

400 Longwater Avenue

Ecological Appraisal

On behalf of **Green Park Reading No.1 LLP**

Project Ref: 27159/3004 | Rev: AA | Date: March 2016



Document Control Sheet

Project Name: 400 Longwater Avenue

Project Ref: 27159

Report Title: Ecological Appraisal

Doc Ref: 27159_3004_Eco_150316_kehs

Date: March 2016

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For and on behalf of Peter Brett Associates LLP				

Revision	Date	Description	Prepared	Reviewed	Approved
A	15/03/16	Amended version following client comment	KE		

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Executive Summary

Peter Brett Associates LLP have been appointed by Green Park Reading No.1 LLP to provide ecological support and advice in relation to the proposed development of the 400 Longwater Avenue plot at Green Park in Reading, Berkshire, hereinafter referred to as 'the site'. The site is located on the western edge of Green Park, a large business park positioned approximately 3.7 km south of Reading town centre, and is centred by National Grid Reference SU700 699. The development proposals for the site involve the construction of a new multi-storey office building and associated car parking, as well as areas of soft landscaping.

A Phase 1 habitat survey of the site was carried out on 12th February 2016. This survey was extended in order to identify the potential for protected and notable species to be present. A desk study review of recent existing ecological survey information relating to Green Park was also undertaken to provide contextual information about protected sites and species, assisting interpretation of the field study results.

The site was dominated by a development platform comprising made land vegetated by ephemeral/short perennial vegetation and considered to be of low ecological value. Around the margins of the site were areas of scrub and tree planting. Immediately east of the site lies Longwater Lake, a large open waterbody which many of the Green Park plots face on to and which provides one of the main flood storage areas for the wider Green Park complex.

Whilst the habitats within the site were limited in extent and support un-diverse and common plant assemblages, they had some potential to support protected and notable species. The desk study revealed previous records of grass snake *Natrix natrix* associated within the margins of the site. The site also had the potential to support low numbers of breeding birds, including species of conservation importance. The February 2016 field survey did not reveal any evidence of, or potential for, protected or priority species within the site beyond those identified during the desk study. No further protected species surveys are considered necessary to inform a planning application for the development.

The proposed works have the potential to impact indirectly upon the adjacent Longwater Lake. Recommendations have therefore been made with regards to appropriate construction methods, to ensure the risk of a pollution incident upon this priority habitat is kept to a minimum. Similarly, the scheme will be supported by a carefully designed drainage strategy to ensure run off levels, both in terms of quantity and quality, remain at or below current pre-development thresholds.

To avoid impacts on breeding birds and reptiles, vegetation clearance works prior to the commencement of construction activities will need to follow appropriate working methods and timings.

Details of the ecological mitigation and enhancement measures that will be delivered as part of scheme design are provided. These include:

- The incorporation of native species or species with a known wildlife benefit into the proposed landscaping scheme.
- Incorporation of areas of species-rich meadow grassland within the proposed landscaping scheme.
- The incorporation of a sensitive lighting scheme for the site, which minimises spillage onto the Longwater Lake and adjacent scrub habitats, where these habitats have the potential to be used by foraging and commuting bats.
- The anchoring of a floating raft within Longwater Lake, in order to mitigate for the loss of Introduction

1.1 Site Description

- 1.1.1 The planning application site known as 400 Longwater Avenue, and hereinafter referred to as 'the site', is located on Longwater Avenue on the western perimeter of Green Park and is centred by National Grid Reference SU700698. The site totals approximately 2.5 ha in area.
- 1.1.2 Green Park itself, which is owned and managed by Oxford Properties, is located to the south of Reading town centre. The site location is shown in Figure 1.
- 1.1.3 The site is bound by the M4 motorway to the south and A33 Relief Road to the east. The Madejski Stadium, Green Park Village and Energy from Waste facility are situated nearby with extensive areas of commercial and residential development associated with south Reading lying to the east. Arable fields and a former gravel works are located to the west of Green Park.
- 1.1.4 The site is dominated by intensively managed habitats in the form of a development platform comprising made land vegetated by ephemeral/short perennial vegetation. Around the margins of the site are areas of scrub and tree planting. A semi-wet ditch and mosaic of rough grassland, tall ruderal vegetation and scattered trees and scrub forms the eastern site boundary. Beyond this lies Longwater Lake, a large open waterbody which spans the length of Green Park. Immediately south of the site is a small land parcel vegetated by tall ruderal and scrub habitats, beyond which lie further development platforms similar in character to the site. The western site boundary is formed by Longwater Avenue, which also forms the western boundary of the Park itself. Immediately north of the site is one of the many modern office buildings located within the Park, and associated hardstanding car parking and areas of soft landscaping.
- 1.1.5 Photographs of the site are provided in Appendix C.

1.2 Proposed Works

- 1.2.1 The proposals for the site involve the development of a new office block (comprising two distinct wings connected by a central bridge link) and associated areas of car parking and soft landscaping. The development proposals are provided in Figure 2.

1.3 Aims of Study

- 1.3.1 The study was commissioned by Green Park Reading No.1 LLP and requires an ecological assessment of the impacts of the proposed scheme (as summarised above) to inform a planning application, due to be submitted to Reading Borough Council in Spring 2016.
- 1.3.2 Activities to inform the study were as follows:
 - i. Phase 1 habitat survey of the site to identify and map the habitats present, providing details of any other features of ecological interest associated with the site;
 - ii. Assessment of the likely presence of protected species;
 - iii. Identification of any potential ecological constraints to the scheme and confirmation on the scope of any mitigation or compensation measures, as well as details of enhancement measures; and
 - iv. Identification of requirements for any additional ecological surveys required to assess ecological impacts and/or guide mitigation measures.

