITIONS

15.1. Investigations of soil and ground conditions have been undertaken. These have assessed the agricultural land classification and soil resources of the site.

- 15.2. In keeping with the implementation of the landscape enhancement features to date, the topsoil from the further areas of works will be stripped of topsoil. This topsoil will then be used on-site in the restoration of the landscape enhancement features.
- 15.3. Subject to the implementation of appropriate methods of soil handling and replacement there will be no significant environmental effects either in the short term or long term. There will be no direct or indirect effects. Although the works represent a modest increase in the footprint of the scheme as consented, it is not considered this will generate any cumulative or transboundary significant effects.
- 15.4. The proposed implementation of the works follows a phased completion approach. Therefore, whilst the overall duration of timing of the works will be extended, the extent of groundworks being undertaken, and its impact on soil and ground conditions at any one time, would not be increased.

16. AIR, INCLUDING DUST

16.1. An assessment of the potential for dust nuisance has been undertaken for the proposed development. It is concluded that dust emissions can be controlled to a standard that ensures that the development does not cause a significant impact in respect of nuisance relating to dust.

17. POPULATION AND HUMAN HEALTH

17.1. The proposals have and will continue to generate employment for the duration of the works, with aftercare of the park on completion of the works continuing to generate employment in the local area in the long term. Income generated by employees will be recycled into the local economy generating a new round of expenditure and demand. Additional positive impact on the local population come in the form of greater tranquility for the estate and a reduction in noise for those living there, but with the additional benefit of increased public access for the wider population.

18. CONCLUSIONS

18.1. Extensive technical studies have been undertaken to establish the environment of the application area and surrounding area on which to base a robust assessment of the potential environmental impacts of the development. The proposed development will confer considerable benefits to the wildlife and amenity of Knepp Park and its setting, and users of the site, including the public.