

Arboricultural Impact Assessment (AIA)

NAME OF SITE:	Bury
PROJECT No:	11761
CLIENT NAME:	EHC
SPECIALIST:	Amenity Tree Care Ltd
DATE PREPARED:	28.02.2024
PREPARED BY:	Sb
REVIEWED BY:	Ps
DATE REVIEWED:	28.02.2024
VERSION CONTROL:	1

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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 land at Bury (this report only applies to the northern part of the Site).
- 1.3 This Arboricultural Implications Assessment (AIA) is based on the proposed developments as shown on the Proposed Site Plan 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 a Special Measure Area (SMA) has been shown on the TPP for the study areas.
- 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.

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 confirms there are no arboricultural impacts on the surveyed trees.

3.0 Tree Preservation Orders

3.1 I have not checked with the Local Council over Conservation Area or Tree Preservation Order and if they apply to this site.

4.0 Trees to be removed and retained

4.1 The following trees have been identified for removal due to their condition (Category U): T5,T24.

4.2 No trees are identified to be removed for the direct impact of development as listed in section 2.3.2.

4.3 The remaining trees are due to be retained and protected as outlined on the TPP by methodology needed in an AMS.

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 effect 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

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 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 in order 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 available on site at all times 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 has not been necessary.

13.0 Amenity Value

The retention of significant arboricultural assets has been achieved.

14.0 Concluding statement

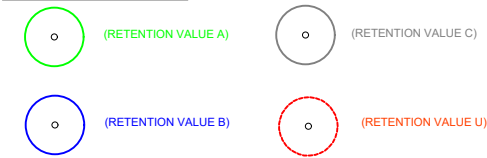
- 14.1 The proposed scheme was assessed in line with guidance provided in BS 5837:2012 *Trees in relation to design demolition and construction – Recommendations* with the aim to achieve a harmonious relationship between trees and structures that can be sustained in the long term.
- 14.2 It is my professional opinion as an arboriculturist given that no trees are removed for the application and new tree planting is proposed then the development is acceptable to the LPA.

Appendix 1 Tree Protection Plan



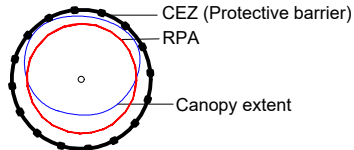
TREE PROTECTION PLAN

Retention value key



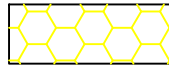
Root Protection Areas (RPA) & Construction Exclusion Zones (CEZ)

Root Protection Areas (RPA's) have been identified and are based on BS5837:2012. RPA's and Construction Exclusion Zones (CEZ) have been shown as detailed below. The CEZ shall act as the protective barrier for retained trees.



Special Measure Area/s (SMA)

Special Measure Areas (SMA's) have been identified for construction in these areas and have been shown as detailed below.



Refer to Arboricultural Implications Assessment (AIA) for details of recommended construction in SMA's.

Notes

Where trees and tree groups have been identified for removal for development within the AIA or condition related reasons (Cat. U) they have been shown dashed on the Tree Protection Plan (as shown below) and cross referenced to the site survey sheets

MONOCHROME WARNING
This drawing shall not be reproduced in black and white.

Client:

EHC

Project:

Bury

Detail:

TREE PROTECTION PLAN

Drawn By:

SB

Date:

28.02.2023

Scale:

1:500@A3

Drg No:

TR-01

Revision:

V1

Tree No.	latin name	Life Stage	Diameter(mm)	Height(m) / Crown Height (m)	North(m)	South(m)	East(m)	West(m)	Category	Estimated Remaining Life Expectancy (yrs)	Comments	Recommendations following AIA	RPR(m)	RPA(m)
T1	Prunus avium (Wild Cherry)	SM	200	6(2)	2	1	2	2	C2	20+		Unaffecetd	2.4	18.1
T2	Acer pseudoplatanus (Sycamore)	EM	300	11(1)	3	2	3	3	B2	20+		Unaffecetd	3.6	40.72
T3	Platanus X hispanica (London Plane)	EM	300	11(1)	4	4	4	3	B2	20+		Unaffecetd	3.6	40.72
G1	Fraxinus excelsior (Ash)	EM	200	12(1)	2	2	2	2	C2	20+		Unaffecetd	2.4	18.1
T4	Salix caprea (Goat Willow)	EM	100,100,250	14(0)	2	3	5	3	C2	20+		Unaffecetd	3.44	37.18
T5	Salix caprea (Goat Willow)	SM	150	9(0)	0	3	4	1	U	<10		Unaffecetd	1.8	10.18
T6	Salix caprea (Goat Willow)	EM	150,200	11(0)	1	0	3	6	C2	20+		Unaffecetd	3	28.28
G2	Betula pendula (Silver Birch)	Y	100	11(1)	1	1	1	1	C2	40+		Unaffecetd	1.2	4.52
G3	Alnus glutinosa (Common Alder)	EM	200	11(2)	1.5	1.5	1.5	1.5	B2	40+		Unaffecetd	2.4	18.1
T7	Alnus glutinosa (Common Alder)	EM	150	12(2)	2	2	2	2	B2	40+		Unaffecetd	1.8	10.18
T8	Salix caprea (Goat Willow)	Y	100	7(0)	1	2	2	2	C2	20+		Unaffecetd	1.2	4.52
T9	Salix caprea (Goat Willow)	M	450	15(2)	5	0	5	7	B2	40+		Unaffecetd	5.4	91.62
T10	Salix caprea (Goat Willow)	M	350,300,250	15(2)	4	1	5	7	B2	40+		Unaffecetd	6.29	124.31
T11	Salix caprea (Goat Willow)	M	450	15(2)	3	2	5	7	B2	40+		Unaffecetd	5.4	91.62
T12	Salix caprea (Goat Willow)	M	200	10(2)	1	0	4	6	B2	40+		Unaffecetd	2.4	18.1
T13	Salix caprea (Goat Willow)	SM	200,100	10(2)	6	0	2	7	B2	40+		Unaffecetd	2.69	22.74
G4	Salix caprea (Goat Willow)	SM	100	6(0)	3	3	3	3	C2	20+		Unaffecetd	2.4	18.1
T14	Betula pendula (Silver Birch)	M	300	16(2)	3	2	1	2	B2	20+		Unaffecetd	3.6	40.72
T15	Betula pendula (Silver Birch)	M	300	16(2)	3	2	1	2	B2	20+		Unaffecetd	3.6	40.72
T16	Betula pendula (Silver Birch)	M	300	16(2)	3	2	2	2	B2	20+		Unaffecetd	3.6	40.72
T17	Betula pendula (Silver Birch)	M	150	16(2)	1	1	1	1	B2	20+		Unaffecetd	1.8	10.18
T18	Betula pendula (Silver Birch)	M	150	16(2)	1	1	1	1	B2	20+		Unaffecetd	1.8	10.18
T19	Betula pendula (Silver Birch)	M	150	16(2)	1	1	1	1	B2	20+		Unaffecetd	1.8	10.18
T20	Betula pendula (Silver Birch)	M	150	16(2)	1	1	1	1	B2	20+		Unaffecetd	1.8	10.18
G5	Betula pendula (Silver Birch)	M	150	16(2)	1	1	1	1	B2	20+		Unaffecetd	1.8	10.18
T21	Acer pseudoplatanus (Sycamore)	M	600	18(5)	6	6	5	6	A2	20+		Unaffecetd	7.2	162.88
T22	Fraxinus excelsior (Ash)	M	400	19(2)	3	7	5	4	A2	20+		Unaffecetd	4.8	72.39