2 Methodology

2.1 Desk Study

- 2.1.1 A desk study was undertaken to gather existing ecological records and data in relation to the site and the surrounding area, in order to provide ecological context for the site and inform an assessment of the likely effects of development.
- 2.1.2 Existing ecological and nature conservation data relevant to the site and 2 km from its boundaries was collated from the MAGIC (Multi-Agency Geographic Information for the Countryside) online database and through a review of existing and recent ecological survey reports relating to the wider Green Park complex (BSG, 2011; 2013a-d; PBA, 2014).
- 2.1.3 The results of the desk study are summarised in Section 4.

2.2 Field Survey

- 2.2.1 A field survey was carried out by Kerry Elliott MCIEEM CEcol of Peter Brett Associates LLP (PBA), following the phase 1 habitat survey methodology (JNCC, 2010), on the 12th February 2016. The phase 1 survey area is shown on Figure 1 (i.e. the red line site boundary). Weather conditions on the day of the survey were sunny and dry with light and partial cloud cover (3/8) and a light breeze (Beaufort Scale 2-3). The temperature remained at 5°C for the duration of the survey.
- 2.2.2 The phase 1 habitat survey involved walking over the site, mapping and characterising the principal habitat types and compiling detailed 'target notes'. The target notes recorded habitat features and provided a list of the dominant vascular plant species present, together with a qualitative assessment of relative abundance, where appropriate.
- 2.2.3 The phase 1 habitat survey was extended to include observations on the presence of, or habitats suitable for, protected species, with relevant information recorded within the target notes. However, this information should not be relied on as a comprehensive assessment of the presence or otherwise of protected species on the site. This is because protected species more usually require specialist and/or seasonal-critical survey techniques to confirm their presence or likely absence and such surveys fall outside the scope of the present study.

Limitations

Field Survey

- 2.2.4 The field survey was undertaken outside of the optimal time of year for a Phase 1 Habitat survey. However, this is not considered to be a significant constraint as the habitats on site were readily characterised and assessed. A robust assessment of the site's potential to support protected and notable species was also achieved.

3 Results and Interpretation

3.1 Designated Sites

- 3.1.1 Information with regard to designated sites is presented below with reference to the distance from the site boundary.

Statutory designated areas

- 3.1.2 No areas of the site, any part of the Green Park complex or any of the areas within 2 km of the site boundary are subject to a statutory designation for nature conservation.

3.2 Habitats

Overview of habitats

- 3.2.1 The site is small (approximately 2.5 ha) and dominated by highly modified habitats supporting common and widespread species with limited intrinsic ecological value.
- 3.2.2 The habitats recorded during the extended Phase 1 survey are shown on Figure 3. Target notes (TNs) on the figure can be easily cross-referenced to the text below. A full list of botanical species recorded within each habitat parcel is provided in Appendix B.

Ephemeral/short perennial vegetation

- 3.2.3 The majority of the site comprised a development platform formed of made land which was sparsely vegetated with ephemeral/short perennial vegetation (TN1). Botanical species present included common and widespread early colonising species typical of disturbed habitats. This was to be expected as the development platform has been subject to on-going management works (i.e. spraying off with herbicide and cut on an biannual basis to maintain a short sward) in order to maintain a barren landscape suitable for future construction. Species present included dandelion *Taraxacum officinale*, common daisy *Bellis perennis*, doves-foot cranesbill *Geranium molle*, bristly ox-tongue *Picris echinoides*, teasel *Dipsacus fullonum*, mosses and bent grass *Agrostis* sp.

Scrub and scattered trees

- 3.2.4 All four margins of the site were vegetated to varying degrees by scattered tree and scrub habitats.
- 3.2.5 The western margin of the site was formed by a bund/embankment, beyond which runs Longwater Avenue (TN2). This had been planted with a diverse tree and shrub mix including hazel *Corylus avellana*, field maple *Acer campestre*, willows *Salix* spp., Scots pine *Pinus sylvestris*, roses *Rosa* spp., ash *Fraxinus excelsior*, dogwood *Cornus sanguinea*, silver birch *Betula pendula*, buddleia *Buddleja davidii* and laurel *Laurus* sp. A number of self-seeded species had also colonised the bund and included bramble *Rubus fruticosus*, ivy *Hedera helix* and soft rush *Juncus effusus*.
- 3.2.6 The northern boundary was also marked by a bund which was vegetated by a similar mix of tree and scrub species (TN3). This supported a greater density and diversity of herb and grass species within its ground flora including willowherb *Epilobium hirsutum*, cow parsley *Anthriscus sylvestris*, creeping thistle *Cirsium arvense*, common nettle *Urtica dioica* and false-oat grass *Arrhenatherum elatius*.

- 3.2.7 A line of young, semi-mature willows were present along the southern site boundary (TN3) whilst more established specimens were scattered along the site's eastern margin, becoming denser towards the south. Stands of scattered scrub, dominated by bramble and buddleia, also occurred along the site's eastern boundary.

Tall ruderal and rough grassland habitat

- 3.2.8 Adjacent to the site's eastern boundary was a large mound vegetated with a mosaic of scattered scrub and young trees, tall ruderal vegetation and coarse grasses (TN4). The grassland sward was generally dominated by tufted hair-grass *Deschampsia cespitosa*, with Yorkshire fog *Holcus lanatus*, cock's foot *Dactylis glomerata* and false oat-grass *Arrhenatherum elatius* also present. Where it occurred, pockets of tall ruderal vegetation comprised species including mugwort *Artemisia vulgaris*, creeping thistle, common nettle and butterbur *Petasites hybridus*. As with the rest of the site, this area had evidently been subject to on-going management, with the sward maintained at a short height and the scrub cover cut back.

