



Shropshire Council

LUF2 - TRANSFORMING MOVEMENT AND PUBLIC SPACES IN SHREWSBURY

Arboricultural Impact Assessment Report





Shropshire Council

LUF2 - TRANSFORMING MOVEMENT AND PUBLIC SPACES IN SHREWSBURY

Arboricultural Impact Assessment Report

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OUTLINE ARBORICULTURAL STATEMENT

1. INTRODUCTION

1.1 SCOPE

- 1.1.1. WSP have been commissioned by Shropshire Council to provide arboricultural support in relation to permitted development activities located in Shrewsbury's Station Quarter (hereafter referred to as the site). Various road junction and public realm improvements are proposed for the site (hereafter referred to as the Proposed Development) as detailed in Section 2.
- 1.1.2. Arboricultural scope consists of the following:
- an arboricultural site survey (undertaken to British Standard BS 5837:2012 '*Trees in Relation to Design, Demolition and Construction – Recommendations*') (BS5837);
 - provision of an Arboricultural Impact Assessment (AIA) report summarising site findings, Proposed Development impacts on trees and recommendations to mitigate impacts on retained trees; and
 - provision of a Tree Removals and Protection Plan (TRPP) showing extents of tree removal and trees requiring mitigation/protection or tree work.

1.2 PURPOSE OF REPORT

- 1.2.1. The purpose of this report is to identify all trees which may be affected by the Proposed Development, to assess the impact of the Proposed Development upon those trees and to recommend such protection measures as are necessary to ensure the health of retained trees.
- 1.2.2. The scope and level of detail included within this report is commensurate with that required for the adequate consideration of arboricultural features as part of the Proposed Development.
- 1.2.3. Information provided complies with the requirements of British Standard BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations (BS 5837), and includes reference to the following:
- a desk study search for the baseline information on arboricultural statutory and non-statutory designations;
 - results of a BS 5837 site survey; and
 - an AIA with Outline Arboricultural Method Statement (AMS).

1.3 LIMITATIONS

- 1.3.1. WSP have provided this report solely for the use of the recipient and accepts no liability to any third parties or any other party using or reviewing the report or any part thereof. WSP makes no warranties or guarantees, actual or implied, in relation to this report, or the ultimate commercial, technical, economic, or financial effect on the project to which it relates, and bears no responsibility or liability related to its use other than as set out within the scope of the contract under which it was supplied.
- 1.3.2. Trees are dynamic organisms which are influenced by a variety of environmental variables and whose health and condition can rapidly change. Because of this, any recommendations made within this report are valid for a period of 24 months from the date of survey, when any site conditions

change or pruning or other works unspecified in the report are carried out to, or affecting, the subject trees, whichever is the sooner.

- 1.3.3. This report does not constitute a health and safety survey. Where concerns for tree health and safety exist then necessary and appropriate tree inspections should be carried out.
- 1.3.4. This AIA is informed by design information listed in Section 1.4 and should be reviewed at each construction phase of the Proposed Development as a minimum. The outline AMS of **Appendix D** should be considered a working document and be modified appropriately with input from the Site Agent/Works Manager, the appointed arboriculturist and Local Planning Authority (LPA). Any report modifications will need to be approved by the LPA and, only when approved, can the updated work commence in accordance with requirements of the updated AMS report.

1.4 PROVIDED DESIGN INFORMATION

- 1.4.1. The following information has been viewed and used to prepare this report:
 - Topographical survey information (dated June 2023)
 - General Arrangements (Drawing number '70107870-WSP-HGN-GY-DR-CH-00001 C02')
 - Site Clearance Plan (Drawing number '70107870-WSP-HSC-GY-DR-CH-00001 C02')
 - Proposed Drainage Plan (Drawing number '70107870-WSP-HDG-GY-DR-CD-00001 C03')
 - Carriageway Construction (Drawing number '70107870-WSP-HPV-GY-DR-CH-00001 C02')
 - Kerbs and Footways (Drawing number '70107870-WSP-HKF-GY-DR-CH-00001 C02')
 - Traffic Signs Plan (Drawing number '70107870-WSP-HSN-GY-DR-CH-00001 C02')

