APPENDIX 3

INVASIVE SPECIES MANAGEMENT PLAN

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1. INTRODUCTION

1.1 General Introduction

MKO were commissioned by Slieveacurry Ltd to prepare an Invasive Species Management Plan (ISMP) to submit with a planning application for the Proposed Project at Glendine North and adjacent townlands, Co. Clare.

The Proposed Project is located within a rural, agricultural setting in west Clare, approximately 7km south of Ennistimon, Co. Clare. Where the 'Site' is referred to, this relates to the primary study area for the EIAR.

Invasive species surveys were carried out by MKO. The surveys comprised a focussed search for Invasive Species (ISs) listed on the 'Third Schedule' of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011), and species listed on the 'First Schedule' of the European Union (Invasive Alien Species) Regulations 2024 (S.I. 374 of 2024). One IS was identified within and directly adjacent to the Site. The multidisciplinary walkover surveys were carried out by MKO throughout 2024, 2025 and 2026. The species identified was:

- Rhododendron (*Rhododendron ponticum*)

This ISMP has been prepared with reference to current legislation and best practice guidelines in the identification, treatment and management of invasive alien species listed on the 'Third Schedule' and the 'First Schedule' of the above-mentioned European Union/Communities Regulations.

The objectives of this report are summarised below:

- Provide site specific best practice guideline measures for the control and management of invasive species.
- Provide detailed recommendations for the management of invasive species listed on the 'Third Schedule' of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011) and the 'First Schedule' of the European Union (Invasive Alien Species) Regulations 2024 (S.I. 374 of 2024).

The recorded Rhododendron are mapped in Figure 3-1, showing their distribution within and adjacent to the Proposed Project.

1.2 Legislative Framework

Regulations 49 and 50 of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011) and Regulation 17(a)/(b) of the European Union (Invasive Alien Species) Regulations 2024 (S.I. 374 of 2024), include legislative measures to deal with the dispersal and introduction of invasive alien species listed in the Third Schedule and First Schedule of the respective regulations. These regulations are highlighted below.

Regulation 49 of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011)

> "any person who plants, disperses, allows or causes to disperse, spreads or otherwise causes to grow in any place specified in relation to such plant in the third column of Part 1 of the Third Schedule, any plant which is included in Part 1 of the Third Schedule, shall be guilty of an offence."

Regulation 50 of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011)

"a person shall be guilty of an offence if he or she has in his or her possession for sale, or for the purposes of breeding, reproduction or propagation, or 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

(b), can be reproduced or propagated, or

(c), a vector material listed in Part 3 of the Third Schedule,"

Regulation 17 of the European Union (Invasive Alien Species) Regulations 2024 (S.I. 374 of 2024)

(1)A person shall not

(a) introduce into the State,
(b) keep, including in contained holding,
(c) breed, including in contained holding,
(d) import into, export from or transport within the State, except for the transportation of species to facilities in the context of eradication,
(e) place on the market,
(f) use, exchange or offer for exchange,
(g) permit to reproduce, grow or cultivate, including in contained holding, or
(h) release into the environment, an invasive alien species of national concern.

(2) A person shall not

(a) import or otherwise introduce into the State,
(b) place on the market,
(c) use, exchange or offer for exchange, or
(d) release into the environment, a vector material.'

1.3 Guidance Documents

The following guidance documents and literature sources were consulted during the preparation of this report:

