



**TREE SURVEY,
ARBORICULTURAL IMPACT ASSESSMENT &
TREE PROTECTION PLAN Rev:1,**

with regard to proposed development at:

**400 Longwater Avenue,
Reading,
RG2 6GP,**

for:

Place DP.

Job no: MJC-15-0323

11th March 2016.

Mark Carter

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1.0 Instruction

1.1 MJC Tree Services Limited have been instructed, in writing, by Tony Edwards of Place DP as follows:

"Re: Development Site Tree Survey & Reports in Accordance With BS5837:2012 at 400 Longwater Avenue, Reading, RG2 6GP.

To visit the above site and carry out the following works:

- To carry out a ground level and visual survey of trees on and adjacent to the avenue side bunds that are identified for survey and assessment under the criterion given in British Standard 5837:2012 'Trees in Relation to design, demolition and construction – Recommendations' (BS5837:2012):*
- To draw up a Tree Constraints Plan and tree survey schedule in accordance with BS5837:2012, using as a base plan a positionally accurate topographical survey of the site that will need to be supplied, via email, in an electronic (.dwg or AutoCAD) format to the above office before the survey can be undertaken:*
- To provide an explanation of the tree constraints to the design team:*
- To combine these elements into a single report:*
- To supply the completed report in an electronic format as a .PDF file, with the plans available as .dwg (AutoCAD) files".*

and:

"In response to specific additional instruction from yourself, to carry out the following works:

- To discuss a proposed development of the site with the design team in the light of the identified tree constraints with a view to arriving at a proposed layout that is acceptable in arboricultural planning terms:*
- To draw up an Arboricultural Impact Assessment for a proposed development of the above site, using the tree constraints information for reference and a proposed site layout (including all access and service plan details) that will need to be supplied, via email, in an electronic (.dwg or AutoCAD) format to the above office before the report can be completed:*
- To draw up a Tree Protection Plan and, if required, the heads of terms for an Arboricultural Method Statement for the proposed development that will provide adequate protection to the trees identified for retention:*
- To combine these elements into a single report:*
- To supply the completed report in an electronic format as a .PDF file, with the plans available as .dwg (AutoCAD) files".*

2.0 Qualifications and Caveats

2.1 The author of this report is a:

- Fellow of the Institute of Chartered Foresters:
- Arboricultural Association Registered Consultant:
- Chartered Arboriculturist:
- Chartered Surveyor:
- Registered Consultant of the Institute of Chartered Foresters.

He also holds the Royal Forestry Society's Professional Diploma in Arboriculture and has over 20 years experience in UK arboriculture. A full CV and CPD record is available as a .pdf file upon request the above office.

2.2 The tree survey was preliminary in nature and was carried out from ground level using visual techniques only. No trees were climbed or internally investigated. Should a more detailed inspection be required then this will be highlighted in the recommendations.

2.3 Trees are living organisms whose health and condition can change rapidly. The health, condition and safety of trees should be checked on a regular basis, preferably at least once a year. The conclusions and recommendations in this report are based only on the observations made by the author during the tree survey.

2.4 This report is for the sole use of the above named client and refers only to those trees identified within. It may not be reproduced in whole or in part, or sold, lent, hired out or divulged to any third party not directly involved in the subject matter, without our consent. Use by any other person(s) in attempting to apply its contents for any purpose other than stated in this report renders the report invalid for that purpose.

2.5 This report is supplied subject to our terms and conditions in force at the time of our instruction by the client.

3.0 Introduction

- 3.1 This report is presented largely in the form of annotated plans with a tree survey schedule that are intended to be read in the sequence they are presented, cross referencing as instructed in the annotations.
- 3.1.1 The reason for this graphical form of presentation is to make its interpretation easier by the greater design team and the demolition/construction team. These teams work in a graphical environment, and if the arboricultural reports involved in the design and demolition/construction processes are to be easily interpreted by these teams they must also be presented in a graphical environment. To do otherwise would create an unhelpful disconnect between the arboricultural information and the design and demolition/construction teams. It also allows the report and the proposed development to be assessed on site by officers of the Local Planning Authority (LPA) whilst referencing a small number of single page documents, thereby avoiding the need to keep flicking backwards and forwards through a written report whilst holding open a large site plan.
- 3.1.2 The layout and order of the plans and schedule are intended to illustrate a logical progression from the existing site (Tree Constraints Plan and Tree Survey Schedule), through the proposed development, its impact on the trees in terms of tree losses, and the establishment of conflicts with the retained trees and how these conflicts will be resolved (Arboricultural Impact Assessment), to the specific tree protection measures required (Tree Protection Plan).
- 3.2 The comments and recommendations made in the tree survey schedule are made in the current context of the site, and they do not relate to any proposed development of the site. Tree works and removals required as a result of the proposed development will be detailed in the Arboricultural Impact Assessment plan.

