Hewitt&CarrArchitects

Knotweed Method Statement

21 High Street, Cheadle, Stoke-on-Trent. Caldmore Taverns Ltd.

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1.0 Introduction

This statement seeks to provide information regarding the removal, treatment and further management of Japanese Knotweed found on site at the rear of 21 High Street, Cheadle.

The first priority is to establish accurately the extent of the stand on our site, which is significantly smaller than the stand on the adjacent site.

2.0 PLANNED ACTIONS

The recommended 'least-cost' but practical solution uses a combination of herbicide treatment and knotweed barrier as no invasive works are to take place in this location:

- 2.1. The herbicide treatment programme would consist of a first application to all undisturbed stands, made in late August/early September 2016. This would be followed by a winter visit to clear dead material and ensure future access to the stands, and a herbicide application in mid-June 2017. The site would be inspected and a brief progress report prepared, in late May or early June.
- 2.2. Before site disturbance commences, peg out and record the extent of the knotweed, cutting and removing the competing vegetation to ground level before setting out the works. Knotweed growth from the current season shall not be disturbed. Dead knotweed stems (ie brown brittle material from previous years' growth) and material from other species such as bramble may be mulched on site.
- 2.3. Lay proprietary knotweed barrier in line with method statement below.
- 2.4. Implement a herbicide regime to the remaining knotweed until fully eradicated. Only non-persistent herbicide containing glyphosate is to be used. The programme would be expected to take 3 years to achieve eradication, and during this period the ground would remain bare of vegetation.

3.0 METHOD STATEMENT: INSTALLATION OF KNOTWEED BARRIER

- 3.1. Equipment: Proprietary knotweed barrier Timber pegs to which barrier may be fixed until void is backfilled.
- 3.2. Preparation of surface to receive barrier: Trim surface to remove protrusions, particularly stones and debris, which could puncture the barrier. Horizontal ground may be rolled to achieve this. Clean roller thoroughly before removing from infested area.

- 3.3. Blinding layers: Where the prepared surface is not free from protrusions or sharp objects, a blinding layer of selected site-won fill, imported stone-free sand or a woven geotextile will be laid according to availability and the gradient of the surface. Before the barrier is covered with fill, a second blinding as above will be installed to protect the barrier from puncture by the fill.
- 3.4. Barrier fixing: The barrier will be laid as a single sheet where possible or as overlapping jointed strips. Jointing by means of manufacturer-supplied double-sided tape. Barrier fixed to the face of an excavation or at a boundary will extend a minimum of 150mm above ground level, and be attached to timber pegs so that it remains visible.
- 3.5. Record photographs of the barrier location will be taken to ensure that contractors carrying out further activity within the area are aware of its location and ensure that it is not damaged or disturbed by future works.

4.0 EVALUATION OF ACTIONS

- 4.1. The actions will be evaluated at two stages:
 - 4.1.1. Completeness of initial herbicide treatment and installation of specialist knotweed barrier.
 - 4.1.2. Completeness of knotweed eradication in treatment area (by annual inspection and recording, before hand-over to occupier for long term maintenance).

5.0 KNOTWEED REMOVAL

Should knotweed need to be removed from the site then the following methodology for both its excavation and its transportation should be followed:

5.1. EXCAVATION OF KNOTWEED FOR DISPOSAL

5.1.1. Equipment:

CAT scanner 3600 excavator with toothed and smooth-lipped buckets and digging capacity to 2m depth Additional bucket(s) for use with non-infested materials on site (to avoid cleaning work) Hand tools for cleaning buckets and tracks to remove all soil and knotweed fragments Hand tools (shovels, stiff brushes) for cleaning hardstanding after stockpiling or loading Aerosol paint for ground marking. High-visibility tape or other means of marking voids for safety when unattended.

5.1.2. Planning:

Ensure area is CAT scanned and free from services before commencing excavation Arrange work so that machine stands outside the infested area where possible, and does not track over or into disturbed ground containing knotweed. Clean fill may be used to create a blanket over infested ground on which excavator stands to work. Arrange work so that stockpiling for loading is within infested area, or on hardstanding that can be thoroughly cleaned on completion (eg tarmac). Arrange work so that loaded bucket slews across infested ground, hardstanding or geotextile sheet when loading. All spillage to be thoroughly cleaned before completion.

5.1.3. Excavation:

Commence excavation near the visible crowns, and remove this material separately in designated loads. Continue with remainder, working up to required depth within the infested area. Complete excavation under close supervision, taking the final layer from each part of the void when no further spillage or infested material can fall into it. This avoids repeated 'scraping' of void to clean it, increasing the volume of material taken out. Use toothed bucket where tree stumps or other obstacles require removal, and pull out to leave soil behind.

5.1.4. Stumps and other obstructions:

Pull out and leave within the infested area until inspected by supervisor for knotweed. Load as infested material or dispose of elsewhere as instructed.

5.1.5. Clean-up:

Clean all buckets thoroughly before using for non-infested material. Clean tracks of excavator before moving off infested ground onto clean ground, and dispose of cleanings as infested material. Thorough inspection of working area for any remaining spilt material.

5.2. LOADING KNOTWEED FOR ROAD TRANSPORT OR ON SITE

- **5.2.1. Planning: Arrange work so that vehicle stands on clean ground (preferably** hardstanding) close to loading machine, and slew of bucket is over infested area, hardstanding or geotextile. Arrange work so that vehicle access is relatively level and ground disturbance is minimised.
- **5.2.2. Loading and transport: Load vehicle no more than 80% of capacity to avoid** any risk of material spillage. Loading bucket to grade or firm within body of vehicle to minimise movement of material in transit Vehicle to control speed and route so that spillage of material is prevented ALL road vehicles must be properly sheeted before leaving site Wheel cleaning and control of mud on road is the responsibility of the site manager.

5.2.3. Stockpile area:

Designated area to be prepared to accommodate anticipated volume. Margins of area to be level or bunded to prevent erosion of infested material (eg in run-off)

5.2.4. Stockpiling before loading road transport:

Arrange deposition and spreading of material so that transport vehicles run on clean ground at all times (to avoid knotweed spread on tyres) Excavator / dumper to place material in stockpile location. Excavator / dumper should not

track over the transport vehicle route, or leave the treatment area until completion unless tracks are thoroughly cleaned Material from the crowns of each stand (ie first excavations) to be kept and loaded separately for disposal (Higher rate landfill tax payable).

5.2.5. Clean-up:

Clean all buckets thoroughly before using for non-infested material. Clean tracks of excavator before moving off infested ground onto clean ground, and dispose of cleanings as infested material. Thorough inspection of working area for any remaining spilt material.