

**Extended Phase 1 Habitat
and Arboricultural Survey
Enterprise South Liverpool Academy**

**REC Report: 60002p1r0
Issued: 9th January 2013**

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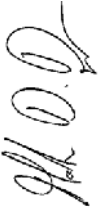
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NATIONAL CONSULTANCY, LOCALLY DELIVERED

QUALITY ASSURANCE

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EXECUTIVE SUMMARY

Site Address	Enterprise South Liverpool Academy, Liverpool, L19 4TN
Grid Reference	340756, 386117
Site Area	5.92 Hectares
Current Site Use	The site is currently used as Secondary School with associated playing fields and car parking facilities. The eastern half of the site comprised the eight buildings forming the school complex, while the western half comprised the playing fields.
Adjacent Site Use	Predominantly residential with Allerton Park Golf Course to the east.
Designated Sites	It is not anticipated that the proposed development would impact upon any statutory or non-statutory designated sites due to the distance they are from the site and the presence of natural and/or anthropogenic barriers.
Important Habitat Features	<p>The important habitat features within the site and immediately adjacent to the site (within the 30m zone of influence) are as follows:</p> <ul style="list-style-type: none"> Trees, hedgerows and shrubs provided opportunities for common invertebrates, foraging/breeding birds and foraging/commuting/roosting bats; Buildings and hard-standing were maintained and of low ecological value; Amenity and poor semi-improved grasslands were of low ecological value; and, Cotoneaster and rhododendron were present within ornamental areas.
Arboricultural Assessment	<ul style="list-style-type: none"> The majority of the trees within and adjacent to the site fall within the Land at New Heyes School bounded by Allerton Road, Heath Road and Mather Avenue (18) Tree Preservation Order, 1994; Retention Category A (high quality) represented 45% of the tree(s); Retention Category B (moderate quality) represented 42% of the tree(s); Retention Category C (low quality) represented 10% of the tree(s); and, No trees required immediate attention for reasons of public health and safety; however, two trees were classified as Category U (unsuitable for retention) and it is recommended that these are removed and replaced.
Recommendations	<ul style="list-style-type: none"> Safeguard mature trees and those that fall within the Tree Preservation Order with an Arboricultural Method Statement; Nesting bird check prior to removal of suitable nesting bird habitat (during the breeding bird season only); Erect bird boxes on retained trees (only if significant tree losses are anticipated); Bat activity surveys; Internal inspection of buildings for signs of bats; Bat emergence surveys (if the loss/disturbance of any 2a/2b trees is expected and if potential roost is identified within any of the buildings); and, Eradicate and replace cotoneaster and rhododendron.

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60002-001 Site Location Plan	N.T.S
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1.0 INTRODUCTION

1.1 Background

Resource and Environmental Consultants Ltd (REC) have been commissioned by Redrow Homes (NW) to undertake an Extended Phase 1 Habitat survey at Enterprise South Liverpool Academy, Heath Road, Liverpool, L19 4TN; hereafter referred to as the 'site'. It is proposed that the site is developed to a series of residential dwellings.

1.2 Objectives

The purpose of the Extended Phase 1 Habitat Survey was to identify:

- The major habitats present;
- The potential for legally protected species to be present; and,
- Additional ecological surveys likely to be required.

The Extended Phase 1 Habitat Survey included a desktop review, consultation and a site visit. The results of this review were used to assess the nature conservation importance of the site. The potential for each habitat to support protected species was also noted. An Extended Phase 1 Habitat Survey does not constitute a full survey for protected species to standard survey methodologies, but is used as a tool to recommend which surveys are required for protected species (or other species of significant nature conservation interest). Recommendations for further ecological surveys are made at the end of the report.

The purpose of a pre-development arboricultural survey is to provide information on existing vegetation (principally trees) within a proposed development site and to set out the measures to be applied to ensure development does not adversely impact upon retained trees. This report is designed to act as an aid to layout by identifying the better trees, specifying protective measures and also any work that might be necessary to maintain the trees in an improved or safer condition.

This pre-development tree survey should be considered the first step in a sequence where the arboricultural implications of development are assessed. In most cases the pre-development tree survey will be followed by:

- An Arboricultural Impact Assessment that assesses the impact on trees from proposed development; and
- An Arboricultural Method Statement that provides specific details on how a development should proceed in such a manner that avoids damage to trees being retained.










1.3 Site Description

The site covers an area of approximately 5.92 hectares and is situated within Allerton, approximately 7km south east of the centre of Liverpool. The site is accessed off Heath Road that defines the southern boundary of the site; residential units are situated further south. Allerton Park Golf Course is situated to the north of Allerton Road that defines the site to the east. The residential units associated with Ambleside Road and New Hayes Drive restrict the site to the North, and Mather Avenue (B5180) and further residential units are situated to the west. The ground topography is generally level though slopes down gradually to the west. Please refer to drawing number 60002-001 for the Site Location Plan.

2.0 SURVEY METHODOLOGY

2.1 Desk Study & Consultation

The desktop study involved conducting database searches for statutory and non-statutory designated sites, legally protected species and features of interest within and immediately surrounding the site within a 2km radius. The central grid reference of the site (340756, 386117) was used as the central point of all searches. The baseline conditions were based on a review of existing available information including:

-  MAGIC (Multi-Agency Geographical Information for the Countryside) website;
-  Ordnance Survey mapping (to identify potentially notable habitats);
-  Aerial photography (e.g. google mapping);
-  the NBN Gateway (National Biodiversity Network) website;
-  Nature on the Map (Natural England website);
-  Cheshire Region Biodiversity Partnership Biodiversity Action Plan (LBAP);
-  UK Biodiversity Action Plan (UKBAP);
-  Consultation with Merseyside BioBank (BioBank), the local records centre for Merseyside; and,
-  Consultation with the Tree and Landscape Officer at Liverpool City Council (Michael Anders).

The Extended Phase 1 Habitat and Arboricultural Survey of the site were carried out on 26th October 2012 by a suitably qualified surveyor from REC. Weather conditions of the day were clear and dry.

2.2 Extended Phase 1 Habitat Survey

The field survey comprised a walkover of the land and habitats present, with a classification of the habitats to Phase 1 Habitat Survey standard.

The survey broadly followed the 'Extended Phase 1' methodology as set out in 'Guidelines for Baseline Ecological Assessment' (Institute of Environmental Assessment, 1995), which is a development of the method described in the 'Handbook for Phase 1 Habitat Survey – a technique for environmental audit' (Joint Nature Conservation Committee, 2007). The Extended Phase 1 Habitat Survey provides information on the habitats in the survey area and identifies actual or potential presence of legally protected or otherwise notable species/habitats in or immediately adjacent to the site. The main habitats within the site were mapped and are shown at an appropriate scale on drawing number 60002/002 - Extended Phase 1 Habitat Plan.

Target notes (more detailed descriptions of a particular area in terms of habitat and species composition or means of highlighting a particular feature of ecological interest), are given in Appendix 1.

Plant names follow 'New Flora of the British Isles' (Stace, 2011). The common and scientific

name of each of the botanical species is provided when first mentioned in the text, but only the common name is stated thereafter.

In addition to establishing the baseline ecological interest within the area, the survey intended to identify areas where further surveys may be required, during the appropriate season. Habitat potential for legally protected or national/local BAP species, including but not limited to bats, breeding birds, botanical plants, amphibians and reptiles was noted.

2.3 Arboricultural Survey


This Arboricultural Assessment is compiled in accordance with BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations (The British Standards Institution, 2012). All significant trees or groups within the site have been inspected, identified and detailed. Where applicable, trees outside the site boundary, but close enough to be affected by the proposed development, are also included.

