

BOTANY SURVEY REPORT

JULY 2024

Ryebank
Chorlton
Manchester
M21 9WW

U R B A N
G R E E N



QUALITY MANAGEMENT

Project No.:	UG1910				
Project:	Ryebank				
Location:	Ryebank, Chorlton, Manchester, M21 9WW				
Title:	Botany Survey Report				
Document Type:	BOT	Issue No.:	02		
Date:	17/07/2024				
Prepared By:	Barnaby Indio Gardner	Signature:		Qualifications:	Assistant Ecologist, MEnv, BSc, QCIEEM
Checked By:	Jake Healy	Signature:		Qualifications:	Ecologist, MSc, ACIEEM
Checked By:	Oliver Silver	Signature:		Qualifications:	Director of Ecology, BSc MCIEEM
Revision Status					
Rev	Date	Comment	Prepared	Checked	

NON-TECHNICAL EXECUTIVE SUMMARY

Step Places, Southway Housing Trust and Manchester Metropolitan University ('the Applicants') is proposing to develop land at Ryebank in Chorlton (hereafter referred to as 'the site'). The proposals namely include a residential development, comprising 120 residential dwellings, with associated hard and soft landscaping.

Urban Green has been appointed to complete a botany survey of the site during a period of optimal vegetative growth, following the recommendations outlined in the Preliminary Ecological Appraisal, completed in October 2023. The objectives of the assessment are to identify flora species on site and determine the presence and suitability for any 'protected and/or notable' species that may occur on site.

In summary, no species with strict legislative protection (i.e. require licencing or notification to Natural England) were found on the site, rather, only flowering plant species that require landowner permission prior to 'uprooting/damage'. For this reason, from a botanical standpoint, the works can legally proceed without delay or the need for further botanical surveys.

CONTENTS

1	Introduction	4
1.1	Background to the Scheme.....	4
1.2	Site Context.....	4
1.3	Purpose of this Report	4
2	Ecology Background	5
2.1	Preliminary Ecological Appraisal (Ascerta, 2020)	5
2.2	Preliminary Ecological Appraisal (Urban Green, 2023)	5
3	Methods	6
3.1	Desk Study	6
3.2	Field Survey.....	6
3.3	Constraints to the Survey	7
3.4	Lifespan of Report	7
3.5	Definitions.....	7
4	Results	8
4.1	Desk Study	8
4.2	Field Survey.....	8
5	Recommended Mitigation.....	11
5.1	Notable and Protected Species	11
5.2	Invasive Alien Species	12
6	Conclusion	13
7	References	14
	Figure 1 – Site Context	1
	Figure 2 – Botany Survey Map	2
	Figure 3 – Survey Photographs	3



Legend: Red Line Boundary		0.85 Kilometers		U R B A N G R E E N A: Ground Floor, The Tower, Deva City Office Park, Trinity Way, Manchester M3 7BF T: +44 (0) 161 312 3131 weareurbangreen.co.uk
Client: Step Places		Issue: 01	Figure: 01	
Project: Ryebank		Scale @ A4 1:10000		
Title: Site Context		Approved by: JH	Checked by: SP	
Drawing Ref: UG_1910_SITE_CONTEXT		Author: CL	Date: 10/07/2024	



U R B A N
G R E E N

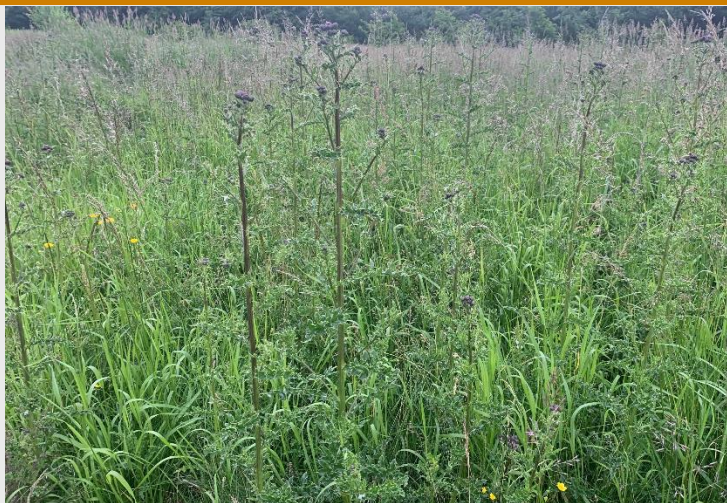
- Red Line Boundary
- Quadrats
- Invasive Species
TN1 - Three cornered garlic
TN2 - Variegated Yellow Archangel