- TII (2020). *The management of Invasive Alien Plant Species on National Roads.* TII Publications, Transport Infrastructure Ireland.[1]
- Crushell, P., Foss, P., Hurley, C. & O'Loughlin, B. (2011). *County Kerry Invasive Species Survey 2011 - Pilot Mapping Study of the River Lee Catchment, Tralee*. Report prepared for Kerry County Council and The Heritage Council.[2]
- Stokes et al. (2004). Stokes, K., O'Neill, K. & McDonald, R.A. (2004) *Invasive species in Ireland*. Unpublished report.
- Actions for Nature 2023-2030, Ireland's 4th National Biodiversity Action Plan.[3]
- Higgins, G.T. (2008) Rhododendron ponticum: A guide to management on nature conservation sites. Irish Wildlife Manuals, No. 33. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin, Ireland.[4]
- Maguire, C.M., Kelly, J. and Cosgrove, P.J. (2008). Best Practice Management Guidelines Rhododendron *Rhododendron ponticum* and Cherry Laurel *Prunus laurocerasus*. Prepared for NIEA and NPWS as part of Invasive Species Ireland.[5]
- www.invasivespeciesireland.com

[1] https://cdn.tii.ie/publications/GE-ENV-01105-01.pdf
[2] https://www.npws.ie/sites/default/files/publications/pdf/Stokes_et_al_2004_IAS_Ireland.pdf
[3] https://www.npws.ie/sites/default/files/publications/pdf/National%20Biodiversity%20Action%20Plan%20English.pdf
[4] https://www.npws.ie/sites/default/files/publications/pdf/IWM33.pdf
[5] https://invasivespeciesireland.com/wp-content/uploads/2012/01/Rhododendron-BPM.pdf

1.4 Statement of Authority

This report has been prepared by Padraig Desmond with assistance from Andrew McCarthy.

Andrew is a Graduate ecologist with MKO with previous experience with the company as an ecology intern during the summer of 2024. Andrew holds BA (Hons) in Ecology and Environmental Biology from University College Cork.

Pádraig is a Project Ecologist with MKO with six years post graduate ecological experience, five years of which have been in ecological consultancy. Pádraig holds a BSc (Hons) in Ecology and Environmental Biology from University College Cork. Pádraig took up his position with MKO in December 2021, prior to which he worked as an Ecologist with Envirico. Through these consultancy roles Pádraig has gained excellent experience in producing ecological reports such as Natura Impact Statements, Ecological Impact Assessments, Biodiversity chapters, Invasive Species Management Plans, and Constraints Reports for a wide range of projects including small private developments to housing developments and renewable energy projects such as solar and wind farms. Prior to the above roles, Pádraig worked as a field ecologist for the Department of Conservation in New Zealand, where he developed a strong field-based skill set. Pádraig's key strengths and areas of expertise are in terrestrial ecology, including vegetation surveys, habitat identification, invasive species surveys, mammal surveys, Appropriate Assessment and Ecological Impact Assessment. Pádraig is also skilled in GIS.

Multidisciplinary walkover surveys, including aquatic surveys, were carried out in 2024, 2025, and 2026 by MKO Ecologists Pat Roberts (BSc, MCIEEM), Corey Cannon (BSc., MSc., CEcol, MCIEEM), Pádraig Desmond, Deepali Mooloo (BSc., MSc.) and Tim Murphy (BSc.) to ground-truth the ecological surveys previously undertaken within the Site and to record any changes which may have occurred in the interim. All surveyors have relevant academic qualifications and are competent in undertaking habitat and ecological assessments.

2. CHARACTERISTICS OF THE PROPOSED PROJECT

The Proposed Project comprises the construction of 9 No. wind turbines and all associated works. The proposed turbines installed on the site will have the following dimensions:

- Turbine Tip Height – 175 metres
- Hub Height – 100 metres
- Rotor Diameter - 150 meters

The overall layout of the Proposed Project is shown on Figure 4-1 of the EIAR. This figure shows the proposed locations of the wind turbines, underground electrical cabling route, permanent extension of the Slievecallan 110kV substation, peat and spoil management areas, met mast, temporary construction compounds, internal roads layout and entrance to the Site. The Proposed Wind Farm Site layout is shown below in Figure 2-1 for ease of reference.

Full details of the Proposed Project are provided in Chapter 4: Description of the submitted EIAR.

