



## **METHOD STATEMENT**

**07.12.2015**

**SITE: West Way, South Shields**

**CLIENT: South Tyneside Housing**

**ACTIVITY: Excavation of Japanese Knotweed Root System (Rhizome)**

*Anticipated Start Date: 11.01.2016*

*Anticipated Duration: 4-5 days*

### **General**

It has come to light that the vertical root barrier installed previously is not in the correct position. The top requires moving back approximately 1.5m towards the bottom of the embankment/woodland area to accommodate the services trench and footpath to the rear of plots 9-15.

JKSL have therefore been appointed to undertake these works which we anticipate will be undertaken in January 2016.

### **Site set up**

JKSL will have 2-3 members of staff on site at any one time and will be using basic welfare facilities provided by Keepmoat.

Our staff vehicles will be parked on West Way outside the site with the other contractors in such manner that no traffic will be obstructed.

We assume that the working hours will be as follows:

Weekdays – 07:00 – 18:00

Saturday - 07:00 – 16:00

### **PPE**

Full personal protective equipment will be worn by our operatives at all times. This includes the following:

- High visibility vest or jacket
- Hard Hat and Ear defenders (defenders where necessary only)
- Steel toe capped boots
- Gloves
- Safety Glasses (where necessary only)
- High visibility trousers may also be worn at times although this is not compulsory

### **Qualifications**

Our operatives will be appropriately qualified to undertake the task at hand and will have their qualifications on their person at all times.

Our SSTS qualified person on site will be Pete Whelan or Phil Whelan.



## **Environmental issues**

All works will be undertaken in a controlled manner, as set out in this document, to ensure that they do not disperse Japanese knotweed rhizomes throughout the rest of the site.

As our operatives will be working within an infestation in an area to be agreed, near to the infestation area an inspection point will be created. This will be clearly marked out and lined with geotextile for the inspection and cleaning of all hand tools. A foot wash facility will also be installed and used by each operative every time they leave the contaminated area to ensure that no rhizomes are dispersed via muddy boots.

This will ensure that cross-contamination doesn't occur and the Wildlife & Countryside Act (1981) isn't compromised.

## **Machinery Security**

At the end of every working day all JKSL machinery will be fitted with vandal guards. The excavator will have to be left within the contaminated area overnight or cleaned off and moved to the storage area next to the welfare cabin/in a set location.

We propose to refill all machinery at the end of each working day or when necessary using a bowser or diesel drums which will be located in the storage area. This will be fitted with a padlock which only Phil Whelan or our foreman will have the key to it.

## **Deliveries**

JKSL will be arranging for a small 360 tracked excavator and a small dumper truck to be delivered to site. All deliveries will be arranged with JKSL's contracts manager Phil Whelan, or the relevant foreman, to escort them to the entrance way.

## **Machinery**

All machinery used on site will be hired and have all relevant paperwork within the cab or in the possession of JKSL's senior site foreman. All operatives will have relevant qualification details on their persons at all times. During the works high visibility warning signs will be put in place as well as banksmen where necessary.

## **Preparation**

It is assumed at the time of writing this document that the existing tree protection fencing would be dismantled and moved further back towards the embankment (approximately 2m to give us enough working space). These works are to be undertaken by Keepmoat following a clean site policy as per our recommendations.

It is our understanding that these works and our own excavation works will be undertaken in the presence/with the approval of Tristram Gray.



Keepmoat are to mark out the excavation dimensions or as a minimum the line of the new rear garden fences for JKSL to work from.

Full, suitable PPE to the task in hand will be worn at all times.

All relevant waste transfer information will be submitted to the client once collected after the works have been completed.

### **Creation of lined loading area**

A loading area will be created by JKSL next to the community building in the west section of the site. This area will be lined with a non-woven needle punched geotextile membrane prior to importing any materials.

The loading area is already effectively fenced off by Keepmoat thus we will erect appropriate signage in this area.

#### *Transferral of Material*

The material will be supplied to site and will be transported to the installation site by use of labour only.

#### *Preparation of Material*

The material will be unwrapped of its protective cover immediately prior to works commencing and the roll will be manoeuvred into position by means of site machinery or by hand by site operatives, depending on the size and weight of the sections to be moved. The geotextile will be cut to specific size in-place using Stanley fixed hook blade knife.

#### *Welding of Material*

Using a 240V petrol generator as a power source with a step-down transformer to provide 110V, the light-weight portable heat wedge welding machine will be manoeuvred to position to heat weld all seams across the specified area to provide a 'one-piece' geotextile cover.

Temperature and speed will be specific to site conditions and test welding will be performed to give optimum seam welds. These test welds are inspected for integrity to inform temperature and speed settings.