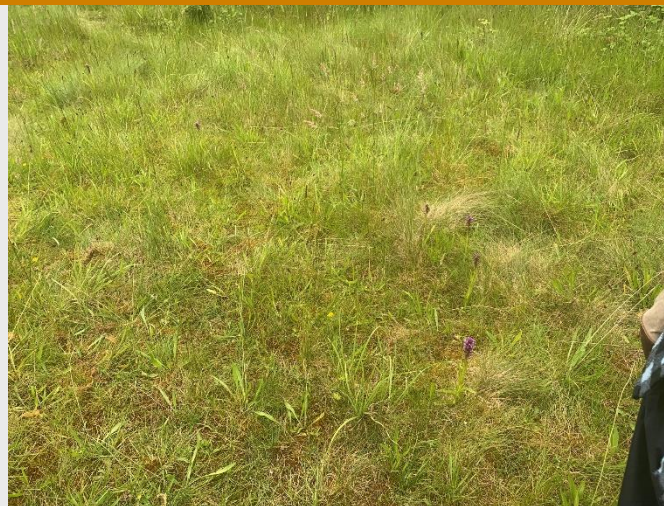
Do not scale this drawing (printed or electronic version). This drawing is copyright and is for use on this site only. This drawing should be read in conjunction with all relevant consultants drawings and specialist subcontractors / supply chain drawings and specifications. Responsibility for the reproduction of this drawing in paper form, or issued in electronic format, lies with the recipient to check that all information has been replicated in full and is correct when compared to the original paper or electronic image.

Client:	Step Places	
Project:	Ryebank Fields	
Title:	Quadrat Location	
Issue:	01	
Drawn: CL	Checked: SP	Approved: SB
Project: UG1910	Scale @ A3: 1:1250	Date: 08/01/2025
Dwg No: UG_1910_ECO_BOT_01	Revision: 01	

Figure 3. Photographs of the Site



Photograph 1: Tall sward of the northern grassland



Photograph 2: Lesser sward on the southern, wetter grassland



Photograph 3: Dense, complex ground flora on the grassland-woodland scrubby interface



Photograph 4: Typical ground flora in the western woodland



Photograph 5: Bare ground in the western woodland



Photograph 6:

1 Introduction

1.1 Background to the Scheme

- 1.1.1.1 Step Places, Southway Housing Trust and Manchester Metropolitan University ('the Applicants') is proposing to develop land at Ryebank in Chorlton (hereafter referred to as 'the site'). The proposals include the development of a residential scheme, comprising 120 residential dwellings, with associated hard and soft landscaping.
- 1.1.1.2 The PEA conducted in 2023 (Urban Green, 2023) included a walkover to identify notable and protected vascular plant species across the site. No highly protected plant species were recorded, although, given the sub-optimal survey season, it was recommended that the botany survey be repeated during the optimal survey window for flowering plant species.
- 1.1.1.3 To that end, a focused botanical survey (specifically searching for protected flowering plant species) was conducted by Urban Green on 3rd June 2024. For robustness, a second botany survey was conducted on 18th June 2024.
- 1.1.1.4 The author of this report is Barnaby Indio Gardner, MSc, Assistant Ecologist at Urban Green. Barney has experience providing ecological consultation services for an array of projects including botany specialisation, for residential, industrial, and commercial schemes.

1.2 Site Context

- 1.2.1.1 The site is located at National Grid Reference SJ 8104 9458 and comprises a total area of approximately 4.86ha (see Figure 1).
- 1.2.1.2 The site is located in an urban area of Chorlton, approximately 4km south of Manchester City Centre. Old Trafford Cricket Ground and Manchester United Football Ground are located approximately 0.8km and 1.5km north of the site, respectively. Various green spaces are adjacent to the site including Turn Moss Playing Fields, Trafford Athletic Club and Longford Park. Due to the site's location close to city centres, main roads, train lines, tram lines, urban areas and residential areas, there is a high baseline level of disturbance (namely in the form of noise and light pollution, as well as visitor pressure).

1.3 Purpose of this Report

- 1.3.1.1 This report has been produced to set out the methods, results, and conclusions of a botany survey. The purpose of the report is to identify flora species on site and determine the site's potential value for protected and/or notable flora. This will inform the need for mitigation to minimise the potential impacts on flora on site and within the local area.
- 1.3.1.2 Further information and details of UK legislation for those species which are formally protected is defined in Appendix 1, which are considered throughout the assessment.

