Arboricultural Impact Assessment BS5837:2012

Glendale, Sandersons Lane, Heskin

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11/12/2021

Contents

Commission

This survey was commissioned by Andrew Huntley-Jacobs, 'the client', to assess the arboricultural constraints of the proposed development site, Glendale, Heskin, in accordance with BS5837:2012.

Site Description

The site is located at Glendale, Sandersons Lane, Heskin, PR7 5PX (OS Grid Ref: SD 51371 13529) measuring approximately 5.6 acres. The site is a private residence comprising of maintained grassland, garden and woodland areas, with the majority of the trees situated to the edges of the property. The trees are primarily mature and well established.

Proposal

The proposed development of the site consists of the demolition of the current dwellings on the property that are situated to the South of the site, along with the current outbuildings. A new dwelling is proposed in a similar position to the smaller of the current dwellings with formal gardens encompassing the immediate areas around the property leading to informal and wetland areas within the current grassland area. A new entrance is also proposed for the new development.

Scope of report

The aim of the report is to provide guidance in conjunction with the British Standards BS5837:2012 Trees in relation to design, demolition and construction. This will help in producing a sustainable and achievable plan for the development in both the short and long term.

The report will identify where trees and other woody vegetation come within conflict of the proposed development. Methods by which these conflicts can be alleviated or mitigated will be outlined and should be implemented to achieve this.

Caveat

The trees referred to in this report are living organisms and are therefore subject to change. They are also subject to change by humans and exceptional weather conditions. The inspection undertaken relies on visual inspection of the trees from the ground and it is therefore possible for defects within the canopy of the trees to be hidden. It cannot be guaranteed that the trees will be structurally sound in all circumstances and cannot be guaranteed that the recommendations made will categorically result in the trees being safe.

Although recommendations of work to trees may be made within the report, this report is not a risk assessment and should not be interpreted as such. The assessment of the effects upon buildings and other structures through shrinkable soils or branch/root growth are excluded from this report and would require advice from a structural engineer.

No soil samples were taken and only a visual inspection of the surrounding ground was made for the possible existence of underground utilities. This report is only valid as a complete document and any alterations made will invalidate it. No responsibility is assumed by the author of this report for any legal matters that may arise as a consequence.

Legal

No investigations were made into the presence of Tree Preservation Orders or Conservation Orders in relation to the site, or any other legal covenants.

Supplied Information

The initial field survey was conducted on the 30th, 31st January and 3rd, 4th February 2021, and subsequent report compiled on 7/2/2021.

Outline plans for development where received via email from Shaun Lyons (project landscape architect) on 9/12/2021, file 1931-EXA-XX-GF-DR-L-100.

Tree report

A condensed schedule from the tree report can be found in Appendix A, T52 and T55 had been removed and as such have been deleted from report.

Demolition

Following verbal consultation with the client on 3/11/2021 the demolition is to be completed in two stages. Initial stage will involve the removal of the smaller property. This poses minimal impact on the retained trees, care will need to be taken as to not damage the soil structure of areas for future gardens and landscaping. The second stage will be completed after the new dwelling is constructed, this will include demolition of the remaining original dwelling and outbuildings. The use of the existing driveway is recommended as the access, this will alleviate the potential of unnecessary compaction and damage through the new proposed entrance.

Storage

No plans where provided for storage areas of materials or equipment. The selected area should be easily accessible from the current driveway as this will become the main access during construction, but not be of detriment to the future landscape design or infringe on designated RPA's.

Services

No plans for installation of new services were provided. Due to the location of the new building footprint being close to that of an existing building it can be assumed that the services are to be altered to suit within the footprint.

Impact Assessment

Main Build Area

The proposed construction on the site will primarily affect the trees to the South and South-East of the site. Within the main build area T245, a mature Willow and lower class trees T246 through to T251 will be removed. The Willow has a prominent position within the existing site, however cannot be seen from beyond the site boundaries and provides no benefit to the surrounding area. This coupled with the large scale planting that is proposed as part of the project, appendix G, mitigates its removal. The lower class fruit trees, T246 – T251, will similarly be replaced within the proposed project in more suitable positions and

with higher quality plants, providing greater benefit to the site and surrounding wildlife. Within the main building area groups G8 and G9 will be removed, these Laurel and Rhododendron groups are of low overall value providing negligible benefit to the site.

Driveways

The proposed entrance is in the South-East corner of the site, through the W2 woodland. The removal of T157, 158 and 159, would be required along with minor crown lifting of overhanging branches from T74, 78, 79, 81, 152, 153 and 160. The removal of class U trees, T80, 155 and 156 is recommended due to proximity with proposed new entrance and poor form. This route would impact upon the RPA's of the immediate surrounding trees, being especially close to the stem of T78, 79 and 160, however the implementation of correct no dig construction techniques with products such as 'Cell Web', appendix I, would minimise impact.

As previously mentioned the existing entrance road is to be used as the service road to the main construction area on the site to the South. Due to the larger vehicles that are likely to be using this entrance for delivery of materials and equipment, the trees that border the entrance in the North-East corner of the site will require crown lifting to a suitable height of approximately 5m over the driveway/service road. This will reduce the potential for unnecessary damage to both vehicles and retained trees.

Gardens and Paths

As well as the main entrance roads a number of paths and maintenance routes are proposed throughout the grounds. The majority of the paths are clear of any trees on the site, however the maintenance track on the East side of the main gardens adjacent to the drainage ditch will require the removal of T88 and 89. Due to the large scale replanting that is proposed for the gardens removal of the three trees would be well mitigated.

The paths proposed for the gardens would be best constructed using permeable surfaces and structural soil bases if possible. This would provide the existing and proposed planting maximum rooting environment, as well as reducing the potential of roots lifting the hard surfaces in the future. Where the paths cross through the RPA's of existing trees no dig construction techniques should be implemented such as 'CellWeb', Appendix I, fig 2&3.

The path/road that curves around to an outbuilding in the South-East corner will be of minimal impact due to this area already being hard surface. Extra care should still be taken when working in close proximity to T62.

The Northern part of the site is to be a wetland and pond area, the ground is currently poorly drained grassland, the proposed use should therefore have minimal effect on the existing surrounding trees.