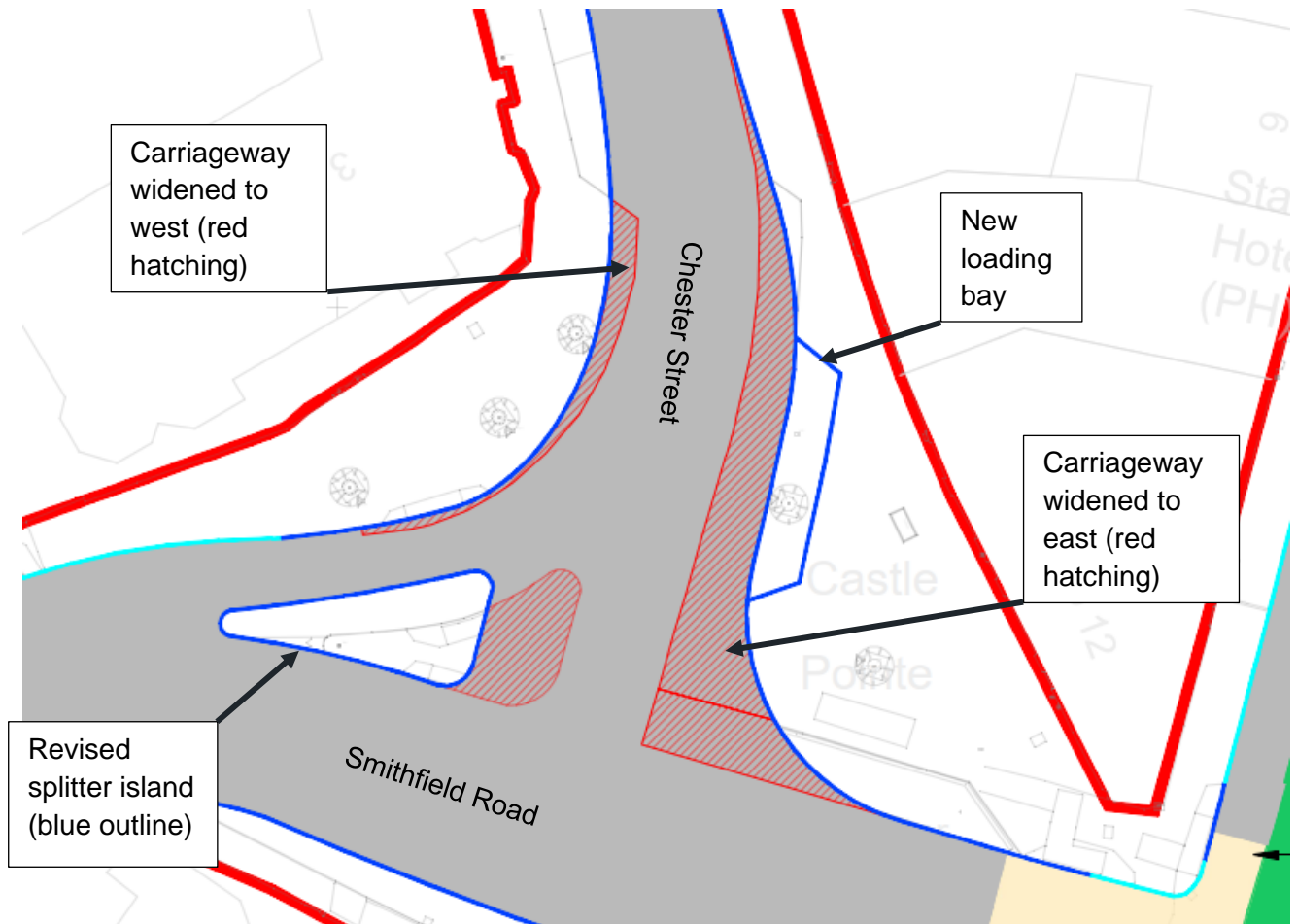
2. PROPOSED DEVELOPMENT

2.1 CARRIAGEWAY CONSTRUCTION

2.1.1. The Proposed Development centres on the gyratory next to Shrewsbury railway station, which connects Chester Street (A528) and Smithfield Road (A458). As outlined in Figure 2-1, carriageway upgrades (all excavated to a maximum depth of 600mm below existing levels) will include the following:

- Realignment and variable widening of Chester Street (both sides of existing carriageway);
- A new 2.5m wide loading bay; and
- A revised splitter island layout for the gyratory.

Figure 2-1 – Carriageway construction details as taken from WSP Carriageway Construction Plan (drawing number ‘70107870-WSP-HPV-GY-DR-CH-00001 C02’ and dated 16/05/24).



3. DESKTOP STUDY FINDINGS

- 3.1.1. An arboricultural desk study was undertaken to establish presence/absence of the statutory and non-statutory arboricultural constraints using publicly available information for Conservation Areas¹, ancient woodland² and ancient/veteran trees³. Scope of the desk study includes arboricultural constraints located up to 15m from the Proposed Development's carriageway construction (hereafter referred to as the study area).
- 3.1.2. The desk study confirms the absence of ancient woodland or ancient/ veteran trees within the study area. The Proposed Development is sited fully within Shrewsbury Conservation Area. The WSP Project Manager also confirmed on 11 October 2024 that trees in the study area are not protected by Tree Preservation Order (TPO).

4. SITE SURVEY FINDINGS

- 4.1.1. An arboricultural survey was undertaken on 14 October 2024 in accordance with BS5837 and as described in **Appendix A**. A Tree Survey Schedule detailing information about arboricultural features in the study area is presented in **Appendix B** with locations of arboricultural features shown on the TRPP of **Appendix C**.
- 4.1.2. The site centres on a gyratory system margined by five roadside field maple which are possible cultivars based on observed upright branching habit. Three moderate quality trees (T1 to T3) are located to the western side of Chester Street and two low quality trees (T4 and T5) are located to the eastern side of Chester Street.
- 4.1.3. All trees were planted in 2012 as part of the public realm landscaping proposals associated with the Shrewsbury Northern Gateway project. These were planted in 1m x 1m recessed stone sett edged resin-bound tree pits and stems enclosed in circular metal tree guards. Sometime prior to the site survey, tree guards have been removed for each tree and the tree pit/hard surfacing surrounding T4 removed.
- 4.1.4. T4 and T5 are enclosed within a managed construction site associated with the Proposed Development. Significant excavation associated with the Proposed Development has occurred within T4's Root Protection Area (RPA) which will adversely impact the tree's condition, longevity and future contribution to the Conservation Area.
- 4.1.5. Tree pit/hard surfacing removal around T4 has exposed an underlying 1200mm wide concrete ring in which the stem is planted. Subsequent trial hole investigations undertaken on 15 October 2024 (in

