Ecological Statement

Phase 2b, Green Park Village School

November 2018

1.0 Introduction

1.1 This Ecological Statement has been prepared by CSA Environmental on behalf of Berkeley Homes (Western) Ltd in relation to land at Green Park Village (GPV), Reading (hereafter referred to as, 'the Site'). This Statement summarises the findings of an update ecological walkover and assessment made to support a reserved matters application for the construction of a school as Phase 2b of the wider GPV development.

1.2 Outline planning permission for the GPV development was obtained in 2010 (Reading Borough Council ref: 10/01461/OUT (102172)). An Environmental Statement (ES) (Peter Brett Associates, 2010; Drivers Jonas, 2007) prepared for the outline application included the results of detailed ecological surveys, and this Statement makes reference to the findings and recommendations of the ES where relevant.

2.0 Methods

2.1 An extended Phase 1 Habitat Survey of the Site was undertaken by Kate Kibble ACIEEM on 07 March 2018, in order to assess the on-site habitats and their potential to support notable and protected species. The survey, encompassing the Site and immediately adjacent habitats that could be viewed, was conducted in dry, fine weather conditions. Due to the time of year, many plant species may not be visible above ground, however this limitation is unlikely to significantly affect classification of the habitats present.

2.2 As the principle of development has already been agreed, a full desktop data search was not undertaken. However the conclusions and recommendations within this report give regard to the previous ecological surveys undertaken for the wider GPV site, as well as ecological work undertaken more recently by CSA for Phase 6 (2017), where relevant.

3.0 Baseline Ecological Conditions

<u>Historic baseline</u>

3.1 The wider GPV site, originally a waste refuse tip, supported a range of successional habitats following its restoration. With reference to the Phase 1 Habitat Survey produced in 2010 (Place Design and Planning, C368_DR-313), Phase 2B incorporated amenity grassland, tall ruderal vegetation, a

partially-wet ditch, associated trees and scrub and a small area of tree nursery. Part of the area was also an industrial estate/offices, which was not mapped in detail, but predominantly comprised hard-standing and buildings of low ecological value.

3.2 Detailed surveys of the wider GPV site were undertaken between 2000 and 2010 for rare plants, bats, badger *Meles meles*, water vole *Arvicola amphibius*, otter *Lutra lutra*, birds, reptiles, amphibians and invertebrates with the results summarised as follows:

- No evidence of water vole, otter or great crested newt *Triturus cristatus* was found on-site
- The notable hairlike pondweed *Potamogeton trichoides*, musk stork's-bill *Erodium moschatum* and crosswort *Cruciata laevipes* were recorded within the lake and colonising habitats, respectively
- Four bat species were recorded; common and soprano pipistrelle *Pipistrellus pipistrellus/pygmaeus*, noctule *Nyctalus noctula* and Daubenton's bat *Myotis daubentonii*. Activity was low and generally associated with the Site perimeter, ditches and waterbodies
- Two infrequently used badger setts (single entrances) were recorded in the north of the GPV area
- Bird interest was generally associated with the large waterbodies and boundary tree-lines. The notable nightingale *Luscinia megarhynchos*, willow warbler *Phylloscopus trochilus*, house sparrow *Passer domesticus*, reed bunting *Emberiza schoeniclus*, dunnock *Prunella modularis* and song thrush *Turdus philomelos* were recorded
- Grass snake *Natrix natrix* were recorded at several locations in association with the ditch network and railway corridor to the north
- Common frog *Rana temporaria* and smooth newt *Lissotriton vulgaris* were recorded within the lakes and some of the ditches
- Several notable invertebrate species were recorded within the GPV site, largely associated with the waterbodies, ephemeral pools and surrounding vegetation. The weevil *Gymnetron villosulum* was found in the perimeter ditches alongside its food plant water speedwell *Veronica* sp. and cinnabar moth *Tyria jacobaea* was recorded within the colonising terrestrial habitats

3.3 The nature of habitats within the Phase 2b area were not reported to support any significant species although the small section of ditch and tall ruderal may have provided opportunities for grass snake, common amphibians and invertebrates.

Current Baseline

3.4 The Site habitats have changed considerably since the original surveys were undertaken and are subject to regular disturbance. The survey area comprised recently cleared land within the active development area which was being used for contractor parking, materials storage and stockpiling earth. The habitats are mapped on the Habitats Plan (CSA/3698/100A) in Appendix A and a detailed species list for each habitat is given in Appendix B.

Bare and colonising ground

3.5 Much of the Site comprises bare ground within the contractor parking area and bank of recently stock-piled soil. Less disturbed areas within the north-east of the Site have begun to colonise with pioneer plant species including teasel *Dipsacus fullonum*, ragwort *Senecio* sp., colt's-foot *Tussilago farfara*, creeping bent *Agrostis stolonifera* and annual meadow-grass *Poa annua*. Hemlock *Conium maculatum* has dominated one of the spoil-banks. No rare or uncommon species were recorded such as the musk stork's-bill or crosswort previously found on-site.

