Arboricultural
Constraints Report

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Huddersfield
West Yorkshire

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Contents

1. Introduction

1.1. Project outline

2.2.1 This report has been produced in accordance with *British Standard 5837: 2012 Trees in relation to design, demolition and construction* to achieve a harmonious and sustainable relationship where tree retention or planting is proposed in conjunction with nearby construction (site-based operations with the potential to affect existing trees).

1.2. Scope of this report

1.2.1 This report has been produced to comply with planning requirements where trees are to be considered as part of a proposed development. In order to achieve this, arboricultural constraints have been identified and a detailed plan (*Tree Constraints Plan*) has been produced showing the location, root protection areas and retention category of trees within the site.

1.2.2 This report does not form part of a tree safety inspection. In order to manage the safety and risk from trees it is advised that trees are inspected in detail for this purpose by an arboriculturist using a suitable risk management strategy.

1.3. Survey details

1.3.1 A ground level inspection was undertaken by Godwin's Arboricultural Limited on 12th November 2015, recording the position of all trees within the site with a stem diameter of 75 mm or more, measured at 1.5 m above highest adjacent ground level. The position of trees with an estimated stem diameter of 75 mm or more that overhang the site or are located beyond the site boundaries within a distance of up to 12 times their estimated stem diameter were also recorded. For individual trees the crown spread taken at four cardinal points; for woodlands or substantial tree groups the overall extent of the canopy was recorded.

1.3.2 Tree positions were plotted using a topographical plan supplied by the client, which is the basis for which the *Tree Constraints Plan* has been prepared.

2. Arboricultural Constraints

2.1. Tree condition

2.1.1. Five individual trees, two groups of trees and one hedge were recorded. In accordance with *BS5837:2012 Trees in relation to design, demolition and construction* two individual trees were recorded as retention category 'B'; and a mixture of two groups of trees and one hedge were recorded as retention category 'C'.

2.1.2. The trees were generally found to be in a good to fair condition, however three individual trees (**T1**, **T3** and **T7**) were classified as retention category 'U' (unsuitable for retention).

2.1.3. Please see *Appendix 1* for the detailed list on existing species, age class, dimensions and condition of trees within the site, and *Appendix 2* for an explanation of retention category criteria. Tree locations can be seen on the *Tree Constraints Plan* at the rear of this report (*Drawing 1*).

2.1.4. The inspection of several trees and groups was restricted as detailed at *Appendix 1*. However, sufficient tree related data were collected to fulfil the requirements detailed within the scope of this report.

2.2. Root Protection Areas

2.2.1 The tree root protection area (RPA) is a layout design tool indicating the area around a tree that must be considered during development. The protection of the roots and soil structure within the RPA should be treated as a priority. The RPA of each tree or group is marked on the *Tree Constraints Plan* at the rear of this report.

2.3 Tree protection status

2.3.1 **Due to the large potential penalties for illegally carrying out work to protected trees, it is essential that no works are undertaken to any trees within the site, including works to category 'U' trees, prior to consideration and approval of the proposed works by the local planning authority (Kirklees Council) regardless of whether the trees are currently protected or not.**

3. Arboricultural Impact Advice

3.1 The following comments can be made about the site in terms of its tree cover in relation to potential development.

3.2 Care should be taken to ensure during tree removal or remedial work that damage to the retained trees and/or disturbance to the RPA is avoided. Precautions should include ground protection measures where excessive pedestrian movements or use of plant and machinery might lead to compaction. All tree works, as described *in Appendix 1*, should be carried out in accordance with *BS 3998: 2010 Recommendations for tree work*, and after permission has been granted to do so by the local planning authority.

3.3 Where trees are to be retained the erection of a protective barrier, in accordance with *BS 5837: 2012*, will be required prior to the start of construction activity.

3.4 Whether trees are to be retained or removed within proximity of proposed foundations, it is important that foundation depth is considered prior to any construction activity. No soil samples were taken during the site visit. It is recommended that soil assessment it undertaken by a competent person to determine soil shrinkability, and ensure that foundation design is undertaken in line with detailed guidance given in the National House Building Council (NHBC) publication *Building near trees, Chapter 4.2*.

3.5 Consideration must be given to movement of both vehicle and pedestrian construction traffic. If possible traffic should be diverted away from the RPA of a retained tree. If this is not possible a range of temporary surfaces are available to distribute the weight of passing traffic.

