Invasive Weed Management Plan

Kellen Homes Ltd
Riverpark Road
Manchester
M40 2XP

Date	28-02-25
Updated	
Project	Riverpark Rd
Client	Kellen Homes Ltd
Inspected by	D Nightingale
Authorised by	D Nightingale
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Revision	B

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LIMITATIONS

Nightingale Environmental Ltd has prepared this report with reasonable skill, care and diligence and taking account of the contract terms and conditions and manpower and resources devoted to it in agreement with the client. Nightingale Environmental Ltd disclaims any responsibility to the client and others in respect of any matters outside the scope of the above.

This report has been prepared based on the information received during the timescale available and all potential contamination; constraints or liabilities associated with the site may not necessarily have been revealed. The report is only valid when it is used in its entirety.

The survey was carried out following non-intrusive measures and should be seen as a visual inspection only. The survey results are therefore limited to showing invasive weed species visible at the time of the survey

This report is confidential to the client and Nightingale Environmental Ltd accepts no responsibility to third parties to whom the report, or any part thereof, is made known. Any such party using any information contained within the report does so at their own risk.

CONTENTS

1. **Introduction**
2. **Site and findings**
3. **Invasive and problematic plants**
4. **Control of invasive and problematic plants**
5. **Bio-security and On site precautions**
6. **Proposed works**
7. **Photos**
8. **Site plan**
9. **Works Undertaken and Conclusions**
10. **Health and safety**
11. **References**

1. INTRODUCTION

1.1 Daniel Nightingale of Nightingale Environmental Ltd has been involved in vegetation management and weed control for over 20 years, including 18 years specialising in the control and eradication of invasive weed species as identified in the Wildlife and Countryside Act 1981 (as amended).

1.2 As a member of the BASIS professional register along with IOSH, NPTC, CSCS and SMSTS qualifications and as a Property Care Association Certified Surveyor Japanese Knotweed (CSJK) he is ideally placed to provide clients with information and advice as to how best to deal with vegetation management and weed control issues on land within their ownership.

1.3 In January 2024 Nightingale Environmental Ltd were commissioned by Kellen Homes Ltd to undertake an inspection of the proposed development site at Riverpark Road, M40 2XP. The purpose of the inspection was to identify any invasive or problematic weed species that may be present within the boundary of the site or the immediate surrounding area, report the findings and propose a solution to any infestations found to be present. The inspection was undertaken on 18th January 2024

1.4 The main species being inspected for at this time is Japanese Knotweed (JK)

1.5 This management plan provides background information relating to the main invasive plant species and sets options for control and eradication. Any contractors providing costings for works based on these findings do so at their own risk

2. SITE AND FINDINGS

2.1 The site consists of an area of an industrial complex with associated areas of storage, warehousing, hardstand, parking with vegetated boarder around the perimeter and overgrown railway embankment. Approx OS coordinates at central point SJ 8732499472

2.2 Surrounding areas comprise of lice railway to the north, Briscoe lane to the west, Riverpark Rd to the south and Ten Acres Lane and area od POS to the east

2.3 The site was inspected on the 18th January 2024 outside of the expected growing season

2.4 No records of any historical treatment to invasive weeds has been presented

2.5 Some disturbance work to hardstanding areas has been undertaken by others, as part of site investigation works, prior to site inspection being undertaken.

2.6 Continued monitoring of the site should be undertaken throughout the treatment period with any further areas identified being marked on site with appropriate control and treatment measures being implemented.