In the South-West corner of the site is a proposed path/seating area beneath the canopy of a large mature Oak, T42. This should be executed sympathetically with minimal ground alterations and a buffer zone between the path surface and the oak stem of a minimum of 1.5m.

Along the Western edge of the site the new planting may require the crown lifting of a number of existing trees this should be done sympathetically and only where necessary as new planting should take into account the existing landscape.

Detailed schedule of works, appendix A, highlights trees to be retained, removed and pruned. All work should be carried out in accordance with BS3998: 2010. If any unforeseen works are required to the existing tree stock on site, consultation and subsequent approval from the project arborist should be sought.

Tree Protection

To depict the exclusion zones on site, fencing should be erected as specified in BS5837:2012, this fencing should be erected as shown in appendix I, fig 1. During the construction of the new entrance 'track mats' or similar should be used to reduce compaction of the surrounding ground within the woodland areas. Once construction of the entrance is completed the fencing should be moved to follow the edges of the driveway until building works are completed, appendix F. Where construction of paths through the garden areas requires the fencing to be moved, it should be re-instated on the path edge after completion. Extra care should be taken in these areas as to not cause unnecessary damage. Due to the nature of the site and build location it is not practical to fence the entire site so key areas should be fenced as shown in appendix F.

Timing

All tree works should be completed before any construction or demolition starts on site. All exclusion fencing should be erected ounce tree works have been completed.

New Planting

There is a large amount of new planting proposed for the development of the site, including feature, secondary and fruit trees. New plant stock should comply with BS3936: Part 1 1992 Nursery stock (specification for trees and shrubs) to ensure quality plants are used. Recommendations detailed within BS8545: Trees from nursery to independence in the landscape consultation, should be followed where practicable for physical planting procedures and aftercare.

Future Development

Due to the location of the main building being farther from the trees on site, their development should pose minimal impact. In relation to driveways, the proposed route should provide adequate space for the surrounding trees to mature without significant interference.

Ecology

Due to the nature of the site and proposed works to ponds, woodlands and wet areas an ecological survey may be required, however this is not within the remit of this report.

Considerations

The public road that leads to the site is single track and densely lined with trees and multiple overhanging branches. Although the canopy is of an adequate height for normal traffic it should be taken into consideration for delivery of equipment and materials to the site.

Appendix A

Tree survey

Tree No.	Common Name	Latin Name	Maturity	Height (m)	Height/ Direction first branch (m)	DBH, >5 averaged (mm)					Comments	Cat.	Sub cat.
						1	2	3	4	5			
T1	Oak	Quercus robur	Semi-mature	12	3s	420						B	2
T2	Oak	Quercus robur	Semi-mature	8.5	1s	170						B	2
T3	Holly	Ilex aquifolium	Semi-mature	6.5	.5n	230	100	100	120			C	2
T4	Oak	Quercus robur	Mature	13	2s	510						A	1 ,2
T5	Holly	Ilex aquifolium	Semi-mature	7	2s	100	100	150	160			C	2
T6	Holly	Ilex aquifolium	Semi-mature	7	1s	230	130	80				C	2
T7	Oak	Quercus robur	Mature	13	2nw	350						A	1 ,2
T8	Oak	Quercus robur	Mature	12	2e	450						A	2
T9	Oak	Quercus robur	Mature	16	3n	460						A	1 ,2
T10	Hazel	Corylus avellana	Young	4	0	90						C	2
T11	Oak	Quercus robur	Mature	18	3.5n	370						A	1 ,2

T12	Oak	Quercus robur	Mature	15	3n	610						A	1 ,2
T13	Oak	Quercus robur	Mature	15	3ne	320						A	2
T14	Oak	Quercus robur	Mature	15	.5n	500						A	1 ,2
T15	Holly	Ilex aquifolium	Young	4	1n	120	50	180				C	2
T16	Oak	Quercus robur	Mature	16	1s	330						A	2
T17	Oak	Quercus robur	Young	8.5	1.5e	150						C	2
T18	Oak	Quercus robur	Mature	17	5.5w	330						A	2
T19	Oak	Quercus robur	Young	5	3e	150						C	2
T20	Oak	Quercus robur	Mature	18	3e	370	300					A	2
T21	Oak	Quercus robur	Mature	15	2n	550						A	1 ,2
T22	Alder	Alnus glutinosa	Mature	17	6n	440						A	2 ,1
T23	Downy Birch	Betula pubescens	Mature	18	7s	350						B	2
T24	Oak	Quercus robur	Mature	17	1n	780						A	1 ,2
T25	Oak	Quercus robur	Mature	18	2.5e	410	220					A	2
T26	Oak	Quercus robur	Mature	16	2w	500	400					A	1 ,2

T27	Alder	Alnus glutinosa	Mature	15	2n	600						B	1 ,2
T28	Oak	Quercus robur	Mature	18	4s	320						A	2
T29	Oak	Quercus robur	Mature	19	4.5sw	770						B	2 ,1
T30	Oak	Quercus robur	Mature	17	3.5n	330						B	2
T31	Oak	Quercus robur	Mature	17	3.5e	300						A	2
T32	Oak	Quercus robur	Mature	8	1.5n	160						B	2
T33	Oak	Quercus robur	Mature	17	5.5n	410						A	1 ,2
T34	Oak	Quercus robur	Mature	17	3.5w	380						B	2
T35	Oak	Quercus robur	Young	6	1se	110						B	2
T36	Oak	Quercus robur	Semi-mature	10	2.5e	200						B	2
T37	Oak	Quercus robur	Semi-mature	10	1.5s	280						A	1 ,2
T38	Alder	Alnus glutinosa	Young	5	1.5e	100						C	2
T39	Silver Birch	Betula pendula	Semi-mature	11	3e	200						C	2
T40	Alder	Alnus glutinosa	Semi-mature	10	1.5ne	340						C	2
T41	Mountain Ash	Sorbus aucuparia	Young	4	1n	90						C	2
T42	Oak	Quercus robur	Mature	20	2.5s	780					Collapsed lower limb	A	1 ,2