2 Ecology Background

2.1 Preliminary Ecological Appraisal (Ascerta, 2020)

- 2.1.1.1 A PEA was produced by Ascerta in January 2020 for Manchester Metropolitan University. The field survey was carried out by Mr Neil Everett on 1st November 2019. The site was found to comprise an area of semi-improved and unmanaged improved grassland, with pockets of broadleaved woodland, scattered trees, bramble scrub, and species poor hedgerow. A small electrical substation was present to the south of the site with areas of hardstanding. While the Nico ditch (an ancient boundary or defensive ditch) runs east – west through the centre of the site.
- 2.1.1.2 The site was found to provide suitable habitat for nesting birds, badger, hedgehog, amphibians, bats, and reptiles, and various mitigation measures and further survey work was recommended.

2.2 Preliminary Ecological Appraisal (Urban Green, 2023)

- 2.2.1.1 An updated PEA was produced in October 2023 for Step Places, Southway Housing Trust and Manchester Metropolitan University by Jake Healy, Ecologist at Urban Green. The assessment included an updated UKHAB survey of the site's habitats, and their potential to support notable and protected flora and fauna species.
- 2.2.1.2 The survey found the site to comprise 'other neutral grassland', broadleaved woodland, scattered scrub, hardstanding, trees, and a ditch.
- 2.2.1.3 Further survey work for notable plants was recommended, as the survey was undertaken during a period of sub-optimal vegetative growth.

3 Methods

3.1 Desk Study

3.1.1 Online Resources and Local Records Centre

- 3.1.1.1 Online sources of information were consulted in the desk study, including DEFRA's MAGIC map website (www.magic.gov.uk), for the location of nearby statutory sites of botanical relevance, and for European Protected Species licenses of relevance granted within vicinity of the site.
- 3.1.1.2 The JNCC (<https://jncc.defra.gov.uk/>) was consulted for details of relevant Section 41 species and habitats, and the Greater Manchester Biological Records Centre (https://gmlrc.org/projects/gm_bap/) was consulted for details of locally designated plant species and habitats.

3.2 Field Survey

3.2.1 Vegetation

- 3.2.1.1 A botanical survey of the land at Ryebank was completed on 3rd June 2024 by Jake Healy, Ecologist, and Toby Mills, Assistant Ecologist at Urban Green. A second survey was completed on 18th June 2024 by Barnaby Indio Gardner, Assistant Ecologist and Sarah Child, Senior Biodiversity Net Gain Consultant of Urban Green. The weather conditions were 14 °C, intermittent clouds (3/8 oktas), with a wind speed of 1 on the Beaufort Scale.
- 3.2.1.2 The methods were based on the standard methodology as detailed by The UK Habitat Classification User Manual (Butcher et al, 2020), with a focused search for species listed under Schedule 8 or 9 of the Wildlife and Countryside Act (1981), as amended. This included a systematic random sampling methodology, using 15 1m² quadrats randomly distributed between the site's habitats (see Figure 2), and a supporting walkover survey of all accessible areas on site (dense vegetation was a limiting factor) was also conducted.
- 3.2.1.3 Species abundance is described using the DAFOR scale as shown in Table 2. Percentages are an approximate indication rather than a quantitative measure.

Table 1. Key to Species Abundance

Code	Term	Description	Indicative Percentage Ranges
D	Dominant	Covers most of the area	90% or greater
A	Abundant	Very common throughout the area.	50 – 90%
F	Frequent	Common or with many individuals.	20 – 50%
O	Occasional	Occurs in several places but not throughout. Populations are not large.	5 – 20%
R	Rare	Occurs in low numbers in relation to size of area.	Less than 5%
“L” will be used to indicate abundance in a localised area, e.g. LA = Locally abundant			

3.3 Constraints to the Survey

- 3.3.1.1 Whilst every effort has been made to provide a comprehensive description of the site, no investigation could ensure the complete characterisation and prediction of the natural environment.
- 3.3.1.2 Dense vegetation, particular dense scrub vegetation containing bramble restricted survey access. Notwithstanding this, a visual inspection was made from a safe distance. Moreover, the presence of dense vegetation typically precludes the presence of other plant species.
- 3.3.1.3 The findings of this report represent the professional opinion of qualified ecologists and do not constitute professional legal advice. The client may wish to seek professional legal interpretation of the relevant wildlife legislation cited within this document.