4.0 Summary

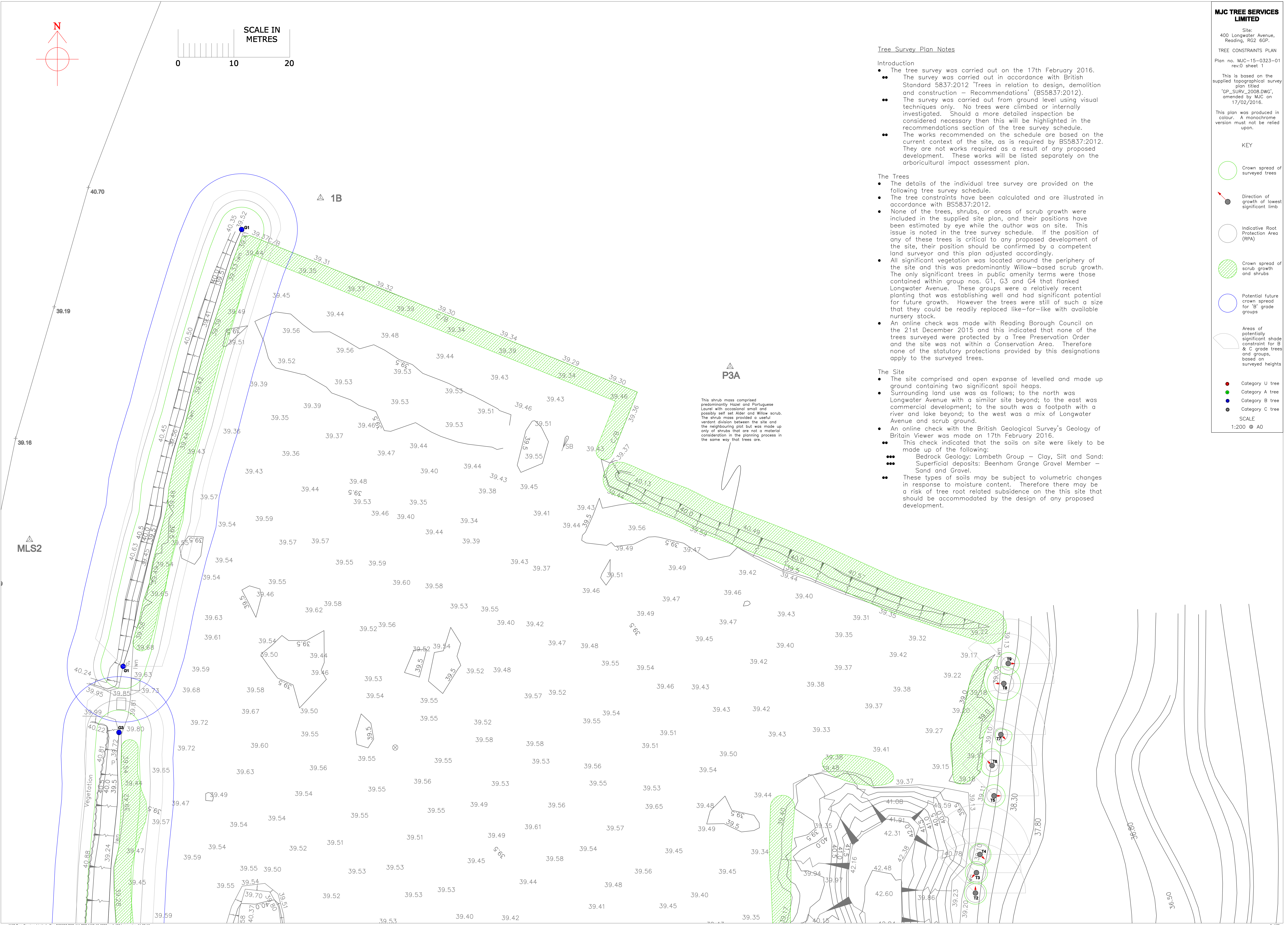
- 4.1 It is proposed to construct a new office complex with parking and revised access arrangements on the site, as illustrated in the enclosed Arboricultural Impact Assessment Plan.
- 4.1.1 In the Arboricultural Implications Assessment Plan the proposed development layout is illustrated in colour.
- 4.1.2 In order to provide context with the existing site, the existing site layout plan is also illustrated in the Arboricultural Implications Assessment Plan in pale grey.
- 4.2 There are no substantive arboricultural reasons to refuse planning permission for the proposed development, providing the tree protection measures detailed in the Tree Protection Plan are undertaken, along with the carrying out of the proposed soft landscaping scheme. In order to ensure that these actions take place, it is likely that the LPA will make planning permission for the proposed development conditional on the following:
- Adherence to the proposed soft landscaping scheme (see Place DP Landscape Strategy document):
 - Adherence to the Tree Protection Plan (see following Tree Protection Plan):
- 4.2.1 The use of these conditions is reasonable, necessary and commonplace. Therefore the required use of these conditions cannot result in a legitimate reason to refuse planning permission for the proposed development.
- 4.2.2 An arboricultural method statement is not required for the proposed development as there is no complex interaction with retained trees, and adherence to the following Tree Protection Plan will provide adequate protection to the retained trees.

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5.0 Tree Constraints Plan

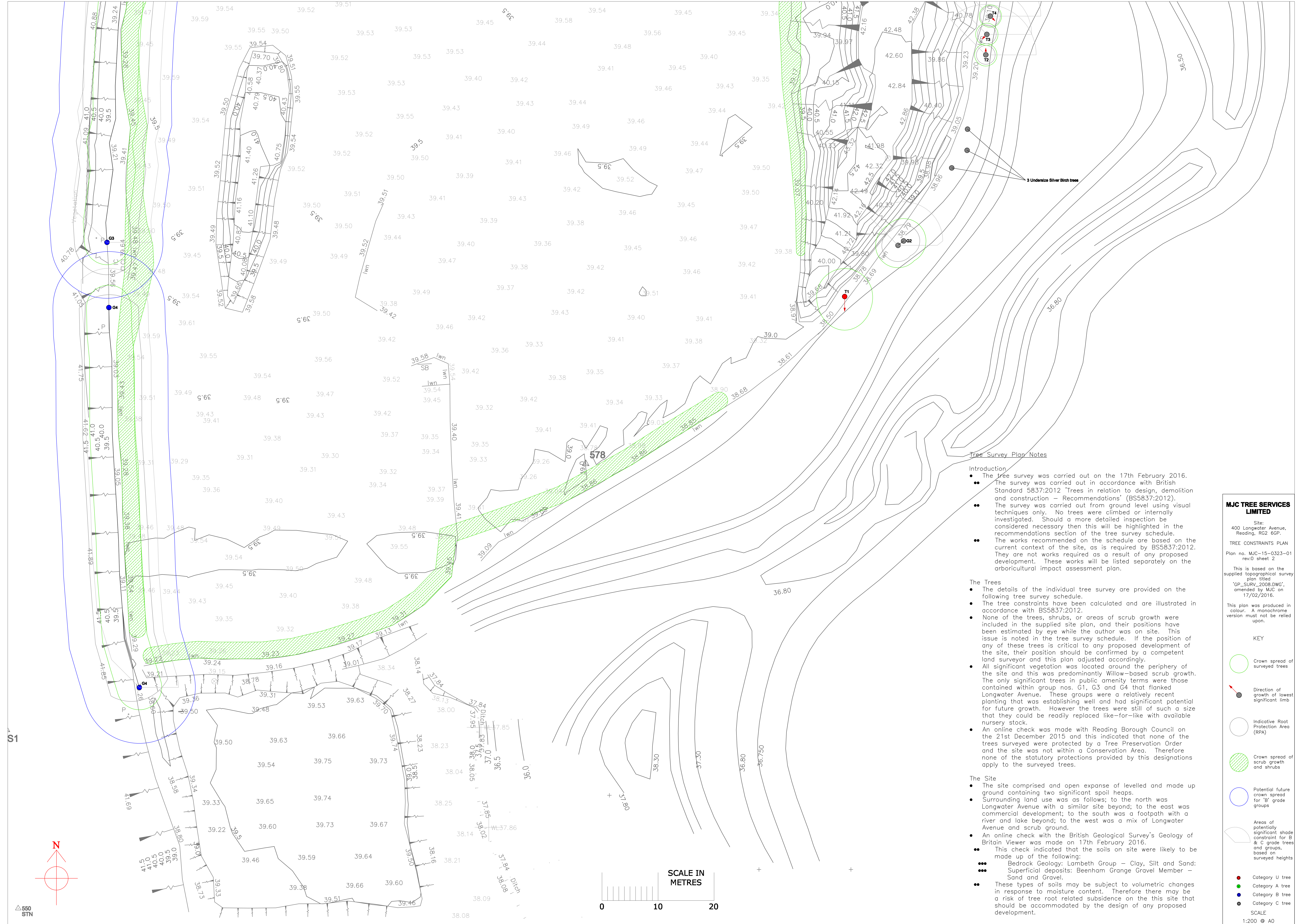


Tree Survey Plan Notes

- Introduction
- The tree survey was carried out on the 17th February 2016.
 - The survey was carried out in accordance with British Standard 5837:2012 'Trees in relation to design, demolition and construction – Recommendations' (BS5837:2012).
 - The survey was carried out from ground level using visual techniques only. No trees were climbed or internally investigated. Should a more detailed inspection be considered necessary then this will be highlighted in the recommendations section of the tree survey schedule.
 - The works recommended on the schedule are based on the current context of the site, as is required by BS5837:2012. They are not works required as a result of any proposed development. These works will be listed separately on the arboricultural impact assessment plan.

