

Project Note

Project:	Berewood	Date:	8 th October 2020
Subject:	Town Park Phase B – Ecology update note	Author:	Jeff Picksley MCIEEM

1.0 Background

- 1.1. This briefing note has been prepared to provide an update for Winchester City Council (WCC) ecologists on present site conditions within the Town Park Phase B application area. A series of ecological surveys were undertaken in 2018 by Lindsay Carrington Ecological Services (LCES) and the report detailing the results of these surveys was submitted to WCC to allow the discharge of Condition 6ii(f) attached to the outline planning permission (Planning Ref:10/02862/OUT) for the site. The current application is of the detailed landscaping plans to allow the discharge of Condition 6i(d).
- 1.2. Since condition 6ii(f) was discharged a reptile translocation exercise has been completed and further monitoring of the badger setts has been undertaken. Part of the application site is currently being reprofiled, using excess material generated from the Phase 2 River Wallington restoration works. Vegetation removal has also taken place within the application area. An update to the 2018 Phase 1 survey was undertaken in 2020.
- 1.3. This briefing note provides a summary of the works undertaken within the Town Park Phase B area since February 2019. Where conditions on the ground are significantly different from those detailed in the 2018 LCES report these changes are described.
- 1.4. This note covers the following elements: current status of badgers within the application site, the outcome of the reptile translocation exercise, current site conditions and details of the ecological input into the design of Town Park Phase B.

2.0 Vegetation

- 2.1 Since the LCES survey was undertaken in April 2018 some changes in the habitats recorded on site have occurred. These mainly relate to the removal of areas of scrub within the site or along ditch lines to facilitate access for works on site. The area of arable land within the red line is no longer cultivated. As a result of reprofiling work, the area of semi-improved grassland within the application boundary has decreased since the previous survey.
- 2.2 A walkover survey was undertaken by Jeff Picksley MCIEEM on 9 June 2020 to refresh the Phase 1 survey. The notes below should be read in conjunction with the original Phase 1 habitat notes (April 2018) provided in Appendix 1. Only significant changes between the two surveys have been highlighted. The target

note references are the same in both reports. Appendix 2 includes photographs of the site taken in June 2020

- 2.3 The arable land identified in the LCES report (target note 1) is no longer under active cultivation. A temporary haul road bisects the area and a small number of common and widespread species have colonised the areas of abandoned arable either side of the haul road. Species recorded from the areas of abandoned arable include: greater plantain, perennial rye-grass, Canadian fleabane, Yorkshire fog, common fleabane, white clover, wheat, creeping buttercup, spear thistle compact rush and abundant prickly sow-thistle
- 2.4 The rough grassland identified in the LCES report (target note 3) is largely unchanged since the previous survey although some additional species were recorded including corky-fruited water dropwort, wild carrot, black medick and ribbed melilot (see photo 1).
- 2.5 The semi-improved grassland areas have changed since the 2018 survey. The area covered by target note 5 is now largely bare earth as a result of the on-going reprofiling works (see photo 2). A narrow band of grassland remains along the southern boundary of the application site (see photo 3). The species present here are similar to those recorded in April 2018. Additional species recorded include scentless mayweed, toad rush, common cat's-ear, black medick and common poppy. There is a significant reduction in area of grassland compared to the 2018 survey.
- 2.6 The area covered by target note 6 is now larger than previously recorded due to the removal of bramble scrub to facilitate the reptile translocation exercise (see photos 4 & 5). Both southern marsh orchid (single plant) and pyramidal orchid (minimum of fourteen plants) were recorded from the grassland in this area during the 2020 survey. Other species noted in this area not recorded in the earlier survey include black knapweed, corky-fruited water dropwort, perforate St John's-wort, wild carrot and black medick.
- 2.7 The areas of ruderal vegetation identified in target note 7 are greatly reduced as a result of the disturbance caused by the destructive search.
- 2.8 The wet drainage ditch (target note 17) has had three sections of bramble scrub removed to facilitate access to the Town Park site (see photos 6 and 7). The scrub areas shown on the Phase 1 plan from 2018 are also significantly reduced.
- 2.9 Clearance work involving the cutting back of scrub and grassland areas to facilitate the reptile translocation exercise was undertaken in late February 2019, followed by a destructive search in September 2019. A section of bramble scrub along a ditch line (target note 17) was removed to allow access to Town Park Phase B for vehicles moving spoil from the Phase 2 River Wallington restoration works in early March 2019.
- 2.10 In early March 2020 some further scrub clearance undertaken to facilitate topographical surveys to inform the design of the SuDS basins, comprising small naturally regenerated trees, willow scrub and blackthorn.