Grassland

3.6 Some retained semi-improved grassland exists around the edges of the construction zone and areas which have not been recently disturbed. These supported creeping bent, daisy *Bellis perennis*, creeping buttercup *Ranunculus repens*, red dead-nettle *Lamium purpureum* and soft rush *Juncus effusus*.

Aquatic habitats

3.7 A very short section of ditch (c. 1-2m) is present within the working area. This was wet at the time of visit and a line of rush vegetation extending along the same course suggests that this area is regularly wet and the movement of water continues underground. An additional ditch line previously mapped on-site during the 2010 surveys was no longer apparent.

3.8 Several areas of standing surface water are also present. A small number of aquatic plant species were recorded within the flooded zones including soft rush, celery-leaved buttercup *Ranunculus sceleratus* and fool's water-cress *Apium nodiflorum*.

Fauna

3.9 There was no evidence of protected fauna on-site. The Site is sparsely vegetated and isolated from potential wildlife habitats or corridors by active construction zones. The ephemeral vegetation and potentially the ditch/areas of pooling may provide limited opportunities for invertebrates, at certain times of year. It is not expected that any rare aquatic invertebrates historically recorded on-site will still be present, as many of these had become locally extinct by the 2010 surveys.

4.0 Summary of Ecological Constraints and Opportunities

4.1 The current habitats are considered to be of low ecological value. No protected species constraints were identified and as such, no site-specific avoidance or mitigation or protection measures are considered to be required.

4.2 The following compensation and enhancement measures have been incorporated into the landscape design to provide opportunities for wildlife:

- Inclusion of new native tree, hedgerow shrub and herb species (and cultivars or known wildlife value). These include flowering and fruiting varieties of value to a range of species.
- A dedicated Habitat Area is also being provided within the scheme to be developed as an educational resource for the new pupils. Whilst this will be designed and implemented by the school, it will include a range of flowering plants, vegetables and herbs which will provide opportunities for wildlife.
- To provide nesting/roosting opportunities for local wildlife, a bird box, bat box and insect house will be provided to support declining species. The number of roosting features is limited by the construction materials of the building however it is proposed that one Schwegler 1B bird box (or similar) and one Improved Crevice Bat Box (or similar) can be installed on the west-facing wall of the plant room. An insect house, similar to those elsewhere within the Green Park Village (multi-layer structure with a variety of insect nesting materials) will be provided within the Habitat Garden. This will provide a learning resource for pupils as well as supporting notable invertebrate species.

