

**LAND AT ROYAL BRITISH LEGION, LLAY,
WREXHAM**

BIOSECURITY RISK ASSESSMENT

JUNE 2021

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Revised	-

CONTENTS

	<u>Page No.</u>
1.0 INTRODUCTION	1.
2.0 SITE SURVEY & INVASIVE SPECIES ON SITE	2.
3.0 METHOD STATEMENT FOR INVASIVE SPECIES REMOVAL & RISK ASSESSMENT	3.
4.0 IDENTIFICATION & COURSE OF ACTION SHOULD INNS BE FOUND	6.
5.0 CONCLUSION	9.

Appendix A: Extended Phase 1 Habitat Map & Key

1.0 INTRODUCTION

- 1.1 Cheshire Ecological Services (CES), the consultancy division of Cheshire Wildlife Trust, was commissioned to undertake a Biosecurity Risk Assessment of a site at Royal British Legion, Llay, Wrexham, in connection with proposed development of the site.
- 1.2 An extended Phase 1 Habitats survey was conducted on 11th February 2021, as part of the Preliminary Ecological Appraisal (PEA) for the site. Variegated yellow archangel (*Lamium galeobdolon subsp. Argentatum*) was identified on site within a hedgerow on the site boundary. No other invasive species were identified during the survey.
- 1.3 The application for the proposed development is required to be supported by a Biosecurity Risk Assessment. The Biosecurity Risk Assessment covers appropriate measures for any invasive non-native species (INNS) currently identified to be present on site, measures should any further INNS be identified on site during construction to prevent their spread, and also provides preventative measures to reduce the risk of INNS, pests and infectious diseases being introduced to the site during the construction phase of the proposed development.
- 1.4 The implementation of good biosecurity measures is essential as INNS, pests and infectious diseases can be spread/be introduced via vectors such as footwear, building equipment, machinery and vehicles.
- 1.5 Watkin Jones PLC will be responsible for ensuring that all site contractors are issued with a copy of the Biosecurity Risk Assessment and that the measures outlined within this report are successfully implemented.

2.0 SITE SURVEY & INVASIVE SPECIES ON SITE

- 2.1 An extended phase 1 habitats survey was undertaken of the site on the 11th February 2021, as part of the PEA for the site (see CES report - CES_052_RoyalBL_PEA_Apr21_KM). The survey was conducted by Kyle Mellish ACIEEM, who is experienced in both Phase 1 habitat survey methodology and in the identification of invasive species.
- 2.2 All areas of the site were subject to a thorough walkover. Variegated yellow archangel was identified on site within hedgerow H4, denoted by TN4 within the appended Phase 1 Habitat Map & Key (refer to Appendix A and see Plate 1 below). Variegated yellow archangel is listed under Schedule 9 of the Wildlife & Countryside Act in England and Wales, and it is therefore an offence to plant or cause this species to grow in the wild. Variegated yellow archangel is evergreen or semi-evergreen in habit, and therefore can be readily identified in February. No further individuals of variegated yellow archangel were found within other habitats on site and its spread is therefore currently limited to hedgerow H4. No further invasive species were identified on site or within adjacent habitats during the survey.



Plate 1: Variegated yellow archangel with hedgerow H4 on site (TN4).

- 2.3 Though not all invasive species can be identified in February, common invasive species such as Japanese knotweed, Himalayan Balsam and Giant Hogweed typically leave conspicuous old stems throughout the winter, and in the case of Himalayan balsam areas of conspicuously bare ground. As such it is considered likely that no further invasive species are present on site.

