



ASSOCIATED BRITISH PORTS

HILL & SMITH COMPOUND EXTENSION

ALEXANDRA DOCKS, NEWPORT

TECHNICAL REPORT TO INFORM HABITATS REGULATION ASSESSMENT

JUNE 2021

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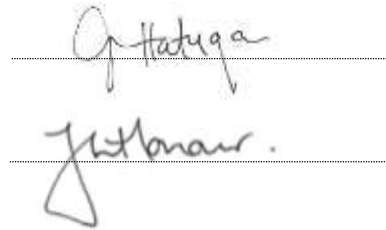
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EXECUTIVE SUMMARY

Associated British Ports (ABP) are looking to redevelop the Hill & Smith site at the Port of Newport. The development entails the dismantling and removal of portacabin offices and the construction of additional office buildings and associated infrastructure on existing hardstanding. The site will continue its present operations in the assembly of prefabricated steel to produce motorway barrier structures and as a storage area of such materials and barriers.

This report, prepared by Wardell Armstrong LLP, sets out the Habitat Regulations Assessment (HRA) Screening (Stage 1) and Appropriate Assessment (AA) (Stage 2) components of the HRA for the proposed development, which is centred on National Grid Reference ST 31108476.

The report considers whether any Likely Significant Adverse Effects (LSE) will arise from the Project on the Severn Estuary Special Area of Conservation (SAC), Special Protection Area (SPA), and Ramsar and the River Usk SAC. Impact pathways considered in the Screening (Stage 1) assessment are disturbance effects from noise, lighting, and reduced water quality.

The Stage 1 assessment considered that due to the scale and nature of the activities, noise and lighting impacts during the construction and operational phases of the development could not give rise to Likely Significant Adverse Effects (LSE) on the qualifying features of the designated sites and therefore noise and lighting effects will not be considered further through Stage 2 - Appropriate Assessment.

However, the impacts of potential contamination on the qualifying features of the designated sites during the construction phase was considered further through Stage 2 - Appropriate Assessment. This concluded that disturbance effects from reduced water quality can be mitigated by the implementation of construction industry best practice measures and through design and operational procedures of the manufacturing facility. Details of measures to be employed during the construction phase will be provided within a Construction Environmental Management Plan (CEMP). With the implementation of mitigation measures there will be no adverse disturbance effects arising from the project, or in combination with other developments, on the ecological integrity of the Severn Estuary SPA, SAC and Ramsar, and the River Usk SAC.

1 INTRODUCTION

1.1 Terms of Reference

1.1.1 Associated British Ports (ABP) are looking to redevelop the Hill & Smith site at the Port of Newport. The development entails the dismantling and removal of portacabin offices and the construction of additional office buildings and associated infrastructure. The site will continue its present operations in the assembly of prefabricated steel to produce motorway barrier structures and as a storage area of such materials and barriers.

1.1.2 The objective of Habitats Regulations Assessment (HRA) report is to identify any aspects of the development that would cause Likely Significant Adverse Effects (LSE) on the qualifying features of any relevant European sites identified as the Severn Estuary Special Area of Conservation (SAC), Special Protection Area (SPA), and Ramsar located approximately 360 m south of the development site at its closest point and the River Usk SAC located approximately 850 m to the south of the development site. Both European sites are hydraulically connected to the development site through the river Ebbw, and Alexandra Docks.

1.1.3 The recent 'People Over Wind' case ruling has been considered. In summary, this ruling states mitigation measures cannot be taken into account when considering the screening test for 'likely significant effects,' whereas it was previously standard practice that projects which may affect European sites could incorporate suitable mitigation measures at the screening stage.

1.1.4 Impact pathways are routes by which a change in activity as a result of the development can lead to an effect upon a European site. For the Severn Estuary SAC, SPA and Ramsar and the River Usk SAC, there are potential impact pathways on the qualifying habitat and supporting species from reduced water quality. Hence it is not possible to rule out LSE without considering mitigation, therefore appropriate assessment will be required.

1.2 Limitations

1.2.1 HRA assessment limitations relate to characterising effects and the risk of them occurring relating to the following parameters:

- The level of detail and stage of the Project implementation;

- The information published at the time about European Sites, the qualifying features, conservation status, habitat composition, distribution or extent, or species' population, abundance, distribution, mobility or behaviour etc;
- The age, type or format of data, and its availability;
- Timescales and seasonal constraints;
- Scientific understanding of natural processes and ecosystems, and understanding of likely effects and responses; and
- Details of other plans and projects that are not yet published or not in the public domain.

1.2.2 Therefore, there are likely to be differing levels of certainty in the predictions as to both the characteristics of the effects and the risk of their occurrence. If assumptions, which strongly influence the outcome of the assessment, are made about the plan or the qualifying features, or the effects of risks, they will be stated in this assessment report.

1.2.3 HRA is underpinned by the precautionary principle, whereby the Competent Authority (in this case Newport Council) acts to avoid potential harm in the face of scientific uncertainty. If it is not possible in a 'likely significant effect' test to rule out risk of significant effect on a European site on the basis of available evidence, then it should be assumed a risk may exist to be addressed at the next stage of HRA. The precautionary approach should be exercised at all stages of the assessment.