3.3 Protected Species and Species of Conservation Importance

Overview

- 3.3.1 This section confirms any evidence of (or potential for) protected species or species of conservation importance identified during the survey and evaluates the potential for the site to support species that may be present in the local area. The relevant legislation and policy for each species or species group is also briefly summarised below with legislation and policy information presented more fully in Appendix A.

Badger

- 3.3.2 Badger *Meles meles* are known to occur within the southern part of the Green Park complex (BSG, 2013a). However, no evidence of badger within the site was recorded during the survey and the site provided limited foraging habitat for this species. Similarly, no sett building opportunities for badgers were present within the site, due to a lack of areas of dense vegetation cover that might otherwise disguise sett entrances and allow badgers to emerge at night discretely. This species is not therefore considered further in this assessment.

Bats

- 3.3.3 None of the trees within the site provided opportunities for roosting bats, being young/semi-mature and lacking any features that might otherwise offer roosting habitat.
- 3.3.4 The wider Green Park complex is known to support a relatively undiverse and uncommon assemblage of commuting and foraging bats, including species which favour wetland areas such as soprano pipistrelle *Pipistrellus pygmaeus* and Daubenton's *Myotis daubentonii* (R. Parkin, pers. comms.). The majority of the site provided limited opportunities for foraging bats, being dominated by sparsely vegetated and managed ground. Opportunities for community and foraging bats are likely to be limited to the eastern margin of the site, where the tree, scrub and rough grassland habitats form a continuous shelter belt adjacent to Longwater Lake.

Birds

- 3.3.5 The Green Park complex is known to support a diverse breeding bird assemblage (BSG, 2013b). Breeding bird surveys were undertaken across Green Park in spring/summer 2013 in order to help inform the scope of the Park's biodiversity management plan. These surveys confirmed robin *Erithacus rubecula*, blackcap *Sylvia atricapilla*, chiffchaff *Phylloscopus*

collybita and linnet *Carduelis cannabina* to be breeding within the site itself (as well as other areas within the wider Green Park complex). These birds were found to be associated with the tree and scrub habitats around the site's margins.

- 3.3.6 The 2013 survey also identified probable breeding lapwing *Vanellus vanellus* associated with the area of open, sparsely vegetated habitat within the site, as well as other areas of the Green Park complex to the south of the site where this habitat type is present.
- 3.3.7 Since the 2013 breeding bird survey was undertaken, the presence of breeding lapwing has been confirmed at the site (R. Parkin, pers. comm.). In addition, little ringed plover *Charadrius dubius* have been recorded using the site during the breeding period although no active nests have been confirmed (R. Parkin, pers. comm.). Both species prefer to breed in open, sparsely vegetated habitats close to areas of open water. As such, the site provides good quality breeding habitat for this species although other, larger areas of similar habitat are also present elsewhere within the Green Park complex.
- 3.3.8 Both linnet and lapwing are Species of Principal Importance (SPI) in England via the provisions of Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (see Appendix A), meaning they are of material consideration in the context of a planning decision. Despite being SPIs, these species receive no specific legal protection over and above the general protection given to all birds by the Wildlife and Countryside Act, 1981 (as amended).
- 3.3.9 Little ringed plover receive additional protection during the breeding season under the Wildlife and Countryside Act 1981 (as amended). This means it is an offence to intentionally or recklessly *disturb* the bird whilst it is at, on or near an 'active' nest.

Reptiles

- 3.3.10 Three sightings of grass snake *Natrix natrix* were made within the site during survey work undertaken in August/September 2013, and the Green Park complex as a whole was found to support a low population of this species (BSG, 2013c). These sightings were made on the short section of bund along the site's northern boundary, and were associated with the grassy/scrub mosaic where this comprises the site's eastern boundary.
- 3.3.11 During the extended Phase 1 Habitat survey, the bund along the northern site boundary, and vegetated mound to the east, were both considered to continue to provide opportunities for low numbers of foraging/basking grass snake. The value of these areas is however likely to be limited by their small size, and the fact they will be subject to regular disturbance as part of the on-going management of the site to ensure vegetation cover remains low, and spread is controlled.

Invertebrates

- 3.3.12 Invertebrate surveys undertaken at Green Park in summer 2013 identified a number of habitats across the Park that were of value for invertebrates (BSG, 2013d). This included the complex of undeveloped plots to the west of Longwater Lake, which includes the site. Whilst no invertebrates fully protected under the Wildlife and Countryside Act (1981) were recorded during the Green Park invertebrate surveys, a number of nationally scarce species were identified (mainly beetles). Based on the results of the Phase 1 habitat survey, it is considered likely that the site continues to provide opportunities for invertebrates, including the notable species previously recorded and found to be associated with the open, sparsely vegetated habitats. Larger areas of similar habitat are also present elsewhere within the Green Park complex and are likely to support similar invertebrate assemblages.

4 Potential Impacts and Recommendations

4.1 Overview

- 4.1.1 This section confirms the potential impacts of the proposed development on ecological receptors identified during the desk study and field survey. It then goes on to describe the mitigation and compensation measures that will be implemented to overcome the identified potential impacts. Recommendations for ecological enhancement are also made, where necessary, in line with legislation and current government and local planning policy.

