Habitats Regulations Assessment (HRA)

Application reference:	15/01856/OUT
Application address:	Land At Meggeson Avenue Townhill Park Southampton SO18 2HD
Application description:	Part-redevelopment of the Townhill Park Estate with 675 new dwellings and associated parking, a retail store (up to 500sq.m), diversion/stopping up of a public right of way, highway enhancements and replacement public open space. The detailed phase 1 element comprises 275 dwellings in buildings of up to 7 storeys,
HRA completion date:	03/03/2016

HRA completed by:	
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Summary

The project being assessed would lead to the net gain of up to 275 residential dwellings and is located approximately. 0.5km from the River Itchen Special Area of Conservation (SAC), 1.7km from the Solent and Southampton Water Special Protection Area (SPA)/Ramsar site and 8.9km from the New Forest SAC/SPA/Ramsar site.

The application site is an existing large housing estate which will undergo partial re-development. The significant distance between the development and the European sites means that construction stage impacts will be minor and readily addressed through a Construction Environmental Management Plan (CEMP). Concern has been raised however, that the proposed development, in-combination with other residential developments across south Hampshire, could result in recreational disturbance to the features of interest of the Solent and Southampton Water SPA/Ramsar site and the New Forest SAC/SPA/Ramsar site.

The findings of the initial assessment concluded that a significant effect was possible. A detailed appropriate assessment was therefore conducted on the proposed development. Following consideration of a number of avoidance and mitigation measures designed to remove any risk of a significant effect on the identified European sites, it has been concluded that **the significant effects which are likely in association with the proposed development can be overcome.**

Section 1 - details of the plan or project		
European sites potentially impacted by	 River Itchen SAC 	
plan or project:	 The New Forest SAC 	
European Site descriptions are available in Appendix I	 New Forest SPA 	
of the City Centre Action Plan's Habitats Regulations	 New Forest Ramsar site 	
Assessment Baseline Evidence Review Report, which is on the city council's website at	 Solent and Southampton Water (SPA) 	

	 Solent and Southampton Water Ramsar Site
Is the project or plan directly connected with or necessary to the management of the site (provide details)?	No – the development consists of new residential development which is neither connected to, nor necessary for, the management of any European site.
Are there any other projects or plans that together with the project or plan being assessed could affect the site (provide details)?	 Southampton Core Strategy (amended 2015) (http://www.southampton.gov.uk/policies/Amended- <u>Core-Strategy-inc-CSPR-%20Final-13-03-2015.pdf</u> City Centre Action Plan (http://www.southampton.gov.uk/planning/planning- policy/adopted-plans/city-centre-action-plan.aspx 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 floor space across the South Hampshire area between 2011 and 2026. 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. Whilst the dates of the two plans do not align, it is clear that the proposed development of land on the Townhill Park Estate 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 0.5km to the south east of the River Itchen Special Area of Conservation (SAC) and 1.7km north east of the Solent and Southampton Water Special Protection Area (SPA)/Ramsar site. The New Forest SAC, SPA and Ramsar site lie 8.9km to the south.

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 permanent arising from the operational phase of the development.

The Townhill Park Regeneration Habitat Regulations Assessment Screening (September 2015) (Capita) identified the following effects arising from the construction and operational phases of the development:

Construction phase

Limited potential for polluted surface water run-off and dust particles to reach the River Itchen SAC, the Solent and Southampton Water SPA and Ramsar site leading to;

• Change to key elements of the site (e.g. water quality, hydrological regime etc.)

Operational phase

Recreational disturbance of the New Forest SPA, New Forest Ramsar site, Solent and Southampton Water SPA and Solent and Southampton Water Ramsar site leading to:

- Reduction of habitat area;
- Disturbance to key species;
- Habitat or species fragmentation;
- Reduction in species density.

Deterioration in air quality affecting the New Forest SAC leading to:

• Change to key elements of the site (e.g. water quality, hydrological regime etc.).

A summary table of the screening results can be found in Appendix 2

In their response to the consultation on this planning application, dated 28th October 2015 Natural England raised concerns about insufficient information being provided about potential impacts on the New Forest sites. The response also highlighted the potential for recreational impacts upon the New Forest SPA as a consequence of the operation of the proposed development.

