TREE AWARE UK LTD
Arboricultural Consultancy

Tree Aware UK Ltd
Company Reg 08330676
Email enquiries@treeawareuk.com
Tel 01832 710 874

Arboriculture Impact Assessment

Kiln Place
Refuse Storage locations

Written by Alastair Gavin on behalf of Tree Aware UK Ltd
on the 03/12/2019

The purpose of this document is to assess the tree or trees and/or any significant vegetation at the above site, to fully identify any constraints that the tree/trees or significant vegetation may pose to the proposed construction or design in line with BS 5837: 2012 “trees in relation to design, demolition and construction – recommendations”.

Contents

1.0 Summary

The following points in this summary are intended for quick reference only, as we recommend that the Arboricultural Impact Assessment report is read fully.

1.1 Overview of Tree Constraints

Following a site inspection on the 31/05/2018, a general preliminary assessment of the site as a whole is that the existing trees located near to the areas identified for the refuse storage, should not pose a constraint to the proposed refuse store constructions, if the recommendations within this Impact Assessment are followed.

1.2 Overview of Construction Costs in Connection to the Trees

In terms of additional costs in the use of special construction techniques and providing adequate tree protection. It is deemed that the presence of the trees may pose a small to medium additional cost. This is dependent on the final proposed design and locations for the refuse stores.

1.3 Notable Tree Constraints (Trees of a BS 5837 Category being either an A or B)

It was identified that the trees T23, T42, T51, and T52 located near to the proposed locations for the refuse stores were of a notable category being category A or B trees with the remainder (T36, T37, and T49) being category C trees (Please see Appendix A, BS 5837 Tree Survey Schedule for specific tree details).

1.4 Impact on Trees

The footprint of the current proposed locations for refuse stores 1, and 3 do not encroach into the root protection areas (RPA) of the adjacent trees. As such the proposed refuse store constructions do not impact these trees directly.

The footprint of the proposed refuse store 4 does encroach into the root protection areas (RPA) of the nearby trees. As such the proposed construction is likely to impact these trees, this is likely if standard construction techniques are used for the refuse stores foundations. There is also very minimal encroachment into the RPA of the adjacent tree from the location of refuse store 2. The encroach is of a level where is it highly unlikely any significant root damage will occur.

As the RPA of the trees are near to proposed location of the refuse stores, there is the potential for damage to occur to the trees root systems from the construction process of the storage areas, this being in the form of indirect damage from compaction or contamination of the ground.

2.0 Introduction

2.1 Instruction has been received from the client to assess the impact on the trees near to the four locations for the proposed refuse stores, might cause a constraint to the current proposed design/location of the storage areas.

2.2 A BS 5837 Tree Survey in accordance to BS 5837:2012 "Trees in Relation to Design, Demolition, and Construction"- Recommendations was carried out on the 31/05/2018. The trees included in the survey (please see Appendix A) has been visually inspected from ground level. No climbing inspection or any decay detection equipment has been used or carried out.

2.3 As there are trees located on the site which are contributing to the character of the area it is important to assess and ascertain the quality and value of the trees and the likely impact on the trees from any proposed construction, this being the proposed four refuse stores.

2.4 Dependant on their age, condition, and species trees differ in their ability to cope with root disturbance and damage. Subsequently, tree roots which are commonly located within the top metre of soil can be affected by natural and

manmade topography and structures, which can restrict, redirect and affect trees root growth rate. It is therefore important to consider all relevant factors when ascertaining the retention and or removal of trees.

3.0 Site Description

3.1 The site being the area known as Kiln Place is within an urban environment that has a small amount of tree cover. This is made up of predominantly street trees likely managed by the local authority with some privately-owned trees in front and rear gardens. The trees that are present in the surrounding area are of different ages and vary in species.

3.2 The area surrounding the site comprises of privately-owned and rented properties with small gardens. Most of the area is flat in gradient with level change occurring over a wider area.

3.3 The trees in question T23, T36, T37, T42, T49, T51, and T52 are located near to the proposed locations for the refuse stores and are likely under the management of the local authority. These trees can be classed as individual trees.

3.4 During the BS 5837 Tree Survey in 2018 no abnormal grounds conditions such as water logging or contamination were noted next to the trees surveyed.

4.0 Impact on Trees

4.1 The trees near to the proposed construction of the refuse stores have been assessed in accordance to BS 5837:2012 "Trees in Relation to Design, Demolition, and Construction"- Recommendations. Please see Appendix A for tree details in accordance to the methodology of BS 5837:2012. The trees have been categorised as follows;

Individual trees

T23	Lime	Category A
T36	Willow	Category C
T37	Willow	Category C

T42	London Plane	Category B
T49	Sorbus	Category C
T51	Lime	Category B
T52	Lime	Category B

4.2 The footprint of the current proposed locations for refuse stores 1, and 3 do not encroach into the root protection areas (RPA) of the adjacent trees, these being T23 store location 1, and T36 and T37 store location 3. As such the proposed refuse store constructions 1 and 3 do not impact these trees. These trees can be viably retained with the refuse storage areas built in situ.

