Jon Oliver Arboriculture

Client: Mr and Mrs M Faraday
- Arbour Farm, Thornley PR3 2TE

Arboricultural Impact Assessment

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1.0	INTRODUCTION	.1
2.0	The Proposed Development	. 1
3.0	Survey Methods	1
4.0	RESULTS	2
4.1	Tree Preservation Orders and Conservation Areas	2
4.2	THE TREE POPULATION	2
4.3	ARBORICULTURAL IMPACT ASSESSMENT	3
5.0	Mitigation Measures	4
6.0	Method Statement	4
6.1	1 Site Wide Measures:	4
7.0	Conclusion	6

Appendix 1: Tree Schedule

Appendix 2: Tree constraints plan

Appendix 3: Site images

Appendix 4: Tree protection plan

Appendix 5: Tree protection fencing

Ref: Arbour Farm 25/1/18

1.0 INTRODUCTION

- Jon Oliver of Jon Oliver Arboriculture was commissioned to produce an Arboricultural Impact Assessment with respect to the proposed development at Arbour Farm, Thornley, PR3 2TE for the construction of a two story extension and a single story utility room.
- 1.2 The development site, as indicated on the site plan (see appendix 2) and is in a rural location. The site property faces Chipping road where there is a parking area to the front. Vehicle access to the rear of the property is via a tarmac lane.
- 1.3 The existing dwelling and has well maintained garden areas and is well represented by trees planted by the current owners.

2.0 THE PROPOSED DEVELOPMENT

2.1 The proposed development is for the construction of a two story extension and single story utility room as indicated in appendix 2.

3.0 SURVEY METHODS

- 3.1 The site was initially surveyed by Jon Oliver on 22/1/18 using the supplied site plan.
- 3.2 Tree heights were estimated via use of clinometer, measurements of DBH taken at 1.5m height and crown spread was taken by ground measurements. All images were taken at the time of the survey with a Panasonic Lumix TZ20. This is in accordance with BS 5837:2012 Trees in relation to design, demolition and construction Recommendations.
- 3.3 All surveying of tree stock on the site was carried out visually from the ground only. If ivy cover was encountered on trees, then only limited visual checking of structure and potential defects was possible.
- 3.4 Weather was dry and overcast with a light breeze. There were no constraints to completing a thorough survey.

Ref: Arbour Farm

- 3.5 The location of the tree stock is as indicated on the supplied site plan (See Appendix 2). Where trees were not included on the site plan they were marked on by using ground measurements and their position relative to fixed features such as walls and boundaries.
- 3.6 At the time of surveying all trees were recorded on standard tree record sheets, see Appendix 1: Tree Schedule. Trees were surveyed throughout the proposed development site, individual details were recorded for all significant trees within the proposed development. Where a larger number of smaller trees, off site trees or a hedge are encountered in the survey area these are included as a group/hedge record which includes the approximate height range and maximum Diameter at Breast Height (DBH) of trees within the group/hedge, these groups are referred to as follows: Group 2 (G2), Hedge 3 (H3) etc.
- 3.7 The surveyed trees are categorized by the standard retention categories as defined in BS5837:2012. Such retention categories seek to inform the design process of trees which may be worthy of consideration for inclusion within the proposed development. All work recommendations relate to trees within the context of the current site layout and usage.
- 3.8 In the current context of the site usage any trees which are unsuitable for retention are indicated on the Tree Constraints Plan (appendix 2) and are further identified in the narrative of this report and in the tree schedule (appendix 1).

4.0 RESULTS

4.1 TREE PRESERVATION ORDERS AND CONSERVATION AREAS

4.1.1 To the best of my knowledge the site is not located within a conservation area and no trees are the subject of a tree preservation order.

4.2 THE TREE POPULATION

4.2.1 T1 has had its crown removed approximately two years ago and there has

Ref: Arbour Farm 25/1/18

been little regrowth (see appendix 3, images). This tree is not worthy of retention and should be removed irrespective of any development.