3.4 Lifespan of Report

- 3.4.1.1 In accordance with CIEEMs Advice Note on the Lifespan of Ecological Reports and Surveys (CIEEM, 2019), the details of this report will remain valid for a period of **18 months** from the date of the survey (i.e. until **January 2026**). After this date, this assessment should be reviewed to determine whether any updated surveys are required.

3.5 Definitions

- 3.5.1.1 For the purposes of this report, the term ‘protected and notable species’ relates to:
 - Species included on Schedule 8 of the *Wildlife and Countryside Act 1981* (as amended), excluding species that are only protected in relation to their sale (see Section 9[5] and 13[2]);
 - Invasive non-native species included on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended);
 - Species of principal importance for the conservation of/maintaining and enhancing biodiversity as required under: Section 41 of the *Natural Environment and Rural Communities Act 2006* (England).
 - Local species of importance as identified within various local biodiversity action plans.

4 Results

4.1 Desk Study

4.1.1 Site Location

- 4.1.1.1 The site is located in an urban area of Chorlton, approximately 4km south of Manchester City Centre. Old Trafford Cricket Ground and Manchester United Football Ground are located approximately 0.8km and 1.5km north of the site, respectively. Various green spaces are adjacent to the site including Turn Moss Playing Fields, Trafford Athletic Club and Longford Park. Due to the site's location close to city centres, main roads, train lines, tram lines, urban areas and residential areas, there is a high level of disturbance. Due to the site's location close to city centres, main roads, train lines, tram lines, urban areas and residential areas, there is a high baseline level of disturbance.
- 4.1.1.2 Longford Park is located immediately west of the site, covering approximately 22ha, the largest council-managed park in Trafford. This park was formally designated as a conservation area in 1996 due to its heritage landscape, buildings, features and historical connections. This park contains many habitats such as woodland, wildlife gardens and reduced mowing areas, with notable flora such as bluebells (*Hyacinthoides non-scripta*) present throughout.

4.1.2 Designated Sites

- 4.1.2.1 No sites awarded designation for the presence of notable or protected flora were located within 1km of the site. The closest relevant designated site was the Bridgewater Canal Site of Biological Importance (SBI), 930m west.
- 4.1.2.2 The site does not fall within any specific Impact Risk Zone of any Statutory Sites, based on consultation with MAGIC.

4.2 Field Survey

- 4.2.1.1 The site's habitats were species-rich, structurally diverse, and in good condition, between both the site's grassland, woodland, and bordering scrub. A total of 77 flora species were identified on the site, however, no species with protection in legislation (Schedule 8 of the Wildlife and Countryside Act 1981, as amended) were found to be present on the site.
- 4.2.1.2 Two species considered to be invasive, under the Invasive Alien Species Order 2019 – three-cornered garlic, and variegated yellow archangel - were recorded on site, however, there abundance was very low.
- 4.2.1.3 A full species list included in Appendix 2.

4.2.2 Grassland

- 4.2.2.1 The majority of the site was defined by a large parcel of 'other neutral grassland' that spanned much of the site's centre. The site is known to have been subject to heavy disturbance in the past, before effective abandonment allowed the natural succession of the site to its present state. The site's grasslands comprise predominantly generalist species, associated with disturbed land. These were dominantly grasses, such as creeping bent (*Agrostis stolonifera*), cock's foot (*Dactylis glomerata*), red fescue (*Festuca rubra*), perennial ryegrass (*Lolium perenne*), and Yorkshire fog (*Holcus lanatus*), with typical forb species comprising creeping buttercup (*Ranunculus repens*), common vetch (*Vicia sativa*), white clover (*Trifolium repens*), and common ragwort (*Jacobaea vulgaris*).
- 4.2.2.2 They are effectively unmanaged, comprising a ~1-2m tall, tussocky sward, with prominent desire lines of public use leading through and around the parcel. Scattered compact (*Juncus conglomeratus*) and soft rushes, (*Juncus effusus*) and tall forb species typically comprising creeping buttercup, common vetch (*Vicia sativa*), white clover, and ragwort (*Jacobaea vulgaris*) were frequent, as well as scattered trees such as goat willow (*Salix caprea*), sessile oak (*Quercus petraea*), beech (*Fagus sylvatica*), lime (*Tilia sp.*), sycamore (*Acer pseudoplatanus*), and hazel (*Corylus avellana*). The grassland was subject to regular anthropogenic disturbance by walkers. The borders of grassland and woodland, and the site's Nico ditch, featured dense growth of unmanaged scrub.
- 4.2.2.3 The grassland was consistent in composition, though the areas south of the Nico Ditch was observed to be slightly more waterlogged - with scattered areas of soft rush (*Juncus effusus*), compact rush, field woodrush (*Luzula campestris*), and reed canary-grass (*Phalaris arundinacea*) present. Two orchid species were present in the site's wet southwest: southern marsh-orchid (*Dactylorhiza praetermissa*), and early marsh-orchid (*Dactylorhiza incarnata*). Early marsh-orchid are a protected species, listed under Section 41 of the Natural Environments and Rural Communities Act 2006, and as a priority species in the UK Biodiversity Action Plan.