A number of avoidance and mitigation measures are set out in the Townhill Park Regeneration Green Infrastructure Management Plan v.2 and summarised as follows:

Construction phase

 Provision of a Construction Environmental Management Plan containing detailed methodologies for the avoidance measures.

Operational

- Upgrade footpaths on Frogs Copse and Hidden Pond;
- Upgrade site entrances;
- Provision of a natural play trail;
- Creation of a picnic/informal sports area;
- Development of detailed biodiversity management plans in partnership with the local community;
- Habitat management works;
- New signage across the estate showing distances to green spaces within and close to Townhill Park;

- Maps within the apartment blocks showing locations of open spaces and routes to them;
- Community engagement activities focused on the establishment of a Friends group to assist with the management of semi-natural sites and to run walking and cycling activities to introduce new and existing residents to the open spaces within and beyond the estate;
- Financial contributions to deliver infrastructure improvements (£35,175), site management (£16,920) and community engagement on greenspaces (£16,974);
- Provision of a welcome pack to new residents including walking and cycling maps illustrating local routes; and
- A contribution of £47,850 (£174 x 275) to the Solent Recreation Mitigation Project.

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 lead to a net gain of up to 275 residential dwellings and is located approximately 0.5km from the River Itchen Special Area of Conservation (SAC), 1.7km from the Solent and Southampton Water Special Protection Area (SPA)/Ramsar site and 8.9km from the New Forest SAC/SPA/Ramsar site.

The application site is an existing large housing estate which will undergo partial re-development. The significant distance between the development and the European sites means that construction stage impacts will be minor and readily addressed through a CEMP. Concern has been raised however, that the proposed development, in-combination with other residential developments across south Hampshire, could result in recreational disturbance to the features of interest of the New Forest SAC/SPA/Ramsar site and the Solent and Southampton Water SPA/Ramsar site.

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 for 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 to assess whether the proposed avoidance and mitigation measures are sufficient to remove any potential impact.

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."

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 PHASE EFFECTS

The New Forest designated sites are all located a substantial distance away from the development site and are therefore outside the zone of influence of construction activities. The River Itchen SAC is located approximately 0.5km from the development site whilst sections of the Solent and Southampton Water SPA and Ramsar site can be found 1.7km downstream. There is a limited potential for polluted surface water run-off and dust particles to reach these sites leading to changes to key elements of the site.

Activities leading to the release of dust particles and chemical pollutants can be controlled through measures included in a Construction Environmental Management Plan.

PERMANENT, OPERATIONAL EFFECTS.

Recreational disturbance

New Forest SPA/Ramsar site

The New Forest National Park attracts a high number of visitors (13.3 million annually), and is notable in terms of its catchment, attracting a far higher proportion of tourists and non-local visitors than similar areas such as the Thames Basin and Dorset Heaths. Research undertaken by Footprint Ecology, Sharp, J., Lowen, J. and Liley, D. (2008) Changing patterns of visitor numbers within the New Forest National Park, with particular reference to the New Forest SPA. Footprint Ecology.), indicates that 40% of visitors to the area are staying tourists, whilst 25% of visitors come from more than 5 miles (8km) away. The remaining 35% of visitors are local day visitors originating from within 5 miles (8km) of the boundary.

The report states that the estimated number of current annual visits to the New Forest is predicted to increase by 1.05 million annual visits by 2026 based on projections of housing development within 50km of the Forest, with around three quarters (764,000) of this total increase originating from within 10km of the boundary (which includes Southampton).

The application site is located 8.9km from the nearest part of the New Forest SPA and Ramsar site in terms of linear distance and as such, residents of the proposed development would fall into the category of non-local day visitors.

Characteristics of visitors to the New Forest

In addition to visitor numbers, the report, "Changing patterns of visitor numbers within the New Forest National Park", 2008 also showed that:

- 85% of visitors to the New Forest arrive by car.
- 23% of the visitors travelling more than 5 miles come from the Southampton/Eastleigh area (see para 2.1.1).
- One of the main reasons for visiting the National Park given in the 2005 Visitor Survey was dog walking (24% of visitors Source New Forest National Park Visitor survey 2005).
- Approximately 68% of visitors to UK National Parks are families.
- (Source:www.nationalparks.gov.uk).

