

SUBMITTED WITH PLANNING APPLICATION SD18A/0363



# greentrack

## Ecological/Screening Report

Ecological/Screening Report in relation to planning application by Pavement Homes Ltd. For the construction of 22 dwelling houses and all associated site works located in Newcastle, South Dublin as detailed within planning ref. SD18A/0363.

Greentrack Environmental Consultants

April 2019



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## **1 INTRODUCTION**

Greentrack Consultants have been instructed by Pavement Homes Ltd. c/o William Donoghue and Associates, Woodlands, Rathangan, Co. Kildare, to undertake this ecological/screening report examining their proposal as detailed in planning application SD18A/0363.

The purpose of this ecological/screening report is to establish an ecological baseline within the subject site and outline if there is any biodiversity of significant value present within the subject site including hedgerows, trees and grasslands as well as the presence of any protected species such as badger. This report will assess any likely significant effects or impacts (if any) that the proposed development will have on the biodiversity of the subject site.

### **1.1 Background and Requirement for Report**

#### **1.1.1 Project Description**

The proposal is for the construction of 22 dwelling houses along with all associated site works along the main street in Newcastle, South Dublin as detailed in planning ref. SD18A/0363. The site as detailed for planning measures 0.71 Ha in total.

The consent authority, South Dublin County Council, served notice on the applicant in November 2018 seeking an “Ecological Report/Screening Report” on the impact of the development (planning ref. SD18A/0363) on the biodiversity of the subject site. Following the principles of best practice, we are now submitting this Ecological/Screening Report in order to determine whether or not an Appropriate Assessment is required for the proposed development and also to assess any likely significant effects or impacts (if any) that the proposed development will have on the biodiversity of the subject site.

This report contains ecological data on the subject site and the surrounding environs and screens the possible impacts associated with the proposed development against the biodiversity found within the site footprint. This report has now been produced in response to Schedule 4 of this notice.

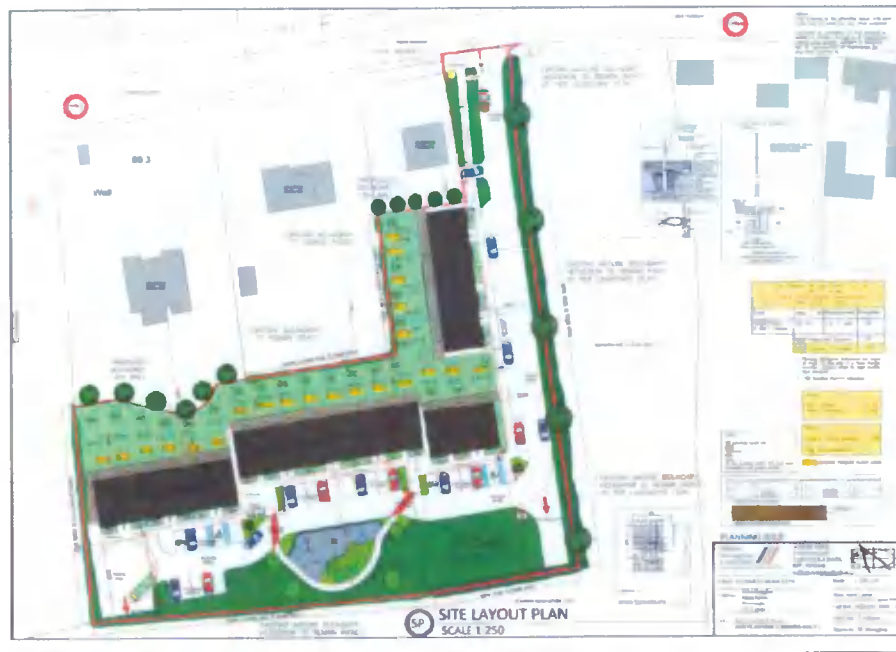
Map 1 below gives the site location while Figure 1 below shows the entire site layout with photographs 1 and 2 giving a visual assessment of the subject site.



