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# Invasive Species Management Plan

PRESENTED TO

**Former Ford Site**

**Proposed Large-Scale Residential Development, Centre Park  
Road, Ballintemple, Cork**

DATE

November 2024

Environmental Consultancy Services

## DOCUMENT CONTROL SHEET

<b>Client</b>	Marina Quarter Ltd
<b>Project Title</b>	Proposed Large-Scale Residential Development at the Former Ford Distribution Site fronting on to Centre Park Road, Ballintemple, Cork
<b>Document Title</b>	Invasive Species Management Plan

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## 1. INTRODUCTION

### 1.1 Background

Enviroguide Consulting was commissioned by Marina Quarter Ltd. to prepare an Invasive Alien Species Management Plan in relation to a Proposed Development at the Former Ford Distribution Site, fronting onto Centre Park Road, Ballintemple, Cork, hereafter referred to as 'Proposed Development' or 'Site' when referring to the site area of the Proposed Development.

### 1.2 Quality Assurance and Competence

Enviroguide Consulting is a multi-disciplinary consultancy specialising in the areas of the Environment, Waste Management and Planning. All of our consultants carry scientific or engineering qualifications and have a wealth of experience working within the Environmental Consultancy sectors, having undergone extensive training and continued professional development.

Enviroguide Consulting as a company remains fully briefed in European and Irish environmental policy and legislation. Enviroguide staff members are highly qualified in their field. Professional memberships include the Chartered Institution of Wastes Management (CIWM), the Irish Environmental Law Association and Chartered Institute of Ecology and Environmental Management (CIEEM).

All surveying and reporting have been carried out by qualified and experienced ecologists. Enviroguide ecologist, TR compiled this report.

TR holds a B.Sc. in Environmental and Natural Resource Management (Hons.) and a Post-Graduate Diploma in Environmental Management with GIS. TR is an experienced Ecologist who has specialised in ornithology and terrestrial mammals with over 8 years' experience in ecological consultancy along with a lifetime of personal interest and experience in wildlife management. TR has extensive experience in ecological surveying, desktop research, preparing AA Screening Reports (AA), Ecological Impact Assessment Reports (EclAs), Bird Activity Reports and detailed Species-Specific Mapping. His ability to deal with and understand a range of species, survey methods and habitats is excellent, having an in-depth knowledge and understanding of EU and Irish legislation.

### 1.3 Relevant Legislation

The control of invasive species in Ireland falls under the Wildlife (Amendment) Act, 2000, where it is stated that:

*“(7) Any person who—*

*(a) turns loose, wilfully allows or causes to escape any species of wild animal or the spawn of such wild animal or wild bird or the eggs of such wild bird,*

*(b) transfers any species of wild animal or the spawn of such wild animal or wild bird or the eggs of such wild bird from any place in the State to any other place in the State for the purpose of establishing it in a wild state in such other place,*

*(c) plants or otherwise causes to grow in a wild state in any place in the State any species of flora, or the flowers, roots, seeds or spores of flora, otherwise than under and in accordance with a licence granted in that behalf by the Minister shall be guilty of an offence.*

*(8) For the purposes of subsection (7), any reference to wild animals, wild birds, plants, flowers, roots, seeds or spores refers only to exotic species thereof.”*

Certain plant species and their hybrids are listed as IAS in Part 1 of the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations 2011 (SI 477 of 2011, as amended) e.g., Japanese knotweed *Reynoutria japonica*. In addition, soils and other material containing such invasive plant material, are classified in Part 3 of the Third Schedule as vector materials and are subject to the same strict legal controls.

Failure to comply with the legal requirements set down in this legislation can result in either civil or criminal prosecution, or both, with very severe penalties accruing. Convicted parties under the Act can be fined up to €500,000.00, jailed for up to 3 years, or both.