Inspection was made at ground level. Further investigation, such as climbed inspections or decay detection surveys, may be recommended where appropriate. Where accurate measurements could not be made, they were estimated and suffixed with a hash-tag (#). A tree schedule is provided as Appendix 4, it includes the following information:

- Sequential reference number (prefixed with a T for Trees, G for groups, H for Hedges and W for woodlands);
- Age class (sapling, young, semi-mature, early-mature, mature, over-mature, veteran or ancient);
- Tree species by common name (botanical names are provided in Appendix 2);
- Height (metres);
- Crown spread (measured in metres at all four cardinal points);
- Crown clearance and direction of first significant branch (measured in metres; first significant branch direction is not applicable for groups or for trees with uniform spread);
- Stem diameter (measured in accordance with Annex C of BS 5837: 2012);
- General observations of structural and/or physiological condition (Good, Fair, Poor, Dead) and/or preliminary management recommendations;
- Estimated remaining contribution (measured in years and categorised as <10, 10+, 20+, 40+);
- Retention category assigned as follows:

U = unsuitable for retention (irremediable or with less than 10 years contribution);
A = high quality and value trees with an estimated life expectancy of at least 40 years;
B = moderate quality and value with an estimated life expectancy of at least 20 years;
C = low quality and value trees with an estimated life expectancy of at least 10 years and young trees with stem diameter below 150mm (these may be considered for relocation);
- Subcategory assigned as follows:
1 = mainly arboricultural merit;

- 2 = mainly landscape merit;
- 3 = mainly cultural or conservation merit; and,

 Root Protection Area (calculated as per section 4.6 of BS 5837: 2005).

Preliminary recommendations are given with a view to the long-term management of a sustainable tree cover.

2.4 Caveat

Desk study data is not likely to be exhaustive and it is therefore possible that protected species not identified during the data search do in fact occur within the vicinity of the site.

Potential impacts that may be encountered will depend upon the type and scale of the works that will be undertaken. This survey was undertaken in October and therefore the species identified are limited to those that would be present at this time of the year.

3.0 BASELINE CONDITIONS

3.1 Aerial Photography and OS Maps









The site comprises a large sports field with school buildings and boundary tree planting. The trees are part of an extensive band extending east.

Natural England's Newt Mitigation Guidelines (English Nature, 2001) recommend that any waterbodies within 500m of a site and sites with suitable terrestrial habitats within 500m of a waterbody should be assessed for great crested newt potential. A study of aerial photography and OS maps identified no waterbodies within 500m of the site boundary. The site is relatively isolated by built development and is surrounded by fencing and/or walls that minimise the potential presence of terrestrial animals.

3.2 Statutory and Non-Statutory Designated Sites

No statutory designated sites for nature conservation were identified within 2km of the site boundary during the desk study exercise.

Consultation with rECOrd identified eight non-statutory designated sites for nature conservation within 2km of the site boundary:

-  Allerton (Eric Hardy) Local Nature Reserve (LNR) situated approximately 600m east of the site boundary;
-  Hillfoot Road and Simpsons Pavilion Local Wildlife Site (LWS) situated approximately 700m east of the site boundary;
-  Calderstone Park LWS situated approximately 750m north of the site boundary;
-  Land of Brunt Lane (proposed) LWS situated approximately 1.15km south east of the site boundary;
-  Cressington Heath LWS situated approximately 1.5km south of the site boundary;
-  Garston Gas Works LWS situated approximately 1.65km south east of the site boundary;
-  Blackwood LWS situated approximately 1.7km north of the site boundary; and,
-  Childwall Woods and Fields LNR & LWS situated approximately 1.95km north of the site boundary.

3.3 UK & Local Biodiversity Action Plans

A review of the National Biodiversity Action Plan (UKBAP) and the LBAP identified the following habitat and species biodiversity action plans that may be of relevance for the site (see Table 1).

Table 3.1 North Merseyside BAP Habitats and Species of Relevance

Habitats	
Conifer Woodland	Urban Grasslands
Field Boundaries	Urban Green Infrastructure
Lowland Broadleaf Woodland	Urban Trees

Species	
Bats	Lapwing
Bluebell	Purple Ramping-fumitory
Brown Hare	Red Squirrel
Bullfinch	Skylark
Common Lizard	Song Thrush
Corn Bunting	Urban Birds
Dark-green Fritillary	Willow Tit
Grey Partridge	Yellowhammer

Consultation with Natural England's 'Nature on the Map' website identified several areas of *deciduous woodland* UKBAP habitat within 2km of the site boundary; the closest situated approximately 65m west of the site boundary. Two *Traditional Orchard's* (Inventory for England) were also identified; the closest of these was situated approximately 450m north west of the site boundary. Consultation with BioBank identified the woodland to the north and north west of the site is classified as BAP habitat.

4.0 HABITATS

4.1 Site Summary

The main habitats within the site are described below. Additional details are shown on the Extended Phase 1 Habitat Plan (see drawing number 60002-002) and target notes are listed in Appendix 1. The species present in each habitat are listed in Appendix 2.

4.2 Buildings and hard standing

The school buildings and car parking facilities were situated in the east of the site (Target Note 1). The buildings were generally large, brick built with flat roofs (comprising felt or corrugated iron). They ranged from single storey to four floors and were all relatively modern and well maintained. They had low potential to support roosting bats.

Car parking and hard-standing recreational facilities (also see Target Note 1) were situated adjacent to the buildings. These features were of no ecological value.

The site boundary was defined by a fence line (and stone wall in sections). These boundary features were of no ecological value; however, they did limit access to the site for terrestrial animals, reducing the sites potential to support them.

4.3 Trees and hedgerow

An arboricultural assessment of the trees is provided in chapter 5. Ornamental tree planting was a common feature of the local area (predominantly sycamore *Acer pseudoplatanus*, ash *Fraxinus excelsior*, beech *Fagus sylvatica* and lime *Tilia x europaea*). To summarise:

- A row of semi-mature and mature broad-leaved trees extended along Mather Avenue and along the western boundary of the site. This band also extended east along Heath Road, adjacent south of the site;
- A row of mature broad-leaved trees defined the site to the east; Allerton Road separated these trees from an extensive woodland band associated with Allerton Park Golf Course;
- A line of trees defined the north eastern border of the site and surrounded the tennis courts. These comprised; London plane (*Platanus x hispanica*), sycamore, lime, hazel (*Corylus avellana*), horse chestnut (*Aesculus hippocastanum*), Leyland cypress (*Cupressus x leylandii*), common cherry (*Prunus avium*) and ash; and,
- Semi-mature trees and ornamental shrubs were present around the main school car park and school entrance. Most notable was the presence of cotoneaster (*Cotoneaster sp.*). An extensive band of garden ornamentals were also present within the gardens to the north west of the site.

The trees within the site could be considered Urban Trees and thus be covered by the HAP and some of the trees within the site are protected by a Tree Preservation Order (see chapter 5). Collectively these trees provide habitat for a range of different species and are of local importance for nature conservation. The shrubs provide foraging habitat for birds, bats and invertebrates. However, the majority of these were non-native and it is not anticipated that their loss would be felt outside of the zone of influence.

There were four hedgerows within the site; all were maintained (approximately 1m tall and 1m wide) and predominantly hawthorn (*Crataegus monogyna*). H1 (see Target Notes) was

situated in the west of the site separating the playing fields. H2 was situated in the centre of the site between the fields and the building. H3 extended along the site boundary to the south west and H4 extended along the site boundary to the south east. None of these hedgerows qualify as an *important* hedgerow as per the Hedgerow Regulations (1997). However, they provide foraging opportunities for birds and H1 may be an important linear feature for dispersing/foraging bats. H1 may be of local importance for bats.

4.4 Grasslands

The western section of the site comprised a large area of maintained sport fields. Managed amenity grassland was also present adjacent to the hard standing areas in the east. These grasslands were species poor and of negligible ecological importance.

Field margins were generally negligible; however a thin strip of unmanaged poor semi-improved grassland (Target Note 2) had established along the western boundary. Common species included; white clover (*Trifolium repens*), cocksfoot (*Dactylis glomerata*), creeping buttercup (*Ranunculus arvensis*), dandelion (*Taraxacum officinale*), ribwort plantain (*Plantago lanceolata*), rosebay willowherb (*Epilobium angustifolium*), spear thistle (*Cirsium vulgare*), common nettle (*Urtica dioica*), bramble (*Rubus fruticosus*) and sorrel (*Rumex acetosa*). This area provides foraging opportunities for common birds and invertebrates; however, it is small and species poor and it is not anticipated that its loss would be felt outside of the zone of influence.