3.0 METHOD STATEMENT FOR INVASIVE SPECIES REMOVAL & RISK ASSESSMENT

Method Statement for Invasive Species Removal

- 3.1 As the section of hedgerow H4 that contains the variegated yellow archangel is due to be cleared, without prior removal/treatment of the plant an offence is likely to be committed under the wildlife and countryside act.
- 3.2 It will be therefore be necessary to remove/treat the variegated yellow archangel prior to the commencement of works on site.
- 3.3 Method statement items for the removal of variegated yellow archangel on site as follows:
- Prior to any works on site, the area is to be cordoned off with security fencing/barrier tape to discourage entry into the area which may cause further spread.
 - A qualified invasive species control specialist should be instructed to treat the yellow archangel. The specialist should supply their own method statement for the removal of the invasive species, based on this method statement. The method statement should also be available to the local planning authority or Natural Resources Wales upon request.
 - Given its location within the hedgerow, mechanical removal of the archangel is likely to be difficult, as large roots are likely to be encountered making removal of all plant and root fragments problematic. It is therefore recommended that the area be treated with herbicide to kill the plants and their rhizomes, to be carried out by the qualified invasive species specialist.
 - After the area has been fully treated, the area should be left for a period of time to ensure all stolons are dead. The specialist should return to the site to confirm that the treatment has been successful, and the remains of the plant then removed by excavators (where possible within the vicinity of roots). Excavators are to be disinfected following the works, and the removed vegetation and earth to be removed from site through appropriate controlled waste channels. Following the above, works can then proceed to remove the hedgerow (assuming planning permission is granted).
 - All construction personnel should be aware of the identification features of variegated yellow archangel and other common invasive species, as presented later within this document within Table 2.

Risk Assessment

- 3.4 Given the method outlined above, the variegated yellow archangel currently on site would be removed and not allowed to spread beyond the site. The risk remains that variegated yellow archangel or other INNS species may enter or become established on site during the construction process. As such, Table 1 below identifies potential vectors by which further INNS may enter the site and control measures to minimise the risk of spread of INNS via these vectors.

Table 1: Risk Assessment of possible INNS vectors and associated control measures

Possible Vector	Risk	Likelihood	Control Measures to be Implemented	Likelihood Following Implementation of Control Measures
Construction Machinery	Importation of INNS to the site on plant, machinery or tools	Medium	Avoid frequent movement of plant, machinery and tools between sites. Plant, machinery and tools to be either pressure-washed or disinfected prior to leaving previous sites (i.e. before coming on site). Should plant, machinery or tools come onto site in a dirty condition, they should be cleaned/disinfected – with wastewater not allowed to spread across the site.	Low
Access to site by construction personnel	Importation of INNS, pests and infectious diseases onto site.	Medium	Designated areas for parking of vehicles on compacted hardstanding or similar impermeable materials. Footwear and vehicles to be kept in clean condition, and pressure washed/cleaned if not, with wastewater not allowed to spread across the site. Site personnel to not attend site if feeling unwell. Site personnel to be made aware of the symptoms of tick bites and lyme disease.	Low
Construction Materials	Importation of INNS through construction materials, particularly through topsoil or aggregates.	Medium	Maximise of on-site soils to minimise importation of topsoil. Any topsoil or aggregates to come from reputable sources known to be free of INNS. Any topsoil or aggregates containing suspect materials to be quarantined until further investigated by	Low

			an ecologist or invasive species specialist.	
Ornamental planting and planting of trees	Importation of INNS onto site within planting materials. Importation of vigorous non-natives onto site. Spread of disease into the wider landscape.	Medium	Ornamental planting should not include any INNS, and should be from a reputable source free of INNS. Vigorous non-native plants that can spread into the wider landscape should be avoided – such as cotoneasters and snowberry. Plants to have been grown in the UK at reputable UK nurseries. Native species planting is to be encouraged, where possible, both within landscaping and homeowner gardens.	Low
Site maintenance	Pests such as rats within piled materials or rubbish and increased difficulty of spotting INNS.	Medium	Site to be maintained in a good state, with minimal piling of materials and waste to be stored appropriately and removed via proper channels.	Low
Establishment by Natural Means	Invasive species may already be present within the seedbank or introduced by wild animals / seeding.	Low	Site to be monitored continuously for INNS, with species to be treated/removed by an experienced specialist if found.	Low

4.0 IDENTIFICATION & COURSE OF ACTION SHOULD INNS BE FOUND

- 4.1 In order for site contractors to identify common invasive species, identification features of variegated yellow archangel and three of the other most common invasive species in the UK are provided in Table 2 within this section; including photographs and features of these plants to assist in identification. It is worth noting however that while these comprise three of the most common invasive species in the UK, many more are prevalent within the country. No part of suspected invasives should be touched during identification – as several can spread from tiny fragments and others can cause severe allergic reactions or skin conditions.
- 4.2 Should invasive species be found or suspected to be found on site, an appropriately experienced ecologist or invasive species specialist should be contacted to confirm identification. The area should be fenced/taped off in the meantime to prevent ingress in the area
- 4.3 If identification is confirmed, an experienced invasive species management company should be contacted to produce a method statement for its treatment/removal from the site, in line with good practice guidance. All invasive species plant materials (as listed under Schedule 9 of the Wildlife and Countryside Act, 1981) are to be treated as controlled waste, and disposed of through appropriate channels only.