510000

515000

680000

675000

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T1

T2

T3

T4

T5

T6

T7

T8

T9

Silverhill

R460

R474

Glenletternafinny

Kinturk

Kinturk

0

1

2 km

Map Legend

- EIAR Site Boundary
- Proposed Turbines
- Proposed Turbine Hardstands
- Existing Roads to be Upgraded
- Proposed New Roads
- Public Road to be Upgraded
- Public Road to be Maintained
- Proposed Temporary Construction Compound
- Met Mast
- Proposed 33kV Underground Cable Connection
- Proposed Extension to the Existing 110kV Slievecallan Substation
- Existing 110kV Slievecallan Substation
- Proposed Access Track
- Proposed Peat and Spoil Management Areas
- Turbine Delivery Overrun Areas
- Proposed Biodiversity Enhancement Areas
- Proposed Biodiversity Enhancement Linear Features

N

SITE LOCATION - NOT TO SCALE

Drawing Title

Proposed Project Layout

Project Title

Slieveacurry Renewable Energy Development, Co. Clare

Project No.	Drawing No.	Scale
240718	2-1	1:27,000
Drawn By	Checked By	Date
MVN	BT	20/04/2026

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3. LOCATION/EXTENT OF INVASIVE SPECIES WITHIN THE DEVELOPMENT SITE

3.1 Rhododendron (*Rhododendron ponticum*)

Rhododendron (*Rhododendron ponticum*) is an evergreen, acid loving shrub introduced to Ireland in the 18th Century. Since its introduction it has established itself as a major weed of acid woodlands in Wicklow, Kerry and Cork. It can withstand considerable shade and thrives as an understorey species in woodland, though it also tolerates open conditions in suitable acid soils. In additional to shading, the foliage of rhododendron contains various compounds that have an allelopathic action on other species (inhibiting their growth) which may further inhibit plants from growing within close proximity.

During field surveys undertaken, Rhododendron was recorded at 19 locations within the Site, the locations of which are shown in Figure 3-1. Descriptions and coordinates of each infestation are provided in Table 3-1 and are depicted in Plate 3-1 to Plate 3-19.

Table 3-1 Locations of Rhododendron recorded during the surveys undertaken

Map ID	Description	Plate	Coordinates
R1	One ~2m wide bush recorded along a stream within the most northern proposed felling land	3-1	52.8580109° -9.3104661°
R2	One ~1.5m wide bush recorded along a stream within the most northern proposed felling land.	3-2	52.8799356° -9.2952916°
R3	One ~4m wide bush recorded to the west of the most northern proposed felling land along a road.	3-3	52.879505° -9.293251°
R4	One ~5m wide bush recorded to the west of the most northern proposed felling land along a road. This stand has been cut back.	3-4	52.878906° -9.293537°
R5	One ~2m wide bush recorded to the south of the most northern proposed felling land in a drain along a road.	3-5	52.874600° -9.295003°
R6	Multiple bushes ranging from saplings to ~2m wide located roughly 170m south of T2 along the edge of a conifer plantation.	3-6	52.869650° -9.300322°
R7	Large mature stand located~200m west of T5.	3-7	52.868428° -9.294403°
R8	Numerous saplings located ~390m east of T4	3-8	52.866639° -9.300813°
R9	Numerous bushes ranging from saplings to large mature ones roughly 280m north of T6	3-9	52.864673° -9.299533°
R10	One sapling located ~300m northeast of T7 close to a conifer plantation	3-10	52.856411° -9.314269°
R11	One mature bush surrounded by >50 saplings roughly 320m north of T7	3-11	52.859298° -9.315410°
R12	~40m long mature hedgerow along the edge of a conifer plantation 330m southwest of T3	3-12	52.8635343° -9.3163075°
R13	1.5 meter wide bush located within a conifer plantation in a felling land southwest of the windfarm.	3-13	52.830030° -9.231507°
R14	2 meter wide bush located within a conifer plantation in a felling land southwest of the windfarm.	3-14	52.8316692° -9.2350021°
R15	One mature bush located within a conifer plantation in a felling land southwest of the windfarm.	3-15	52.8285154° -9.2413664°,