- 4.2.2 The electricity supply cable passes through the crown of T2 and as a consequence it has been identified by the utilities company as requiring removal as the cable rubs against the stem in windy conditions (see appendix 3, images). There is no potential to reshape this tree in a satisfactory manor to avoid an ongoing conflict with the electricity supply and this tree should be considered for removal irrespective of any development.
- 4.2.3 To the south east of the property there are several trees (T3-T7) and a well maintained privet hedge (H1/H2) which are all in good condition and do not require any works.
- 4.2.4 The group of trees situated to the side and rear of the garage (G1) are regularly cut back by the utility company to maintain clearance from the electricity supply. This has been carried out with little consideration for form. Irrespective of this these trees appear to be in good condition.
- 4.2.5 G2 consists of four mature trees on the northern boundary. They are in good condition. The two sycamore trees have included bark unions which appear to have good reaction wood but should be monitored on a regular basis for signs of failure. In front of this group are two groups of smaller garden trees, G3 and G4. These are generally well maintained in good condition.
- 4.2.6 The fenced area bordering Chipping road contains approximately 25 Sitka spruce of various diameters (G5). These trees create effective screening from the road and should be maintained as a group. Beyond this group are two Irish yew trees which have been regularly maintained to limit their spread and height (G6).

4.3 ARBORICULTURAL IMPACT ASSESSMENT

4.3.1 The proposed development will require the removal of T1 and T2 as indicated on the tree constraints plan (appendix 2) and tree protection

- plan (appendix 4). Both these trees have already been identified as not suitable for retention irrespective of any development for the reasons stated above in 4.2.1 and 4.2.2.
- 4.3.2 All remaining trees and hedges are of sufficient distance from the proposed development that the development will have no impact on them providing the guidance contained within the method statement is adhered to.
- 4.3.3 The proposed development will not have any affect on the current levels of shading and consequently no future pressure will be put on the retained trees.

5.0 MITIGATION MEASURES

5.1 The site and wider area is very well stocked with a range of trees and the loss of T1 and T2 should not adversely affect the tree population sufficiently to warrant mitigation planting.

6.0 METHOD STATEMENT

6.1 SITE WIDE MEASURES:

6.1.1 Due to the layout of the development site, site conditions and location of trees it should not be necessary to erect heras style tree protection fencing during the proposed works to create a construction exclusion zone as no construction machinery will need to access any areas where they could cause damage to any trees. No vehicles will need to access areas where damage to any tree canopy or root protection area could occur as can be seen in appendix 4, tree protection plan. A simple barrier constructed from barrier netting and rebar pins (appendix 5a) should be sufficient to create a visual reminder that of the arears that form the construction exclusion zone. A more substantial physical barrier should be erected to form the edge of the construction exclusion zone for G5 and G6 which should be constructed from driven posts and chestnut palings (appendix 5b). The tree protection fencing should be positioned as

Ref: Arbour Farm 25/1/18

indicated in appendix 4, tree protection plan.

- 6.1.2 There is no need for the storage of any materials, waste products or parking of construction vehicles near the root protection area and all site access and movement of materials will take place via the tarmac access road and hard standing in front of the garage which provides access to the rear garden.
- 6.1.3 The tree protection fencing/boundary fencing needs to have weather proof signs attached containing the wording:

CONSTRUCTION EXCLUSION ZONE - NO ACCESS

- 6.1.5 A list of general construction guidelines is detailed below:
- Creation of a construction exclusion zone (as detailed above) will be required for the development phase in order to protect the root zones of all retained trees.
- Once installed tree protection must remain in place and be observed at all times.
- No fires within 10m of the crown of any retained trees.
- Soil levels in rooting areas to be retained with minimal level changes, no greater than 300mm.
- No cement mixing/washout to take place within 15m of any retained trees.
- No chemicals, bitumen etc. to be stored within 10m of any retained trees.
- Any spillage of fuel, chemicals or contaminated water occurring within 2m of the root protection areas to be reported to project supervisor.
- No underground services will be required within or adjacent to the RPA of retained trees.

