



**BOTANICAL APPRAISAL
MAPLE ROAD, TANKERSLEY**

SEPTEMBER 2017

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1 INTRODUCTION

Surface Property (Surface) was commissioned by Company Shop and Rula Developments Ltd to undertake an Ecological Appraisal¹ in support of a planning application for a Distribution Centre with two-storey offices, a service yard and car parking (henceforth referred to as the Development) at Maple Road, Tankersley (henceforth referred to as the Site).

The Biodiversity Officer of Barnsley Metropolitan Borough Council (BMBC) commented on the Ecological Appraisal, specifically regarding the botanical value of the habitats. Consequently, this Botanical Survey Report was commissioned separately to address those comments. This report describes the methods and results of the botanical survey and provides an assessment of the potential impacts of the Development.

This report makes reference to the following three key reports:

- Wildscapes Report (survey in May 2013)²
- Ecological Appraisal (survey in March 2017)
- Botanical Appraisal [this report] (survey in July 2017)

This report supersedes the August 2017 Botanical Appraisal previously submitted, following comments from Barnsley Metropolitan Borough Council (BMBC). Revisions have been made to Section 4: *Potential Effects of Development* due to a change in scheme layout.

1.1 Site Description

The Site occupies a small area within an Industrial Park and, as such, is bounded by a commercial unit to the east, by Maple Road and further commercial units to the south, a car parking area for a unit to the north, and an area of grassland to the west. The Site was dominated by semi-improved grassland with broadleaved semi-natural woodland to the west of the Site and small areas of other habitats.

2 METHODS

2.1 Desk Study

For the purpose of this report, the Ecological Appraisal will be reviewed along with the Wildscapes Report as part of a high-level habitat assessment by BMBC. The Wildscapes Report is over four years old³ but is considered by BMBC to be materially relevant and so has been subject to review in the preparation of both the Ecological Appraisal and this Botanical Appraisal.

2.2 Botanical Survey

The survey was undertaken by Alistair Huntly, an experienced botanist trained in National Vegetation Classification (NVC). A Phase 1 Habitat Survey was conducted following methods described in the Joint Nature Conservation Committee (JNCC) handbook⁴ (results are shown on Figure 1, Appendix A). The purpose of the survey was to identify and map habitats within the Site and target further detailed botanical assessment.

¹ Surface Property (August 2017) *Ecological Appraisal*.

² Wildscapes (May 2013) *Site N1 Wentworth Industrial Estate, Tankersley*

³ Natural England's standing advice states that: surveys should not be over 2–3 years old for medium to high impact schemes or multi-plot or phased developments.

⁴ Joint Nature Conservation Committee (2010) *Handbook for Phase 1 habitat survey – a technique for environmental audit*.

Detailed botanical survey was undertaken within habitats that had potential to support valuable semi-natural vegetation. Quadrats were used to determine the structure and composition of vegetation in these areas so that NVC classifications⁵ could be assigned, where possible, to enable identification of habitats of conservation concern. Standard NVC methodology⁶ was used to delimit homogeneous stands of vegetation and assign quadrat size and placement. Note that it is not possible to assign NVC communicates to some vegetation, particularly where its composition and structure has been affected by anthropogenic influences.

Botanical nomenclature used in this report follows the accepted authorities for vascular plants⁷, and mosses and liverworts⁸. Common and scientific names are given in Appendix B.

2.3 Value

The legal and conservation status of habitats, communities and plant species was determined from the following:

- Annex I habitats⁹;
- UK Biodiversity Action Plan (UKBAP) priority habitats¹⁰;
- Local Biodiversity Action Plan (LBAP) habitats¹¹;
- JNCC designations spreadsheet¹²;
- Habitats supporting rare or scarce plants;
- Species composition; and
- Geographic context.

3 Results

3.1 Desk Study

The Wildscapes Report did not provide any survey methodology but the Phase 1 Habitat Map suggests that a Phase 1 Habitat Survey was completed; our review assumes this. Habitats recorded are summarised below with commentary from the more recent surveys undertaken by Surface.

