



14.0 Conclusion

14.1 Introduction

- 14.1.1 An EIA has been undertaken for the Proposed Development at Campdown, Purbrook, which has included an assessment of the likely significant environmental effects of those aspects of the environment likely to be affected.
- 14.1.2 The conclusions of the assessments, the assessment of cumulative and inter-relationship of effects and the mitigation measures are set out in the section below.

14.2 Traffic and Transport

- 14.2.1 Transport related effects during the construction phase will be appropriately mitigated, and therefore any residual effects are assessed as negligible, adverse and temporary.
- 14.2.2 Operationally, the designs of the access points to the Site have taken into consideration impacts upon drivers, seeking to minimise delay wherever practical. Mitigation against severance in the design includes pedestrian environment improvement through the provision of walking and cycling routes and modifications on College Road and Scratchface Lane. The provision of excellent walking and cycling routes through the masterplan will encourage existing residents to use the on-site facilities. The residual effects in relation to severance would therefore be **slight**, beneficial and permanent in nature.
- 14.2.3 The enhancement of pedestrian facilities around the Site, will likely result in a **slight** beneficial effect upon pedestrian amenity, although pedestrian delay will be impacted upon in a **slight** adverse manner due to the increase in traffic levels resulting from the Proposed Development.
- 14.2.4 Impacts upon Fear and Intimidation is considered to be **slight** beneficial, given the improvements to pedestrian facilities.

14.3 Air Quality

- 14.3.1 During the construction phase, it is anticipated that without mitigation and control measures, dust sensitive receptors will potentially experience increased levels of dust and particulate matter. However, these are predicted to be short term and temporary impacts. Throughout this period, the potential impacts from construction on air quality will be managed through site specific mitigation measures detailed within this assessment. With these mitigation measures in place, the effects from the construction phase are **not** predicted to be **significant**.
- 14.3.2 The assessment of the significance of the effects associated with both the committed and proposed developments with respect to traffic derived nitrogen dioxide exposure is determined to be 'negligible' for both existing and proposed receptors. With respect to predicted particulate matter exposure, the significance of the proposed development is determined to be '**negligible**' for both existing and proposed receptors.
- 14.3.3 The overall significance of potential impacts was determined to be **not significant**, in accordance with the EPUK and IAQM guidance.

14.4 Archaeology and Cultural Heritage

- 14.4.1 The archaeology and Cultural Heritage chapter identified the following assets: Littlepark Wood Roman Villa, Bevis' Grave Neolithic long barrow and early medieval cemetery, Fort Purbrook, The Towers, an undated Roman enclosure, a Roman road, a Roman trackway and the site of the Farlington Redoubt and Camp Down Admiralty Semaphore Station.

- 14.4.2 During the construction phase, a **minor** adverse effect for the Littlepark Wood Roman Villa, Fort Purbrook, the Roman Road and a **major** effect on potential unrecorded archaeology; which is considered to be significant.
- 14.4.3 Mitigation for the construction phase includes a programme of archaeological works, which would assist in further understanding the context of the potential archaeological assets and, proposed retention of open space surrounding the Roman Villa heritage site to reduce any potential significant effects on the heritage value of the asset. Additionally, good practice measures during the construction phase will reduce any significant effects on the adjacent heritage assets as far as practical.
- 14.4.4 During the operational phase, and following identified design and construction mitigation, any potential operational effects are reduced to a **minor** adverse effect and therefore **no significant** residual effects are likely.

