

Abercynon Feeder Pipe Bridge

Preliminary Ground Level Tree Assessment North and South

Report for Rhondda Cynon Taff Borough Council

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Summary of Key Findings

Temple was commissioned by Rhondda Cynon Taff Borough Council in October 2023 to undertake an update Ground Level Tree Assessment (GLTA) to determine the available roosting resource and the need for further survey and/or mitigation and any likely constraints to the proposed development at land on the south side of the River Taff, Abercynon. A GLTA of an additional area of potential land take to the north of the river was subsequently instructed in December 2023. This work follows on from earlier surveys undertaken by Temple in 2023 (Temple 2023). The main findings are as follows:

- The Site is located on the outskirts of Abercynon, which is situated in South Wales. An updated GLTA was undertaken on all trees on the two site locations (north and south) plus an additional 10m buffer of the southern site boundary, as requested by the client.
- Two trees along the northern site boundary were assessed as being of low (PRF-I) suitability for roosting bats.
- Four trees within the southern site boundary were assessed as being of low (PRF-I) suitability for roosting bats.
- A further eight trees within the southern buffer zone were identified as having suitability to support roosting bats. No evidence of bats was evident at any of these trees at the time of the survey.
- Two trees within the southern buffer zone were assessed as being of low (PRF-I) suitability for roosting bats.
- Four trees within the southern buffer zone were assessed as being of moderate (PRF-M) suitability for roosting bats.
- Two trees within the southern buffer were assessed as being of high (PRF-M) suitability for roosting bats.
- For the PRF-I trees within the site boundaries, these trees should be felled using a soft felling technique. Soft felling is to take place between April and October, and is to

comprise of felling and gently lowering sections of the main trunk and significant limbs, taking care to avoid cutting through any cavities present and to enclose any identified features. Trees are then to be checked for any bat presence and to be stacked in a way that if any are they would be permitted to leave on their own accord.

- The two PRF-I trees within the buffer should be subject to an updated inspection if sufficient time lapses from the time of the original survey to removal.
- Due to the location of the moderate and PRF-M trees, further surveys are not required at present. However, if changes to the proposed works are made that would move these trees within the site boundary, then further surveys would be required to determine the presence/likely absence of roosting bats. These further surveys would comprise climbing inspections and/or up to three dusk emergence surveys.
- The proposed development to the south of the river will result in the loss of potential tree roosting opportunities. To compensate for this loss, bat boxes should be provided on retained trees in undisturbed areas to provide replacement roost opportunities and where plant species attractive to insects should be incorporated to the scheme design.

1 Introduction

BACKGROUND TO COMMISSION

- 1.1 Temple was commissioned by Rhondda Cynon Taff Borough Council in October 2023 to undertake a Ground Level Tree Assessment (GLTA) for bats on an area on the southern side of the River Taff, Abercynon to inform a planning application for the development of an old feeder pipe bridge into a public footbridge. Previous surveys were undertaken in February 2023 (Temple, 2023), however due to changes in the proposed location of the site access and compound, an additional area required surveying. The survey area was further extended in December 2023 to incorporate land on the northern side of the river.
- 1.2 The survey covered all trees located within both the northern site boundary (henceforth referred to as 'the north Site'), and the new southern site boundary (henceforth referred to 'the south Site'), as indicated on the plans provided by the client (Appendix 1, Figure 1 (North). Abercynon Feeder Pipe – Red Line Boundary QFP-001 – Oct 23; Appendix 1, Figure 3 (South)). An additional 10m buffer of the south Site boundary was also surveyed.

SCOPE OF REPORT

- 1.3 This report provides an assessment of the likelihood that the trees within the Sites support roosting bats and outlines any requirement for further survey. It also provides a preliminary assessment of the likely importance of the Site for foraging and/or commuting. Where possible, it also outlines any avoidance, mitigation, compensation, and enhancement measures as may be required to ensure compliance with legislation and policy.
- 1.4 The assessment is based on the following sources of information:
 - a desk study of the Sites and land within a 2km surrounding radius, which includes records of bats, as reported in the Preliminary Ecological Appraisal (PEA) report (Temple 2023);

- a detailed ground level inspection of each tree; and
- an assessment of the habitats within the Sites and surrounding habitats for their likely importance to bats.

1.5 This assessment has been prepared with reference to best practice guidance published by the Bat Conservation Trust (Collins, 2023) and as detailed in British Standard 42020:2013 *Biodiversity – Code of Practice for Biodiversity and Development* (BSI, 2013).

1.6 This report provides supporting information in the appendices with a georeferenced map of the survey results in Appendix 1 (Figure 2 for north and Figure 3 for south), cross-referenced photographs in Appendix 2 and full survey data in Appendix 3.

SITE CONTEXT AND STATUS

1.7 The Sites are located on the outskirts of the town of Abercynon, Rhondda Cynon Taff. The south Site is centred on Ordnance Survey National Grid Reference ST 09209 95484 and the north Site is centred on ST 09128 95574. The Sites are adjacent, for the most part, to woodland and grassland with the A470 beyond on the north Site and Woodland and the A4054 to the south of the South site. The River Taff flows between and separates the north and south Sites.

DEVELOPMENT PROPOSALS

1.8 The proposals for the north Site involve the creation of a compound at the top of the slope above the river and the creation of a track down to the river side allowing building materials to be transported to the construction site. A number of trees will need to be cleared at the roadside to allow access to the site. Further trees and a large area of bracken will need to be cleared for the access track down to the river edge.

1.9 The proposals for the south Site involve the creation of a compound and platform on the south side of the river to allow for building materials to be craned across for

construction of the new bridge. An area of trees and scrub (approximately 860m²) on the Site will be cleared to facilitate works.

RELEVANT LEGISLATION AND PLANNING POLICY

1.10 The following key pieces of nature conservation legislation are relevant to this assessment. A detailed description of this legislation is provided in Appendix 3.

- The Conservation of Habitats and Species Regulations 2017 (as amended);
- The Wildlife and Countryside Act 1981 (as amended); and
- Environment (Wales) Act 2016.