Extracts from the relevant sections of the regulations are reproduced below:

*“49(2) Save in accordance with a licence granted [by the Department of Arts, Heritage and the Gaeltacht], any person who plants, disperses, allows or causes to disperse, spreads or otherwise causes to grow in anyplace [a restricted non-native plant], shall be guilty of an offence.*

*49(3) ... it shall be a defence to a charge of committing an offence under paragraph (1) or (2) to prove that the accused took all reasonable steps and exercised all due diligence to avoid committing the offence.*

*50(1) Save in accordance with a licence, a person shall be guilty of an offence if he or she [...] offers or exposes for sale, transportation, distribution, introduction, or release—*

*(a) an animal or plant listed in Part 1 or Part 2 of the Third Schedule,*

*(b) anything from which an animal or plant referred to in subparagraph (a) can be reproduced or propagated, or*

*(c) a vector material listed in the Third Schedule, in any place in the State specified in the third column of the Third Schedule in relation to such an animal, plant or vector material”.*

Following on from that the following are strictly prohibited:

- Dumping invasive species cuttings in the countryside;
- Planting or otherwise causing to grow in the wild (hence the landowner should be careful not to cause further spread);
- Disposing of invasive species at a landfill site without first informing the landfill site (that is licenced under the Waste Act to take such third schedule material - plant or soil) that the waste contains invasive species material (this action requires an appropriate licence); and

- Moving soil which contains third schedule-specific non-native invasive species in the Republic of Ireland, unless under licence<sup>1</sup> from National Parks and Wildlife Service (NPWS).

## **2. SITE & PROJECT DESCRIPTION**

### **2.1 Site Location**

The Proposed Development is located within Corks South Docklands and is bound by an existing Strategic Housing Development (SHD) to the west, and Centre Park Road to the north. Lee Rowing Club is adjoining the Proposed Development Site to the northeast. The existing SHD is in the early stages of the construction phase and backs directly onto the proposed site. The area is located within a 25-minute walk of Cork City Centre and within a 35-minute walk of Mahon Point. Both of which are significant employment centres. The total site area 0.84 hectares.

### **2.2 Proposed Development Description**

The Proposed Development will consist of:

Permission for the construction of 176 no. 1, 2 and 3 bed apartment units in 2 no. blocks, 1 no. creche, 1 no. gym, a retail/café space and all associated ancillary development works.

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<sup>1</sup> This licence is separate from and does not discharge any person being in receipt of other necessary waste permits/licences etc.