2.7 During the inspection five areas of Japanese Knotweed were identified (see site plan 8.0)

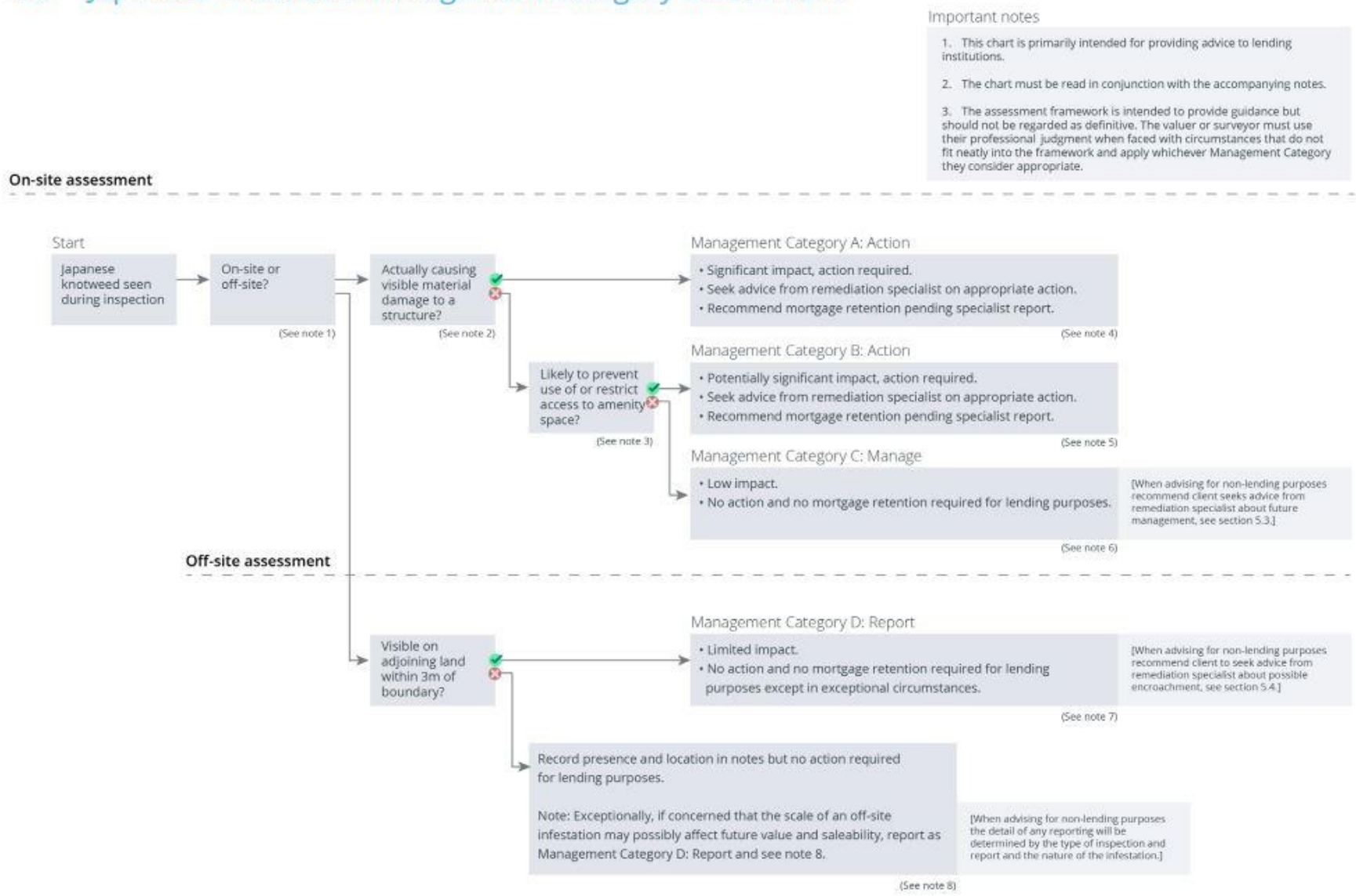
Species	Description	RICS Management Category (Japanese Knotweed) and proposed management
Japanese Knotweed (JK1) Approx 15m x 3m visible growth SJ87055 99502	Japanese Knotweed was identified along the western boundary of the site adjacent to Briscoe Lane. Some growth would appear to be stunted possibly indicating some form of herbicide treatment programme though this cannot be confirmed at this time	JK within development footprint to be excavated as part of site remediation works and either buried at depth with soft landscaping in accordance with RPS178 or removed from site to licensed landfill facility. Where JK is not within the development footprint on-going herbicide applications are to be undertaken as part of a monitoring programme throughout the development, prior to implementation of a warranty period RICS Risk Category D on completion of works
Japanese Knotweed (JK5) Approx 10m x 1.5m SJ 87049 99439	Japanese Knotweed was identified along the southern boundary of the site adjacent to Riverpark Road. Some growth would appear to be stunted possibly indicating some form of herbicide treatment programme though this cannot be confirmed at this time	JK within development footprint to be excavated as part of site remediation works and either buried at depth with soft landscaping in accordance with RPS178 or removed from site to licensed landfill facility. Where JK is not within the development footprint on-going herbicide applications are to be undertaken as part of a monitoring programme throughout the development, prior to implementation of a warranty period RICS Risk Category D on completion of works

