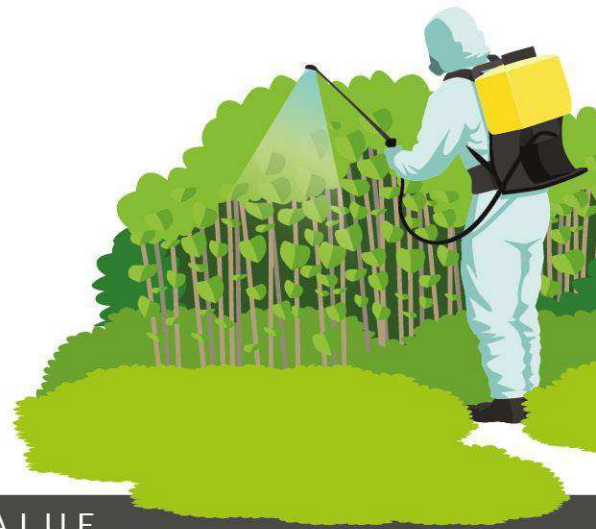


HOWARD STREET, RADCLIFFE (ELPM) JAPANESE KNOTWEED MANAGEMENT PLAN

Job Number: IPM 21 1004

Date of Plan: 20/07/2022

Client: Great Places Housing Group



INCREASING LAND VALUE

LK
GROUP

DOCUMENT VERIFICATION

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1 OVERVIEW

1.1 Project Description:

The LK Group was asked to provide a survey, management plan and method statement for Japanese Knotweed (JK) within the site of the propose new residential development at Howard Street, Radcliffe.

1.2 Invasive Species

1.2.1 Site Visit

Following receipt of the site plan indicating the presence of Japanese Knotweed on site, our survey on the 25th January 2022, confirmed the location and quantified the area affected by the infestation.

The Japanese Knotweed is located in one area within the site and on the northern boundary, see Figure 1 below:



1.2.2 Japanese Knotweed:

The recommended management plan is to undertake a “controlled excavation” of the material within the development area followed by transfer to licensed landfill. As the infestation exists on the northern boundary of the site it may be necessary to install a geo-textile root barrier on the boundary to prevent future re-infestation of the site should the Japanese Knotweed rhizome network extend beyond the boundary.

Following the works, we will continue to monitor the area and treat the remaining Japanese Knotweed on site for a period of 4 years. We will issue reports and photographs following each visit.

2 SEQUENCE OF OPERATIONS

The sequence of operations shall be as follows:

- The demarcation and isolation of all contaminated areas to prevent any spread from other contractors.
- Excavation of Japanese Knotweed.
- Transfer of arisings to licensed landfill by 8-wheel wagon.
- Possible installation of geo-textile root barrier membrane.
- Ongoing herbicide monitoring and treatment programme.

3 WORKING AREA

The working area shall allow sufficient space for operatives to work safely adjacent to the site plant (i.e. 360° hydraulic excavator & 8 wheel wagon) and will include:

- The areas contaminated with JK
- The wagon loading area

3.1 Controlled Excavation

Before any ground disturbance is carried out a Permit to Dig form will be filled out (**See Appendix 1**).

The areas subjected to the remediation program shall be excavated with a ditching bucket on a 13 tonne 360° excavator. The detailed method proposed is as follows:

- All JK plants shall be demarcated before any work takes place on site to prevent any spread from existing contaminated areas to 'clean' areas from plant and operatives on site.
- Where practical, excavate from outside the contaminated area to the extent of the JK rhizomes. This reduces the likelihood of getting contaminated material on the tracks and spreading around site. Where it is not possible the tracks will be cleaned in situ before the excavator moves elsewhere on site.
- The excavated material is then stockpiled to a waste management area.
- When an area or section appears to be clean, a careful search of the surface shall be carried out by experienced personnel. If no JK rhizomes are found a further 100mm layer shall be removed and moved to the stockpile area.
- If no more JK is found, a further 200-300mm of material shall be loosened and searched. If on this third check no rhizomes are found, the material shall be left in-situ.
- If more JK material is found at any stage, the whole process is repeated.
- A root barrier membrane may be installed to the boundary if the Japanese Knotweed rhizome network extends beyond the boundary.
- The edges of the excavations shall be battered back to a safe angle (approximately 30°), to ensure safe working conditions for the site operatives.