1.11 The Planning Policy Wales (PPW) (Cabinet Secretary for Energy, Planning and Rural Affairs, 11th Ed. 2021) works with the objective to ensure the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural well-being of Wales.

1.12 The actions that could result in an offence occurring under the above legislation include: the disturbance of bats within (and, in some cases, away from) a roost; loss or damage of a roost; obstructing access to or from a roost; or modification of a roost¹. If development proposals are likely to result in an offence, then a mitigation licence must be obtained from Natural Resources Wales prior to works, to provide a derogation from the relevant legislation.

¹ These actions are inferred from Section 43.1 and 43.2 of *The Conservation of Habitats and Species Regulations 2017* (as amended).

2 Methodology

DESK STUDY

- 2.1 A desk study was conducted by Temple in April 2023 as part of the original PEA report (Temple 2023) to identify any existing ecological information relating to the whole Site and a 2km surrounding radius (sourced from South East Wales Biological Record Centre, the local environmental record centre).
- 2.2 Additional contextual information was compiled from publicly available data sources:
- MAGIC (<http://www.magic.gov.uk>) – the Government’s on-line mapping service. Information was sought regarding: the presence of statutory designated nature conservation sites; and
 - Ordnance Survey mapping and publicly available aerial photography to determine any features such as: running and standing water, woodland, tree lines, hedgerows, railway corridors and the surrounding landscape uses.

GROUND LEVEL TREE ASSESSMENT

- 2.3 GLTA were undertaken at the north and south Sites on the 19th December and 30th November respectively. These surveys involved searching for any Potential Roost Features (PRFs) on or within the trees. PRFs could include rot holes, cracks, flaking bark, branch cavities, hollow trunks and woodpecker holes or any other features that could be used as a roost. All PRFs were assessed and noted. Surveys and assessments were undertaken by Jess Clitheroe BSc (Hons). Jess is an experienced ecologist with over 10 years’ commercial bat survey experience.

Survey Area

- 2.4 The survey covered all trees within the red-line boundary of the Sites (both north and south) as shown in the maps provided in Appendix 1, on the south side of the river an additional 10m buffer was surveyed as requested by the client as a

precaution in case any additional removal of trees should be required once construction is underway.

Assessment Criteria

2.5 The purpose of the GLTA was to:

- Identify PRFs that could provide access points for bats, including; loose, flaking or folded bark, cracks and fissures in limbs, woodpecker holes, or any downward-facing crevice or hole in the limbs or trunk;
- Categorisation of the suitability of all PRFs as either PRF-I or PRF-M, in line with best practice guidance (Collins, 2023): PRF-I representing a feature suitable for individual or very low numbers of bats, and PRF-M for features suitable for multiple bats and therefore may be used by a maternity colony;
- Identify signs indicating possible use by bats, such as; tiny scratches, rub marks and staining around access points, bat droppings in around or below access points;
- Following the GLTA, trees are to be categorised depending on the PRFs present, in line with the following:
 - **NONE** – No PRFs in the tree, or highly unlikely to be any;
 - **FAR** – Further Assessment Required to establish if PRFs are present in the tree;
 - **PRF** – A tree with at least one PRF present.

2.6 The gathered information has been used to inform whether further survey is required in the form of climbing inspections or dusk emergence surveys to fully understand how bats are using the Sites and the potential impacts of the proposals on bats, or whether an assessment can be made on the basis of the GLTA alone.

2.7 The survey methodology followed best practice guidelines (Mitchell-Jones 2004; Reason and Wray, 2023). Equipment used during the tree inspection included close-focusing binoculars and a high-powered torch.

- 2.8 Finally, all trees were inspected for evidence of/potential for breeding and/or roosting birds.

EVALUATION AND IMPACT ASSESSMENT

- 2.9 Where sufficient baseline data are available, the ecological importance of the Sites has been evaluated broadly following guidance issued by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2018) which ranks the nature conservation importance of a site according to a geographic scale of reference: international, national, regional (South Wales), metropolitan, county (Rhondda Cynon Taff), vice-county or other local authority-wide area (Abercynon); and of importance at the zone of influence of the site only. In evaluating the nature conservation importance of the Sites, the following factors were considered: nature conservation designations; species/habitat rarity; naturalness; fragility and connectivity to other habitats. Where no importance has been assigned this is due to insufficient information.
- 2.10 An assessment of likely ecological impacts has been undertaken in accordance with CIEEM guidelines (CIEEM, 2018) only where clear evidence is available to substantiate and justify the findings. In the absence of such evidence, the ecological feature is merely identified as a potential constraint to development. Reference is also made to Section 6 of the Bat Mitigation Guidelines (Reason and Wray, 2023) and Natural Resources Wales's standing advice and includes a summary of the scale of impact according to roost type and development effect, if known.
- 2.11 Where ecological constraints to development are identified, further survey requirements and/or mitigation measures that are proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development are described. In addition, in accordance with the Environment (Wales) Act 2016, Planning Policy Wales (PPW) and local/regional planning policies, opportunities to enhance or create benefits for wildlife are provided where this is possible based on the information available to date.

DATA VALIDITY AND LIMITATIONS

- 2.12 It is important to note that even where data are held, a lack of records for a defined geographical area does not necessarily mean that there is a lack of ecological interest; the area may be simply under-recorded.
- 2.13 Data from bat surveys should be considered to be valid for 12-18 months, unless there are any significant changes to the trees within the site (CIEEM, 2019). Data used to support a mitigation licence application to Natural Resources Wales must be from the most recent survey season; depending on the timing of the application, this may mean from the same or previous year.

3 Results

DESK STUDY

- 3.1 The desk study undertaken to inform the PEA identified multiple records for bat species within 2km of the survey area (Temple, 2023). These included records of common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, Nathusius's pipistrelle *Pipistrellus nathusii*, brown long-eared bat *Plecotus auritus*, Brandt's bat *Myotis brandtii*, serotine *Eptesicus serotinus* and noctule *Nyctalus noctula*. The closest bat roost, a common pipistrelle day roost, was recorded approximately 1.1km from the north Site.