Japanese Knotweed (JK2, JK3 and JK4) JK2 approx 5mx 5m SJ 87234 99554 JK3 approx 25m x 15m SJ 87291 99530 JK4 approx 5m x 5m SJ 87320 99522	Three areas of Japanese Knotweed were identified outside of the development footprint within the retained railway embankment to the north of the site Growth in these areas was well established. Monitoring should be undertaken during remediation works to ensure rhizome growth does not extend in to the development area	Where JK is not within the development works on-going herbicide applications are to be undertaken as part of a monitoring programme throughout the development, prior to implementation of a warranty period. Supervised remediation of adjacent development area to ensure no encroachment of rhizome. Installation of root barrier membrane if required RICS Risk Category D

2.8 It is proposed that the site be developed for residential purposes. prior to hand over of the site to Management Company / individual plot owners

2.9 Please note: If materials are removed from site this must be done in accordance with current waste regulations by a licensed carrier to an appropriate licensed receiving facility.

4.5 Japanese knotweed Management Category assessment



Extract from RICS Guidance Note Japanese Knotweed January 2022

3. INVASIVE AND PROBLEMATIC PLANTS

3.1 Identifying invasive and problematic plants (extracted from Netregs website)

1.1 Identifying invasive and problematic plants on a site early lets developers assess and cost options for destroying, disposing of and managing them.

2.1 Managing land infested by invasive and problematic plants in a timely and appropriate way can avoid:

- excessive cost
- potential prosecution and compensation claims
- physical damage to buildings and hard surfaces
- harm to the environment

3.2 Identifying Invasive Species

NNSS
GB non-native species secretariat

www.nonnativespecies.org

Produced by Olaf Booy, Max Wade and Vicky White of RPS

Japanese Knotweed



Species Description

Scientific name: *Fallopia japonica*
AKA: Japanese Bamboo, Pysen saethwr (Welsh), *Polygonum cuspidatum*, *Reynoutria japonica*
Native to: Japan, Taiwan, northern China
Habitat: Common in urban areas, particularly on waste land, railways, road sides and river banks

Tall herbaceous perennial with bamboo like stems. Often grows into dense thickets. Characteristic leaves and stems, persistence of last year's dead canes and distinctive rhizome (underground root-like stems) enables year round identification.

Introduced in the early 19th century as an ornamental plant. Now common and widespread across the UK. Spreads rapidly in the wild by natural means and as a result of spread by humans. Spread is solely by vegetative means, either fragments of rhizome or stem. Does not produce seed in the UK. Negative impacts include outcompeting native flora, contributing to river bank erosion and increasing the likelihood of flooding. Can also cause significant delays and cost to development as well as structural damage (it can grow through asphalt and some other surfaces).

Japanese Knotweed is listed under Schedule 9 to the Wildlife and Countryside Act 1981 with respect to England, Wales and Scotland. As such it is an offence to plant of otherwise cause Japanese knotweed to grow in the wild. Under the Environmental Protection Act 1990, Japanese Knotweed is classified as controlled waste.

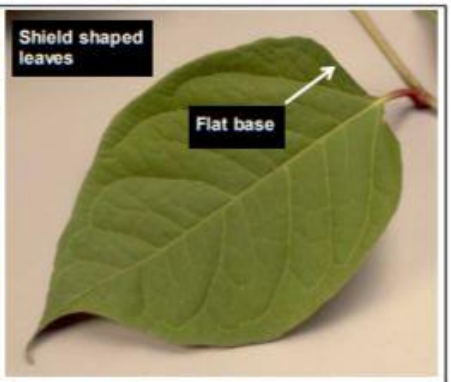
For details of legislation go to www.nonnativespecies.org/legislation.

