

Japanese Knotweed Solutions Ltd

WORKING ON BEHALF OF
Middleton Sheet Metal Co Ltd

Invasive Plant Species Management Plan document

for

1 Hanson Close, Middleton, M24 2HD

Prepared by:



Japanese Knotweed Solutions Ltd

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JKSL Ltd unless written approval granted*

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DATE	14-10-2024
REPORT REFERENCE	JK24-0035-241014-MP

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Table of Contents

INTRODUCTION	3
MANAGEMENT PLAN OBJECTIVE	4
SITE INFORMATION	5
Site development	6
SURVEY RESULTS	7
SITE PHOTOGRAPHS	9
JAPANESE KNOTWEEED (General Information)	12
HORSETAIL (General Information)	14
CONTAMINATION PATHWAYS	15
INVASIVE SPECIES RISK ASSESSMENT	16
IMPACTS ON DEVELOPMENT PLANS	19
TREATMENT OPTIONS	20
Remediation Option to be implemented	20
Alternative Remediation options	25
EVALUATING SUCCESS OF CONTROL METHODS	26
SCHEDULE OF WORKS	27
Excavation-removal works	27
Ongoing 5 year programme	27
Ongoing 3 year programme (Horsetail)	28
APPENDIX 1	29
Illustrative masterplan	29
APPENDIX 2	30
Drawing JK24-0035-01 Rev A (invasive non-native plant species location plan)	30
APPENDIX 3	31
Drawing JK24-0035-02 Rev A (Anticipated extents of excavation and vertical root barrier)	31
APPENDIX 4	32

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INTRODUCTION

Japanese Knotweed Solutions Limited (JKSL) were instructed by Middleton Sheet Metal Co Ltd to assess for the potential presence of invasive plant species at the site known as 1 Hanson Close, Middleton, M24 2HD, and if present to develop a invasive species management plan which will include appropriate remedial (and treatment) options to facilitate the future redevelopment of the site and also discharge planning condition 18 (relating to planning application 22/01538/FUL) which states:

18 Prior to any commencement of any earthworks to be undertaken as part of the development hereby approved, a survey for invasive plant species including Japanese knotweed and Himalayan balsam will occur and the finding supplied to and agreed in writing to the LPA. If any invasive species are present a method statement detailing avoidance, control and eradication measures should also be supplied to and agreed in writing by the LPA, prior to any earthworks being undertaken. Any earthworks required as part of the development shall be undertaken in accordance with the approved details.

JKSL has used its understanding of the current legislation and the recommended best practice in developing this management plan document and continue to evolve our methods and recommendations to clients in line with current understanding of the problem.

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MANAGEMENT PLAN OBJECTIVE

The objective of this Management Plan Ltd is to:

- assist the client, Middleton Sheet Metal CO Ltd with controlling and preventing the spread of recorded areas containing invasive plant species situated within the development boundary, to facilitate proposals for the site (illustrative masterplan, enclosed within Appendix 1).
- implement ongoing monitoring pre and post development.
- ensure that all remedial and treatment works are carried out in accordance with the relevant laws and statutes.

To ensure the above objective is achieved, the following measures are to be implemented:

- Identify all areas of infestations containing invasive plant species situated within the development boundary, and within immediate areas on neighbouring land (particularly those which may pose a potential risk to the development);
- Determine the areas of infestations which are to be directly/indirectly affected by the proposed development;
- Implement biosecurity control measures when working in and/or in close proximity of known infestations, to aid in minimising the risk of propagules (a vegetative structure that can become detached from the main plant and give rise to a new plant) being spread around site and off-site; and
- Implement an appropriate remediation strategy to facilitate the proposed development e.g. excavation and removal of impacted materials that are directly affected by the proposed development, and in-situ monitoring/treatment of impacted materials that are not affected by the proposed development.

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SITE INFORMATION

The site is circa 1.1ha in area, mainly comprising of hardstanding across the central section of site, bunds containing demolition materials along the northern and eastern boundary and areas containing dense vegetation along the periphery of site. There is a brick wall along the southern boundary of site, beyond which is the River Irk. The site is accessed via Hanson Close from the north.

Surrounding land uses mainly include commercial.

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Site development

The proposed illustrative masterplan is enclosed within Appendix 1.

The redevelopment proposals include the construction of two commercial units, a main production facility building, and associated hardstanding (includes parking, access and storage) and landscaping.

It is important that JKSL are provided with up-to-date information about site plans, including accurate site drawings and details of any additional planned works, particularly in any contaminated area. Japanese knotweed is easily spread and even tiny fragments can cause new infestations if they are moved out of a contaminated area. It is important to implement a Clean Site Policy (includes biosecurity control measures) and Management Plan as soon as practically possible.