¹ Shropshire Council. 2024, *Conservation areas in central Shropshire* [online]. Available at: <https://next.shropshire.gov.uk/environment/historic-environment/conservation-areas/conservation-areas-in-central-shropshire/> [Accessed 11 October 2024]

² Natural England, 2024. *Multi-Agency Geographic Information for the Countryside (MAGIC) database* [online]. Available at: <https://magic.defra.gov.uk/MagicMap.aspx> [Accessed 11 October 2024]

³ Ancient Tree Inventory, 2024. *Ancient Tree Inventory* [online]. Available at: <https://ati.woodlandtrust.org.uk/tree-search> [Accessed 11 October 2024]

accordance with Section 4 of 'Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees – Volume 4' from the National Joint Utilities Group (NJUG)) confirm the 1200mm wide concrete ring extends 1000mm belowground (Figure 4-1). This restrictive growing medium for T4 shall also adversely limit T4's future contribution to the Conservation Area.

Figure 4-1 – T4 located in 1200mm wide x 1000mm deep concrete ring underlying recently removed tree pit and hard surface.



- 4.1.6. A similar concrete ring is assumed to have been used for the tree pit of T5 (based on October 2012 streetview imagery) which shall similarly adversely limit T5's future contribution to the Conservation Area. T5 has a 150mm diameter impact wound to its lower stem (Figure 4-2). Incremental stem growth/root development also appears to be prying up the resin bound surface.

Figure 4-2 – T5 with impact wound (red arrow) which encircles one-third of stem.



- 4.1.7. T1 to T3 are located to the western side of Chester Street (Figure 4-3) and contribute residential screening benefits to an adjoining residential building. Incremental stem growth/root development of each tree appears to be prying up the resin bound tree pit surface. Twiggy roadside facing canopy growth of T1 and T2 suggests the trees are coming into contact with high sided vehicles.

Figure 4-3 – Three moderate quality field maple (T1-T3) provide screening to. T1 (yellow arrowed), T2 (blue arrowed) and T3 (red arrowed).



5. ARBORICULTURAL IMPACT ASSESSMENT

5.1 SCOPE OF ASSESSMENT

- 5.1.1. The scope of this assessment has been established with reference to BS 5837. The scope of assessment is to evaluate the effects of the Proposed Development on arboricultural features and where necessary recommend mitigation.
- 5.1.2. The assessment includes specific reference to the effects of tree loss and other potentially damaging activities which could foreseeably occur in the vicinity of retained trees. Further reference is made concerning recommendations for mitigation, including those matters which require inclusion within a site-specific AMS. An outline AMS is included in **Appendix D**.

5.2 ASSUMPTIONS AND LIMITATIONS

- 5.2.1. This AIA report has been compiled on the basis of the following assumptions:
- All construction, demolition and landscaping activities will be excluded from RPAs and canopies of T1, T2 and T5 as identified on the TRPP unless detailed in this report.
 - Tree Protection Fencing (TPF) with below ground stabilisation systems are assumed to be inappropriate for the Proposed Development due to the likely presence of underground services and works phasing/public access requirements associated with Proposed Development. TPF alignments, specifications and phasing requirements should be confirmed by the appointed contractor.
 - No adjusted RPAs (accounting for natural root barriers, historic ground disturbance or tree pits) have been used for the TRPP.
 - No canopy pruning is required to enable removal of a defunct lamppost column sited within the eastern canopy of T1 as further discussed in Section 5.5.5.

5.3 ARBORICULTURAL FEATURES TO BE REMOVED

- 5.3.1. The Proposed Development would result in removal of one moderate quality tree (T3) and one low quality tree (T4) as detailed below:
- T3 requires removal as its RPA and canopy are significantly compromised by the revised carriageway re-alignment to be excavated to 600mm depth (below existing levels).
 - T4 requires removal as the tree is located in the proposed new loading bay to be excavated to 600mm depth (below existing levels).

5.4 RPA ENCROACHMENT

- 5.4.1. Iterative design changes to the alignments of the revised carriageway and tactile pavement have designed out RPA incursions of T1 and T2 respectively. New resurfacing and planter locations shall also be sited to avoid RPA incursion of T5.

5.5 ARBORICULTURAL FEATURES TO BE PRUNED

- 5.5.1. All retained trees (T1, T2 and T5) form part of Shrewsbury Conservation Area and any proposed tree pruning works must be agreed and approved with the LPA tree officer. Any tree works undertaken should comply with British Standard 3998:2010 – Tree Work Recommendations and should therefore be carried out by skilled tree surgery contractors.