5.0 ARBORICULTURAL ASSESSMENT

5.1 Tree Constraints Plan





Full details of all surveyed trees are recorded in the tables at Appendix 4; botanical names are provided in Appendix 2. Please also refer to the Tree Constraints Plan (Drawing No. 60002-003) for tree locations and Root Protection Areas (RPA).

5.2 Consultation Response

Consultation with Liverpool City Council (LCC; initially on the 31/10/1) confirmed that there are a number of Tree Preservation Order's (TPO's) within the site but that the site does not lie within a conservation area. On the 18th December 2012, LCC provided the documentation for *Land at New Heyes School bounded by Allerton Road, Heath Road and Mather Avenue (18) Tree Preservation Order, 1994*. This documentation contained a plan illustrating the locations of protected trees/tree groups within the site. This plan is attached at the foot of Appendix 4 and has been used to determine each tree with a TPO. These trees have been demarked on the Tree Constraints Plan (Drawing No. 60002-003) and the Tree Schedule (Appendix 4). Please refer to Appendix 3 for the relevant legislation regarding TPO's and Conservation Areas.

5.3 Arboricultural Assessment

In total, 37 groups, 21 individual trees and 4 hedgerows were assessed; these were classified into the following categories:

-  Retention Category A (high quality) - approximately 45% (representing 28 groups, trees or hedgerows);
-  Retention Category B (moderate quality) - approximately 42% (26);
-  Retention Category C (low quality) – approximately 10% (6); and,
-  Category U (unsuitable for retention) - approximately 3% (2).

The majority of the trees within the site represent extensive belts and/or groups of trees that are generally of significant visual amenity with 40+ years remaining contribution. Some form parts of extensive belts (extending further along Mather Avenue; an important approach road into the city centre, for example), screen the school buildings from adjacent residential properties and provide an important backdrop to the existing buildings and open space. Collectively these trees also have significant conservation value; however, they have been classified as Category A2.

The position or age of some of the trees meant that they were not as visually as significant as those in Category A. In addition, their age and size was such that should their removal be required, then this would not be felt within the immediate landscape and replacement planting would sufficiently mitigate for their loss. For these reasons, these trees were afforded a lower category and were classified as B2 trees.

Several trees were of low value, their removal would be insignificant. These trees were afforded a Category C2.

Two trees; T15 (dead) and T60 (showing signs of immediate, irreversible decline) were classified as Category U and are thus unsuitable for retention. In addition, ornamental

shrubs were common around the school buildings. As these were non-native and/or of low value it was not deemed necessary to assess them as part of this report. They do not represent a constraint and should be regarded as Category U trees.

6.0 PROTECTED SPECIES

6.1 Overview

The legislation that relates to the protected species referred to in this section is included in Appendix 3. Additional species/species groups have been considered as part of this report; however, only those that operate within the same geographical range and where suitable habitats are present within or adjacent to the site are included below.

6.2 Avifauna

Consultation identified several records of notable bird species within 2km of the site boundary; these are summarised in Table 6.1.

Table 6.1 Records of notable avifauna within 2km of the site boundary

Species	
Swift (<i>Apus apus</i>)	Grey partridge (<i>Perdix perdix</i>)
Skylark (<i>Alauda arvensis</i>)	Willow tit (<i>Poecile montanus</i>)
Lesser redpoll (<i>Carduelis cabareff</i>)	Hedge accentor (<i>Prunella modularis</i>)
Linnet (<i>Carduelis cannabina</i>)	Bullfinch (<i>Pyrrhula pyrrhula</i>)
House martin (<i>Delichon urbicum</i>)	Starling (<i>Sturnus vulgaris</i>)
Reed bunting (<i>Emberiza schoeniclus</i>)	Song thrush (<i>Turdus philomelos</i>)
Grasshopper warbler (<i>Locustella naevia</i>)	Barn owl (<i>Tyto alba</i>)
House sparrow (<i>Passer domesticus</i>)	Lapwing (<i>Vanellus vanellus</i>)
Tree sparrow (<i>Passer montanus</i>)	

The habitats on site are unsuitable for some of these species (such as barn owl, grey partridge, skylark and lapwing); however, the trees within the site provide breeding opportunities and the grasslands, hedgerows and adjacent residential gardens provide foraging opportunities for a range of common birds. During the site survey starling, house sparrow, blackbird (*Turdus merula*) and woodpigeon (*Columba palumbus*) were identified within the site. House sparrow and starling are LBAP species (Urban Birds) and it is likely that the site supports additional notable species such as song thrush. Overall, the foraging potential of the site is fairly limited (comprising improved amenity grassland and non-native shrubs) and it is not anticipated that the loss of the sites habitats would be felt outside of the zone of influence (with regards to birds).

6.3 Badger

No records of badger (*Meles meles*) were identified during the desk study exercise and no signs of badger were identified during the site survey. The site does provide foraging opportunities for badger; however, fences/walls that surround the site limit access. Thus, it is not anticipated that badger use the site. Badgers are not considered a constraint to development.

6.4 Bats

No records of bats or bat roosts were identified within the site boundary during the desk study and no signs of bats were identified during the site visit. However, consultation identified the presence of common pipistrelle (*Pipistrellus pipistrellus*), Daubenton's bat

(*Myotis daubentonii*), noctule bat (*Nyctalus noctula*) and Soprano pipistrelle (*Pipistrellus pygmaeus*) within the local area and the site does provide roosting and foraging opportunities for bats.

During the survey a visual assessment of all trees and buildings within and adjacent to the site was undertaken to determine their potential to support bat roosts (as per the categories listed within the Bat Conservation Trust, 2007). Table 6.2 presents the categories and lists which trees fell within them.

Table 6.2 Bat roosting potential of trees within and adjacent to the site

Category	Tree Reference
Category 1 - Confirmed bat roost or tree with field evidence of the presence of bats.	None.
Category 2a - Trees that have a high potential to support bat roosts.	G23, G26, G30 & G46.
Category 2b - Trees with a moderate/low potential to support bat roosts.	G6, G7, T10, G13, G24, G27, G29, G51 & G62
Category 3 - Trees with negligible potential to support bat roosts.	G3, G5, T8, G9, G11, G12, G14 - G22, T25, G28, G31 - G45, G47 - T50 & G52 - G61.

The buildings were generally modern and well maintained. Roofs were flat and although an internal inspection was not undertaken it is not anticipated that the roof spaces will be complicated. Several buildings had wooden fascia boards that did provide roosting opportunities; however, these were limited and no signs were identified. The buildings were assessed as having negligible to low potential to support bat roosts; they are potentially of local importance for bats.

The habitats within the site were of low foraging quality; however, H1 may provide an important linear feature for commuting/foraging bats and the tree groups and extensive shrubs (particularly those in the adjacent residential gardens; G19) provided suitable foraging areas. It is anticipated that common and widespread bat species will forage and/or commute across the site. The site is potentially of local importance for bats.

6.5 Red squirrel

Consultation identified two records (within the last 20 years) of red squirrel (*Sciurus vulgaris*) within the search area. These were situated 1.4km south east (from September 1999) and 1.5km north east (from April 2008). The habitats present within the site are suitable for red squirrels; however, none were identified during the survey and it is not anticipated that they are present within the local area. Red squirrels are not considered a constraint to development.

6.6 Reptiles

Consultation identified no records of reptile within 2km of the site boundary. The habitats within the site are sub-optimal for reptiles and as the site is fairly isolated it is not anticipated that reptiles are present. Reptiles are not considered a constraint on development.

6.7 Invertebrates

Consultation identified several records of notable terrestrial invertebrates within 2km of the site boundary; these are summarised in Table 5.2.