4.2.3 Scrub

- 4.2.3.1 The unmanaged interface of grasslands and bordering woodlands had been left throughout the site to develop into a scrubby ecotone. These bordering habitats were defined by ruderal, competitive species such as tall forbs, predominantly bramble (*Rubus fruticosus*) patches scattered with tall willowherb (*Epilobium sp.*) species, clustered dock (*Rumex conglomeratus*), common nettles (*Urtica dioica*), common ivy (*Hedera helix*).
- 4.2.3.2 Scattered, self-set saplings and juvenile trees were also present in scrub borders, and often hosted unique scrub assemblages beneath their canopy, such as greater abundances of ground elder (*Aegopodium podagraria*), and hedge bindweed (*Calystegia sepium*).

4.2.4 Woodland

- 4.2.4.1 The site's woodlands are historically long-standing, with minimal management. The woods were narrow, and situated between the site's main recreational area, and the neighbouring Longford Park. Accordingly, the woodlands were commonly used as a throughway and walking path, and much of the habitat's open area was heavily disturbed, bare ground. Lesser-disturbed areas of the woods still featured a multi-storey structure featuring ground flora of common ivy (*Hedera helix*) and common nettle (*Urtica dioica*), common hawthorn (*Crataegus monogyna*) scrub, sapling and shrubbery, and mature trees. Tree composition typically included pedunculate oak (*Quercus robur*), hybrid black poplar (*Populus nigra*), white poplar (*Populus alba*), hornbeam (*Carpinus betulus*), white willow (*Salix alba*), and sycamore (*Acer pseudoplatanus*). The invasive species, three-cornered garlic (*Allium triquetrum*), and variegated yellow archangel (*Lamium galeobdolon* 'Variegatum') were found in small abundance within lesser-disturbed corners.
- 4.2.4.2 The site's 'Aspen Grove' is a notably unique feature of the site, a copse of self-set, rhizomatous aspen (*Populus tremula*) clones along the northern boundary. A review of historic satellite imagery highlights the unfettered spread of the grove since ~2000. The grove's heavily shaded interior predominantly comprised scrub species and sapling growth, with a lack of developed ground flora community.

4.2.5 Summary

- 4.2.5.1 Collectively, the site's plant assemblages were defined by unmanaged, disturbed habitats, and accordingly featured a diversity of commonly occurring species. A lack of management has allowed natural successional processes to define a structurally complex habitat. One protected species was identified on the site: early marsh-orchid, protected under Section 41 of the Natural Environment and Rural Communities Act 2006. The species was found alongside southern marsh-orchid, in small numbers in the site's wet southwest grassland.
- 4.2.5.2 Two invasive, non-native wild plant species were found on the site.