5.5.2. Tactile pavement is proposed for installation within the outer eastern canopy of T1 and outer southwestern canopy of T5. TPF (assumed to be 2.4m high heras-style fencing) is proposed for installation within the outer southern canopies of T1 and T2 at roadside. Outline tree pruning work is specified in Table 5-1 and indicated on the TRPP.

Table 5-1 – Tree works required in Shrewsbury Conservation Area

| Tree Ref | Pruning work (<u>underlined</u>) plus justification for proposed pruning |
|------------|--|
| T1, T2, T5 | <u>Crown to be crown lifted to 2.4m from ground level.</u> Crown lifting would be required to achieve vertical clearance for installation of TPF. Height of clearance is subject to confirmation of TPF alignments, specification and phasing requirements by the appointed contractor. |

5.5.5. Careful removal of one lamppost column is required within the eastern canopy of T1 (Figure 5-1). Should any branches be identified to encroach this activity then branches should be temporarily tied back to achieve required clearance in the first instance. If additional pruning is required at a later date, then proposed tree pruning works must be agreed and approved with the LPA tree officer. The appointed contractor shall adhere to the precautionary working methods around trees as outlined in **Appendix D**.

Figure 5-1 – Lamppost column located in canopy of T1.

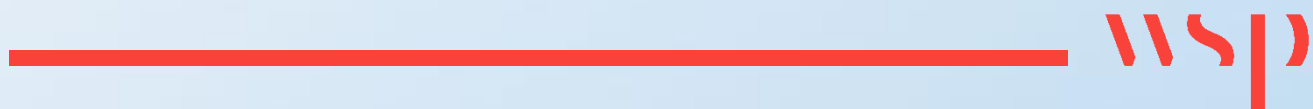


6. SUMMARY

- 6.1.1. A desk study undertaken on 11 October 2024 confirmed the absence of ancient woodland or ancient/veteran trees within the study area whilst the WSP PM also confirmed surveyed trees are not protected by TPO. All surveyed trees are located within Shrewsbury Conservation Area.
- 6.1.2. An arboricultural survey was undertaken on 14 October 2024 in accordance with BS5837. A Tree Survey Schedule detailing information about arboricultural features in the study area is presented in **Appendix B** with locations of arboricultural features shown on the TRPP of **Appendix C**.
- 6.1.3. The Proposed Development would result in the removal of one moderate quality tree (T3) and one low quality tree (T4). Minor crown lifting works to T1, T2 and T5 is required as outlined in Table 5-1. This information should support submission of a tree works application for trees protected by the Conservation Area.
- 6.1.4. All other trees can be retained and protected through demolition, construction and landscaping. Principles for tree protection and mitigation are set out in the outline AMS of **Appendix D** which includes the need for TPF, canopy pruning and banksman supervision. TPF alignments, specification and phasing requirements should be confirmed by the appointed contractor. It is recommended that locations and extents of exclusion fencing are confirmed on site pre-construction in consultation with the appointed arboriculturist.

Appendix A

SURVEY METHODOLOGY





SITE SURVEY

The BS587 site survey was undertaken in accordance with the following criteria:

- The trees have been visually inspected from ground level only;
- No tissue samples were taken nor was any internal investigation of the subject trees undertaken;
- Tree heights and crown spreads have been estimated to the nearest 1m;
- Notes have been recorded where they relate to the quality of the arboricultural feature;
- Management recommendations have been provided where work is necessary for the abatement of a hazard which presents a high level of risk to persons or property. Such management recommendations have been communicated to the tree owner/manager separately from this report;
- Stem diameters have been measured in accordance with Annex C of BS 5837;
- Diameters of single stem trees on level ground have been measured at 1.5m above ground level.
- By default, RPAs are calculated as an area equivalent to a circle with a radius 12 times the stem diameter and are capped at a distance of 15 metres.

QUALITY ASSESSMENT

The quality of arboricultural features has been determined in accordance with BS 5837 Table 1 a copy of which is provided in Figure A-1. The purpose of the quality assessment is to enable informed decisions to be made regarding the removal and retention of arboricultural features in the context of development. For an arboricultural feature to be included within a particular quality category it should accord with the description provided.

The quality of each arboricultural feature is defined based on its sub-category. Sub-categories carry equal weight, do not influence retention priority and are simply included to indicate the primary value associated with each surveyed item. Sub-categories 1, 2 and 3 are intended to reflect arboricultural, landscape and cultural values, respectively.

The quality and sub-category assigned to each arboricultural feature are identified within the Tree Survey Schedule included in **Appendix B** of this report.