- The Trees
- The details of the individual tree survey are provided on the following tree survey schedule.
 - The tree constraints have been calculated and are illustrated in accordance with BS5837:2012.
 - None of the trees, shrubs, or areas of scrub growth were included in the supplied site plan, and their positions have been estimated by eye while the author was on site. This issue is noted in the tree survey schedule. If the position of any of these trees is critical to any proposed development of the site, their position should be confirmed by a competent land surveyor and this plan adjusted accordingly.
 - All significant vegetation was located around the periphery of the site and this was predominantly Willow-based scrub growth. The only significant trees in public amenity terms were those contained within group nos. G1, G3 and G4 that flanked Longwater Avenue. These groups were a relatively recent planting that was establishing well and had significant potential for future growth. However the trees were still of such a size that they could be readily replaced like-for-like with available nursery stock.
 - An online check was made with Reading Borough Council on the 21st December 2015 and this indicated that none of the trees surveyed were protected by a Tree Preservation Order and the site was not within a Conservation Area. Therefore none of the statutory protections provided by this designations apply to the surveyed trees.

- The Site
- The site comprised an open expanse of levelled and made up ground containing two significant spoil heaps.
 - Surrounding land use was as follows; to the north was Longwater Avenue with a similar site beyond; to the east was commercial development; to the south was a footpath with a river and lake beyond; to the west was a mix of Longwater Avenue and scrub ground.
 - An online check with the British Geological Survey's Geology of Britain Viewer was made on 17th February 2016.
 - This check indicated that the soils on site were likely to be made up of the following:
 - Bedrock Geology: Lambeth Group – Clay, Silt and Sand:
 - Superficial deposits: Beenham Grange Gravel Member – Sand and Gravel.
 - These types of soils may be subject to volumetric changes in response to moisture content. Therefore there may be a risk of tree root related subsidence on this site that should be accommodated by the design of any proposed development.



6.0 Tree Survey Schedule

TREE SURVEY SCHEDULE

Key:

- **Ht** = Height estimated in metres.
- **Stem Diam** = Stem or trunk diameter, measured and calculated in accordance with Annex C and section 4.6 of BS5837:2012.
 - **oi** = Measurement taken over ivy, which is likely to produce an exaggerated figure.
- **Crown Spread** = Crown spread to the cardinal points in metres, measured by pacing.
- **1st significant branch ht' & direction** = First significant branch height in metres and direction of growth e.g. N = North.
- **Crown base ht'** = Minimum distance between surrounding ground level at the trunk base and the base of the main crown, estimated by eye in metres.
- **Life stage** is chosen from the four following categories;
 - Y = Young;
 - SM = Semi mature;
 - EM = Early mature;
 - M = Mature;
 - OM = Over Mature.
- **General observations** = Particularly of structural and/or physiological condition, significant features and defects, and the effect these may have on the health, stability and safe retention of the tree.
- **Preliminary management recommendations** = any significant works identified as necessary in the current context, and not taking into account any development of the site..
- **Rem' cont'** = an estimate, in years, of the remaining period over which the tree can be retained at an acceptable level of risk whilst still providing significant amenity benefits with no significant management intervention.
- **Reten' Cat'** = Desirability for retention category. Refers to BS5837:2012 which categorises trees on development sites into one of four categories – A, B, C or U, A being very good and U meaning that felling is appropriate regardless of any proposals. The suffix 1, 2 or 3 refers to a subcategory relating to tree, landscape or cultural/ecological values respectively.
- **AGL** = Above ground level
- **#** = Estimated dimension.
- **TYP** = Typical dimension where several are present.

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m)				1 st sig' branch ht' (m)	Direction of 1 st sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
					N	E	S	W								
T1	Crack Willow	17	520	1	5	5	6	5	2	S	2	EM	- The tree was not plotted on the supplied topographical plan and its position was estimated by eye whilst on site. - The tree contained a longitudinal bark wound on the trunk and the wood exposed was beginning to decay. - Given the propensity of this species to rapid internal wood decay the retention of this tree was not recommended.	- Fell. - RPA area = 122.3 square metres (radius = 6.2 metre).	0-10	U

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m)				1 st sig' branch ht' (m)	Direction of 1 st sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
					N	E	S	W								
T2	Silver Birch	9	140	1	2	2	2	2	2.1	N	2.2	SM	- The tree was not plotted on the supplied topographical plan and its position was estimated by eye whilst on site. - The tree formed part of a group of similar Silver Birch trees that flanked the existing footpath along the southern periphery of the site. - The trees were not of such a size to be of great significance and were not publicly prominent.	- No works currently identified. - RPA area = 8.9 square metres (radius = 1.7 metre).	20-40	C1
T3	Silver Birch	8	140	1	2	2	2	2	2.1	SW	2.3	SM	- The tree was not plotted on the supplied topographical plan and its position was estimated by eye whilst on site. - The tree formed part of a group of similar Silver Birch trees that flanked the existing footpath along the southern periphery of the site. - The trees were not of such a size to be of great significance and were not publicly prominent.	- No works currently identified. - RPA area = 8.9 square metres (radius = 1.7 metre).	20-40	C1
T4	Silver Birch	9	150	1	2	2	2	2	2	SE	1.5	SM	- The tree was not plotted on the supplied topographical plan and its position was estimated by eye whilst on site. - The tree formed part of a group of similar Silver Birch trees that flanked the existing footpath along the southern periphery of the site. - The trees were not of such a size to be of great significance and were not publicly prominent.	- No works currently identified. - RPA area = 10.2 square metres (radius = 1.8 metre).	20-40	C1