**Map 1: Site location**



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**Figure 1: Proposed site layout**





**Photograph 1: View of subject site from the entrance gate looking south**



**Photograph 2: View of subject site looking north west**



### **1.1.2 Site location in relation to Natura 2000 sites**

Natura 2000 sites (also known as European Sites or more commonly as Special Areas of Conservation and Special Protection Areas) are a European-wide ecological network of special areas of conservation composed of sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II, as well as areas for the protection of bird species listed on Annex I of the Directive, regularly occurring populations of migratory species (such as ducks, geese or waders), and areas of international importance for migratory birds.

The aim of the network is to aid the long-term survival of Europe's most valuable and threatened species and habitats. National Heritage Areas (NHAs) are designations under the Wildlife Acts 1976 & 2000 in order to protect habitats, species or geology of national importance. The boundaries of many of the NHAs in Ireland overlap with Natura 2000 sites. Although many NHA designations are not yet fully in force under this legislation (referred to as 'proposed NHAs' or pNHAs until such time), they are offered protection in the meantime

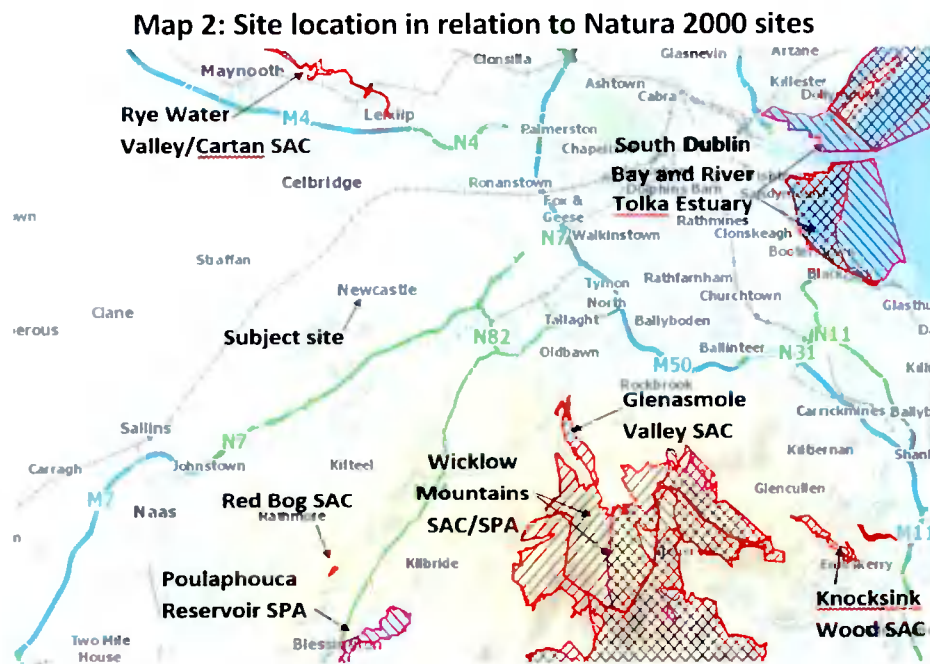


under planning legislation which requires that planning authorities give recognition to their ecological value.

As detailed in Map 2 below, there are no Natura 2000 sites within the vicinity of the subject site. The Natura 2000 sites occurring within a 15km radius of the subject site are:

- Rye Water Valley/Cartan SAC site code 001398
- Glenasmole Valley SAC site code 001209
- Wicklow Mountains SAC site code 002122
- Wicklow Mountains SPA site code 004040
- Red Bog SAC site code 000397
- Poulaphouca Reservoir SPA site code 004063

The Knocksink Wood SAC is approx. 21km from the subject site while the South Dublin Bay and River Tolka Estuary SPA are approx. 23.6km from the subject site.



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As shown in map 2, there is no land borders nor any hydrological links between the subject site and any of the listed Natura 2000 sites. On this basis, due to the distance between the sites and the absence of any hydrological links, it is deemed that the proposed development will not have any effects on any of the Natura 2000 sites as listed above. Therefore, they can be screened of any further studies and this application does not require Appropriate Assessment by the consent authority.



## **2 METHODOLOGY**

This section of the report concentrates on ecological features within the development area of particular significance such as rare plants listed in the Flora Protection Order and other semi-natural habitats of conservation value.