Habitats

- 4.1.2 The site currently comprises an existing development platform which supports readily established plant communities and contains common and widespread native and non-native species of limited ecological value.
- 4.1.3 A portion of the existing scattered semi-mature trees around the boundary of the site will be retained as part of the site's development. Construction works in the vicinity of retained trees should adhere to British Standard: 5837:2012 "Trees in Relation to Design, Demolition and Construction" which includes the need for the following protection measures:
- Erection of stout fencing around each tree in advance of site clearance, enclosing the Root Protection Area;
 - Prohibition of construction activities, material storage, use of vehicles, fires, etc. within the fenced area to prevent damage to tree roots and compaction of the soil; and
 - Maintenance of an adequate water supply to the tree both during and after construction.
- 4.1.4 Development of the site has the potential to indirectly impact Longwater Lake, which lies approximately 30 m to the east of the site as a result of incidental pollution, siltation owing to uncontrolled run-off, etc. All construction works will therefore need to accord with appropriate methods of working in order to minimise incidental pollution risk. The Environment Agency's Pollution Prevent Guidance (PPG) has now been taken out of circulation, but still provide a useful reference. In particular, consideration should be given to the following:
- PPG 1 – general guide to the prevention of pollution;
 - PPG 5 – works and maintenance in or near water; and
 - PPG 6 – working at construction and demolition sites
- 4.1.5 The proposed development will also be supported by a carefully designed drainage strategy, which will include a network of ditches and swales, in order to ensure that run-off levels into the lake are maintained at or below (in terms of quality and quantity) pre-development rates.
- 4.1.6 The proposed development will also include new areas of tree planting which will mitigate for the loss of existing tree and shrub habitats. The scheme will also deliver ecological enhancement through the introduction of native tree and shrub planting and incorporation of areas of species-rich meadow grassland. Furthermore, the new ditches and swales to be incorporated as part of the drainage strategy will enhance the wetland resource associated with the site and create opportunities for flora, invertebrates and amphibians.

4.2 Bats

- 4.2.1 The inclusion of native trees and shrub within the landscaping scheme for the site, particularly along the eastern margin where it lies adjacent to Longwater Lake will enhance the suitability and connectivity of this boundary as a commuting and foraging corridor for bats.
- 4.2.2 The lighting proposals for the proposed development have been informed by the site's setting adjacent to Longwater Lake, with no external lighting proposed on the eastern aspect of the building. This will minimise the potential for light spillage onto the lake and its associated riparian habitats (Hoare Lea, 2016), and will therefore maintain conditions suitable for foraging bats.

4.3 Breeding birds

- 4.3.1 The existing areas of scrub and tree planting around the margins of the site provide potential nesting habitat for common and widespread species of breeding birds, as well as some species identified as being priorities for conservation (e.g. linnet). The more open areas of the site are also likely to be used by lapwing and little ringed plover which are both ground nesting species (with lapwing also considered a priority for conservation action).
- 4.3.2 Where trees or scrub are to be removed and in order to avoid damage or destruction of nests and eggs, or killing or injury of young birds in nests, site clearance should be timed to avoid the breeding season. In practice, this means that clearance of such areas should be undertaken within the period from 1st September until the 28th February, as a guide. Similarly, construction works within the main development platform should commence in the autumn/winter period to avoid the potential for ground nesting species to be present, and affected by the works.
- 4.3.3 If it is not possible to avoid the bird breeding season, all areas to be cleared should first be checked by an ecologist or other suitably qualified individual, for active nests. This would involve watching the areas for signs of behaviour associated with breeding activity and undertaking a search for active nest sites. In the event that an active nest is identified clearance works in the vicinity of the nest will need to cease and a buffer zone around the nest identified, until nesting has finished.
- 4.3.4 The development of the site will result in the loss of habitat suitable for ground nesting birds (i.e. lapwing and little ringed plover). In order to mitigate for this habitat loss, a floating raft will be anchored on Longwater Lake. This raft will provide approximately 3 m² of suitable nesting habitat for waders, as well as gulls and terns, and will be constructed from durable re-cycled plastic. Maintenance of the raft, as well as monitoring of its use, will come under the responsibilities of the Green Park landscape team, as part of Oxford Properties' wider commitment to the on-going management of Green Park's biodiversity related assets (PBA, 2014).

4.4 Reptiles

- 4.4.1 Very low numbers of grass snake have been recorded on the bund and grassy/scrub mosaic along the site's northern boundary. Grass snake is a highly mobile species of reptile, inhabiting large home ranges (up to 120 ha) and travelling up to 300 m a day (www.online-field-guide.com).
- 4.4.2 Where small areas of suitable grass snake habitat around the margins of the site will necessarily be disturbed/lost as a result of the proposed development, clearance could present a risk, in the form of killing or injury, to any grass snakes present.
- 4.4.3 It is considered that the most pragmatic and effective way of ensuring development activities do not result in a breach in the legislation protecting reptiles is through pre-commencement

habitat management works. Specifically, habitat suitable for reptiles will be removed in phases, under the watching brief of an ecologist and during the period reptiles are active (i.e. between March and September) in order to allow their safe dispersal to areas of retained habitat outside of the works footprint.

- 4.4.4 Where this requires the removal of vegetation that might otherwise provide opportunities for nesting birds, clearance can occur outside the reptile active period. However, were this to be necessary, sensitive clearance methods will need to be employed to ensure the disturbance of ground features suitable for hibernating reptiles are avoided (i.e. by cutting down to stump level only and using hand tools).
- 4.4.5 It is anticipated that the potential for the site to support grass snake will increase as part of its development, through the retention and expansion of areas of shrub planting and creation of new habitat such as species-rich grassland and ephemeral waterbodies (as part of the SUDs scheme).

4.5 Invertebrates

- 4.5.1 Following development, the site will continue to provide opportunities for invertebrates with a greater diversity of habitats available to invertebrates in the site's post-development state, including species-rich grassland, and wetland habitats associated with SUDs.

