

Arboricultural Impact Assessment (AIA) Version 1

Medlock Street

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Appendix

1 Tree Protection Plan

2 Survey sheets (updated as a result of AIA)

1.0 Introduction

1.1 Instruction, Scope, Methodology, Mitigation & Limitations

- 1.2 My name is Simon Brain, I am a chartered arboriculturist, with 25 years' experience holding the LANTRA Professional Tree Inspection certificate. I have been instructed by the client to prepare the following Arboricultural Impact Assessment for 1 Medlock Street.
- 1.3 This Arboricultural Implications Assessment (AIA) is based on the proposed developments as shown on the detailed landscape GA plans as drawn by PLANIT IE and incorporated into the Tree Protection Plans (TPP) in Appendix 1 of this report.
- 1.4 The assessment will be carried out in line with the recommendations in BS 5837:2012 *Trees in relation to design, demolition and construction – Recommendations* and will evaluate the direct and indirect impacts of the proposed design and where necessary recommend mitigation.
- 1.5 The AIA considers constraints posed above and below ground and where appropriate makes recommendations to mitigate impacts associated with development sites and retained trees.
- 1.6 Where specialist design, construction techniques or in areas where supervision of the works is required in Root Protection Areas (RPA) this has been shown on the survey sheets for the study areas and detailed in section 2.3.1 of this AIA.
- 1.7 Below ground constraints are influenced by the root protection area and are determined in line with the recommendations set out in BS 5837:2012. These recommendations quantify the root protection area based on a measured stem diameter in accordance with Annex C, and the root protection area determined from Annex D.
- 1.8 It is important to understand that when considering the Root Protection Area (RPA) with regards to the circular plot as delineated on the TPP

that a number of site factors can influence root morphology and disposition of tree roots.

- 1.9 Above ground constraints are considered above and below ground and in line with the recommendations in BS 5837:2012 to include; shade, dominance, current and future crown spread as well as the ultimate height of those retained trees.
- 1.10 Impacts associated with development sites and retained trees can be associated with single or multiple site operations that can subject trees to multiple impacts (*root severance, compaction, loss of photosynthetic material*), where this is applicable it will be highlighted in the AIA.
- 1.11 The mitigation measures proposed in this report are essential to ensure that trees marked for retention are adequately protected during the period of post/preconstruction and on site supervision of works and compliance reporting is needed for all works in RPA.

2.0 Arboricultural Impact Assessment

2.1 Area for proposed development

2.2 The proposed development has been embedded within the Tree Constraints Plan which indicates the following developments associated with this site to have an arboricultural impact:

- Installation of proposed development infrastructure requiring tree removal

2.3 The arboricultural impacts of these items have been identified below.

2.3.1 The installation of proposed development requires the removal of all tree references on site

3.0 Tree Preservation Orders

3.1 I have not checked with over Tree Preservation Order and if they apply to this site and they do not appear on line.

4.0 Trees to be removed and retained

4.1 The following trees have been identified for removal due to their condition (Category U): none

4.2 A total of thirty one tree references are identified to be removed for this development.

4.3 A new landscaping plan shall replace lost visual amenity.

5.0 Root Protection Areas (RPA)-modifications

5.1 Root Protection Areas have been plotted in line with the guidance given in BS 5837: 2012 where ground constraints have had or are likely to affect the root morphology of trees e.g. where underground utilities or building foundations have obstructed root growth this shall require formal confirmation by excavation to establish presence or absence of

significant rooting material. No RPA modifications have been shown for this scheme.

6.0 Post construction considerations

6.1 Not applicable due to tree loss.

7.0 Tree pruning to facilitate development and future pruning

7.1 There are no requirements for minor levels of tree pruning to facilitate the proposed development.

8.0 New surfacing and ground level modifications

8.1 No new surfacing is required in RPA of trees

9.0 Construction Exclusion Zones and Special Measure Areas

9.1 The Construction Exclusion Zone has been shown as a black fenced polyline on the TPP in Appendix 1 and shall be constructed using heras panels and rubber feet securely staked to the ground.

9.2 The CEZ is purposefully located within proposed new surfacing near TPO trees to prompt site supervision and wider protective measures when new surfacing is installed.

9.3 The CEZ must be installed as signed off as fit for purpose before any other works commence on site.

10.0 Site supervision and monitoring

10.1 Where a tree has been delineated on the TPP as requiring retention there will be a requirement to oversee construction operations in these areas to ensure that no damage occurs to the retained tree.

10.2 To ensure that there is an auditable system of site monitoring, reports will be compiled by an appointed arborist and following site visits they issued to the site manager and design team, copies of which will be

always available on site for inspection by a Council planning/Tree officer.

11.0 Installation of below ground infrastructure

- 11.1 No detailed plans have been provided specifying the location of site utilities.
- 11.2 Specialist advice with regards to the position of utilities will need to be sought from engineers and must be reviewed by the consulting arboriculturist prior to commencement on site.
- 11.3 The usual construction techniques for installing site utilities within an RPA will be unacceptable due to the level of root severance that would occur. The impact of root severance will have a detrimental effect on tree health as trees require a healthy root system in order to maintain water and mineral uptake from the soil. Trees need to maintain a balance between shoot and root growth to ensure that the resources supplied by each can meet the demand of the other. Severance of tree roots caused by trenching can lead to reduced water uptake which in turn impacts on the trees ability to supply water to the canopy, resulting in desiccation. A further complication associated with root severance can be problems associated with tree stability. The tree relies on an intact root system in order to maintain stability; this stability will be compromised by root severance.
- 11.4 The use of trenchless techniques can be acceptable provided the depth of service run that is excavated is below the anticipated root depth.