⁵Rodwell, J.S. (1991 *et seq.*) British Plant Communities Vols 1-5, Cambridge University Press, Cambridge.

⁶Rodwell, J.S. (2006) *National Vegetation Classification: User's Handbook*, Joint Nature Conservation Committee, Peterborough.

⁷Stace, C. (2010) *New Flora of the British Isles*, 3rd ed, Cambridge University Press, Cambridge.

⁸Atherton, I. D. M., Bosanquet, S. D. S. and Llawley, M. (2010) *Mosses and Liverworts of Britain and Ireland: A Field Guide*, British Bryological Society.

⁹ The Habitats Directive (Council Directive 92/43/EEC)

¹⁰ UKBAP list of priority habitats <http://jncc.defra.gov.uk/page-5706>

¹¹ Barnsley Biodiversity Action plan 2008-2012 <https://www.barnsley.gov.uk/media/4085/barnsley-biodiversity-action-plan-2009-2013.pdf>

¹² <http://jncc.defra.gov.uk/page-3418>

Semi-Natural Ancient Woodland

Quercus x rosacea dominated woodland was present on site and a ground flora dominated by *Hyacinthoides non-scripta* and *Holcus mollis*, with *Lamium galeobdolon*, an ancient woodland indicator, suggested that this may be a remnant of semi-natural ancient woodland. During the more recent surveys (March and July 2017) the area covered by woodland did not match the area shown on the 2013 Phase 1 Habitat Survey Map (Appendix D). Furthermore, the dominant oak species recorded during the 2013 may be a misidentification, with the 2017 surveys recording *Quercus petraea* which is more shade tolerant and explains the successful self-seeding within the woodland. The presence of *Lamium galeobdolon* suggests the Site may have areas of ancient woodland; however, it is not designated as such with it being shown on the Multi-Agency Government Information Centre's interactive mapping system as an area of deciduous woodland.

Scrub

The Wildscapes Report recorded scattered scrub within the grassland as well as an area of dense scrub at the northern boundary of the Site. The Botanical Appraisal notes that the south-western corner of the Site was dominated by scrub as well as an increase in area to the northern boundary. This was considered to be a result of lack of management as the scrub colonises areas previously covered with grassland.

Species-rich neutral grassland

The Wildscapes Report recorded that the grassland was species-rich semi-improved; however, large areas of the Site (shown on Figure 1 in Appendix A) have since been assessed to be poor semi-improved grassland, clearly deteriorated through lack of management. Furthermore, the only area of the Site considered to have remained as species-rich neutral grassland was towards the northern boundary of the Site (shown on Figure 1 and identified as an area of Local (Site) value on Figure 2).

Marshy Grassland

Wildscapes identified two areas of marshy grassland (shown in Appendix D) but these are now dominated by poor semi-improved grassland which suggests that the Site may have dried out in the intervening years.

Other Habitats

No tall ruderal vegetation or ephemeral vegetation was recorded by the Wildscapes Report, but large areas of the Site are now dominated by these habitats (see Figure 1 in comparison to figure in Appendix D). The overall botanical value of tall ruderal vegetation is limited as ruderal plants are by their very nature transitional early colonising species. The dominance of tall ruderal vegetation suggests the Site has been subject to high levels of disturbance as highlighted in the Ecological Appraisal¹. The ephemeral vegetation covering the earth bund on the southern boundary of the Site was not reported during the Wildscapes Report which suggests the earth bund may be a more recent addition, further suggesting recent disturbance.