14.5 Landscape and Visual Impact Assessment

- 14.5.1 Construction works would introduce new elements within the landscape and increase the level of activity within the area, therefore changing the landscape character on Site and surrounding area. Phasing of the works would mean that change to landscape character would occur gradually. Additionally, the proximity to the A3(M) and South Downs College means that new urban elements would not be alien to the setting. The residual effects during the construction phase on the landscape character are considered to be initially substantial, but the overall temporary effects would become **moderate**, but remain **significant** throughout the construction works.
- 14.5.2 In respect to visual receptors, six visual receptors were assessed. During the construction period potential effects are likely, especially to the users of College Road as pedestrians are more highly sensitive due to a slower travel speed and open nature of views. The use of Site hoarding will block views into the Site, and this would have a **Substantial to Minor** effect on pedestrians, depending on location, which would be Adverse in nature.
- 14.5.3 Once in operation, the Site hoarding will be taken down and views will be re-established but with new elements in them. The landscape proposals in and around the periphery of the residential area would mitigate the negative effects of development and with time the significance of effects would reduce. The magnitude of change would drop down to **Medium** with a **Moderate** effect, because although the proposed development will cause a notable change in the nature of the existing character, it would now be one of several elements in an overall setting.
- 14.5.4 The visual effects on private residents and visitors to Belmont Castle are considered to be less prominent once the Proposed Development is fully operational, nonetheless, due to the high sensitivity of the receptors, a significant residual effect of **major** significance was identified.

14.6 Ecology

- 14.6.1 A full suite of ecological surveys was carried out at the Site by qualified ecologists along with a desk study of information relating to local wildlife and designated sites within or adjacent to the Site. Surveys have been undertaken for bats, dormice, wintering birds.
- 14.6.2 During the construction phase, it was considered that works will be contained within the boundaries of the Site and as these will be temporary and short term, no effects on the designated sites were identified. Additionally, with the implementation of additional construction management, any potential effects derived from construction lighting which is likely to disturb a variety species, especially bats, will be mitigated.
- 14.6.1 The Proposed Development includes a number of enhancements proposed during the design stage. All of these enhancement measures would contribute to increasing the habitat diversity and therefore ecological



value of the Site and therefore represents a negligible residual effect on the ecological value of the Site and its surrounding area.

14.7 Noise

- 14.7.1 Noise from the construction phase will be controlled through a CEMP which will ensure that all construction work is carried out in accordance with good practice. The measures within the CEMP will ensure that any potential effects are temporary, local, adverse effects of neutral significance.
- 14.7.2 For the opening year, but without the development in place it is shown the majority of roads will be subject to the same magnitude of impact as they would through natural predicted growth.
- 14.7.3 Comparing the changes, as a whole, in road traffic noise levels as a result of the Proposed Development with the guidance contained in the DMRB, it can be shown that the magnitude of impact is categorised as short-term neutral to intermediate at the local level.
- 14.7.4 Operationally, without appropriate Site design, it is considered that a long-term minor to substantial adverse impact at the local level would be experienced in the garden areas of the proposed dwellings. For phase 1 of the development, the predicted external noise is considered to be of a neutral magnitude of impact. For the remaining phases, if the lowest practicable levels can be achieved through additional mitigation, the impacts should range between negligible and minor.
- 14.7.5 Within internal habitable rooms, a negligible long-term permanent impact at the local level can be achieved through the use of higher specification glazing and alternative ventilation, where required.
- 14.7.6 With regards to noise from the existing commercial units impacting upon proposed receptors, it is assumed that a long-term negligible impact can be achieved through suitable site design and mitigation measures at the local level.

14.8 Water Environment

- 14.8.1 One residual risk is the blockage of the surface water drainage system, as a result of surface water run-off generated by the Proposed Development. To minimise this risk, the onsite drainage system maintenance will be carried out by a private recognised management company through the implementation of an approved maintenance and management plan for the lifetime of the development.

14.9 Socio-economic and Health

- 14.9.1 The socio-economic and health assessment examined the effects derived from the Proposed Development.
- 14.9.2 During the construction phase, no significant adverse effects were identified, and it was considered that only beneficial effects in relation to construction employment opportunities will be present. The Proposed Development is likely to generate construction employment, considered essential for the economic development in the surrounding area.
- 14.9.3 During the operational phase, the Proposed Development would benefit from the increase in population and housing units by providing a range of high-quality housing and consequently a range of age groups in the area.
- 14.9.4 The Proposed Development was also considered to beneficially impact on the area by increasing the local expenditure and overall revenue generated through council tax and new homes bonus which would then be spent by the local authority on a range of facilities and services considered required in the area.
- 14.9.5 Significant adverse effects in relation to increased pressure on local educational facilities, especially primary-age and existing GP surgeries were identified. Nonetheless, it is anticipated that financial contributions would be made via Section 106 provisions to mitigate any potential pressure on the outlined services.