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SURVEY RESULTS

JKSL surveyed the site on 4th September 2024. The survey was undertaken by Jonathan Harris who is a certified surveyor in Japanese knotweed (CSJK) and has over ten years experience in dealing specifically with invasive plant species. The results as summarised below should be read in conjunction to drawing JK24-0035-01 Rev A (Invasive non-native plant species location plan), enclosed within Appendix 2.

During the survey, 9 no. areas of Japanese knotweed were recorded, denoted as JK1-JK9 on enclosed drawing JK24-0035-01 Rev A. An additional 3 no. areas of Japanese knotweed were recorded within the site boundary during a monitoring and treatment visit (undertaken in early October 2024), denoted as JK10-JK12 on enclosed drawing JK24-0035-01 Rev A. Due to proximities to the site boundary, it is possible that associated rhizome could potentially extend onto neighbouring land.

Due to the presence of dense vegetation and existing boundary brick walls, viewing was restricted; additional areas of Japanese knotweed / infestations could be present that we are currently unaware of.

Additional areas containing extensive Japanese knotweed were recorded directly south of the main development footprint, on the river embankment, as noted on enclosed drawing JK24-0035-01 Rev A. It is our understanding that these areas of Japanese knotweed are situated on neighbouring land.

25 no. areas containing horsetail were recorded during the survey, denoted as HT1-HT25 on enclosed drawing JK24-0035-01 Rev A. Horsetail is a native plant and is therefore not listed within Schedule 9 of the Wildlife and Countryside Act 1981 (unlike Japanese knotweed), however is still considered to be invasive and can potentially cause defects such as damage to hard standing areas (in particular tarmac surfaces) and can also be regarded as a nuisance weed in soft landscaping areas in certain situations, thus it is wise to deal with it as part of the proposed development, particularly in areas where there are a high number of plants.

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There were mounds noted to be present on site; it is unknown as to whether buried Japanese knotweed or horsetail propagules (i.e. a vegetative structure that can become detached from the main plant and give rise to a new plant) are present in these mounds at this stage.

There has also been previous ground disturbance on site; propagules could have been spread around site (and off-site); as a result new areas of infestations could emerge in the future.

The visible extent of an infestation may not accurately indicate the full extent of the area affected; concealed growth below ground level could be more extensive.

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SITE PHOTOGRAPHS



Area JK1



Area JK2 – evidence of surrounding dense vegetation



Area JK3



Areas JK4-JK7



Area JK9



Area JK10

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Area JK11



Area JK1



Evidence of horsetail
surface growth



Evidence of horsetail
surface growth



Evidence of horsetail
surface growth



Evidence of horsetail
surface growth

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Evidence of Japanese knotweed on
neighbouring land to the south.

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JAPANESE KNOTWEEED (General Information)

Japanese knotweed (*Reynoutria japonica*), a rhizomatous perennial was introduced from Asia to Europe in the mid-nineteenth century as an ornamental and fodder plant. It is an impressive species which grows to a height of 2-3 metres, with bamboo like stems, arching branches and clusters of creamy white flowers appearing late in the season. The orange to brown coloured, woody, dead stems persist erect throughout the winter and new shoots, produced from the extensive rhizome system, grow up amongst these the following spring to form dense thickets. The dead stems and leaf litter decompose very slowly and form a deep organic layer, which prevents native seeds from germinating. Once present at a site, Japanese knotweed increases in area very rapidly and soon forms monoculture stands (a stand of Japanese knotweed is a term normally used to describe a collection of stems/canes arising in a group and which have a continuous foliar canopy when mature). Unless otherwise managed, Japanese knotweed will usually suppress native flora, establishing itself as a dominant feature.

Reproduction is primarily by vegetative regeneration of rhizomes (underground stem system – a regenerative part of the plant) and fresh / viable (above ground) stems; it does not normally spread via seeds in the UK. Generally, in most situations the associated rhizome network (i.e. rhizosphere) from the parent plant will typically spread laterally up to circa 3m and vertically down up to a depth of 1m to 2m (based on latest research and consensus), however extents of the associated rhizosphere can also be more than this in some situations.

Japanese knotweed thrives on disturbance and has been spread by both natural means and by human activity. In riparian areas, high water flows disperse fragments of the plant downstream where new colonies form. In the past, fly tipping and transportation of soil containing rhizome fragments have been a major cause of spread, particularly in the urban environment.