The majority of the visitors to New Forest locations arriving from Southampton could therefore be characterised as day visitors, car-owners in family groups and many with dogs. The residents of the new properties are likely to fall within these groups and as such there is the potential that they will visit the New Forest placing additional pressure on the European designated sites.

Species and habitats affected by recreational activity

Townhill Park will result in a population increase in the zone from which people make day visits to the New Forest, primarily for walking, often with dogs. The screening report for the Habitat Regulations Assessment (HRA) of the development recognised likely significant effects on the conservation objectives of the qualifying features of three overlapping international sites; New Forest Special Protection Area (SPA), The New Forest Ramsar Site and The New Forest Special Area of Conservation (SAC). The Ramsar Site is not considered separately as its conservation objectives overlap those of the SPA and SAC and so are contained within the HRA for these two sites.

The Townhill Park, Southampton, Habitats Regulations Assessment, Scoping Report, December 2015 (Capita) scoped the following qualifying features into the assessment:

- Breeding Woodlark New Forest SPA) ;
- European Nightjar New Forest SPA) ; and
- Dartford Warbler (New Forest SPA).
- Damage by Trampling to Qualifying Habitats, or Habitats on Which Qualifying Species Rely (The New Forest SAC in-combination);
- Damage by Wild Fire to Qualifying Habitats, or Habitats on which Qualifying Species Rely (The New Forest SAC – in-combination);
- Dog Fouling, Resulting in Damage to Qualifying Habitats, or Habitats on Which Qualifying Species Rely (The New Forest SAC in-combination); and
- Air Pollution from Increased Private Vehicles, with Damage to Qualifying Habitats, or Habitats on which Qualifying Species Rely (The New Forest SAC in-combination).

Effects of recreational disturbance on Birds

Within the New Forest, it is the ground and near-ground nesting birds such as Dartford warbler, nightjar and woodlark that are particularly affected by recreational activity. Studies by Langston et al (2007), Liley and Clarke (2003), and Murison (2002) investigated the effect of disturbance on the nightjar on heaths in Dorset, finding that breeding success of nightjar is significantly lower close to paths, and that proximity to housing has a negative relationship with the size of the population (Langston et al, 2007). The most common cause of breeding failure for this ground nesting species was due to daytime predation of eggs when disturbance caused an incubating bird to leave the nest. Similarly, the study by Murison et al (2007) revealed that for Dartford warbler on Dorset heathland, disturbance also reduced breeding activity, particularly so in heather-dominated territories. Birds in heavily disturbed areas (e.g., close to access points and car parks) delayed the start of their breeding by up to six weeks, preventing multiple broods and so reducing annual productivity. Most of this disturbance was found to come from dog walkers as a result of dogs being encouraged to run through the vegetation after sticks.

Modelling of the overlap of visitor activity, using car parks as the central point, with known locations of woodlark, European nightjar and Dartford warbler territories is detailed in the Statement to inform the Habitats Regulations Assessment for Townhill Park, Southampton (Capita 2016). This work indicates that, in isolation, the recreational disturbance arising from the Townhill Park development will not lead to likely significant effects. However, when considered incombination with recreational disturbance arising from residential developments across Southampton and neighbouring boroughs, likely significant effects in respect of damage by trampling, dog fouling and air pollution (all The New Forest SAC – in-combination) and damage by fire (The New Forest SAC and New Forest SPA – in-combination);

Mitigation measures are therefore required to remove the adverse impacts.

Mitigation Approach

Adverse impacts on ground nesting birds are not restricted to the New Forest with similar issues being experience on the Thames Basin Heaths SPA and the Dorset Heathlands SPA. The mitigation approach adopted at these sites is to provide suitable alternative natural green spaces (SANGS) as a component of new developments.

The findings of a residents' survey, undertaken in conjunction with an open spaces assessment for the Southampton City-wide Local Plan indicates that that whilst visits to the New Forest were often to seek large areas of green open space and the associated features (for example wildlife and tranquillity) they were not necessarily specific to features unique either to the New Forest or to lowland heathland. Further recent local evidence for the general desire for open space as opposed to features unique to the New Forest or lowland heath is provided by the Test Valley Open Spaces Residents Survey (QA 2014). Walking and dog walking were important reasons for visits, but specific features of habitats ("it is a bog", "it is a protected area") were not.

