

Habitats Regulations Assessment (HRA)

Application reference:	17/02368/FUL
Application address:	Former Redbridge Sidings Old Redbridge Road Southampton
Application description:	Change of use of land from open space and landscaping into operational railway use and construction of new railway sidings, with associated works and proposed change of use of Network Rail land to public open space (resubmission 15/00306/FUL) - Amended submission following initial consultation.
HRA completion date:	18/06/2018

HRA completed by:	
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Section 1 - details of the plan or project	
<p>European sites potentially impacted by plan or project:</p> <p>European Site descriptions are available in Appendix II of the Portsmouth Plan's Habitats Regulations Assessment, which is on the city council's website at portsmouth.gov.uk/living/7923.html.</p>	<ul style="list-style-type: none"> ▪ Solent and Southampton Water Special Protection Area (SPA) ▪ Solent and Southampton Water Ramsar Site ▪ Solent Maritime SAC ▪ Solent and Dorset Coast potential Special Protection Area (pSPA) ▪ River Itchen SAC
<p>Is the project or plan directly connected with or necessary to the management of the site (provide details)?</p>	<p>No, the project involves the change use of land from open space to operational railway use and construction of new railway sidings which are neither connected to, nor necessary for, the management of any European site.</p>
<p>Are there any other projects or plans that together with the project or plan being assessed could affect the site (provide details)?</p>	<ul style="list-style-type: none"> ▪ Southampton Core Strategy (amended 2015) (http://www.southampton.gov.uk/policies/Amended-Core-Strategy-inc-CSPR-%20Final-13-03-2015.pdf) ▪ City Centre Action Plan (http://www.southampton.gov.uk/planning/planning-policy/adopted-plans/city-centre-action-plan.aspx) <p>Southampton aims to provide a total of 16,300 net additional dwellings across the city between 2006 and 2026 as set out in the Amended Core Strategy.</p>

- South Hampshire Strategy
(http://www.push.gov.uk/work/housing-and-planning/south_hampshire_strategy.htm)

The South Hampshire Strategy plans for 55,200 new homes, 580,000m² of office development and 550,000m² of manufacturing or distribution floorspace across the South Hampshire area between 2011 and 2026.

Whilst the dates of the two plans do not align, it is clear that the proposed extension of the Redbridge railway sidings is part of a far wider reaching development strategy for the South Hampshire sub-region which will result in a sizeable increase in population and economic activity.

Regulation 68 of the Conservation of Habitats and Species Regulations 2010 (as amended) (the Habitats Regulations) is clear that the assessment provisions, i.e. Regulation 61 of the same regulations, apply in relation to granting planning permission on an application under Part 3 of the TCPA 1990. The assessment below constitutes the City Council's assessment of the implications of the development described above on the identified European sites, which is set out in Regulation 61 of the Habitats Regulations.

Section 2 - Assessment of implications for European sites

Test 1: the likelihood of a significant effect

This test is to determine whether or not any possible effect could constitute a significant effect on a European site as set out in Regulation 61(1)(a) of the Habitats Regulations.

The proposed development is located approximately 20m to the east of the Solent and Dorset Coast pSPA and 115m to the north-east of a unit of the Solent and Southampton Water SPA/Ramsar site and the Solent Maritime SAC. Atlantic salmon, a feature of the River Itchen SAC, use the lower reaches of the River Test.

A full list of the qualifying features for each site is provided at the end of this report. The development could have implications for these sites which could be both temporary, arising from construction activity, or permanent arising from the on-going impact of the development when built.

The Redbridge Sidings Habitat Regulations Assessment (April 2018) identified the following impact pathways:

- Construction disturbance through light, noise and visual presence;
- Change in air quality through nitrous oxide emissions from plant during construction and rail engines during operation and dust emissions during operation;
- Changes in water quality through surface water runoff and fuel and chemical spillage; and,
- Increased recreational pressure on nearby European designated sites through displacement of dog walkers onto SAC/SPA/Ramsar habitats.

A number of avoidance and mitigation measures are set out in the Redbridge Sidings Habitat Regulations Assessment (April 2018), AECOM, which are summarised as follows:

Construction phase

Preparation of a Construction Environmental Management Plan (CEMP) to include details of:

- Working methods to reduce noise disturbance;
- Procedures for safe handling and storage of materials;
- Use of screening to remove noise, light and visual impacts;
- A lighting plan;
- Timing of works;
- Dust management practices;
- Control of surface water run-off;
- Safe handling of chemicals and refuelling to minimise spillage risk
- Safety procedures to deal with chemical spills.

