

BS5837:2012 TREE SURVEY / Arboricultural Impact Assessment

Customer No: WYETH01
Document No: 800847
14/12/2022



Site Address:
Clock Tower
133-139 Milton Road
Gravesend, Kent, DA12 2RQ

Client:

Wyeth Projects Services Ltd
The Cart Shed, Amberley Court
Amberley Lane
Milford
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Contents

Contents	2
Site.....	3
1.0 Terms of Reference.....	3
2.0 General Information.....	4
3.0 The Tree Survey	5
4.0 Observations and Discussion	6
5.0 Arboricultural Impact Assessment.....	7
Appendix	9
Photos	11
Survey Data	12
Survey Map – Design Overlay	14
Survey Map – Tree Removal.....	15

Site

Site: Clock Tower, 133-139 Milton Road, Gravesend, Kent, DA12 2RQ

Inspection date: 13th December 2022

Inspected by: Steve Launchbury

1.0 Terms of Reference

I am instructed by Wyeth Projects Services Ltd to carry out a BS5837:2012 Tree Constraints Survey and Arboricultural Implication Assessment at the above address.

This report contains survey information in accordance with BS 5837:2012 Trees in Relation to design, demolition and construction – Recommendations.

It details the quality and the value of the trees on site or immediately adjacent to the proposed development site.

A proposed development is to be considered in terms of an Arboricultural Impact assessment.

Remedial or other works may also be recommended along with Tree Protection measures as required.

A site visit was carried on 13th December 2022 to survey the site and immediately adjacent to prepare a Tree Constraints report. An Arboricultural Impact Assessment of the proposed development using the provided proposed site development plan. Preliminary detail for Tree Protection and other operations is included.

One tree (T1, Silver Birch) on site: Category C

One tree (T2, Ornamental Pear) off site: Category B

Trees or groups of trees that are categorized A or B should be considered as constraints to development and every effort should be made to keep them within the design. Trees categorized C will not usually be seen as a constraint unless by virtue of for example grouping, they attain a higher categorization. Trees categorized U are rarely a constraint to development and may generally be felled.

Steve Launchbury of Alltree Consultancy Ltd trained at Kew Gardens in Horticulture in the early 80's and specialised in Arboriculture.

Since then he has worked in the industry for nearly 40 years, gaining further professional qualifications including passing and further refreshing the Professional Tree Inspection course by Lantra.

2.0 General Information

2.1 The Brief

Visit site and assess Tree Constraints in relation to a proposed redevelopment of the Service Station site, to include a 4 Bay Electric Vehicle (EV) Charging Facility and associated Control Equipment.

Prepare an Arboricultural Impact Assessment of the proposed design in relation to the Tree Constraints.

2.2 Scope of Report

This report is a preliminary report and as such did not entail an examination of the root system, did not ascend the tree or use internal decay detection equipment. Further inspections may be required as a result of these preliminary findings.

2.3 References

The British Standard Institute publication BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations' is the basis for this report.

2.4 List of relevant documents provided by the client:

CLCKTWR-WPS-MFG-580-F-10 Proposed Site Plan A1.pdf

2.5 Limitations

The information contained in this report is for the use of the client for whom it was prepared.

The contents are copyright and may not be used by third parties without written consent from Alltree Consultancy Ltd

This document is a report identifying trees, their locations and their condition in respect of planning.

It is not a tree health or safety report, it has not been prepared for use in a mortgage application or for insurance claims.

Detailed inspection, aerial access, drillings and soundings were not done for this report.

A tree owner is advised to have their trees regularly inspected, and again after strong winds or other severe weather.

This report is valid for one year from the Survey date.

2.6 Tree Preservation Orders

No online check was available for Gravesham Borough Council to verify TPO locations. A phone-call on 14th December confirmed that there is no TPO present on site.

The Conservation area is to the adjacent boundaries, West, North and East, but the PFS Site itself is not within the Conservation Area.

Due to the planning process being under way, trees are effectively protected while the impact of the proposed development is determined. It is therefore prudent to liaise with the Gravesham Borough Council Local Planning Authority before any tree-works are carried out.