It is therefore reasonable to assume that the approach of providing alternative natural greenspace would be an effective means of diverting recreational activity away from the New Forest European sites.

This option of creating new sites is unfortunately not practical within Southampton which is a densely developed urban area with no suitable locations available for conversion to SANGS. There is, however, an existing, under-used, network of semi-natural green spaces comprising the greenways and sites such as Frogs Copse.

The greenways are an extensive network of wooded stream valleys, supporting a range of seminatural habitats, located within close proximity to residential areas allowing residents easy access. Originally identified in the late 1980s, they were safeguarded from development and received significant investment in infrastructure such as footpaths, entrances and signage. Unfortunately, over time, budgets have declined and the infrastructure within the greenways has deteriorated leading to a reduction in their recreational value.

The approach, therefore, is to upgrade the infrastructure within existing SANGS, specifically Frogs Copse and the Hidden Pond, which are located adjacent to the Townhill Park Estate, and to provide improved access to other sites in close proximity to the estate. The Green Infrastructure Management Plan for Townhill Park (SCC 2015c), which has been developed to support the planning application, provides details, including costs, of improvements to local greenspaces that are designed to attract a significant proportion of the predicted increased in recreational demand away from the New Forest.

The open spaces being up-graded as part of the green infrastructure plan will need to provide high quality recreation environment in-perpetuity; generally considered to be 125 years. This is a considerably longer period than the standard 10-20 years funding arrangements for developments. The nature of the proposed development, partial regeneration of a brownfield site with significant demolition and site preparation costs, mean that it is not possible to provide full in-perpetuity funding without jeopardising its viability. However, the Townhill Park Estate forms part of a much larger residential area and the green infrastructure to be provided or enhanced by the Green Infrastructure Management Plan will be available to residents of subsequent developments.

The intention therefore is for financial contributions to be secured to install and maintain in the short term (10 years), physical improvements to the green infrastructure, new signage across the estate and community engagement activities. Funding in-perpetuity will subsequently be secured through a mitigation strategy that is currently being developed in conjunction with the City wide Local Plan. Once adopted, all new residential developments within the city will pay a contribution towards the ongoing maintenance.

Measures detailed within the Townhill Park Green Infrastructure Management Plan

The overall approach to green infrastructure within the development is to create a network of accessible green spaces at various scales throughout the estate. This will ensure that all residents have access to high quality open space close to home. Frogs Copse, Hidden Pond and the Cutbush Lane bridleway will form a major element of the GI strategy which will be supplemented by a new village green, rooftop terraces on the apartment blocks and street tree planting. Combined with traffic calming, this will create an environment that is both attractive and safe for walking and cycling.

Version two of the Green Infrastructure Management Plan has been produced in response to the objection received from Natural England following consultation on the Townhill Park development planning application. The GI Plan provides an assessment of the existing green infrastructure within the estate and identifies measures to improve the value of these sites for informal recreation of the type that could be experienced on a trip to the New Forest.

The individual components of the green infrastructure network include:

Frog's Copse

Frog's Copse is an area of mixed woodland and grassland, at the northern end of the site, which is designated as a Site of Importance for Nature Conservation (SINC). It is existing public open space but is generally underused by the community. Dog walking and children making their way to the nearby secondary school appear to be the most frequent activities.

The area has potential to offer a valuable open space resource to local people, providing access to the natural environment close to home. There are open views from the elevated grassland area of Frogs Copse across the estate and the city beyond. This can be exploited as a destination point, and provides a wider sense of place within the City context.

Hidden Pond

Hidden Pond lies adjacent to Cut Bush Lane toward the north-eastern edge of the site. The Pond is surrounded by trees and scrub, with a small semi-natural grassland area next to it. Currently underutilised as a recreational resource, improved management could increase its value for biodiversity, visual amenity and as a resource for the community.

Cut Bush Lane,

Cut Bush Lane is a public bridleway that runs along the north-eastern boundary of the site. A strip of mixed broadleaf woodland runs along the bridleway providing an attractive walking and cycling route between the top and bottom of the estate.