T43	Mountain Ash	Sorbus aucuparia	Semi-mature	7	2n	120	50	80				C	2
T44	Mountain Ash	Sorbus aucuparia	Semi-mature	6.5	1.5e	90						C	2
T45	Mountain Ash	Sorbus aucuparia	Semi-mature	7	1s	160						C	2
T46	Mountain Ash	Sorbus aucuparia	Semi-mature	6.5	0.5n	120	60	90				C	2
T47	Oak	Quercus robur	Mature	18	4s	510						A	1 ,2
T48	Oak	Quercus robur	Mature	16	2n	390						A	2 ,1
T49	Beech	Fagus sylvatica	Semi-mature	17	2nw	330						B	2
T50	Beech	Fagus sylvatica	Young	15	2w	180						C	2
T51	Beech	Fagus sylvatica	Young	5.5	.5n	150						C	2
T53	Beech	Fagus sylvatica	Young	8	.5n	220						B	2
T54	Beech	Fagus sylvatica	Young	7	1.5e	100						B	2
T56	Sycamore	Acer pseudoplatanus	Young	5	2.5ne	90						C	2
T57	Sycamore	Acer pseudoplatanus	Mature	18	4se	510						B	2
T58	Sycamore	Acer pseudoplatanus	Semi-mature	15	2w	330	300					B	2
T59	Ash	Fraxinus excelsior	Mature	17	5.5s	400						C	2

T60	Sycamore	Acer pseudoplatanus	Young	7	.5n	90	150	120				C	2
T61	Goat Willow	Salix caprea	Young	7	3s	200						B	2
T62	Oak	Quercus robur	Mature	17.5	4ne	600						A	2 ,1
T63	Oak	Quercus robur	Mature	5.5	2w	320						C	2
T64	Sycamore	Acer pseudoplatanus	Semi-mature	11	2n	210	200					C	2
T65	Oak	Quercus robur	Young	6	1.5w	130						C	2
T66	Oak	Quercus robur	Semi-mature	4	1.5w	150						C	2
T67	Sycamore	Acer pseudoplatanus	Mature	18	5e	350						B	2
T68	Sycamore	Acer pseudoplatanus	Mature	15.5	4.5w	500						B	2
T69	Sycamore	Acer pseudoplatanus	Semi-mature	15.5	4.5w	300	280					C	2
T70	Sycamore	Acer pseudoplatanus	Mature	16.5	3.5w	410						C	2
T71	Sycamore	Acer pseudoplatanus	Mature	16.5	7nw	270	350	600				B	2
T72	Oak	Quercus robur	Semi-mature	9	2nw	310						B	2

T73	Oak	Quercus robur	Semi-mature	10	2.5nw	220						B	2
T74	Oak	Quercus robur	Mature	11	.5n	460						A	2
T75	Oak	Quercus robur	Young	8	7.5e	200						C	2
T76	Oak	Quercus robur	Semi-mature	9	3.5n	280						B	2
T77	Oak	Quercus robur	Young	9	4.5n	200						C	2
T78	Oak	Quercus robur	Semi-mature	10	1.5n	390	360					B	2
T79	Oak	Quercus robur	Semi-mature	10	2.5n	390						B	2
T80-T245 contained within W1 and W2													
T244	Oak	Quercus robur	Young	3	.5se	80						C	2
T245	Willow	Salix babylonica	Mature	9	1.5nw	490						B	2
T246	Cherry	Prunus spp.	Semi-mature	3.6	.5ne	100						C	2
T247	Cherry	Prunus spp.	Semi-mature	3.5	.5nw	90	90					C	2
T248	Cherry	Prunus spp.	Semi-mature	3	.5w	110						C	2
T249	Cherry	Prunus spp.	Semi-mature	3	.5nw	60						C	2
T250	Cherry	Prunus spp.	Semi-mature	3	.5sw	80						C	2
T251	Cherry	Prunus spp.	Semi-mature	3.5	.5nw	60						C	2

Ref No	Common Name	Species	Comments	Height Approx. (m)	Cat.	Sub Cat.
G1	Rhododendron, Holly	Rhododendron spp., Ilex aquifolium	Rhododendron and Holly understory	2-4	C	2
G2	Holly	Ilex aquifolium	Holly understory	4-6	C	2
G3	Holly	Ilex aquifolium	Holly understory	2-4	C	2
G4	Holly	Ilex aquifolium	Holly understory	4-6	C	2
G5	Holly	Ilex aquifolium	Holly understory	4-6	C	2
G6	Holly	Ilex aquifolium	Holly understory	4-8	C	2

G7	Holly, Elder	Ilex aquifolium, Sambucus nigra	Holly and Elder	2-4	C	2
G8	Laurel, Buddleja	Laurus spp., Buddleja davidii	Garden shrubbery, laurel, Buddleja.	2	C	2
G9	Rhododendron	Rhododendron spp.	Garden shrubbery, Rhododendron	2	C	2
W1	Oak, Sycamore	Acer pseudoplatanus, Quercus robur	Raised ground level around majority of trees. Tightly grown.	16	B	2

W2	Oak, Beech, Sycamore, Alder, Hazel, Elder, Rowan	Acer pseudoplatanus, Quercus robur, Fagus sylvatica, Alnus glutinosa, Corylus avellana, Sorbus aucuparia	Mature woodland, Canopy height 4m on field to 10m+ within woodland.	19	A	1, 2