Baseline ecological data was collated through a field visit to the subject site and surrounding areas on 24<sup>th</sup> March 2019 by Greentrack. Desk based research was also carried out. Interpretation and analysis of the information gathered is presented in this report. The area of study included all land within the subject site (area within the red line boundary as detailed in Map 1 – 0.71 Ha in total).

### **2.1 Habitat Assessment**

The assessment was carried out in three stages, firstly through desktop assessment to determine existing records in relation to habitats and species present in the study area. This included research on the NPWS metadata website and a literature review of published information on flora and fauna occurring in the development area.

The second phase of the assessment involved a site visit to establish the existing environment in the footprint of the proposed development. Areas which were highlighted during desktop assessment were investigated in closer detail according to the Heritage Council Best Practice Guidance for Habitat Survey and Mapping (Smith et al., 2011). Habitats in and around the development areas were classified according to the Heritage Council publication “A Guide to Habitats in Ireland” (Fossitt, 2000). This publication sets out a standard scheme for identifying, describing and classifying wildlife habitats in Ireland. This form of classification uses codes to classify different habitats based on the plant species present. Species recorded in this report are given in both their Latin and English names. Latin names for plant species follow the nomenclature of “An Irish Flora” (Parnell & Curtis, 2012).

A habitat survey was conducted at the site on 24<sup>th</sup> March 2019 by Shannen McEwen and Denis Faulkner of Greentrack Consultants who conducted a site walkover covering the areas under the footprint of the development as shown in Map 3 below. Using the Fossitt Guide to Habitats in Ireland (2000) the overall area of the subject site can be described as a mosaic of amenity grassland (GA2) which is dominated by fescue and bent grasses. A mature leylandii hedgerow (WL1) fringed the site boundary which is to be retained as per the site landscape plan which various scattered tree species (WD5) found within the subject site. The subject site also contains a garden shed (BL3) which will be removed as part of the development (see section 3 for more detail on habitats found within the subject site). The field adjacent to the subject site can be termed as improved agricultural grassland (GA1). The subject site can be considered to be monocultured and is not rich in biodiversity with no habitats/flora or fauna of interest/importance found onsite.