Table 5.2 Records of notable invertebrates within 2km of the site boundary

Species	
Buff ermine (<i>Spilosoma luteum</i>)	Ghost moth (<i>Hepialus humuli</i>)
Cinnabar (<i>Tyria jacobaeae</i>)	Latticed heath (<i>Chiasmia clathrata</i>)
Dusky brocade (<i>Apamea remissa</i>)	White ermine (<i>Spilosoma lubricipeda</i>)

The habitats within the site are largely managed and ornamental and provided limited opportunities for notable invertebrates. The semi-improved grassland field boundary and the mature trees are likely to support common species (for example, common ragwort, the food source of caterpillars of the cinnabar was identified within the field boundary). However, the extensive woodland and grassland to the east of the site and the residential gardens adjacent north of the site provided far more opportunities for invertebrates; thus it is not anticipated that the loss of the site would be felt outside of the zone of influence.

6.8 5.8 Other Species

Consultation identified records of hedgehog (*Erinaceus europaeus*) and brown hare (*Lepus europaeus*) within 1km of the site boundary. However, the habitats on site are sub-optimal and due to the isolated (by fence lines and walls) nature of the site it is not anticipated that these species are present.

6.9 5.9 Flora

Consultation identified several records of notable flora within 2km of the site boundary; these are summarised in Table 5.3.

Table 5.2 Records of notable flora within 2km of the site boundary

Species	
Box (<i>Buxus sempervirens</i>)	Bluebell (<i>Hyacinthoides non-scripta</i>)
Chamomile (<i>Chamaemelum nobile</i>)	Yellow bird's-nest (<i>Monotropa hypopitys</i>)
Purple ramping-tumitory (<i>Fumaria purpurea</i>)	Field woundwort (<i>Stachys arvensis</i>)

No notable flora was identified during the site survey and due to the managed and limited nature of the habitats within the site, it is not anticipated that the site will support any. Notable flora are not considered a constraint on development.

6.10 5.10 Invasive species

No invasive species were identified within the site during the desk study; however, cotoneaster and rhododendron was identified within the site. These species are listed on schedule 9 of the Wildlife and Countryside Act (1981). Although their presence is not considered a constraint to development, their eradication and replacement with species of local provenance should be considered.

7.0 CONCLUSIONS AND RECOMMENDATIONS

7.1 Statutory/Non-Statutory Designated Sites

It is not anticipated that the proposed development would impact upon any statutory or non-statutory designated sites due to the distance they are from the site and the presence of natural and/or anthropogenic barriers.

7.2 Habitats

Urban Trees is a LBAP habitat and covers trees that occur as individuals or small groups rather than in woodlands. The trees within the site fall within this category; thus, collectively, they are considered to be of local importance for nature conservation. A relevant aim of the LBAP is to maintain the current urban tree population.

None of the hedgerows qualify as an *important* hedgerow (Hedgerow Regulations, 1997); however, H1 may be an important linear feature for commuting/foraging bats and is potentially of local importance for nature conservation.

The other habitats within the site are of negligible to low ecological value.

7.3 Tree Assessment

The majority of the trees within the site fall within the *Land at New Heyes School bounded by Allerton Road, Heath Road and Mather Avenue (18) Tree Preservation Order, 1994*. All contributing trees are protected against cutting, removal, wilful damage or destruction without prior agreement from the Local Planning Authority.

The majority of the trees within the site were also assessed as high quality (i.e. Category A) and measures (such as a working method statement with ground protection) should be put into place to ensure that development does not adversely impact upon them. During development the part of the tree most commonly under threat, and most commonly ignored, is the rooting system. When trees are damaged, particularly the roots, their long-term health and stability can be affected.

For an open grown tree(s) the Root Protection Area (RPA) is generally circular in shape. However, account should be taken of ground structures and topography (i.e. roads, paths, retaining walls, water courses, slopes and house foundations etc.) as these can have the effect of restricting the ability of a tree to freely root in all directions. It should be noted that the RPA is considered the minimum area that is required to provide a trees root system with adequate protection. For individual trees, it may be acceptable to off-set the distance by up to 20% in one direction.

The trees that fell within Retention Category B were of moderate quality and should be retained where possible. However, their age and size is as such that replacement planting would sufficiently mitigate for their loss, should this be required.

Trees that fell within Category C should also be retained where possible; however, their removal (if required) is considered negligible. Relocation of some of these trees should also be considered.

Two trees were placed in Category U. It is recommended that these trees are removed and replaced with species of local provenance.

It should be noted that regardless of the tree(s) retention category (including Category U trees); any works that affect trees protected by the TPO need prior agreement with the LPA.

The exact location of the TPO (as per the drawing at the foot of Appendix 4) is unclear and assumptions have been made from the descriptions and the plan provided by Liverpool City Council and the location of trees within and adjacent to the site during the tree survey. It is recommended that an Arboricultural Impact Assessment, detailing trees to be affected by development and including a Tree Protection Plan is produced and agreed with the LPA prior to works commencing.

7.4 Protected species

Below is the potential impact to species and species groups that may be adversely affected as a result of development.

Avifauna

The site is considered to provide opportunities for common and widespread breeding and foraging birds. Nevertheless, BAP species such as starling, house sparrow and song thrush are likely to be present and development should aim to maintain the local distribution. If the recommendations made within the Tree Assessment (above) are adhered to, then impacts to breeding birds will be negligible. However, should significant tree losses be proposed for the site then it is recommended that nest boxes that target these BAP species are installed on retained trees, post development.

It is also recommended that any vegetation removal is undertaken outside of the breeding bird season (March to September inclusive). However, should these works be required within the breeding bid season then it is recommended that a check for breeding birds is undertaken by a suitably experienced surveyor prior (within 24 hours) to works commencing. If a nest (or nest in construction) is found a suitable stand-off area should be maintained until the young have fledged.

Bats

Several trees (particularly to the north east and east) provided opportunities for bats to roost and H1 may be an important linear feature for commuting/foraging bats. It is recommended that bat activity surveys are undertaken on the site to determine the level of activity (particularly across H1) and the value of the site with regards to this species group. Impacts to potential bat roosts will be minimised if the recommendations made within the Tree Assessment are adhered to; however, should development require the loss or disturbance to any of the trees identified as 2a or 2b trees (see Table 6.2), then it is recommended that further investigations (such as bat emergence surveys) are undertaken to determine whether bats roost within them.

Although the potential for the buildings to support bat roosts is assessed as negligible to low, it is recommended that internal inspections of the buildings are undertaken to determine the actual or likely presence of bats and how they might use the buildings. The internal inspections and the results of the activity surveys will be used to determine whether emergence surveys are required on any of the buildings.

Invasive species

The presence of cotoneaster and rhododendron within the site does not require any further survey and is not considered a constraint to development. However, it is recommended that

an eradication programme is considered and that these shrubs are replaced by species of local provenance.

7.5 Recommended further ecological surveys and mitigation







Table 7.1 summarises further ecological survey and mitigation requirements. Note, these surveys are only recommended if these habitats are affected by development.

Table 7.1 Recommended Further Ecological Surveys and Mitigation

Species / Feature & Location	Recommended Survey/Action	Potential impact/mitigation required	Survey Timing
Avifauna Starling, house sparrow and song thrush.	Erect species specific bird boxes on retained trees. NB: only recommended if significant tree loss is anticipated as part of development.	Maintain distribution of LBAP species.	Post development
Trees, shrubs and hedgerows.	Nesting bird check prior to removal of suitable nesting bird habitats. NB: only required if works undertaken during the breeding bird season.	Disturbance of breeding birds. Area to be declared free immediately prior to site works.	March to September.
Bats Site	Activity surveys.	Determine the value of the site with regards to foraging bats (particularly H1).	April to September.
2a and 2b trees	Emergence surveys. NB: only required if development requires the loss/disturbance of these trees.	Potential loss/disturbance to bat roost.	April to September.
Buildings	Internal inspection. NB: results of inspection and activity surveys may identify the need for emergence surveys on the buildings.	Potential loss/disturbance to bat roost.	N/A
Invasive species	Consider eradication programme with replacement with species of local provenance.	Spread this species in the wild.	N/A

An Extended Phase 1 Habitat survey should be repeated prior to commencement of works if more than 12 months have elapsed since the date of this survey (12 months will have elapsed on 26th October 2013).