3.2 Botanical Survey

3.2.1 A1.1.1 Broadleaved semi-natural woodland

Semi-natural woodland was recorded in the west of the Site. The canopy consisted mostly of *Betula pendula* in the south of the woodland and *Quercus petraea* in the north. The shrub layer was largely restricted to the south and central parts of the woodland which had a distinctive composition and structure, together with the ground flora beneath it. However, the majority of this was *Rubus fruticosus* agg., *Galium aperine* and *Urtica dioica* which had little to no ground flora beneath it. In places where *Sambucus nigra*, *Crataegus monogyna* and *Carpinus betulus* were recorded as the shrub layer, a slightly more developed ground flora existed, consisting of *Silene latifolia*, *Dryopteris felix-mas*, *Hyacinthoides non-scripta*, *Teucrium scorodonia*, *Galeopsis tetrahit* and *Holcus mollis*. Areas where the shrub layer became sparse and opened-up supported a more diverse ground flora (see Figure 2). A detailed botanical assessment was conducted in this habitat which was dominated by *Hyacinthoides non-scripta* and *Holcus mollis*, with occasional *Agrostis canina*, *Dryopteris felix-mas*, *Teucrium scorodonia*, *Galeopsis tetrahit* and *Holcus lanatus*. *Agrostis stolonifera*, *Rubus fruticosus* agg., *Geum urbanum* and *Angelica sylvestris* were recorded on rare occasions towards the woodland edge. This area of woodland had most affinity with the W10 *Quercus robur*–*Pteridium aquilinum*–*rubus fruticosus* woodland community.

3.2.2 A2 Scrub

This habitat was recorded in the south of the woodland, where it was composed of *Crataegus monogyna*, *Sambucus nigra* and *Fraxinus excelsior* with an understory of *Silene latifolia*, *Dryopteris felix-mas*, *Hyacinthoides non-scripta*, *Galeopsis tetrahit*, *Teucrium scorodonia* and *Holcus mollis*. Where this habitat met the southern Site boundary, the understory was dominated with *Rubus fruticosus* agg. In the north of the site, it was composed of *Crataegus monogyna* and *Prunus* sp. which had been planted beyond the Site boundary and was encroaching into the Site.

3.2.3 B2.2 Neutral semi-improved grassland

An area of neutral grassland was recorded in the north and north-west corner of the grassland area, narrowing as it extended to the north-east corner of the Site. This habitat was dominated by *Arrhenatherum elatius* and *Dactylis glomerata* and included common species such as *Plantago lanceolata*, *Torilis japonica*, *Lathyrus pratensis*, *Stellaria holostea*, *Centaurea nigra*. Shade-tolerant, neutral species were also recorded, such as *Vicia sepium*, *Galium oderatum* and *Galeopsis tetrahit*, suggesting that the area may have been part of the woodland in the past or was reverting to scrub through lack of appropriate management; evidence for the latter supported by the presence of seedlings of *Quercus* sp. and *Crataegus monogyna*.

The grassland has closest affinity to the MG1 *Arrhenatherum elatius* grassland community. Three sub-communities were recorded: *Festuca rubra* (MG1a), *Urtica dioica* (MG1b, *Epilobium hirsutum* variant) and *Centaurea nigra* (MG1e). As this grassland is in a state of flux, the distribution and location of the sub-communities was influenced by the degree of localised enrichment and disturbance.

3.2.4 B4 Improved grassland

This habitat was recorded in an area to the south of the Site (before the earth bund) and along the periphery of the Site in the south-east corner. It had been largely improved with agricultural species which dominated the sward, such as *Trifolium repens*, *Lolium perenne* and *Ranunculus repens*, but had retained some of its floristic diversity which included species such as *Trifolium pratensis*, *Lotus corniculatus*, *Lathyrus pratensis*, *Odontites vernus*, *Cerastium fontanum*, *Plantago lanceolot*, *Cynosurus cristatus*, *Festuca rubra*, *Holcus lanatus* and *Agrostis capillaris*.

3.2.5 B6 Poor semi-improved grassland

Two forms of this grassland were recorded, each lacking the floristic diversity to be assigned to any other category.