Figure A-1 - BS 5837 Table 1 - Cascade Chart for Tree Quality Assessment

| Table 1 Cascade chart for tree quality assessment | | | | |
|---|--|---|---|------------------------|
| Category and definition | Criteria (including subcategories where appropriate) | | | Identification on plan |
| Trees unsuitable for retention (see Note) | | | | |
| Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years | <ul style="list-style-type: none"> Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality <p><i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i></p> | | | See Table 2 |
| | 1 Mainly arboricultural qualities | 2 Mainly landscape qualities | 3 Mainly cultural values, including conservation | |
| Trees to be considered for retention | | | | |
| Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years | Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue) | Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features | Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture) | See Table 2 |
| Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years | Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation | Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality | Trees with material conservation or other cultural value | See Table 2 |
| Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm | Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories | Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits | Trees with no material conservation or other cultural value | See Table 2 |

NOTES AND LIMITATIONS

Arboricultural survey data is of a preliminary nature and has been collected based on a site survey.

Only attributes visible from the ground have been noted and each arboricultural feature may not have been inspected closely due to access difficulties or safety constraints. Safety related features have not been recorded on the basis that the arboricultural features will be subject to a normal programme of tree hazard assessment and only those features which materially affect the quality of the feature or pose a real and immediate safety concern have been recorded.

Arboricultural survey data is typically valid for a period of two years unless otherwise stated. Significant environmental events (such as extreme weather conditions) or changes to the site may render it invalid within a shorter timescale. All trees have been mapped to the available topographical survey.

Whilst arboricultural surveys are not seasonally limited it is the case that certain pests and diseases may be more or less evident at different times of the year. This is especially true of certain wood decaying fungi such as the Giant Polypore (*Meripilus giganteus*) where fruiting bodies are short-lived, and the early stages of root decay may not result in other identifiable symptoms. Survey data is therefore based upon observations made at the time of the site visit and may be subject to change should further or more detailed inspections be undertaken.

The survey has only been undertaken from land within the client's ownership, from public land or from areas where formal access has been arranged.

Appendix B

TREE SURVEY SCHEDULE





SURVEY SCHEDULE EXPLANATORY NOTES

REFERENCE ABBREVIATIONS

- T – Tree

MEASUREMENTS

Height is estimated to provide a relative indication of tree size.

Stem Diameter are in reported accordance with BS 5837 paragraph 4.6.1, Annex C.

Crown spread for trees was estimated in the four cardinal points.

LCH – lowest canopy height. It is an estimate of the lowest point of foliage above ground level of the tree indicating the clearance below the tree.

LBH – lowest branch height. It is the height above ground level of the first branch union with the main stem of the tree.

ASSESSMENTS

Life stage: Y – Young, SM – Semi-mature, EM – Early Mature, M – Mature, V – Veteran

Physiological condition: G – Good, F – Fair, P – Poor, D – Dead

Structural condition: G – Good, F – Fair, P – Poor

ERC - Estimated remaining contribution: <10 years, 10+ years, 20+ years or 40+ years.

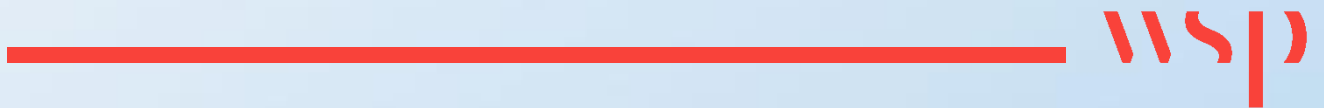
BS 5837 Category: A, B, C or U with sub-category recorded as 1, 2 or 3.

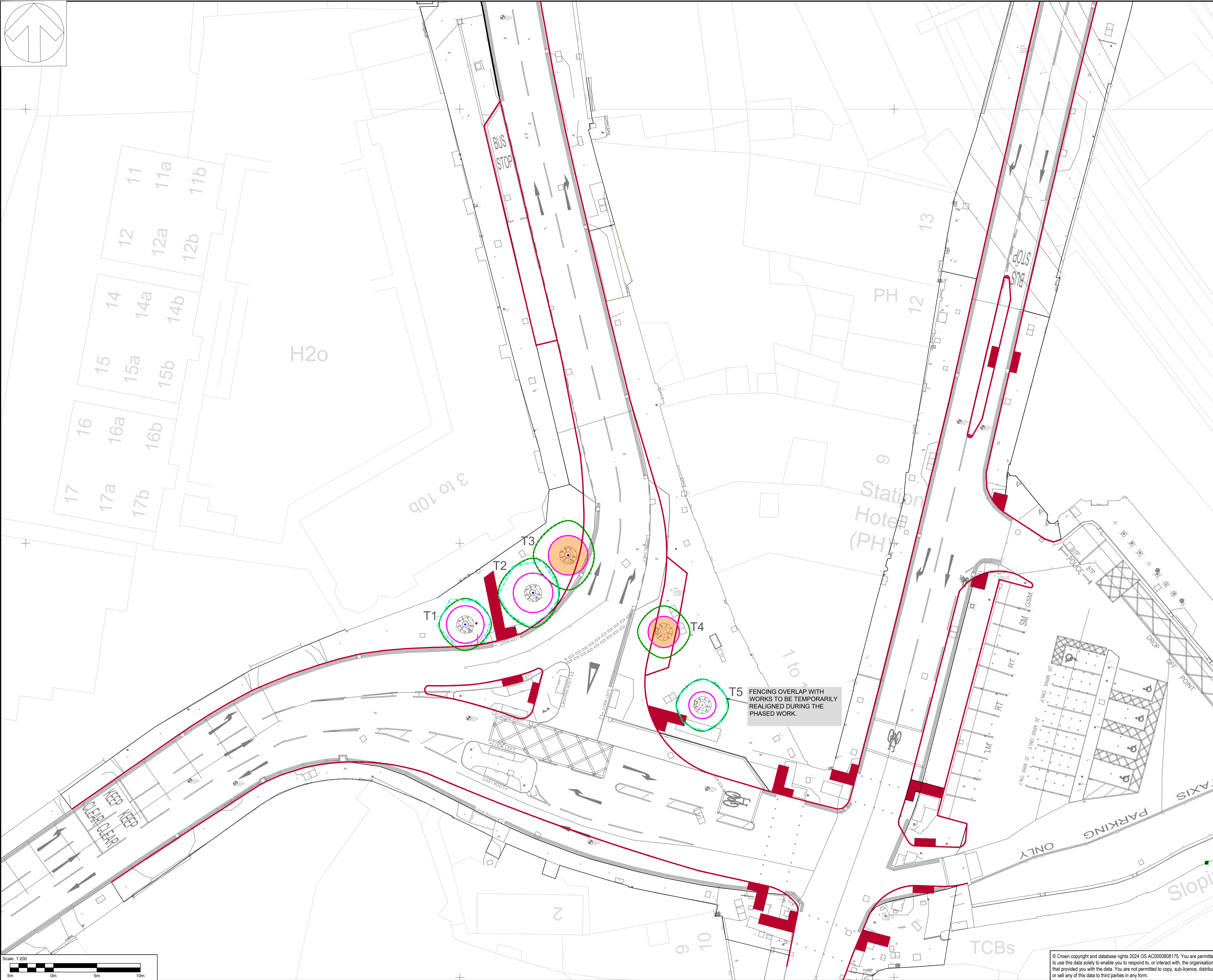
RPA Radius is the radius of a circular Root Protection Area associated with the tree as measured from the centre of the stem.