CONCLUSION 7.0

- The survey was completed on all the trees within the garden area. There 7.1 were no other potentially affected off site trees to take into consideration.
- It will be necessary to remove T1 and T2 to permit the development to 7.2 take place. Both of these trees will need to be removed irrespective of development due to their condition (T1) and conflict with electricity supply (T2).
- No other tree removals or tree work is required to take place as a direct 7.3 consequence of the proposed development and all work can easily take place without any stress being placed on all retained tree stock providing tree protection fencing is erected as indicated in appendix 4 (tree protection plan) and as specified in section 6.1.1 and all site wide measures are adhered to as detailed in the method statement (section 6). There is no work required within any tree root protection area.

Type Name			\neg	Height	15tB	z	S	≩	Cond	Life Exp	Cond Life Exp Comments Re	Recommend	RPR	RPA	Category
Ö	Cherry	Σ.	510	4	1.5	1	1 1	1	۵	<10	Crown removed. Insignificant regrowth Re	Remove	6.1	117.7	
											Conflict with electricity supply. Not viable for long				
× 2	Willow	Σ	370	10	3	4 4	4	4	U	50±		Consider for removal	4.4	61.9 C1	77
표	Privet	Σ	<50	1.7	•	0.5 0.5	5 0.5	5 0.5	g	±02	Well maintained hedge	Maintain as hedge	9.0	1.102	2
Ö	Cherry	Σ	520	00	7	2 2	2 2	7	G	‡ 70,			2.6	219	ا,
ž	Norway spruce	Σ	340	12	7	4	4	4	σ	‡07			4.1	52.3	
8	Birch	Σ	205	12	2.5	en en	m	m	ဖ	5¢			2.5	19 61	1 2
Ö	Cherry	Ž	210	10	7	2	7	7	g	± 55			2.5	2002	2 2
뤼	Privet	Σ	<50	1.5	-	0.5 0.5	5 0.5	5 0.5	9	±05	Well maintained hedge	Maintain as hedge	9.0	1.1	2 2
								_			Mixed group. Heavily pruned by utility company to				
_		_	est								_	Continue ongoing maintenance by power	_		
×	X4 including cypress, larch, spruce	ν Σ	<320	9	1.5	4 4	1 2	1	Ø	50÷		company	4.2	55.4 C2	7
											2 x Sycamore with included unions where stems				
Ś	Sycamore x2, ash x2	V N	<550	12	m	9	9	9	g	5 0		Monitor included unions on sycamore	9.9	136.9 B2	2
Σ	Mixed group	W V	<150	2	•					20±	Mixed group of small garden trees and shrubs		00	10.2	
ن	Cypress x4	> M	<150	2	-	1 1	1	1	g	‡05	Small maintained cypress		200	10.2 C2	_
25	25 x Sitka spruce	ν Σ	998>	12	2	e e	3	m	G	± 20±	Roadside group		43	58.6	~
		60	Basal					-	_						,
		#	flare						_						
7	W	Σ	510	9	-	1.5 1.5	5 1.5	1.5	Ø	20	Muti stemmed		5.1	81.7 C2	2
š	Scots pine	Σ	9	12	9	4	4	4	٥	-0-t	Pruning wounds on main stem		0 5	27 4 57	

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tree quality assessmen	
art for t	
Cascade char	
Table 1	