Appendix C

Required Tree Works

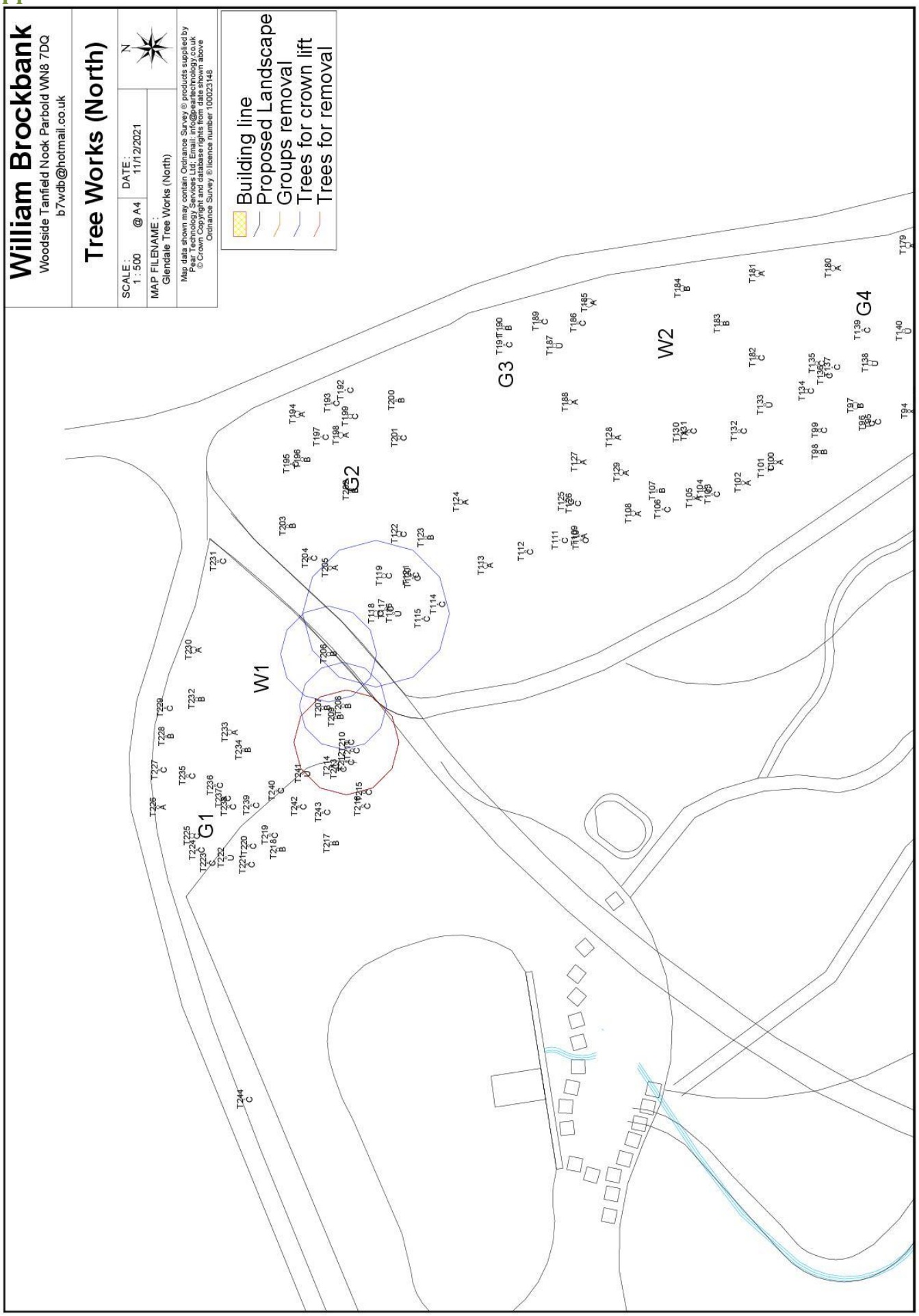
Tree No.	Common Name	Latin Name	Maturity	Height (m)	Height/ Direction first branch (m)	DBH, >5 averaged (mm)					Comments	Cat.	Sub cat.
						1	2	3	4	5			
T63	Oak	Quercus robur	Mature	5.5	2w	320					Remove	C	2
T65	Oak	Quercus robur	Young	6	1.5w	130					Remove	C	2
T66	Oak	Quercus robur	Semi-mature	4	1.5w	150					Remove	C	2
T80	Oak	Quercus robur	Mature	13	6w	350					Remove	U	
T88	Oak	Quercus robur	Semi-mature	7.5	2w	290					Remove	B	2
T89	Oak	Quercus robur	Semi-mature	7.5	2nw	270					Remove	B	2
T155	Oak	Quercus robur	Dead	10	3.5e	330					Remove	U	
T156	Oak	Quercus robur	Veteran	18	.5n	370	250	190			Remove	U	
T157	Oak	Quercus robur	Mature	13	5.5ne	340					Remove	B	2
T158	Sycamore	Acer pseudoplatanus	Semi-mature	17	6e	340					Remove	B	2
T159	Sycamore	Acer pseudoplatanus	Semi-mature	18	3n	260					Remove	C	2

T210	Sycamore	Acer pseudoplatanus	Mature	14	3s	470					Remove	C	2
T245	Willow	Salix babylonica	Mature	9	1.5nw	490					Remove	B	2
T246	Cherry	Prunus spp.	Semi-mature	3.6	.5ne	100					Remove	C	2
T247	Cherry	Prunus spp.	Semi-mature	3.5	.5nw	90	90				Remove	C	2
T248	Cherry	Prunus spp.	Semi-mature	3	.5w	110					Remove	C	2
T249	Cherry	Prunus spp.	Semi-mature	3	.5nw	60					Remove	C	2
T250	Cherry	Prunus spp.	Semi-mature	3	.5sw	80					Remove	C	2
T251	Cherry	Prunus spp.	Semi-mature	3.5	.5nw	60					Remove	C	2
T74	Oak	Quercus robur	Mature	11	.5n	460					Crown Lift over new roadway, 5m	A	2
T78	Oak	Quercus robur	Semi-mature	10	1.5n	390	360				Crown Lift over new roadway, 5m	B	2
T79	Oak	Quercus robur	Semi-mature	10	2.5n	390					Crown Lift over new roadway, 5m	B	2
T81	Sycamore	Acer pseudoplatanus	Mature	14	4.5w	240	230	140	350	400	Crown Lift over new roadway, 5m	B	2
T118	Sycamore	Acer pseudoplatanus	Mature	16	2w	320	360	200	400		Crown Lift over roadway, 5m	C	2

T152	Sycamore	Acer pseudoplatanus	Mature	18	4n	590					Crown Lift over new roadway, 5m	A	2
T153	Sycamore	Acer pseudoplatanus	Mature	18	8n	390					Crown Lift over new roadway, 5m	B	2
T160	Oak	Quercus robur	Mature	14	3ne	380					Crown Lift over new roadway, 5m	B	2
T206	Sycamore	Acer pseudoplatanus	Mature	15	7.5ne	430					Crown Lift over roadway, 5m	B	2
T208	Sycamore	Acer pseudoplatanus	Mature	13	3.5s	390					Crown Lift over roadway, 5m	B	2