Japanese knotweed is known to have significant impacts on development and infrastructure. While damage to structures, particularly existing buildings, is uncommon (particularly where substantial foundations are present), it is known to occur and is much more likely when the structures are built on top of areas where Japanese knotweed is already present or where soils containing Japanese knotweed are imported during the development process. Damage to hard surfaces,

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landscaping and retaining walls (where foundations are less significant) is common and growth within buildings and infrastructure damage have all been recorded on sites / properties which JKSL have investigated.

Japanese knotweed is an invasive non-native Schedule 9 plant under Section 14 of the Wildlife and Countryside Act 1981. Soil/materials containing Japanese knotweed propagules are regarded as 'controlled' waste and should be disposed of at an appropriate licenced facility if taken off-site. Associated impacted materials should not be reused in further construction or landscaping without an appropriate remediation strategy being implemented.

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HORSETAIL (General Information)

Horsetail is one of the oldest living plants, with a variety of species dating back millions of years. It has continued to spread by both spores and rhizome fragments and can be found all over the world.

It is a perennial plant which begins to grow in April. The plant grows upwards and produces a large cone, whereby spores are produced. The hollow, fir tree-like stems have high silica content with black flecks around the nodes. Later on in the growing season, once the spores have been released, very thin, light green leaves appear.

Horsetail quickly establishes itself into dense stands of foliage, which can suppress the growth of grasses and native British plants, leaving the ground bare of vegetation in late autumn/winter and liable to erosion.

Left untreated the plant can rapidly colonised and cause damage to hard-landscaping surfaces.

Horsetail is a native plant and is therefore not listed within Schedule 9 of the Wildlife and Countryside Act 1981 (unlike Japanese knotweed), however is still considered to be invasive and can potentially cause defects such as damage to hard standing areas (in particular tarmacadam surfaces), and can take over soft landscaping areas, thus it is wise to deal with it, particularly in areas where there are a high number of plants.

Materials being disposed as waste from site containing horsetail propagules should be appropriately described to the receiving disposal facility to ensure that the correct level of duty of care is being implemented as per the Environmental Protection Act 1990.

It is recommended that horsetail impacted materials should not be reused in further construction or landscaping without an appropriate remediation-treatment strategy being implemented.

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CONTAMINATION PATHWAYS

“Contamination Pathways” are routes by which a contaminant can spread into or out of a site – for the recorded onsite and off-site areas of infestation. This could include movement of soils or other plant materials. JKSL’s surveyor has identified the following current contamination pathways in the course of the survey.

Pathway	Notes
Disturbance activities	There was evidence that previous disturbance activities (associated with previous agricultural related activities such as movement of farm vehicles, farm animals and “muck”) had taken place on site, which could result in potential cross-contamination to occur; as a result new areas of infestation could potentially emerge in the future.
Propagule Spread (outward)	Should an appropriate remediation strategy not be implemented, Japanese knotweed and horsetail could potentially migrate onto neighbouring land from site.
Propagule Spread (inward)	Should an appropriate remediation strategy not be implemented, Japanese knotweed could potentially migrate into site from neighbouring land.
Watercourse	There is a watercourse to the south of site. Floating propagules (includes Japanese knotweed debris) from upstream areas of infestation could potentially affect embankment areas (which are adjacent to the site boundary) through this pathway.

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INVASIVE SPECIES RISK ASSESSMENT

Based on the survey results, this section of the report outlines the risk factors and level of risk of cross-contamination via the contamination pathways identified. The risk assessment was used in the process of devising the Recommended Remediation Option.

The table below outlines potential negative consequences associated with the Japanese knotweed (and horsetail), and how it could spread in and out of the site. A "Risk Level" of "Low / Mid / High" has been included to quantify each risk factor's likelihood of cause damage or cross-contamination on site. A "Low" risk might not cause problems in the short term even if the plant is not treated, a "Mid" risk is likely to cause problems without treatment and a "High" risk is very likely to cause problems. The "Distance" specifies how far the risk factor is from the nearest surface growth. Because of the plant's extensive root system, anything within 7m could potentially be at risk. Anything that is less than an unobstructed 4m away from mature plants is likely to be inside the root network.

We strongly urge that the recommended treatment is started as soon as possible, as this will minimise the spread of the plant. Implementing an invasive plant species management plan immediately (and communicating it to all contractors on site) will reduce the chance of cross contamination during other works on site.

Risk Factor	Distance	Risk Level	Description
Proposed hard standing and building structures associated with the re-development of the site.	n/a	High	Should no appropriate remedial-treatment and/or control measures be implemented, future development could be at risk, whereby associated Japanese knotweed rhizome could potentially exploit cracks and weaknesses within proposed hardstanding/building structures. Horsetail could cause potential defects to hardstanding areas without appropriate remedial-treatment and/or control measures being implemented.