Key ID Features





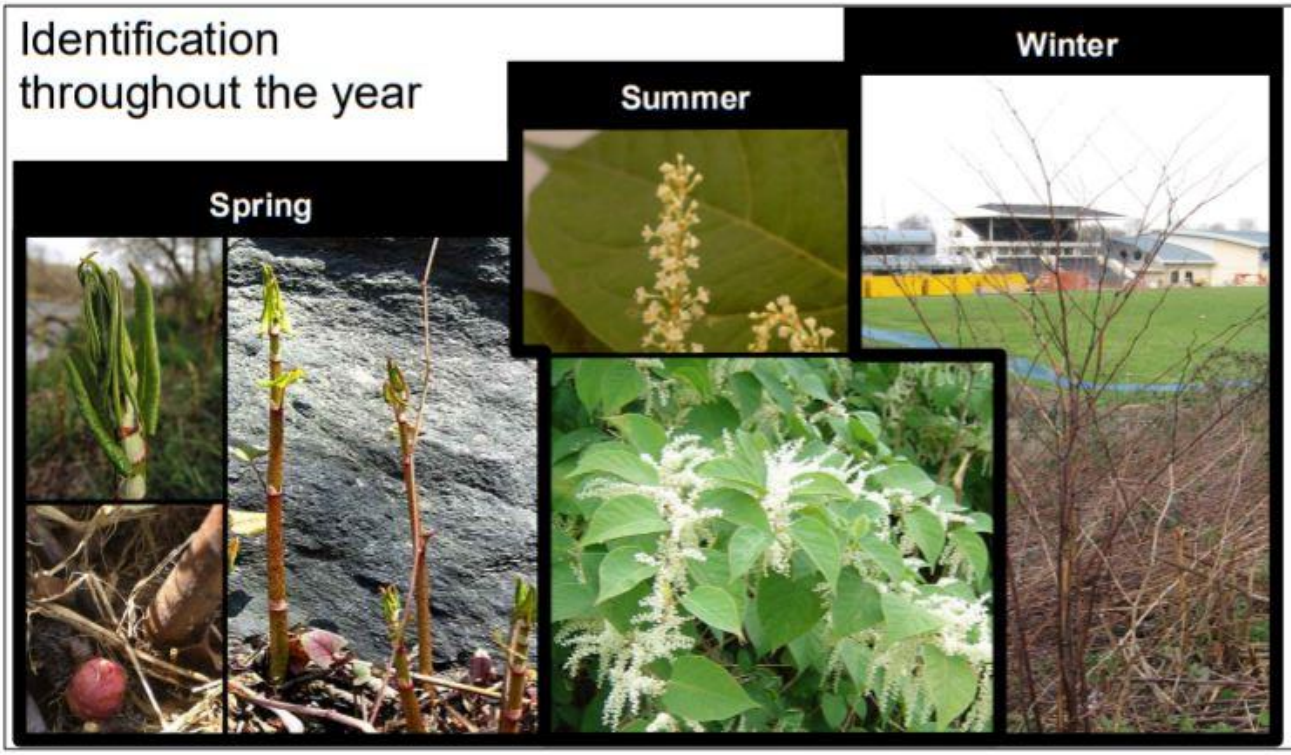






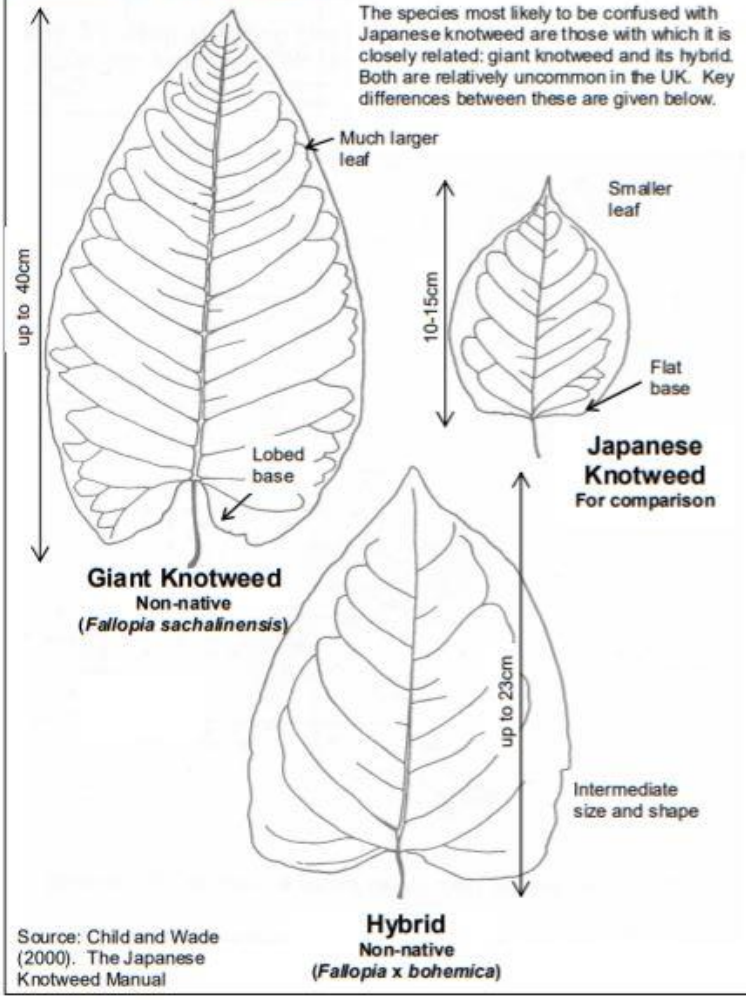


Identification throughout the year



Similar Species

The species most likely to be confused with Japanese knotweed are those with which it is closely related: giant knotweed and its hybrid. Both are relatively uncommon in the UK. Key differences between these are given below.



Source: Child and Wade (2000). The Japanese Knotweed Manual

Distribution

Widespread and common across the UK. Notably extensive infestations are found in the south-west of England, south Wales and Greater London, however similarly extensive populations can also be found elsewhere.



Source: NBN Gateway. Check website for current distribution

References and further reading:

Blamey, M, Fitter, R and Fitter, A (2003) *"The Wild Flowers of Britain and Ireland. The Complete Guide to the British and Irish Flora."* A & C Black

Child, L E and Wade, P M (2000) "The Japanese Knotweed Manual". Packard

Environment Agency (2006) *"The Japanese Knotweed Code of Practice"*. Environment Agency

Preston, C D, Pearman, D A and Dines, T A (editors) (2002) *"New Atlas of the British and Irish Flora"*. Oxford University Press

Stace, C (1999) *"Field Flora of the British Isles"*. Cambridge University Press

Photos from: Olaf Booy, Helen Parish, Max Wade, Vicky White

4 CONTROL OF INVASIVE AND PROBLEMATIC PLANTS

4.1 Treating invasive and problematic plants with herbicide can be a very effective method of control. Though it should be noted that with invasive or problematic weed species it is expected that repeat applications would be required to either reduce the vigour of the infestation or as part of a treatment programme for an established seed base

4.2 *Using herbicides* The person doing the spraying must hold a certificate of technical competence for herbicide use or work under the direct supervision of a certificate holder. The sprayer must also comply with the pesticide product label and meet all of its conditions

4.3 Herbicide applications adjacent to or within a watercourse will be subject to Environment Agency approval Aquaherb01, and must be in please prior to treatments being undertaken

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5.0 BIO SECURITY AND ON SITE PRECAUTIONS