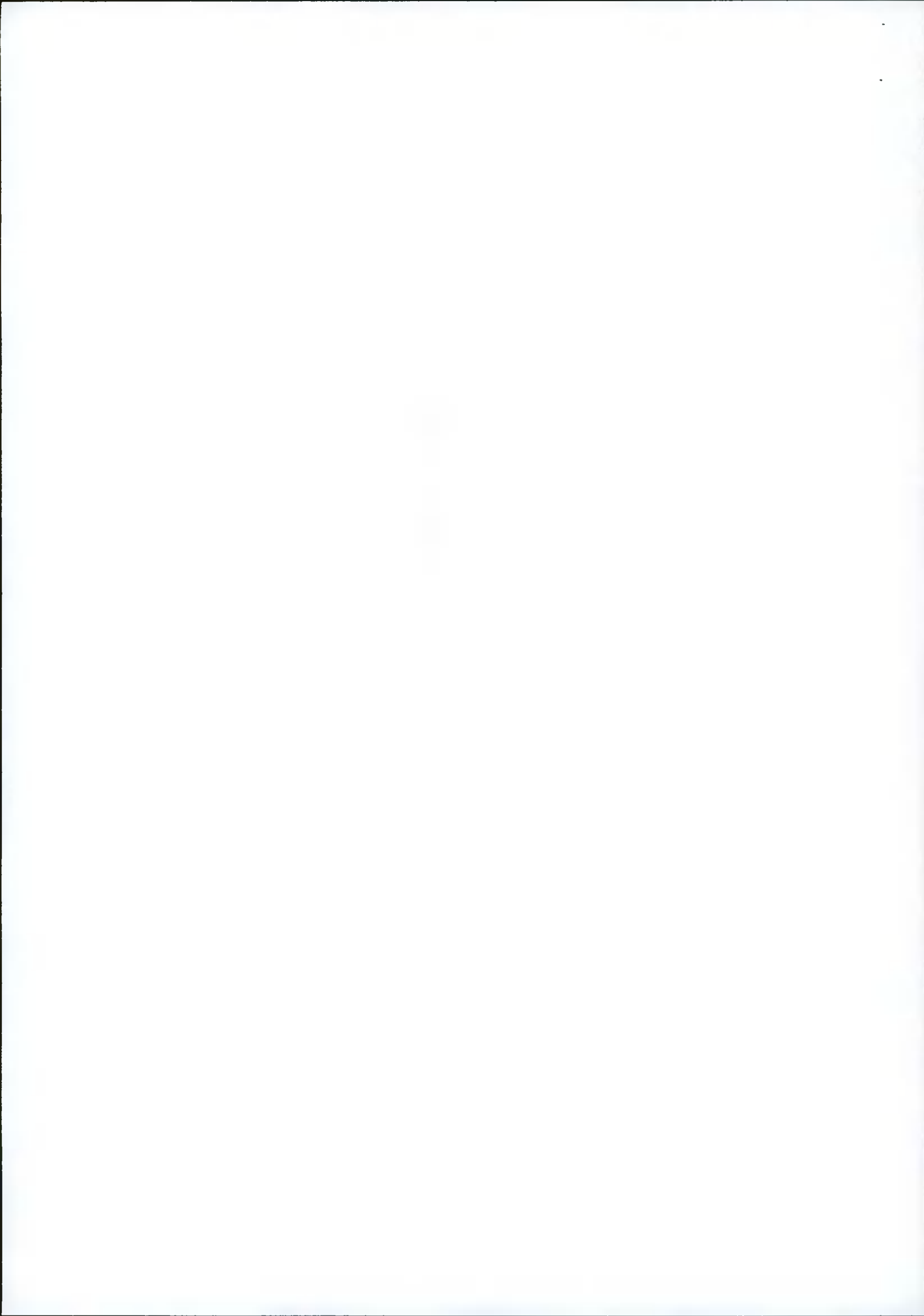


**Map 3: Habitats found within the subject site and the surrounding environs**



The third stage of the assessment involves an evaluation of the development area and determination of the potential impacts on the flora and fauna of the area and is based on the following guidelines and publications:

- Guidelines on the Information to be contained in Environmental Impact Assessment Reports (EPA, Draft August 2017);
- Advice Notes for preparing Environmental Impact Statements (EPA, Draft Sept 2015);
- Assessment of plans and projects significantly affecting Natura 2000 sites (EC, 2002);
- Managing Natura 2000 Sites (EC, 2000)
- Guidance document on Article 6(4) of the Habitats Directive 92/43/EEC (EC, 2007);
- Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (DEHLG, Rev. Feb. 2010).
- Best Practice Guidance for Habitat Survey and Mapping (Smith et al., 2011).
- A Guide to Habitats in Ireland (Fossitt, 2000).
- Bat Surveys: Good Practice Guidelines (Bat Conservation Trust, 2016).
- Habitats Directive and environmental assessment of plans and projects. García Ureta, A. Journal for European Environmental and Planning Law 2, 8496, 2007.
- Compliance Conditions in respect of Developments requiring (1) Environmental Impact Assessment (EIA); or (2) having potential impacts on Natura 2000 sites. Circular letter PD 2/07, NPWS 1/07
- Compliance of Existing Land Use Plans with the EU Habitats Directive. Department of Environment, Heritage and Local Government (2011) Circular Letter PSSP 5/2011.





The following resources assisted in the production of this section of the report:

- OSI, Google and Bing Aerial photography;
- National Parks and Wildlife Service (NPWS) Mapviewer: <http://www.npws.ie/en/MapsData/>; Designated sites (SACs, SPAs, NHAs);
- Records of protected species from 10km squares;
- National Biodiversity Data Centre Records and Maps.
- National Biodiversity Plan 2017 – 2021 (Department of Arts, Heritage and the Gaeltacht, 2017);

## **2.2 Mammal survey**

### **2.2.1 Badgers**

There was no evidence of badgers recorded in and around the subject site. There are also no recent records for Badgers within 10km of the subject site, according to the National Biodiversity Data Centre. Badgers are fully protected under the Wildlife Act (1976) and subsequent amendments.