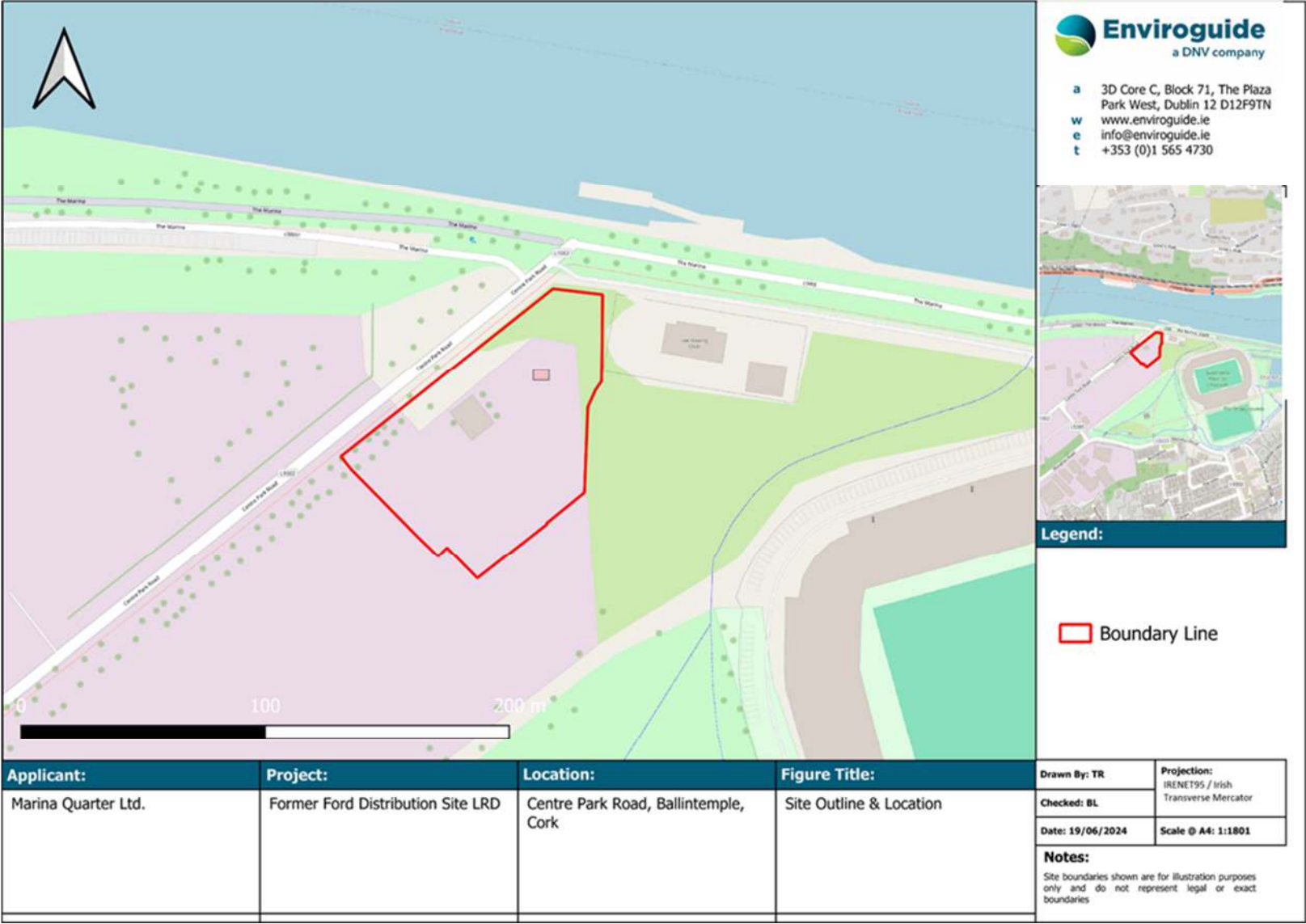


FIGURE 1. SITE LOCATION



### 3. METHODOLOGY

#### 3.1 Invasive Alien Species Survey

The purpose of this survey was to assess the Site and the adjacent areas for the presence of invasive plant species. This was informed by a previous invasive species survey undertaken by Enviroguide in May 2024, whereby the Site was assessed for the presence of additional IAS or spread of existing IAS, particularly those listed in the Third Schedule of European Communities (Birds and Natural Habitats) Regulations 2011 (SI 477 of 2011, as amended). The survey was conducted as per the methodology outlined in the guidance documents listed in Section 3.2 below, whereby the entirety of the lands within the Site boundary were walked by a surveyor, noting the locations and extent of any IAS encountered. Locations and extent of invasive species encountered were recorded along with photographs. This survey primarily comprised identification of any invasive species that might act as constraints to future development.

IAS in Ireland to date have been assessed by Kelly, O' Flynn and Maguire (2013) and attributed an impact rating of either '*High*', '*Medium*' or '*Low*' impact based on a number of factors that determine a species' potential to become established in this country and have significant impacts. Invasive species can also be rated as an 'Amber-list species', which signifies a '*Medium*' impact potential or established invasive species that may pose a threat to conservation goals (Invasive Species Ireland).

All surveys were conducted within the typical growing period (late March/early April to mid-October) for plant species in Ireland, following best practice guidance (TII, 2009).

#### 3.2 Guidance

This report and the mitigation strategies that are discussed relating to IAS has been prepared with regard to the following guidance documents, where relevant:

- The Management of Invasive Alien Plant Species on National Roads - Technical Guidance (TII, 2020a);
- The Management of Invasive Alien Plant Species on National Roads – Standard (TII, 2020b);
- Managing Invasive Non-native Plants in or near Freshwater (Environment Agency, 2010); and
- Best Practice Management Guidelines for Japanese Knotweed (Invasive Species Ireland, 2008).