Operational

- Provision of replacement public open space through the creation of a pocket park
- Installation of a sustainable drainage system to safeguard water quantity and quality in the River Test.

Conclusions regarding the likelihood of a significant effect

This is to summarise whether or not there is a likelihood of a significant effect on a European site as set out in Regulation 61(1)(a) of the Habitats Regulations.

The project being assessed would result in the extension of two existing railway sidings at Redbridge Railway Station, which are in close proximity to a section of the Solent Maritime SAC, the Solent and Southampton SPA/Ramsar site and the Solent and Dorset Coast pSPA, to enable longer freight trains to be accommodated.

The development site currently comprises existing railway sidings and an area of public open space. Without mitigation the proposed development is likely to result in new permanent impacts caused by an increase in recreational pressure as a consequence of a reduction in the extent of the open space leading to displacement of dog walking activity. There will also be a range of temporary impacts arising from the construction activities. As a consequence, the precautionary principle applies.

The applicant has provided details of several avoidance and mitigation measures which are intended to reduce the identified impacts. However, without more detailed analysis, it is not possible to determine whether the proposed measures are sufficient to reduce the identified impacts to a level where they could be considered not to result in a significant effect on the identified European sites. Overall, there is the potential presence of both temporary and permanent impacts which could be at a sufficient level to be considered significant. As such, a full appropriate assessment of the implications for the identified European sites is required before the scheme can be authorised.

Test 2: an appropriate assessment of the implications of the development for the identified European sites in view of those sites' conservation objectives

The analysis below constitutes the city council's assessment under Regulation 61(1) of the Habitats Regulations

The identified potential effects are examined below to determine the implications for the identified European sites in line with their conservation objectives and whether the proposed avoidance and mitigation measures are sufficient to remove any potential impacts.

In order to make a full and complete assessment, it is necessary to consider the relevant conservation objectives. These are available on Natural England's web pages at <http://publications.naturalengland.org.uk/category/6528471664689152> .

The conservation objective for Special Protection Areas is to, "Avoid the deterioration of the habitats of the qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive." Whilst the conservation objective for the Special Areas of Conservation is to, "Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features."

Ramsar sites do not have a specific conservation objective however, under the National Planning Policy Framework (NPPF), they are considered to have the same status as European sites.

TEMPORARY, CONSTRUCTION BASED EFFECTS

Disturbance

This includes physical disturbance, visual disturbance, noise and vibration arising from construction activities. These impacts have the potential to lead to a significant effect upon the Solent and Southampton Water SPA and Ramsar site, the Solent and Dorset Coast pSPA and species for which the River Itchen SAC is designated.

Solent and Southampton Water SPA/Ramsar site

The habitats for which the Ramsar site is designated are not vulnerable to light, visual or noise disturbance. Construction of the sidings extension will not involve piling works therefore no vibration impacts are expected during construction.

The application site consists of an existing railway siding and an area of public open space. Whilst there is likely to be a high level of background noise this will be more constant than the sudden sharp noise of pneumatic drills or hammers for example. Such noise has the potential to cause birds on the inter-tidal area to cease feeding or even fly away. This in turn leads to a reduction in the birds' energy intake and/or increased expenditure of energy which can adversely affect their survival.

A number of mitigation measures are proposed to remove adverse noise impacts, these are as follows:

- all plant and equipment is located away from sensitive receptors;
- plant is maintained to a high standard to reduce noise emissions;
- turning off plant when not in use; and
- use of localised noise reducing screening to ensure noise disturbance is minimal.

The construction works will be undertaken over a period of approximately twelve consecutive weekends and is currently scheduled to be undertaken during the autumn months when the migratory birds will have returned for the winter. It is anticipated that the proposed mitigation measures will be sufficient to prevent adverse effects from noise impacts under average weather conditions, however, if severe weather is experienced (0

degrees Celsius or lower night time minimum temperature for three consecutive days) works will be suspended.

Vibration is unlikely to be a significant disturbance factor as the construction work will not involve piling.

Visual disturbance: The majority of the development site will benefit from screening by a line of trees, in addition the distance between the application site and the inter-tidal area is over 100m which means that visual disturbance is unlikely to be a major factor. However, the developer proposes to install screening around the site which will reduce this risk to a negligible level. The fencing will also help to reduce the impact of light disturbance. In addition, a lighting plan will be incorporated into the CEMP to ensure that all lighting is directed within the construction boundary and away from the Natura 2000 sites.

