

181 Havant Road
Hayling Island, Hampshire
Shadow Habitat Regulations
Assessment
2023



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ECOLOGY

Client Euro Garages Ltd
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Introduction

Background

Rachel Hacking Ecology Ltd was commissioned by Euro Garages Ltd to provide ecology consultancy services in connection with a proposed development at 181 Havant Road, Hayling Island, Hampshire, hereafter referred to as the 'project'. The project is described as "*Demolition of existing structures and erection of replacement kiosk store including integrated drive thru and associated development*" (planning reference APP/23/00314). The project is located at O.S. grid reference: SU 71794 03010 (see Figure 1).

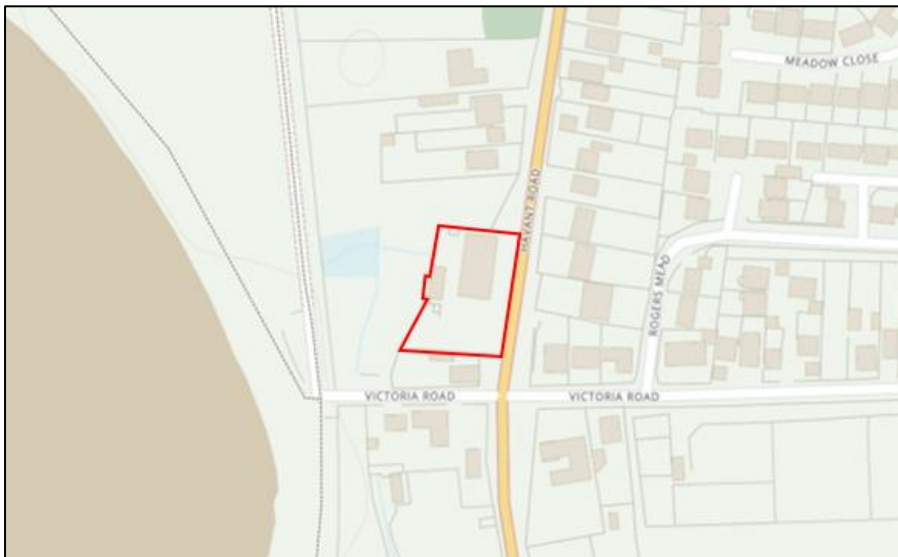


Figure 1 showing the location of the project

Initial assessment identified that the project is located in close proximity to three European protected sites for nature conservation:

- Chichester & Langstone Harbours Special Protection Area (SPA);
- Chichester and Langstone Harbours Ramsar site; and
- Solent Maritime Special Area of Conservation (SAC).

The location of these protected sites in relation to the project is shown in Figures 2 to 4.

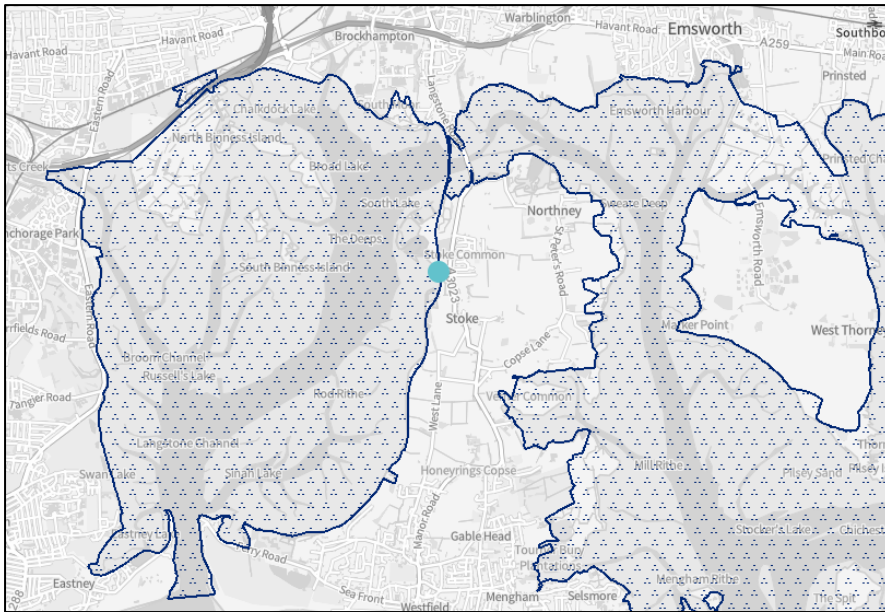


Figure 2 showing the proximity of the project to Chichester & Langstone Harbours SPA (www.magic.defra.gov.uk)