### **Excavation of contaminated material**

No machine work will commence on site until the safety measures laid out in the associated Risk Assessment have been put in place and until Keepmoat have provided full service drawings. As an additional precaution JKSL will check the area using CAT scan equipment.

JKSL propose to excavate in 250-300mm layers then re-scan if necessary. If deemed necessary by our foreman trial pits will be excavated by hand to determine the depth of services highlighted during the scan.



Excavations will commence once a permit to dig has been issued by Keepmoat or as per their specific site procedure.

We will then excavate the following materials:

- 300mm x 450mm from lamppost/service trench in-between the garden fences and the footpath (behind plot 9-15)
- 1200mm x 300mm from footpath footprint (behind plot 9-15)
- New vertical root barrier trench (if the old barrier is not in a state to weld the new barrier too)
- Trench along the side of the previous barriers installed behind plots 21-23 and 29-33 (we are waiting to be informed by Keepmoat's site manager if it is necessary to remove any materials from this area. If it is then the number of wagons to be removed will be re-measured).

JKSL follow stringent methods to avoid any spreading of contaminated material across the site during excavation and removal from site. Specifically the excavator used to remove the rhizome, remains in the marked area until completion, upon which the vehicle is fully decontaminated, as is any machinery used to move material or any vehicle that may enter a contaminated zone.

### **Relocation to loading area**

Vehicles are to move and remain within the site boundary only - JKSL will ensure that the only time machinery leaves the site boundary is when it is to be removed from site or for security reasons.

A small dumper truck will be used to move contaminated material to the prepared loading area. This will not be over-loaded (maximum 75% capacity used) to avoid any cross-contamination issues. The dumper will never drive on contaminated material within the excavation or screening area to avoid rhizomes being caught up on the wheels.

The machine loading the dumper will sit on contaminated material at the edge of the excavation area. Once this area has been remediated the dumpers can enter the area travelling on remediated land working along the infestation. This will be controlled by the excavator driver as well as the dumper driver to ensure that the dumper doesn't travel too far. JKSL will erect a small amount of orange barrier mesh fencing and signs to mark out the loading area/stopping area for the dumpers. This can be moved back across the excavation area as its remediated.

The dumper trucks will follow the designated haul route marked out by our contracts manger and/or the client on site.

It is anticipated that our plant movements will not conflict with any other contractors on site as we will be working to the rear of the site out of the way of others.

### **Removal from site**

While the above operations are taking place JKSL will be removing the material from site to a licenced landfill in grab wagons.



It is anticipated that the wagons will enter the site off West Way and reverse to the loading area under the guidance of JKSL's banksmen in order to collect the materials. JKSL contract manager or foreman may well adapt this slightly during the works to make the process more practical if necessary.

The wagons will enter the site and position themselves next to the contaminated area on the loading area without coming into contact with any contaminated materials.

The appropriate warning signage will be installed prior to any works commencing.

The loaded wagon will leave site onto West Way via the same route.

Please note that we have not allowed for a road sweeper within our package of works.

All wagons will be covered and will not leave site until the cover is secured in place.

### **Root Barrier Systems**

A new vertical and surface root barrier will then be installed in the base of excavations to the rear of plots 9-15.

A new vertical root barrier will be installed in front of the existing barriers behind plots 21-23 and 29-33 (assuming the existing barriers are in the correct position).

#### *Securing Geotextile*

JKSL will temporarily secure the root barrier along the top of the excavation face using small wooden stakes/pegs and ties.

Backfill of material to completely cover the exposed face of the geotextile must be carried out within 2 weeks. If this is not done, then exposure to sunlight will mean that the specification of the geotextile cannot be guaranteed, and potential migration of plant rhizomes is a possibility.

### **Backfill**

The excavation is to be backfilled by the client at a later date however where possible we will grade it off.

### **Decontamination of machinery**

After each time a machine has been working with materials containing Japanese knotweed rhizomes it will be fully decontaminated.

All cleaning of machinery is undertaken by hand using shovels, spades and stiff brushes – a mobile jet wash is then used to clean off the remaining material. All debris are then collected by hand and disposed of in the receptor area. Care is taken to ensure that the angle of the water is facing downward so as not to disperse small fragments of material any distance.



The cleaning of machinery will also not take place near road gullies – only undertaken at location of excavation site.

**Works completion report**

At the end of the works JKSL will provide a brief report on the works implemented, digital photos of the barriers installed and the waste transfer information.

**Author: Alexander Dayes**

**Position: Managing Director – Japanese Knotweed Solutions Ltd**

**Signed:**

**Dated: 07.12.2015**

**Declaration**

I have read and understood the above Method Statement:

Print Name	Date	Signature