2.7 Disclaimer

This report was prepared for the named client and the Local Authority Planning Department.

This report does not constitute advice to any third party not directly involved. No liability for any loss or damage will be accepted from any third party reliant on this report who is able to access the content by any means.

3.0 The Tree Survey

Methodology

Data is collected in accordance with BS5837 requirements.

All data is collected from ground level without climbing or other potentially invasive methods including digging to expose the root system.

Tools normally used are a diameter tape, laser measure and a handheld GPS data capture device.

Heights may also be estimated by using a surveyor's pole next to the tree.

Measurements

Where there is no access into the next door property, measurements are estimated where 'hands on' measuring is not possible.

Complete accurate tree data is therefore not possible for trees on adjoining properties unless there is access granted and no reliance should therefore be made on the limited data possible.

Parts of the tree obscured by ivy or other climbing plants or materials cannot be assessed accurately and no reliance must be made without further inspection.

Data is plotted using PT-Mapper Professional from Pear Technology.

Where tree canopies are symmetrical, one measurement is taken of the radius. Where the crown is asymmetrical, readings are taken at North, East and South. These will give a general idea of the shape as a representation.

Tree stems are measured at 1.5m above ground level.

A Root Protection Zone figure is derived from this reading with variations for multiple stems.

Rooting Zone

Ground features or obstructions may limit or encourage root spread into an asymmetrical area rather than the plotted area.

The plotted data will show the Root Protection Area as an idealized area and must be subject to confirmation or otherwise by hand dug trial pits if required.

For the Constraints survey the trees are recorded as at the present with no reference to any proposed plan or development.

For the Arboricultural Impact Assessment, the tree data is used where applicable in conjunction with the proposed construction layout to establish Tree Protection requirements.

The survey data will detail the recorded measurements.

Survey findings are shown in the appendix.

4.0 Observations and Discussion

Category A and B trees should normally be retained and be a constraint to development. Category C trees should not normally be a significant barrier to development by that may depend on other controls and the LPA policy. Category U trees can normally be removed as good Arboricultural practice. Any trees within neighbouring properties that affect or are affected by a proposed development may then be subject to negotiation.

Root Protection Areas are recommendations due to the difficulty of mapping the extent of the root system. Hand digging is recommended to locate the main roots if required.

Ideally any conflicts with trees (roots, canopies, and trunks) should be designed out with careful consideration of building location and size and special design arrangements where required. Trees that overhang or are close to a new building are often subject to excessive pruning over time or even removal.

Surgery may be required to trees adjacent to new structures, but this should be kept to a minimum due to the potential adverse long term health impact and retention of the tree. All surgery works must be agreed beforehand and must conform to BS3998:2010

Before any works (including demolition) commence on site, storage of materials, or changes of levels, a plan must be submitted to and approved by the Planning Authority.

Protective fencing that is required must be set up and remain operational and not repositioned without the advice of the Arboricultural Consultant.

Consent for any works to protected trees (either Conservation Area, Tree Preservation Order or Planning Conditions) must be obtained prior to being carried out. If the trees are in adjoining properties under third party ownership, permission must be obtained in writing from the tree owner in addition.

5.0 Arboricultural Impact Assessment

Assesses how the development will affect local character from a tree perspective

The Constraints

The Silver Birch is a relatively unremarkable short lived tree.

T1 in particular has a large Burr on the trunk. The centre of the Burr appears to be a dead branch stub.

The tree is visible from the streets surrounding the PFS and does make a contribution to the street scene.

Birch trees are relatively short lived trees.

Given the Burr, it is quite likely that the expected life is between 10 to 20 years, resulting in a C Classification rather than 20 – 40 years, giving a potential B Classification.

The neighbouring and younger Council Street tree (Chanticleer Pear) is likely to flourish and visually replace the Silver Birch in the coming decades.

The Proposal

The document CLCKTWR-WPS-MFG-580-F-10 Proposed Site Plan A1.pdf shows the location of the proposed development of the four Bay Electric Vehicle Charging Bays, Sub Station and Control Equipment that is vital for the decarbonizing of the transport systems.