Designated sites

- 3.2 The Sites are not subject to any statutory nature conservation designation and no statutory sites were recorded within 2km of the development area.
- 3.3 Sixteen non-statutory nature conservation sites, designated as Sites of Importance for Nature Conservation (SINC) are present within 2km of the Sites. The nearest of these is Lower Taff and Edwardsville Woods which is located on the north of the River Taff directly across from the Sites. Further details of this and other conservation sites are found in the PEA report (Temple, 2023a).

Significant landscape features

- 3.4 Several areas of woodland are present within the immediate vicinity of the Site, which have good connectivity to the Site via the river and tree lines. This includes woodland at Lower Taff and Edwardsville Woods directly connected to the Site by the River Taff. 62 areas of Ancient Woodland, five Restored Ancient Woodland Sites (RAWS) and nine Plantation on Ancient Woodland Sites (PAWS) are within 2km of the site. Such habitats are likely to provide important roosting, foraging and commuting resources for bats locally.

FIELD SURVEY

Overview

- 3.5 A plan of the Sites is provided in Appendix 1 and supporting photographs of key features in Appendix 2. Appendix 3 provides a detailed assessment of each tree.

Preliminary Ground Level Assessment - Trees

- 3.6 All trees within the redline boundary of the north Site were subject to a GLTA a number of trees within the site were surveyed. Trees where no PRF's were noted are were designated as having negligible potential. 3 individual trees and 2 groups of trees were found to have PRFs. These consisted of two young alders, two groups of young oaks and a large mature willow. The trees were found to host low (PRF-I) potential for roosting bats, therefore no further survey efforts are required. Features identified included low trunk ivy on most trees, and branch crack exposed from the top side found on the willow.
- 3.7 All trees within the south Site and a 10m buffer were subject to a GLTA. Trees with no PRFs were noted as being negligible or devoid of features. A total of 12 trees possessed features suitable for roosting bats, including rot holes, woodpecker holes, trunk cavities and splits. The majority of the trees inspected were semi-mature or mature species and were predominantly alder, birch and oak, with an understorey of bramble scrub and bracken. The non-native invasive species Japanese knotweed was dominant within the centre of the Site. A small number of trees had a covering of ivy on the lower trunks, however, none had any dense enough to conceal PRFs or to be considered a PRF itself.
- 3.8 Within the south Site boundary four trees were assessed as having low (PRF-I) suitability to support roosting bats.
- 3.9 Within the 10m buffer around the south Site two trees were assessed as having low suitability, four trees were assessed as having moderate suitability and two trees were assessed as having high (PRF-M) suitability for roosting bats. Detailed results are in Appendix 3.

- 3.10 As all trees within the site boundary of the north and south Sites were of low (PRF-L) suitability for bats, no further surveys are required. However, removal of any of these trees will need to be done through the use of a soft felling technique.
- 3.11 All trees recorded as having moderate or high (PRF-M) suitability are outside of the Site and works area. They are therefore not required to have further surveys. However, should the Site boundary change and these trees be impacted by the works further survey will be necessary as per the recommendations in Section 5.

Other Fauna

- 3.12 The trees within and/or adjacent to the Site also provide opportunities for nesting birds.
- 3.13 Japanese knotweed was identified growing throughout the south Site. Further detail, including recommendations for management of this species, is provided in the separate Invasive Non-Native Species report (Temple 2023c). No Invasive non-native species were identified in the north Site.

4 Evaluation and Impacts

EVALUATION

- 4.1 No confirmed evidence of roosting bats was found during the GLTA survey; however, a number of trees assessed as PRF-I, moderate and PRF-M to support roosting bats were found on the survey within the 10m buffer zone of the south Site. Further surveys are not required at present, but, would be required to determine the presence/likely absence of bats within the trees identified in the survey, if these are to be affected by the works at a later date.
- 4.2 A number of PRF-I trees were identified within both sites. No further surveys are required on these trees, but suitable felling techniques should be used during removal under the watch of a suitable qualified ecologist.
- 4.3 The habitats within the Sites provide suitable foraging and commuting habitat for a range of bat species. Temple (2023b) recorded common pipistrelle, soprano pipistrelle, Myotis species and noctule utilising the Site for foraging and commuting during emergence surveys conducted in 2023, and concluded that the development proposals would have a low impact on foraging and commuting bats.

IMPACT ASSESSMENT

Bat roosts

- 4.4 The trees located within the north and south Site boundaries are considered to have low (PRF-I) suitability for roosting bats. In accordance with best practice guidelines, no further survey is required as no impacts to roosts are expected. However, precautionary methods need to be applied if these trees are to be affected by the proposed development (Reason and Wray, 2023). Further detail is provided in Section 5 below.

- 4.5 The survey identified six trees with features of moderate or high (PRF-M) suitability for roosting bats within the 10m buffer of the south Site. At present no further surveys are required as no impact is expected on these trees.
- 4.6 Trees outside the south Site but within the 10m buffer are assessed as having moderate and high (PRF-M) potential. As these trees are along the side of a relatively busy road any bat roosts will be habituated to some level of noise and vibration from passing traffic. Additionally, no night-time work or Site lighting is permitted as part of the works. Therefore, current works are not considered likely to have any impacts on any potential roosts within this buffer at present and no further surveys are recommended.
- 4.7 In the absence of mitigation, the development proposals will potentially result in the destruction and permanent loss of roosts for bats and an effect on the local bat population. No evidence of roosting bats has been recorded during the surveys undertaken to date but in the event that individual bats are present at the time of felling of the trees, a risk of mortality or injury may occur during the construction phase.

Foraging and commuting habitats

- 4.8 The proposals will result in the loss of an area of suitable foraging and commuting habitat. The area to be lost sits within a wider area of connected woodland and foraging/commuting habitat so the loss is not considered likely to have any significant impact on the overall foraging/commuting habitat suitability in the area.

OTHER FAUNA

Birds

- 4.9 The trees and shrubs within the Sites and surrounding area provide potential breeding habitat for birds and the Sites are assessed as important for breeding birds at the Site level.

4.10 All wild birds, their nests and eggs are protected under the Wildlife and Countryside Act 1981 (as amended). Under this legislation it is an offence to intentionally kill, injure or take any wild bird, intentionally take, damage or destroy the nest of any wild bird whilst it is in use or being built and intentionally take or destroy an egg of any wild bird.