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Risk Factor	Distance	Risk Level	Description
Ground disturbance during construction phase associated with the future re-development (future risk)	n/a, within development boundary	High	Should no appropriate treatment and/or control measures be implemented, future ground disturbance activities during the construction phase of the development where operatives, and machineries move in and out of the contaminated areas, are likely to cause propagules to be spread around site (and potentially off-site), thus exacerbating the infestation problem further.
Other human activity (future risk)	0m	High	Ongoing grounds maintenance / landscaping activities associated with the future re-development of the site where people move in and out of the contaminated areas, and potentially disturb the soils containing propagules. Should no appropriate treatment and/or control measures be implemented, these human activities can potentially cause the plant to spread.
Infestations near site boundary (on site)	0m	High	The infestations on site are at risk of spreading to neighbouring land – this could potentially result in the Wildlife and Countryside act being compromised, if “reasonable measures” are not in place to control the spread and reduce the viability of the invasive plants. Having a Management Plan in place is an important part of preventing the invasive plants from spreading
Infestations near site boundary (off site)	0m	Low – medium (based on site levels being greater than embankment area)	The site is at risk of being infested with infestations from neighbouring land. It is important to take action to prevent the site being infested, such as informing the relevant landowner(s) so that they are aware of the invasive plants and for them to implement an appropriate treatment programme / remediation strategy. Due to the Japanese knotweed situated directly south of the main development footprint being located on lower ground, associated rhizome/impacted materials is unlikely to be present along the southern section of site.

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Risk Factor	Distance	Risk Level	Description
Watercourse	10m	Low to medium	There is a watercourse to the south of site. Floating propagules (includes Japanese knotweed debris) from upstream areas of infestation could potentially affect embankment areas (which are adjacent to the site boundary) through this pathway. However there is a boundary wall, and site is significantly higher than watercourse which reduces risk

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IMPACTS ON DEVELOPMENT PLANS

Drawing JK24-0035-02 Rev A (enclosed within Appendix 3) shows the areas Japanese knotweed and horsetail that will be directly affected by the development proposals.

Construction activities (includes ground disturbance works) will likely exacerbate the infestation problems further, and there is a high risk that this will then cause the spread of propagules around site, and potentially off-site, should an appropriate remediation strategy not be implemented.

It is important that JKSL are provided with up-to-date information about site plans, including accurate site drawings and details of any additional planned works, particularly in any contaminated area. It is important to implement a Clean Site Policy and Management Plan as soon as practically possible.

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TREATMENT OPTIONS

Based on the proposed development, and taking in to account the survey results, contamination pathways and invasive species risk assessment, the mechanical remediation option to be implemented has been outlined below. This is designed to get the best results for the lowest possible cost.

Other options may be feasible, and where alternatives are available, these have been listed below the remediation option to be implemented.

Making sure that everyone with a role on site is familiar with the recommendations and ensuring they are actioned from day one will help to minimise the risk of cross-contamination, and increase responsiveness to any undesirable situations, including new or previously undiscovered infestations on site.

While this is no guarantee against infestations recurring on site, while no treatment can be certified as 100% effective and while your site will always be vulnerable to uncontrollable threats, JKSL can offer further protection in the form of ongoing monitoring programmes (based on repeated site inspections). The recommended remediation option will outline the level of protection that we think is most appropriate to the works we have laid out.

Remediation Option to be implemented

Due to the proposed development directly affecting areas of infestation, ground disturbance / construction related activities will likely exacerbate the infestation problems further, unless an appropriate remediation strategy is implemented.

A mechanical remediation strategy whereby the affected Japanese knotweed and horsetail impacted materials situated within the development boundary are excavated/removed is therefore required to be implemented. The most robust and viable remediation strategy option to be implemented at this stage (with least risk to the future redevelopment of the site) is to dispose the excavated impacted materials off-site at an appropriate licenced facility.

To aid in minimising the risk of the off-site Japanese knotweed migrating into the development site and/or reducing the risk of on-site Japanese knotweed left in-situ

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migrating back into remediated areas, sections of vertical root barrier will be installed.

Drawings JK24-0035-02 Rev A (enclosed within Appendix 3) shows the anticipated extents of excavation and location of the vertical root barrier.