Wider environment

Beyond the estate there is a variety of green spaces within convenient walking and cycling distance that provide opportunities for dog walking and general informal recreation. However, at present connectivity between Townhill Park and these sites is not strong due to indistinct links

between the sites. These sites are detailed below.

Riverside Park

Riverside Park is situated along the eastern bank of the River Itchen, to the north west of Townhill and approximately 800m north of the centre of the Estate. It provides a range of good quality amenities, including a riverside footpath and cycleway, open landscaped areas, sports grounds, pitch and put golf course and a miniature railway. The riverside footpath extends northwards along the river bank providing access to the Itchen Navigation.

Itchen Valley Country Park

This country park is situated to the north of Townhill Park, around 1800m from the centre of the estate. It comprises 440 acres of high quality open space, including water meadows, woodland and grasslands, of Green Flag status. Facilities include a 1 mile forest trail for disabled users, a Visitor Centre with shop & café, car parking and easy access from bus and road, play areas for under nines, adventure play areas for U-14's, play trails with sculptures, orienteering courses and a range of nature trails to explore and a Go Ape Tree Top adventure course.

Itchen Navigation

The Itchen Navigation is a designated as a Site of Special Scientific Interest (SSSI) and Special Area of Conservation (SAC) for its chalk stream habitats and associated wildlife. The Navigation was created in 1710 to transport barges of coal and timber from Southampton to Winchester and the old towpath is now a public footpath which can be accessed from Riverside Park.

The Itchen Navigation provides a good quality footpath allowing access to the natural environment. The route takes in a variety of environments, generally following the course of the riverbank, with the opportunity to observe wildlife, walk dogs and see local heritage.

National Cycle Route 23

The NCN23 listed under Sustrans is a key National Cycling route that passes through Riverside Park, this route is 81 miles long and stretches from the Isle of Wight over to Southampton and then up into North Hampshire. The route is traffic free in sections and offers cyclists a combination of woodlands, villages, river habitats, chalk downland and rural fields along its length.

The following map, taken from the Townhill Park Regeneration Green Infrastructure Management Plan v.2, shows the locations of the sites mentioned above in proximity to the Townhill Park Estate.



LOCAL OUTDOOR RECREATION AREAS CLOSE TO TOWNHILL ESTATE







Frogs Copse





Itchen Valley Country Park

Riverside Park

Mitigation Measures

The GI plan clearly illustrates that there are substantial informal recreation opportunities both within and in close proximity to the Townhill Park estate. However, these are not currently of a standard that readily attracts visitors or sufficiently easy for people to find. The GI plan therefore proposes a series of measures that will improve the quality and accessibility of the various green spaces. These measures are as follows:

Frogs Copse

Proposed improvements in phase 1 include:

- Upgrading of the existing footpath
- Provision of a natural play trail
- Creation of a picnic/informal sports area
- Habitat management
- Development of a detailed management plan, in partnership with the local community, with the intention of setting up a 'Friends of' group

In addition, the north eastern entrance to Frogs Copse will be improved in conjunction with a later phase of the development.

Hidden Pond

Proposed improvements include:

- Improved footpath connection to the pond;
- A management plan developed in partnership with the local community.

Cutbush Lane Bridleway

The intention is to maintain Cutbush Lane as green link.

Estate-wide

Proposed improvements include:

- New signage across the estate showing distances to green spaces within and close to Townhill Park
- Maps within the apartment blocks showing locations of open spaces and routes to them.
- Community engagement activities focused on the establishment of a Friends group to assist with the management of semi-natural sites, mainly Frogs Copse and Hidden Pond, and to run walking and cycling activities to introduce new and existing residents to the open spaces within and beyond the estate.

Resources for delivering the mitigation measures

Financial and other resources will be provided through the development to deliver the package of mitigation measures set out in the Green Infrastructure Management Plan version 2. These are summarised below. The annual maintenance sums cover a period of 10 years after which funding will be provided through the City-wide Mitigation Strategy which is currently being developed in conjunction with the Local Plan.