Implications of the proposal

Trees potentially affected:

Tree	Cause for removal
T1 Mature Silver Birch	Location required for the Sub Station and control equipment

Impact on tree canopies:

There will be no impact on the tree canopy of the street tree T2, assuming the removal of T1 and the locations of the proposed design stay as proposed.

Impact on RPA's

The theoretical radius of T2 comes to approx the site boundary line.

Potentially, depending on how the root system of T2 has actually grown, there may be no interaction with the root system of T2.

In any case, the RPA around the rest of the tree will not be disturbed.

Therefore, in my opinion, the implementation of the proposed design as shown in the document CLCKTWR-WPS-MFG-580-F-10 Proposed Site Plan A1.pdf will have no impact on T2.

Impact of Retained Trees on the Development.

Adequate space has been allowed to the off-site tree and the proposed development works. Consequently the proposal shall not result in any concern to the street tree. Likewise, there is expected to be no impact on the development by T2.

Potential Conflict areas

There are no potential conflict areas, assuming the removal of T1 to facilitate the proposed design.

Tree Protection

No Tree Protection is required to limit access to the vicinity of the street tree. The street tree is not impacting in or on the land within the PFS.

Mitigation, eg planting area

Due to the lack of available planting space, there is no room for any mitigation planting on site.

Summary

One Silver Birch, Category C, with the potential defect of a large stem Burr, is required to be removed to facilitate the implementation of the proposed design shown in the document CLCKTWR-WPS-MFG-580-F-10 Proposed Site Plan A1.pdf.

The loss of the tree will have minimal visual impact on the street scene, due to a young Chanticleer Pear tree being positioned in the street adjacent.

This tree is expected to have a life of between 20 and 40 years.

The arboricultural impact of the design will be the loss of one Silver Birch, with minimal impact due to the close proximity of a semi mature street tree.

Appendix

Contains

BS 5837:2012 Chart for Tree Quality Assessment

Photos

The survey data table

Survey maps

Table 1 (BS5837:2012) – Cascade Chart for Tree Quality Assessment.

Category & 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	• 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 (i.e. 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 NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.				DARK RED
TREES TO BE CONSIDERED FOR RETENTION					
Category & Definition	Criteria — Subcategories				
	1 Mainly arboricultural values	2 Mainly landscape values	3 Mainly cultural values, including conservation		
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 essential components of groups, or of 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)	LIGHT GREEN	
Category B Trees of moderate quality With an estimated remaining life expectancy of at least 20 years	Trees that might be included in the high category, 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	MID BLUE	
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 150mm	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	GREY	

Photos



Survey Data

Tree ID	Tree Type	Latin Name	Maturity	Likely Bat Habitat	Height (m)	Height and direction of first significant branch (m)	Number of Stems	Stem dia (mm)	Spread N E S W (m)	Crown Height (m)	Crown	Stem	Basal Area	Category	Life Expectancy	Phys Condition	Comment
1	Birch	Betula pendula	Mature	No	14	5	1	300	3.5 3.5 3.5 3.5	1.5	Good	Fair	Good	C2	10 to 20 yrs	Fair	Large Burr on the stem, may at some stage be the site of weakness / decay / dysfunction.
2	Pear	Pyrus calleryana Chanticleer	Semi mature	No	10		1	285	2.6 2.6 2.6 2.5	2.2	Good	Good	Good	B2	20 to 40 yrs	Good	Street tree, outside the area of Constraint.