R16	One sapling within the southernmost felling land.	3-16	52.820242° -9.269907°,
R17	Numerous bushes growing amongst immature Sitka spruce along a fire road within a felling land east of the windfarm.	3-17	52.859469° -9.257575°
R18	Large stand of roughly 5 metres in width on the side of a fire road within a felling land east of the windfarm.	3-18	52.856244° -9.266385°
R19	Hedgerow of mature bushes running from a proposed felling land through agricultural fields.	3-19	52.830936° -9.239663°

Plate 3-1 Rhododendron found at R1

Plate 3-2 Rhododendron found at R2.

Plate 3-3 Rhododendron found at R3.

Plate 3-4 Rhododendron found at R4

Plate 3-5 Rhododendron found at R5.

Plate 3-6 Rhododendron found at R6.

Plate 3-7 Rhododendron found at R7.

Plate 3-8 Rhododendron found at R8

Plate 3-9 Rhododendron found at R9.

Plate 3-10 Rhododendron found at R10.

Plate 3-11 Rhododendron found at R11.

Plate 3-12 Rhododendron found at R12.

Plate 3-13 Rhododendron found at R13.

Plate 3-14 Rhododendron found at R14.

Plate 3-15 Rhododendron found at R15.

Plate 3-16 Rhododendron found at R16.

Plate 3-17 Rhododendron found at R17.

Plate 3-18 Rhododendron found at R18.

Plate 3-19 Rhododendron found at R19.

3.1.1 Proposed Management Strategy

Recordings of Rhododendron were recorded within the built infrastructure footprint and Proposed Enhancement Site and therefore, the following steps will be taken to ensure that this species does not spread into the wider environment, as a result of the Proposed Project.

3.1.1.1 Site Set Up

Prior to the commencement of any works, the following site setup procedures will be carried out:

- A pre-commencement survey for Rhododendron will be undertaken by a fully qualified ecologist to determine the locations and extent of the species within the Site and to determine whether there have been any changes in the extent of the infestation since the undertaking of surveys in 2024, 2025 and 2026.
- The locations and extent of Rhododendron within the Site will be clearly marked out using hazard tape to ensure they are not disturbed. A 10m buffer zone (Higgins, G.T. 2008) surrounding each stand will also be applied using temporary fencing, to avoid disturbance of potentially contaminated soils.

Given the largely interspersed recordings of this species within the Site, it is proposed to treat the plant *in-situ*. The recommended option for *in-situ* treatment is to manually remove the upper parts of the plant and apply the Ecoplug method (www.landscapedepot.ie) as to avoid spray drift and to minimise the potential for spraying of non-target species. The Ecoplug method is outlined below.

- Cut the tree/plant as close to the ground as possible. This should be carried out from October to early March, outside the bird nesting season.
- The cut material can be stacked and stored on site, used as firewood or mulched.
- A 30 mm hole will be drilled into the remaining stump and the Ecoplug will be inserted into the hole until it is flush with the top of the stump.
- Where immature plants occur, hand pulling can be undertaken at any time of the year and left to dry out on an impermeable surface.

Where the Ecoplug method is unsatisfactory, such as with smaller saplings, manual extraction of the root/stump from the ground is recommended. The following methods for root extraction are outlined below.