Ref No	Common Name	Species	Comments	Height Approx. (m)	Cat.	Sub Cat.
G8	Laurel, Buddleja	Laurus spp., Buddleja davidii	Remove	2	C	2
G9	Rhododendron	Rhododendron spp.	Remove	2	C	2

Appendix D


William Brockbank
Woodside Tanfield Nook Parbold WN8 7DQ
b7wdb@hotmail.co.uk
Tree Works (North)
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DATE : 11/12/2021
MAP FILENAME : Glendale Tree Works (North)
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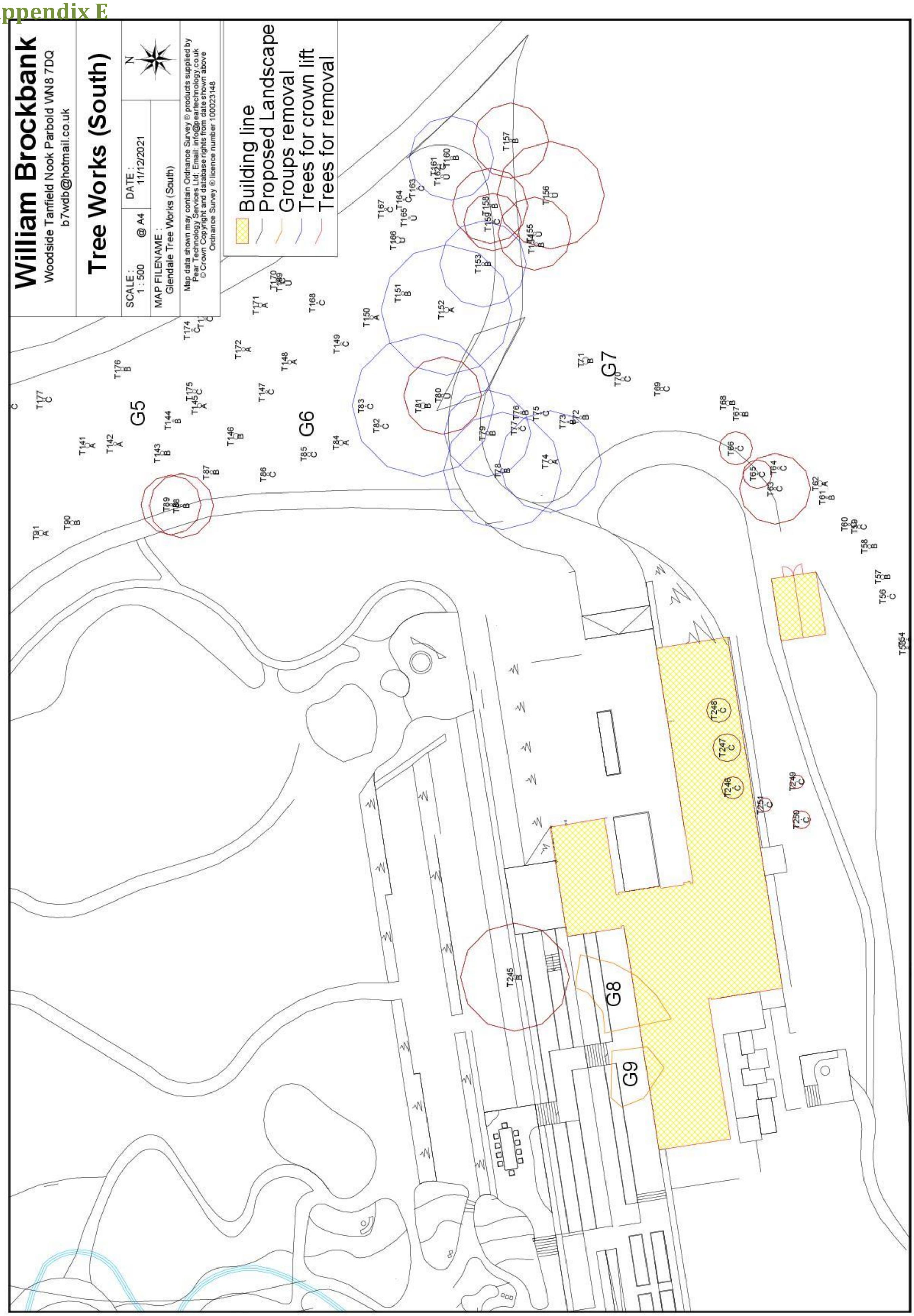
Building line
Proposed Landscape
Groups removal
Trees for crown lift
Trees for removal
G1
G2
G3
G4
W1
W2