5 Conclusion

- 5.1.1 The majority of the site, being dominated by a development platform subject to regular management and supporting ephemeral/short-perennial vegetation, is considered of limited ecological value.
- 5.1.2 The site has the potential to support some protected and notable species/species groups including breeding birds, reptiles (grass snake), bats and invertebrates. No further survey for these species will be required to support the planning application for the site.
- 5.1.3 Appropriate controls will be adopted as part of construction in order to avoid impacts on protected species and nearby valued habitats (e.g. Longwater Lake). Measures will be delivered as part of scheme design in order to mitigate for impacts upon certain species groups (i.e. ground nesting birds). The development of the site also presents an opportunity for biodiversity enhancement as promoted by Government and local policy. .

References

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BSG Ecology (2013a) Green Park, Reading – Otter and Water Vole Survey. BSG Ecology, August 2013.

BSG Ecology (2013b) Green Park, Reading – Breeding Bird Survey. BSG Ecology, September 2013.

BSG Ecology (2013c) Green Park, Reading – Reptile Survey. BSG Ecology, October 2013.

BSG Ecology (2013d) Green Park, Reading – Invertebrate Survey. BSG Ecology, October 2013.

Hoare Lea (2016) 400 Longwater Avenue – Exterior Lighting Proposal Document. Hoare Lea, February 2016.

Figures

Figure 1: Site Location Plan

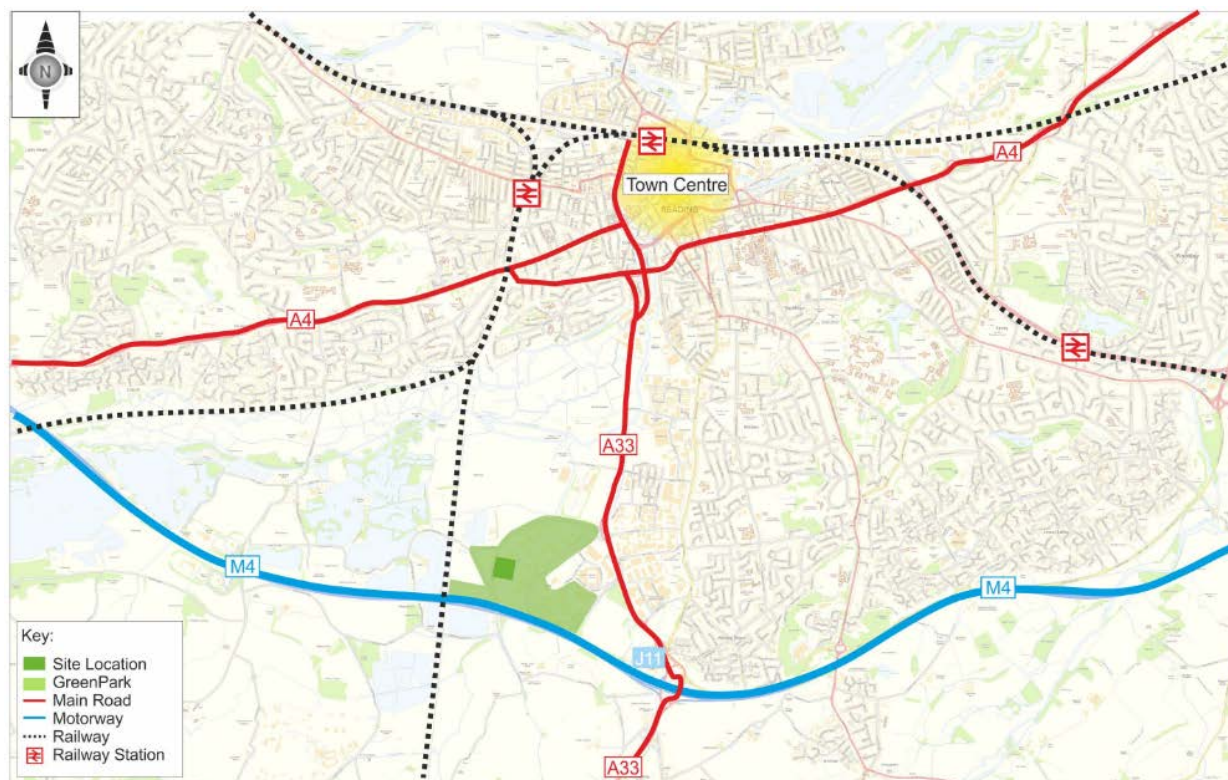
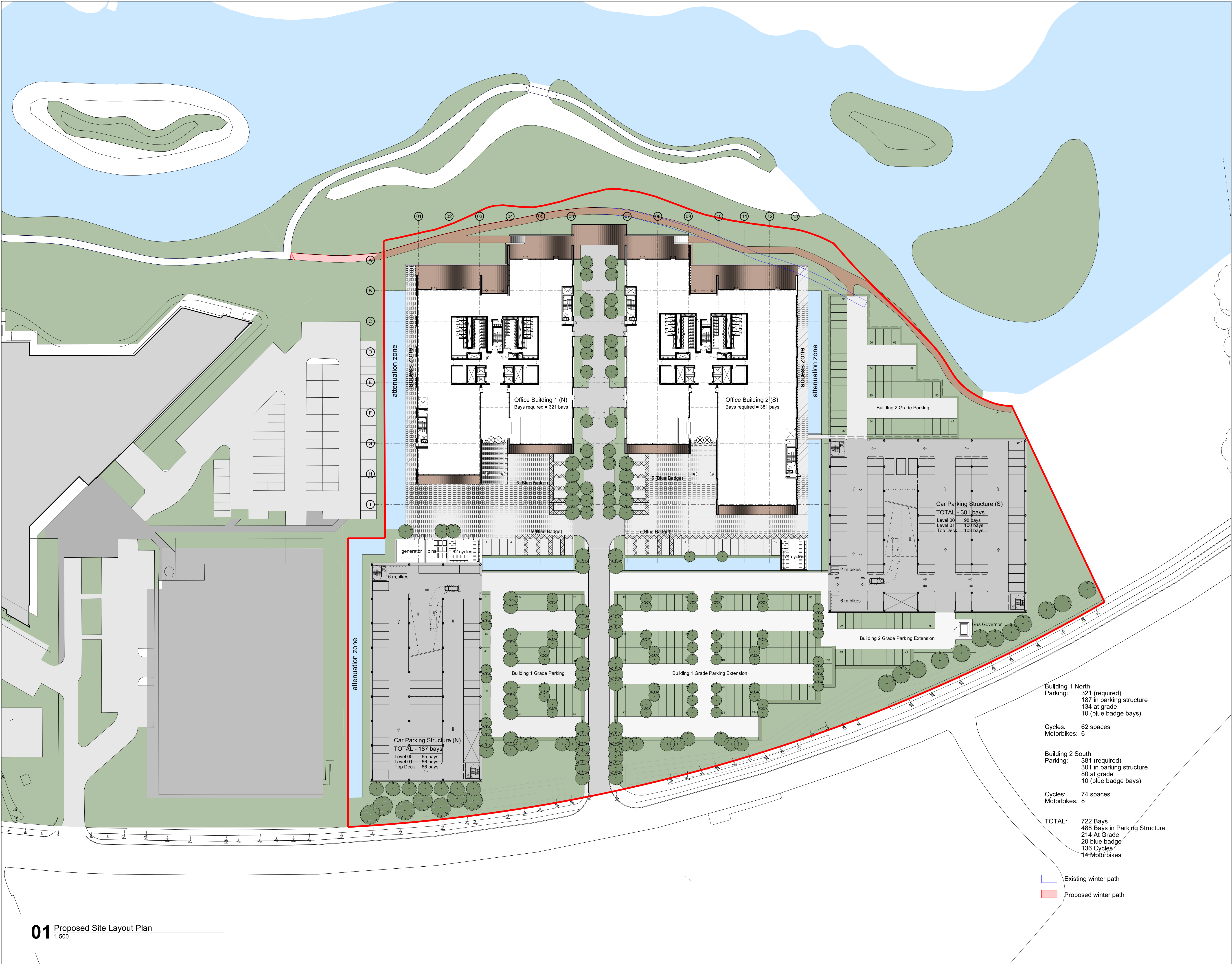