4.3 The footprint of the proposed refuse store 4 does encroach into the root protection areas (RPA) of trees T51 category B tree by approximately 5%, and T52 category B tree by approximately 5%. It is also likely that there is encroachment into the RPA of a further adjacent tree which was not included in the 2018 BS 5837 tree survey. As such the proposed construction of the refuse store is likely to impact these trees, this is likely if standard construction techniques are used for the refuse stores foundations.

4.4 There is also very minimal encroachment into the RPA of the adjacent tree T42 from the location of refuse store 2. The encroach is of a minimal level under 5% and as such it is highly unlikely any significant root damage will occur.

4.5 As the trees T23, T36, T37, T42, T49, T51, and T52 are adjacent to the proposed location of the four refuse stores there is the potential for damage to occur to the trees root systems from the construction process of the refuse stores. This being in the form of indirect damage from compaction or contamination of the ground. The risk of damage occurring in this form is present if tree protection methods such as tree protection fencing, or ground protection are not used during construction.

5.0 Conclusions and Recommendations

5.1 As refuse stores 1, and 3 do not encroach into RPA of any of the trees nearby and as refuse store 2 encroaches less than 5% in T42 RPA. Trees T23, T36, T37, T49 and T42 can be viable retained and do not pose a constraint.

5.2 As there is encroachment into the RPA of T51 and T52 and likely the additional adjacent trees (not captured in the BS 5837 tree survey undertaken in 2018) which could impact the trees root systems. It is recommended that the refuse store at location 4 is built using a no dig construction such a cell web or similar product. This would allow the refuse store to be built in its current location without any impact to the trees.

5.3 As the RPA of the trees are adjacent to the construction areas of the refuse stores at all four locations and as such are at risk from the construction process in the form indirect damage, this being from compaction or contamination to the root protection areas of the trees. It is recommended that basic tree protection in the form of tree protection fencing and or ground protection matting should be used to protect the trees RPA during the construction process.

5.4 It is recommended to ensure adequate tree protection is used and to protect the ground where there are likely roots from the trees during the construction process, that an Arboricultural Method Statement (AMS) is produced along with a Tree Protection Plan (TPP).

5.5 In terms of additional costs in the protection of the trees, to stop damage occurring during the construction of the refuse stores, it is deemed that this may pose a small to medium additional cost dependant on the final design/location. This would be in the form of tree protection measures such as tree protection fencing and or ground protection matting and construction awareness of the trees on the site.

Appendix A BS 5837 Tree Survey Schedule (extract of the trees listed in this Impact Assessment)

Sequential Reference Number	Species (Common Name)	Height	Stem Diameter	Branch Spread N S E W in meters	First Significant Branch	Canopy Height	Life Stage	General Observations	Estimated Remaining Contribution in years	BS 5837 Category
T23	Lime	18m	355mm	4, 3, 4, 4	4m	5m	M	Good conditioned tree with good form, evidence of past branch pruning, raised soil level around tree pit.	40+	A
T36	Willow	3m	150mm	3, 3, 3, 3	1m	1m	Juvenile	Good conditioned tree, evidence of past branch pruning with pruning g wounds present, average form to tree.	10+	C
T37	Willow	4m	100mm 050mm	3, 3, 3, 3	1m	1.5m	Juvenile	Good conditioned tree, evidence of past branch pruning with pruning g wounds present, average to good form to tree.	10+	C
T42	London Plane	25m+	1160mm	10, 9, 9, 10	2.5m	4m	M	Decay in limb east side of tree, tree overhangs play area and car parking spaces, good form to tree, large east side limb, evidence of past branch pruning. **Recommendation**	20+	B

								Remove or reduce decayed limb		
T49	Sorbus	4m	070mm	1, 1, 1, 1	2m	1.7m	Juvenile	Good conditioned tree with good form.	10+	C
T51	Lime	25m+	730mm	4, 4, 4, 4	4m	Ground Level	M	Good conditioned tree, previously reduced, re-growths present, significant epicormic growth at base as such tree could not be fully inspected, evidence of past branch pruning.	20+	B
T52	Lime	25m+	750mm	4, 4, 4, 4	2m	Ground Level	M	Good conditioned tree, previously reduced, re-growths present, epicormic growth present , potential weak stem/branch unions, dead wood in canopy, small cavities in pruning wounds, good form to tree.	20+	B

Appendix B Root Protection-Constraints Plan

(Please see separate document)