5.1 Warning signs or fencing shall be erected, including suitable buffer zone, to identify infestations to other site personnel. Additionally, other contractors working on site will be briefed to familiarise them with the appearance of the plant.

5.2 Unauthorised access disturbance or removal of contaminated material will be prevented.

5.3 Restrictions regarding access to the infested areas and any applicable restrictions regarding movement of plant and vehicles, shall be communicated to all on-site personnel.

5.4 Should access to the area be required during the treatment period, advice should be sought prior to entering.

5.5 Vehicles, equipment and footwear should be inspected and cleaned prior to exiting contaminated areas.

5.6 Where herbicide is to be utilised in the control and management of invasive weed species herbicide selection will be dependent on each area taking into consideration surrounding desirable vegetation and environmental considerations.

5.7 Where invasive or problematic weed species are identified on adjacent land, owners should be informed so that appropriate actions can be taken to prevent re-infestation.

5.8 Any imported material should be from a known source and be traceable to the point of origin. Imported material containing invasive weeds will invalidate any warranty offered

5.9 PLEASE NOTE: Task and site specific method/risk and COSHH assessments will need to be carried out for each specific task being undertaken.

6.0 PROPOSED WORKS

6.1 Once possession of the site is taken all areas of infestation should be clearly marked and identified to site personnel.

6.2 A suitable exclusion zone or warning signs should be marked out and erected around areas. As a precautionary measure works within these areas will be managed under a separate risk assessment depending on the tasks to be undertaken.

6.3 Japanese Knotweed will be treated via application of herbicide to reduce the vigour and potential spread of the plant. It is expected that a glyphosate based product would be utilised

6.4 As part of remediation works Japanese Knotweed within the development footprint will be excavated and placed in a lined geotextile cell within landscaped areas of the site in accordance with RPS178 or removed from site to licensed landfill facility.