8.0 REFERENCES

-  Bat Conservation Trust (2007). *Bat Surveys – Good Practice Guidelines*. Bat Conservation Trust, London.
-  English Nature (2001). *Great crested newt mitigation guidelines*. English Nature.
-  JNCC (1990). Handbook for Phase 1 habitat survey: A technique for environmental audit. English Field Unit, Nature Conservancy Council.
-  Institute of Environmental Assessment (1995). Guidelines for Baseline Ecological Assessment.
-  Stace. C. A. (2011). *'New Flora of the British Isles'*. Third Edition. Cambridge University Press.
-  The British Standards Institution (2012). *BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations*.

REC Services

REC are a multi-disciplinary health, safety, environmental and energy consultancy. Our national coverage enables our local experts to provide cost effective and pragmatic consultancy services in an efficient and sustainable manner.



- Sound Insulation Testing
- Noise at Work Assessment
- Development Related Noise
- Environmental Noise



- Air Quality Impact
- Odour Assessment
- Dispersion Modelling
- Stack Emission Testing
- Pollution Monitoring



- Phase 1 Habitat Surveys
- Invasive Species
- Legally Protected Species Surveys
- Mitigation Schemes
- Ecological Impact Assessment (EclA)
- BREEM & Code 4 Sustainable Homes
- Habitat Management Plans
- Biodiversity planning and targeted
- Biodiversity Action Plan survey
- Environmental Impact Assessment



Corporate Health & Safety Services

- NEBOSH Accredited Training Courses
- IOSH Accredited Training Courses
- IEMA Accredited Training Courses
- Asbestos Training
- Health & Safety Training
- CDM Training
- Health & Safety Consultancy



- Feasibility Studies
- Ground Source Heat Pumps Installation
- Air Source Heat Pump Installation
- System Design and Maintenance
- Solar Photovoltaic (PV) Systems
- Combined Heat and Power Systems



Environmental Management

- Environmental Management
- Divestment Services
- Environmental Management Systems
- CDM Co-Ordination
- Environment Permit Application



- Asbestos Management Surveys
- Demolition/Refurbishment Surveys
- Analysis of Asbestos in Soils and Bulk Samples
- Air Testing for Clearances and Reassurance
- Legionella Risk Assessment



Geotechnical Investigation & Assessment

- Contaminated Land Investigation & Assessment
- Waste Management
- Groundwater Testing
- Environmental Impact Assessment

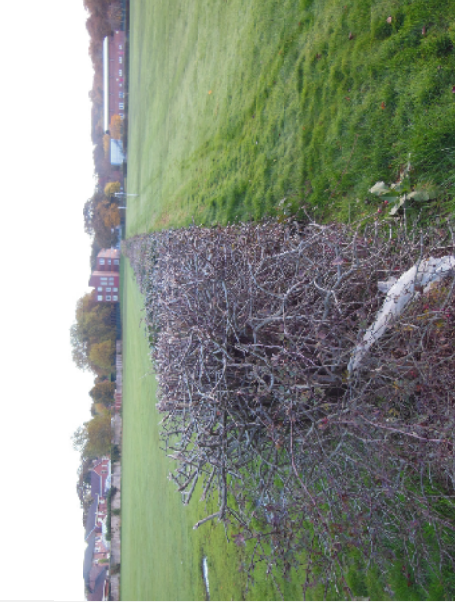





Flood Risk & Consequence Assessment

- Strategic Flood Risk Assessment (SFRA)
- EIA Technical Chapters
- Assessment of Flood Levels
- Hydrology & Hydrogeology
- Flood Defence Structures
- Drainage Systems (SUDS) Design
- Mitigation Measures
- Soakaway Tests

APPENDIX 1 TARGET NOTES

APPENDIX 1 – TARGET NOTES (TN)

TN	Feature	Photograph of feature
H1	<p>Approx. 160m long, managed, predominantly hawthorn hedgerow situated within the playing field to the west of the site. Holly (<i>Ilex aquifolium</i>), elder (<i>Sambucus nigra</i>), sycamore, hedge bindweed (<i>Calystegia sepium</i>) and bramble were also present. Field margins were non-existent with common nettle and rosebay willowherb populating small open sections.</p> <p>Potentially an important linear feature for foraging/dispersing bats.</p>	
H2	<p>Approx. 85m long hedgerow situated to the east of the playing fields. Similar in size and species composition as H1.</p> <p>Suitable for common species of foraging birds and invertebrates.</p>	
H3	<p>Approx. 160m long hedgerow situated along the south western border of the site. Similar in size and species composition as H2.</p> <p>Suitable for common species of foraging birds and invertebrates.</p>	

H4	<p>Approx. 115m situated along the south eastern border of the site. Similar in size and species composition as H2.</p> <p>Suitable for common species of foraging birds and invertebrates.</p>	
1	<p>School buildings and car parking facilities in the east of the site. Modern, flat roofed and well maintained.</p> <p>Negligible to low potential to support bat roosts.</p>	
2	<p>Thin strip of poor semi-improved grassland extending across the west of the site.</p> <p>Provides opportunities for common invertebrates and foraging birds.</p>	

APPENDIX 2 SPECIES LIST

APPENDIX 2 – SPECIES LIST

Flora

Horse-chestnut (*Aesculus hippocastanum*)
Sycamore (*Acer pseudoplatanus*)
Alder (*Alnus glutinosa*)
False oat grass (*Arrhenatherum elatius*)
Silver birch (*Betula pendula*)
Downy birch (*Betula pubescens*)
Common box (*Buxus sempervirens*)
Hedge bindweed (*Calystegia sepium*)
Common hornbeam (*Carpinus betulus*)
Creeping thistle (*Cirsium arvense*)
Spear thistle (*Cirsium vulgare*)
Common hazel (*Corylus avellana*)
Cotoneaster (*Cotoneaster* sp.)
Hawthorn (*Crataegus monogyna*)
Leyland cypress (*Cupressus x leylandii*)
Cockfoot (*Dactylis glomerata*)
Rosebay willowherb (*Epilobium angustifolium*)
Common ivy (*Hedera helix*)
Common beech (*Fagus sylvatica*)
Ash (*Fraxinus excelsior*)
Holly (*Ilex aquifolium*)
Orchard apple (*Malus domestica*)
Ribwort plantain (*Plantago lanceolata*)
London plane (*Platanus x hispanica*)
Wild cherry (*Prunus avium*)
Cherry laurel (*Prunus laurocerasus*)
Pedunculate oak (*Quercus robur*)
Creeping buttercup (*Ranunculus arvensis*)
Bramble (*Rubus fruticosus*)
Sorrel (*Rumex acetosa*)
Broad-leaved dock (*Rumex obtusifolius*)
Bay willow (*Salix pentandra*)
Elder (*Sambucus nigra*)
Common ragwort (*Senecio jacobaea*)
Prickly sow thistle (*Sonchus asper*)
Rowan (*Sorbus aucuparia*)
Dandelion (*Taraxacum officinale*)
Common lime (*Tilia x europaea*)
White clover (*Trifolium repens*)
Common nettle (*Urtica dioica*)

Fauna




Woodpigeon (*Columba palumbus*)
House sparrow (*Passer domesticus*)
Magpie (*Pica pica*)
Starling (*Sturnus vulgaris*)
Blackbird (*Turdus merula*)

APPENDIX 3 PROTECTED SPECIES LEGISLATION

APPENDIX 3 – PROTECTED SPECIES LEGISLATION

Bats

All bat species are afforded full protection under UK and European legislation, including the Wildlife and Countryside Act 1981 (as amended), the Countryside and Rights of Way Act (2000) and the Conservation (Natural habitats &c.) Regulations 2010 (as amended). Together, this legislation makes it illegal to:





-  Intentionally or deliberately take, kill or injure a bat;
-  Damage to, destruction of, and obstruction of access to, a bat roost; and,
-  Disturbance of a bat occupying a roost.