3.0 Status of badger on site

- 3.1 The 2018 LCES report identified two outlier badger setts in April 2018, both were single hole setts. One had an area of fresh spoil around the entrance and was classed as active and the second was considered to be in partial use.
- 3.2 The setts were monitored through the use of a camera trap in January 2019. No badger activity was recorded between 12th and 22nd January. The only mammals recorded around the holes were rabbits. Periodic monitoring has continued since February 2019 and no evidence of reuse of the setts by badgers has been recorded.
- 3.3 The most recent survey of the site undertaken in June 2020 confirmed there is no evidence of current activity around the two setts which are now considered to be disused.

4.0 Reptile translocation

- 4.1 A reptile survey undertaken by LCES during May and June 2018 identified a good population of slow worm in the area north of Plant Farm, within the Town Park Phase B application area. The maximum count of slow worm during the 2018 surveys was 11 animals (3 males, 2 females and 6 juveniles).
- 4.2 WCC were notified of the intention to implement a translocation exercise by e-mail in January 2019 and confirmation of the acceptability of the proposal was received 11th February 2019. All animals captured on site were translocated to Newlands Meadow rather than the fringes of Plant Row due to the more extensive nature of Newlands Meadow. A total of 37 visits were made between 14th May and 23rd August 2019 to capture animals. When capture rates reached a suitably low level a destructive search was undertaken.
- 4.3 A total of 34 slow worm were translocated to Newlands Meadow Site of Importance for Nature Conservation (SINC). This comprised 29 adult animals and 5 juveniles. Newlands Meadow SINC is a mix of meadow, scrub and woodland edge habitat that provides a range of foraging, hibernation and breeding sites for common reptiles. The site is contiguous with further suitable habitat along the boundary of Plant Row and areas of green spaces linked to residential development.
- 4.4 The destructive search was undertaken under ecological supervision in early September 2019. No reptiles were encountered during the destructive search. Six common toad, fifteen common frogs and nine field voles were relocated to Newlands Meadow during the destructive search.

5.0 Ecological input into Town Park design

- 5.1 The clearance of bramble scrub from land around Plant Farm has shown that grassland is more diverse than previous surveys indicated. The design of the less formal areas of Town Park has been amended to allow for the retention and reuse top-soil from these areas, where possible, to allow the grassland to

develop naturally rather than through seeding (as shown on the submitted plans). The approach should safeguard populations of orchids and other locally notable species such as corky-fruited water dropwort.

- 5.2 The Town Park Phase B proposals include measures to enhance the pond on site for wildlife. Willow has encroached around and into the pond, which was dry at the time of the June 2020 survey (see photo 8). Cutting back this willow and reprofiling the pond will improve its value for wildlife. The planting of the pond margins with native species may be undertaken depending on the range of species that regenerate naturally following the restoration work. Topographical surveys to inform the enhancement works are scheduled for November 2020.
- 5.3 The creation of a more open pond with emergent vegetation will benefit a range of aquatic insects such as damselflies, dragonflies and water beetles. The pond will also provide a source of water for badgers and provide suitable habitat for amphibians and grass snake.
- 5.4 The new SuDS features will also provide new habitats in the local area (see submitted plans). These areas will be sown with a wet grassland mix (Emorsgate Seeds EM8 or similar). Monitoring of other SuDS features within the wider development has shown species will readily colonise these features including common spotted and southern marsh orchids.
- 5.5 In addition to the wet grassland areas associated with the SuDS, the planting scheme for Town Park Phase B includes provision for large areas of dry meadow (using Emorsgate Seeds EM2 or similar) and flowering lawn (using Emorsgate Seeds EL1 or similar) to be created. Together these areas will create a substantial area of flower-rich grassland which will provide shelter and foraging opportunities for invertebrates, bats, birds, reptiles, amphibians and small mammals.
- 5.6 A significant number of new trees will be planted as part of the Town Park Phase B proposals (as set out in the submitted plans). These include a range of native species including walnut, pedunculate oak, field maple, silver birch, hazel, alder and rowan. The proposals also include for the planting of a wide range of fruit trees. The combination of native and fruit trees will provide sources of nectar and larval food plants for a wide range of insects. The seeds and fruits of the trees will provide a food source for badgers, smaller mammals, birds and insects.
- 5.7 The Town Park Phase B proposals also include measures to maintain existing established hedgerows. This will take the form of either gapping up those hedgerows in poor condition with native species and instigating appropriate management, or, where the hedgerow is already in good condition, implementing an appropriate cutting cycle. Part of the extant hedgerow to the east of the Cricket Pavilion and MUSA will be removed to facilitate works. This hedgerow will be replaced with an appropriate mix of native shrubs and standard trees.