The first was tall, rank grassland that had clearly deteriorated in term of diversity through lack of appropriate management, and which was mostly recorded in the north-west and south-east corners of the grassland area. This habitat was dominated by *Arrhenatherum elatius*, *Dactylis glomerata* and *Gallium aperine*, with occasional *Cirsium arvense*, *Epilobium ciliatum*, *Rubus fruticosus* agg. and *Heracleum sphondylium*. In the south-east corner of the Site, the grass was dominated by *Deschampsia cespitosa*. Species such as *Lathyrus pratensis* and *Odontites vernus* were recorded in association with more disturbed areas, such as the Site boundary and paths.

The second form of grassland appeared to be acidic in origin, as it was composed of a low-lying carpet of *Agrostis capillaris*, *Festuca ovina*, *Festuca rubra* and *Holcus lanatus*. However, many of the key species that distinguish this grassland, such as *Deschampsia flexuosa*, *Galium Saxatile*, *Nardus stricta* and pleurocarpous mosses were not recorded. Other species associated with more neutral habitats, such as *Lotus corniculatus*, *Stellaria holostea*, *Lathyrus pratensis* were present (in low quantities), suggesting this habitat, which may have been acid, was largely degraded and becoming more neutral through lack of appropriate management.

Throughout this habitat, to the west of the grassland area, a number of native shrubs were recorded, consisting of a few shrubs which appeared to be encroaching into the grassland area from the woodland. These shrubs consisted of *Betula pendula*, *Rosa canina*, *Rubus fruticosus*, *Quercus patraea* and *Crataegus monogyna*. These shrubs were not recorded as A2 Scrub, as few shrubs were recorded and the seral or climax vegetation would likely be woodland.

3.2.6 C3.1 Tall ruderal

Tall ruderal vegetation was recorded throughout the Site. Along the eastern side of the woodland edge it was dominated by *Heracleum sphondylium*, *Urtica dioica*, *Epilobium ciliatum* with occasional *Rubus fruticosus* agg., *Galium aperine* and *Cirsium arvense*. In the northern and central parts of the Site, where it became slightly damp, tall ruderal vegetation was dominated by either *Epilobium hirsutum* and *Urtica dioica*, although many other species were recorded growing in amongst these including *Rubus fruticosus* agg., *Galium aperine*, *Cirsium arvense*, *Chamerion angustifolium*, *Juncus inflexus*, *Rumex sanguinum*, *Petasites hybridus*, *Heracleum sphondylium*, *Achillea millefolium*, *Centaurea nigra*, *Galeopsis tetrahit*, *Hypericum androsaemum*, *Stachys sylvatica* and *Lactuca virosa*.

3.2.7 J1.3 Ephemeral / short perennial

This habitat was largely restricted to the south of the Site on an earth bund that marks the Site boundary. Species typical to disturbed land were recorded including *Petasites hybridus*, *Heracleum sphondylium*, *Achillea millefolium*, *Plantago major*, *Trifolium repens*, *Dipsacus fullonum*, *Leucanthemum vulgare* and *Tripleurospermum inodorum*.

3.3 Value of Habitats

The Wildscapes Report considered the majority of the Site to be of 'high quality', although the justification for this Wildscapes conclusion was not presented. The current botanical value of the Site is now considered to be much lower, with only the woodland and the restricted area of neutral semi-improved grassland providing valuable habitats, with the latter resource diminishing on the Site due to encroaching scrub and tall ruderal vegetation, which has been considerable in the intervening years since the Wildscapes Report.

3.3.1 Woodland

The broadleaved semi-natural woodland is a UKBAP and LBAP habitat and is considered to be of Borough value¹³ (Figure 2) due to its species composition, extent and its value for landscape connectivity with other woodlands. The colonisation of scrub and tall ruderal is considered to be detrimental to the conservation value of the woodland as it is reducing the diversity of the ground flora and now dominates the south-western corner of the Site. Within the woodland, certain areas had more or less well-developed ground flora depending on the dominance of the *Rubus fruticosus* agg. shrub layer. Areas considered to have the higher value, in terms of ground flora, are highlighted on Figure 2.