Appendix E


William Brockbank
Woodside Tanfield Nook Parbold WN8 7DQ
b7wdb@hotmail.co.uk
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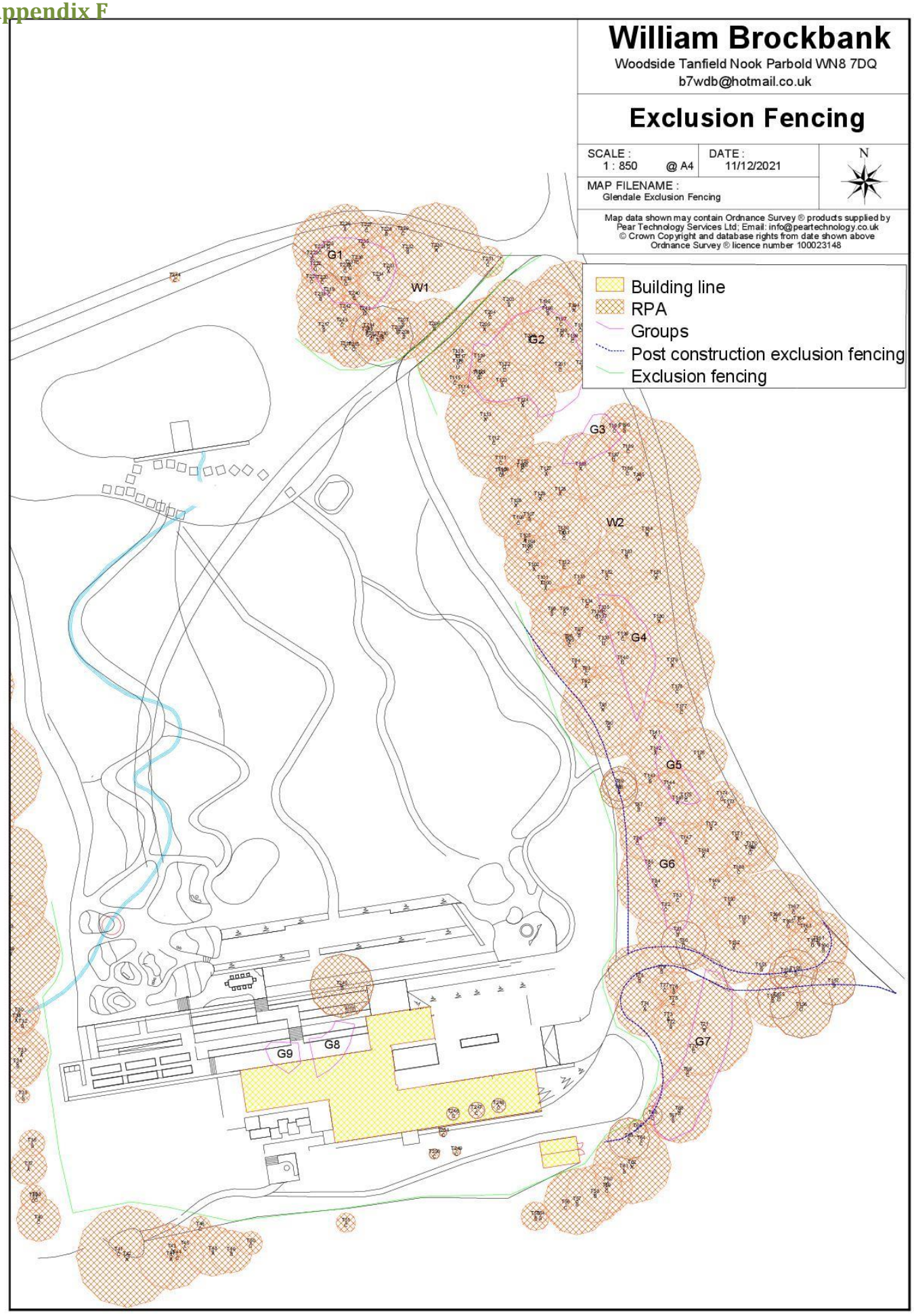
Building line
Proposed Landscape
Groups removal
Trees for crown lift
Trees for removal
G5
G6
G7
G8
G9

Appendix F


William Brockbank
Woodside Tanfield Nook Parbold WN8 7DQ
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MAP FILENAME : Glendale Exclusion Fencing
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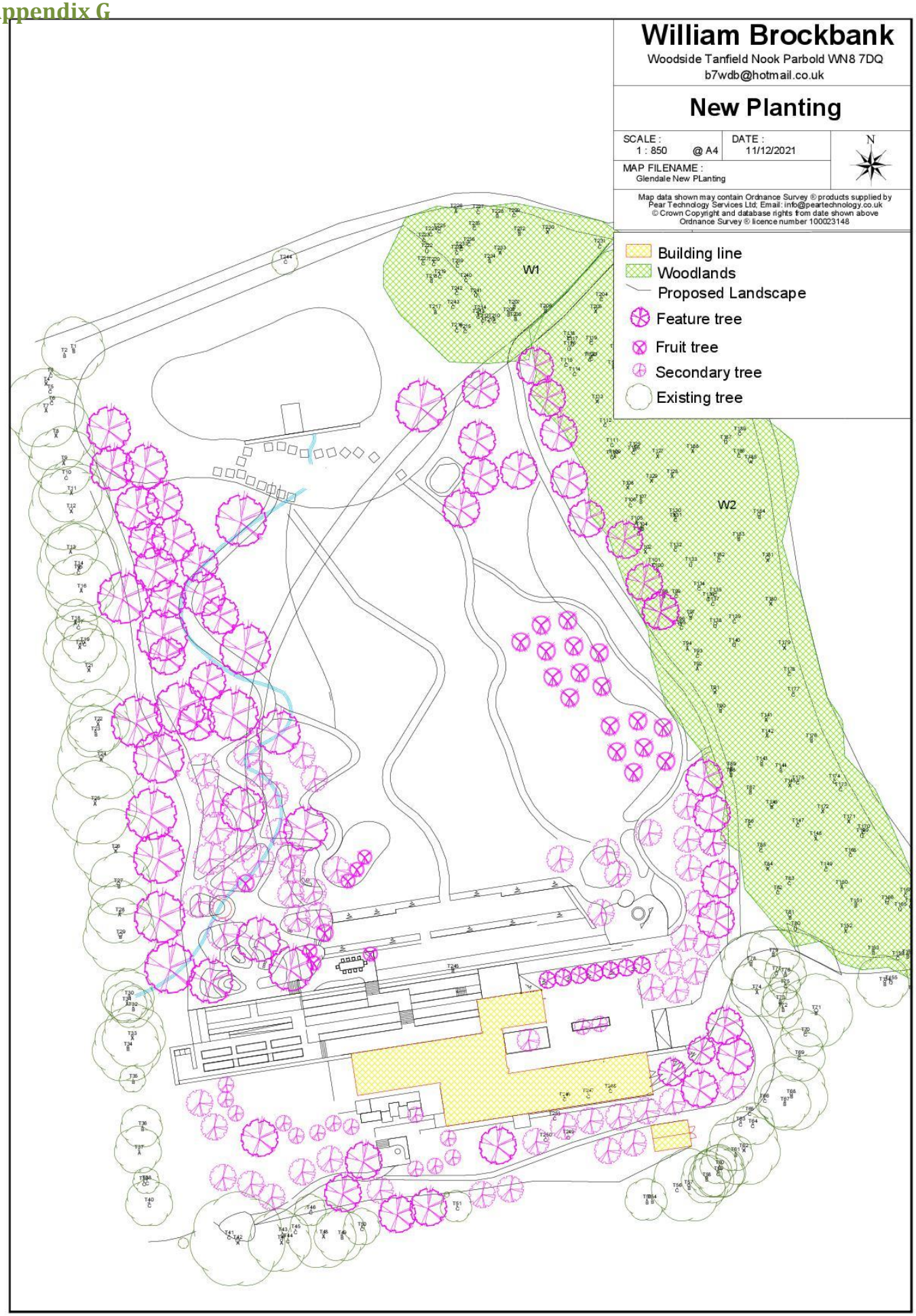
Building line
RPA
Groups
Post construction exclusion fencing
Exclusion fencing
G1
W1
G2
G3
W2
G4
G5
G6
G7
G8
G9