#### 3.3 Limitations

No significant limitations were encountered which would prevent robust conclusions being drawn as to the potential impacts of the spread of IAS at the Site of the Proposed Development.

Neither Enviroguide Consulting nor its ecologists are registered pesticides advisors<sup>2</sup>. In respect of discussing the potential that chemical treatments may form as part of the management arsenal, it should be clearly noted that any decision on their efficacy and /or use can only be provided by registered pesticides advisor. Thus, specific measures relating to the

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<sup>2</sup> Appropriately trained and registered personnel with the Department of Agriculture, Food and Marine

use or specification of chemical treatments have been limited within this report. This will form part of the remit for the specialists acting on behalf of the appointed contractor, taking into account the specific recommended practical analysis and measures contained in this report.

## 4. RESULTS

During preliminary ecological surveys, undertaken on the 9th of May 2024 and all subsequent bird and bat surveys carried out in 2024, two species of invasive plant were identified as being present within the Site, namely, sycamore (*Acer pseudoplatanus*) and winter heliotrope (*Petasites pyrenaicus*) (see Figure 2 below).

Photographs of existing mature sycamore trees at the northeastern treeline (Figure 3) and winter heliotrope on the northern boundary (Figure 4) may be seen below.

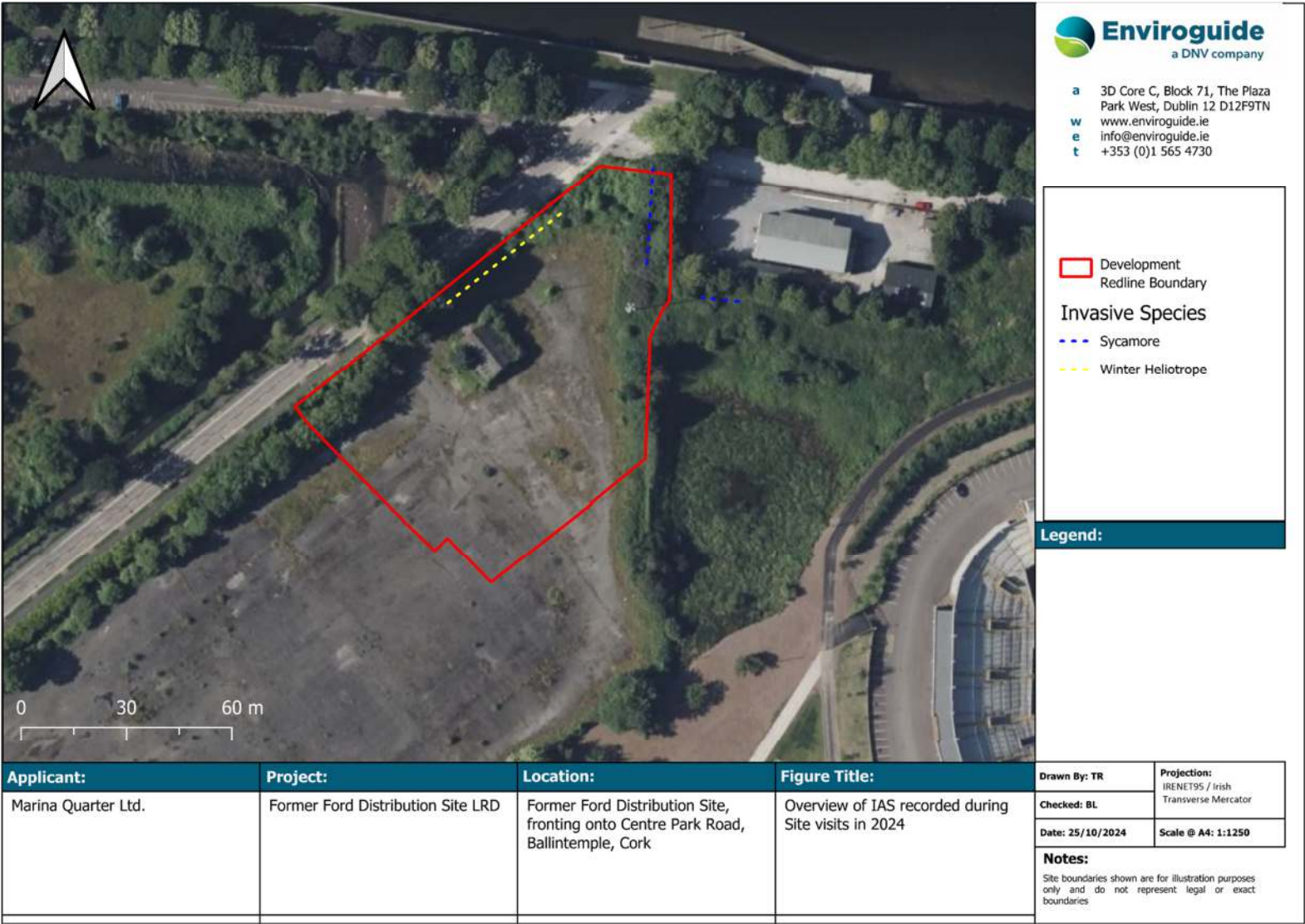


FIGURE 2. OVERVIEW OF INVASIVE ALIEN SPECIES RECORDED AT THE SITE DURING THE PREVIOUS WALKOVER SURVEY IN 2024



**FIGURE 3 – MATURE SYCAMORE TREES AT NORTHEASTERN TREELINE OF THE SITE**





FIGURE 4 – WINTER HELIOTROPE PRESENT ON THE NORTHERN BOUNDARY OF THE SITE

## 5. PROPOSED MANAGEMENT PLAN

The objectives of this invasive species management plan (IASMP) are as follows:

- Describe the invasive alien species (IAS) at the Site;
- Provide code of practice guidelines and legislative context; and,
- Provide a plan for managing the IAS at the Site.

### 5.1 Control Options

Control of non-native invasive species can be broken into either **physical** methods or **chemical** treatment. Physical methods include cutting, digging or excavating, hoeing and pulling by hand. Chemical treatment may involve the application of herbicide either by targeted spraying or direct application to the individual plant by wiping or direct injection (NRA, 2010).