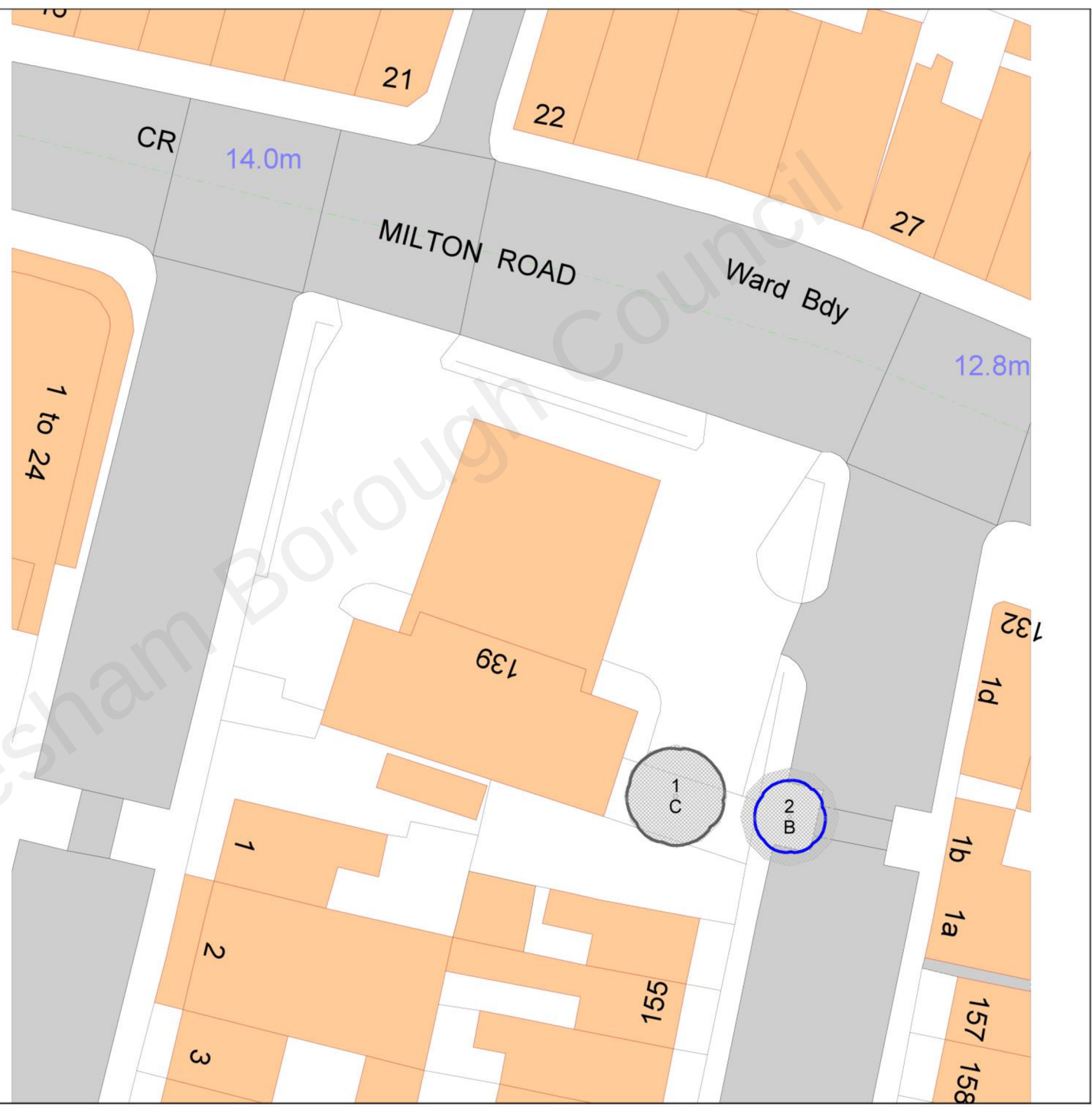
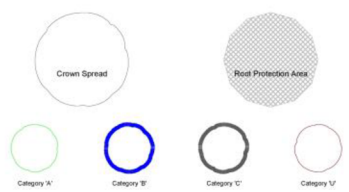
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133-139 Milton Road
Gravesend, Kent, DA12 2RQ