### **2.2.2 Bats**

A separate survey for the presence of bats was undertaken on 22<sup>nd</sup> and 23<sup>rd</sup> August 2018 by Brian Keeley and forms part of the current planning application. The assessment involved a night time examination of the areas within the site footprint including the garden sheds which are to be removed and a pre-dawn survey was undertaken on trees/hedgerows throughout the site. The report found no roosting bats onsite but several were found commuting through the site. None of the trees located around the subject boundary were considered suitable for roosting bats as they did not support any potential roost features.

All Irish bat species are fully protected under the Wildlife Act (1976) and subsequent amendments and incorporated into the European Communities (Birds and Natural Habitats) Regulations, 2011.

### **2.2.3 Birds**

The presence of trees and scrub around the subject site boasts potential for bird habitats. A few doves and pigeons were spotted around the Leylandii trees in the hedgerow as well as in the Sitka spruce trees on site with no birds of interest noted on site. Birds, as well as their nests and eggs, are fully protected under the Wildlife Act (1976) and subsequent amendments.

A check for any breeding/nesting birds must be carried out by a suitably qualified ecologist before site works begin, to ensure any birds, their nests, eggs or young are not affected/disturbed by any activities. If nesting birds are identified during the check, the advising ecologist will issue guidance in relation to the protection of the nesting birds in



conjunction with the scheduled works. Measures such as applying a set boundary around the nest may be necessary until the young birds have fledged.

### **2.3 Invasive Alien Species**

During the site visit, a search for Invasive Alien Species (IAS) listed under the Third Schedule of the European Communities Regulations 2011 (S.I. 477 of 2015) was undertaken. This included the area within the red line boundary as detailed in Map 1 and in the immediate surrounding area. None were found within the subject site nor in the immediate surrounding environs. The National Biodiversity Data Centre website was also consulted in relation to records of invasive species in the area, for which none were found.

### **3 Habitat Description**

Each habitat type found within the subject site and in the immediate surrounding environs will be described in further detail with emphasis placed on features of ecological importance and mitigation measures required, where appropriate. The ecological value of the sites was assessed following the guidelines set out in the Institute of Ecology and Environmental Management's Guidelines for Ecological Impact Assessment (2006) according to the Natura Scheme for evaluating ecological sites (after Nairn & Fossitt, 2004).

#### **Amenity Grassland (GA2)**

This type of grassland is improved, or species-poor, and is managed for purposes other than grass production. It includes amenity, recreational or landscaped grasslands, but excludes farmland. Most areas of amenity grassland have been reseeded and are regularly mown to maintain very short swards. Fertilisers and herbicides are often applied but there is rarely any grazing by livestock.

Using the Fossitt Guide to Habitats in Ireland (2000) the main habitat of the subject site can be described Amenity Grassland (GA2). This was dominated by bents (*Agrostis capillaris*, *A. tenuis*) and fescues (*Festuca* spp.). Ground ivy (*Glechoma hederacea*), Buttercup (*Ranunculus repens*) and Plantains (*Plantago* spp.) are also abundant. No flora of interest was noted in this area.



**Plate 1: Amenity Grassland within the subject site**



**Mitigation:** There is nothing of significant ecological importance in this area. Therefore, no mitigation is required in relation to the proposed development.

### **Hedgerows WL1**

Linear strips of shrubs, often with occasional trees, that typically form field or property boundaries. Most hedgerows originate from planting and many occur on raised banks of earth that are derived from the excavation of associated drainage ditches. Dimensions of hedgerows vary considerably, depending largely on management and composition, and are taken here as being mainly less than 5 m high and 4 m wide.

The hedges on this site are mainly comprised of Leylandii (*Cupressus leylandii*), Castlewellan Gold (*Cupressus castlewellan gold*), Spruce (*Picea*) and Lawson (*Chamaecyparis lawsoniana*) and are of notable size, offering a mature landscape feature with good screening effect. 6 out of the 9 hedgerows identified are to be retained during the development process as referenced in the tree survey which accompanies this planning application.

**Plate 2: Hedgerows within the subject site**





**Mitigation measures:** Protection measures to ensure the long-term retention of as many of the remaining trees and hedges as practicable around the new development such as the erection of fencing and the establishment of a root protection zone are described in the Arboricultural Method Statement and Tree Protection Recommendations which accompanies the planning application.