INVASIVE SPECIES

4.11 Japanese knotweed, a non-native invasive species, was recorded throughout the south Site. This species is listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). It is an offence to plant or otherwise cause to grow in the wild any plant which is included in Part II of Schedule 9.

4.12 Although it is not an offence to have these plants on your land per se, it is an offence to cause these species to grow in the wild. Therefore, if they are present on site and development activities (for example movement of spoil, disposal of cut waste or vehicular movements) have the potential to cause the further spread of these species to new areas, it will be necessary to ensure appropriate measures are in place to prevent this happening prior to the commencement of works. Further recommendations are given in the separate INNS report (Temple 2023c).

5 Summary and Recommendations

SUMMARY

- 5.1 The GLTA identified 14 trees, or groups of trees, on the south Site, 4 within the Site boundary and 10 in the 10m buffer zone, as well as 5 trees, or groups of trees, on the north Site as having suitability to support roosting bats.
- 5.2 Currently trees to be affected by the works are all considered to have low (PRF-I) suitability for roosting bats. In line with best practice guidance, no further surveys are required, however soft felling of these trees is recommended.
- 5.3 If the Site boundary or working area are changed prior to works or machinery is to be used within close proximity to the trees with moderate or high (PRF-M) potential, then these trees may require further surveys at a future date.
- 5.4 Therefore, the following recommendations are given to enable the proposed development to lawfully proceed and ensure the status of local bat populations is maintained in the long-term.

FURTHER SURVEY

Low potential trees

- 5.5 Trees with low (PRF-I) suitability for roosting bats do not require any specific further survey. They should be soft felled between April and October (when bats are active) to avoid the risk of killing or injuring any individual bats present. This is to comprise the felling and gentle lowering to the ground of sections of the main trunk and significant limbs (where potential roost features are present), taking care to avoid cutting through any cavities present (sections should aim to fully enclose any identified feature rather than bisecting it). Once on the ground, the sections should be carefully checked to confirm no bats are present and then stacked in such a way as to permit any bat within the sections to leave of its own accord. Sections should be left in situ overnight. Low (PRF-I) potential trees should be reinspected if 12-18

months passes between the GLTA survey and the start of works to assess if any new PRFs are present.

Moderate PRF-M and High PRF-M potential trees

- 5.6 Should any of the moderate potential trees need to be removed at a later stage the following surveys would be required.

Tree-climbing surveys

- 5.7 Where features are able to be fully inspected by a tree climbing inspection, climbing inspections under new guidance (Collins, 2023) replace presence/likely absence surveys as the data provided will be robust and constitute an appropriate level of survey effort. For moderate PRF-M trees two surveys are required and for high PRF-M trees three surveys are required.
- 5.8 Trees with high (PRF-M) and moderate (PRF-M) suitability for roosting bats should be subject to a climbed inspection by a suitably licenced ecologist with the appropriate climbing qualifications. The aim of this survey would be to search for evidence of bats and to gather further information on the likely value or use of PRFs identified from the GLTA. The results of this inspection may result in a re-evaluation of the suitability of the feature for roosting bats, and/or the requirement for further survey effort as outlined below. In the absence of a climbed inspection, the further survey effort should be based on the precautionary results of the GLTA and in line with Collins (2023).

Presence/absence surveys

- 5.9 In the absence of climbed inspections, presence/absence dusk surveys using night vision aids such as Thermal Imaging scopes or Infra-Red Cameras should take place. This is required where climbed inspections are not possible for reasons such as; the tree is unsafe to climb; features are inaccessible by climbing surveys; where features such as lifted bark would be at risk of damage through climbing or endoscope inspection; or to confirm species and numbers where sensitive roost are identified and we need less invasive techniques.

5.10 Trees assessed as being of moderate suitability (PRF-M) require two dusk presence/absence surveys to be completed. This should comprise of two dusk surveys using night vision aids completed between May and September inclusive with at least one survey between May and August. Surveys should be at least three weeks apart. If required Trees assessed as high (PRF-M) suitability following a climbed inspection should be subject to two dusk surveys, or in absence of a climbed inspection should be subject to three dusk surveys. These should be carried out between May and September inclusive, with at least two surveys between May and August. Surveys should be at least three weeks apart.

RECOMMENDATIONS

Bats and lighting

5.11 Works on Site will be restricted to daytime only. No lighting will be allowed on Site either during construction or post construction.

Birds

5.12 Whilst impacts to birds are not considered to be significant, where the proposed works will require the removal of shrubs or trees with potential to support breeding birds, this must be carried out between September and February inclusive to avoid any potential offences relating to birds during the main breeding season (Newton et al., 2011).

5.13 If south Site clearance during the breeding season is unavoidable, potential nesting habitat must be inspected by a suitably experienced ecologist a maximum of 48 hours before work commences to identify active birds' nests. Should they be present, the nest and a suitable buffer of habitat around it must be retained until it has been confirmed that the young have left the nest, or the nest is no longer deemed active.

Invasive Non-Native Species

- 5.14 The stand of Japanese knotweed on Site would need to be managed to stop the non-native invasive species spreading off Site. A separate report has been completed with further recommendations (see amended Temple, 2023c).

ENHANCEMENTS

Provision of bat roosting opportunities

- 5.15 The provision of additional roosting opportunities would provide compensation and enhancement and should be included in the development design. Bat boxes should be placed on retained trees in undisturbed areas and suitable. The boxes used on trees should be of suitable design and made of Woodcrete. Boxes suitable for higher value roosts should be used where possible e.g. maternity or hibernation roosts.

Provision of bat foraging opportunities

- 5.16 Replacement planting for trees removed should be provided on a 3 to 1 basis and include species attractive to insects to provide additional foraging potential for bats.

References

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Temple (2023b) Feeder Pipe Bridge. Bat Surveys Report for Rhondda Cynon Taff Borough Council.

Temple (2023c) Feeder Pipe Bridge Replacement, Abercynon, Invasive Species Survey.