1.3 **Scope and Structure of Report**

1.3.1 This report, prepared by Wardell Armstrong LLP (WA), sets out the HRA Screening (Stage 1) and Appropriate Assessment (AA) (Stage 2) components of the HRA for the proposed development.

1.3.2 The objective of these assessments is to identify any aspects of the project that would cause LSE on the qualifying features of the European sites designated, specifically:

- Severn Estuary SPA and Ramsar;
- Severn Estuary SAC; and
- River Usk SAC.

1.3.3 The report is set out as follows:

- Section 2: sets out the **methodology** of the assessment including the objectives and scope of the assessment, the collection of baseline data, the prediction of impacts and identification and quantification of Likely Significant Effect (LSE), including in-combination effects;
- Section 3: summarises the **project proposals** which comprise the proposed development works;
- Section 4: provides details of **European Sites within 2km** of the project.
- Section 5: presents an initial **screening** of European sites to identify those for which potentially significant effects are predicted, and impact pathways that can lead to an effect upon a European site;
- Section 6: presents the **assessment of the impacts – AA** for the project on the European sites screened into the HRA; and
- Section 7: provides details of the **conclusions** of the HRA on the European sites.

1.3.4 This HRA report is presented as an Appendix to the Ecological Impact Assessment (EclA) report (WA, 2021)¹ prepared to support this application.

¹ WA, 2021. Hill & Smith Compound Extension Alexandra Docks, Newport. Ecological Impact Assessment.
Report number CA112034-V02

2 METHODOLOGY

2.1 Habitat Regulations Consenting and Assessment Process

- 2.1.1 As a result of the UK having left the European Union, the need for an assessment of impacts on European sites such as SACs and SPAs previously set out within Article 6 of the EC Habitats Directive 1992, remains. However, this process is now relevant to the nationally transposed legislation, the Conservation of Habitats and Species Regulations 2017 (as amended) and not the European Habitats Directive.
- 2.1.2 The Regulations apply the precautionary principle to the European sites. Plans and Projects can only be permitted having ascertained that there will be no adverse effect on the integrity of the site(s) in question. Plans and Projects with predicted adverse impacts on European sites may still be permitted if there are no alternatives to them and there are Imperative Reasons of Overriding Public Interest (IROPI) as to why they should go ahead. In such cases, compensation would be necessary to ensure the overall integrity of the site network.
- 2.1.3 In order to ascertain whether or not site integrity will be affected, an assessment should be undertaken of the Plan or Project in question. While the competent authority (e.g. Newport City Council) makes the formal decision as to whether adverse effects will result, they are entitled to request the applicant to produce necessary information to assist them. That is the purpose of this report.

Box 1. The legislative basis for Habitats Regulations Assessment

Conservation of Habitats and Species Regulations 2017 (as amended)

The Regulations state that:

24.—(1) Where it appears to the appropriate nature conservation body that a notice of a proposal under section 28E(1)(a) of the WCA 1981 relates to an operation which is or forms part of a plan or project which—

- (a) is likely to have a significant effect on a European site (either alone or in combination with other plans or projects), and
- (b) is not directly connected with or necessary to the management of that site, it must make an appropriate assessment of the implications for that site in view of that site's conservation objectives.

(2) In the light of the conclusions of the assessment, it may give consent for the operation only after having ascertained that the plan or project will not adversely affect the integrity of the site.

2.1.4 Over the years the phrase ‘Habitats Regulations Assessment’ (HRA) has come into wide currency to describe the overall process set out in the Conservation of Habitats and Species Regulations 2017 (as amended) from screening through to IROP. This has arisen in order to distinguish the process from the individual stage described in the law as an ‘Appropriate Assessment’ (AA). Throughout this report we use the term for the overall process and restrict the use of AA to the specific stage of that name.

2.2 Habitats Regulations Assessment Stages

2.2.1 HRA of projects can be broken down into three discrete stages, each of which effectively culminates in a test. The stages are sequential, and it is only necessary to progress to the following stage if a test is failed. The stages are:

Stage 1 – Likely Significant Effect (LSE) Screening Test

2.2.2 This is essentially a risk assessment, typically utilising existing data, records and specialist knowledge. The purpose of the test is to decide whether ‘full’ AA is required. The essential question is:

“ Is the project, either alone or in combination with other relevant projects and plans, likely to result in a significant [adverse] effect upon European sites?”

2.2.3 If it can be demonstrated that significant effects are unlikely, no further assessment is required. As a result of the People over Wind C-323/17 (Court of Justice of European Union, 12 April 2018) the ECJ have clarified that *...it is not appropriate at the screening stage, to take account of the measures intended to avoid or reduce the harmful effects of the plan or project on that site.*

2.2.4 The tasks undertaken to complete Stage 1 are:

- identification of European sites potentially affected by the proposed project;
- review of the proposed development works and identification of likely impacts;
- identification and consideration of other plans and projects; and
- an assessment of LSE.

Stage 2 – Appropriate Assessment (AA)

2.2.5 If it cannot be satisfactorily demonstrated that significant effects are unlikely, an AA will be required. This is focussed entirely upon the designated qualifying features of the European sites in question. The essential question here is:

“Will the project, either alone or in combination with other relevant projects and plans, actually result in an adverse effect upon the integrity of any European sites, without mitigation?”