### **Improved Agricultural Grassland GA1**

This category is used for intensively managed or highly modified agricultural grassland that has been reseeded and/or regularly fertilised, and is now heavily grazed and/or used for silage making. It includes regularly-reseeded monoculture grasslands and rye-grass leys that are planted as part of an arable rotation. These differ significantly from areas of permanent grassland. Improved agricultural grassland is typically species-poor. Sward quality varies depending on soil type, fertility, drainage and management. The field adjacent to the subject site can best be described as improved grassland. This was dominated by bents (*Agrostis* spp.), meadow-grasses (*Poa* spp.), fescues (*Festuca* spp.) and clovers (*Trifolium* spp.).

**Plate 3: Improved grassland within the surrounding environs**

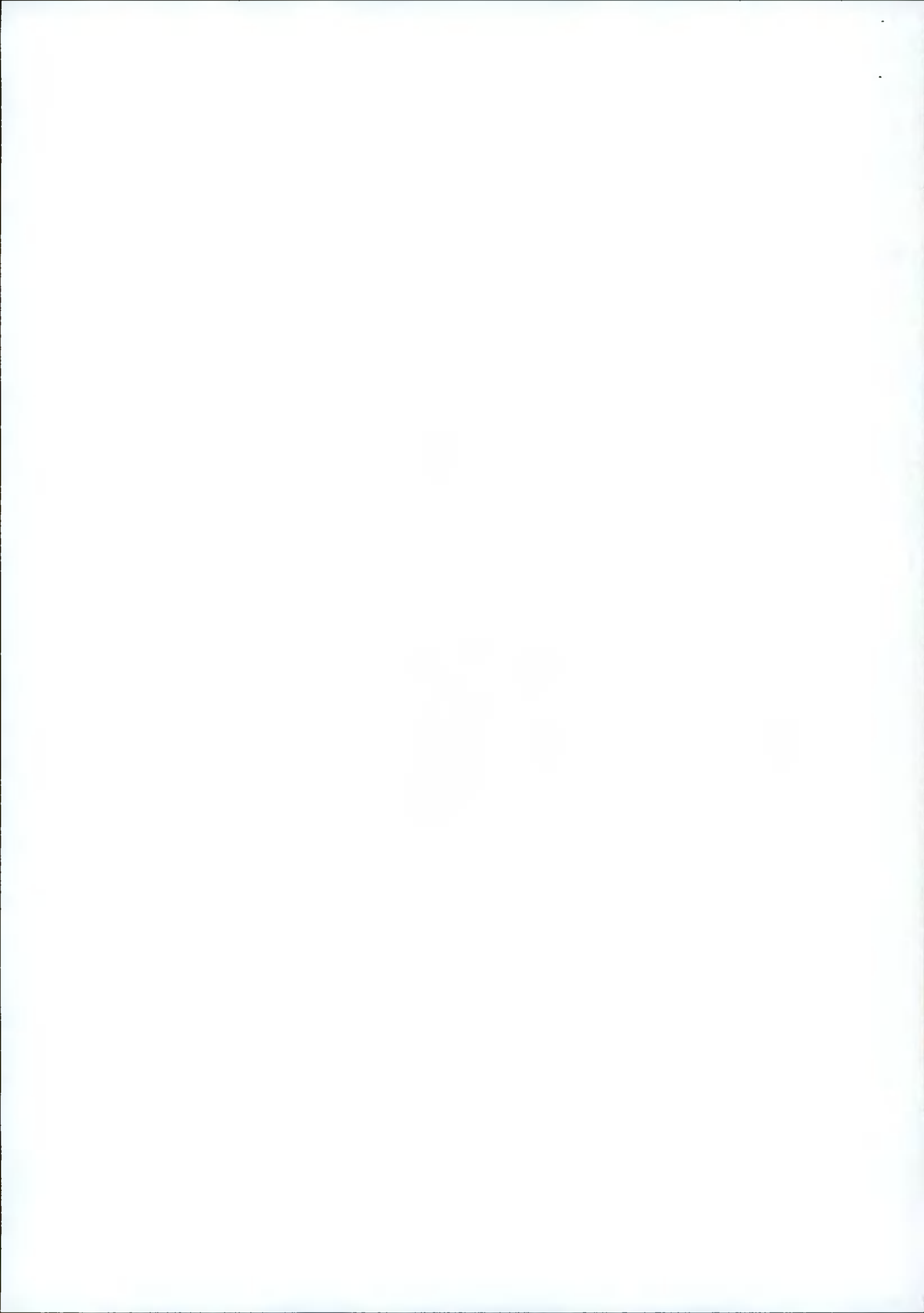


**Mitigation:** There is nothing of significant ecological importance in this area. Therefore, no mitigation is required in relation to the proposed development.