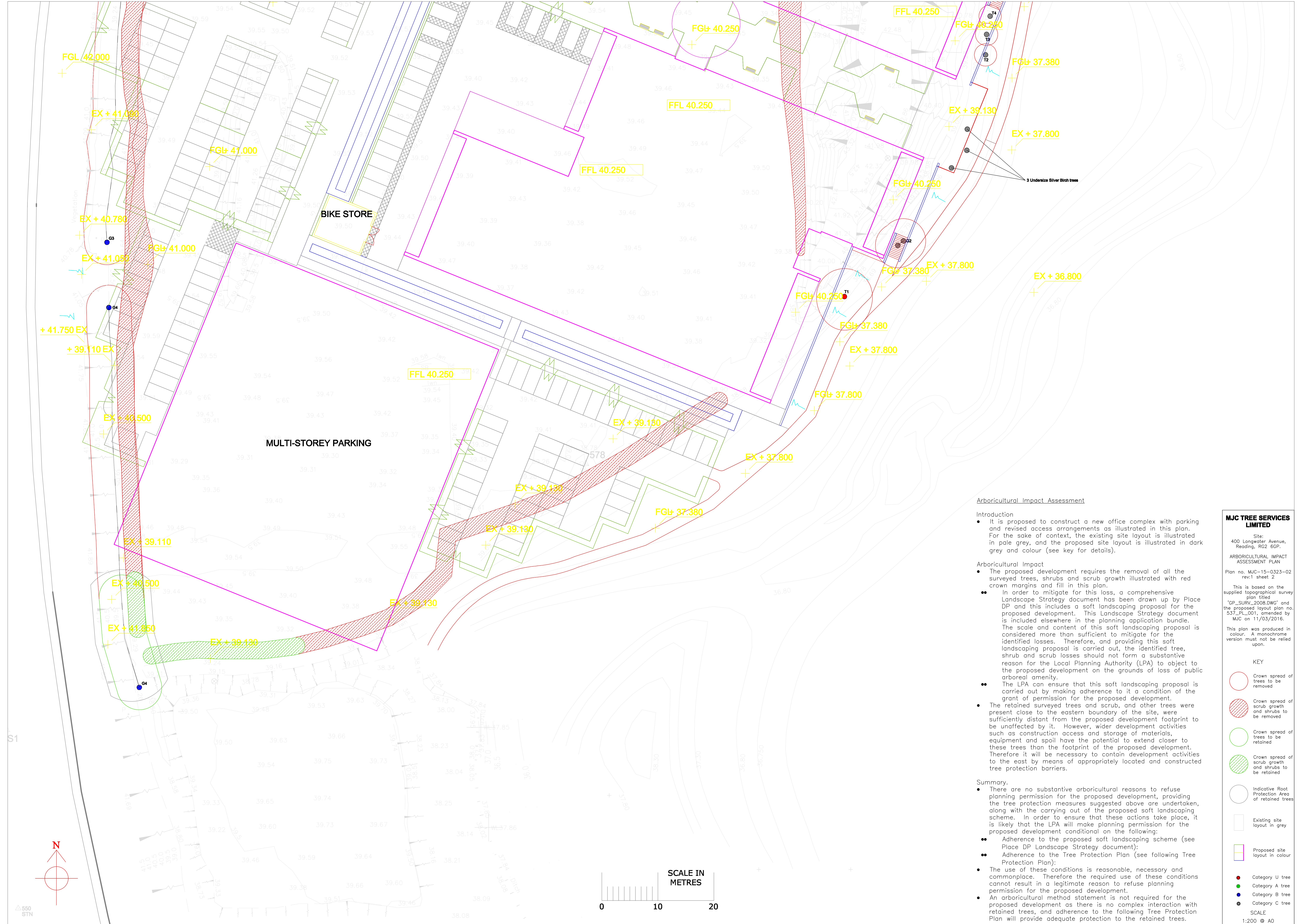
Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m)				1 st sig' branch ht' (m)	Direc- tion of 1 st sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
					N	E	S	W								
T5	Silver Birch	8	110	1	2	2	2	2	1.8	E	1.3	SM	- The tree was not plotted on the supplied topographical plan and its position was estimated by eye whilst on site. - The tree formed part of a group of similar Silver Birch trees that flanked the existing footpath along the southern periphery of the site. - The trees were not of such a size to be of great significance and were not publicly prominent.	- No works currently identified. - RPA area = 5.5 square metres (radius = 1.3 metre).	20-40	C1
T6	Silver Birch	8	90	1	3	2	2	2	1.3	NW	1.3	SM	- The tree was not plotted on the supplied topographical plan and its position was estimated by eye whilst on site. - The tree formed part of a group of similar Silver Birch trees that flanked the existing footpath along the southern periphery of the site. - The trees were not of such a size to be of great significance and were not publicly prominent.	- No works currently identified. - RPA area = 3.7 square metres (radius = 1.1 metre).	20-40	C1
T7	Silver Birch	8	100	1	1	2	2	1	1.7	SE	1.7	SM	- The tree was not plotted on the supplied topographical plan and its position was estimated by eye whilst on site. - The tree formed part of a group of similar Silver Birch trees that flanked the existing footpath along the southern periphery of the site. - The trees were not of such a size to be of great significance and were not publicly prominent.	- No works currently identified. - RPA area = 4.5 square metres (radius = 1.2 metre).	20-40	C1

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m)				1 st sig' branch ht' (m)	Direction of 1 st sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
					N	E	S	W								
T8	Silver Birch	9	150	1	3	3	3	3	1.9	W	1.3	SM	- The tree was not plotted on the supplied topographical plan and its position was estimated by eye whilst on site. - The tree formed part of a group of similar Silver Birch trees that flanked the existing footpath along the southern periphery of the site. - The trees were not of such a size to be of great significance and were not publicly prominent.	- No works currently identified. - RPA area = 10.2 square metres (radius = 1.8 metre).	20-40	C1
T9	Silver Birch	8	100	1	2	2	2	2	1.2	E	1.3	SM	- The tree was not plotted on the supplied topographical plan and its position was estimated by eye whilst on site. - The tree formed part of a group of similar Silver Birch trees that flanked the existing footpath along the southern periphery of the site. - The trees were not of such a size to be of great significance and were not publicly prominent.	- No works currently identified. - RPA area = 4.5 square metres (radius = 1.2 metre).	20-40	C1
G1	Lime Willow Maple Scots Pine Portuguese Laurel (trained to form small trees) Ash Sorbus Silver Birch Variety of shrubs predominantly Viburnum with some Dogwood that have been maintained as coppice stools.	7 max	190 max	1 typical	As per plan	As per plan	As per plan	As per plan	N/A	N/A	0	Y-SM	- The group was not plotted on the supplied topographical plan and its position was estimated by eye whilst on site. - The linear group was an attractive if young feature that provided useful boundary screening. - The size of the trees and shrubs present were such that they could be easily replaced by new planting of the same size, i.e., on a like-for-like basis.	- No works currently identified. - RPA area = 16.3 square metres (radius = 2.3 metre).	40+	B2

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m)				1 st sig' branch ht' (m)	Direction of 1 st sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
					N	E	S	W								
G2	Willow	7	180 + 160 typical = 241	2 typical	As per plan	As per plan	As per plan	As per plan	N/A	N/A	2	Y-SM	- The group was not plotted on the supplied topographical plan and its position was estimated by eye whilst on site. - The group of two trees formed a unified crown structure. - The trees were multi stemmed with potentially weak lower forks and varying degrees of decay in the lower stems therefore their long term retention was not anticipated.	- Monitor and assess condition annually. - Be prepared to fell and replace with better formed specimen trees within the foreseeable future. - RPA area = 26.2 square metres (radius = 2.9 metre).	10-20	C1
G3	Lime Willow Maple Scots Pine Portuguese Laurel (trained to form small trees) Ash <i>Sorbus</i> Silver Birch Variety of shrubs predominantly Viburnum with some Dogwood that have been maintained as coppice stools.	8 max	230 max	1 typical	As per plan	As per plan	As per plan	As per plan	N/A	N/A	0	Y-SM	- The group was not plotted on the supplied topographical plan and its position was estimated by eye whilst on site. - The linear group was an attractive if young feature that provided useful boundary screening. - The size of the trees and shrubs present were such that they could be easily replaced by new planting of the same size, i.e., on a like-for-like basis.	- No works currently identified. - RPA area = 23.9 square metres (radius = 2.8 metre).	40+	B2

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m)				1 st sig' branch ht' (m)	Direction of 1 st sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
					N	E	S	W								
G4	Lime Willow Maple Scots Pine Portuguese Laurel (trained to form small trees) Ash <i>Sorbus</i> Silver Birch Variety of shrubs predominantly Viburnum with some Dogwood that have been maintained as coppice stools and Flowering Cherry	7 max	190 max	1 typical	As per plan	As per plan	As per plan	As per plan	N/A	N/A	0	Y-SM	- The group was not plotted on the supplied topographical plan and its position was estimated by eye whilst on site. - The linear group was an attractive if young feature that provided useful boundary screening. - The size of the trees and shrubs present were such that they could be easily replaced by new planting of the same size, i.e., on a like-for-like basis.	- No works currently identified. - RPA area = 16.3 square metres (radius = 2.3 metre).	40+	B2

7.0 Arboricultural Impact Assessment Plan



Arboricultural Impact Assessment

Introduction

- It is proposed to construct a new office complex with parking and revised access arrangements as illustrated in this plan. For the sake of context, the existing site layout is illustrated in pale grey, and the proposed site layout is illustrated in dark grey and colour (see key for details).