| Ref. | Species | Height (m) | Stem Dia. (mm) | Crown Spread N - E - S - W | LCH (m) | LBH (m) | Life Stage | Physiological Condition | Structural Condition | Tree Condition Notes & Observations | RPA Rad. (m) | Estimated Remaining Contribution | BS5837 Category |
|------|-------------|------------|----------------|-------------------------------|---------|---------|------------|----------------------------|-------------------------|---|-----------------|--|--------------------|
| T1 | Field maple | 7 | 180 | 3 - 3 - 3 - 3 | 2 | 2 | SM | G | F | Stem sited in 1m x 1m stone sett edged resin-bound tree pit. Recessed floodlight adjoins stone edging and ground fixings of remnant tree guard in-situ. Stem within 1m of lamppost with canopy encroaching. Incremental stem growth/root development prying open degraded resin-bound surface. Fused plastic collar at base. Possible cultivar due to pronounced upright branches. | 2.2 | 20+ | B2 |
| T2 | Field maple | 7 | 190 | 4 - 3 - 4 - 4 | 2 | 2 | SM | G | G | Stem sited in 1m x 1m stone sett edged resin-bound tree pit. Recessed floodlight adjoins stone edging and ground fixings of remnant tree guard in-situ. Incremental stem growth/root development prying up degraded resin bound surface. Fused plastic collar at southern base. Outer canopy growth on southern aspects encroach road and appear to be sided up by high sided vehicles. Possible cultivar due to pronounced upright branches. | 2.3 | 20+ | B2 |
| T3 | Field maple | 7 | 190 | 4 - 3 - 4 - 4 | 2 | 2 | SM | G | F | Stem sited in 1m x 1m stone sett edged resin-bound tree pit. Recessed floodlight adjoins stone edging and ground fixings of remnant tree guard in-situ. Incremental stem growth/root development prying up resin-bound surface. Outer canopy growth on southern/eastern aspects slightly encroach road and appear to be sided up by high sided vehicles. Possible cultivar due to pronounced upright branches. | 2.3 | 20+ | B2 |
| T4 | Field maple | 8 | 150 | 3 - 3 - 3 - 3 | 2 | 2 | SM | F | F | Tree located in cordoned off construction site within 1-2m of multiple service chambers. Multiple occluded stem wounds from 0-1m from recent epicormic management. Significant recent ground level changes have occurred within 1m of stem associated with proposed highway/pavement/drainage layouts. Stem sited within 1200mm diameter concrete ring installed to unknown depth. Concrete ring has been exposed by recent site clearance of pre-existing tree pit surfacing (described in T5) to an approximate depth of 250mm below existing. Non-structural roots (<150mm diameter) in 0-250mm have been removed by site clearance up to edge of concrete ring. Fibrous bundles of roots appear to be encircling concrete ring. Fused plastic tree collar at basal flare. One historic snapped out secondary branch (2.5S) and locally crown lifted to northern aspect. Multiple impact/scrape wounds to lower branches of canopy on N, W and S aspects between 2-5m have resulted in localised branch/foliar dieback. Possible cultivar due to pronounced upright branches. | 1.8 | 10+ | C2 |
| T5 | Field maple | 7 | 130 | 3 - 3 - 3 - 3 | 2 | 2 | SM | F | F | Tree located in hardsurfaced public realm area (within managed construction site). Stem sited in 1m x 1m stone sett edged resin-bound tree pit. Recessed floodlight adjoins stone edging and ground fixings of remnant tree guard in-situ. October 2012 street view indicates 1200mm diameter concrete ring located below tree pit. 150mm diameter impact wound to stem base (west) encircles one third of stem. Wound surrounded by damaged bark and exposed discoloured sapwood. Incremental stem growth/root development prying open resin-bound surface. Multiple occluded stem wounds from 0-1m from recent epicormic management. Possible cultivar due to pronounced upright branches. | 1.6 | 10+ | C2 |