Table 1 Cascade chart for	Cascade chart for tree quality assessment			
Category and definition	Criteria (including subcategories where appropriate)	ppropriate)		Identification on plan
Trees unsuitable for retention (see Note)	(see Note)			
Category U Those in such a condition	 Trees that have a serious, irremediable, structural defect, such that thei including those that will become unviable after removal of other categ reason, the loss of companion shelter cannot be mitigated by pruning) 	is, irremediable, structural defect, such that their early loss is expected due to collapse, become unviable after removal of other category U trees (e.g. where, for whatever banion shelter cannot be mitigated by pruning)	is expected due to collapse, (e.g. where, for whatever	See Table 2
that they cannot realistically be retained as living trees in	 Trees that are dead or are showing s 	Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline	e overall decline	
the context of the current land use for longer than	 Trees infected with pathogens of significance to the heal quality trees suppressing adjacent trees of better quality 	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	trees nearby, or very low	
10 years	NOTE Category U trees can have existing see 4.5.7.	NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.	iht be desirable to preserve;	
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation	
Trees to be considered for retention	ention			
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)	See Table 2
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 processor to morit the	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	See Table 2
				X
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	See Table 2

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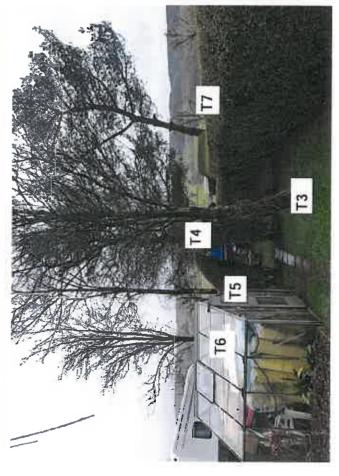
Appendix 2

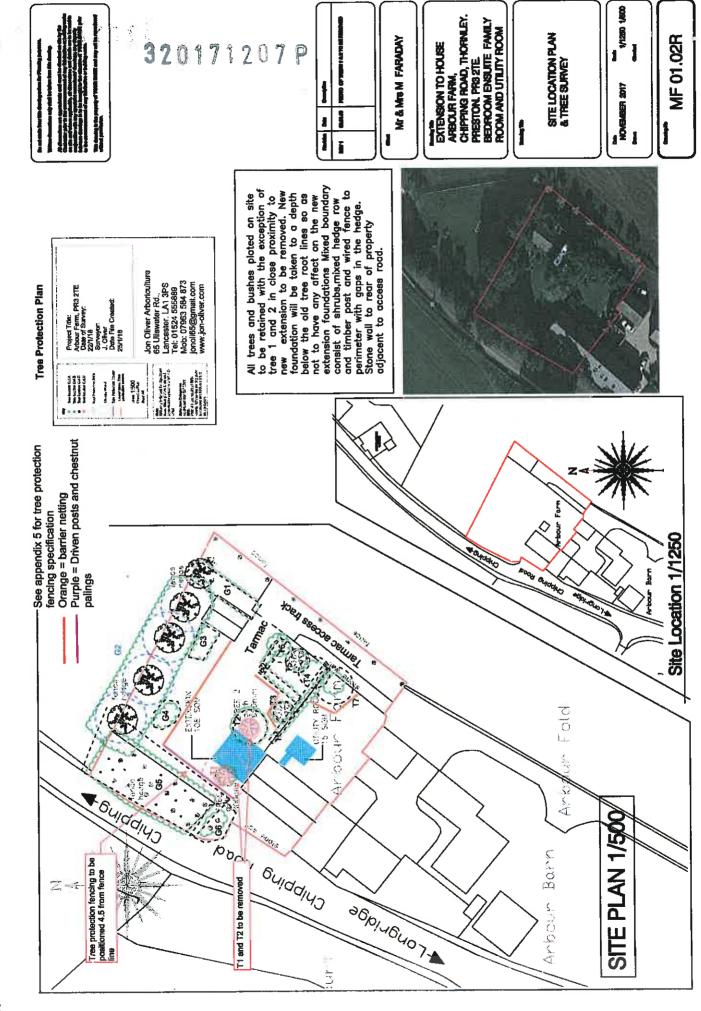












Appendix 5a: Fencing to mark out the construction exclusion zone as an alternative to heras style fencing.



Appendix 5b

Medium weight tree protection fencing for smaller developments or where a lower specification for tree protection is required.

Driven posts at 2 meter spacings with chestnut paling attached as indicated below.