2.2.6 If it is concluded that significant adverse effects will occur, measures will be required to either avoid the impact in the first place, or to mitigate the ecological effect to such an extent that it is no longer significant. Note that, unlike standard EclA, compensation for adverse effects (i.e. creation of alternative habitat) is not permitted at the AA stage.

Stage 3 - Assessment of alternative solutions

2.2.7 The process examines alternative ways of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of the European designated sites.

Stage 4: Assessment of compensatory measures – Imperative Reasons of Overriding Public Interest (IROPI) Test

2.2.8 If a project will have a significant adverse effect upon a European site, and this effect cannot be either avoided or mitigated, the project cannot proceed unless it passes the IROPI test. In order to pass the test, it must be objectively concluded that no alternative solutions exist. The project must be referred to Secretary of State on the grounds that there are IROPI as to why the project should nonetheless proceed.

Confirming Other Plans and Projects That May Act ‘In Combination’

2.2.9 It is a requirement of the Regulations that the impacts of any plans or projects being assessed are not considered in isolation but in combination with other plans and projects that may also be affecting the European site(s) in question.

2.2.10 In this case the Newport Local Plan is considered as being the major point of information for the in-combination assessment. The following is an extract from the Newport HRA² which informed the Newport Local Plan and summarises the way development in Newport can potentially impact upon European sites.

² Habitats Regulations Screening Report, Newport City Council, Newport Local Development Plan 2011-2026, Adopted Version, January 2015. Produced by Newport City Council in conjunction with Atkins Limited.

“Urbanisation Impacts and Recreational: Resulting from an expanding population within and around the Eastern Expansion Area, issues including disturbance from construction and an increased population, pollution (water, air, noise, light);

Land take: From proximal and adjacent development to European sites, including impacts on surrounding ‘buffer’ habitats/ green space areas not designated for European interest but part of wider habitats connectivity supporting site integrity (important when considering the features of the designated sites, e.g. otters require riparian habitat, bird features of the SPA and Ramsar require terrestrial habitat; **Water**

Resources and Water Quality: Resulting from increased demand for water consumption and discharge requirements arising from new/ expanded housing and commercial developments and the potential for increased point source pollution, changes to surface water/ run-off which may have implications for water dependant sites; and,

Atmospheric Pollution: Arising from a growth in traffic and transport and general development (emissions from construction/ building). Policies that lead to development could result in an increase of oxides of nitrogen (NOx) and sulphur dioxide (SOx)“.

2.2.11 It’s considered that the proposed development will have nugatory contribution to the impacts listed above.

2.2.12 In this case an in combination assessment has not been undertaken, given the separation distance, and the nugatory contribution of the proposed development towards any wider impact along with other developments (with mitigation in place for pollution control measures). In this regard it is considered that once basic pollution control measures are adopted there will be no contamination of the European site(s).

2.3 Data Collection (Evidence Base)

Literature Review

2.3.1 The evidence base to inform the assessment has been derived from a review of Newport Local Plan, and relevant published documents on the European sites and their Conservation Objectives.

Field Surveys

Habitat Survey

- 2.3.2 WA has undertaken an EclA of the application area and identified measures which will be implemented to minimise the significance of effects on the habitats and species because of the proposed development.
- 2.3.3 The EclA provides the methodology and results Extended Phase 1 Habitat Surveys of the application site undertaken in April 2021.
- 2.3.4 The Extended Phase 1 Habitat survey area included the terrestrial land within the proposed working area for the development is shown in Drawing number CA112034-007 (Habitat Plan) within the EclA.

2.4 Identification of Qualifying features and Conservation Objectives

- 2.4.1 Information on the qualifying features of the European sites were obtained from the Joint Nature Conservation Committee (JNCC) website (www.jncc.gov.uk).
- 2.4.2 Conservation Objectives are documents which set out Natural Resources Wales targets for designated site which have been devised to protect and enhance the species or habitats that led to the site's European designation.
- 2.4.3 These are very lengthy documents and have not been incorporated into this report but have been reviewed to identify those Conservation Objectives which are relevant to this assessment.

2.5 Prediction of Impact

- 2.5.1 Predicted impacts are characterised in accordance with the Chartered Institute of Ecology and Environmental Management (CIEEM, 2018) *'Guidelines for Ecological Impact Assessment (EclA) in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine, version 1.1.*
- 2.5.2 The CIEEM guidelines are considered by ecologists as the most appropriate methodology for predicting likely impacts on the qualifying features of European sites.