SCALE :
1 : 200 @ A2 DATE :
14/12/2022

Tree Constraints



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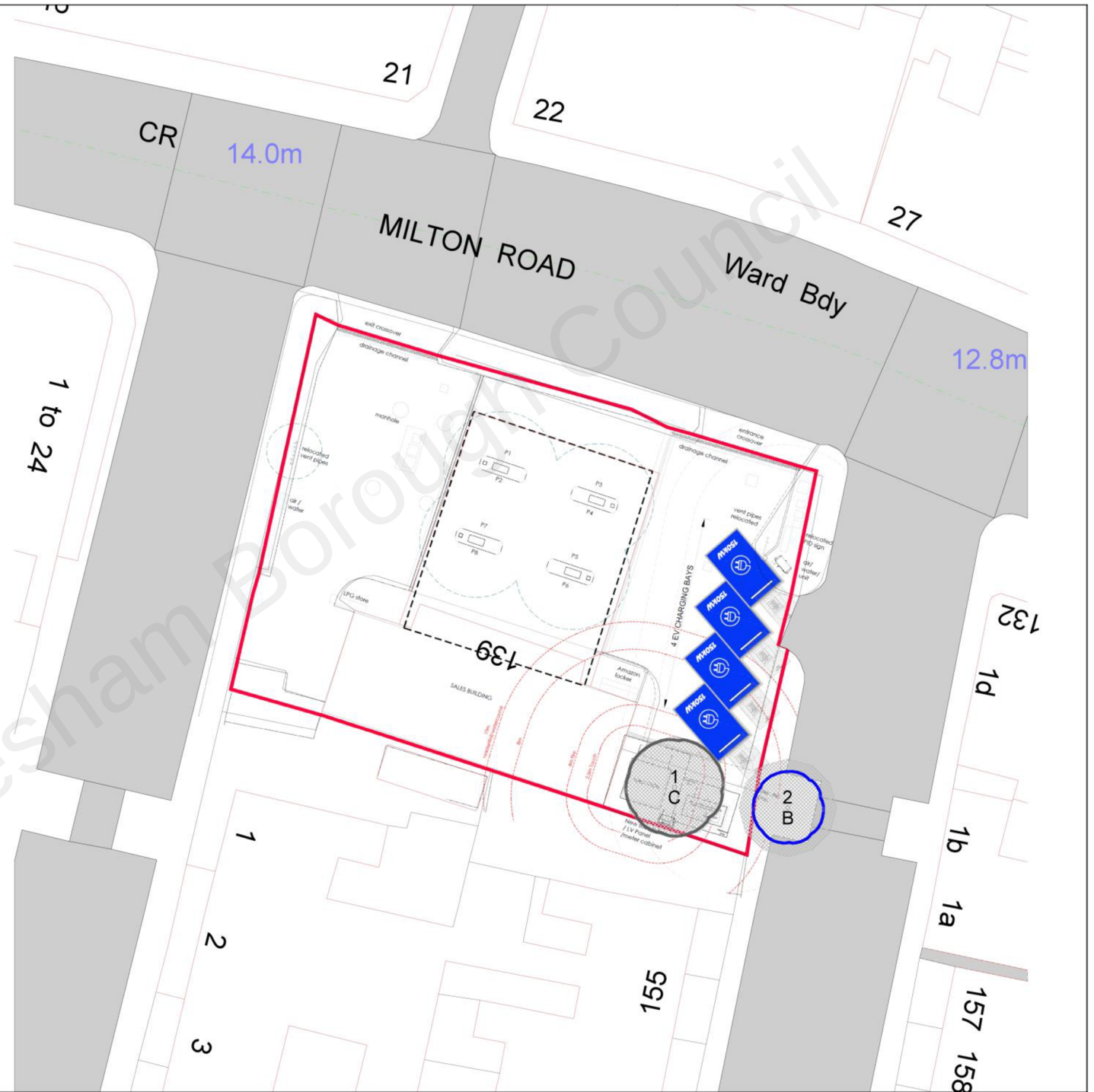
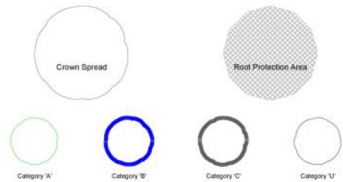
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Design Overlay

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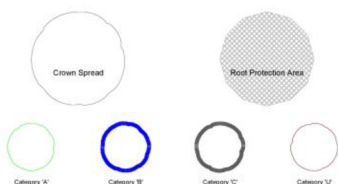
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Tree to Remove

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0 25m

Legend

 Tree to Remove