Arboricultural Impact

- The proposed development requires the removal of all the surveyed trees, shrubs and scrub growth illustrated with red crown margins and fill in this plan.
 - In order to mitigate for this loss, a comprehensive Landscape Strategy document has been drawn up by Place DP and this includes a soft landscaping proposal for the proposed development. This Landscape Strategy document is included elsewhere in the planning application bundle. The scale and content of this soft landscaping proposal is considered more than sufficient to mitigate for the identified losses. Therefore, and providing this soft landscaping proposal is carried out, the identified tree, shrub and scrub losses should not form a substantive reason for the Local Planning Authority (LPA) to object to the proposed development on the grounds of loss of public arboreal amenity.
 - The LPA can ensure that this soft landscaping proposal is carried out by making adherence to it a condition of the grant of permission for the proposed development.
- The retained surveyed trees and scrub, and other trees were present close to the eastern boundary of the site, were sufficiently distant from the proposed development footprint to be unaffected by it. However, wider development activities such as construction access and storage of materials, equipment and spoil have the potential to extend closer to these trees than the footprint of the proposed development. Therefore it will be necessary to contain development activities to the east by means of appropriately located and constructed tree protection barriers.

Summary.

- There are no substantive arboricultural reasons to refuse planning permission for the proposed development, providing the tree protection measures suggested above are undertaken, along with the carrying out of the proposed soft landscaping scheme. In order to ensure that these actions take place, it is likely that the LPA will make planning permission for the proposed development conditional on the following:
 - Adherence to the proposed soft landscaping scheme (see Place DP Landscape Strategy document);
 - Adherence to the Tree Protection Plan (see following Tree Protection Plan);
- The use of these conditions is reasonable, necessary and commonplace. Therefore the required use of these conditions cannot result in a legitimate reason to refuse planning permission for the proposed development.
- An arboricultural method statement is not required for the proposed development as there is no complex interaction with retained trees, and adherence to the following Tree Protection Plan will provide adequate protection to the retained trees.