3 DESCRIPTION OF THE PROJECT

3.1 The Proposed Development

- 3.1.1 The planning application site occupies an area of approximately 5.6 ha and the proposals entail the dismantling of the existing portacabin offices and the erection of a stores unit (450 m² floor area), an additional open-fronted wash down area (225 m² floor area) and new portacabin offices (300 m² floor area). The existing washdown area, and the Top Deck Paint shop will be retained.
- 3.1.2 Associated infrastructure development include excavations for a new cesspool, drainage works and services associated with the southern development site Offices, Washdown Canopy and Store Building as shown on drawing number CA12034-006 (Indicative Primary Drainage Layout).
- 3.1.3 In keeping with the current use of the site, the application site will be continue to be utilised for two main purposes. The first purpose being the assembly of prefabricated steel to produce motorway barrier structures and the second purpose being the storage of such materials and barriers. In respect of the latter, it is necessary to increase the area that is set aside for storage and as such it is proposed that the site area is expanded northwards to incorporate land that is already used for such purposes elsewhere.
- 3.1.4 The erection of the new buildings will entail excavations within the concrete ground. This will be limited to the footprint of each building to the approximate depth of 1.5 m for the portacabin buildings and associated infrastructure and 2.0 m depth for the Store Building, Washdown Bay and Canopy,
- 3.1.5 Excavations for a circa 70,000 litre capacity cesspool, located to the south west of the site, will be approximately 4.5 m deep.
- 3.1.6 There will be some re-surfacing work and the northern site, mainly for low areas near the north and south site boundary, with possible excavations no deeper than 300mm.
- 3.1.7 The proposals will entail minimal changes to the existing external lighting scheme. The lighting to the existing washdown area, and general yard lighting will remain as it is.
- 3.1.8 Lighting will be mounted to the new proposed buildings (the new washdown and stores area in the south of the site and the new portacabin offices in the south east of the site) but as these facilities are replacements for existing facilities, the replacement lighting will not result in an increase in lighting levels in these locations.

- 3.1.9 Additional new external lighting will be mounted on low columns next to the new car park area and along pedestrian routes around the car park in the south east of the site.
- 3.1.10 There is no project programme yet in place, but its currently envisaged that the works will take place before August 2022.
- 3.1.11 During the operational phase of the development, no night time working will be undertaken during hours of darkness.
- 3.1.12 Surface water will be managed by a Sustainable Drainage System (SuDs) which will be designed to meet current Statutory SuDs Standards. The SuDS scheme will be approved by the SuDS Approving Body (SAB) which will be subject to NRW consultation.

4 EUROPEAN SITES WITHIN 2KM OF THE PROJECT

4.1.1 As detailed in the EclA, SEWBReC identified the Severn Estuary SAC, SPA and Ramsar and the River Usk SAC within 2km of the application site. A plan showing their boundaries in relation to the application area is shown drawing CA12034-008.

4.1.2 A summary of reasons for the European site's designation is provided in paragraphs 4.1.3 to 4.1.6. Information on the conservation objectives for each site is detailed in section 4.2.

Severn Estuary SAC, SPA, Ramsar and the River Usk SAC

4.1.3 The Severn Estuary SAC, SPA, Ramsar site is located approximately 360 m south of the development site at its closest point. The Severn Estuary is designated for its marine habitats, fish species (refer to paragraph 4.1.6) and wintering bird populations it supports.

4.1.4 The Severn Estuary is also designated for the following habitats:

- Sandbanks which are slightly covered by sea water all the time (Severn Estuary SAC and Ramsar);
- Subtidal sandbanks (SAC and Ramsar);
- Estuaries (SAC and Ramsar);
- Mudflats and sandflats not covered by seawater at low tide; intertidal mudflats and sandflats (SAC and Ramsar);
- Reefs/rocky platforms (SAC); and
- Atlantic salt meadows (SAC and Ramsar).

4.1.5 The River Usk SAC is located approximately 850m to the south of the development site. The River Usk is designated as a watercourse of plain to montane levels with the *Ranunculion fluitantis* (aquatic mosses) and *Callitriche-Batrachion* (water-starwort) vegetation. The River Usk is also an important site for otters *Lutra lutra* which is a qualifying feature of this designation along with fish species, as detailed in paragraph 4.1.6 below.

4.1.6 The following species are qualifying features of the Severn Estuary SAC, SPA, Ramsar and the River Usk SAC as listed below:

- Sea lamprey *Petromyzon marinus* (Severn Estuary SAC, Ramsar / River Usk SAC);

- River lamprey *Lampetra fluviatillis* (Severn Estuary SAC, Ramsar / River Usk SAC and SSSI);
- Atlantic salmon *Salmo salar* (Severn Estuary Ramsar / River Usk SAC);
- Twaité shad *Alosa fallax* (Severn Estuary SAC, Ramsar / River Usk SAC);
- European eel *Anguilla Anguilla* (Severn Estuary Ramsar);
- Allis shad *Alosa alosa* (Severn Estuary Ramsar / River Usk SAC);
- Sea trout *Salmo trutta* (Severn Estuary Ramsar);
- Bewick's swan (Non-breeding) *Cygnus columbianus bewickii* (Severn Estuary SPA and Ramsar)
- Common shelduck (Non-breeding) *Tadorna tadorna* (Severn Estuary SPA and Ramsar);
- Gadwall (Non-breeding) *Anas Strepera* (Severn Estuary SPA and Ramsar);
- Dunlin (Non-breeding) *Calidris alpina alpina* (Severn Estuary SPA and Ramsar);
- Common redshank (Non-breeding) *Tringa tetanus* (Severn Estuary SPA and Ramsar);
- Greater white-fronted goose (Non-breeding); *Anser albifrons albifrons* (Severn Estuary SPA, Ramsar); and
- Waterbird assemblage (Severn Estuary SPA and Ramsar).