Appendix G


William Brockbank
Woodside Tanfield Nook Parbold WN8 7DQ
b7wdb@hotmail.co.uk
New Planting
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DATE : 11/12/2021
N
MAP FILENAME : Glendale New PLanting
Map data shown may contain Ordnance Survey ® products supplied by Pear Technology Services Ltd. Email: info@peartechnology.co.uk
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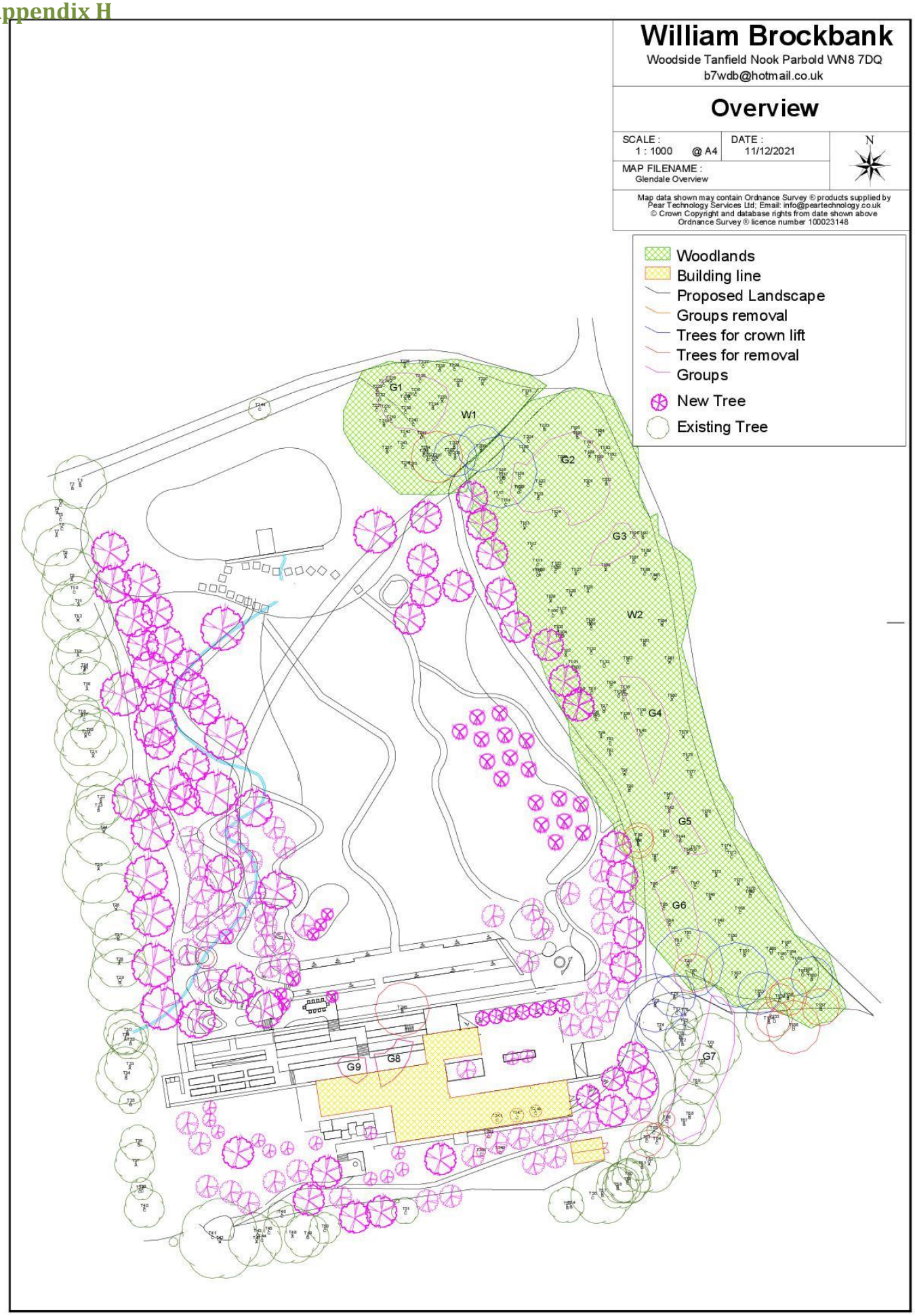
Building line
Woodlands
Proposed Landscape
Feature tree
Fruit tree
Secondary tree
Existing tree
W1
W2

Appendix H


William Brockbank
Woodside Tanfield Nook Parbold WN8 7DQ
b7wdb@hotmail.co.uk
Overview
SCALE : 1 : 1000 @ A4
DATE : 11/12/2021
N
MAP FILENAME : Glendale Overview
Map data shown may contain Ordnance Survey ® products supplied by Pear Technology Services Ltd. Email: info@peartechnology.co.uk
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Ordnance Survey ® licence number 100023148
Woodlands
Building line
Proposed Landscape
Groups removal
Trees for crown lift
Trees for removal
Groups
New Tree
Existing Tree
G1
W1
G2
G3
W2
G4
G5
G6
G7
G8
G9

Appendix I

Exclusion zone fencing for tree Root Protection Areas should consist of 2 m tall welded mesh panels on