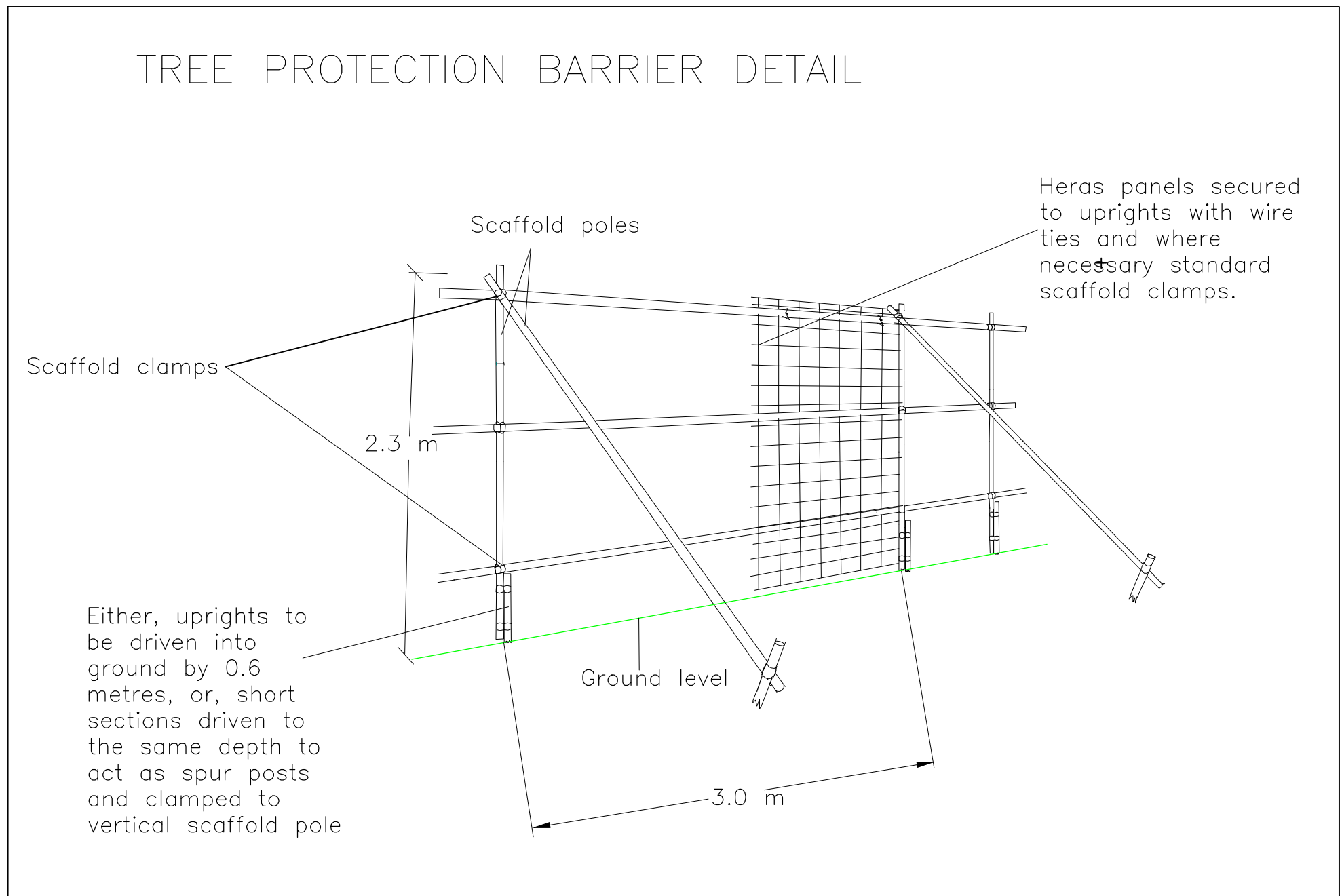
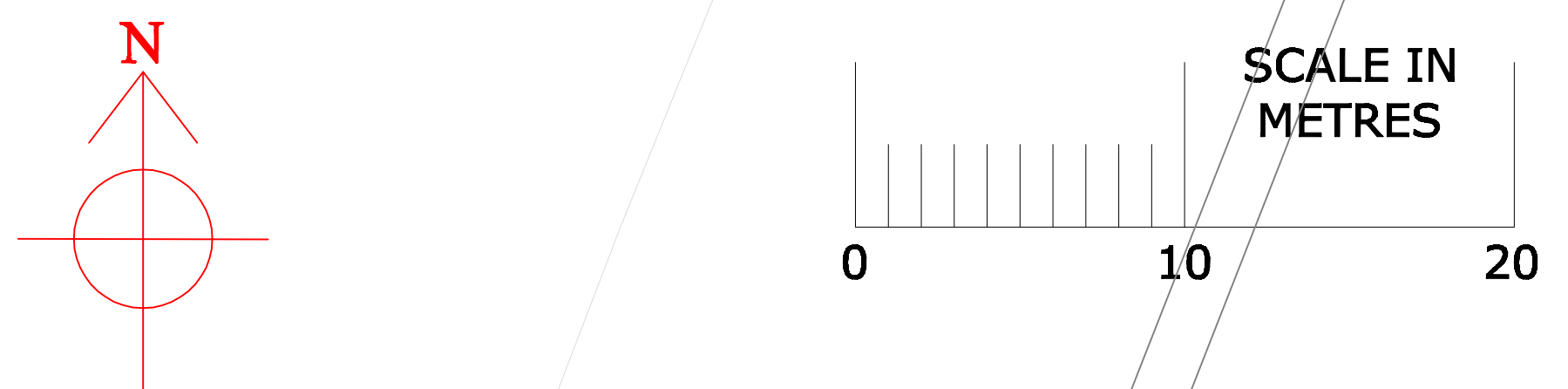
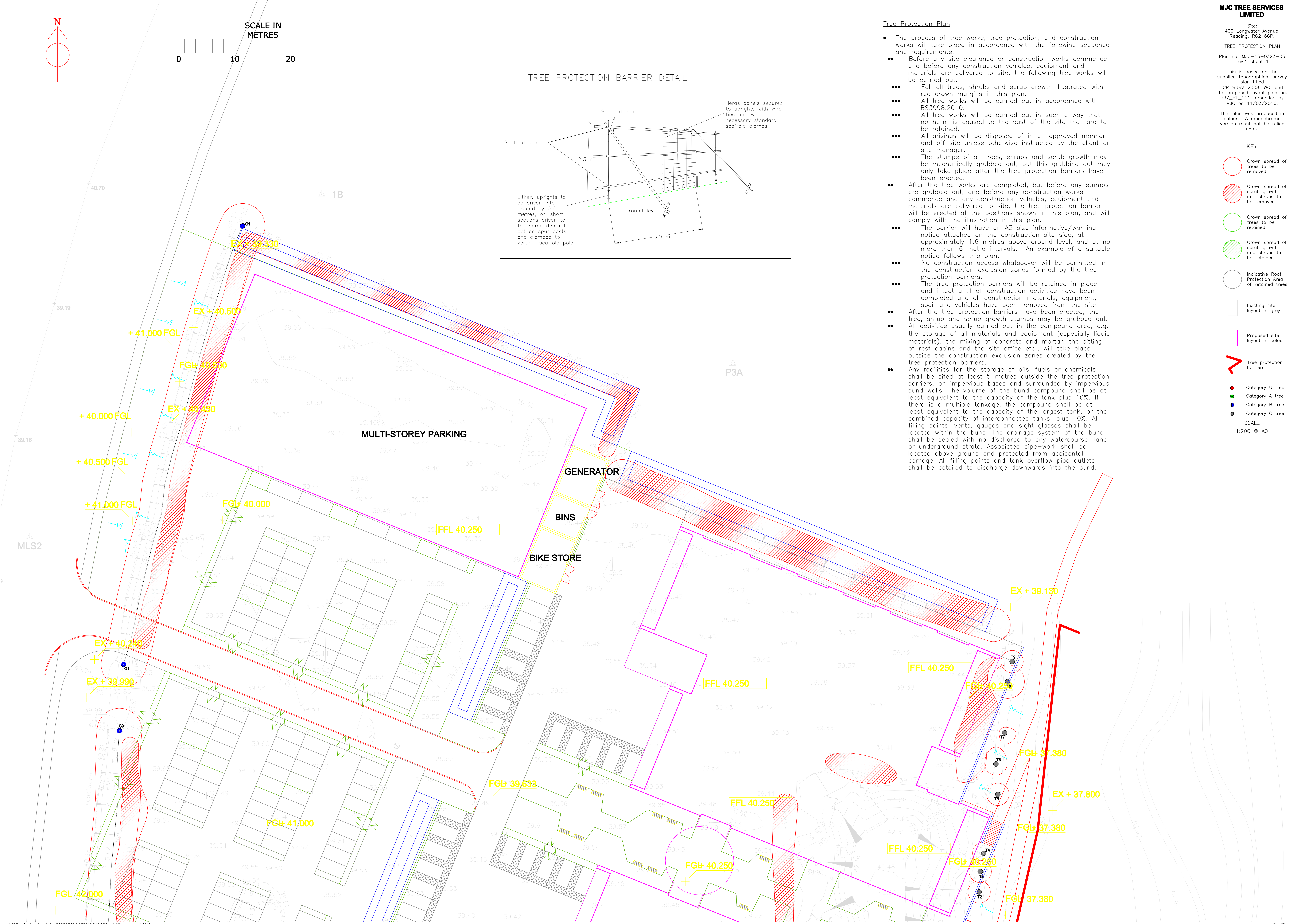
MJC TREE SERVICES LIMITED

Site:
400 Longwater Avenue,
Reading, RG2 6GP.
ARBORICULTURAL IMPACT
ASSESSMENT PLAN
Plan no. MJC-15-0323-02
rev:1 sheet 2
This is based on the
supplied topographical survey
plan titled
'GP_SURV_2008.DWG' and
the proposed layout plan no.
537_PL_001, amended by
MJC on 11/03/2016.
This plan was produced in
colour. A monochrome
version must not be relied
upon.

KEY

- Crown spread of trees to be removed
- Crown spread of scrub growth and shrubs to be removed
- Crown spread of trees to be retained
- Crown spread of scrub growth and shrubs to be retained
- Indicative Root Protection Area of retained trees
- Existing site layout in grey
- Proposed site layout in colour
- Category U tree
- Category A tree
- Category B tree
- Category C tree
- SCALE
1:200 @ A0