Solent and Dorset Coast pSPA

The pSPA is approximately 20 m west of the closest point of the construction works. Despite this close proximity the terns for which the pSPA is designated are unlikely to be affected by construction activities as they feed during the day whilst the construction work will take place over-night.

Even in the unlikely event that terns avoided foraging in the vicinity of the proposed development during the construction period, the pSPA is sufficiently extensive to provide large areas of alternative foraging habitat.

River Itchen SAC

Atlantic salmon, one of the species for which the SAC is designated, are present in the lower reaches of the River Test. They are vulnerable to vibration generated by activities such as piling which can result in adverse impacts ranging in severity from delaying the migration of fish to physical injury of fish.

Construction of the sidings extension will not involve piling works therefore no vibration impacts are expected during construction and consequently no adverse impacts are likely.

Other designated sites

The habitats and species for which the Solent Maritime SAC is designated are not vulnerable to any of the identified disturbance factors.

It is considered that the avoidance and mitigation measures are appropriate and will be effective. Subject to a CEMP being agreed, this will ensure that there will be no implications for the identified European sites from this impact pathway.

In order to be effective, the agreement of the CEMP will need to be secured as a pre-commencement condition attached to the consent.

Air quality

Solent and Southampton Water SPA/Ramsar site and Solent and Dorset Coast pSPA

The bird species for which the SPAs are designated are not directly sensitive to air pollution, although increased atmospheric pollution could adversely affect supporting habitats, including those noted on the Ramsar citation. However, the measures designed to mitigate impacts on the

Solent Maritime SAC, see below, will also prevent adverse effects on the integrity of the SPAs and Ramsar site.

With the CEMP in place it can be concluded that there will be no likely significant effect on the integrity of the SPAs and Ramsar site due to construction activities.

Solent Maritime SAC

Habitats for which the SAC is designated are potentially vulnerable to increased air pollution. However, as the construction activity will occur over a short timeframe (18 hours per weekend for twelve weekends commencing in October 2018), elevated emissions levels will be short-term.

Adverse effects from nitrogen deposition on designated habitats generally occur as a consequence of long term exposure. The short term nature of the construction activity on the development site means that there is unlikely to be any measurable effect on the habitats. In addition, habitat lying within 200m (the distance over which vehicle emissions have been shown to affect habitat adjacent to roads) of the site is mudflat which is not generally considered to be particularly sensitive to nitrogen deposition. Nitrogen from atmospheric sources is also likely to be significantly lower than that from agricultural run-off which is already present in the river.

There is also the risk of particulate pollution, i.e. dust, being generated which could lead to smothering of habitats. The developer has proposed a number of control measures which will be set out in the CEMP. These measures include:

- Use of grey water as a dust suppressant;
- Aggregates delivered to site will be dampened before arrival to minimise the spread of dust;
- Unloading aggregate from wagons to the ground rather than offloading from height;
- Careful selection of appropriate locations for unloading ballast to maximise separation from sensitive receptors;
- cleaning vehicles before they leave the site; and
- covering loads that can generate dust while travelling to and from site.

With the CEMP in place it can be concluded that there will be no likely significant effect on the integrity of the SAC due to construction activities or operation of the extended freight line through emissions or dust deposition.

River Itchen SAC

The River Itchen SAC is too distant to be affected by air quality impacts.

Water quality (mobilisation of contaminants, siltation)

Solent Maritime SAC, Solent and Southampton Water SPA/Ramsar site, Solent and Dorset Coast pSPA and River Itchen SAC

The habitats and species for which the SACs, SPA and pSPA are designated are vulnerable to water pollution. Such pollution could arise from the use of grey water to suppress dust and spills of oil, fuels or chemicals. The following mitigation measures, which are designed to prevent such impacts, have been proposed:

- Silt and oil traps on drains
- No materials to be stockpiled or stored within 10 m of a water course;
- Spill kits to be made available on site;

- Refuelling areas and liquid storage areas to be of sufficient capacity and appropriately banded.

These measures will be included in the proposed CEMP.

It is considered that the avoidance and mitigation measures are appropriate and will be effective. Subject to a CEMP being agreed and the necessary pollution control measures being secured through a condition, there will be no implications for the identified European sites from this impact pathway.

Permanent, operational phase impacts

Disturbance (visual disturbance, noise and lighting)

Solent Maritime SAC, Solent and Southampton Water SPA/Ramsar site, Solent and Dorset Coast pSPA and River Itchen SAC

During operation the sidings will only be subject to low level lighting (knee height) to facilitate a safe walking route for staff. This is unlikely to result in any adverse effects upon the features for which the SACs, SPAs and Ramsar site are designated. Activities with potential to cause visual or noise disturbance will be the same as those already occurring and therefore no additional impacts are expected.