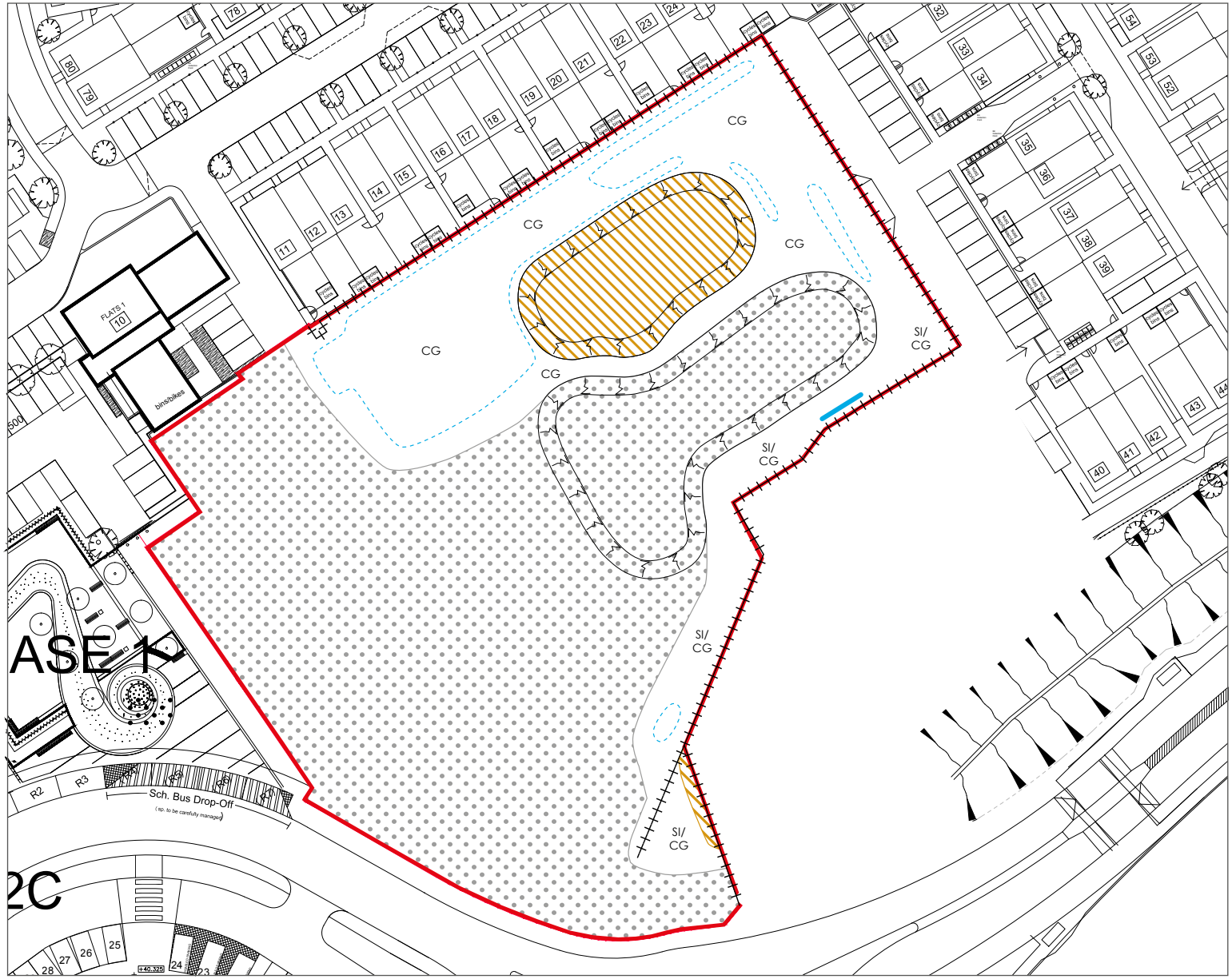
5.0 Conclusion

5.1 The Phase 2B area has historically contained habitats of low ecological value, although it is apparent that a small amount of woody vegetation and a ditch line were present which have since been lost or altered. The current habitats are also of low ecological value and no specific constraints to the proposed development have been identified.

5.2 Measures to increase the ecological value of the proposed habitats have been incorporated into the landscape design where possible.

Appendix A

Habitats Plan
CSA/3698/100A



LEGEND

- Survey area
- Bare ground
- CG — Colonising ground
- SI — Semi-improved grassland
- A — Amenity grassland
- Dense tall ruderal
- Temporary surface water
- Wet ditch
- Raised ground
- Fence

N

0 — 50m

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Project	Phase 2b, Green Park Village School	Date	March 2018	Drawing No.	CSA/3698/100
Drawing Title	Habitats Plan	Scale	Refer to bar	Rev	A
Client	Berkeley Homes (Western) Ltd	Drawn	TR	Checked	KK

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Appendix B

Flora List, Site visit 07 March 2018

Flora Species List

SITE ref. & NAME	3698 Green Park Village School
DATES OF SURVEY AND SURVEYORS	**1. 07/03/2018 KK**

Latin name	Common Name	HABITAT TYPE		
		Colonising ground	Tall ruderal	Wet habitats / ditch
Description				
Herb species				
Arctium sp.	Burdock	x	x	
Bellis perennis	Daisy	x		
Cardamine sp.	Bitter-cress	x		
Cerastium sp.	Mouse-ear	x		
Cirsium vulgare	Spear thistle	x		
Conium maculatum	Hemlock		x	
Dipsacus fullonum	Teasel	x	x	
Galium aparine	Cleavers	x		
Geranium dissectum	Cut leaved crane's-bill	x		
Geranium sp.	Crane's-bill		x	
Helminthotheca echiodes	Bristly oxtongue	x		
Lamium purpureum	Red dead-nettle	x		
Lotus pedunculatus	Greater birds's-foot-trefoil	x		
Malva sp.	Mallow		x	
Myosotis spp.	Forget-me-not	x		
Plantago sp.	Plantain	x		
Ranunculus repens	Creeping buttercup	x		x
Ranunculus sceleratus	Celery-leaved buttercup			x
Rumex sp.	Dock	x	x	
Senecio sp.	Ragwort	x		
Senecio vulgaris	Groundsel	x		
Trifolium sp.	Clover	x		
Tripleurospermum/Matricaria	Mayweed	x	x	
Tussilago farfara	Colt's-foot		x	x
Urtica dioica	Common nettle		x	
Veronica sp.	Speedwell	x		
Sedges and rushes				
Juncus effusus	Soft rush	x		x
Grasses				
Agrostis stolonifera	Creeping bent	x		
Dactylis glomerata	Cock's-foot	x		
Festuca sp.	Fescue	x		
Poa annua	Annual meadow-grass	x		
Trees/shrubs				
Buddleja spp.	Buddleia	x		
Rubus fruticosus agg.	Bramble		x	