During the works, a clean site policy (include biosecurity control measures) will be implemented. The control measures to be implemented include –

- Prior to works commencing, all operatives on site should make themselves familiar to the extents of infestations as shown on the relevant project drawing plans. Should any additional infestations be identified, works in that area should be immediately stopped and the client / specialist informed; the management plan should then be updated accordingly.
- Should the risk of disturbance be considered to be high within areas of site impacted by invasive plant species (prior to the remediation works being undertaken), the area(s) of infestation should ideally be fenced off with signage, including an appropriate exclusion zone.
- Signage should be installed during the excavation-removal works, to distinguish the different working areas (i.e. excavation area, loading area, footwash facility/inspection area)
- During works, site operatives should install a foot wash and/or an inspection point with a small area of geotextile root barrier on the ground for site personnel and equipment to be checked and decontaminated on leaving the contaminated area. Signage may also be installed at the edge of the contaminated area.
- Any machine, equipment or personnel leaving the buffer zone/exclusion zone at any point will need to undergo decontamination. All equipment (such as machine buckets, machine tracks) and tools (shovels, spades) used within the contaminated area shall be suitably decontaminated prior to each occasion that it leaves the contaminated area. Equipment should be visually checked, and any potential impacted spoil material should be placed back within the original area of infestation or disposed off-site at an appropriate licenced facility (or placed within a temporary waste management area, as

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mentioned below). Anything which has been used to cut or dig in impacted materials shall be cleaned thoroughly.

- A temporary waste management area (lined with an appropriate membrane) may be created to reduce the risk of cross-contamination occurring while temporary stockpiling impacted soils on site (where applicable/required), or the impacted materials can be placed on an existing area containing impacted materials within immediate surrounding areas on site, prior to the impacted materials leaving site to be disposed of at an appropriate licenced facility.
- Due care should be taken not to spill excavated materials outside the contaminated area, and any spillages were cleaned up as soon as it is safe to do so.
- Vehicles (i.e. dumpers and tipper wagons) used to transfer waste should not be overloaded, to minimise the risk of spillage.
- All tipper wagons leaving site (i.e. vehicles used to haul the excavated Japanese knotweed and/or horsetail impacted material impacted to the disposal facility) should not leave site until their cover is secured in place. The wheels of the tipper wagons should not come into contact with any material contaminated with Japanese knotweed and/or horsetail propagules.
- During the works, the ground will be inspected by JKSL's site foreman to ensure all rhizome will be chased until fully removed, or up to the development boundary or any other limit laid out by the client's site engineer.
- Any materials excavated from areas containing Himalayan balsam taken off site will be regarded as 'controlled' waste and will be disposed of accordingly at an appropriate licenced facility.
- Relevant information should be saved within the project folder, such as the description of completed works, photographs of the completed works, completed excavation drawing(s), and copies of the waste transfer information provided.

To reduce the viability and control the spread on Japanese knotweed left in-situ (which are not directly affected by the proposed development), a 5 year monitoring and treatment programme is to be implemented. Potential Japanese knotweed surface re-growth which is likely to occur within these areas will be

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chemically treated in-situ with a Glyphosate based herbicide. Glyphosate is a broad spectrum and non-selective herbicide so will potentially kill/affect non-target plants should the herbicide come into contact with these. Site operatives will do their utmost to minimise the risk of chemical drift occurring, such as applying herbicide within correct weather threshold limits (so its not too windy), using the correct spray nozzle and spot treating the re-growth (rather than blanket spraying). The programme will normally comprise of 8 no. monitoring visits over a 5 year period, as follows (precise date normally dictated by weather conditions and growth patterns):

- Oct 2024 (completed on 8th and 9th October 2024)
- May/June 2025
- Aug-Oct 2025
- May/June 2026
- Aug-Oct 2026
- May/June 2027
- Aug-Oct 2027
- Aug-Oct 2028

Over the first winter period of the treatment programme (likely to be between November '24 and February '25), the clearance of dead Japanese knotweed canes/surface growth will be undertaken. This should maximise the quantity of herbicide that reaches new growth which is likely to occur during the following growing season. Surface growth will be cut no lower than 150mm above ground level, and arisings will be cut into smaller pieces and left in-situ to decompose.

In accordance with latest industry standards, it is recommended that there are 2 no. consecutive growing seasons that show no evidence of re-growth within the affected area to demonstrate that the programme has been successful. Upon completion of the 5 year programme, the situation will be re-assessed to determine whether additional monitoring (and treatment) visits are required. It should be noted that due to the maturity/extents of the Japanese knotweed, control might not be achieved within the 5 year period.