5 Recommended Mitigation

5.1 Notable and Protected Species

- 5.1.1.1 No species protected under Schedule 8 of the Wildlife and Countryside Act 1981, nor locally designated in the Greater Manchester Biodiversity Action Plan, were identified on the site.
- 5.1.1.2 One species protected under Section 41 of the Natural Environment and Rural Communities Act 2006 was identified on the site: early marsh-orchid. The species was found alongside southern marsh-orchid, in small numbers in the site's wet southwest grassland.
- 5.1.1.3 Wood avens and enchanter's nightshade, found within the site's western woodland, are often considered indicator species of ancient woodland (FSC, 2016). However, this categorisation speaks to the general good condition of the habitat at large, rather than to the need for mitigation for the species themselves. Furthermore, the woodland parcel is proposed to be retained in the latest landscaping plans for the site, at the time of writing.
- 5.1.1.4 The protection of wild plants listed under Section 41 of the Natural Environment and Rural Communities Act 2006 in England and Wales is as follows:
 - 5.1.1.5 Without prejudice to section 40(1), the Secretary of State must—
 - 5.1.1.6 (a) take such steps as appear to the Secretary of State to be reasonably practicable to further the conservation of the living organisms and types of habitats included in any list published under this section, or
 - 5.1.1.7 (b) promote the taking by others of such steps
- 5.1.1.8 The legal protection of early marsh-orchid under this legislation pertains then only to the Secretary of State and other bodies of public office.
- 5.1.1.9 The Greater Manchester County Council – the relevant devolved body of public office – does not include the early marsh-orchid on its local species action plans. The presence of the orchid then **should not** be considered a legal constraint to the proposed private development, especially so when considered the minimal extent of the plant on the site.
- 5.1.1.10 The ECoW should, however, take steps wherever possible to avoid and mitigate the uprooting of early marsh-orchid during the development.
- 5.1.1.11 Under the Wildlife and Countryside Act 1981, as amended, the protection of wild plants in England and Wales is as follows:
 - 5.1.1.12 Subject to the provisions of this Part, if any person—
 - 5.1.1.13 (a) intentionally picks, uproots or destroys any wild plant included in Schedule 8; or
 - 5.1.1.14 (b) not being an authorised person, intentionally uproots any wild plant not included in that Schedule, he shall be guilty of an offence.
- 5.1.1.15 Neither of the aforementioned orchid species recorded on site (marsh orchid or southern marsh orchid) are listed on Schedule 8 of the Act. For that reason, these plant species are only protected from unauthorised uprooting of these species. Given the proposed SI works have the potential to uproot these species by means of hand-dug trial pits, permission from the landowner is required. To that end, permission has been granted by the landowner in the form of a letter 'Urban Green – Manchester Met – Letter of Consent – Ryebank.pdf'.
- 5.1.1.16 No further botanical surveys are required for the development to progress. Notwithstanding this, precautionary measures will be followed as per the Precautionary Method of Works (Urban Green, 2024) document, produced for the development. A summary of these is provided below.

5.1.2 Precautionary Method of Works

- 5.1.2.1 A toolbox talk will be delivered by the ECoW to all site operatives prior to works commencing & repeated as often as necessary. This will include an overview of the protection afforded to wild plants under the Wildlife and Countryside Act 1981, as amended.
- 5.1.2.2 As a precaution, the ECoW will check the proposed SI locations, immediately prior to works commencing, for Schedule 8 plant species such as English bluebell (*Hyacinthoides non-scripta*). There are two main scenarios that follow:
- 5.1.2.3 If Schedule 8 plants are absent, the proposed SI works can commence; even if this results in the uprooting or damage to flowering plant species.
- 5.1.2.4 In the unlikely event of a Schedule 8 plants species being recorded on site, the ECoW will establish a suitable 'no works buffer zone' around these stands to avoid an impact. Under this scenario, the works would not recommence within these buffer zones until such time as the proper permission and/or licencing has been obtained.

5.2 Invasive Alien Species

- 5.2.1.1 Non-native invasive flora species were identified during the survey: three corned garlic and variegated yellow archangel, which are both listed on Schedule 9 of the Wildlife and Countryside Act 1981 and the Invasive Alien Species Order 2019 as invasive non-native species.
- 5.2.1.2 As such, it is recommended, prior to the development, that an invasive species specialist should be contracted to map the extent of invasive species present within the site and produce a detailed management plan for the removal and eradication of such species onsite

6 Conclusion

6.1.1.1 The report has met the objectives of the report, by demonstrating the following:

- A total of 77 plant species identified on site between other neutral grassland, broadleaved woodland, and bramble scrub.
- One species listed under Section 41 of the Natural Environment and Rural Communities Act 2006 was found on site: early marsh-orchid.
- No Schedule 8 species (as listed on Wildlife and Countryside Act 1981, as amended) were recorded on site.
- Two species listed on Schedule 9 of the Wildlife and Countryside Act 1981, and the Invasive Alien Species Order 2019 were identified on the site: three-cornered garlic and variegated yellow archangel.
- Mitigation recommendations include the implementation of a Precautionary Method of Works to be considered, and to contract an invasive species specialist.
- No further botanical surveys or licenses are required for the works to lawfully proceed.