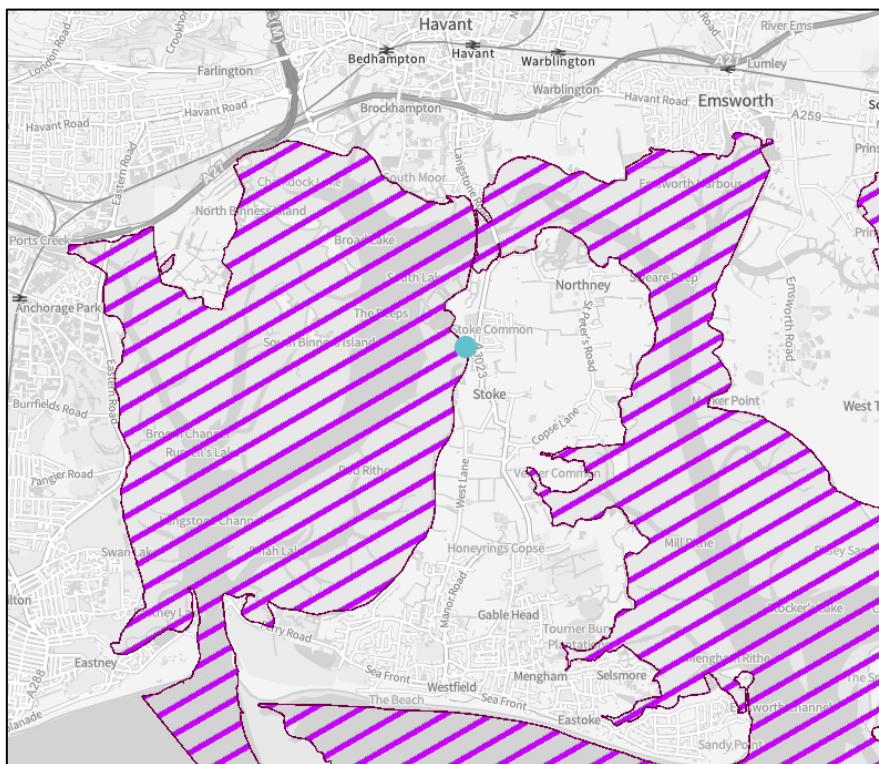


Figure 3 showing the proximity of the project in relation to the Solent Maritime SAC (www.magic.defra.gov.uk)

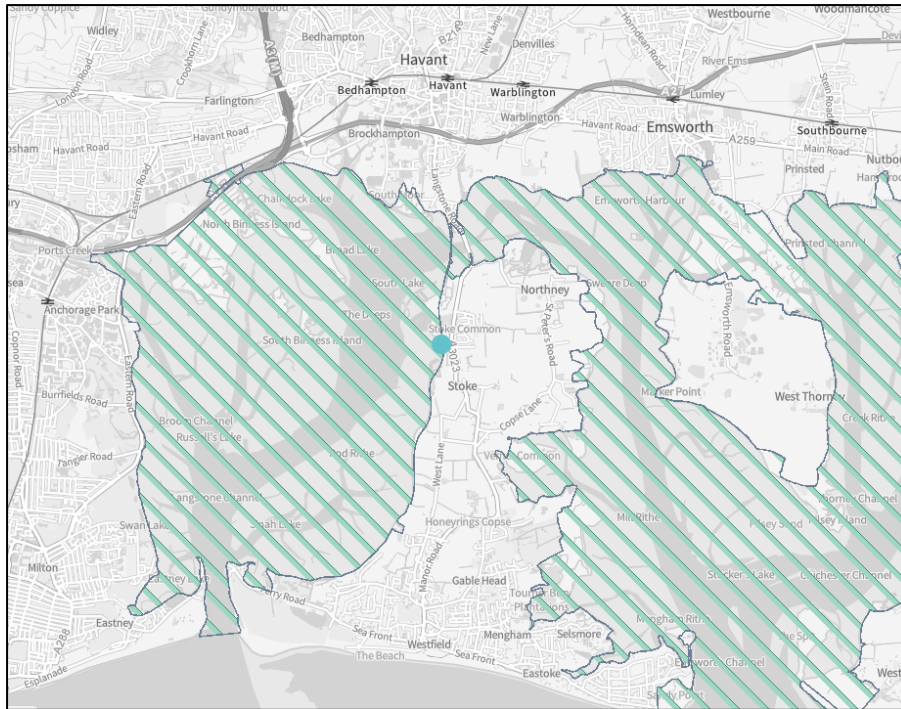


Figure 4 showing the proximity of the project in relation to Chichester & Langstone Harbours Ramsar site (www.magic.defra.gov.uk)