- 5.8 Further ecological enhancements will be provided in the form of retained habitat piles and large logs which will provide habitat for insects, amphibians, reptiles and small mammals.

Appendix 1: Phase 1 map and target notes (LCES April 2018).

APPENDIX II: Phase 1 habitat map



Phase 1 habitat key

	Hardstanding
	Bare ground
	Arable
	Amenity grassland
	Semi-improved grassland
	Tall ruderal
 H1 – H6	Native hedgerow
	Scrub
	Native broad-leaved woodland
	Plantation woodland
	Tree
	Fence line
	Wall
	Dry ditch
 D1 – D7	Wet ditch
	Stream
	Pond
	Survey boundary
 T1	Target notes

Target notes to accompany Phase 1 habitat map

Target Note	Description
1	Arable land which is currently being used for growing wheat (<i>Triticum</i> sp).
2	Regularly managed amenity grassland comprising a regularly mown, species-poor sward c. 3-4 centimetres in height. Species recorded include common bent (<i>Agrostis capillaris</i>), Yorkshire fog (<i>Holcus lanatus</i>), daisy (<i>Bellis perennis</i>), dandelion (<i>Taraxacum</i> agg.), white clover (<i>Trifolium repens</i>), common bird's-foot trefoil (<i>Lotus corniculatus</i>), greater plantain (<i>Plantago major</i>), sticky mouse-ear (<i>Cerastium glomeratum</i>), red fescue (<i>Festuca rubra</i>) and cat's-ear (<i>Hypochaeris radicata</i>).
3	Rough amenity grassland which comprises an infrequently managed and mostly species-poor sward c. 10-12 centimetres in average height. Dominant and abundant species recorded within the sward include Yorkshire fog, perennial ryegrass (<i>Lolium perenne</i>), false oat-grass (<i>Arrhenatherum elatius</i>) and creeping bent (<i>Agrostis stolonifera</i>), other species recorded include soft brome (<i>Bromus hordeaceus</i>), red fescue (<i>Festuca rubra</i>), annual meadow-grass (<i>Poa annua</i>), rough-stalked meadow-grass (<i>Poa trivialis</i>), creeping thistle (<i>Cirsium arvense</i>), wild teasel (<i>Dipsacus fullonum</i>), cut-leaved crane's-bill (<i>Geranium dissectum</i>), common bird's-foot trefoil, bristly ox-tongue (<i>Picris echioides</i>), ribwort plantain (<i>Plantago lanceolata</i>), curled dock (<i>Rumex crispus</i>), broad-leaved dock (<i>Rumex obtusifolius</i>), dandelion (<i>Taraxacum</i> agg.), lesser trefoil (<i>Trifolium dubium</i>), white clover (<i>Trifolium repens</i>), common ragwort (<i>Senecio jacobaea</i>) and common vetch (<i>Vicia sativa</i>).
4	Species-poor, semi-improved grassland comprising a mostly grass-dominated sward, c. 8 centimetres in average height, with few common/widespread forbs in limited abundance. Dominant and abundant species recorded within the sward include Yorkshire fog, creeping bent, common bent (<i>Agrostis capillaris</i>), cock's-foot (<i>Dactylis glomerata</i>), white clover and creeping buttercup (<i>Ranunculus repens</i>), other species recorded include red fescue, cut-leaved crane's-bill (<i>Geranium dissectum</i>), cat's-ear, ribwort plantain (<i>Plantago lanceolata</i>), broad-leaved dock (<i>Rumex obtusifolius</i>), dandelion (<i>Taraxacum</i> agg.), red clover (<i>Trifolium pratense</i>) and common ragwort (<i>Senecio jacobaea</i>).
5	Semi-improved grassland comprising a rough, regenerating sward, c. 6 centimetres in average height, with abundant ruderals and scattered goat willow (<i>Salix caprea</i>) and bramble (<i>Rubus fruticosus</i> agg.) scrub. It is considered that this grassland has regenerated on land that was formerly used for arable farming. Dominant, abundant and frequent species within the sward include creeping bent, Yorkshire fog, ribwort plantain, bristly oxtongue (<i>Picris echioides</i>), Canadian fleabane (<i>Conyza canadensis</i>) and willowherb (<i>Epilobium</i> sp), other species recorded include common bent, cock's-foot, common mouse-ear (<i>Cerastium fontanum</i>), creeping thistle, spear thistle (<i>Cirsium vulgare</i>), cut-leaved crane's-bill, hogweed (<i>Heracleum sphondylium</i>), greater plantain, meadow buttercup (<i>Ranunculus acris</i>), broad-leaved dock, common ragwort, dandelion, white clover and common nettle (<i>Urtica dioica</i>).
6	Moderately species-rich semi-improved grassland comprising a short rabbit (<i>Oryctolagus cuniculus</i>)-grazed sward, approximately 5-7 centimetres in average height. The sward comprises a variety of common grasses and forbs which include Yorkshire fog, creeping bent, common bent, cock's-foot, ribwort plantain, ox-eye daisy (<i>Leucanthemum vulgare</i>), common vetch, creeping cinquefoil (<i>Potentilla reptans</i>), mugwort (<i>Artemisia vulgaris</i>), common mouse-ear, spear thistle, wild teasel, willowherb (<i>Epilobium</i> sp), cut-leaved crane's-bill, ground ivy (<i>Glechoma hederacea</i>), meadow vetchling (<i>Lathyrus pratensis</i>), cowslip (<i>Primula</i>