Care should be taken to choose the most appropriate method for the specific circumstances of each site. Where chemical treatment is recommended below, it is important that the services of registered and appropriately trained advisors and professional users are procured (TII, 2020). Further information relating to professional users and the register is available on the website of the Pesticide Registration and Controls Divisions (PRCD) of the Department of Agriculture, Food and the Marine (DAFM), accessible via the following link: <http://www.pcs.agriculture.gov.ie/sud/professionaluserssprayeroperators/>.

Legislation regulating the use of Plant Protection Products (PPPs) and the sustainable use of pesticides significantly impacts the management of IAPS. Those involved in managing IAPS with pesticides will need to be aware of, and comply with, this law. This legislation must generally be regarded as complex, evolving and difficult to interpret. Therefore, great care is required by users to ensure that the relevant legislation is fully researched and understood. Where any doubt remains as to the applicability and interpretation of relevant legislation, it is recommended that professional legal advice be obtained (TII, 2020a).

## **5.2 General Measures to Prevent the Spread of IAS at the Site**

### **5.2.1 Management**

Areas identified as requiring specific IAS treatment will be demarcated by an Ecological Clerk of Works (ECoW) or invasive species treatment specialist, and designated control measures will be implemented at the earliest possible stage to reduce the risk of spread of IAS. In accordance with environmental requirements, all IAS management will be scheduled to coincide outside of the nesting bird season (March 1<sup>st</sup> - August 31<sup>st</sup>), given the vegetated areas of treeline in which some of the IAS are found, which may provide nesting habitat for breeding birds. If removal of IAS is required within this period, preclearance surveys by a suitably qualified ECoW will need to be undertaken in order to determine absence of nesting birds, prior to the commencement of any works. The areas of infestation and the appropriate buffer zone will be isolated with fencing or warning tape and 'biosecure zone' signs will be erected at each contaminated area to alert workers to the presence of IAS and to ensure that they avoid entering or unnecessarily interfering with these areas. To reduce the risk of material transfer of IAS material at the Site, appropriate controls on the movement of machinery in the infected area will be implemented.