8.0 Tree Protection Plan



- Tree Protection Plan**
- The process of tree works, tree protection, and construction works will take place in accordance with the following sequence and requirements.
 - Before any site clearance or construction works commence, and before any construction vehicles, equipment and materials are delivered to site, the following tree works will be carried out.
 - Fell all trees, shrubs and scrub growth illustrated with red crown margins in this plan.
 - All tree works will be carried out in accordance with BS3998:2010.
 - All tree works will be carried out in such a way that no harm is caused to the east of the site that are to be retained.
 - All arisings will be disposed of in an approved manner and off site unless otherwise instructed by the client or site manager.
 - The stumps of all trees, shrubs and scrub growth may be mechanically grubbed out, but this grubbing out may only take place after the tree protection barriers have been erected.
 - After the tree works are completed, but before any stumps are grubbed out, and before any construction works commence and any construction vehicles, equipment and materials are delivered to site, the tree protection barrier will be erected at the positions shown in this plan, and will comply with the illustration in this plan.
 - The barrier will have an A3 size informative/warning notice attached on the construction site side, at approximately 1.6 metres above ground level, and at no more than 6 metre intervals. An example of a suitable notice follows this plan.
 - No construction access whatsoever will be permitted in the construction exclusion zones formed by the tree protection barriers.
 - The tree protection barriers will be retained in place and intact until all construction activities have been completed and all construction materials, equipment, spoil and vehicles have been removed from the site.
 - After the tree protection barriers have been erected, the tree, shrub and scrub growth stumps may be grubbed out. All activities usually carried out in the compound area, e.g. the storage of all materials and equipment (especially liquid materials), the mixing of concrete and mortar, the siting of rest cabins and the site office etc., will take place outside the construction exclusion zones created by the tree protection barriers.
 - Any facilities for the storage of oils, fuels or chemicals shall be sited at least 5 metres outside the tree protection barriers, on impervious bases and surrounded by impervious bund walls. The volume of the bund compound shall be at least equivalent to the capacity of the tank plus 10%. If there is a multiple tankage, the compound shall be at least equivalent to the capacity of the largest tank, or the combined capacity of interconnected tanks, plus 10%. All filling points, vents, gauges and sight glasses shall be located within the bund. The drainage system of the bund shall be sealed with no discharge to any watercourse, land or underground strata. Associated pipe-work shall be located above ground and protected from accidental damage. All filling points and tank overflow pipe outlets shall be detailed to discharge downwards into the bund.

MJC TREE SERVICES LIMITED

Site:
400 Longwater Avenue,
Reading, RG2 6GP.

TREE PROTECTION PLAN

Plan no. MJC-15-0323-03
rev:1 sheet 1

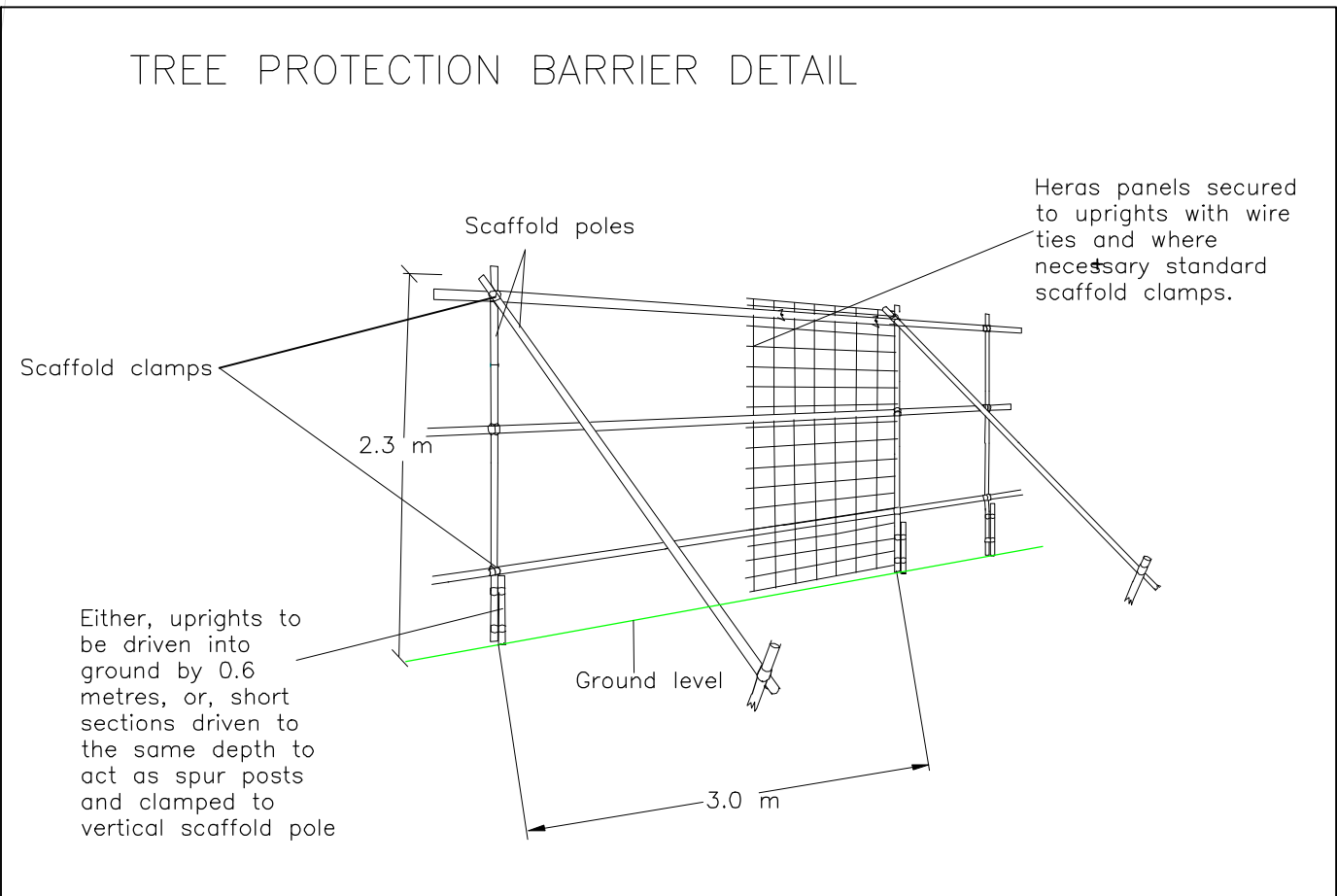
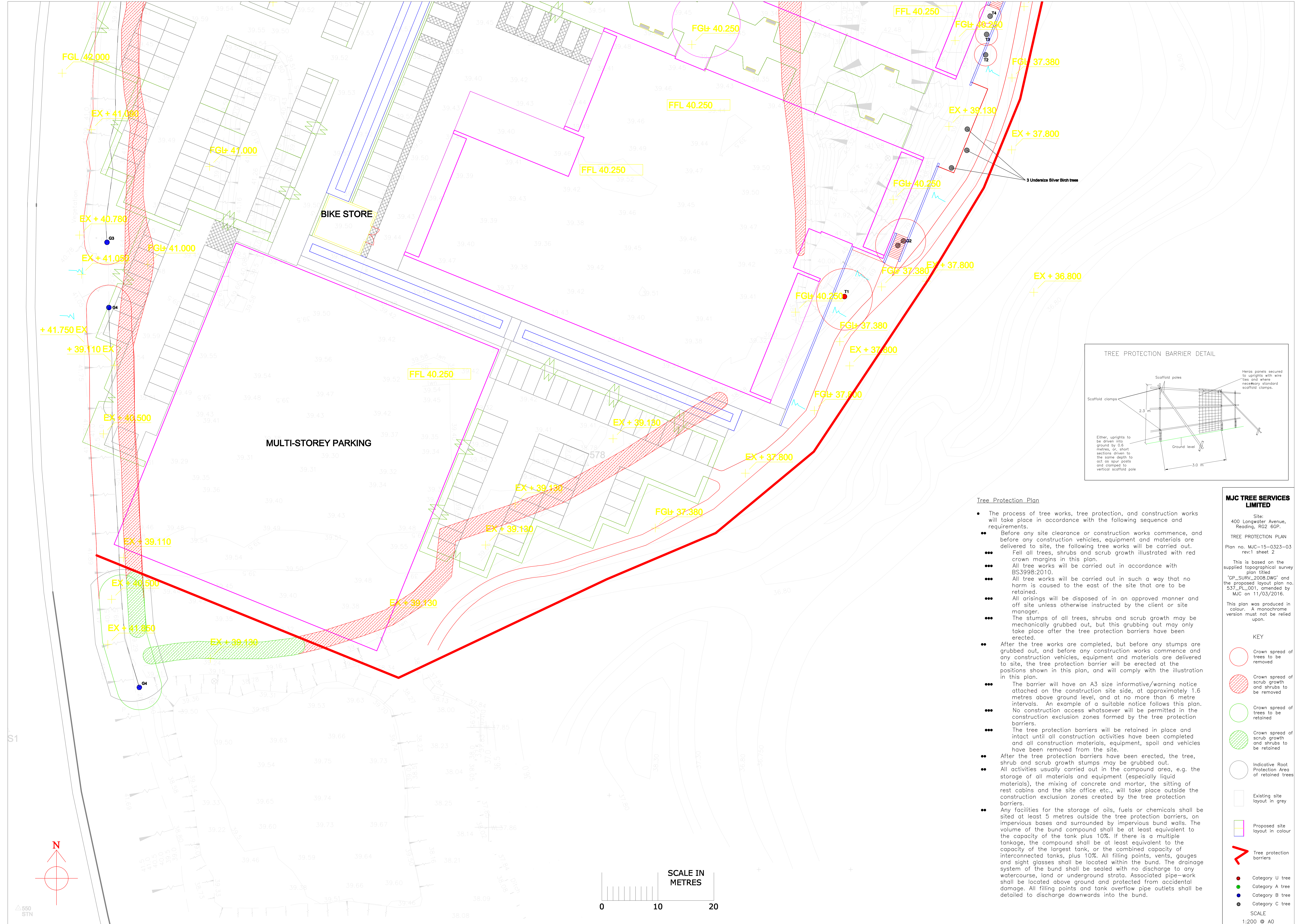
This is based on the supplied topographical survey plan titled "GP_SURV_2008.DWG" and the proposed layout plan no. 537_PL_001, amended by MJC on 11/03/2016.