3.6 When laying access roads, driveways, parking areas or any other hard surfaces within proximity to retained trees, consideration must be given to the trees roots and RPA. There are many solutions available to construct hard surfaces sympathetic to tree roots, without causing damage to trees, and allowing the roots to receive moisture and air.

3.7 Boundary walls or other light structures can be constructed without damage to roots through the use of piled foundations rather than the more traditional strip foundations.

3.8 It is recommended that the position of the site compound, which typically includes the site office, facilities, toilets, storage of materials and parking, is located away from trees and outside of any RPA.

3.9 Generally, the alteration of ground levels within an RPA is not acceptable, however, should ground levels need to be lowered in areas adjacent to trees or within the minimum distance recommended, appropriate measures should be taken to minimise the detrimental effects on the trees and their root systems.

Client: Diseno Ltd
Project No: ACR.12598
Revision: 01

Date Issued: 22nd December 2016
Status: FINAL

Signed for on behalf of Godwin's Arboricultural Ltd:

R Godwin

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Appendix 1. Tree Schedule

Tree No.	Species	Age	Stems at 1.5m	Stem Dia (mm)	Height (Crown Hgt) (m)	FSB (D) (m)	Branch Spread (m) N	E	S	W	Observations	Cond	Life Exp	Tree Work Recommendations	Root Protection Area (RPA) Radius (m)	Area (m^2)	Retention Category
T 1	Acer pseudoplatanus (Sycamore)	Young	3	80	6(1.5)	1.5(N)	2	1.5	0.5	0.5	Multiple pruning wounds. Self-seeded specimen. Multi-stemmed from ground level.	Fair	10+	Remove for arboricultural reasons.	1.67	8.76	U
H 2	Cupressus sp. (Cypress)	Semi-mature	1	90	5(0.5)	0.5(N)	0.75	0.75	0.75	0.75	Linear boundary hedge. Unmaintained.	Good to Fair	40+	No action required.	1.08	3.66	C
T 3	Ilex aquifolium (Holly)	Semi-mature	1	120	2(0.5)	0.5(N)	0.5	0.5	0.5	0.5	Previously pollarded.	Fair to Poor	<10	Remove for arboricultural reasons.	1.44	6.52	U
G 4	Sambucus nigra (Elder)	Semi-mature	1	100	2.5(0.5)	0.5(N)	1.5	1.5	1.5	1.5	Multi-stemmed from ground level. Unbalanced crowns.	Fair	10+	No action required.	1.2	4.52	C
G 5	Fraxinus excelsior (Ash)	Semi-mature	1	100	2(0.5)	0.5(N)	1	1	1	1	Self-seeded specimens. Previously pollarded.	Fair	10+	No action required.	1.2	4.52	C
T 6	Acer pseudoplatanus (Sycamore)	Early-mature	1	810	14.5(3)	4(W)	7	7	7	6.5	Balanced crown. Occasional pruning wounds. Crown overhangs adjacent building.	Good to Fair	40+	Crown lift north section of canopy to provide 2m clearance from adjacent property.	9.72	296.85	B
T 7	Acer pseudoplatanus (Sycamore)	Early-mature	1	550	9(5)	5(N)	4	5	4	5	Asymmetrical crown. Multiple pruning wounds. In decline with limited future. Stem - bark wound.	Poor	<10	Remove for arboricultural reasons.	6.6	136.87	U
T 8	Acer pseudoplatanus (Sycamore)	Early-mature	1	800	15(5)	6(E)	7	7	7	7	Balanced crown. Occasional pruning wounds. Crown overhangs adjacent footpath.	Good to Fair	40+	No action required.	9.6	289.57	B