Water quality

Solent Maritime SAC, Solent and Southampton Water SPA/Ramsar site, Solent and Dorset Coast pSPA and River Itchen SAC

Run-off from the trains and track of oil, diesel or polluted water could result in pollution of the water course. As a consequence a sustainable drainage system will form part of the final scheme design to ensure that water quantity and quality in the River Test remains protected once the site is operational.

Air quality

Solent Maritime SAC, Solent and Southampton Water SPA/Ramsar site, Solent and Dorset Coast pSPA and River Itchen SAC

The proposed development will not result in an increase in the number of trains although there may be an increase in emissions due to trains pulling more wagons. However, this is likely to be minimal in scale and unlikely to lead to significant effects.

Recreational disturbance

Increases in recreational activity at SPA locations have the potential to result in mortality in the SPA bird populations due to increased disturbance. For a review of the in-depth analysis which has taken place on this issue at the Solent, please see the Solent Disturbance and Mitigation Project (SDMP)

(http://www.solentforum.org/forum/sub_groups/Natural_Environment_Group/Disturbance_and_Mitigation_Project/).

Solent and Southampton Water SPA/Ramsar site

The proposed development will result in the loss of a narrow belt of trees and scrub immediately adjacent to the existing railway sidings which comprises 0.1 ha or 7% of the open public space.

However, the construction activities have been arranged in such a way as to ensure that the majority of the open space will be available for recreational activities during the site clearance, construction and operational phases. In addition, a new 'pocket park' will be provided which will result in an overall net gain in public open space provision.

The likelihood of increased recreational pressure through dog walking displacement from Redbridge Wharf Park to within the SPA is therefore unlikely due to the minimal land take, short construction timescales and the continued operation of the remainder of the park.

Providing the proposed mitigation can be secured there are no implications from increased recreation on the SPA designations.

Solent Maritime SAC and Solent, Dorset Coast pSPA and River Itchen SAC

The habitats and species listed under the SAC and pSPA citations are not considered to be sensitive to recreational disturbance, and as such, the proposed development is unlikely to result in any significant effect on the SACs or pSPA as a result of recreational disturbance, either alone or in combination.

Conclusions regarding the implications of the development for the identified European sites in view of those sites' conservation objectives

The findings of the initial assessment concluded that significant effects were likely through a number of impact pathways. As such, a detailed appropriate assessment has been conducted on the proposed development, incorporating a number of avoidance and mitigation measures which have been designed to remove any likelihood of a significant effect on the identified European sites.

This report has assessed the available evidence regarding the potential impact pathways on the identified European sites. It has also considered the effectiveness of the proposed avoidance and mitigation measures. It has been shown that, provided that the proposed mitigation measures are implemented, **the significant effects which are likely in association with the proposed development can be overcome**. A detailed mitigation package is set out in the Redbridge Sidings Habitats Regulations Assessment, April 2018, AECOM. These measures, which are summarised below, should be secured through a legal agreement or planning conditions:

Preparation of a Construction Environmental Management Plan (CEMP) to include details of:

- Working methods to reduce noise disturbance;
- Handling and storage of materials;
- Use of screening remove noise, light and visual impacts;
- A lighting plan;
- Timing of works;
- Dust management practices;
- Control of surface water run-off;
- Safe handling of chemicals and refuelling to minimise spillage risk
- Safety procedures to deal with chemical spills.

Operational

- Provision of replacement public open space through the creation of a pocket park
- Installation of a sustainable drainage system to safeguard water quantity and quality in the River Test.

As a result, there should not be any implications as a consequence of this development in relation to either the conservation objective of the SPAs to "avoid the deterioration habitats of the qualifying features, and the significant disturbance of the qualifying features, ensuring that the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive" or to the conservation objective of the SACs to, "Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features."

European Site Qualifying Features

Solent and Southampton Water SPA

Solent and Southampton Water SPA qualifies under Article 4.1 of the Birds Directive by supporting breeding populations of European importance of the following Annex I species:

- Common Tern *Sterna hirundo*
- Little Tern *Sterna albifrons*
- Mediterranean Gull *Larus melanocephalus*
- Roseate Tern *Sterna dougallii*
- Sandwich Tern *Sterna sandvicensis*

The SPA qualifies under Article 4.2 of the Birds Directive by supporting overwintering populations of European importance of the following migratory species:

- Black-tailed Godwit *Limosa limosa islandica*
- Dark-bellied Brent Goose *Branta bernicla bernicla*
- Ringed Plover *Charadrius hiaticula*
- Teal *Anas crecca*