Welsh Government (2021). Planning Policy Wales. Edition 11. [Online]. Available at: <http://www.gov.uk>

Appendix 1: Survey Maps

Figure 1: Preliminary Roost Assessment Map North Site



Figure 2: Preliminary Roost Assessment Map North Site – PRF locations

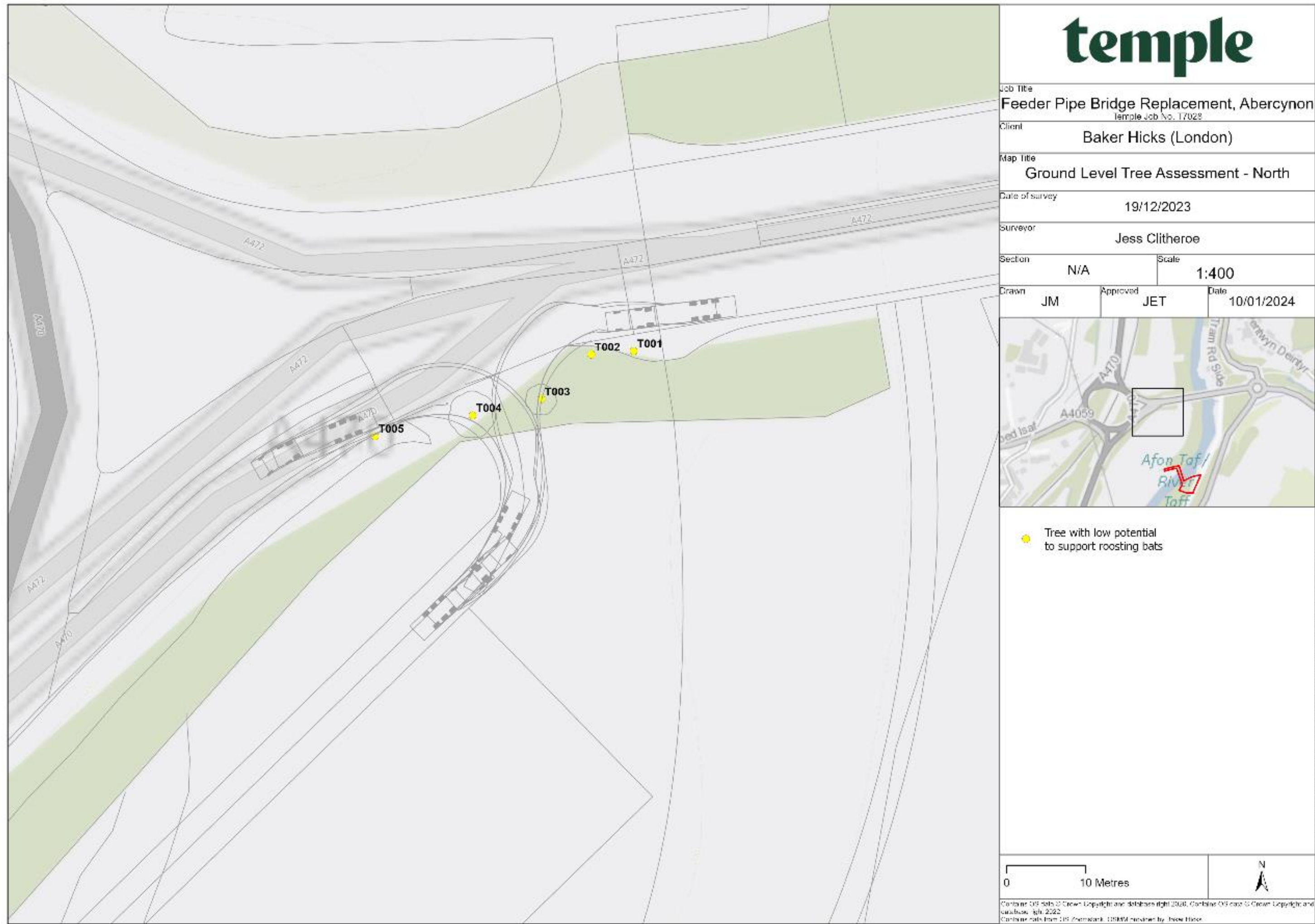


Figure 3: Preliminary Roost Assessment Map South Site

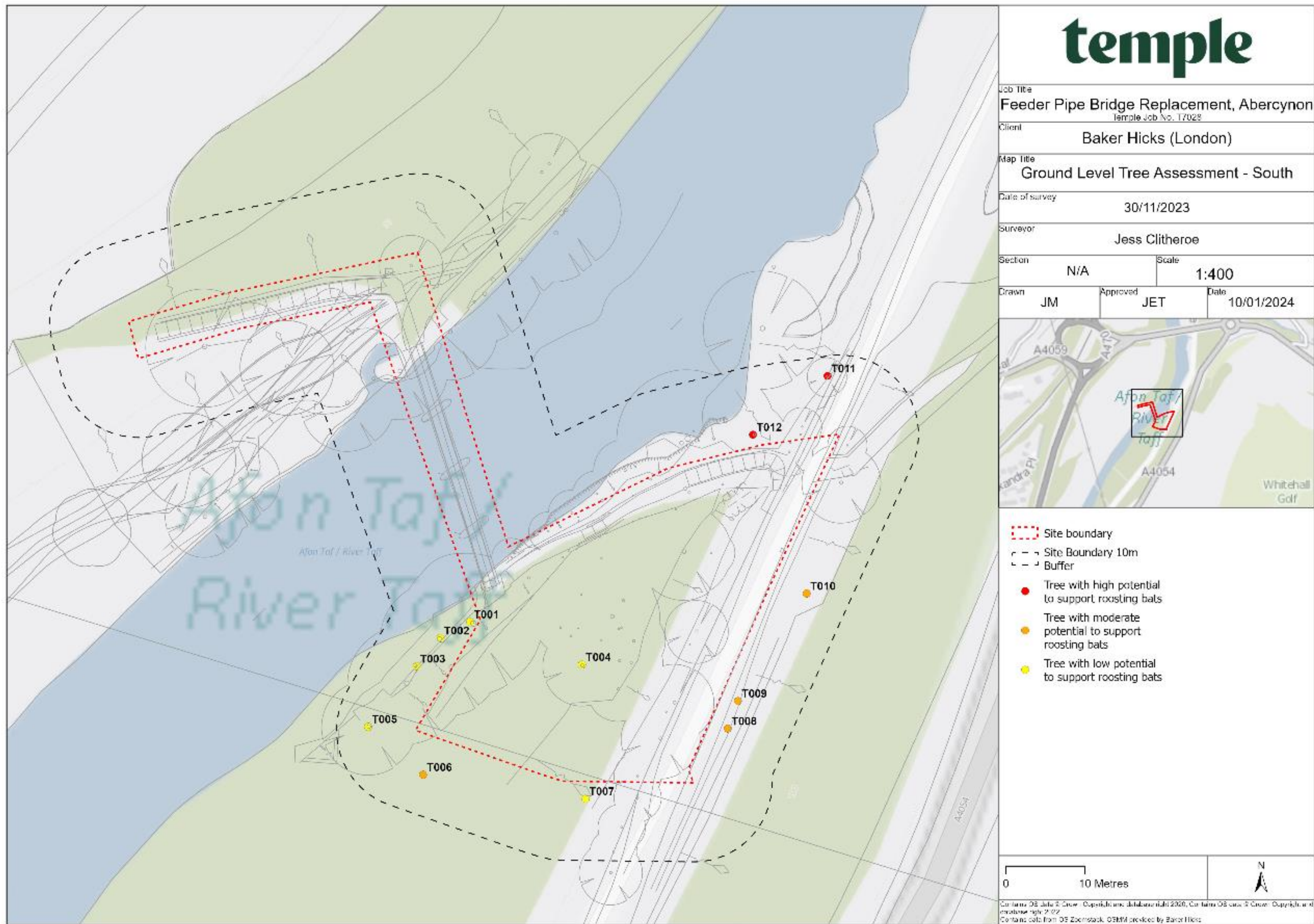
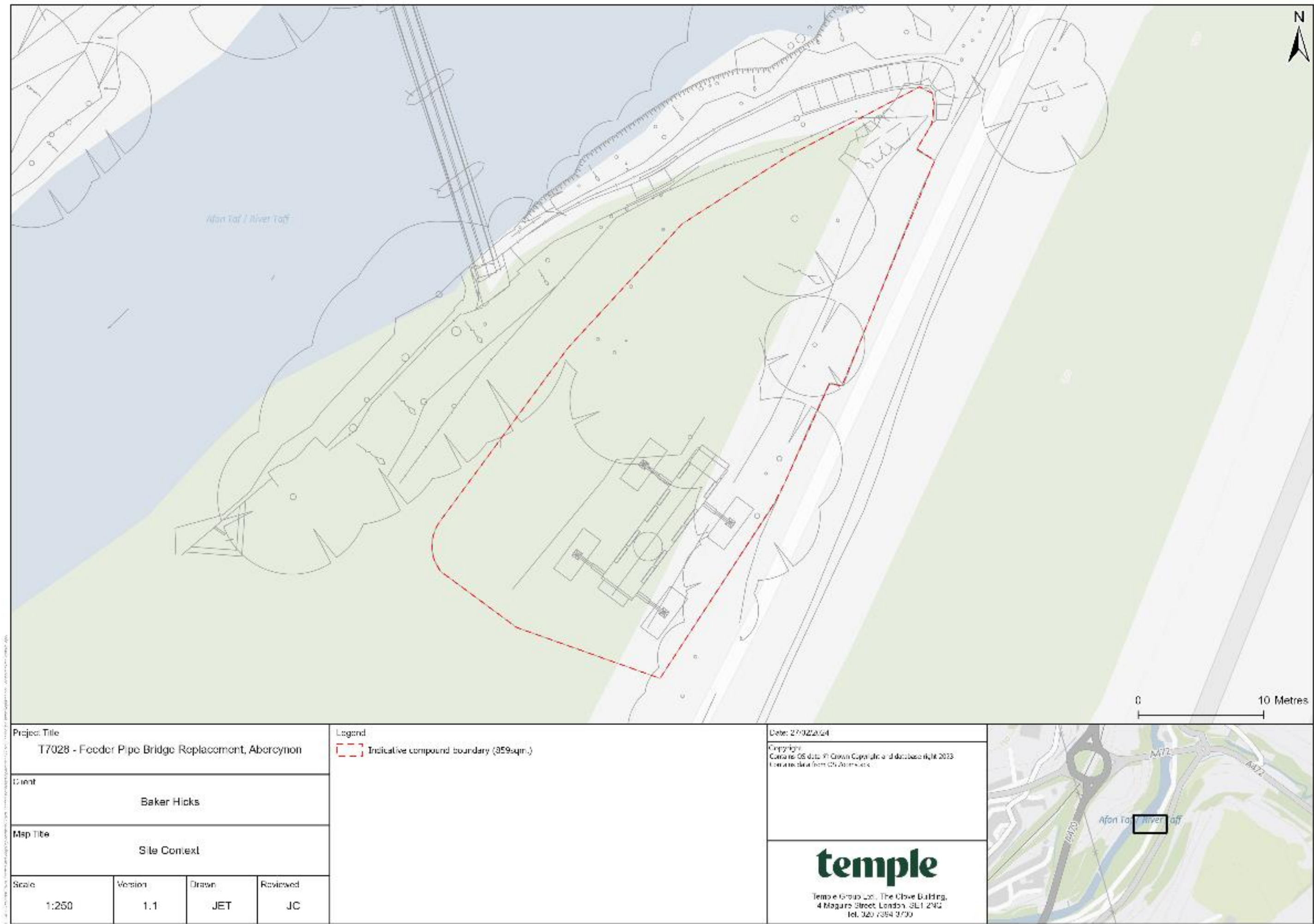


Figure 4: Compound location - South Site



Appendix 2: Photographs

Photograph 1 - South South site overview showing cleared area to centre and Japanese knotweed	
Photograph 2- South T002- within redline boundary. Small knot hole in trunk, does not go far back into cavity.	
Photograph 3 - South T004 – within red line boundary. Young silver birch with hole in small trunk stem. Hole does not appear to go far back into stem.	