Information related to the excavation of the contaminated area shall be recorded using the Dig Control Form (**see Appendix 2**). All occurrences on site will be recorded in the Foreman's Diary of Works Form (**see Appendix 3**).

3.2 Monitoring and Spraying Program

A spraying and monitoring programme should be implemented to inspect the whole site to review any unexpected regrowth. The monitoring program, which includes spraying as required, is recommended to last for a three to four-year period.

The recommended monitoring program is as follows:

- Year 1 – at least 2 visits
- Year 2 – at least 2 visits
- Year 3 – at least 2 visits
- Year 4 – at least 2 visits

The application of herbicide shall be undertaken by knapsack sprayers, using telescopic or extended lances. Pressure limitation valves will be set at 1 Bar and coarse droplet nozzle shall be used to reduce drift to a minimum. Glyphosate bioactive will be used in all circumstances within this site.

Information related to the monitoring and spraying programme shall be recorded using the Site Monitoring and Spraying Log (**see Appendix 4**).

4 OPERATIONAL RISK MANAGEMENT

In order to prevent cross-contamination, tracks/wheels and compartments of machines in addition to any tools used on the site shall be inspected and cleaned as required before moving from the contaminated areas.

IPC requires that information relating to the physical and chemical nature of the ground containing the JK areas are provided. The information will assist IPC in its Health & Safety plan for the site and will also ensure that no preferential pathways will be created for contaminants that may be present in the ground.

All operatives shall wear appropriate PPE.

5 ADDITIONAL SERVICES

In addition to the services described, The LK Group shall provide the resources and management to:

- Manage and control the JK on site to enable other trades and construction work to undertake their activities with the least hindrance.
- To provide documentary and photographic evidence to be able to demonstrate to any legislative or other interested bodies that due care has been taken to address all issues relating to the on-site Japanese Knotweed problem.

The site will be monitored for a minimum of 4 years post completion with relevant reports being issued where necessary.

5.1 RICS Risk Assessment

The RICS risk assessment takes into account the real risk to a property and addresses some of the concerns of the lenders and insurance companies.

The adjacent table defines a category for risk depending on the distance between a habitable space and the nearest stand of Japanese Knotweed.

Based on this assessment tool, as the Japanese Knotweed will be removed in its entirety, it does not fall into any of the categories following the works.

It is also important to note that the area of Japanese Knotweed are under a monitoring and treatment programme following the removal works.

Table 1: Japanese Knotweed risk categories

Category	Descriptors
4	Japanese Knotweed is within 7 metres of a habitable space, conservatory and/or garage, either within the boundaries of this property or in a neighbouring property or space; and/or Japanese Knotweed is causing serious damage to outbuildings, associated structures, drains, paths, boundary walls and fences and so on. Further investigations by an appropriately qualified and/or experienced person are required.
3	Although Japanese Knotweed is present within the boundaries of the property, it is more than 7 metres from a habitable space, conservatory, and/or garage. If there is damage to outbuildings, associated structures, paths and boundary walls and fences, it is minor. Further investigations by an appropriately qualified and/or experienced person are required.
2	Japanese Knotweed was not seen within the boundaries of this property, but it was seen on a neighbouring property or land. Here, it was within 7 metres of the boundary, but more than 7 metres away from habitable spaces, conservatory and/or garage of the subject property.
1	Japanese Knotweed was not seen on this property, but it can be seen on a neighbouring property or land where it was more than 7 metres away from the boundary.

6 HEALTH & SAFETY MANAGEMENT PROPOSALS

All staff shall wear the appropriate safety clothing, including protective headgear, safety boots, and high-visibility jackets/vests.