Figure 2: Development Proposals and Landscape Strategy (Robin Partington & Partners, 2016)



01 Proposed Site Layout Plan
1:500

Disclaimer
Do not scale from this drawing.
Check all dimensions on site before fabrication or setting out.
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Notes
Final car parking arrangements are yet to be determined

Key
Site area

Car park structure GEA (sqm)	North	South
Ground floor	2125	3000
First floor	2125	3000
Second floor	2125	3000
Third floor		
Total	6375	9000
Grand Total		15375

Car parking bays	North	South
Ratios used	1:38.75	1:38.75
Ground floor	65	98
First floor	56	100
Second floor	66	103
Third floor		
Total	187	301

At grade	134	80
At grade total		214
Disabled		20

Grand Total	702
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V05	Final Review prior to planning submission	07.03.16	RPP	RPP
V04	For information	04.03.16	RPP	RPP
V03	For information	01.03.16	RPP	RPP
V02	For information	26.02.16	RPP	RPP
V01	For information	25.02.16	RPP	RPP
00	For information	18.02.16	RPP	RPP

Rev	Notes	Date	Dwn	Iss

Consultants

Structure: Building Services: Landscape Architect: Quantity Surveyors: Transport Consultant: Environmental Planning: Civil Engineer: Archaeology:	Ramboll Hoare Lee Place Design + Planning Gardiner & Theobald LLP Peter Brett Associates Deloitte LLP Peter Brett Associates Peter Brett Associates Oxford Archaeology
--	--