Just to re-iterate that there are restrictions as to what can done within the Japanese knotweed "maintenance areas" (i.e. where there is ongoing monitoring/treatment), as the plant thrives on disturbance, even after the

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completion of a successful herbicide treatment programme. Rhizome can stay dormant for 20 years or more, which may result in potential re-growth emerging should any ground material containing viable / dormant rhizome be disturbed. Due to the biology and nature of the plant, and site variations, this means that, in some circumstances, regrowth can occur after the delivery of a successful treatment programme). It is recommended that the treatment areas are left undisturbed in-situ (includes a circa 3-4m buffer zone, where applicable). The appearance of the maintenance areas can be significantly improved (e.g. by cutting back other surface weed plants), however it is important that the ground material (within the treatment areas and associated buffer zones) is not disturbed and bio-security control measures are implemented.

To reduce the viability and control the spread of horsetail which are to be left in-situ, an ongoing 3 year programme will be implemented. Horsetail re-growth within these areas, will be chemically treated in-situ with an appropriate herbicide. 6 visits will be undertaken over a 3 year period. Upon completion of the 3 year period, the situation will be re-assessed to determine whether additional monitoring/treatment is required. The areas of horsetail left in-situ should be not be disturbed (including a circa 2-3m buffer zone, where applicable).

To facilitate treatment within 1m of the neighbouring embankment (if/where required) approvals from the Environment Agency will be sought (Aqherb01).

We recommend that the relevant landowner(s) is/are made aware of the extensive Japanese knotweed situated along the embankment of the adjacent watercourse on neighbouring land, and for them to implement an appropriate treatment programme to control the spread of these infestations (thus also minimising the risk of the Japanese knotweed migrating into site from neighbouring land).

A clean site policy will also be implemented when works are being undertaken as part of the ongoing 5 and 3 year programmes.

In the meantime, all areas containing the recorded invasive non-native plant species should be left in-situ and not disturbed (includes a circa an appropriate exclusion zone – normally 3-4m for Japanese knotweed and circa 2-3m for horsetail), to further aid in preventing propagules being spread around site.

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All of the proposed remediation and treatment works are to be undertaken by Japanese Knotweed Solutions Limited, who are a suitably qualified and experienced contractor who is a full member of the trade bodies INNSA (Invasive Non-Native Specialists Association) and PCA (Property Care Association), the two leading trade bodies for contractors who specialise in Japanese knotweed (and other invasive non-native plant species).

Alternative Remediation options

Due to lack of space on site (without the future development being compromised), other mechanical remediation strategy options (such as burial, waste management area, screening) have been discounted at this stage.

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EVALUATING SUCCESS OF CONTROL METHODS

Monitoring will be carried out by the Site Foreman and/or Site Operatives prior to any treatment/remediation works being carried out.

As mentioned above, upon completion of the excavation-removal works the ground will be inspected by JKSL's site foreman.

Upon completion of the excavation-removal works, a completion report will be issued which will outline the summary of works that have been undertaken, photographs of completed works, completed excavation drawing, description of products used (applicable for the vertical root barrier to be installed) and confirmation of duration/period of works. Waste transfer information (includes copies of individual transfer notes, hauliers waste carriers licence and permit of the disposal facility) will be issued upon completion of the excavation-removal works, to demonstrate that the waste has been disposed of correctly.

As part of on-going monitoring and treatment of programmes, inspection reports will be issued upon completion of each monitoring/treatment revisit which will include the following information:

- Date/time of visit
- Name of operative who completed the visit
- Summary of findings, including maturity and density of potential re-growth within the treatment area, as well as other relevant information (e.g. a new feature that might impact on the effectiveness of the management plan or increase the risk of spread or re-infestation)
- Spray record (includes herbicide application and weather condition)

It is recommended that there are 2 no. consecutive growing seasons pass that show no evidence of re-growth within the affected area to demonstrate that the programme has been successful.

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SCHEDULE OF WORKS

Excavation-removal works

It is recommended that the proposed excavation works of are undertaken prior to any other ground disturbance works, to prevent/minimise the risk of cross-contamination.

Ongoing 5 year programme

The 5 year programme for the monitoring and treatment of on-site Japanese knotweed left in-situ will comprise of 8 no. visits over a 5 year period, as follows (precise dates normally dictated by variables such as weather conditions, growth patterns, commencement of contract/works):

- Oct 2024 (completed on 8th and 9th October 2024).
- May/June 2025
- Aug-Oct 2025
- May/June 2026
- Aug-Oct 2026
- May/June 2027
- Aug-Oct 2027
- Aug-Oct 2028

Over the first winter period of the treatment programme (likely to be between November '24 and February '25), the clearance of dead Japanese knotweed canes/surface growth will be undertaken. This should maximise the quantity of herbicide that reaches new growth which is likely to occur during the following growing season. Surface growth will be cut no lower than 150mm above ground level, and arisings will be cut into smaller pieces and left in-situ to decompose.