A bat roost is defined in the legislation as “*any structure or place which a bat uses for shelter or protection*”.

Breeding Birds

Under the Wildlife & Countryside Act 1981 (as amended), a wild bird is defined as any bird of a species that is resident in or is a visitor to the European Territory of any member state in a wild state. Game birds, however, are not included in this definition (except for limited parts of the Act). They are covered by the Games Acts, which fully protect them during the closed season.


All birds, their nests and eggs are protected by law and it is an offence, with certain exceptions, to;

-  Kill, injure or take any wild bird;
-  Take, damage or destroy the nest of any wild bird while it is being built or in use;
-  Take or destroy the eggs of any wild bird; and,
-  Possess or control any wild bird or egg unless obtained legally.

Birds listed under Schedule 1 of the Wildlife & Countryside Act 1981 (as amended) are afforded additional protection, which makes it an offence to disturb a bird while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

The UK's birds can be split in to three categories of conservation importance - red, amber and green.

Red list criteria:

-  Globally threatened;

- Historical population decline in UK during 1800–1995;
- Severe (at least 50%) decline in UK breeding population over last 25 years, or longer-term period (the entire period used for assessments since the first BoCC review, starting in 1969); or,
- Severe (at least 50%) contraction of UK breeding range over last 25 years, or the longer-term period.

Amber list criteria:

- Species with unfavourable conservation status in Europe (SPEC = Species of European Conservation Concern);
- Historical population decline during 1800–1995, but recovering; population size has more than doubled over last 25 years;
- Moderate (25-49%) decline in UK breeding population over last 25 years, or the longer-term period;
- Moderate (25-49%) contraction of UK breeding range over last 25 years, or the longer-term period;
- Moderate (25-49%) decline in UK non-breeding population over last 25 years, or the longer-term period;
- Rare breeder; 1–300 breeding pairs in UK;
- Rare non-breeders; less than 900 individuals;
- Localised; at least 50% of UK breeding or non-breeding population in 10 or fewer sites, but not applied to rare breeders or non-breeders; or,
- Internationally important; at least 20% of European breeding or non-breeding population in UK (NW European and East Atlantic Flyway populations used for non-breeding wildfowl and waders respectively).

Green list species occur regularly in the UK but do not qualify under any or the above criteria.

Invasive Species

A number of non-native, invasive plants are listed on Schedule 9 (part 2, section 14) of the Wildlife and Countryside Act 1981 (as amended). This legislation makes it an offence to ‘plant or otherwise cause such species to grow’ in the wild. This includes spreading of the species or transferring polluted ground material from one area to another.

Tree Preservation Orders and Conservation Areas

A Tree Preservation Order (TPO) is an order made by a Local Planning Authority (LPA) which makes it an offence to cut down, lop, top, uproot, wilfully damage or wilfully destroy a tree without first getting permission from the LPA. TPO's are usually made to protect trees which make a significant contribution to the amenity of an area. The LPA may also impose some tree protection as part of the planning process, either as a 'condition of planning' or by the placement of a TPO.

Conservation Areas are designated by the LPA in areas of special architectural or historic interest to help preserve or enhance their character or appearance. As a consequence of the Conservation Area designation, any tree over 75mm in diameter at 1.5m above ground level is given automatic protection.

No cutting, removal, wilful damage or destruction of any contributing tree is allowed without giving prior notification to the LPA (a section 211 notice). The LPA then has 6 weeks to decide whether the tree should be made the subject of a TPO. There are a few exceptions to these restrictions, and it is advisable to seek the advice of the LPA. Any person doing anything to a tree in a conservation area that would normally be prohibited by a TPO can be prosecuted, unless permission has been given by the LPA or six weeks have elapsed since notice of intention to carry out the work was submitted and there has been no reply from the LPA.

APPENDIX 4 TREE SCHEDULE

APPENDIX 4 - TREE SCHEDULE

Tree No.	Age class / Species	Height m	Crown spread (N/E/S/W) m	Crown clearance	Stem dia. mm	Condition / Comments	Remaining contribution Years	Retention category	RPA m ²
H1	Mature Hawthorn (dominant) Bramble (abundant) Holly (common) Sycamore (occasional) Ivy (occasional) Elder (rare)	1.5	1.1 wide	N/A	150	Fair - well maintained, some gaps.	40+	B2	10
H2	Mature Hawthorn (dominant) Sycamore (common) Elder (common) Bramble (common) Ivy (rare)	1.5	1.1 wide	N/A	150	Fair - well maintained, few small gaps.	40+	B2	10
G3	Semi-mature Sycamore (x4)	8	2,2,2,2	1.6-S	180	Good – small ornamental group at school entrance, cotoneaster at base.	40+	B2	15
H4	Mature Hawthorn (dominant) Sycamore (common) Bramble (occasional) Ivy (rare)	1.5	1.1 wide	N/A	150	Fair - well maintained.	40+	B2	10
G5	Mature Sycamore (x4) Common hornbeam (x1)	20	5,5,5,5	1.5	300	Good – part of extensive band. Insignificant saplings adjacent. TPO	40+	A2	41
G6	Mature to over-mature Common beech (x2) Sycamore (x1)	20	6,6,6,6	1.5	740	Good – part of extensive band. TPO	40+	A2	248
G7	Mature Common beech (x3)	20	5,5,5,5	1.5	700	Good – part of extensive band. TPO	40+	A2	222

T8	Semi-mature Sycamore	7	2,2,2,2	1.2	140	Good— part of extensive band. TPO	40+	C2	9
G9	Semi-mature to mature Sycamore (x4)	18	4,4,4,4	1.4	240	Good— part of extensive band. TPO	40+	A2	26
T10	Over-mature Common beech	20	5,4,3,5	1.2-S	740	Good— part of extensive band. TPO	40+	A2	248
G11	Mature Common beech (x2)	20	5,5,5,5	1.2-S	680	Good— part of extensive band. TPO	40+	A2	209
G12	Young to semi-mature Ash	3	1,2,1,2	N/A	75	Good— part of extensive band. TPO	40+	C2	3
G13	Over-mature Common beech (x2)	20	5,5,5,5	N/A	1000	Good— part of extensive band. TPO	40+	A2	452
G14	Mature Hawthorn (x1) Alder (x1)	16	3,3,3,3	1.5	300	Good— part of extensive band. TPO	40+	A2	41
T15	Mature Sycamore	15	3,3,3,3	1.5-E	200	Dead – Standing. Remove and replace. TPO	<10	U	N/A
G16	Semi-mature Common lime (x13)	15	3,3,3,3	N/A	200	Good - row of trees along Mather Avenue. TPO	40+	A2	18
G17	Mature Common beech (x2)	20	5,5,5,5#	1.2	740#	Good – part of extensive band. TPO	40+	A2	248
T18	Mature Bay willow	15	2,2,1,1#	1.7-E	170#	Fair – leaning to north, dense growth at base. TPO	20-40	C2	13