Statutory Requirement for Habitat Regulations Assessment

As a public body, the Planning Authority (Havant Borough Council) is identified as a 'competent authority' within the Habitats Regulations, and the requirement to assess the implications for European sites is applicable in situations where the competent authority is undertaking or implementing a plan or project, or authorising others to do so. A Habitats Regulations Assessment (HRA) considers the implications of a plan or project for European protected sites. It assesses any possible harm to the habitats and species that form an interest feature of the European sites, which could occur as a result of the plan or project being put in place, or as a result of the plan or project in-combination with other plans or projects. In-combination effects include those cumulative effects that might arise from multiple plans or projects together.

The requirement for the HRA derives from the EU Habitats Directive and, notwithstanding the UK's withdrawal from the EU, UK law and policy remains currently largely unchanged. The legislation transposing the EU Directives has been changed so that they continue to operate effectively from 1st January 2021. The changes have been made by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.

Habitat Regulations Assessment

The first stage of HRA is a screening exercise to address the question:

“Is the project, either alone or in combination with other relevant projects and plans, likely to result in a significant (adverse) effect on the conservation objectives and integrity of the European site?”

Qualifying Features

Chichester & Langstone Harbours SPA

The site is designated as it regularly supports more than 10,000 wintering wildfowl (average 25,000) and also regularly supports more than 20,000 wintering waders (average 77,000). The site also supports internationally important numbers of the following species:

- Grey Plover *Pluvialis squatarola*
- Sanderling *Caldris alba*
- Dunlin *Caldris alpina*
- Redshank *Tringa totanus*
- Brent Goose *Branta bernicla*
- Shelduck *Tadorna tadorna*
- Teal *Anas crecca*

The site also supports internationally important numbers of the migratory bird species listed above and nationally important wintering numbers of the following migratory species:

- Ringed Plover *Charadrius hiaticula*
- Curlew *Numerius arquata*
- Bar-tailed godwit *Limosa lapponica*
- Turnstone *Arenaria interpres*
- Wigeon *Anas penelope*
- Pintail *Anas acuta*
- Shoveler *Anas clypeata*
- Red-breasted Merganser *Mergus serrator*

The site also provides a breeding site for three species of Tern *Sterna* spp..



Conservation Objectives

With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed above), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, 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 population of each of the qualifying features, and,
- The distribution of the qualifying features within the site.

Chichester & Langstone Harbours Ramsar site (<https://rsis.ramsar.org/ris/378>)

Principal Features: Two large estuarine basins linked by the channel which divides Hayling Island from the main Hampshire coastline. The site includes extensive intertidal mudflats, saltmarsh, sand and shingle spits and sand dunes. The mudflats support beds of *Zostera* and *Enteromorpha*, whilst the lower saltmarsh is dominated by *Spartina anglica*, with a more varied community at higher levels. Although many areas bordering the site have been developed, some grassland and brackish/freshwater marshes with reedbeds remain. Peak counts of wintering water birds regularly exceed 20,000 individuals, including internationally important numbers*

of *Branta bernicla bernicla* (Chichester 10,133; Langstone 7,333), *Charadrius hiaticula* (1,041; 459), *Pluvialis squatarola* (2,803; 1,373), *Calidris alpina* (19,847; 32,896), and *Limosa limosa* (694; 668). Several other species occur in nationally important numbers, notably *Tadorna tadorna* (Chichester 2,373) and *Tringa totanus* (Chichester 1,460). Breeding *Sterna albifrons* (154 pairs in 1990) and *S. hirundo* (143 pairs in 1990) are also of national importance. Parts of the site are managed as nature reserves by the Royal Society for the Protection of Birds, the Hampshire and Isle of Wight Naturalists' Trust, Chichester Harbour Conservancy and Hampshire County Council. (1a,2c,3a,3b,3c)

*All figures are average peak counts for the five winters 1987/88 to 1991/92.

Conservation Issues: The 1990 UK National report provided information concerning recreational disturbance and pollution from sewage effluent. However, measures aimed at improving the site's water quality are under way; one major source of untreated sewage effluent has already been removed through the construction of a new off-shore outfall. English Nature and Chichester Harbour Conservancy are working together to prepare an estuary management plan which will address remaining water quality issues, together with recreational disturbance problems. Langstone Harbour is subject to dredging for oysters and clams. The alien seaweed

Sargassum muticum has colonised both harbours. It is thought that the species spread to southern England from France, following accidental introduction with Pacific oysters *Crassostrea gigas*.