Phase One Mitigation Capital Costs

Frogs Copse Phase One Mitigation Costs	Capital Items	£29,700.00
Frogs Copse Phase One Mitigation Costs	Annual Maintenance	£1,478.00
Hidden Pond Phase One	Capital Items	£600.00

Mitigation Costs		
Townhill Park Phase One Mitigation Costs	Capital Items	£4,875.00
Townhill Park Phase One Costs	Annual maintenance	£15,442.00

Phase One Mitigation Revenue Items

Funding to support local community groups, local authority Ecology	£16,974.00
officers to oversee Phase One mitigation and Senior Ecologist to carry	
out voluntary training	

Note: SCC Open Spaces currently carry out a regular maintenance regime on Frogs Copse and Townhill Park, and the figures quoted above are based on an increase in capital required to maintain the Phase One mitigation the development will bring to site. Figures quoted will need to be revised annually to reflect inflation increases.

In addition to the financial contributions detailed above, routine maintenance currently undertaken by Southampton City Council will continue.

Conclusion

The Green Infrastructure Management Plan details a strategy for creating a coherent network of green spaces and corridors within the Townhill Park Estate that is also connected to the wider countryside.

The planned improvements within Frogs Copse and the Hidden Pond will create attractive environments which provide residents with opportunities for a range of recreation activities including dog walking, picnicking and informal play. The community engagement work will run a programme of activities to take residents on foot or by bicycle to sites within close proximity to the estate. It will also encourage local people to become involved in looking after their green spaces.

Whilst this will not eliminate all visits to the New Forest it will present new residents, and the existing community, with a range of alternative options which should help to spread recreation pressure more widely.

The proposed improvement to the semi-natural green spaces on the estate will make them a more attractive option for local people whilst the new signage and walking groups will introduce visitors to sites in the wider landscape.

The community engagement activities will make local people aware of what their local green space has to offer and help in the delivery of the management plans. This in turn will help to develop a sense of ownership and affinity with these sites which will make them destinations of first choice.

Based on full implementation of the proposed mitigation package it is possible to conclude no likely significant effects.

Solent and Southampton Water SPA/Ramsar site

The net increase of 275 dwellings will lead to an increase in population and in all probability an increase in recreational activity at SPA locations.

Research undertaken through the Solent Disturbance and Mitigation Project (SDMP) indicated that increases in recreational activity at SPA locations have the potential to create 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 (<u>http://www</u>.solentforum.org/forum/sub_groups/Natural_Environment_Group /Disturbance_and_Mitigation_Project/). However a key outcome of the research was that residential development within 5.6km of a Solent SPA could lead to a likely significant effect due to disturbance from recreation.

At 1.7km from the nearest section of the Solent and Southampton Water SPA/Ramsar site the development site is clearly within the 5.6km buffer zone. It can therefore be conclude that the population increase which will occur as a consequence of the proposed development is likely to lead to an increase in recreational activity at SPA locations.

The proposed development includes open space, however, whilst this will accommodate some of the recreational demand, it will not be able to replicate features found at coastal sites. A contribution

The SDMP identified a number of costed mitigation measures to reduce recreational disturbance arising from increased levels of recreational activity. A figure of £174 per residential unit was agreed by planning authorities across south Hampshire, and adopted by Southampton City Council, to enable delivery of the mitigation measures. The applicant intends to make a payment of £47,850 (174 x 275 (net increase) to the Solent Recreation Mitigation Partnership (successor to the SDMP), secured through an appropriate legal agreement, which will ensure that potential adverse effects arising from recreational development can be avoided.

Providing the proposed mitigation can be secured there are no implications from increased recreation on the SPA designations, even accounting for other plans and projects.

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

Conclusions

The findings of the initial assessment concluded that there a significant effect was 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 and proposed a number of 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.

The following mitigation measures have been proposed as part of the development:

Construction phase:

• Provision of a Construction Environmental Management Plan containing detailed methodologies for the avoidance measures.

Operational:

- Upgrade footpaths on Frogs Copse and Hidden Pond
- Upgrade site entrances
- Provision of a natural play trail
- Creation of a picnic/informal sports area
- Development of detailed biodiversity management plans with the local community
- Habitat management works
- New signage across the estate showing distances to green spaces within and close to Townhill Park
- Maps within the apartment blocks showing locations of open spaces and routes to them.
- Community engagement activities focused on the establishment of a Friends group to assist with the management of semi-natural sites and to run walking and cycling activities to introduce new and existing residents to the open spaces within and beyond the estate.
- Financial contributions to deliver infrastructure improvements (£35,175), site management (£16,920) and community engagement on greenspaces (£16,974) within the Townhill Park Estate
- Provision of a welcome pack to new residents including walking and cycling maps illustrating local routes.
- A contribution of £47,850 (£174 x 275) to the Solent Recreation Mitigation Project;