12.0 Design change requirements

12.1 Design change requirements have not been recommended.

13.0 Amenity Value

It is considered that the successful establishment of replacement trees referred to in section in 4.3 shall mean an improvement in the long term wider visual public amenity associated with the trees on these sites.

14.0 Concluding statement

- 14.1 The proposed scheme was assessed in line with guidance provided in BS 5837:2012 *Trees in relation to design demolition and construction – Recommendations*.
- 14.2 Whilst it is my professional opinion as an arboriculturist that this design cannot retain existing trees it is considered that a significant improvement in the longer-term visual amenity associated with the site can materialise through proposed re plantings.

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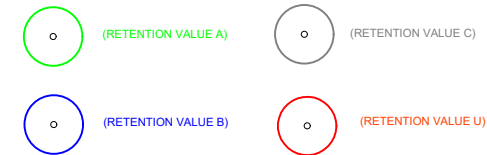
Appendix 1 Tree Protection Plan

Tree No.	Common Name	Estimated Life Stage	Diameter(mm)	Tree Stems	Height(m)	Crown Height(m)	North(m)	South(m)	East(m)	West(m)	Retention Category	Estimated Remaining Contribution (yrs)	Comments	Recommendations following AIA	RPR(m)	RPA(m)
T1	Ash	Y	115	1	6	2	1	1	1	2	C2	40+		Remove for development	1.4	6
T2	Ash	Y	125	1	6	2	1	2	2	2	C2	40+		Remove for development	1.5	7
T3	Ash	Y	115	1	6	2	2	2	1	1	C2	40+		Remove for development	1.4	6
T4	Norway Maple	SM	215	1	8	2	3	4	4	3	B1	40+		Remove for development	2.6	21
T5	Norway Maple	SM	210	1	8	2	3	3	3	3	B1	40+		Remove for development	2.5	20
T6	Norway Maple	SM	240	1	8	2	4	4	4	4	B1	40+		Remove for development	2.9	26
T7	Norway Maple	SM	195	1	8	2	3	3	3	3	B1	40+		Remove for development	2.3	17
T8	Norway Maple	SM	255	1	8	2	4	4	4	4	B1	40+		Remove for development	3.1	29
T9	Norway Maple	EM	290	1	8	2	4	4	4	4	B1	40+		Remove for development	3.5	38
T10	Norway Maple	EM	265	1	8	2	4	4	4	4	B1	40+		Remove for development	3.2	32
T11	Whitebeam	EM	170	1	5	1.5	3	3	3	3	B1	40+		Remove for development	2	13
T12	Whitebeam	SM	134	1	5	1.5	3	3	3	3	B1	40+		Remove for development	1.6	8
T13	Grey Alder	SM	200	1	7	2	4	4	4	4	B1	40+		Remove for development	2.4	18
T14	Grey Alder	SM	175	4	8	2	4	4	4	4	B1	40+		Remove for development	4.2	55
T15	Whitebeam	SM	195	1	5	1.5	3	3	3	3	B1	40+		Remove for development	2.3	17
T16	Ash	Y	145	1	8	2	1	1	1	1	C1	40+		Remove for development	1.7	10
T17	Silver Birch	M	345	1	14	2	5	5	5	5	A1	40+		Remove for development	4.1	54
T18	Goat Willow	Y	170,90,90	3	7	2	4	3	2	4	C1	40+	There is a split branch in the upper crown of the tree.	Remove the split branch in the upper crown of the tree.	2.5	20
T19	Hornbeam	EM	265	1	9	2	3	3	3	3	A1	40+		Remove for development	3.2	32
T20	Hornbeam	EM	240	1	9	2	3	3	3	3	A1	40+		Remove for development	2.9	26
T21	Hornbeam	EM	215	1	9	2	3	3	3	3	A1	40+		Remove for development	2.6	21
T22	Hornbeam	EM	205	1	9	2	3	3	3	3	A1	40+		Remove for development	2.5	19
T23	Hornbeam	EM	145	1	8	3	3	3	3	3	B1	40+		Remove for development	1.7	10
T24	London Plane	M	735	1	17	1.5	10	10	10	10	A1	40+		Remove for development	8.8	244
T25	Common Lime	EM	285	1	12	1.5	4	4	4	4	B1	40+		Remove for development	3.4	37
T26	Common Lime	EM	295	1	13	1.5	5	5	5	5	B1	40+		Remove for development	3.5	39
T27	Common Lime	EM	375	1	13	1.5	5	5	5	5	B1	40+		Remove for development	4.5	64
T28	Small-leaved Lime	EM	385	1	14	1.5	5	5	5	5	B1	40+		Remove for development	4.6	67
T29	London Plane	M	550	1	17	3	10	8	10	5	A1	40+	The stem diameter of the tree has been estimated by the arboricultural surveyor because of dense surrounding vegetation.	Remove for development	6.6	137
T30	London Plane	M	490	1	17	3	10	9	6	5	A2	40+		Remove for development	5.9	109
T31	London Plane	M	665	1	17	3	10	10	6	10	A2	40+		Remove for development	8	200



TREE PROTECTION PLAN

Retention value key



Removed trees shown dashed

AMENITY TREE Ltd

Client:
Cumming Group

Project:
One Medlock Street

Detail:
Tree Protection Plan

Drawn By: SB Date: 12.10.2022 Scale: NTS

Drg No: 01 Revision: V1