### **5.2.2 Sycamore *Acer pseudoplatanus***

There are no TII guidelines listed for sycamore due to the nature of its invasiveness; it does not pose a significant threat in spreading on or off Site during management and disposal.

It is noted that sycamore is traditionally considered to be an invasive species due to its ability to outcompete native tree species and its supposedly low contribution to local biodiversity by supporting fewer insect species than native tree species (Leslie, 2005). However, sycamore's invasiveness is considered to be more of an issue in some sensitive native woodland settings and not in urban, anthropogenic environments such as the Site in question. Sycamore has also been found to support relatively high numbers of lichen species, including rarer species, when compared to native tree species (Leslie, 2005). Sycamore is therefore not considered to be a negative presence at the Site and in fact provides suitable nesting and foraging habitat



for local birds and invertebrate species, and thus can be viewed as being positive for biodiversity in the context of the urban location of the Site.

### 5.2.3 Winter Heliotrope *Petasites pyrenaicus*

Winter Heliotrope spreads via rhizome material in the soil and eradication of this species can take a number of years. It is important that no rhizome material remains in the soil in order for treatment to be successful. (TII, 2020).

TII (2020) recommends both physical and chemical methods of treatment for eradication. Physical extraction should be carried out to below the extent of rhizome material (30 cm) and extracted material buried at a minimum depth of 0.5m. Re-emerging specimens should be followed up with pesticide treatment until all plants have been successfully removed. Work will need to be carried out by a registered and appropriately trained pesticide operator who may be advised to have access to a registered pesticide advisor established by the minister for Agriculture, Food and the Marine pursuant to Regulation 4 of the Sustainable Use of Pesticides Regulations.

## 5.3 Biosecurity

Ensuring that the further spread of invasive alien species is curtailed is critical in respect of the Site. It is also necessary to ensure that that potential spread of IAS into areas / sites where they are not present is prevented. Equally, this applies to the risk of contaminated material being brought onto the Site.

Unwashed construction equipment, plant and vehicles, and footwear can provide a vector for the spread of IAS within a site and from areas outside the site where infestation is present or where vector material potentially containing seed/root material is attached to plant. The following hygiene measures shall be undertaken:

- Known or potentially infested areas within the Site shall be clearly fenced off in advance of works and access restricted, until such time that the appointed specialist has commenced treatment.
- Erection of clear signage at relevant fenced off areas. The signage and notification should be easily understood so that Site users are aware of the measures to be taken for known non-native invasive species on Site, or what they should do in the case of suspected non-native invasive species identified on Site;
- Where possible, dedicated footwear and wheel-wash facilities should be identified. Where a dedicated/bespoke wheel-wash cannot be installed owing to space limitations, no excavated loose material is allowed offsite from within an exclusion zone. Similarly, where plant that is used to excavate soils, it shall be visually checked for loose soil before movement to another part of the Site (where possible, the movements of tracked machinery should be restricted within the IAS exclusion zone. Loose soil shall be scraped off and disposed of, and a solution of Virkon® (or similar approved disinfectant) applied to machinery to ensure that no obscured seed/root material remains viable;
- Machinery which has been used for the transport and/or excavation of infected/suspected infected vector material shall be thoroughly washed down and the washings captured for disposal. All such machinery/plant shall not be permitted to

commence work elsewhere on or off-site until confirmation of same has been undertaken;