3.3.2 Grassland

The area of neutral semi-improved grassland is common and widespread in the region and UK and is not included in either the UKBAP or LBAP because these only consider unimproved neutral grassland in lowland areas. The grassland was considered to be semi-improved as it was in a state of transition/degradation, with the distribution and location of sub-communities influenced by the degree of enrichment and disturbance sustained in the area. However, it was considered to provide more botanical value than the rest of the grassland on Site, but is of limited extent and less value than other grassland examples in the surrounding landscape, and has, therefore, been classed as Local (Site) value (Figure 2).

3.3.3 Other Habitats

The remaining habitats (tall ruderal, scrub, ephemeral and improved grassland) are considered to have limited botanical value because they are common and widespread and were represented on Site by species-poor examples.

3.3.4 Plant Species

No plant species recorded on the Site were European Protected Species (EPS), with all but *Lamium galeobdolon*, *Nardus stricta* and *Quercus x rosacea* considered to be least concern on the Red Data List (status shown in Appendix B). *Lamium galeobdolon* was listed as Vulnerable under Criterion D2, *Nardus stricta* was listed as Near Threatened and *Quercus x rosacea* is unlisted.

¹³ Following Geographic context defined by CIEEM (2016)

Furthermore, *Hyacinthoides non-scripta* was the only plant species recorded on the Site to have BAP status (Barnsley BAP not UK), with the remaining plants not listed on either the UK or Barnsley BAP list of species. *Hyacinthoides non-scripta* is also listed on Schedule 8 of the Wildlife and Countryside Act; however, only Section 13(2) applies which prohibits sale.

4 Potential Effects of the Development

4.1.1 Woodland

The broadleaved woodland continues to the north for approximately 0.7 km and is represented, albeit discontinuously, by c. 7.5 ha of woodland habitat in the adjacent land parcel to the west. The Development will cause the permanent loss of 0.15 ha of woodland, which is 17 % of the Site resource, and 2 % of the resource in the immediate locale. The loss will not affect the entirety of the interior of the woodland in which the higher value ground flora are located. The loss is of mostly scrub woodland (e.g. not mature canopy), which is encroaching on the higher value ground flora. Works may also cause localised and temporary or permanent disturbance and changes to the light regime, soil structure and microclimate (and other such edge effects), and these may affect both the canopy and ground flora. Such disturbance is likely during both the construction and operation of the Development and will affect the structure and composition and of the woodland in the medium to long term.

The loss of and disturbance to peripheral parts of the woodland – mainly to scrub, edge woodland rather than mature canopy – is considered to be of low magnitude. Furthermore, when considered in the local wider context, due to the woodland's continuity with a much larger resource to the west, a 2 % loss is negligible. Therefore, effects to the woodland will be not significant. Mitigation and compensation are proposed to address further reduce impacts, and enhancements are proposed to increase the value of the woodland and Site.

4.1.2 Grassland

A small area (0.9 ha) of neutral semi-improved grassland is considered to be of Local (Site) value. The Development will cause the permanent loss of all of this habitat. Whilst the habitat provides value in the context of the Site, its loss is not significant in ecological terms because it (and its constituent plant species) is very well or better represented in the wider landscape (e.g. the neighbouring meadow grassland) and lacks uniqueness or objective value. Mitigation is proposed to further reduce potential impacts and enhancements are proposed to provide a net gain in the value of the grassland.

4.2 Mitigation and Enhancement Measures

Outline mitigation and enhancement is provided below. It is assumed that these will be developed into a more detailed, integrated management plan, following consent, which would incorporate mitigation and enhancements from other reports and disciplines.

4.2.1 Woodland

Disturbance to the retained woodland will be minimised through the application of measures detailed in an Arboricultural Method Statement and Tree Protection Plan to be produced for the Site. The measures covered will ensure guidelines for construction and working in proximity to trees are followed (e.g. in line with BS 5837:2012 *Trees in relation to design, demolition and construction*) as well as describing the methodology for ensuring

that existing trees to be retained not only survive but continue to thrive as part of the future value of the site and to ensure that they are safe for users of the Site.