Discussions with / permissions for the relevant owner(s) will be required to facilitate the access/treatment on neighbouring land.

Upon completion of the 5 year programme, the situation will be re-assessed to determine whether additional monitoring (and treatment) visits are required.

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Ongoing 3 year programme (Horsetail)

The 3 year programme will comprise of the following visit (precise dates normally dictated by variables such as weather conditions, growth patterns, commencement of contract/works):

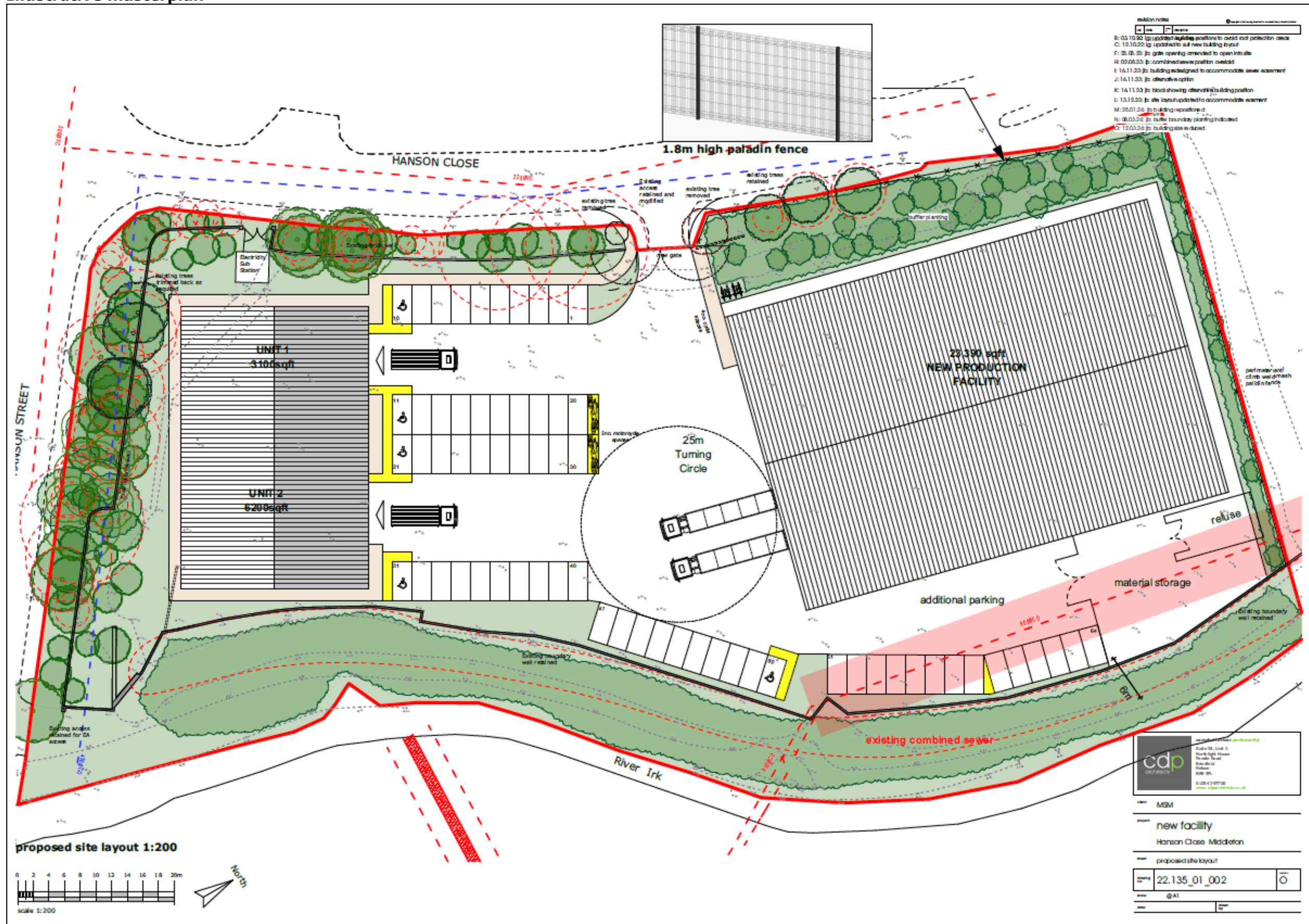
- October 2024 (completed on 9th October 2024)
- June 2025
- September/October 2025
- June 2026
- September/October 2026
- June 2027

Upon completion of the 3 year programme, the situation will be re-assessed to determine whether additional monitoring (and treatment) visits are required.