Appendix 2. Explanatory Notes

A2.1. Tree statistics and measurements

Survey record	Description
Tree No.	Unique tree reference number. (T) = Individual tree, (G) = Group of trees or woodland that form cohesive arboricultural features, (H) = Hedgerows and substantial internal or boundary hedges.
Species	Species listed by scientific name, with (common name).
Age	Life stage – Young, Semi-mature, Early-mature, Mature, Over-mature and Veteran.
Stem Count	Number of stems recorded at 1.5m above ground level.
Stem Diameter	Stem diameter recorded in millimetres at 1.5 meters above ground. Where the tree is multiple stemmed, each stem has been recorded.
Height (Crown Height)	Height of the tree in metres – to the closest 0.5m. Average canopy height in brackets, e.g. 10(3).
First Significant Branch	Existing height above ground level of first significant branch and direction of growth, e.g. 3(N)
Branch Spread	Branch spread, taken as a minimum at the four cardinal points – North, East, South and West.
Observations	General observations, particularly of structural and/or physiological condition (e.g. the presence of any decay, physical defect or historic pruning).
Cond	Condition of the tree recorded as Good, Good to Fair, Fair, Fair to Poor, Poor or Dead.
Life Exp	Life Expectancy - classed as less than 10 years, 10 plus years, 20 plus years, or more than 40 years.
Tree Work Recommendations	Recommended tree works – including those made to ensure an acceptable level of risk, and those made to enable the proposed development.
RPA Radius	Radius of the root protection area, when plotted as a circle centred on the base of the stem.
RPA Area	Total area of RPA in metres squared, e.g. 100m^2.
Retention Category	See below – A2.2.

A2.2. Tree retention categories

Retention category and definition	Criteria
U (marked in red on the plan) = trees for removal.	Trees 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.
A (marked green on the plan) = Trees of high quality	Trees of high quality with an estimated remaining life expectancy of at least 40 years.
B (marked in blue on the plan) = Trees of moderate quality	Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.
C (marked in grey on the plan) = Trees of low quality	Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.

Appendix 3. Report Limitations & General Guidelines

A3.1 Where the inspection of trees was limited (*see Appendix 1*), the 'Tree statistics and measurements' (*Appendix 2.1*) are estimated, and observations, condition and life expectancy are based on an inspection from the available vantage point.

A3.2 It is recommended that qualified and experienced companies are sort when appointing tree work contractors and they should be approved under the Arboricultural Association Approved Contractors scheme. It is essential that all appointed tree work contractors have adequate Public Liability, Products Liability and Employers Liability Insurance. All tree works must conform to the current BS 3998 *"Recommendations for Tree Work"*.

A3.3 This report is based upon a visual ground inspection, any defects seen by a tree work contractor or the employer, that were not apparent to the tree surveyor at the time of our inspection must be brought to our attention immediately.

A3.4 Godwin's Arboricultural Ltd will not accept liability for works undertaken by third party companies. All necessary checks must be made by the appointed tree work contractor prior to undertaking any works to ensure that no statutory tree protection measures or relevant laws are contravened.

A3.5 The validity, accuracy and findings of this report are directly related to the accuracy of the information made available prior to and during the inspection process. No checking of independent third party data will be undertaken. Godwin's Arboricultural Limited will not be responsible for the recommendations within this report where essential data are not made available, or are inaccurate.