4.2 Conservation Objectives of the Designated Sites

Severn Estuary SPA and SAC

4.2.1 The Conservation Objectives for the Severn Estuary SAC and SPA are intended to “ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- *The extent and distribution of the habitats of the qualifying features;*
- *The structure and function of the habitats of the qualifying features;*
- *The supporting processes on which the habitats of the qualifying features rely;*
- *The populations of the qualifying features; and*

- *The distribution of the qualifying features within the site”.*

Severn Estuary Ramsar

4.2.2 There are no specific Conservation Objectives for the Severn Estuary Ramsar site listed on the citation. However, Ramsar sites are designated under the Convention on Wetlands of International Importance with broad objectives to stem the loss and progressive encroachment on wetlands now and in the future. As several features of the Ramsar overlap with those of the Severn Estuary SPA and SAC, the conservation objectives for would be the same as for these designations.

River Usk SAC

4.2.3 As described in section 4.2, the generic conservation objectives of the SAC are to *“ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features by maintaining or restoring”* the ecological parameters the habitats and species operate within.

4.2.4 Below is an extract from the Core Management Plan (March 2008) for the River Usk SAC. It provides a descriptive overview of what needs to be achieved for conservation on the site.

Extract:

“Our vision for the River Usk SAC is to maintain, or where necessary restore the river to high ecological status, including its largely unmodified and undisturbed physical character, so that all of its special features are able to sustain themselves in the long term as part of a naturally functioning ecosystem. Allowing the natural processes of erosion and deposition to operate without undue interference and maintaining or restoring connectivity maintains the physical river habitat, which forms the foundation for this ecosystem. The quality and quantity of water, including natural flow variability, and the quality of adjacent habitats, are maintained or restored to a level necessary to maintain the features in favourable condition for the foreseeable future. In places such as urban environments where natural processes are likely to cause significant damage to the public interest, artificial control measures are likely to be required.

The aquatic plant communities that characterise parts of the river are not only attractive but also give a good indication of the overall quality of the environment. They contain the variety and abundance of species expected for this type of river, in conditions of suitably clean water and bed substrate combined with a relatively stable

flow regime. Locally, there are patches of white-flowered water-crowfoots. In the more shaded reaches, aquatic plants may be scarce, consisting mainly of mosses and liverworts.

The special fish species found in the river, both residents such as the bullhead and brook lamprey, and migratory species such as the Atlantic salmon, sea lamprey and shad, which swim up river to spawn and go through their juvenile stages in the river, are present in numbers that reflect a healthy and sustainable population supported by well-distributed good quality habitat. The migratory fish are able to complete their migrations and life cycles largely unhindered by artificial barriers such as weirs, pollution, or depleted flows.

The abundance of prey and widespread availability of undisturbed resting and breeding sites, allows a large otter population to thrive. They are found along the entire length of the river and its main tributaries.

The presence of the River Usk SAC and its special wildlife enhances the economic and social values of the area, by providing a high quality environment for ecotourism, outdoor activities and peaceful enjoyment by local people and visitors. The river catchment's functions of controlling flooding and supplying clean water are recognised and promoted through appropriate land management. The river is a focus for education to promote increased understanding of its biodiversity and the essential life support functions of its ecosystems."

5 STAGE 1 - LIKELY SIGNIFICANT EFFECT (LSE) SCREENING TEST

5.1 Likely Significant Effect (LSE) Screening Test

5.1.1 The aim of the LSE test is to determine whether the project either alone, or in combination with other plans and projects, is likely to result in a significant effect on the qualifying features of European designated sites. The key questions asked are:

- Would the effect undermine the conservation objectives for the site?
- Can significant effects be excluded on the basis of objective information?

5.2 Impact Pathways

5.2.1 The HRA screening assessment will indicate the possible impact pathways through which the project may impact upon relevant European site features.

5.2.2 Each designated feature is identified from the available official European sites designation documents and the screening assessment is made in view of the conservation objectives for the European site(s) concerned, as set out in either the current NRW Core Management Plan for a terrestrial National site, or in NRW's extant advice issued under Regulation 35 (or 37) of the Conservation of Habitats and Species Regulations 2010 (or 2017) for a marine National site.

5.2.3 In broad terms, predicting potential impacts has involved assessing the activities associated with the construction and operational phases of the proposed development against the conservation objectives of relevant European sites that fall within 2km of the works area.

5.3 Severn Estuary SPA, SAC, Ramsar and River Usk SAC

5.3.1 The proposed development has the potential to impact directly on the qualifying features (habitats and species) for which sites are designated, through disturbance from noise, vibration and light, and dust emissions levels and reducing water quality through contamination. Impacts arising from the development are associated with the construction and operational phases as outlined below.

Disturbance to Qualifying Species from Noise and vibration

5.3.2 Sudden high levels of noise, in particular from concrete breaking operations have the potential to cause disturbance to birds during construction. A bird's ability to respond to disturbance varies depending on the species, flock size, habitat, cold weather and food availability. The frequency of the disturbance event will also affect the extent to

which birds using the SPA and Ramsar can habituate to noise. The severity of this temporary adverse impact will also depend on the timing of the construction works and is considered to be of greater significance if construction is undertaken between November and February.