14.10 Cumulative Assessment

Additive and synergistic

- 14.10.1 The results of the transport assessment for junction improvements and access provision indicate that the existing junctions tested within the vicinity of the Site have capacity issues when committed development and background growth are added to the network.
- 14.10.2 Socio-economic assessment identified that significant beneficial residual effects are likely, especially in respect to housing provision and expenditure impacts.
- 14.10.3 There would be no residual significant additive and synergistic cumulative effects on heritage, landscape, ecology, air quality, noise or water environment.

In-combination effects

Construction

- 14.10.4 Effects during construction will be temporary and short term in nature. All standard best practice construction measures will be undertaken and managed through the implementation of a CEMP during the construction of the Proposed Development.

Operation

- 14.10.5 No operational effects in relation to cumulative in-combination effects are anticipated.

14.11 Summary

- 14.11.1 An assessment has been undertaken for the Proposed Development in respect to the scoped areas of potential environmental concern. This has shown that if the identified additional mitigation is implemented during the design, construction and operational stages of the development, the majority of operational and construction stage effects identified can be appropriately mitigated or compensated and reduced to a level which is not considered to be significant. Table 14.1 summarises the additional mitigation measures proposed, together with an indication of how these can be secured.
- 14.11.2 However, there remain a small number of effects that are still considered to be significant following additional mitigation. These effects are listed below:

Adverse

- Construction Landscape and Visual Effects:
 - Landscape Character of the Site and immediate setting;
 - VR1: Users of PROW26C;
 - VR3 – Users of College Road (pedestrians/ drivers/passengers);
 - VR5 – Residents of Belmont Castle Retirement Home;
 - VR3 – Users of College Road (pedestrians);
- Operation Landscape and Visual Effects: VR5 – Residents of Belmont Castle Retirement Home;
- Construction Archaeology and Cultural Heritage: Potential for unrecorded resources; and,
- Operation Socio-economic and Health: Healthcare provision.



Beneficial

- Operation Landscape and Visual Effects:
 - Landscape Character of the Site and immediate setting;
 - VR1 - Users of PROW26C;
- Construction Landscape and Visual Effects:
 - VR3 – Users of College Road (pedestrians/ drivers and passengers);
 - VR5 – Residents of Belmont Castle Retirement Home;
- Operation Socio-economic and Health:
 - Direct construction employment;
 - Housing impacts;
 - Expenditure and fiscal implications;
 - Open space and recreation.

14.11.3 In addition to the residually significant effects related to the Proposed Development at the Site, there are also a number of residually significant cumulative effects that have been identified. These effects are listed below:

- Cumulative construction beneficial effect: Construction employment;
- Cumulative operational beneficial effect: Housing provision; and,
- Cumulative operational beneficial effect: Expenditure.



Table 14.1 Summary of Method for Securing Additional Mitigation

Identified Effect where additional mitigation (Not design mitigation) has been identified	Type of additional mitigation measures (prevent, reduce, Offset, enhance)	Means by which mitigation measure may be secured	To be delivered by	Auditable by
Construction				
Air Quality Dust emissions from construction activities	Mitigation and Reduction Good working practices	Through CEMP secured through planning condition	Client as part of Construction	Discharge of Planning Condition
Noise	Mitigation and Reduction Good working practices	Through CEMP secured through planning condition	Client as part of Construction	Discharge of Planning Condition
Archaeology Loss of archaeological assets	Prevention and Reduction Phased programme of archaeological works Excavation, recording and analysis of archaeological features	Through geophysical surveys	Client as part of Construction	Discharge of Planning Condition
Operation				
Noise Road traffic noise	Prevention and Reduction Good acoustic design Reduction of speeds	Planning Conditions	Client	Discharge of Planning Conditions
Water Environment Water quality impacts	Prevention and Reduction Calculation of a nutrient budget to achieve nutrient neutrality Reed Beds (other options to be discussed with Natural England and HBC)	Planning Conditions	Client	Discharge of Planning Conditions
Socio-Economics and Health Increased pressure on the existing educational and healthcare facilities	Mitigation and Reduction Financial Contributions	Section 106 agreement	Client prior to Construction	Section 106 Agreement