Target Note	Description
	veris), meadow buttercup, curled dock, broad-leaved dock, hoary ragwort (<i>Senecio erucifolius</i>), dandelion, red clover, white clover and common nettle.
7	Stands of tall ruderal vegetation, species recorded include common nettle, cleavers (<i>Galium aparine</i>), hogweed, cock's-foot, willowherb, creeping buttercup (<i>Ranunculus repens</i>), false oat-grass, wild teasel (<i>Dipsacus fullonum</i>) and colt's-foot (<i>Tussilago farfara</i>).
8	Gravel trackways and pedestrian footpaths.
9	Construction site compounds and area of bare earth used for storing construction materials.
10	Established, species-rich native hedgerows comprising a good variety of woody species and a relatively diverse field layer which includes ancient woodland indicator species such as dog's mercury (<i>Mercurialis perennis</i>) and wood false-brome (<i>Brachypodium sylvaticum</i>). The established hedgerows range from approximately 2.5 to 5.5 metres in height and include mature standard trees and adjoining drainage ditches.
11	A recently planted (but well established) native hedgerow (H6) which comprises a mixture of native shrub planting, with some tree guards still in place, that ranges between 2 and 3.5 metres in height, the field layer of this hedgerow is mostly species poor.
12	Stands of scattered and dense scrub. Species recorded include bramble, goat willow, willows (<i>Salix spp</i>), elder (<i>Sambucus nigra</i>), wild plum (<i>Prunus domestica</i>), Wilson's honeysuckle (<i>Lonicera nitida</i>), cherry (<i>Prunus sp</i>), hazel (<i>Corylus avellana</i>), blackthorn (<i>Prunus spinosa</i>), rose (<i>Rosa sp</i>), butterfly-bush (<i>Buddleja davidii</i>), pedunculate oak (<i>Quercus robur</i>), holly (<i>Ilex aquifolium</i>), sycamore (<i>Acer pseudoplatanus</i>), ash (<i>Fraxinus excelsior</i>) and honeysuckle (<i>Lonicera periclymenum</i>).
13	Native, broad-leaved woodland which is floristically diverse and includes a number of ancient woodland indicator species within the ground flora, such as dog's mercury, wood anemone (<i>Anemone nemorosa</i>) and bluebell (<i>Hyacinthoides non-scripta</i>), other species recorded include pedunculate oak, goat willow, hazel, blackthorn, rose, elder, remote sedge (<i>Carex remota</i>), lords and ladies (<i>Arum maculatum</i>), enchanter's nightshade (<i>Circaea lutetiana</i>), cleavers (<i>Galium aparine</i>), herb robert (<i>Geranium robertianum</i>), ivy (<i>Hedera helix</i>), soft shield-fern (<i>Polystichum setiferum</i>), bracken (<i>Pteridium aquilinum</i>), bramble, wood dock (<i>Rumex sanguineus</i>), common figwort (<i>Scrophularia nodosa</i>) and common nettle.
14	Plantation woodland comprising a fenced-off area which contains numerous recently planted native tree and shrub saplings with tree guards in place. Species recorded within this area include dogwood (<i>Cornus sanguinea</i>), hazel, blackthorn, guelder rose (<i>Viburnum opulus</i>), hawthorn, field maple (<i>Acer campestre</i>), rose and cherry (<i>Prunus sp</i>).
15	There are a number of scattered trees within the site which include mature specimens of pedunculate oak, sycamore, ash, field maple, yew (<i>Taxus baccata</i>) and Leyland cypress (<i>Cupressus × leylandii</i>).
16	A dry ditch comprising a recently excavated small earth channel c. 0.5 metres in depth and width. It is vegetated with the surrounding regularly managed amenity grassland vegetation, as described in the relevant section above.
17	Wet drainage ditches which are approximately 0.5 – 0.75 metres in depth and 0.5 – 0.75 metres in width, they are mostly situated in heavily shaded conditions alongside hedgerows, underneath dense scrub and under broad-leaved woodland, with the exception of ditch D5 and part of ditch D3 which are situated within open fields. No macrophytic vegetation was noted within the ditches on site,