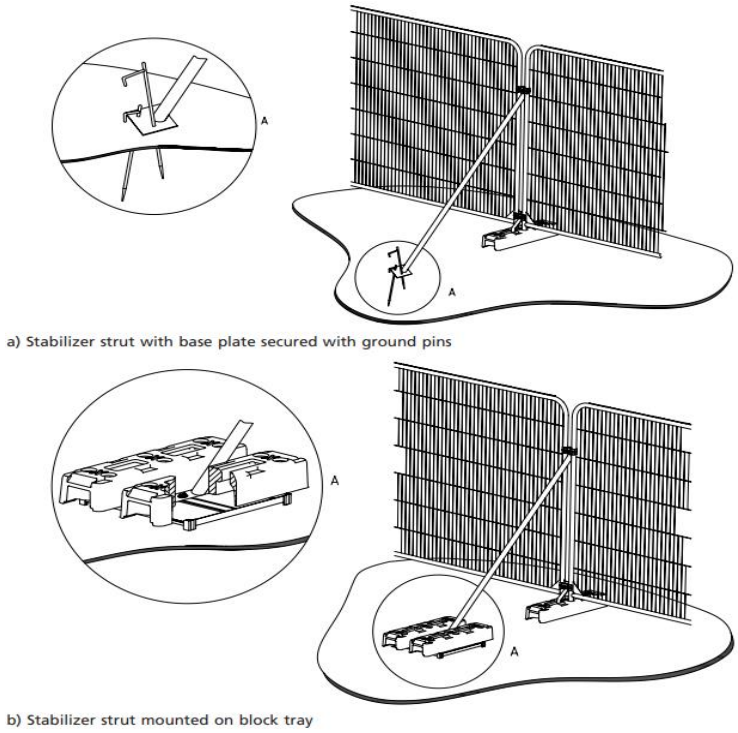

Figure 1: Above ground stabilized RPA fencing, British Standard (2012).

rubber feet. The fence panels should be joined together using two anti-tamper couplers, positioned 1m apart, installed so that they can only be removed from inside the fence. The panels should be supported on the inner side by stabilizer struts, pinned to the ground or on a block tray over hard surfaces.

Signs such as "CONSTRUCTION EXCLUSION ZONE – NO ACCESS" should be fixed to the fencing panels.

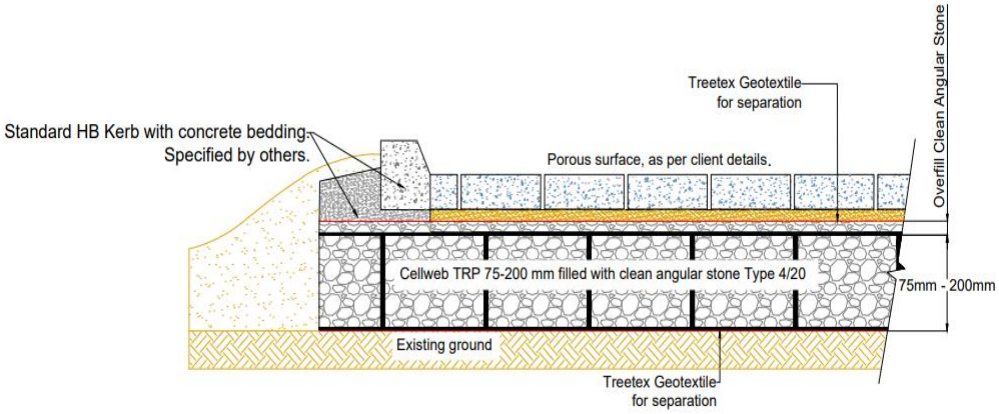

Figure 2: CellWeb path construction with concrete edging, Geosyn (2018).

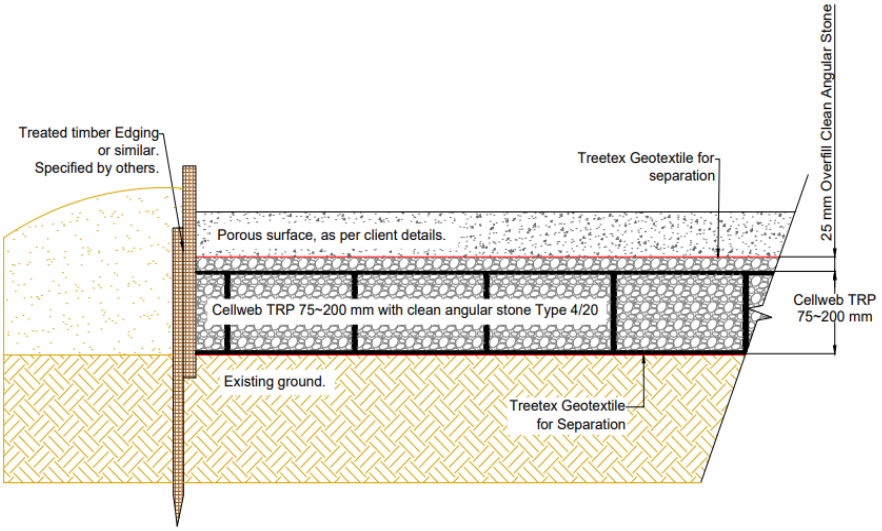

Figure 3: CellWeb path construction with timber edge, Geosyn (2018).

Cross-sectional diagram showing construction of paths and roadways with the use of Cellweb, with both timber edging and concrete kerbs.

Table 1: Text lifted from British standard (2012)

Category and definition	Criteria (including subcategories where appropriate)			
Trees unsuitable for retention				ID on Plan
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 (e.g. 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.			U
Trees to be considered for retention				
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	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 those that are essential components of groups or 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)	A
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, 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	B
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 150 mm	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	C

References

British Standards Institution (1992) *BS3936: Part 1 Nursery stock (specification for trees and shrubs)*. London: British Standards Institution.

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British Standards Institution (2012) *BS5837: Trees in relation to design, demolition and construction*.London: British Standards Institution.

British Standards Institution (2014) *BS 8545: Trees from nursery to independence in the landscape*. London: British Standards Institution.

Geosynthetics (2018) *Cellweb TRP Technical Support Packa*ge. Available at: http://www.geosyn.co.uk/wp-content/uploads/2018/02/Cellweb-TRP-Technical-Support-Package-.pdf (Accessed 12/11/2021).