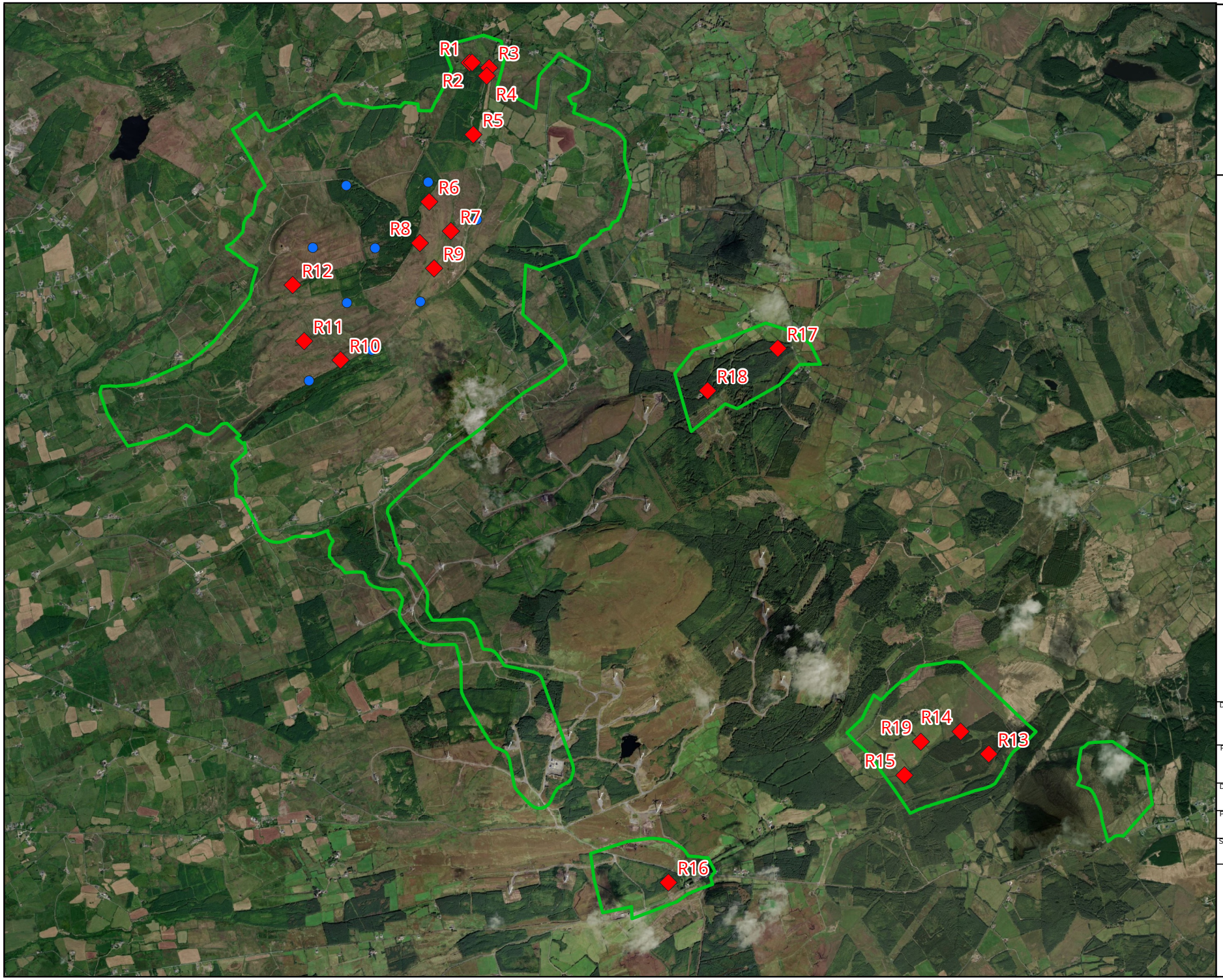
- Cut the tree/plant as close to the ground as possible. This should be carried out from October to early March, outside the bird nesting season.
- The root/stump will be removed from the ground using hand tool or an excavator.
- The cut material can be stacked and stored on the Site, used as firewood or mulched.
- The root/stump will be placed on an impermeable surface such as palettes or a radon barrier membrane and left to dry out.