Table 2: Common Invasive Species and Identification Features

Common Name / Scientific Name	Legal Status	Implications in Respect of Proposed Development	Identification Features
Variegated yellow archangel <i>Lamium galeobdolon</i> subsp. <i>argenteum</i>	Listed under Schedule 9 of the WCA, 1981 (as amended) and Controlled Waste under Part II of the Environmental Protection Act 1990	It is an offence to plant or cause this plant to spread in the wild.	 Small spreading shade-loving perennial that spreads by rooting stolons (also sets seed but rarely viable in UK), - small stolon fragments can form new colonies. Oval-shaped toothed leaves superficially resembling nettles, with silver-grey (sometimes additionally with black) markings on the leaves. The flowers are yellow,

			bourne in whorls around the stem and the stem itself is square.
Japanese Knotweed <i>Reynoutria japonica</i>	Listed under Schedule 9 of the WCA, 1981 (as amended), and Controlled Waste under Part II of the Environmental Protection Act 1990	It is an offence to plant or cause this plant to spread in the wild.	 Tall erect plant that can grow over 2m tall, with green to red stems with purple specks reminiscent of bamboo and large lush green shovel shaped leaves. Can spread from as little as 0.6g of vegetative material. Flowers are cream, held in erect spikes (racemes).
Himalayan Balsam <i>Impatiens glandulifera</i>	Listed under Schedule 9 of the WCA, 1981 (as amended) and Controlled Waste under Part II of the Environmental Protection Act 1990	It is an offence to plant or cause this plant to spread in the wild.	 Up to 2m tall, with long serrated leaves and green to red stems. The white to pink flowers have a strong sickly-sweet smell, and the green fruit capsules explode when ripe.
Giant Hogweed <i>Heracleum mantegazzianum</i>	Listed under Schedule 9 of the WCA, 1981 (as amended) and Controlled Waste under Part II of the Environmental Protection Act 1990	It is an offence to plant or cause this plant to spread in the wild.	 Very tall umbellifer (white flowers held in heads reminiscent of umbrella) up to 5m tall, with huge (up to 3m long) 3 lobed heavily

			divided leaves. The stem is green with stiff white hairs and purple blotches, particularly toward the base. The sap of giant hogweed can cause serious burns through phytophotodermatitis.
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5.0 CONCLUSION

- 5.1 The successful implementation of the control measures detailed within this document will ensure that the proposed development minimises the risk of spread of invasive species and sets out a clear course of action should they be suspected to be found on site.
- 5.2 If INNS are discovered on site, they should be treated/removed according to current legislation by appropriately experienced and qualified invasive species specialists; all invasive species are controlled waste products.
- 5.3 It is important that continual monitoring is carried out to identify any species that establish within the development site. Identification features and photos of common invasive species are provided within this document, and further information and online learning modules are available to familiarise site works with frequently encountered invasives species via the GB non-native species secretariat (<http://www.nonnativespecies.org/elearning/>).

Appendix A: Extended Phase 1 Habitat Survey Map & Key



Legend - Indicative

- Site Boundary
- Amenity Grassland
- Hedgerows- Species-poor
- Temporary_Buildings
- Trees - Individuals
- Trees - Group

Target Notes

- TN1 - Cherry Tree with Low Bat Potential
- TN2 - Silver Birch with Low Bat Potential
- TN3 - Temporary Buildings with Possible Bat Potential
- TN4 - Variegated Yellow Archangel

Project:	Land at Royal British Legion, Ulay, Wrexham
Map:	Extended Phase 1 Map
CES Ref:	CES/052/04-2021/KM
Scale:	Not to scale / indicative
Date	April 2021

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