Solent Maritime SAC

Annex I habitats that are a primary reason for selection of this site

1130 Estuaries

The Solent encompasses a major estuarine system on the south coast of England with four coastal plain estuaries (Yar, Medina, King's Quay Shore, Hamble) and four bar-built estuaries (Newtown Harbour, Beaulieu, Langstone Harbour, Chichester Harbour). The site is the only one in the series to contain more than one physiographic sub-type of estuary and is the only cluster site. The Solent and its inlets are unique in Britain and Europe for their hydrographic regime of four tides each day, and for the complexity of the marine and estuarine habitats present within the area. Sediment habitats within the estuaries include extensive estuarine flats, often with intertidal areas supporting eelgrass *Zostera* spp. and green algae, sand and shingle spits, and natural shoreline transitions. The mudflats range from low and variable salinity in the upper reaches of the estuaries to very sheltered almost fully marine muds in Chichester and Langstone Harbours. Unusual features include the presence of very rare sponges in the Yar estuary and a sandy 'reef' of the polychaete *Sabellaria spinulosa* on the steep eastern side of the entrance to Chichester Harbour.

1320 *Spartina* swards (*Spartinion maritimae*)

Solent Maritime is the only site for smooth cord-grass *Spartina alterniflora* in the UK and is one of only two sites where significant amounts of small cord-grass *S. maritima* are found. It is also one of the few remaining sites for Townsend's cord-grass *S. x townsendii* and holds extensive areas of common cord-grass *Spartina anglica*, all four taxa thus occurring here in close proximity. It has additional historical and scientific interest as the site where *S. alterniflora* was first recorded in the UK (1829) and where *S. x townsendii* and, later, *S. anglica* first occurred.

1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)

The Solent contains the second-largest aggregation of Atlantic salt meadows in south and south-west England. Solent Maritime is a composite site composed of a large number of separate areas of saltmarsh. In contrast to the Severn estuary, the salt meadows at this site are notable as being representative of the ungrazed type and support a different range of communities dominated by sea-purslane *Atriplex portulacoides*, common sea-lavender *Limonium vulgare* and thrift *Armeria maritima*. As a whole the site is less truncated by man-made features than other parts of the south coast and shows rare and unusual transitions to freshwater reedswamp



and alluvial woodland as well as coastal grassland. Typical Atlantic salt meadow is still widespread in this site, despite a long history of colonisation by cord-grass *Spartina* spp.

Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site

- 1110 Sandbanks which are slightly covered by sea water all the time
- 1140 Mudflats and sandflats not covered by seawater at low tide
- 1150 Coastal lagoons ^{* Priority feature}
- 1210 Annual vegetation of drift lines
- 1220 Perennial vegetation of stony banks
- 1310 Salicornia and other annuals colonizing mud and sand
- 2120 "Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes")"

Annex II species present as a qualifying feature, but not a primary reason for site selection

- 1016 Desmoulin's whorl snail *Vertigo moulinsiana*

Conservation Objectives

With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

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 qualifying natural habitats and habitats of qualifying species
- The structure and function (including typical species) of qualifying natural habitats
- The structure and function of the habitats of qualifying species
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely
- The populations of qualifying species, and
- The distribution of qualifying species within the site



Impact Pathways

Effects Alone

The following impact pathways are assessed for the project:

- Direct habitat loss
- Loss or degradation of functionally linked land
- Changes in water quality or levels
- Changes in air quality
- Disturbance to qualifying species due to noise and visual disturbance

In-combination Effects

Other than the project, the planning portal has not identified any other development proposal in the vicinity that needs to be considered in-combination.

Likely Significant Effects

Direct Habitat Loss

No works associated with the project will be undertaken within any of the protected sites. **No likely significant effect.**

Loss or degradation of functionally linked land

Habitats within the project site are limited to buildings and hardstanding, improved grassland, scrub and tall herb. None of these habitats are suitable to support the species or assemblages for which any of the protected sites are designated. **No likely significant effect.**

Changes in Water Quality or Levels

In the absence of mitigation there is potential for pollution to adversely affect nearby areas of the protected sites both during construction and operation. **Likely significant effect.**