As such, visitor pressure on European and other protected sites in the New Forest and along the coast arising from the proposed development is likely to be extremely low and it can therefore be concluded that, subject to the implementation of the identified mitigation measures, **significant effects arising from recreational disturbance will not occur.**

References

Capita, Townhill Park Regeneration Habitats Regulations Assessment – Screening, September 2015

Capita, Townhill Park Regeneration Habitats Regulations Assessment – Scoping Report, December 2015

Capita, Statement to inform the Habitats Regulations Assessment for Townhill Park, Southampton, January 2016

Capita, Townhill Park Regeneration Green Infrastructure Management Plan v2, February 2016

European Site Qualifying Features

New Forest SPA

The New Forest SPA qualifies under Article 4.1 of the Birds Directive by supporting breeding populations of European importance of the following Annex I species:

- Dartford Warbler Sylvia undata
- Honey Buzzard Pernis apivorus
- Nightjar Caprimulgus europaeus
- Woodlark Lullula arborea

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

Hen Harrier Circus cyaneus

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 Callitricho-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 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
- 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.

The New Forest Ramsar Site

The New Forest Ramsar site qualifies under the following Ramsar criteria:

- Ramsar criterion 1: Valley mires and wet heaths are found throughout the site and are of outstanding scientific interest. The mires and heaths are within catchments whose uncultivated and undeveloped state buffer the mires against adverse ecological change. This is the largest concentration of intact valley mires of their type in Britain.
- Ramsar criterion 2: The site supports a diverse assemblage of wetland plants and animals including several nationally rare species. Seven species of nationally rare plant are found on the site, as are at least 65 British Red Data Book species of invertebrate.
- Ramsar criterion 3: The mire habitats are of high ecological quality and diversity and have

undisturbed transition zones. The invertebrate fauna of the site is important due to the concentration of rare and scare wetland species. The whole site complex, with its examples of semi-natural habitats is essential to the genetic and ecological diversity of southern England.

The New Forest SAC

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

- Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) (primary reason for selection)
- Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea (primary reason for selection)
- Northern Atlantic wet heaths with Erica tetralix (primary reason for selection)
- European dry heaths (primary reason for selection)
- Molinia meadows on calcareous, peaty or clayey-silt laden soils (Molinion caeruleae) (primary reason for selection)
- Depressions on peat substrates of the Rhynchosporion (primary reason for selection)
- Atlantic acidophilous beech forests with llex and sometimes also Taxus in the shrub layer (Quercion robori-petraeae or Ilici-Fagenion) (primary reason for selection)
- Asperulo-Fagetum beech forests (primary reason for selection)
- Old acidophilous oak woods with Quercus robur on sandy plains (primary reason for selection)
- Bog woodland (primary reason for selection)
- Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) (primary reason for selection)
- Transition mires and quaking bogs
- Alkaline fens

The New Forest SAC qualifies under Article 3 of the Habitats Directive by supporting the following Annex II species:

- Southern Damselfly Coenagrion mercurial (primary reason for selection)
- Stag Beetle Lucanus cervus (primary reason for selection)
- Great Crested Newt Triturus cristatus

Appendix 2

Summary table of potential impacts upon designated sites				
Activity	Site	Impact	Conclusion	
Reduction of habitat area	River Itchen SAC	There will be no loss of, or damage to habitats within the River Itchen SAC.	No likely significant effect	
	Solent and Southampton Water SPA Solent and Southampton Water Ramsar	There will be no loss of, or damage to habitats within the Solent and Southampton SPA or Ramsar.	No likely significant effect	
	Mottisfont Bats SAC	There will be no loss of, or damage to habitats within the Mottisfont Bats SAC	No likely significant effect	
	New Forest SAC New Forest SPA New Forest Ramsar	No direct loss of habitat area will occur due to the proposed works. The New Forest is a popular tourist location and an increase in population at Townhill has some potential to increase public pressure on the New Forest leading to possible habitat damage and reduction in area.	Likely significant effects	
Disturbance to key species;	River Itchen SAC	The Townhill Regeneration is located a substantial distance, 500m, from the European Site, and disturbance to key species is highly unlikely to occur	No likely significant effects	
	Solent and Southampton Water SPA Solent and Southampton Water Ramsar	Recreational disturbance	Likely significant effects	
	Mottisfont Bats SAC	The Townhill Regeneration is located a substantial distance, over 17km, from the European Site, and disturbance to key species is highly unlikely to occur	No likely significant effect	