Key / Location

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www.rplondon.com

Client
Green Park Reading No.1 LLP

Project
400 Longwater Avenue, Green Park

Drawing Title
Site Plan
Proposed Layout

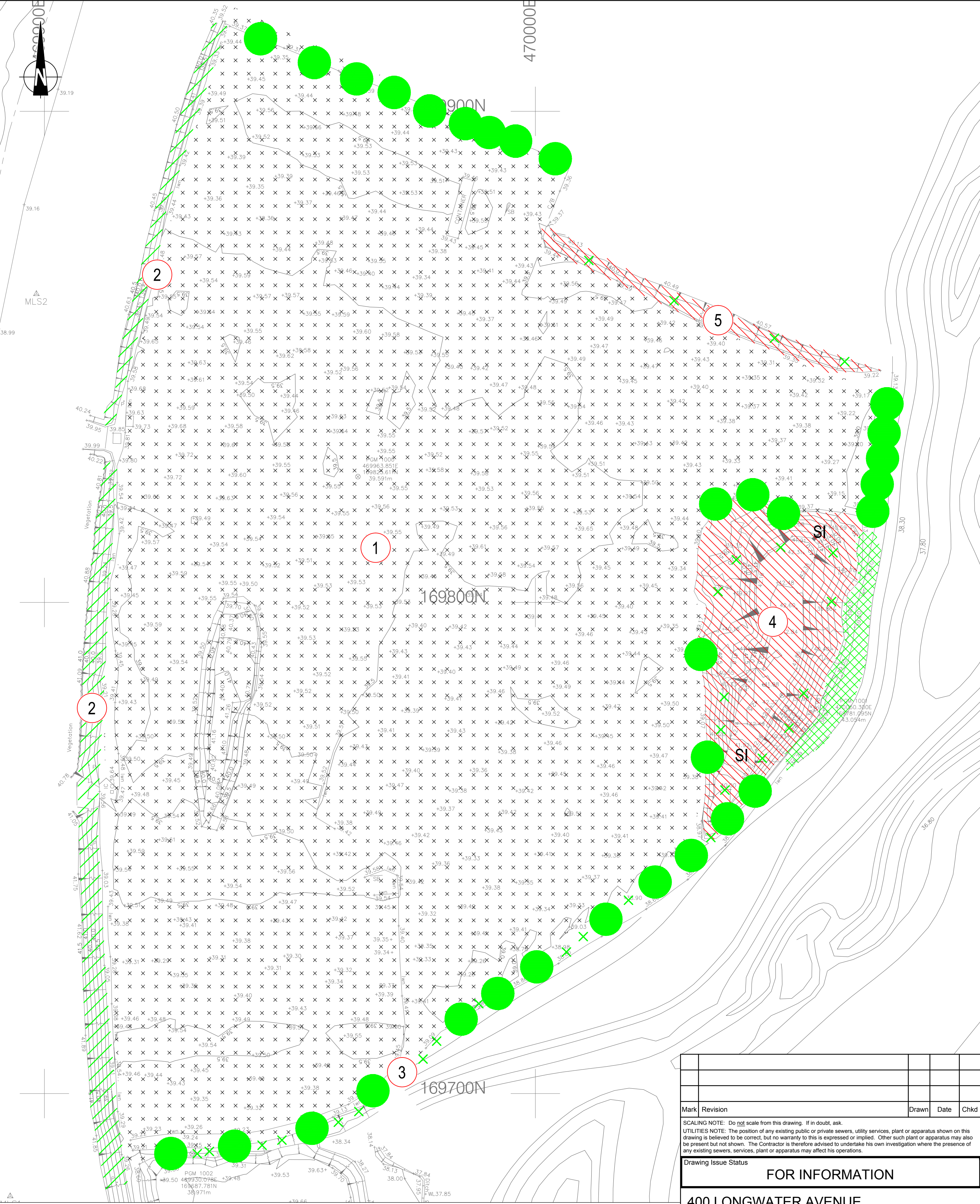
Scale	Drawn By	Issued By
1:500 @ A1	1:1000 @ A3	RPP RPP

Stage 2

Project No.	Drawing No.	Revision
15011	A_SK_10_002_V05	

Date Last Saved: Tuesday, March 01, 2016

Figure 3. Phase 1 Habitat Survey Plan



KEY:

XXXX

DENSE SCRUB

XX

SCATTERED SCRUB

●

SCATTERED BROADLEAVED TREES

SI

POOR SEMI-IMPROVED GRASSLAND

////

TALL RUDERAL VEGETATION

xxx

EPHEMERAL/SHORT PERENNIAL

////

BROADLEAVED PLANTATION WOODLAND

1

TARGET NOTE

NOTES:

1. TOPO SURVEY PROVIDED BY LONGDIN AND BROWNING DATED JUNE 2008

Mark	Revision	Drawn	Date	Chkd
SCALING NOTE: Do not scale from this drawing. If in doubt, ask.				
UTILITIES NOTE: The position of any existing public or private sewers, utility services, plant or apparatus shown on this drawing is believed to be correct, but no warranty to this is expressed or implied. Other such plant or apparatus may also be present but not shown. The Contractor is therefore advised to undertake its own investigation where the presence of any existing sewers, services, plant or apparatus may affect its operations.				
Drawing Issue Status				
FOR INFORMATION				
400 LONGWATER AVENUE GREEN PARK, READING				
PHASE 1 HABITAT SURVEY				
Client GREEN PARK READING No.1 LLP				
Date of 1st Issue 02.03.2016		Drawn by smr		
A2 Scale 1:500		Checked by KLE		
Drawing Number 27159/004/001		Revision -		

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Appendix A Legislation and Planning Policy

A.1 Overview

- A.1.1 This section briefly summarises the relevant legislation, policy and related issues that are mentioned in the main text of the report. The following text does not constitute legal advice.

A.2 National Planning Policy Framework

- A.2.1 The government published the National Planning Policy Framework (NPPF) on 27th March 2012. The NPPF states that, “*the planning system should contribute to and enhance the natural and local environment by:*

- *Protecting and enhancing valued landscapes, geological conservation interests and soils;*
- *Recognising the wider benefits of ecosystem services;*
- *Minimising impacts on biodiversity and providing net gains in biodiversity, where possible contributing to the Government’s commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;*
- *Preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability; and*
- *Remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.”*

A.3 Planning – land allocation and policies

- A.3.1 The NPPF indicates that ‘in preparing plans to meet development needs, the aim should be to minimise pollution and other adverse effects on the local and natural environment. Plans should allocate land with the least environmental or amenity value, where consistent with other policies in this Framework.’
- A.3.2 In paragraph 111, the NPPF refers to brownfield land as follows: ‘planning policies and decisions should encourage the effective use of land by re-using land that has been previously developed (brownfield land), provided that it is not of high environmental value.’
- A.3.3 Local planning authorities are advised in paragraph 113 to ‘set criteria-based policies against which proposals for any development on or affecting protected wildlife or geodiversity sites or landscape areas will be judged. Distinctions should be made between the hierarchy of international, national and locally designated sites so that protection is commensurate with their status and gives appropriate weight to their importance and the contribution that they make to wider ecological networks.’
- A.3.4 Local planning authorities are advised further to ‘set out a strategic approach in their Local Plans, planning positively for the creation, protection, enhancement and management of networks of biodiversity and green infrastructure...’
- A.3.5 The NPPF also states that, “to minimise impacts on biodiversity and geodiversity, planning policies should:

- *Plan for biodiversity at a landscape-scale across local authority boundaries;*
- *Identify and map components of the local ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them and areas identified by local partnerships for habitat restoration or creation;*
- *Promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species populations, linked to national and local targets; and identify suitable indicators for monitoring biodiversity in the plan;*
- *Aim to prevent harm to geological conservation interests; and*
- *Where Nature Improvement Areas are identified in Local Plans, consider specifying the types of development that may be appropriate in these Areas."*

A.4 Planning applications and biodiversity

A.4.1 When determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:

- If significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- Proposed development on land within or outside a Site of Special Scientific Interest likely to have an adverse effect on a Site of Special Scientific Interest (either individually or in combination with other developments) should not normally be permitted. Where an adverse effect on the site's notified special interest features is likely, an exception should only be made where the benefits of the development, at this site clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of Sites of Special Scientific Interest;
- Development proposals where the primary objective is to conserve or enhance biodiversity should be permitted;
- Opportunities to incorporate biodiversity in and around developments should be encouraged;

A.4.2 In paragraph 125 the NPPF stipulates that 'by encouraging good design, planning policies and decisions should limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.'

A.4.3 The Government Circular 06/2005 remains valid and Paragraph 99 provides guidance stating "It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision".

A.5 Species and Habitats of Principal Importance

A.5.1 The NPPF (paragraph 117) indicates that local authorities should take measures to "promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species" linking to national and local targets through local

planning policies. Priority species are those species shown on the England Biodiversity List published by the Secretary of State in accordance with Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. Planning authorities have a duty under Section 40 of the NERC Act to have regard to priority species and habitats in exercising their functions including development control and planning.

A.6 National Legislation

- A.6.1 All nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended) which makes it an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs.
- A.6.2 All species of British reptile are protected by the Wildlife and Countryside Act 1981 (as amended). The common species (adder, grass snake, slow worm and common lizard) are only protected against intentional killing and injuring (but not taking).

Appendix B Botanical Species List

B.1 Botanical Species List by Habitat Parcel

Habitat Type	Latin Name	Common Name
Main development platform (80% ephemeral/short perennial vegetation, 20% bare, exposed gravels)	<i>Festuca arundinacea</i>	Tall fescue
	<i>Cirsium arvense</i>	Creeping thistle
	<i>Jacobaea vulgaris</i>	Common ragwort
	<i>Ranunculus repens</i>	Creeping buttercup
	<i>Lolium perenne</i>	Perennial rye-grass
	<i>Trifolium repens</i>	White clover
	<i>Agrostis capillaris</i>	Common bent
	<i>Festuca rubra</i>	Strong creeping red fescue
	<i>Festuca rubra subsp. commutata</i>	Chewings fescue
	<i>Lotus corniculatus</i>	Birdsfoot trefoil
	<i>Taraxacum officinale</i>	Dandelion
	<i>Bellis perennis</i>	Common daisy
	<i>Geranium molle</i>	Doves-foot cranesbill
	<i>Picris echioides</i>	Bristly ox-tongue
	<i>Dipsacus fullonum</i>	Teasel
Western site boundary/bund (scattered trees and scrub)	<i>Bryophyta sp.</i>	Moss
	<i>Corylus avellana</i>	Hazel
	<i>Acer campestre</i>	Field maple
	<i>Salix caprea</i>	Goat willow
	<i>Pinus sylvestris</i>	Scots pine
	<i>Fraxinus excelsior</i>	Ash
	<i>Rosa canina</i>	Dog rose
	<i>Cornus sanguinea</i>	Dogwood
	<i>Betula pendula</i>	Silver birch
	<i>Buddleja davidii</i>	Buddleia
	<i>Laurus sp.</i>	Laurel sp.
	<i>Rubus fruticosus</i>	Bramble
Northern site boundary/bund (scattered trees and scrub)	<i>Hedera helix</i>	Ivy
	<i>Juncus effusus</i>	Soft rush
	<i>Epilobium hirsutum</i>	Willowherb
	<i>Anthriscus sylvestris</i>	Cow parsley

Habitat Type	Latin Name	Common Name
	<i>Cirsium arvense</i>	Creeping thistle
	<i>Urtica dioica</i>	Common nettle
	<i>Arrhenatherum elatius</i>	False oat-grass
Southern site boundary (scattered trees and scrub)	<i>Salix caprea</i>	Goat willow
	<i>Rubus fruticosus</i>	Bramble
	<i>Buddleja davidii</i>	Buddleia
Eastern site boundary/bund (scattered trees, scrub and tall ruderal vegetation)	<i>Arctium lappa</i>	Burdock
	<i>Deschampsia cespitosa</i>	Tufted hair grass
	<i>Rosa canina</i>	Dog rose
	<i>Buddleja davidii</i>	Buddleia
	<i>Torilis japonica</i>	Hedge parsley
	<i>Galium aparine</i>	Cleavers
	<i>Taraxacum officinale</i>	Dandelion
	<i>Picris echioides</i>	Bristly ox-tongue
	<i>Holcus lanatus</i>	Yorkshire Fog
	<i>Dactylis glomerata</i>	Cock's foot
	<i>Arrhenatherum elatius</i>	False oat-grass
	<i>Artemisia vulgaris</i>	Mugwort
	<i>Cirsium arvense</i>	Creeping thistle
	<i>Urtica dioica</i>	Common nettle
	<i>Petasites hybridus</i>	Butterbur

Appendix C Photographs

Main development platform



Trees and shrubbery along northern site boundary



Embankment of trees and shrubs along western site boundary