Target Note	Description
	instead they are vegetated with the local surrounding flora. Ditch D5 contains some common grasses and ruderals, such as Yorkshire fog, red fescue, rough-stalked meadow grass (<i>Poa trivialis</i>), willowherb (<i>Epilobium sp</i>) and dock (<i>Rumex sp</i>), however it is considered that this ditch is likely to be dry at most times of the year. The wet drainage ditches comprise earth channels and banks, water quality varies from good/clear to very poor/turbid and stagnant with some algal growth also noted.
18	A stream which stretches between the pond (T19) and the northern boundary of the site. The stream is mostly enclosed by mature and dense scrub, it has a shallow channel, c. 0.25 metres in depth, which varies in width from 0.25 – 1.5 metres, in one section the stream channel opens out into a wide muddy flush with some common/widespread macrophytic vegetation including hemlock water-dropwort (<i>Oenanthe crocata</i>), yellow iris (<i>Iris pseudacorus</i>), great willowherb (<i>Epilobium hirsutum</i>) and water figwort (<i>Scrophularia auriculata</i>). The substrate of the stream channel is mostly comprised of earth though it becomes more stony where it nears the northern boundary of the site.
19	A pond which is approximately 150 square metres in size and is enclosed by dense/mature willow (<i>Salix spp</i>) scrub. Water quality varies between average and poor, it is quite turbid and silty in places with some algal growth also noted. Macrophytic vegetation is very limited with only a small amount of yellow iris and hemlock water-dropwort recorded.

Appendix 2: Site photos (June 2020).



Photo 1: Looking south towards Town Park Phase A across rough grassland (Target note 3)



Photo 2: Looking north across reprofiled field devoid of vegetation (target note 5)



Photo 3: Looking west across remaining grass area adjacent to Town Park Phase A (target note 5).



Photo 4: Looking south across area where reptile translocation was undertaken in 2019 (target note 6).



Photo 5: Looking north across area where reptile translocation was undertaken in 2019 and scrub clearance took place in 2020 (target note 6).



Photo 6: Looking east at break created across bramble-lined ditch to create temporary haul road (target note 17)



Photo 7: Looking north along retained section of bramble covered ditch (target note 17).



Photo 8: Condition of pond during June 2020 site visit (target note 19).