- 5.3.3 The development is located approximately 360 m from the Severn Estuary SPA boundary. No piling activities are proposed but there will be some construction noise generated to excavate the foundations for the new building structures. As there are significant building structures located between the proposed construction area and the SPA, and the excavation work is small in scale and temporary, it is considered that there will be no likely significant effect on water birds due to these buildings providing a noise barrier to the works.
- 5.3.4 In general, underwater noise and vibration caused by construction activities has the potential to disturb fish species which could adversely affect their migration and otter if using the designated sites. However, as the development site is not located immediately adjacent to the Severn Estuary and River Usk designations and construction will not take place within or immediately adjacent to these watercourses or banks and mudflats, there will be no likely significant adverse effect on these species from noise or vibration during construction of the development.
- 5.3.5 Noise levels post construction will remain at similar levels to the existing situation therefore no likely significant adverse effect on the qualifying fauna species of the designations from the proposed development is predicted.
- 5.3.6 **It is therefore considered that noise impacts during the construction and operational phases of the development could not give rise to LSE on the qualifying features of the SPA and Ramsar and therefore noise and vibration effects are not considered further through Stage 2 - AA.**

Effects to Qualifying Species from Dust

- 5.3.7 There is potential that construction activities, such as the breakup and removal of hard ground, could generate elevated levels of dust beyond the site boundary and directly affect flora and qualifying habitats within the European designations by covering vegetation and reducing the plants ability to photosynthesise and perform other biological functions. This could also indirectly affect the SPA and Ramsar birds that are using these habitats for foraging and breeding and potentially otter if using riparian habitat.

5.3.8 With regards to ecological receptors, the Institute of Air Quality Management Guidance³ states that an air quality assessment will normally be required where there are existing ecological receptors within 50m of a site boundary and/or within 50m of the route(s) used by construction vehicles on the public highway and up to 500m from a site entrance(s). **As there are no European designations within the distances described above, and due to the scale and nature of the development, no LSE from dust emissions on the European designations are predicted and therefore dust effects are not considered further through Stage 2 - AA.**

Disturbance to Qualifying Species from Lighting

5.3.9 Increased light levels during the construction and operational phases of the development have the potential to disturb otters and wintering birds which may use the European designations, if works are undertaken during hours of darkness between November and February.

5.3.10 During the construction phase, security lighting will be kept to a minimum and directed away from western boundaries. Other construction phase lighting will be restricted to working hours and will avoid disturbance on adjacent sensitive ecological receptors.

5.3.11 The proposals will entail minimal changes to the existing external lighting scheme. The lighting to the existing washdown area, and general yard lighting will remain unchanged. Lighting mounted on the proposed new buildings (the new washdown and stores area in the southern part of the site and the new offices in the south east of the site) will replace existing lighting so there will be no increase in light levels at these locations.

5.3.12 There will be new lighting introduced to the new car park area and along pedestrian routes around the south east of the car park, but these will be mounted on low columns reducing light spill.

5.3.13 No lighting is proposed to remain on throughout the hours of darkness i.e. outside working hours.

³ Institute of Air Quality Management (IAQM) Guidance on “The Assessment of Dust from Demolition and Construction” February 2014.

5.3.14 In addition, the scrub vegetation along the western boundary, and its extent, will provide some screening of light levels during the operational phases of the development.

5.3.15 It is therefore considered that lighting impacts during the construction and operational phases of the development could not give rise to LSE on the qualifying features of the SPA and Ramsar and therefore will not be considered further through Stage 2 - AA.

Effects upon Qualifying Features from Adverse Water Quality

5.3.16 The proposed development site is directly adjacent east of the River Ebbw which joins the River Usk before flowing into the Severn Estuary. It's also hydraulically connected to through drainage that connects to Alexandra docks which in turn are connected to the River Usk SAC.

5.3.17 The development will mostly entail erecting prefabricated buildings on site, with small scale excavation levels. However, given the proximity of the Severn Estuary and River Usk designations and connectivity via the River Ebbw, there is potential for oils and other materials such as cement, concrete, paints and solvents to enter the marine environment during the construction resulting in reduced water quality and damage to habitats of the designated sites. This could result in a LSE on the habitat condition of the designations. In addition, fish, wintering birds and otter using the habitats of the designated sites could subsequently be adversely affected from contaminants resulting in LSE on these species.

5.3.18 Water quality of surface run off may be reduced during the operational phase however the Sustainable Urban Drainage System (SuDS) will be designed and built in accordance with statutory national standards, and will be subject to a consenting procedure with NRW consulted on the application.

5.3.19 With the following appropriate design standards, no LSE on water quality of the designated sites is considered likely during the operational phase of the development.

5.3.20 The impacts of potential contamination on the qualifying habitats and species of the Severn Estuary SPA, SAC and Ramsar and River Usk SAC during the construction phase will therefore be considered further through Stage 2 - AA.

Summary of LSE Screened In/Out

5.3.21 Based on the development proposals and the information on the European sites

within Section 4, Table 1 summarises the LSE which have been screened in /out of further assessment for the Severn Estuary SPA, SAC and Ramsar and the River Usk SAC.