6.5 A barrier membrane is to be installed along the development boundary with the railway embankment as required

6.6 Further monitoring of the site is to be undertaken throughout the development period prior to implementation of a warranty period

6.7 Estimated timescale of works

Site Name: Riverpark Rd	**Client: Kellen Homes Ltd**	**Ref: NIG/DN20196 B**
Location: Manchester	**Description of works**	**Undertaken by**
April – October 2024	On-going monitoring of site during development period	NEL
Spring 2025	Excavation of JK within development footprint as part of remediation works Burial in areas of soft landscaping on site in accordance with RPS178 or removal from site to licensed landfill facility Barrier membrane to be installed along site boundary prior to installation of retaining structure	NEL Client appointed remediation contractor
April – October 2025	On-going monitoring of site during development period	NEL
April – October 2026	On-going monitoring of site during development period	NEL
April – October 2027	On-going monitoring of site during development period	NEL
October 2027	Handover to ManCo. For on-going monitoring and treatment as required. Implementation of warranty period on JK areas	NEL

NB: Timescales are approximate and will align with the build out programme of the site, with handover of on-going maintenance and management to ManCo or individual properties within the development once construction is complete

7.0 SITE PHOTOS 18th Jan 2024



Pic 1 – Stunted JK growth JK1



Pic 2 – JK2 on railway embankment

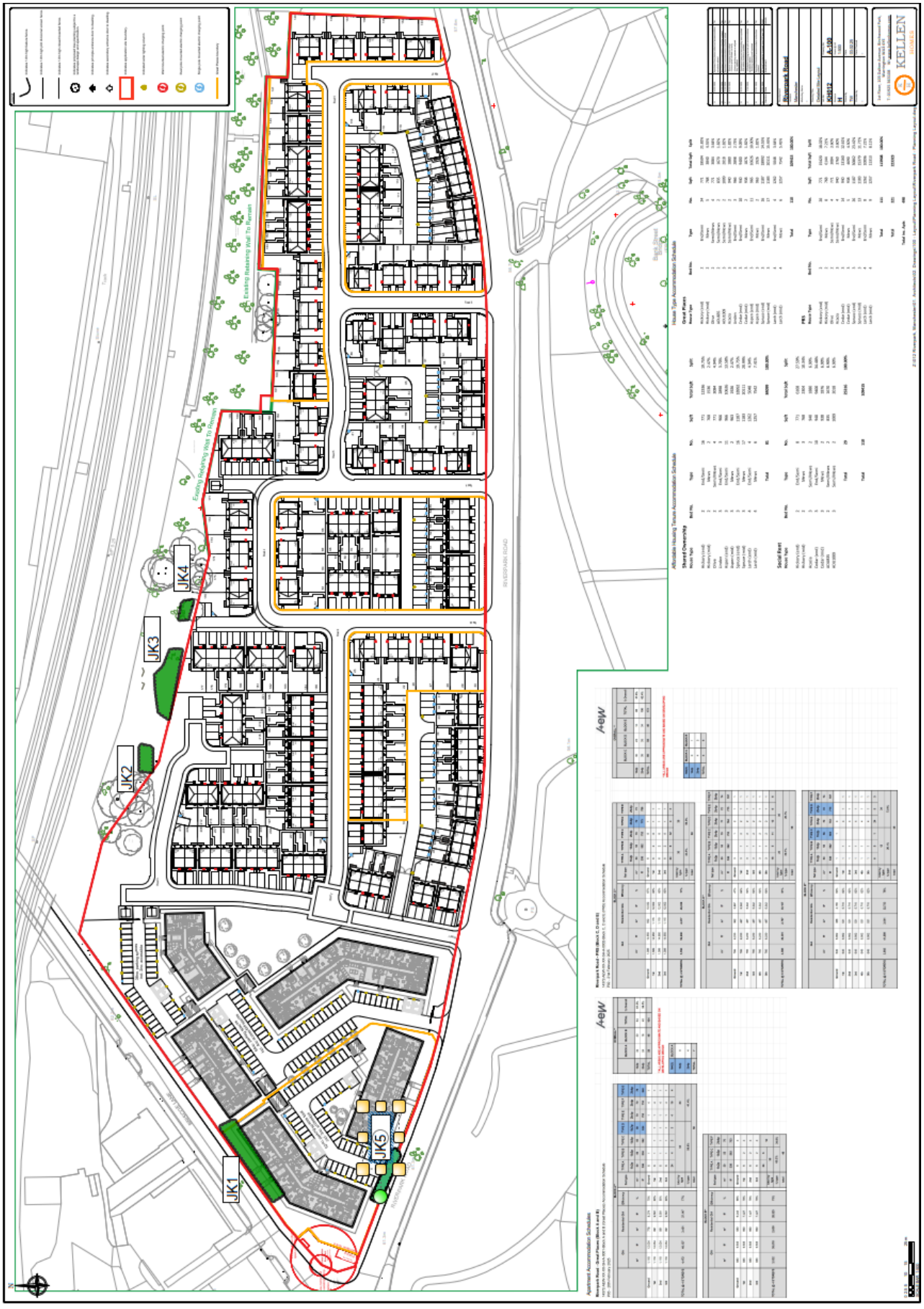


Pic 3 – JK3 on railway embankment



Pic 4 – JK4 on railway embankment

8.0 PROPOSED SITE LAYOUT INDICATING APPROX LOCATIONS OF INVASIVE SPECIES



9.0 WORKS UNDERTAKEN AND CONCLUSIONS

Site Name: Riverpark Rd	Client : Kellen Homes Ltd	Ref : NIG/DN20196 B
Location: Manchester	**Description of works**	**Undertaken by**
14-09-24	Initial herbicide application to all areas of JK identified within site	NEL
17-10-24	Follow up herbicide application to all areas of JK identified within site	NEL
24-10-24	Follow up herbicide application to all areas of JK identified within site	NEL

10.0HEALTH AND SAFETY

10.1 Nightingale Environmental Ltd operates by the below Health & Safety guidelines

10.2 Relevant health and safety legislation must be observed in the UK. The relevant regulations are outlined in *The UK Pesticide Guide* produced annually.

10.3 The legislation relevant to the use of herbicides is: -