	New Forest SAC New Forest SPA New Forest Ramsar	The proposed development itself will not directly disturb key species, however, as the New Forest is a popular tourist location, an increase in population at Townhill has some potential to increase public pressure on the New Forest leading to possible increased disturbance of key species	Likely significant effect.
Habitat or species fragmentation;	River Itchen SAC	No direct loss of habitat or species will occur due to the works.	No likely significant effects
	Solent and Southampton Water SPA Solent and Southampton Water Ramsar	No direct loss of habitat or species will occur due to the works.	No likely significant effect
	Mottisfont Bats SAC	No direct loss of habitat or species will occur due to the works.	No likely significant effect
	New Forest SAC New Forest SPA New Forest Ramsar	No direct loss of habitat or species will occur due to the development. The New Forest is however, a popular tourist location and an increase in population at Townhill has some potential to increase public pressure on the European Sites leading to possible habitat damage and fragmentation.	Likely significant effect.
Reduction in species density;	River Itchen SAC	No direct loss of habitat or species will occur due to the works.	No likely significant effects
	Solent and Southampton Water SPA Solent and Southampton Water Ramsar	No direct loss of habitat or species will occur due to the works.	No likely significant effects
	Mottisfont Bats SAC	No direct loss of habitat or species will occur due to the works.	No likely significant effect

	New Forest SAC New Forest SPA New Forest Ramsar	No direct loss of habitat or species will occur due to the works. Disturbance causing a reduction in species density is possible through increased public pressure at the European Sites. Such pressure could be contributed to by the predicted increased population at Townhill Park	Likely significant effect
Change to key elements of the site (e.g. water quality, hydrological regime etc.).	River Itchen SAC	Without mitigation, there is limited potential for polluted surface water run-off and dust particles to reach the River Itchen SAC. Pollution prevention measures for both surface run- off and dust control will be implemented through a Construction Environmental Management Plan (CEMP).	With mitigation no likely significant effect
	Solent and Southampton Water SPA Solent and Southampton Water Ramsar	 Without mitigation, there is limited potential for polluted surface water run-off and dust particles to reach the Solent and Southampton Water SPA/Ramsar site. Pollution prevention measures for both surface run-off and dust control will be implemented through a Construction Environmental Management Plan (CEMP). 	With mitigation no likely significant effect
	Mottisfont Bats SAC	Due to the distance involved and the intervening countryside changes to key indicators are considered to be highly unlikely.	No likely significant effect
	New Forest SAC New Forest SPA New Forest Ramsar	Due to the distance of the European sites from the Townhill Regeneration scheme, approximately 10km west, there is no direct impact upon indicators of conservation value such as water or air quality etc.	?
Climate change	River Itchen SAC	Impacts in respect of climate change are not	No likely significant effects

		anticipated.		
	Solent and Southampton Water SPA Solent and Southampton Water Ramsar	Impacts in respect of climate change are not anticipated.	No likely significant effect	
	Mottisfont Bats SAC	Impacts in respect of climate change are not anticipated.	No likely significant effect	
	New Forest SAC New Forest SPA New Forest Ramsar	Impacts in respect of climate change are not anticipated.	No likely significant effect	
Issues to be taken forward for full appropriate assess		ssment		
Solent and Southampton Water SPA Solent and Southampton Water Ramsar		 Recreational disturbance leading to: Reduction of habitat area; Disturbance to key species; Habitat or species fragmentation; Reduction in species density. 		
New Forest SPA New Forest Ramsar		 Recreational disturbance leading to: Reduction of habitat area; Disturbance to key species; Habitat or species fragmentation; Reduction in species density. 		
New Forest SAC		 Deterioration in air quality leading to: Change to key elements of the site (e.g. water quality, hydrological regime etc.). 		