Appendix C

TREE REMOVALS AND PROTECTION PLAN





- Notes:**
1. PLAN TO BE READ IN CONJUNCTION WITH WSP ARBORICULTURAL IMPACT ASSESSMENT REPORT (DOCUMENT NUMBER '70107870-ARB-001')
 2. SCHEME FOOTPRINT PRESENTS COMBINED AND UPDATED LAYOUTS OF THE FOLLOWING WSP DRAWINGS:
 - a) CARRIAGEWAY CONSTRUCTION PLAN (DRAWING NUMBER '70107870-WSP-HPV-GY-DR-CH-00001')
 - b) KERBS AND FOOTWAYS PLAN (DRAWING NUMBER '70107870-WSP-HKF-GY-DR-CH-00001')
 - c) SITE CLEARANCE PLAN (DRAWING NUMBER '70107870-WSP-HSC-GY-DR-CH-00001')
- Key:**
- Proposed kerbline
 - ┌ Proposed tactiles
 - Existing street lighting column to be removed
 - Indicative Crown Spread Area
 - Indicative Root Protection Area (RPA)
 - Existing Trees to be removed
 - Tree Protection Fencing
- BS 5837:2012 Tree Quality Category**
- Category B Tree Stem
 - Category C Tree Stem

DRAWING STATUS: S2 - FOR INFORMATION



2nd Floor Shirehall, Abbey Foregate, Shrewsbury, SY2 6ND, UK
T+ 44 (0) 1743 501060
wsp.com



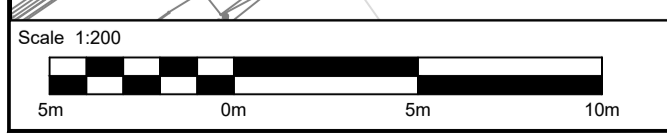
CLIENT: Shropshire Council

STEP/PROJECT: LUF2 - Transforming Movement and Public Spaces in Shrewsbury

TITLE: TREE REMOVALS AND PROTECTION PLAN

| | | | | | |
|--------------|--------------------------------|-----------|-----|-----------|--------------|
| SCALE @ A1: | 1:200 | CHECKED: | D.C | APPROVED: | M.W |
| PROJECT NO: | 70107870 | DESIGNED: | C.W | DRAWN: | C.W |
| | | | | DATE: | October 2024 |
| DRAWING NO: | 70107870-WSP-ARB-AS-DR-CH-0001 | REV: | | | |
| | | | | | P01 |
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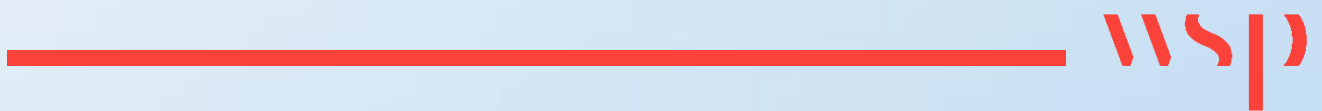
File name: C:\Users\KICKW\OneDrive - WSP\OneDrive\Projects\70107870-WSP-ARB-AS-DR-CH-0001 - TREE REMOVALS AND PROTECTION PLAN.DWG, printed on 17 October 2024, 14:47:20, by Williams, Calum



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Appendix D

OUTLINE ARBORICULTURAL STATEMENT





OUTLINE METHOD STATEMENT

INTRODUCTION

This, heads of terms, outline AMS describes arboricultural protection measures to protect retained trees as part of the Proposed Development. An AMS is a dynamic document that shall be reviewed prior to the issuing of any tender documentation. It shall be revised to accommodate any design amendments or known construction methodologies and must be read in conjunction with the Tree Removals and Protection Plan included within **Appendix C** of this report.

This AMS provides guidance to the Principal Contractor (McPhillips) to ensure appropriate protection and mitigation are given to retained trees during the demolition and construction phases of the project. This AMS feeds into contractor's Construction Phase (Health and Safety) Plan and the Designer's Specification of Highways Work Series 100, 200 and Appendix 30/1 which are the core briefing document on environmental site management for operational staff attending site. All workers on site, at the site induction stage, shall be briefed on the requirements of the AMS and its tree protection requirements.

A copy of this AMS, together with the TRPP, shall be given to all relevant personnel involved in the Proposed Development. A list of relevant site contacts for arboricultural matters is provided in Table D-1.