- Dedicated wash down and solution capture should be set up on-Site. All washings should be stored in a quarantined bunded container that is rated for such storage, until such time that they are removed offsite for disposal and a facility that is authorised to accept such waste;
- Except in very particular circumstances and with the approval of the specialist treatment contractor, there should be no temporary storage of infected/suspected infected soils on-site. They must be removed offsite as per guidance outlined within this report;
- Where small volumes e.g. volume capable of being double bagged in in quarantine bags rated for such of cut plant, bulbs or loose soil occur, it may be practical to bag the material and bring it to a clearly demarcated and dedicated quarantine area within the construction compound until such time that the material is disposed of to an authorised facility, similar to the process of disposing of bulk excavated infected soil.

#### **5.3.4 Measures to Prevent the Introduction of Invasive Species from Infill Material**

The following will be adhered to, to avoid the introduction of new IAS to the Site, and the spread of existing invasive species offsite:

- Any material required on the Site will be sourced from a stock that has been screened for the presence of IAS by a suitably qualified ecologist and where it is confirmed that none are present.
- All machinery (incl. HGVs bringing infill materials) will be thoroughly cleaned and disinfected prior to arrival on Site to prevent the introduction of new IAS to the Site.
- Sufficient buffer zones will be maintained around the current IAS stands and all plant and HGV operation at the Site will take place outside of these buffer zones. This may include erecting an exclusion fence around stands that are in locations where there may be high traffic.

### **5.4 Species-Specific Management Options**

The following sections outline species-specific management options:

#### **5.4.1 Sycamore *Acer pseudoplatanus***

The sycamore (*Acer pseudoplatanus*) is a large, fast growing tree which grows up to 35m tall and is native to central and southern Europe. It was originally thought to be damaging to native Irish woodlands though evidence has been published in relation to how the sycamore supports many lichens including rare lichens and other species (Leslie, 2005).

The sycamore has a wide range in Ireland and concerns relating to the species include its ability to establish quickly to create low diversity forests dominated by sycamore.

Sycamore can be outcompeted by ash (*Fraxinus excelsior*) and vice-versa, though the ash dieback disease is currently causing a drop in ash numbers in Ireland allowing sycamore to thrive, with little competition from other species.

Sycamore thrives in areas of disturbed soil where saplings quickly establish.

Dry weather conditions cause poor growth in sycamore trees.

Habitats for this species include wooded, brownfield and artificial areas (Biodiversity Ireland, 2024).

#### **5.4.1.1 Site-Specific Recommended Management**

As mentioned above in section 5.2.2, sycamore does not pose a significant threat of spreading as a result of management or removal. Sycamore trees on Site may be removed as per normal tree removal protocol where necessary. It is not considered a mandatory measure to remove specimens, due to the naturalised nature of the species and location of the trees on the eastern extent of the Site.

#### **5.4.2 Winter Heliotrope *Petasites pyrenaicus***

Winter Heliotrope has established itself in Ireland over the past century due mainly to escapes from cultivation. It is a low-growing plant of the Mediterranean region and is well established in the southern region, thriving in shaded areas where it crowds out and outcompetes native flora. As mentioned in previous sections, its ability to spread through rhizome material gives it an ability to spread and regenerate rapidly.

##### **5.4.2.2 Site-Specific Recommended Management**

Winter Heliotrope should be removed under the supervision of a suitably qualified invasive species specialist. As outlined above, mechanical measures should initially be employed, with appropriate disposal of all material to below 0.5m. Re-emerging plants should then be monitored post construction and removal and treated by a suitably qualified herbicide specialist as detailed in Section 5.2.3 above.

## **6. MONITORING**

Future monitoring for sycamore on Site will not be required due to the mild invasive nature of this species. It is recommended, however, that the Site is monitored after infill works have been completed to check for potential IAS species which may have been accidentally imported into the Site, including the re-emergence of Winter Heliotrope. This future IAS survey should take place during the optimal botanical period (April to September) after infill works have been completed. If infill works take place at the beginning of the optimal botanical period, the walkover survey should be carried out near the end of the optimal botanical period. If infill works are carried out at the end of the optimal botanical period, it is recommended to wait until the next optimal botanical period to survey. This allows the establishment of potential IAS species so that they may be recorded by an ecologist.