For infestations within or adjacent to the built infrastructure footprint of the Proposed Project, following treatment or eradication of the plant, the soil at the site of the infestation should still be considered contaminated on a precautionary basis. In order to avoid the potential spread of the species, the top layer of soil/peat from the 10m buffer zone will be removed and stored outside of the construction footprint, and within the Site and will then be clearly fenced off. This area will then be monitored and if necessary, re-treated following the initial treatment and should continue until no growth is recorded for a period of at least two consecutive years. Alternatively, the excavated spoil from within the buffer zone can be moved to an offsite waste facility, under licence from NPWS.

3.1.2 Post Treatment Monitoring

Ongoing monitoring will be required, with suitable follow-up management in order to control new growth or re-establishment of this species within the infested areas.

Following the initial treatment and completion of the development, the treated areas will be re-surveyed annually and if necessary, re-treated until no growth is recorded for two consecutive years. If invasive plants are found to be re-establishing, they shall be treated as per the measures outlined in this report.



Map Legend

- EIAR Site Boundary
- Rhododendron Locations
- Turbine Locations

Drawing Title
Recorded Invasive Species

Project Title
Slievacurry Wind Energy Development, Co. Clare

Drawn By	Checked By
AMc	PD
Project No.	Drawing No.
240718	Figure 3-1
Scale	Date
1:40,000	16.04.2026

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4. SITE HYGIENE AND BIOSECURITY MEASURES

The following site hygiene and biosecurity measures will be adhered to for the management of invasive species within the Site.

- No ground works will take place on site prior to the application of this site-specific ISMP. The ISMP will ensure all measures are taken to avoid the spread of species discussed in this report.
- All works in relation to the invasive species will be supervised by an ECoW.
- All staff will be given a Toolbox Talk, by a suitably qualified person or ecologist, on invasive species removal in relation to Rhododendron and their management on site.
- The contractor will assign a member of their team as Environmental Officer to ensure the management plan is adhered to throughout the proposed works.
- A designated bio-secure area/exclusion zone will be set up at recorded invasive species locations to prevent disturbance in these areas. Invasive species will be marked with hazard tape in order to identify the species prior to vegetation clearance works and to keep it separate from other brash material.
- All machinery should be thoroughly cleaned down prior to arriving on the site to avoid the potential spread of invasive species from elsewhere.
- Machinery that is used for excavation and onsite removal of invasive material will not be used for any other works until they are fully cleaned down and then visually inspected by a specialist to ensure no fragments of invasive plant material are present.
- Prior to leaving the invasive species exclusion zones, all boots and clothing will be thoroughly brushed down to remove any contaminated material prior to leaving the area.
- As a precautionary measure, machinery will be thoroughly cleaned down before exiting the site to prevent potential spread of invasive species elsewhere.
- Clean down will be carried out using brushes and shovels and power washing will be avoided insofar as possible. This is to prevent potentially contaminated run-off spreading outside the Site.
- Material used for tracking machinery out of the contaminated areas on site e.g. plywood will be thoroughly cleaned down under supervision of the ECoW prior to removal off site.
- Any soil and topsoil required on the Site will be sourced from a stock that has been screened for the presence of any invasive species and where it is confirmed that none are present.
- Any material imported to the site should be screened for invasive species by a suitably qualified ecologist before transportation to the Site.

5. CONCLUSIONS

This invasive species management plan has been designed to facilitate the eradication and/or management of First and Third Schedule Invasive Species recorded within the Proposed Project. This management plan has provided a record of the locations of invasive species recorded to date.

Infestations of all invasive species identified within the Site during surveys undertaken in 2024, 2025 and 2026 will require additional surveys within the relevant growing season prior to commencement of any works to determine if the recorded species have spread further throughout the Site. Should any additional invasive species be recorded, this ISMP will be updated accordingly to ensure there is no spread of any First and Third Schedule invasive species as a result of the Proposed Project.

Any First or Third Schedule Invasive species and their established buffers that are located outside of the construction footprint will be left undisturbed and will not be the subject of any management as part of the current proposal. All such areas will be avoided during construction activities to avoid potential spread of any invasive plant species.

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