### **Scattered trees and parkland WD5**

This category can be used in situations where scattered trees, standing alone or in small clusters, cover less than 30% of the total area under consideration but are a prominent structural or visual feature of the habitat. This usually occurs in areas of cultivated grassland, particularly amenity areas. In the case of parkland or parks which originate from former planting and landscaping, the proportion of non-native trees is typically high.

The subject site contains numerous trees of various species throughout the site footprint as shown in the photographs below. A total of 20 individual trees (all low quality with no biodiversity value) included in the tree survey will have to be removed to facilitate the new





buildings and associated infrastructure which are discussed in Section 4.2. Photographs 3 – 6 show some of the various species found onsite.

**Photograph 3: Birch tree near the entrance of the site**



**Photograph 4: White beam opposite entrance of subject site**



**Photograph 5: Castlewellan Gold behind garden shed**





**Photograph 6: Sitka spruce, Castlewellan Gold and Leylandii**



**Mitigation:** This area is very monocultured with nothing of significant ecological importance in this area. Trees being retained will be protected from unnecessary damage during the construction process by effective construction-proof barriers that will define the limits for machinery drivers and other construction staff. Ground protected by the fencing will be known as the Construction Exclusion Zone (CEZ). Sturdy protective fencing will be erected along the points identified in the Tree Protection Plan prior to any soil disturbance and excavation work starting; this is essential to prevent any root or branch damage to the retained trees. The British Standard BS5837: Trees in relation to design, demolition and construction (2012). All works will be overseen by qualified arborist who will make regular visits to the site during construction and will assess the tree health post construction.

### **Buildings and artificial surfaces BL3**

This broad category incorporates areas of built land that do not fit elsewhere in the classification. It includes all buildings (domestic, agricultural, industrial and community) other than derelict stone buildings and ruins. It also includes areas of land that are covered with artificial surfaces of tarmac, cement, paving stones, bricks, blocks or astroturf (e.g. roads, car parks, pavements, runways, yards, and some tracks, paths, driveways and sports grounds).

The garden shed located within the first garden which is to be removed as part of the development falls into this category. There is also a shed/garage located within the western field as indicated in Map 3 in section 2.1.



**Plate 4: Garden shed which is to be removed**



**Mitigation:** The shed is proposed for removal and there is nothing of significant ecological importance in this area. Therefore, no mitigation is required in relation to the proposed development.

#### **4 THE RECEIVING ENVIRONMENT**

##### **4.1 General Location**

The receiving environment is in the main town of Newcastle, South Dublin with site access off the R120 regional road.

##### **4.2 Characteristics of the Development**

The site is comprised of gardens which are surrounded on all sides by mature hedges of varying species and quality. Interior to the site are groups of small-medium sized garden ornamentals. Photographs 7-9 show some of the interior gardens found within the subject site. Garden 3 contains an old, dilapidated greenhouse which will be removed as part of the development. Nothing of ecological interest was noted within any of the garden areas.

**Photograph 7: Garden 1**







**Photograph 8: Garden 2**



**Photograph 9: Garden 3**



The boundary hedges are noteworthy because of their size and screening effect and have been classified as category B, except for the 'Castlewellan Gold' cypress hedges on the Western and Southern boundary (labelled H1 and H2 in figure 3 below) which are declining and sparse in some areas and are classified as category C.

A total of 36 individual trees were assessed as part of the separate tree survey (carried out by Angela Ward of Woodfield Horticulture) both on site and adjacent to the site; of these none were classed as a category A tree (high value), 11 as category B tree (moderate value), 23 trees were classed as category C trees (low value) and 2 trees were classed as category U (unsuitable for long term retention). 9 mature hedges were assessed. 5 were classified as category B. 4 Hedges were classified as category C as seen in figure 3 below.