The work shall be carried out in conformity with the Requirements of the Health and Safety Executive Guidance Notes:

- No. GS6 'Avoidance of Danger from Overhead Electrical Cables';
- No. HS(G) 47 'Avoiding Danger from Underground Services'.

Spraying shall be undertaken by operatives qualified to recognised national standards and shall follow all training guidelines and label recommendations and DEFRA off-label recommendations, where applicable. Spraying activities shall comply with the relevant legislation including:

- The *Control of Pollution Act 1974*;
- The *Control of Pesticides Regulations 1986*;
- The *Code of Practice for the Use of Approved Pesticides in Amenity Areas 1988*;
- The *Control of Substances Hazardous to Health Regulations (COSHH) 2004*;
- The *Control of Pesticides Regulations under the Food and Environment Protection Act (FEPA) 1995*;
- And, *Pesticides: Codes of Practices 1990*.

6.1 Operatives Confirmation

All operatives will sign and date below which states that they have read and understood this Method statement and associated Risk Assessments

Name	Signature	Date
.....		
.....		
.....		
.....		
.....		
.....		
.....		
.....		

7 APPENDICES

7.1 Appendix 1 – Permit to Dig Form



The LK Group
Eton Business Park
Eton Hill Road
Greater Manchester
M33 2WJ

Tel: 0161 763 7200
Fax: 0161 763 7318

Project:.....**Date:**.....**Time:**.....

Location:.....

Section 1 (to be completed by IPC Site supervisor)

- Have current drawings showing location, type and status (i.e. live or dead) of all under-ground services been provided
.....Yes/No
- Has a visual inspection of the dig area been carried out
.....Yes/No
- Has a Cable Locating Device (CAT) been used to sweep the area to establish under-ground services
.....Yes/No
- Are all operatives conversant with safe digging practices?
.....Yes/No
- Are appropriate tools available
.....Yes/No

Any other precautions (if any)

I hereby declare that the above precautions will be put into effect prior to the work commencing

Name:**Sign:****Date:****Time:**

Section 2 Control

I am satisfied that the precautions identified above are satisfactory for the works to be undertaken

Digging may proceedYes/No

Further action required: (Specify)

Name:**Sign:****Date:****Time:**

Section 3 Completion

I am satisfied that the work area has been left in a safe condition and therefore this permit is hereby cancelled

Name:**Sign:****Date:****Time:**

7.2 Appendix 2 – Dig Control Form



The LK Group
Eton Business Park
Eton Hill Road
Greater Manchester
M33 2WJ

Tel: 0161 763 7200
Fax: 0161 763 7318

Site Name:

Job Number:

Area/ Section	(A) Dig to visual extent of JK & search	(B) Dig a further 100mm layer & search	(C) Dig & loosen a further 200-300 & search	Arising's fate	Initials	Date
...						
...						
...						
...						
...						

I confirm that the works to the above site have been carried out according to the method statement for Japanese Knotweed treatment, submitted for works on this site.

Supervisor for IPC Name:..... Date:..... Signed:.....	Client representative (if applicable) Company:..... Name:..... Date:..... Signed:.....
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7.3 Appendix 3 – Forman's Diary of Works



The LK Group
 Eton Business Park
 Eton Hill Road
 Greater Manchester
 M33 2WJ

Tel: 0161 763 7200
 Fax: 0161 763 7318

Job No:	Address:	Client:
Date started:	Foreman:	

Date	Time Started	Persons Present	Notes	Time Finished

7.4 Appendix 4 – Monitoring Program Form



The LK Group
 Eton Business Park
 Eton Hill Road
 Greater Manchester
 M33 2WJ

Tel: 0161 763 7200
 Fax: 0161 763 7318

Site:	Client:	Date:
Job No:	Visit No:	Time on site:
Operatives Names:		Time off site:

Area No	Est % or m ² live	Details	Photo No

Herbicide used	Rate ml/litre	No of (L) mix used	Total Chem	Wind	Weather

Operatives Signature:	Client representative (when applicable)
	Client signature (when applicable)