7 References

- Ascerta (2020). Preliminary Ecological Appraisal. Ryebank Fields. P.1254.19.
- Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J (2020) The UK Habitat Classification User Manual Version 1.1 at <http://www.ukhab.org/>
- CIEEM (2019). Advice Note on the Lifespan of Ecological Reports and Surveys. CIEEM.
- Field Studies Council (FSC) (2016). Ancient woodland indicators guide. ISBN 9781908819277.
- Google Earth (2002). Historical aerial imagery of the site. Last checked 01/12/2023.
- IEA (1995). Guidelines for Baseline Ecological Assessment. E & F Spon.
- Urban Green (2023a). Arboriculture Impact Assessment of Ryebank. Reference: UG_1910_ARB_AIA_01_Rev_00.
- Urban Green (2023b) Preliminary Ecological Appraisal of Ryebank. Reference: UG_1910_ECO_PEA_01.
- Urban Green (2024) Precautionary Method of Works for Ryebank. Reference: UG_1910_PMoW_01.

Appendix 1 – Relevant Legislation

Under the Wildlife and Countryside Act 1981, as amended, the protection of wild plants in England and Wales is as follows:

Subject to the provisions of this Part, if any person—

- (a) intentionally picks, uproots or destroys any wild plant included in Schedule 8; or
- (b) not being an authorised person, intentionally uproots any wild plant not included in that Schedule, he shall be guilty of an offence. In addition, under this legislation there are offences relating to sale, possession and control of wild animals listed in Schedule 5.

Legislation relating to invasive plant species

Several non-native invasive plant species such as Himalayan balsam (*Impatiens glandulifera*), giant hogweed (*Heracleum mantegazzianum*), Japanese rose (*Rosa rugosa*), variegated yellow archangel, rhododendron (*Rhododendron ponticum*) and Japanese knotweed (*Reynoutria japonica*) are listed under the Invasive Alien Species Order 2019, which makes it an offence to ‘...plant or otherwise cause the species to grow in the wild’. This includes spreading or transferring contaminated soil from one area to another.

Estate Managers and landowners have a duty to pro-actively treat knotweed outbreaks. Under the Natural Environment and Rural Communities Act 2006 (NERC), subsection 14ZA (1), makes it is an offence to sell, offer or expose for sale, or to have in one’s possession or transport for the purpose of sale, any Schedule 9 animal or plant or anything from which such an animal or plant can be propagated, including rhizomes of Japanese knotweed. Under subsection 14ZA (2) it is also an offence to publish or cause to be published any advertisement for the purchase or sale of these animals and plants.

The Environmental Protection Act 1990 (EPA 1990) contains a number of legal provisions concerning controlled waste. Any Japanese knotweed contaminated soil or plant material that is intended for discard is likely to be classified as controlled waste.

The Environmental Protection (Duty of Care) regulations 1991 also imposes a ‘duty of care’ on persons concerned with controlled waste, which includes any materials incorporating Japanese knotweed including soil, grass cuttings, general wastes and ash arising from the burning of knotweed. The duty applies to any person, who produces, imports, carries, keeps, treats or disposes of controlled waste. Failure to appropriately dispose of any material containing Japanese knotweed may lead to prosecution under Section 33 and 34 of the EPA 1990 and Section 14 (2) of the Wildlife & Countryside Act 1981 (as amended).

Waste leaving the site must be handled responsibly and in accordance with the law at all stages between its production and final recovery or disposal. Waste must be transferred to an authorised person, who is either a registered waste carrier or exempted from registration by the Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations 1991.

Appendix 2 – Species List

Common Name	Latin Name	Grassland	Woodland	Scrub	Protected?	Invasive?
Annual Meadowgrass	<i>Poa annua</i>	X			No	No
Apple	<i>Malus domestica</i>	X			No	No
Ash	<i>Fraxinus excelsior</i>		X	X	No	No
Aspen	<i>Populus tremula</i>		X		No	No
Beech	<i>Fagus sylvatica</i>		X		No	No
Black Poplar (Hybrid)	<i>Populus nigra</i>		X		No	No
Bramble	<i>Rubus fruticosus</i>		X	X	No	No
Brome	<i>Bromus</i>	X			No	No
Cherry	<i>Prunus</i>	X		X	No	No
Cherry Laurel	<i>Prunus laurocerasus</i>		X	X	No	No
Cleavers	<i>Galium aparine</i>		X	X	No	No
Cock's Foot	<i>Dactylis glomerata</i>	X			No	No
Common Bent	<i>Agrostis capillaris</i>	X			No	No
Common Ivy	<i>Hedera helix</i>		X		No	No
Common Nettle	<i>Urtica dioica</i>		X	X	No	No
Common Vetch	<i>Vicia sativa</i>	X			No	No
Compact Rush	<i>Juncus conglomeratus</i>	X			No	No
Cow Parsley	<i>Anthriscus sylvestris</i>	X		X	No	No
Creeping Bent	<i>Agrostis stolonifera</i>	X			No	No
Creeping Buttercup	<i>Ranunculus repens</i>	X			No	No
Creeping Soft-grass	<i>Holcus mollis</i>	X			No	No
Creeping Thistle	<i>Cirsium arvense</i>	X		X	No	No
Crested Dog's Tail	<i>Cynosurus cristatus</i>	X			No	No
Cut-leaved Crane's Bill	<i>Geranium dissectum</i>	X			No	No
Dandelion	<i>Taraxacum officinale</i>	X			No	No
Dogwood	<i>Cornus</i>			X	No	No
Early Marsh Orchid	<i>Dactylorhiza incarnata</i>	X			NERC S41	No
Elder	<i>Sambucus nigra</i>		X	X	No	No
Enchanter's Nightshade	<i>Circaea lutetiana</i>		X		No	No
False Oat-grass	<i>Arrhenatherum elatius</i>	X			No	No
Field Woodrush	<i>Luzula campestris</i>	X			No	No
Goat Willow	<i>Salix caprea</i>	X			No	No
Greater Plantain	<i>Plantago major</i>	X		X	No	No
Greater Willowherb	<i>Epilobium hirsutum</i>	X			No	No