**Figure 3: Current landscape of the subject site**

The interior hedges (7, 8, 9) consist of a mixture of spruce, Lawson and Leyland cypress are becoming over-sized for a domestic site. The Cypress species are classic hedging trees which need to be frequently pruned to maintain density and vigour. When allowed to become large windbreaks they inevitably begin to shed branches and lose their screening purpose as gaps appear as shown in photograph 9.

**Photograph 9: H2 along the southern boundary of the subject site**







**Figure 4: Proposed layout of the subject site**

The layout of the proposed new housing development is shown overlain with the tree survey findings in figure 4 above. The drawing shows the trees requiring removal and the recommended protection measures for those intended for retention; these trees have been identified following an assessment of the likely impact of the planned layout on the existing tree population. A total of 20 individual trees included in the survey schedule will have to be removed to facilitate the new buildings and associated infrastructure. 4 are category B, 14 are Category C and 2 are category U; these are the trees tagged 0791, 0793-0808, 0813-0814. These trees are all small-medium garden trees, the majority being low quality. Replanting within the new development should include replacement of the trees lost with species suited to the scale and type of development. Hedges 7, 8 and 9 will also have to be removed to facilitate the new development. These are hedges of low quality that have outgrown the site and are beginning to deteriorate.

The rear gardens of the new development will incorporate trees 0809, 0810, 0811, 0818 & 0818.1. and G0818.2. These trees are currently marked for retention, however due to their proximity to the new development their root protection area should be protected for the duration of the build and landscaping process. Tree 0816 is to be incorporated into the Public open space. Long term retention of this tree will depend on the protection measures afforded to it during the development process.

### **4.3 Impact Assessment**

This development as detailed above will not have any negative impact on the biodiversity value subject site as there was no habitats or flora or fauna of importance/interest found within the subject site.



#### **4.3.1 Impact on subject site and environs:**

Section 3 detailed the habitats that are found in and around the subject site and the surrounding environs. As stated previously there are no habitats or species of value found within the subject site. This concluded that no mitigation measures are required for the majority of habitats apart from implementing measures to ensure the long-term retention of as many of the remaining trees and hedges as practicable around the new development.

### **5 RESIDUAL IMPACTS**

Taking into account the findings from this report, it is deemed that there will be no residual impacts on the subject site, surrounding environs or Natura 2000 sites on the basis that

- a) There are no flora/fauna/habitats of interest/importance within the subject site nor in the surrounding environs.
- b) There is no adjacent land borders nor hydrological links to any of the Natura 2000 sites as stated in section 1.1.2.

### **6 TECHNICAL DIFFICULTIES**

No technical difficulties were encountered in the preparation of Ecological Report.

### **7 SUMMARY**

The purpose of this ecological/screening report was to establish an ecological baseline within the subject site and to outline if there was any biodiversity of value present within the subject site including hedgerows, trees and grasslands as well as the presence of any protected species such as badger. This report assessed any likely significant effects or impacts (if any) that the proposed development could have on the biodiversity of the subject site.

This report has established that the proposed project will not have any significant negative effect on any of the biodiversity found on site as there was nothing of ecological importance/interest found on site. The report has also established that Appropriate Assessment by the consent authority is not required for the proposed development.

This Ecological/Screening Report has been prepared by Greentrack Consultants with all reasonable care, due diligence and professional application. This Ecological Report has been prepared with the best scientific knowledge on the current development and associated works that is available to Greentrack at the time of writing. Information contained within this report is based on the interpretation of data collected and has been accepted by Greentrack in good faith.

This Ecological/Screening Report is prepared under instruction from Pavement Homes Ltd. c/o William Donoghue and Associates, Woodlands, Rathangan, Co. Kildare, planning applicants to the South Dublin County Council in response to schedule 4 of the FI published in October 2018 under planning no. SD18A/0363. Greentrack accept no responsibility to any



third party to whom this report is made known or available. Any such third parties rely on the findings of this report at their own risk.

Signed:

Dated: 7<sup>th</sup> April 2019



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Denis Faulkner  
Greentrack Consultants





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