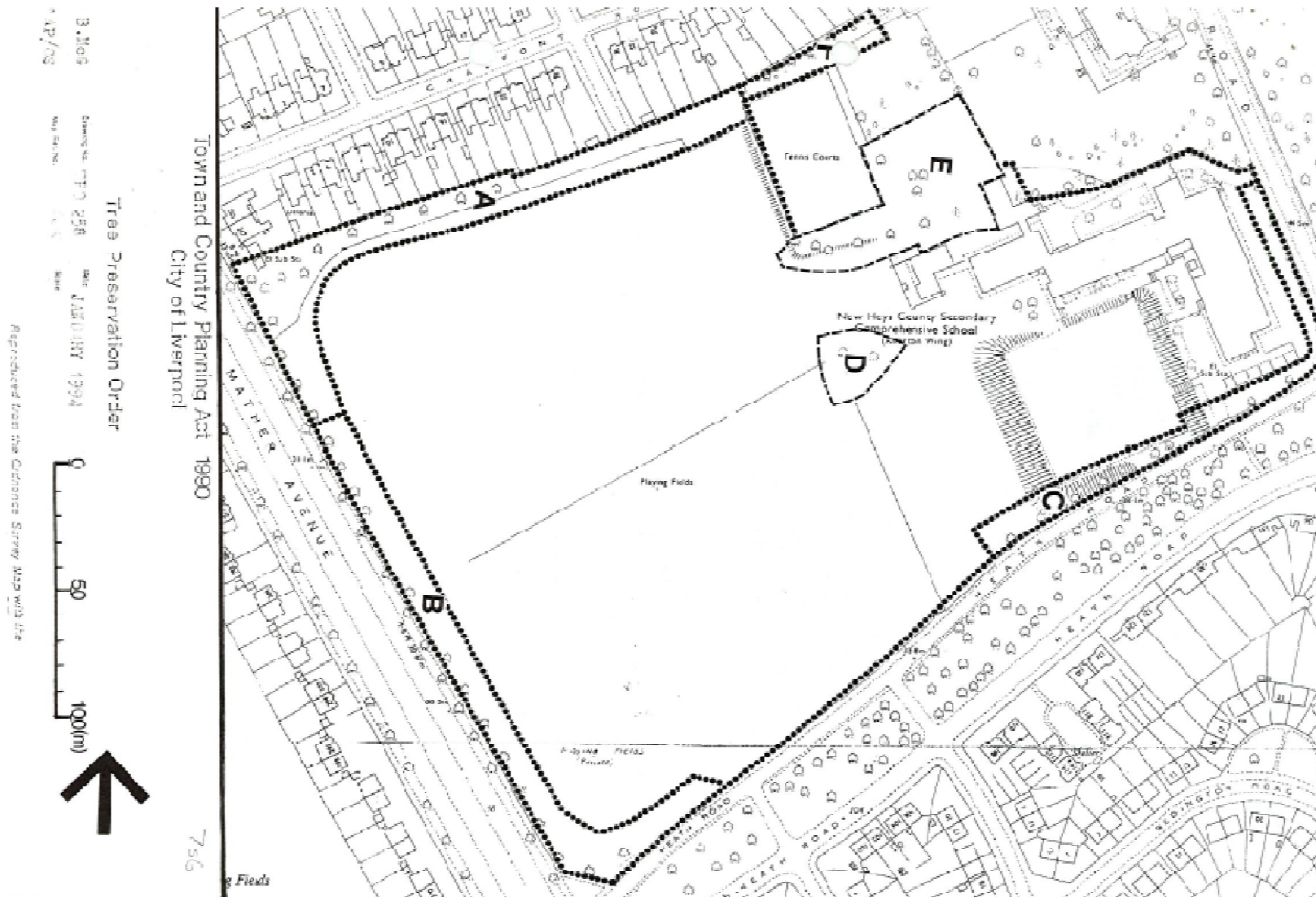
G19	Dense garden shrubs Predominantly butterfly bush, common ivy, young Leyland cypress and honeysuckle.	2	1,1,1,1	N/A	75	Good – within residential gardens. TPO	20-40	C3	13
T20	Early-mature London plane (x1)	12	5,5,5,5#	1.6	200#	Good – within residential gardens. TPO	40+	B2	18
G21	Semi-mature to Mature Common lime Silver birch	15	3,3,3,3	1.5	250#	Good – within residential gardens. TPO	40+	B2	28
G22	Early-mature London plane (x1) Douglas fir (x1)	12	3,3,3,3#	1.3	200#	Good – within residential gardens. TPO	40+	B2	18
G23	Over-mature London plane (x12)	20	6,6,6,6	2.5	800	Good – evenly spaced row. TPO	40+	A2	290
G24	Semi-mature to mature Sycamore (dominant) Common lime (rare) Common hazel (rare)	18	5,5,5,5#	N/A	200#	Fair - over-crowded, some dense ivy growth. Dense understory. Partial TPO	40+	B3	18
T25	Mature Common lime	20	5,3,4,4	2.3-W	680	Good. TPO	40+	A2	209
G26	Over-mature Common beech (x4)	20	8,8,8,8	N/A	>MAX 1250	Good – small group. TPO	40+	A2	707
G27	Young to mature Hawthorn (common) Sycamore (common) Horse chestnut (rare)	17	4,4,4,4	N/A	200#	Fair - over-crowded, some dense ivy growth. Dense understory. TPO	40+	B3	18
G28	Early-mature Leyland cypress (x6)	18	2,2,2,2	N/A	220#	Good – row on northern boundary.	40+	B2	22

G29	Young to mature Holly (dominant) Sycamore (common) Pedunculate oak (common) Hawthorn (occasional) Elder (rare)	16	5,5,5,5	N/A	340	Good - row of holly within grounds with dense growth to north.	40+	A2	52
G30	Young to mature Cherry laurel (common) Sycamore (common) Ash (occasional) Common beech (rare) Douglas fir (rare)	20	5,5,5,5	N/A	340#	Good to fair - some ivy coverage. Past management evident. Some broken/damaged limbs.	40+	B2	52
T31	Mature Rowan	12	2.5,2.5,2.5,2.5	2.2-N	300	Fair - showing signs of decline.	20+	B2	41
T32	Mature Wild cherry	6	1,2,1,6	1.6-W	650	Fair – shaded to south by buildings.	20+	B2	191
G33	Mature Cherry laurel (x3)	8	4,4,4,4	0.1	220	Fair – multi-stemmed.	40+	B2	22
T34	Mature Holly	15	2,2,2,2	0.1	200#	Good. TPO	40+	A2	18
T35	Mature Ash	20	2,3,5,5	1.6-S	320	Fair. Past management. TPO	40+	A2	46
T36	Early-mature Ash	18	5,5,5,5	2-S	240	Good. TPO	40+	A2	26
T37	Mature Ash	18	2,3,5,5	2-S	320	Fair. Multi-stemmed, past management. TPO	40+	A2	26
T38	Mature Sycamore	20	6,6,6,6	2-W	820	Good. TPO	40+	A2	304
T39	Mature Sycamore	20	5,5,5,5	2-S	680	Good. TPO	40+	A2	209
T40	Early-mature Ash	18	1,3,4,1	2.3-S	240	Good. TPO	40+	A2	26

T41	Over-mature Ash	20	6,6,6,6	3.2-S	650	Good. Past management. TPO	40+	A2	191
T42	Mature Sycamore	20	6,6,6,6	2-S	650	Good. TPO	40+	A2	191
G43	Semi-mature Downy birch (x4)	6	1.5,1.5, 1.5,1.5	1.5	80	Good – small group.	40+	B2	3
G44	Mature Wild cherry (x3)	6	6,6,6,6	1.6	500	Good – evenly spaced row.	40+	B2	113
G45	Semi-mature Wild cherry (x4)	6	1.5,1.5, 1.5,1.5	1.5	80	Good – small group.	40+	B2	3
G46	Over-mature Sycamore (x2) Common lime (x1)	18	6,6,6,6	1.6	560	Good – small group.	40+	A2	142
G47	Young Common lime (x1) Sycamore (x1) Rhododendron (x1)	2	1,1,1,1	N/A	60	Fair - shaded by buildings.	20+	C2	2
G48	Semi-mature Downy birch (x6)	6	1.5,1.5, 1.5,1.5	1.5	80	Good – small group.	40+	B2	3
G49	Early-mature Silver birch (x6)	7	2,2,2,2	1.5	130	Good – evenly spaced row.	40+	B2	8
T50	Early-mature Crab apple	6	2,2,2,2	1.1-W	130	Good.	40+	B2	8
G51	Mature to over-mature Sycamore (x5)	16	5,5,5,5	1.2	600	Good – small group.	40+	A2	163
G52	Early-mature Silver birch (x7)	8	2,2,2,2	1.5	130	Good – evenly spaced row.	40+	B2	8
G53	Semi-mature Silver birch (x3)	7	2,2,2,2	1.7	90	Good – small group.	40+	B2	4
T54	Mature Ash	10	4,5,4,4	1.7-S	310	Good. TPO	40+	A2	44
T55	Mature Horse chestnut	9	5,8,2,4	1-E	310	Good - leaning to east. TPO	40+	A2	44