- The *Control of Substances Hazardous to Health Regulations* (COSHH) 2001. All operatives must comply with the regulations and wear protective clothing and observe a strict code of hygiene of washing hands before drinking and eating.
- The *Control of Pesticides Regulations 1986* under the *Food and Environment Protection Act* (FEPA) 1995.
- *Pesticides: Code of Practice* 1990 (Published by MAFF/HSE).

10.4 Health and Safety Guidelines

- All operatives must hold a Certificate of Competence for herbicide application (NPTC) or be under the direct supervision of qualified operative prior to commencing a spraying programme.
- All operatives must act responsibly in the storage and handling of the herbicide. The disposal of the herbicide and empty containers must be carried out by operatives in a responsible way.
- Any spillage must be guarded against and if occurring shall be dealt with and cleaned up. All operatives must carry a basic first aid kit.
- The area of work should be protected from the general public during the treatment and use of the herbicide.
- The use of herbicides should be carried out in compliance with the product label instructions.
- Advice on herbicide application should be sought for a BASIS registered advisor

10.5 Other legislation relevant to the control of non-native invasive weeds includes the following.

- *Town and Country Planning Act 1990.*
- *Highways Act 1980.*
- *Water Resources Act 1991.*
- *The Waste Management and Licensing Regulations 1994.*
- *The Landfill (England and Wales) Regulations 2002.*
- *The Control of Pesticides Regulations 1986 (under the Food and Environment Protection Act 1985).*
- *The Control of Substances Hazardous to Health Regulations 2001 (COSHH)*

11.0 REFERENCES

Renals, T. and Rene, P. (May 2001) *Code of Practice for the Management, Destruction and Disposal of Japanese knotweed, Version 1.*
The Environment Agency.

Available to download: www.environment-agency.gov.uk

Child, L. and Wade, M. (2000) *The Japanese knotweed Manual*
Packard Publishing Limited, Chichester.

Property Care Association
Management of Japanese Knotweed for Surveyors

JAPANESE KNOTWEED AND RESIDENTIAL PROPERTY RICS guidance note, UK 1st edition, January 2022
Effective from 23 March 2022

Treatment and Disposal of invasive Non Native Plants RPS 178
Updated 1st August 2023

Web Sites

Non Native Species Secretariat
www.nonnativespecies.org

Nature Conservation
www.nationaltrust.org.uk

Japanese Knotweed Control Forum
www.ex.ac.uk/knotweed

Netregs
www.netregs.gov.uk