Common Name	Latin Name	Grassland	Woodland	Scrub	Protected?	Invasive?
Ground Elder	<i>Aegopodium podagraria</i>			X	No	No
Hairy Sedge	<i>Carex hirta</i>	X			No	No
Hawthorn	<i>Crataegus monogyna</i>		X	X	No	No
Hazel	<i>Corylus avellana</i>		X		No	No
Hedge Bindweed	<i>Calystegia sepium</i>			X	No	No
Herb Robert	<i>Geranium robertianum</i>	X		X	No	No
Hogweed	<i>Heracleum sphondylium</i>			X	No	No
Holly	<i>Ilex aquifolium</i>		X	X	No	No
Hornbeam	<i>Carpinus betulus</i>		X		No	No
Italian Ryegrass	<i>Lolium multiflorum</i>	X			No	No
Lawson Cypress	<i>Chamaecyparis lawsoniana</i>		X		No	No
Lime	<i>Tilia</i>		X		No	No
London Plane	<i>Platanus × acerifolia</i>		X		No	No
Meadow Buttercup	<i>Ranunculus acris</i>	X			No	No
Meadow Foxtail	<i>Alopecurus pratensis</i>	X			No	No
Meadow Vetchling	<i>Lathyrus pratensis</i>	X			No	No
Norway Maple	<i>Acer platanoides</i>		X		No	No
Pedunculate Oak	<i>Quercus robur</i>		X		No	No
Perennial Ryegrass	<i>Lolium perenne</i>	X			No	No
Pineapple Chickweed	<i>Cerastium fontanum</i>	X			No	No
Poplar Sp.	<i>Populus</i>		X		No	No
Ragwort	<i>Senecio jacobaea</i>	X		X	No	No
Red Fescue	<i>Festuca rubra</i>	X			No	No
Reed Canary-grass	<i>Phalaris arundinacea</i>	X			No	No
Ribwort Plantain	<i>Plantago lanceolata</i>	X		X	No	No
Sessile Oak	<i>Quercus petraea</i>	X	X		No	No
Silver Birch	<i>Betula pendula</i>		X		No	No
Sorrel	<i>Rumex acetosa</i>	X			No	No
Southern Marsh Orchid	<i>Dactylorhiza praetermissa</i>	X			No	No
St John's Wort	<i>Hypericum</i>			X	No	No
Sycamore	<i>Acer pseudoplatanus</i>		X		No	No
Three-cornered Garlic	<i>Allium triquetrum</i>		X		No	Yes
Timothy	<i>Phleum pratense</i>	X			No	No

Common Name	Latin Name	Grassland	Woodland	Scrub	Protected?	Invasive?
Variegated Yellow Archangel	<i>Lamium galeobdolon</i> subsp. <i>argentatum</i>		X		No	Yes
White Clover	<i>Trifolium repens</i>	X			No	No
White Poplar	<i>Populus alba</i>		X		No	No
White Willow	<i>Salix alba</i>		X		No	No
Willowherb Sp.	<i>Epilobium</i>	X		X	No	No
Wood Avens	<i>Geum urbanum</i>		X		No	No
Wych Elm	<i>Ulmus glabra</i>		X		No	No
Yorkshire Fog	<i>Holcus lanatus</i>	X			No	No