Photograph 4 - South T006 – outside red line boundary. Showing cracked trunk stem in Willow running horizontally and vertically along trunk.	
Photograph 5 - South T008 – outside red line boundary. Multiple holes in trunk stem. Looks to form cavity within trunk.	
Photograph 6 - South T009 – outside red line boundary. View of whole tree. Hole is in diagonal limb to right of picture	

Photograph 7 - South T009 – Close up of hole	
Photograph 8 - South T010 – outside red line boundary. Cracks in trunk stem leading to cavity.	
Photograph 9 - South T011 – outside red line boundary. Mature tree with multiple woodpecker holes in stems.	

Photograph 10 - South T011 – outside red line boundary. Close up of woodpecker hole.	
Photograph 11 - South T012 – outside red line boundary. Large mature beech tree hanging over water with multiple features.	
Photograph 12 - South T012 – close up of callus roll on limb.	

Photograph 1 - North Overview of top of site where access track will come in and compound to be sighted.	
Photograph 2 - North View of gap where proposed entrance from road in to site will be. Young alder (T001) is shown on right hand side of the gap.	
Photograph 3 - North T002 to right of picture and group of young ivy clad trees to left of picture.	

Photograph 4 - North

T003 – mature willow. Crack in right hand branch goes straight through with little cavity.



Photograph 5 North

View of bracken that access track will cut through. Trees within bracken have negligible potential.



Appendix 3: GLTA Survey Results

Project		T7028 Abercynon, GLTA – South of river					Further survey recommendation
Surveyor		Jess Clitheroe					
Date		30/11/2023					
Weather		Sun and cloud, gentle breeze, 8C, 6/8					
Tree No. (previous ref.)	Tree species	Tree measurements		Description of feature	Assessment	Grid Reference	
		Height (m)	DBH (m)				
T001 (tree tag 4793)	Young alder at edge of river bank	8	0.2	split limb; 4m height,	Low	SP	n/a
T002	Young alder at edge of river bank	8	0.2	small knot hole; 2m height	Low	SP	n/a
T003	Young alder at edge of river bank	8	0.2	small knot hole underside of limb; 6m height	Low		N/A
T004	Young silver birch within middle of the site	8	0.2	Small hole in trunk stem, doesn't go far in to tree; 4m height	Low	SP	N/A
T005	small alder, outside of site boundary along river edge	8	0.2	small amount of ivy on trunk, unlikely to be concealing further features	Low	SP	N/A

T006	Large mature willow along river edge outside of site boundary but within 10m	8	0.4	Fallen broken limb with large crack	Moderate		N/A outside of site boundary, will require survey if boundary moves closer.
T007	Unknown standing monolith in deep vegetation outside of site boundary but within 10m	5	0.5	Ivy on trunk, unlikely to be concealing further features	Low		N/A
T008 (Tree tag 4794)	Semi-mature multi stemmed alder on road edge to south of site	10	0.2 - 0.3	Multiple holes on one trunk stem	Moderate		N/A outside of site boundary, will require survey if boundary moves closer.
T009 (Tree tag 4795)	Semi-mature multi stemmed alder on road edge to south of site	10	0.2 - 0.3	Hole in smaller limb	Moderate		N/A outside of site boundary, will require survey if boundary moves closer.
T010 (Tree tag 4796)	Semi-mature multi stemmed alder on road edge to south of site	10	0.2 - 0.3	Multiple entrance trunk cavity in smaller trunk stem	Moderate		N/A outside of site boundary, will require survey if boundary moves closer.
T011	Oak on riverbank outside of site	15	0.5	Multiple woodpecker holes on branches, 4 -8m height	High		N/A outside of site boundary, will require

	boundary but within 10m						survey if boundary moves closer.
T012	Large mature beech on riverbank, outside of site boundary but within 10m	15	0.6	Numerous features including stem knot hole, branch cavity roll and woodpecker holes on main trunk. 4 – 10m in height	High		N/A outside of site boundary, will require survey if boundary moves closer.

Project		T7028 Abercynon, GLRA – North of river					Further survey recommendation
Surveyor		Jess Clitheroe					
Date		19/12/2023					
Weather		overcast, gentle breeze, 6C, 8/8					
Tree No. (previous ref.)	Tree species	Tree measurements		Description of feature	Assessment	Grid Reference	
		Height (m)	DBH (m)				
T001	Young alder at edge of road	5	0.2	Small amount of ivy on trunk, unlikely to be concealing further features	Low	SP	n/a
T002	Young alder at edge of road	5	0.2	Small amount of ivy on trunk, unlikely to be concealing further features	Low	SP	n/a
Group 1	Group of small oaks at edge of road	8	0.3	Small amount of ivy on trunks, unlikely to be concealing further features	Low	SP	N/A
Group 2	Group of small oaks at edge of road	8	0.3	Small amount of ivy on trunks, unlikely to be concealing further features	Low	SP	N/A
T003	Large mature willow tree	10	0.2 – 0.4	crack in branch that goes through to other side.	Low	SP	N/A

Appendix 4: Legislation

Important Notice: This section contains details of legislation applicable in England and Wales only (i.e. not including Scotland, the Isle of Man, Northern Ireland, the Republic of Ireland or the Channel Islands) and is provided for general guidance only. While every effort has been made to represent the current (at the time of writing) situation with respect to the UK's position outside of the EU and to ensure accuracy throughout, this section should not be relied upon as a definitive statement of the law.

A LEGISLATION AFFORDED TO SPECIES

The objective of the EC Habitats Directive² is to conserve the various species of plant and animal which are considered rare across Europe. The Directive is transposed into UK law by **The Conservation of Habitats and Species Regulations 2017 (as amended)** and **The 'Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended)**.

Various amendments to the 2017 Regulations in England and Wales have been made through the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. These changes came into effect on the 1 January 2021 following the UK's departure from the EU and the end of the Transition Period. The changes are largely limited to 'operability changes' that will ensure the Regulations can continue to have the same working effect as before.