This plan was produced in colour. A monochrome version must not be relied upon.

KEY

- Crown spread of trees to be removed
- Crown spread of scrub growth and shrubs to be removed
- Crown spread of trees to be retained
- Crown spread of scrub growth and shrubs to be retained
- Indicative Root Protection Area of retained trees
- Existing site layout in grey
- Proposed site layout in colour
- Tree protection barriers
- Category U tree
- Category A tree
- Category B tree
- Category C tree

SCALE
1:200 @ A0



Tree Protection Plan

- The process of tree works, tree protection, and construction works will take place in accordance with the following sequence and requirements.
- Before any site clearance or construction works commence, and before any construction vehicles, equipment and materials are delivered to site, the following tree works will be carried out.
 - Fell all trees, shrubs and scrub growth illustrated with red crown margins in this plan.
 - All tree works will be carried out in accordance with BS3998:2010.
 - All tree works will be carried out in such a way that no harm is caused to the east of the site that are to be retained.
 - All arisings will be disposed of in an approved manner and off site unless otherwise instructed by the client or site manager.
 - The stumps of all trees, shrubs and scrub growth may be mechanically grubbed out, but this grubbing out may only take place after the tree protection barriers have been erected.
- After the tree works are completed, but before any stumps are grubbed out, and before any construction works commence and any construction vehicles, equipment and materials are delivered to site, the tree protection barrier will be erected at the positions shown in this plan, and will comply with the illustration in this plan.
- The barrier will have an A3 size informative/warning notice attached on the construction site side, at approximately 1.6 metres above ground level, and at no more than 6 metre intervals. An example of a suitable notice follows this plan.
- No construction access whatsoever will be permitted in the construction exclusion zones formed by the tree protection barriers.
- The tree protection barriers will be retained in place and intact until all construction activities have been completed and all construction materials, equipment, spoil and vehicles have been removed from the site.
- After the tree protection barriers have been erected, the tree, shrub and scrub growth stumps may be grubbed out.
- All activities usually carried out in the compound area, e.g. the storage of all materials and equipment (especially liquid materials), the mixing of concrete and mortar, the siting of rest cabins and the site office etc., will take place outside the construction exclusion zones created by the tree protection barriers.
- Any facilities for the storage of oils, fuels or chemicals shall be sited at least 5 metres outside the tree protection barriers, on impervious bases and surrounded by impervious bund walls. The volume of the bund compound shall be at least equivalent to the capacity of the tank plus 10%. If there is a multiple tankage, the compound shall be at least equivalent to the capacity of the largest tank, or the combined capacity of interconnected tanks, plus 10%. All filling points, vents, gauges and sight glasses shall be located within the bund. The drainage system of the bund shall be sealed with no discharge to any watercourse, land or underground strata. Associated pipe-work shall be located above ground and protected from accidental damage. All filling points and tank overflow pipe outlets shall be detailed to discharge downwards into the bund.

MJC TREE SERVICES LIMITED

Site:
400 Longwater Avenue,
Reading, RG2 6GP.

TREE PROTECTION PLAN

Plan no. MJC-15-0323-03
rev:1 sheet 2

This is based on the supplied topographical survey plan titled
'GP_SURV_2008.DWG' and the proposed layout plan no. 537_PL_001, amended by MJC on 11/03/2016.

This plan was produced in colour. A monochrome version must not be relied upon.

KEY

- Crown spread of trees to be removed
- Crown spread of scrub growth and shrubs to be removed
- Crown spread of trees to be retained
- Crown spread of scrub growth and shrubs to be retained
- Indicative Root Protection Area of retained trees
- Existing site layout in grey
- Proposed site layout in colour
- Tree protection barriers
- Category U tree
- Category A tree
- Category B tree
- Category C tree
- SCALE
1:200 @ A0

9.0 Tree Protection Barrier Warning Sign



**PROTECTIVE FENCING. THIS
FENCING MUST BE
MAINTAINED IN ACCORDANCE
WITH THE APPROVED PLANS
AND DRAWINGS FOR THIS
DEVELOPMENT.**



**TREE PROTECTION AREA
KEEP OUT !**

**(TOWN & COUNTRY PLANNING ACT 1990)
TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY
PLANNING CONDITIONS AND/OR ARE THE SUBJECTS OF A
TREE PRESERVATION ORDER.
CONTRAVENTION OF A TREE PRESERVATION ORDER MAY
LEAD TO CRIMINAL PROSECUTION**

**ANY INCURSION INTO THE PROTECTED AREA MUST BE
WITH THE WRITTEN PERMISSION OF THE LOCAL
PLANNING AUTHORITY**

10.0 References

- BS5837:2012 = British Standard 5837:2012 'Trees in relation to design, demolition and construction – Recommendations'.
- BS3998:2010 = British Standard 3998:2010 'Tree work – Recommendations'.