G6	Fraxinus excelsior (Ash)	M	250	13(4)	4	4	4	4	A2	20+		Unaffecetd	3	28.28
T23	Fraxinus excelsior (Ash)	M	200,300	18(1)	2	2	2	4	A2	20+		Unaffecetd	4.33	58.91
T24	Salix caprea (Goat Willow)	M	400	11(3)	0	3	4	1	U	<10		Unaffecetd	4.8	72.39
T25	Salix caprea (Goat Willow)	M	450	15(4)	2	4	4	2	C2	<10		Unaffecetd	5.4	91.62
T26	Salix caprea (Goat Willow)	M	350	15(4)	1	4	5	0	C2	<10		Unaffecetd	4.2	55.42
T27	Salix caprea (Goat Willow)	M	250	15(4)	1	1	1	1	C2	<10		Unaffecetd	3	28.28
T28	Salix caprea (Goat Willow)	M	300,300	15(4)	6	3	3	2	C2	<10		Unaffecetd	5.09	81.4
T29	Salix caprea (Goat Willow)	M	300	15(4)	3	6	2	3	C2	<10		Unaffecetd	3.6	40.72
G7	Salix caprea (Goat Willow)	M	300	15(4)	3	6	2	3	C2	<10		Unaffecetd	3.6	40.72
T30	Fraxinus excelsior (Ash)	M	250	15(1)	1.5	1.5	1.5	1.5	B2	20+		Unaffecetd	3	28.28
T31	Fraxinus excelsior (Ash)	M	250	15(1)	2.5	2.5	2.5	2.5	B2	20+		Unaffecetd	3	28.28
T32	Fraxinus excelsior (Ash)	M	250	15(1)	2.5	2.5	2.5	2.5	B2	20+		Unaffecetd	3	28.28
T33	Salix caprea (Goat Willow)	M	150	9(0)	1	4	2	1	C2	10+		Unaffecetd	1.8	10.18
T34	Fraxinus excelsior (Ash)	M	250	15(1)	2.5	2.5	2.5	2.5	B2	20+		Unaffecetd	3	28.28
G8	Betula pendula (Silver Birch)	M	350	15(1)	3	3	3	3	B1	40+		Unaffecetd	4.2	55.42
G9	Robinia pseudoacacia (Locust Tree)	M	400	14(2)	3	3	3	3	B1	20+		Unaffecetd	4.8	72.39
T35	Fraxinus excelsior (Ash)	Y	100	7(2)	2	2	2	2	C1	40+		Unaffecetd	1.2	4.52
T36	Acer pseudoplatanus (Sycamore)	M	550	20(1)	6	3	6	6	A1	20+		Unaffecetd	6.6	136.87
T37	Acer pseudoplatanus (Sycamore)	M	100,100,300,400	20(1)	6	3	6	6	B1	20+		Unaffecetd	6.24	122.34
T38	Acer pseudoplatanus (Sycamore)	M	300	20(1)	4	3	1	3	B2	20+		Unaffecetd	3.6	40.72
T39	Acer pseudoplatanus (Sycamore)	M	300	20(1)	5	5	5	3	B2	20+		Unaffecetd	3.6	40.72
T40	Acer pseudoplatanus (Sycamore)	M	500	20(1)	5	2	5	3	B2	20+		Unaffecetd	6	113.11
T41	Acer pseudoplatanus (Sycamore)	M	500	20(1)	5	2	5	3	B2	20+		Unaffecetd	6	113.11
T42	Acer pseudoplatanus (Sycamore)	M	500	20(1)	3	2	5	3	B2	20+		Unaffecetd	6	113.11
T43	Platanus X hispanica (London Plane)	M	450	20(1)	5	3	2	3	B2	20+		Unaffecetd	5.4	91.62
T44	Platanus X hispanica (London Plane)	M	450	20(1)	5	3	2	3	B2	20+		Unaffecetd	5.4	91.62
T45	Platanus X hispanica (London Plane)	M	450	20(1)	5	3	4	4	B2	20+		Unaffecetd	5.4	91.62
T46	Platanus X hispanica (London Plane)	M	450	20(1)	5	5	4	4	B2	20+		Unaffecetd	5.4	91.62
T47	Acer pseudoplatanus (Sycamore)	SM	250	12(1)	3	3	3	3	B2	20+		Unaffecetd	3	28.28
T48	Acer pseudoplatanus (Sycamore)	SM	250	12(1)	3	3	3	3	B2	20+		Unaffecetd	3	28.28