The SPA also qualifies under Article 4.2 of the Birds Directive by regularly supporting at least 20,000 waterfowl, including the following species:

- Gadwall *Anas strepera*
- Teal *Anas crecca*
- Ringed Plover *Charadrius hiaticula*
- Black-tailed Godwit *Limosa limosa islandica*
- Little Grebe *Tachybaptus ruficollis*
- Great Crested Grebe *Podiceps cristatus*
- Cormorant *Phalacrocorax carbo*
- Dark-bellied Brent Goose *Branta bernicla bernicla*
- Wigeon *Anas penelope*
- Redshank *Tringa tetanus*
- Pintail *Anas acuta*
- Shoveler *Anas clypeata*
- Red-breasted Merganser *Mergus serrator*
- Grey Plover *Pluvialis squatarola*
- Lapwing *Vanellus vanellus*
- Dunlin *Calidris alpina alpina*
- Curlew *Numenius arquata*
- Shelduck *Tadorna tadorna*

Solent and Southampton Water Ramsar Site

The Solent and Southampton Water Ramsar site qualifies under the following Ramsar criteria:

- Ramsar criterion 1: The site is one of the few major sheltered channels between a substantial island and mainland in European waters, exhibiting an unusual strong double tidal flow and has long periods of slack water at high and low tide. It includes many wetland habitats characteristic of the biogeographic region: saline lagoons, saltmarshes, estuaries, intertidal flats, shallow coastal waters, grazing marshes, reedbeds, coastal woodland and rocky boulder reefs.
- Ramsar criterion 2: The site supports an important assemblage of rare plants and invertebrates. At least 33 British Red Data Book invertebrates and at least eight British Red Data Book plants are represented on site.

- Ramsar criterion 5: A mean peak count of waterfowl for the 5 year period of 1998/99 – 2002/2003 of 51,343
- Ramsar criterion 6: The site regularly supports more than 1% of the individuals in a population for the following species: Ringed Plover *Charadrius hiaticula*, Dark-bellied Brent Goose *Branta bernicla bernicla*, Eurasian Teal *Anas crecca* and Black-tailed Godwit *Limosa limosa islandica*.

River Itchen SAC

The River Itchen SAC qualifies under Article 3 of the Habitats Directive by supporting the following Annex I habitat:

- Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitriche-Batrachion* vegetation

River Itchen SAC also qualifies under Article 3 of the Habitats Directive by supporting the following Annex II species:

- Southern Damselfly *Coenagrion mercurial* (primary reason for selection)
- European Bullhead *Cottus gobio* (primary reason for selection)
- White-clawed Crayfish *Austropotamobius pallipes*
- European Brook Lamprey *Lampetra planeri*
- European River Lamprey *Lampetra fluviatilis*
- Atlantic Salmon *Salmo salar*
- European Otter *Lutra lutra*

Solent Maritime SAC

The Solent Maritime SAC qualifies under Article 3 of the Habitats Directive by supporting the following Annex I habitats:

- Estuaries (primary reason for selection)
- *Spartina* swards (*Spartinion maritimae*) (primary reason for selection)
- Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) (primary reason for selection)
- Sandbanks which are slightly covered by sea water all the time
- Mudflats and sandflats not covered by seawater at low tide
- Coastal lagoons
- Annual vegetation of drift lines
- Perennial vegetation of stony banks
- *Salicornia* and other annuals colonising mud and sand
- Shifting dunes along the shoreline with *Ammophila arenaria* (“white dunes”)

Solent Maritime SAC qualifies under Article 3 of the Habitats Directive by supporting the following Annex II species:

- Desmoulin's whorl snail *Vertigo moulinsiana*

Solent and Dorset Coast pSPA

The site regularly supports more than 1% of the Great Britain breeding populations of three species listed in

Annex 1 of the Birds Directive. Therefore the site qualifies for SPA Classification in accordance with the UK SPA

selection guidelines.

- Sandwich tern, *Sterna sandvicensis* – 411 pairs (882 breeding adults 2008-2014)
- Common tern, *Sterna hirundo* – 492 pairs (984 breeding adults 2009-2014)
- Little tern, *Sterna albifrons* – 63 pairs (126 breeding adults 2009-2014)

These are species of tern that depend on the Solent and Dorset Coast pSPA area of sea for foraging that derive from breeding colonies at the following existing SPAs: Pool Harbour SPA, Solent and Southampton Water SPA, Chichester Harbour SPA and Langstone Harbour SPA.