Changes in Air Quality

In the absence of mitigation there is potential for pollution from dust during construction to adversely affect nearby areas of the protected sites. Increased deposition of atmospheric nitrogen is listed as a pressure within the Solent Site Improvement Plan. Vehicles using the drive thru service may result in increased levels of NO_x. **Likely significant effect.**



Noise and Visual Disturbance

In the absence of mitigation there is potential for birds to be disturbed by noise during construction. Visual disturbance is considered unlikely due to the distance between the project and the foreshore (c.90m) and the presence of tall Leyland Cypress *Cupressus x leylandii* trees screening the west of the project. Disturbance of migrating and overwintering birds can result in increased energy expenditure leading to reduced ability to survive. **Likely significant effect.**

Summary

Initial screening has identified the potential for the project to result in likely significant effects associated with changes in water quality (pollution), changes in air quality (pollution) and noise and visual disturbance during construction. The assessment must therefore progress to Stage 2: Appropriate Assessment.



Appropriate Assessment

The stage 1 HRA has determined that the project, without mitigation, will result in LSEs due to pollution of water and air and noise and visual disturbance. These effects could adversely affect the features for which the protected sites are designated and undermine conservation objectives. The HRA must, therefore, progress to stage 2; appropriate mitigation measures must be identified to demonstrate beyond scientific doubt that the project will not result in adverse effects to the integrity of the protected sites.

Mitigation

Changes in Water Quality or Levels

The risk to aquatic habitats and the species that depend on them is associated with potential pollution events during construction and operation (point source pollution) and potential runoff of polluted surface water during operation (diffuse pollution). Oil, fuel, cement, and other chemicals could enter the environment and negatively affect the ecology of the protected sites. This could be through direct mortality of birds should they become coated in spilled oil, or indirect effects such as reduced food availability if feeding areas become polluted.

Mitigation during the construction phase will comprise a Construction Environmental Management Plan (CEMP). The CEMP will include measures to avoid pollutants entering the protected sites. These will include installation of silt fencing around construction zones, safe storage and use of fuel and chemicals, provision of spill kits and training for site staff in pollution prevention and how to respond should a pollution event occur.

A drainage strategy has been produced¹ which details in principle how foul and surface water will be dealt with during the operation phase. The strategy identifies that a sewer diversion will be required and estimates that foul flows will be reduced as a result of the project. Surface water is proposed to be directed into the existing surface water network within the site boundary before discharging to the existing Southern Water storm connection. Surface water discharge rates are also predicted to be reduced from existing levels.

These mitigation measures will avoid changes in water quality or levels adversely affecting the features for which the protected sites are designated.

¹ Goodson Associates (2023). *Proposed PFS and Drive Through Restaurant Redevelopment at 181 Havant Road, Hayling Island: Drainage Strategy Report*. 14 March 2023.

Changes in Air Quality

Changes in localised air quality could result from the release of dust during demolition in the construction phase. This could potentially result in adverse effects to vegetation which forms a feature of the protected sites. The Solent Site Improvement Plan states that nitrogen deposition exceeds site relevant critical loads, but that locally observed effects are unknown.

Dust control measures will be included within the CEMP. These will include the use of damping to suppress dust during demolition and avoidance of dust-producing activities during windy weather. The Leyland Cypress trees along the western boundary of the project are also likely to help prevent any dust from the project reaching estuarine habitats. No new roads will be constructed as part of the project and significant increases in NO_x levels are not considered likely.

Noise and Visual Disturbance

The risk of disturbing birds for which the SPA and Ramsar site are designated is greatest during the migratory and over-wintering period (September to March). If works are undertaken during this period the risk will be reduced by installing an acoustic barrier around the north, west and south sides of the project. Industry standard noise control measures will also be applied, including:

- Use of well maintained and silenced plant and equipment
- Switching off engines on idling vehicles
- Low speed running and idling for plant
- Use of electric or hydraulic powered equipment
- If piling is required, use of continuous flight auger (CFA) techniques
- Mandatory awareness training of for contractors with regards to BS5228 and the need to minimise construction noise

These measures will keep noise under control at source will reduce the levels of noise during demolition and construction. Consequently, no effects on the integrity of any of the protected sites is likely to result from noise associated with the project.

The risk of visual disturbance is considered to be low due to the presence of tall Leyland Cypress trees which will screen the project from habitats to the west. Construction workers will be briefed on the sensitivity of adjacent habitats and will not access land to the west of the project. It is noted that a car park and footpath network are present closer to the foreshore than the project and some level of visual instruction will be present already.



Conclusion

With the appropriate mitigation measures identified the project will not result in adverse significant effects on the nearby protected sites.