In agreement with the BMBC Tree Officer, it is considered that the woodland in the south-western corner of the Site is going through natural succession and that the best course of action would be to allow the woodland to continue its cycle without management intervention. Supplementary tree and shrub planting will still be undertaken around the retained woodland and will use species of local provenance and value to wildlife. Further tree planting will take place in other parts of the site at a ratio of at least one new tree to each tree removed (as detailed in the Arboricultural Impact Assessment¹⁴).

The implementation of this mitigation, compensation and enhancement will reduce the magnitude of the impact such that the residual effect is not significant. Further details about these measures will be provided in the Ecological Management Plan and Landscape Management Plan to be produced for the Site.

4.2.2 Grassland

Wildflower grasslands/beds will be established in parts of the Development that would otherwise be assigned for amenity landscaping planting. This will compensate for the loss of grasslands across the Site and provide resources for pollinators. Landscaping plans would also incorporate any specimen plants already present on the bunds at the south of the Site. A detailed management plan for this design and process will be developed prior to construction.

5 CONCLUSIONS

The Site is of overall limited ecological value, although some habitats have value in a local context. In the absence of mitigation, the Development will have no significant impacts on botanical features. Nonetheless, mitigation and compensation are proposed to further reduce effects. In addition, enhancements are proposed to provide a net gain in the number of trees.

¹⁴ Surface Property (April 2017) *Arboricultural Impact Assessment*

APPENDIX A

Figure 1 – 2017 Phase 1 Habitat Map

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Surface

- Site Boundary
- A1.1.1 Woodland -broadleaved semi-natural
- A2 Scrub
- B2.2 Neutral grassland semi-improved
- B4 Improved grassland
- B6 Poor semi-improved grassland
- C3.1 Tall ruderal
- J3 Ephemeral/short perennial



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Phase 1 Habitat Map
Figure 1