Table D-1 – Key project contacts for arboricultural matters

| Name | Project Role | Organisation |
|-------------------------|-------------------------|--------------|
| Laura Menendez Gonzalez | Project Manager | WSP |
| Callum Williams | Site Supervisor | WSP |
| David Chesterton | Project Arboriculturist | WSP |
| Adrian Elsdon | Site Agent | McPhillips |

ARBORICULTURAL SITE MONITORING

Effective tree protection can only be achieved by adherence to a logical sequence of works combined with effective arboricultural monitoring. The purpose of arboricultural monitoring is to ensure that all tree protection measures are fit for purpose, are implemented in accordance with any approved details and as a means of enabling any previously unforeseen arboricultural issues to be promptly identified and suitably addressed.

An Arboricultural Clerk of Works (ACoW) should be appointed to oversee tree protection during the demolition and construction phase. The ACoW shall attend site prior to commencement of works to ensure TPF is in place. The role of the ACoW is to:

- Advise the client and principal contractor on tree protection issues;
- Attend site as required to advise on variations;

- Inspect and report on the status of tree protection measures in place during the construction phase.

TREE WORKS

A schedule of currently identified tree works is provided below:

Table D-2 – Current schedule of identified tree work

| Tree Reference | Tree Work |
|----------------|-----------------------------|
| T3, T4 | Remove |
| T1, T2, T5 | Crown lift as per Table 5-1 |

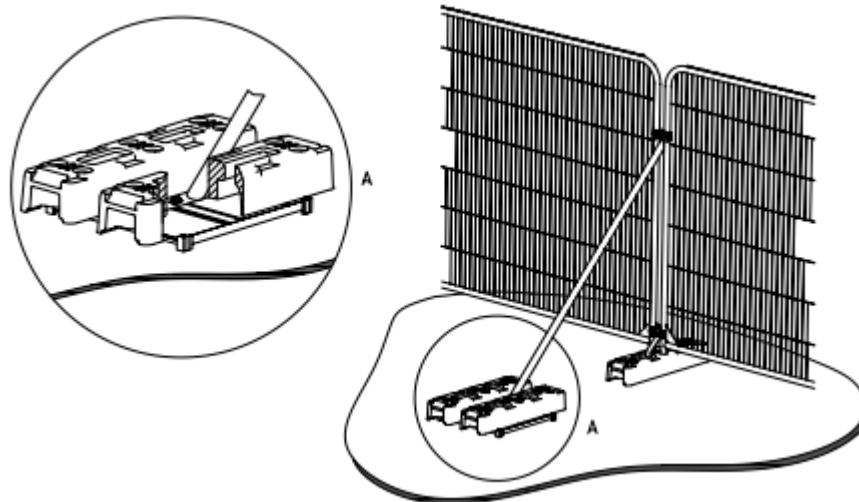
Should the requirement for a tree felling or pruning arise which is additional to that identified above then the following process shall be applied:

- All tree works shall adhere to British Standard BS 3998:2010 *Tree work – Recommendations*;
- All operations shall be carefully carried out to avoid damage to the trees being retained;
- No trees to be retained shall be used for anchorage or winching purposes.
- Any specification shall be technically approved by the ACoW; and
- Written approval shall be obtained from the LPA prior to implementation of the work.

TREE PROTECTION FENCING

Tree protection fencing shall be fit for the purpose of excluding construction activity and appropriate for the degree and proximity of work taking place. An example of the type of tree protection fencing which may be required is included in Figure D-3.

Figure D-3 – Example of appropriate tree protection fencing



NB: Fence to be approx. 2.4m high.

Tree protection fencing will be used to prevent access to the root protection areas (RPAs) of retained trees and this will form a Construction Exclusion Zones (CEZ). In all instances the following shall be adhered to:



- Tree protection fencing shall be erected prior to any works onsite including site clearance, groundwork or the importation of plant and materials;
- No fencing setback is assumed to accommodate temporary working areas (to be confirmed by the contractor);
- All weather notices will be attached (at eye level) to the tree protection fencing at suitable intervals and shall include suitably sized informative text stating “Tree Protection Fencing, Construction Exclusion Zone – No Access”;
- Once erected tree protection fencing shall remain in-situ until construction activities are complete;
- No construction activities, storage of materials or pedestrian or vehicular access shall take place within the CEZ; and
- Regular daily checks will be carried out by an appointed person to ensure that all tree protection fencing is still in place and functioning; any damage will be rectified without delay.

PRECAUTIONARY WORKING METHODS

A precautionary approach to working near retained trees shall be adopted with site huts, welfare facilities, parking, material / spoil storage, mixing and vehicle cleaning facilities being located outside of RPAs.

Care should be taken when planning site operations to ensure that wide or tall loads or plant with booms, jibs and counterweights can operate without coming into contact with retained trees. Any transit or traverse of plant in close proximity to trees should be conducted under the supervision of a banksman to ensure that adequate clearance from trees is maintained at all times. This is to ensure that tree stems/branches are not damaged by construction traffic and during laydown operations.

Notice boards, telephone cables or any other services shall not be attached to any part of a retained tree.



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