Table 1: Summary of Screening Likely Significant Effects			
Designated Site	Relevant Qualifying Feature	Potential Impact	Likely Significant Effect in the absence of Mitigation?
Severn Estuary SPA (and component SSSI)	Gadwall	Temporary disturbance to qualifying birds from construction noise and vibration.	No – no LSE to SPA birds due to distance, existing buildings acting as noise barriers and scale of noise and vibration.
	Greater white-fronted goose		
	Dunlin	Disturbance to qualifying birds from operational noise.	No – operational phase noise will be similar to current noise levels therefore no LSE predicted on qualifying features.
	Bewick’s swan		
	Common shelduck	Dust emissions during construction activities.	No – no LSE on foraging /roosting habitats which could potentially be used by qualifying birds.
	Common redshank		
	Over wintering bird assemblage	Dust emissions during operational phase.	No – no LSE on foraging /roosting habitats which could potentially be used by qualifying birds.
	Increased light levels during the construction phase have the potential to temporarily disturb wintering birds if the construction works are undertaken during hours of darkness between November and February.	No – no LSE as works due to buffering effect adjacent scrub habitat.	
	Any increase in light levels at the western boundary during operation phase may have the potential to disturb wintering birds.	No- no LSE predicted on qualifying features as the operational phase lighting will be similar to the current lighting levels.	
	Changes to water quality during construction activities affecting qualifying habitats and species.	Yes –LSE because of potential for accidental contamination during construction effecting	

Table 1: Summary of Screening Likely Significant Effects

<i>Designated Site</i>	<i>Relevant Qualifying Feature</i>	<i>Potential Impact</i>	<i>Likely Significant Effect in the absence of Mitigation?</i>
			qualifying habitats and species.
		Changes to water quality during operational phase of the development affecting qualifying habitats and species.	No – no LSE with the implementation of appropriate SUDs design standards, no LSE on water quality and the qualifying features of the designated site is considered likely during the operational phase of the development.
Severn Estuary SAC	Estuaries Mudflats and sandflats Atlantic salt meadows Sea lamprey River lamprey Twaite shad	Dust emissions during construction activities.	No – no LSE on flora and habitats.
		Dust emissions during operational phase.	No – no LSE on flora and habitats.
		Changes to water quality during construction activities affecting qualifying habitats and species.	YES – there is potential for LSE on qualifying features in the absence of mitigation.
		Changes to water quality during operational phase of the development affecting qualifying habitats and species.	No – no LSE with following appropriate design standards.
		Temporary disturbance to Ramsar qualifying features from construction noise and vibration.	No – no LSE to Ramsar birds due to distance, existing buildings acting as noise barriers and scale of noise and vibration.
		Disturbance to qualifying birds from operational noise.	No – operational phase noise will be similar to current noise levels therefore no LSE predicted on qualifying features.
Severn Estuary Ramsar	Sandbanks Estuaries	Dust emissions during construction activities.	No – no LSE on habitats potentially used by

Table 1: Summary of Screening Likely Significant Effects

<i>Designated Site</i>	<i>Relevant Qualifying Feature</i>	<i>Potential Impact</i>	<i>Likely Significant Effect in the absence of Mitigation?</i>
	Mudflats and sandflats Atlantic salt meadows Atlantic salmon		qualifying species due to distance and buffer from adjacent scrub.
	Sea trout Sea lamprey River lamprey Allis shad Twaite shad Eel	Dust emissions during operational phase.	No – no LSE on nearby foraging /roosting habitats which could potentially be used by qualifying birds due to distance and buffer from adjacent scrub.
	Waterfowl (peak counts in winter) Tundra swan Greater white-fronted goose Common shelduck Gadwall Dunlin Common redshank	Increased light levels during the construction phase have the potential to temporarily disturb wintering birds if the construction works are undertaken during hours of darkness between November and February.	No – no LSE due to buffering effect adjacent scrub habitat. During the operational phase, no night-time working are undertaken during hours of darkness between November and February.
	Lesser black-backed gull (breeding season) Ringed plover (peak count spring/autumn) Teal (peak counts in winter) Northern pintail (peak counts in winter)	Increased light levels during the operation phase have the potential to disturb wintering birds if lighting is not directed away from the western boundary.	No operational phase lighting will be similar to current lighting levels therefore no LSE on qualifying features predicted.
	Allis shad Twaite shad River lamprey Sea lamprey	Changes to water quality during construction activities affecting qualifying habitats and species.	YES – LSE on qualifying features during construction phase.
		Changes to water quality during operational phase of the development affecting qualifying habitats and species.	No – no LSE with the appropriate design standards.
		Changes to air quality during operational phase of the development affecting qualifying habitats and species.	No – no LSE on flora and habitats due to separation distance.