Botanical Appraisal
Maple Road, Tankersley

APPENDIX B
Plant Species List
Table 1 – Plant Species List

Scientific Name	Common Name	JNCC Status
<i>Achillea millefolium</i>	Yarrow	Least Concern on Red List
<i>Agrostis canina</i>	Velvety Bentgrass	Least Concern on Red List
<i>Agrostis capillaris</i>	Common Bent	Least Concern on Red List
<i>Agrostis stolonifera</i>	Creeping Bent	Least Concern on Red List
<i>Angelica sylvestris</i>	Wild Angelica	Least Concern on Red List
<i>Arrhenatherum elatius</i>	False Oat-grass	Least Concern on Red List
<i>Betula pendula</i>	Silver Birch	Least Concern on Red List
<i>Carpinus betulus</i>	Hornbeam	Least Concern on Red List
<i>Centaurea nigra</i>	Common Knapweed	Least Concern on Red List
<i>Cerastium fontanum</i>	Common Mouse-ear	Least Concern on Red List
<i>Chamerion angustifolium</i>	Rosebay Willowherb	Least Concern on Red List
<i>Cirsium arvense</i>	Creeping Thistle	Least Concern on Red List
<i>Crataegus monogyna</i>	Hawthorn	Least Concern on Red List
<i>Cynosurus cristatus</i>	Crested Dog's-tail	Least Concern on Red List
<i>Dactylis glomerata</i>	Cock's-foot	Least Concern on Red List
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	Least Concern on Red List
<i>Deschampsia flexuosa</i>	Wavy Hair-grass	Least Concern on Red List
<i>Dipsacus fullonum</i>	Wild Teasel	Least Concern on Red List
<i>Dryopteris filix-mas</i>	Male Fern	Least Concern on Red List
<i>Epilobium ciliatum</i>	American Willowherb	Least Concern on Red List
<i>Epilobium hirsutum</i>	Great Willowherb	Least Concern on Red List
<i>Festuca ovina</i>	Sheep's-Fescue	Least Concern on Red List
<i>Festuca rubra</i>	Red Fescue	Least Concern on Red List
<i>Fraxinus excelsior</i>	Ash	Least Concern on Red List
<i>Galeopsis tetrahit</i>	Common Hemp-nettle	Least Concern on Red List
<i>Galium aparine</i>	Cleavers	Least Concern on Red List
<i>Galium odoratum</i>	Woodruff	Least Concern on Red List
<i>Galium saxatile</i>	Heath Bedstraw	Least Concern on Red List
<i>Geum urbanum</i>	Wood Avens	Least Concern on Red List
<i>Heracleum sphondylium</i>	Hogweed	Least Concern on Red List
<i>Holcus lanatus</i>	Yorkshire Fog	Least Concern on Red List
<i>Holcus mollis</i>	Creeping Soft-grass	Least Concern on Red List
<i>Hyacinthoides non-scripta</i>	Bluebell	Least Concern on Red List LBAP and Schedule 8 of Wildlife and Countryside Act
<i>Hypericum androsaemum</i>	Tutsan	Least Concern on Red List
<i>Juncus inflexus</i>	Hard Rush	Least Concern on Red List
<i>Lactuca virosa</i>	Great Lettuce	Least Concern on Red List
<i>Lamiastrum galeobdolon</i>	Yellow Archangel	Vulnerable D2 on Red List
<i>Lathyrus pratensis</i>	Meadow Vetchling	Least Concern on Red List
<i>Leucanthemum vulgare</i>	Oxeye Daisy	Least Concern on Red List
<i>Lolium perenne</i>	Perennial Rye-grass	Least Concern on Red List
<i>Lotus corniculatus</i>	Common Bird's-foot-trefoil	Least Concern on Red List
<i>Lotus corniculatus</i>	Common Bird's-foot-trefoil	Least Concern on Red List
<i>Nardus stricta</i>	Mat-grass	Near Threatened on Red List
<i>Odontites vernus</i>	Red Bartsia	Least Concern on Red List
<i>Petasites hybridus</i>	Butterbur	Least Concern on Red List
<i>Plantago lanceolata</i>	Ribwort Plantain	Least Concern on Red List
<i>Plantago major</i>	Greater Plantain	Least Concern on Red List
<i>Pteridium aquilinum</i>	Bracken	Least Concern on Red List

<i>Quercus petraea</i>	Sessile Oak	Least Concern on Red List
<i>Quercus x rosacea</i>	Oak Hybrid	Not Listed
<i>Rosa canina</i>	Dog-rose	Least Concern on Red List
<i>Rubus fruticosus</i> agg.	Bramble	Least Concern on Red List
<i>Rumex sanguineus</i>	Wood Dock	Least Concern on Red List
<i>Sambucus nigra</i>	Elder	Least Concern on Red List
<i>Silene latifolia</i>	White Campion	Least Concern on Red List
<i>Stachys sylvatica</i>	Hedge Woundwort	Least Concern on Red List
<i>Stellaria holostea</i>	Greater Stitchwort	Least Concern on Red List
<i>Teucrium scorodonia</i>	Wood Sage	Least Concern on Red List
<i>Torilis japonica</i>	Upright Hedge-parsley	Least Concern on Red List
<i>Trifolium repens</i>	White Clover	Least Concern on Red List
<i>Tripleurospermum inodorum</i>	Scentless Mayweed	Least Concern on Red List
<i>Urtica dioica</i>	Common nettle	Least Concern on Red List
<i>Vicia sepium</i>	Bush Vetch	Least Concern on Red List

APPENDIX C

Figure 2 – Botanical Value of Habitats

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Surface

- Site Boundary
- Borough Value
- Local (Site) Value
- More diverse ground flora



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Botanical Value of Habitats
Figure 2

Botanical Appraisal
Maple Road, Tankersley

APPENDIX D

2013 Phase 1 Habitat Map

Figure 1. Phase 1 Habitat Map: May 2013
Site N1