## **7. CONCLUSIONS**

An IAS survey of the Site of the Proposed Development was carried out by Enviroguide Consulting on the 9th<sup>th</sup> of May 2024 which identified two IAS. Subsequent to this IAS survey, a range of species specific. This Invasive Alien Species Management Plan (IASMP) presents an option for addressing the IAS at the Site and a strategy that will be adopted during the Construction and Operation of the Proposed Development in order to manage and prevent the spread of IAS at the Site. This IASMP also recommends a further monitoring survey

concluding the completion of the infill process which will document any potential future IAS constrictions which may arise pending the infill phase.

## 8. REFERENCES

Biodiversity Ireland (2024). Sycamore Species Profile.

Francis, R. (2006). The Wildflower Key: How to Identify Wild Plants, Trees and Shrubs in Britain and Ireland, Revised Edition.

Invasive Species Ireland. Medium Impact IAS: Recorded Species. Available at: <https://invasivespeciesireland.com/wp-content/uploads/wp-post-to-pdf-enhanced-cache/1/amber-list-recorded-species.pdf>

Invasive Species Ireland. High Impact IAS: Recorded Species. Available at: [https://invasives.ie/app/uploads/2022/01/Invasives\\_taggedlist\\_HighImpact\\_2013RA-1.pdf](https://invasives.ie/app/uploads/2022/01/Invasives_taggedlist_HighImpact_2013RA-1.pdf)

Invasive Species Ireland. Third Schedule Part 1 Plants. Available at: <https://invasivespeciesireland.com/wp-content/uploads/wp-post-to-pdf-enhanced-cache/1/third-schedule-part-1-plants.pdf>

Kelly, J., O'Flynn, C. and Maguire, C. (2013). Risk analysis and prioritisation for invasive and non-native species in Ireland and Northern Ireland. A report prepared for the Northern Ireland Environment Agency and National Parks and Wildlife Service as part of Invasive Species Ireland.

Leslie, A.D. (2005) The ecology and biodiversity value of Sycamore (*Acer pseudoplatanus*) with particular reference to Great Britain. Scottish Forestry. Vol 59 No 3. p19 -26.

TII (2009). Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes. Available at: <https://www.tii.ie/technical-services/environment/planning/Ecological-Surveying-Techniques-for-Protected-Flora-and-Fauna-during-the-Planning-of-National-Road-Schemes.pdf>

TII (2010). Guidelines on the Management of Noxious Weeds and Non-native Invasive Plant Species on National Roads. Available at: <https://www.tii.ie/technical-services/environment/construction/Management-of-Noxious-Weeds-and-Non-Native-Invasive-Plant-Species-on-National-Road-Schemes.pdf>

TII (2020a). The Management of Invasive Alien Plant Species on National Roads – Technical Guidance. GE-ENV-01105. December 2020

TII (2020b). The Management of Invasive Alien Plant Species on National Roads – Standard. GE-ENV-01104. December 2020

## APPENDIX I – SAMPLE IAS MONITORING FORM (TII, 2020B)

Column Name	Data Type	Information
SiteID	Text	Read Only field, displaying ID for site recorded as part of full topographical survey stage
Company	Text	Name of company undertaking inspection
InspectBy	Text	Name of individual undertaking inspection
Ins_Date	Date	Date and time of survey
Regrowth	Text (Yes/No Response)	Is there any evidence of regrowth?
%Regrowth	Number	Whole number as a percentage of overall site, indicating estimate of regrowth
Comments	Text	Comments regarding regrowth (e.g. is regrowth coming from untreated adjacent lands outside of the site)
NewStands	Text (Yes/No Response)	Are there any new infestations evident adjacent/outside original site?
NewStdCom	Text	Comments re new infestation: where it is relative to site, how abundant
Notes	Text	Any notes re treatment?



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