The Wildlife and Countryside Act 1981 (as amended) is a key piece of national legislation which implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and implements the species protection obligations of Council Directive 2009/147/EC (formerly 79/409/EEC) on the Conservation of Wild Birds (EC Birds Directive) in Great Britain.

² Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora

Since the passing of the Wildlife & Countryside Act 1981, various amendments have been made, details of which can be found on www.opsi.gov.uk. Key amendments have been made through the Countryside and Rights of Way (CRoW) Act (2000).

Other legislative Acts affording protection to wildlife and their habitats include:

- Salmon and Freshwater Fisheries Act 1975;
- Deer Act 1991;
- Protection of Badgers Act 1992;
- Wild Mammals (Protection) Act 1996;
- Countryside and Rights of Way (CRoW) Act 2000;
- The Eels (England and Wales) Regulations 2009; and
- Environment (Wales) Act 2016.

Species and species groups that are protected or otherwise regulated under the aforementioned legislation, and that are most likely to be affected by development activities, include herpetofauna (amphibians and reptiles), badger, bats, birds, dormouse, invasive species, otter, plants, red squirrel, water vole and white clawed crayfish.

Explanatory notes relating to species protected under The Conservation of Habitats and Species Regulations 2017 (as amended), which includes smooth snake, sand lizard, great crested newt, natterjack toad, all bat species, otter, dormouse and some plant, invertebrate and fish species, are given below. **These should be read in conjunction with the relevant species sections that follow.**

- In the Habitats Directive, the term ‘deliberate’ is interpreted as being somewhat wider than intentional and may be thought of as including an element of recklessness.
- The Conservation of Habitats and Species Regulations 2017 (as amended) does not define the act of ‘migration’ and therefore, as a precaution, it is recommended that short distance movement of animals for e.g. foraging, breeding or dispersal purposes are also considered where relevant.

- In order to obtain a mitigation licence for species protected under the Conservation of Habitats and Species Regulations 2017 (as amended), the application must demonstrate that it meets all of the following three 'tests': i) the action(s) are necessary for the purpose of preserving public health or safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequence of primary importance for the environment; ii) that there is no satisfactory alternative and iii) that the action authorised will not be detrimental to the maintenance of the species concerned at a favourable conservation status in their natural range.

BATS

All species of bat are fully protected under The Conservation of Habitats and Species Regulations 2017 (as amended) through their inclusion on Schedule 2. Regulation 43 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species (e.g. all bats);
- Deliberate disturbance of bat species as:
 - a) to impair their ability:
 - to survive, breed, or reproduce, or to rear or nurture young; or
 - to hibernate or migrate.
 - b) to affect significantly the local distribution or abundance of the species.
- Damage or destruction of a breeding site or resting place; and
- Keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part thereof.

Bats are also protected under the Wildlife and Countryside Act 1981 (as amended) in respect to sub-sections 9 (4) (b) and (c) and 9 (5) through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance while in their place of shelter (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale.

How is the legislation pertaining to bats liable to affect development works?

The appropriate licence issued by the relevant countryside agency (e.g. Natural Resources Wales) will be required for works liable to affect a bat roost or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licence is to derogate from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Though there is no case law to date, the legislation may also be interpreted such that, in certain circumstances, important foraging areas and/or commuting routes can be regarded as being afforded protection, for example, where it can be proven that the continued usage of such areas is crucial to maintaining the integrity and long-term viability of a bat roost³.

BIRDS

All wild birds, their nests and eggs are protected under Sections 1-8 of the Wildlife and Countryside Act 1981 (as amended). A wild bird is defined as any bird of a species that is resident in or is a visitor to the European Territory of any member state in a wild state. Among other things, the legislation makes it an offence to:

- Intentionally kill, injure or take any wild bird;
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built;
- Intentionally take or destroy an egg of any wild bird; or
- Sell, offer or expose for sale, have in his possession or transport for the purpose of sale any wild bird (dead or alive) or bird egg or part thereof.

Certain species of bird, for example the barn owl *Tyto alba*, black redstart *Phoenicurus ochruros*, hobby *Falco subbuteo*, bittern *Botaurus stellaris* and kingfisher *Alcedo atthis*

³ Garland and Markham (2008) Is important bat foraging and commuting habitat legally protected? Mammal News, No. 150. The Mammal Society, Southampton.

receive additional special protection under Schedule 1 of the Act. This affords them protection against:

- Intentional or reckless disturbance while it is building a nest or is in, on or near a nest containing eggs or young.
- Intentional or reckless disturbance of dependent young of such a bird.

How is the legislation pertaining to birds liable to affect development works?

To avoid contravention of the Wildlife and Countryside Act 1981 (as amended), works should be planned to avoid the possibility of killing or injuring any wild bird, or damaging or destroying their nests. The most effective way to reduce the likelihood of nest destruction is to undertake work outside the main bird nesting season which typically runs from March to August⁴. Where this is not feasible, it will be necessary to have any areas of suitable habitat thoroughly checked for nests prior to vegetation clearance.

Those species of bird listed on Schedule 1 are also protected against disturbance during the nesting season. Thus, it will be necessary to ensure that no potentially disturbing works are undertaken in the vicinity of the nest. The most effective way to avoid disturbance is to postpone works until the young have fledged. If this is not feasible, it may be possible to maintain an appropriate buffer zone or standoff around the nest. It should be noted that there is no threshold under which disturbance is not an offence, that is to say that disturbance need not be 'significant' for an offence to be committed.

While it is possible to obtain a licence to permit some activities that would otherwise constitute an offence, these can only be issued for specific purposes set out in the Act. This includes damage to crops, to preserve public health or safety and to preserve air

⁴ It should be noted that this is the main breeding period. Breeding activity may occur outside this period (depending on the particular species, geographical location of the site and vagaries of the season in any particular year) and thus due care and attention should be given when undertaking potentially disturbing works at any time of year.

safety, but does not include development, some land management and recreational activities and damage to property.

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- **Lichfield: 1-2 Trent Park, Eastern Avenue, Lichfield, Staffordshire, WS13 6RN. T: +44 (0)1543 229049**
- **Manchester: Express Building, 3 George Leigh Street, Manchester, M4 5AD. T: +44 (0)161 509 4900**
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