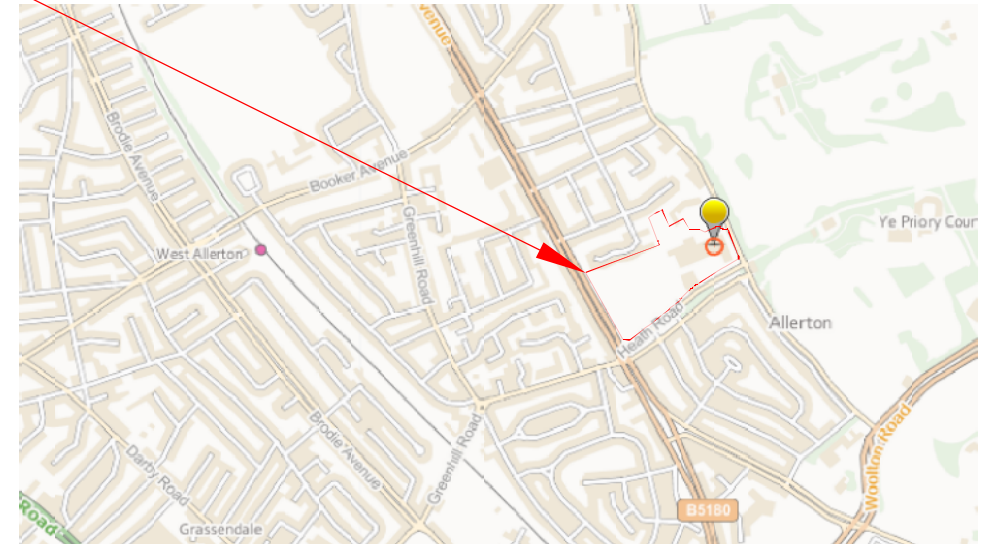
G56	Semi-mature Silver birch (x1) Common beech (x1)	7	2,2,2,2	1.5-S	100	Good – closely planted pair. TPO	40+	B2	5
H57	Mature Hawthorn (dominant) Bramble (occasional) Sycamore (occasional) Ash (occasional) Horse chestnut (rare)	1.5	1.1 wide	N/A	150	Fair - well maintained.	20-40	B2	10
G58	Semi-mature Sycamore (x4)	8	2,2,2,2	1.5	100	Good – small group. TPO	40+	C2	5
G59	Semi-mature Sycamore (x2)	8	2,2,2,2	1.3	130	Good.	40+	B2	8
T60	Early-mature Common lime	8	1,1,1,1	1.6-S	160	Poor - remove and replace. TPO	<10	U	N/A
G61	Semi-mature Common lime (x3)	8	2,2,2,2	1.3	130	Good – evenly spaced row. TPO	40+	B2	8
G62	Over-mature Ash x1 Common lime (x2) Sycamore (x1)	14	7,7,7,7	2.1	450	Good – small group. TPO	40+	A2	92

Land at New Heyes School bounded by Allerton Road, Heath Road and Mather Avenue (18) Tree Preservation Order, 1994.



DRAWINGS

Site Location



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Key



Target Note

--- Fence

--- Site Boundary

■ Broad-leaved Tree

■ Coniferous Tree

A Amenity Grassland

■ Building

■ Hardstanding

SI Poor Semi-Improved Grassland

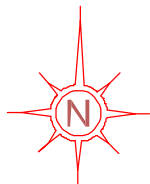
— Wall

— Poor Species Hedgerow






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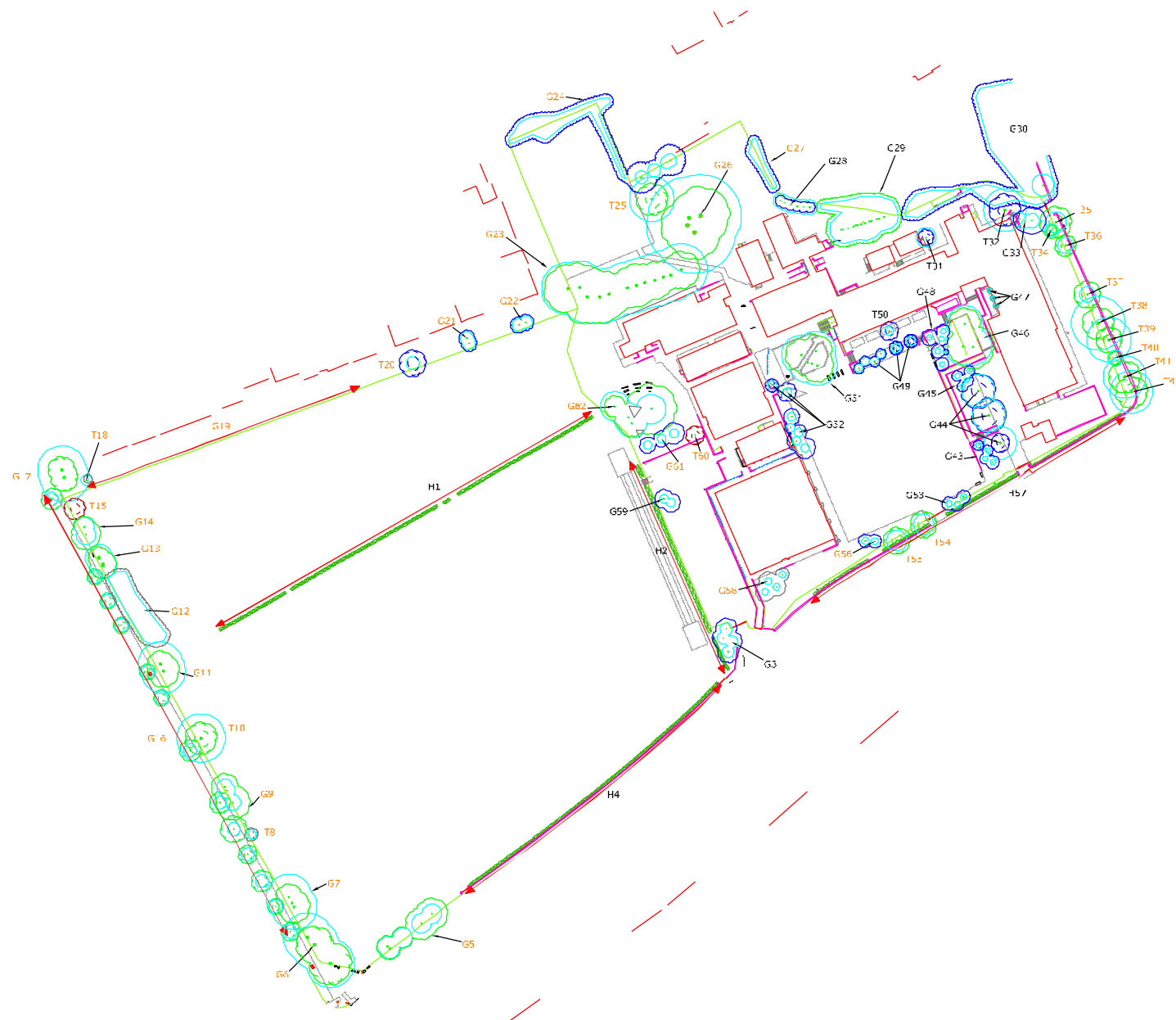


Key

- Crown Spread
- | | |
|---|---------------------------|
|  | Tree Retention Category U |
|  | Tree Retention Category A |
|  | Tree Retention Category B |
|  | Tree Retention Category C |



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Client
Redrow Homes Ltd.

04-01-17

3

60002-003
Tree Constraints
Plan