Table 1: Summary of Screening Likely Significant Effects			
Designated Site	Relevant Qualifying Feature	Potential Impact	Likely Significant Effect in the absence of Mitigation?
		Temporary disturbance to qualifying species from construction noise and vibration.	No – no LSE to SAC qualifying features due to distance and scale of noise and vibration.
		Disturbance to qualifying species during operational phase from operation noise and vibration.	No – no LSE to SAC qualifying features due to distance and scale of noise and vibration.
River Usk SAC	Water courses of plain to montane levels with the <i>Ranunculus fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation Sea lamprey Brook lamprey River lamprey Twaite shad Atlantic salmon Bullhead Otter Allis shad	Dust emissions during construction activities.	No - no LSE to SAC on qualifying features due to distance.
		Dust emissions during operational phase.	No - no LSE to SAC on qualifying features due to distance.
		Changes to water quality during construction activities affecting interest habitats and species.	YES – there is LSE on qualifying features during construction phase.
		Changes to water quality during operational phase of the development affecting interest habitats and species.	No – no LSE with the following appropriate design standards.
		Changes to air quality during operational phase of the development affecting interest habitats and species.	No potential for LSE on interest habitats and species.

6 STAGE 2 - APPROPRIATE ASSESSMENT (AA)

6.1.1 The following aspects of a proposed development which may affect a European site should be included in the scope of assessment:

- All works within the designated site boundary; and
- Construction and operational phases of the development outside of the designated site boundary but linked through a known impact pathways; and
- The Severn Estuary SPA, SAC and Ramsar and the River Usk SAC are screened into the AA because the LSE Screening Test concludes that the construction and operation of the proposed development of the proposed development could result in LSE from disturbance effects from reduced water quality on the designations. The severity of these effects, and proposed mitigation is discussed below.

6.1.2 Details of mitigation measures to be employed during the construction phase will be provided within a Construction Environmental Management Plan (CEMP) to be produced by the contractor.

6.2 Assessing the Impacts

6.2.1 The HRA LSE Screening test considered whether the impacts arising from the construction and operation of the proposed development are likely to significantly affect the qualifying features of the European sites identified within 2km of the site.

6.2.2 The following sections details the further analysis undertaken against the conservation objectives for the Severn Estuary SPA, SAC and Ramsar and the River Usk SAC to determine whether the likely significant effects identified will “ *actually result in an adverse effect upon the integrity of any European site, without mitigation*”.

Water quality

6.2.3 The proposed development site lies outside of the boundary of the designations, however given their proximity and connectivity via the River Ebbw, there is the potential for water quality to be reduced through contamination during construction.

6.2.4 Water pollution/reduced water quality could adversely affect:

- Structure and function of qualifying natural habitats and habitats of qualifying species (i.e. increasing turbidity of water column, contaminating habitat and food sources, or affecting populations that may act as food sources of SPA and Ramsar

qualifying features);

- Supporting processes on which qualifying natural habitats and habitats of qualifying species rely (i.e. smothering habitat/vegetation which could be used by SPA and Ramsar qualifying species);
- Populations of qualifying species (i.e. altering habitats and food sources affecting breeding/survival rates of SPA and Ramsar qualifying features); and
- Distribution of qualifying species within the designation (i.e. avoidance of breeding/foraging/roosting habitat).

Avoidance and Mitigation Measures

6.2.5 Water pollution will be minimised and controlled through construction activity method statements and risk assessments which will follow construction industry best practice guidance such as those described in 'Guidance for Pollution Prevention: Works and Maintenance in or near Water' (GPP5⁴).

6.2.6 All plant will be well maintained to limit leakage from engines or hydraulic systems. Spill kits will be carried to contain any accidental releases. Refuelling will be undertaken in designated areas where any spills can be contained. Pumps and other similar equipment will be placed on drip trays with refuelling undertaken following strict procedures for spill control.

6.2.7 Chemicals and other construction materials will be stored and contained in areas where they will not be easily mobilised to reach the water. Procedures for the use of specific materials will be developed to reduce the risk of accidental release and ensure that water quality is appropriately protected.

6.2.8 Construction staff will remain within the works area and vehicles will be parked away from the River Ebbw.

6.2.9 All the above measures will be specified in a CEMP for the construction works.

Significance of Effect After Mitigation

6.2.10 Adverse effects from water pollution on the qualifying features of European

⁴ Natural Resources Wales (NRW), the Northern Ireland Environment Agency (NIEA) and the Scottish Environment Protection Agency (SEPA). *Guidance for Pollution Prevention: Works and Maintenance in or near Water; Version 1.2, February 2018.*

designations will be successfully mitigated with the implementation of best practice pollution control measures with reference to current industry standard guidance. Therefore, there will be no LSE from water quality on the ecological integrity of the Severn Estuary SPA, SAC and Ramsar and River Usk SAC from the development.

- 6.2.11 As the mitigation control measures will ensure no input of contaminants there will be no contribution from the proposed development to any wider in-combination impact. The Assessment can therefore conclude at 'Stage 2' (Appropriate Assessment).

7 HRA SUMMARY AND CONCLUSIONS

7.1.1 The AA has concluded that the identified disturbance effects from water pollution can be mitigated by the implementation of construction industry best practice measures and through design and operational procedures. Details of these measures would be provided within a CEMP which would require approval by the Local Planning Authority prior to commencement of the works. As a result, there will be no adverse disturbance effects arising from the project alone and in combination with other development sites on the ecological integrity of the Severn Estuary SPA, SAC and Ramsar and River Usk SAC.

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