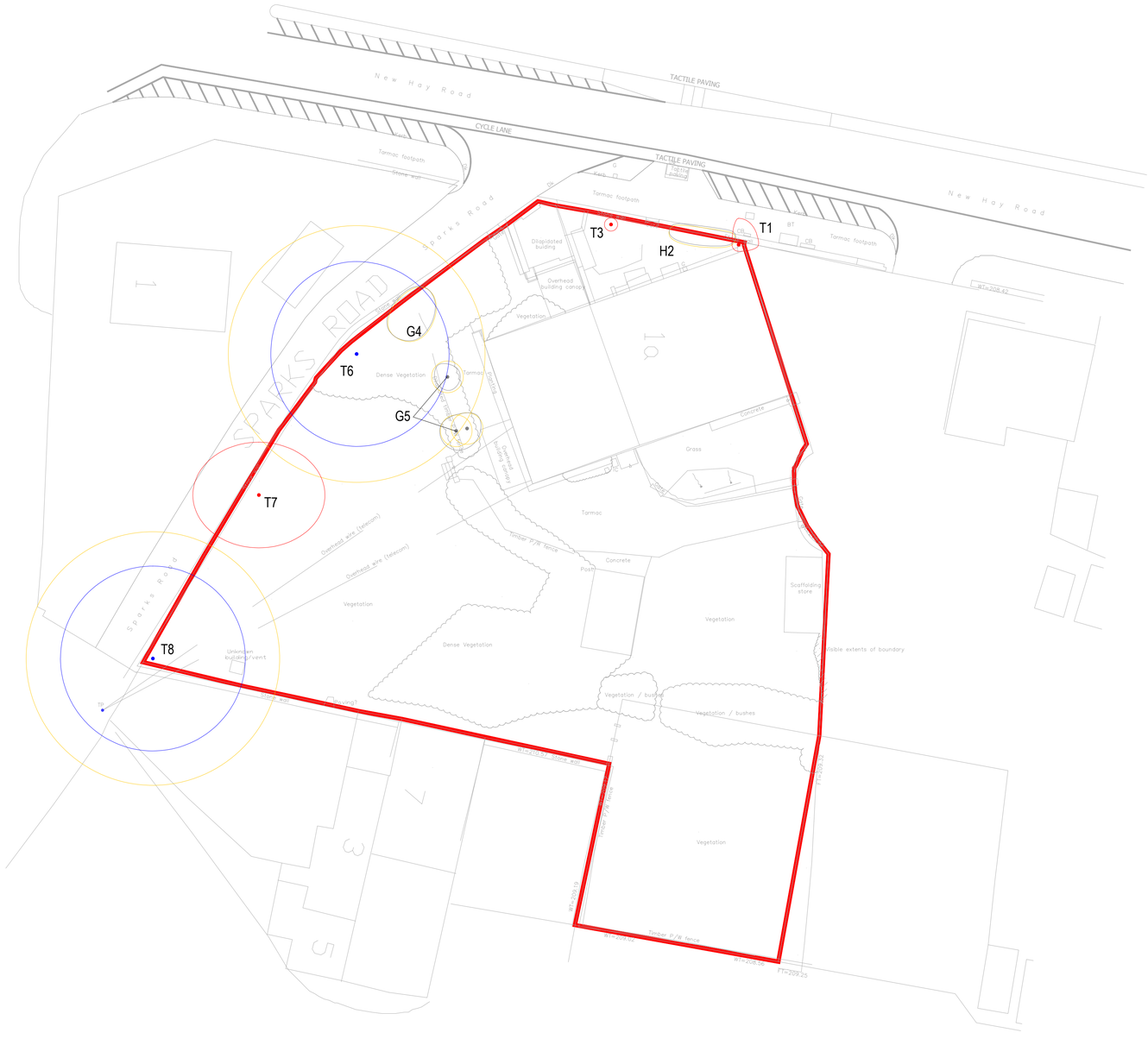
A3.6 The assessment and works recommendations relate to conditions found at the time of our inspection. Any significant alteration to the site post our site inspection but pre submission for planning that may affect the trees present, or have a bearing on the planning implications (including level changes, hydrological changes, storms, extreme climatic events or site works) will necessitate a re-assessment of the trees and the site.

A3.7 This report has been carried out in order to inform the planning process, and not to assess the potential hazards and risks posed by trees. Where clear and obvious hazards have been observed to accessible trees, these have been addressed in the works recommendations. Where inspections were limited by restrictions such as stem ivy, understory vegetation, limited access, epicormic growth or being located on adjacent land, any form of tree condition assessment was restricted. A full assessment of the levels of risk posed by trees can only be informed by considering site use together with assessing any hazards present within a tree.

A3.8 Trees are dynamic structures that continue to develop and decline; in addition, changes in site use are likely to occur during and as a result from the proposed development. On this basis, regular tree risk assessments are advised.

A3.9 Godwin's Arboricultural Ltd plans are to scale whenever possible but care should be taken when measuring from a plan without first checking the original data.

Drawing 1. Tree Constraints Plan



KEY

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T = Individual tree
G = Group of trees
H = Hedge

RETENTION CATEGORIES:
British Standard BS5837:2012
Please refer to Appendix 2 of the report for category definitions.

- CATEGORY A: Tree of HIGH quality
- CATEGORY B: Tree of MODERATE quality
- CATEGORY C: Tree of LOW quality
- CATEGORY U: Tree UNSUITABLE for retention
- Root Protection Area (RPA)

Project:

1 Sparks Road
Huddersfield
West Yorkshire

Title:

Tree Constraints Plan

Drawing No:

TCP.12598.01

Scale:	1:200 @ A1
Drawn by:	RG
Approved by:	KG

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