WORKING ON BEHALF OF
Middleton Sheet Metal Co Ltd

APPENDIX 1

Illustrative masterplan



Japanese Knotweed Solutions Ltd

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Middleton Sheet Metal Co Ltd

APPENDIX 2

Drawing JK24-0035-01 Rev A (invasive non-native plant species location plan)

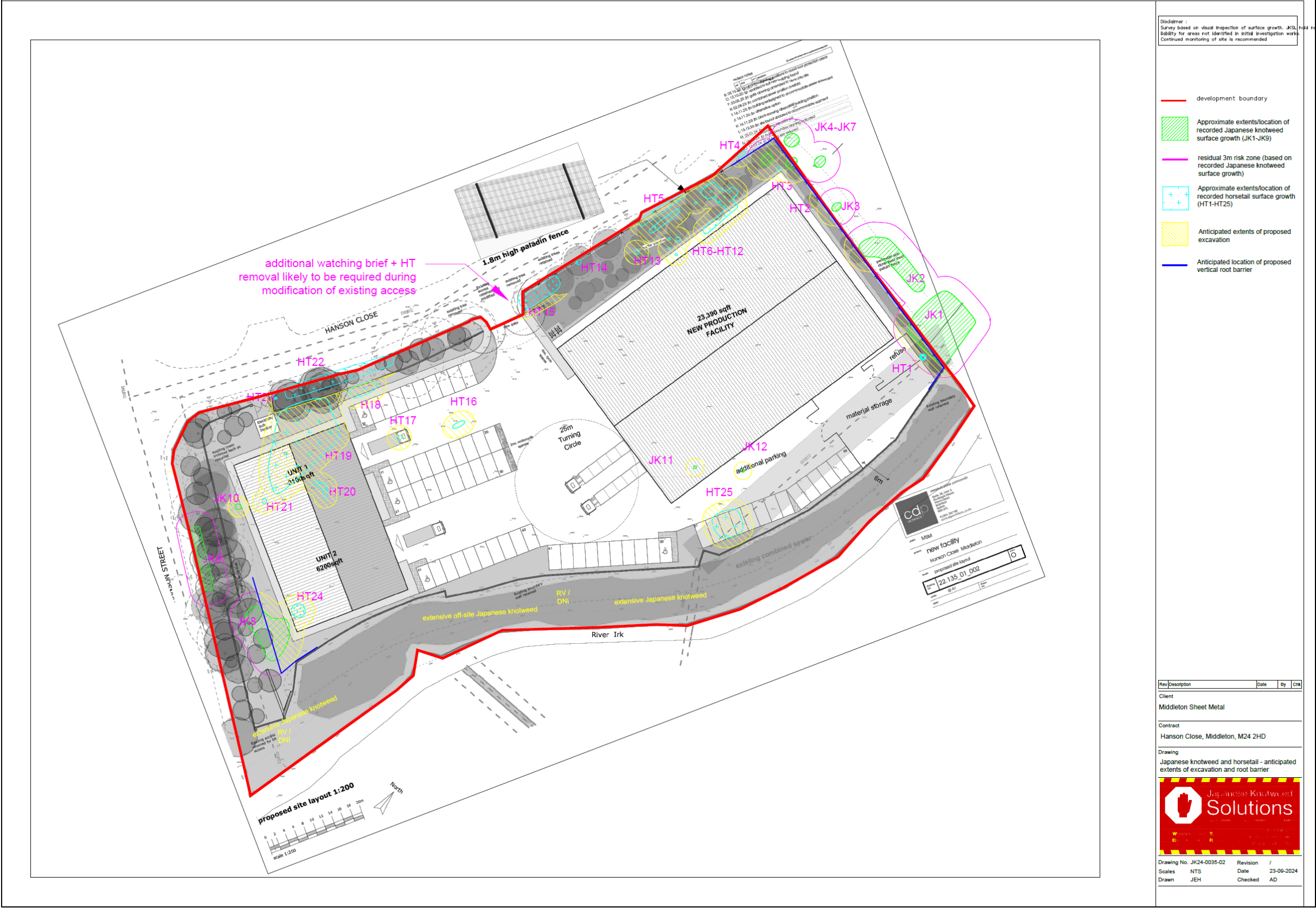


Japanese Knotweed Solutions Ltd

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APPENDIX 3

Drawing JK24-0035-02 Rev A (Anticipated extents of excavation and vertical root barrier)



Japanese Knotweed Solutions Ltd

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Middleton Sheet Metal Co Ltd

APPENDIX 4

INCLUDED IN SEPARATE METHOD STATEMENT DOCUMENT(S)