

Arboricultural Impact Assessment

Cuerden Hall, Bamber Bridge, Preston, PR5 6AZ

Prepared for:

MR C SHENTON

Our Ref: 21/AIA/CHORLEY/12

April 2021

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1.0 INSTRUCTION

- 1.1 We have been instructed by Mr C Shenton to carry out an Arboricultural Impact Assessment (AIA) in order to assess the development proposal in relation to trees in accordance with the principles of British Standard 5837 'Trees in Relation to Design, Demolition & Construction - Recommendations' 2012.
- 1.2 We are instructed to prepare a report in order to provide information to assist all parties involved in the planning process to make balanced judgements regarding arboricultural features in relation to the proposed restoration and redevelopment works to Cuerden Hall, Bamber Bridge, Preston, PR5 6AZ. As such, all significant trees within influencing distance to the redevelopment works both on and adjoining the site have been surveyed and are listed within a Tree Survey Schedule (**Appendix 1**) and plotted on all accompanying plans.
- 1.3 The stage 1 tree survey was carried out from 10 March-12 March 2021 by Russell Pearce, Consultant to Tree Solutions Ltd. Our appraisal of the mechanical integrity of trees on the site is enough to inform the current project. The assessment of trees is carried out from ground level without invasive investigation and the disclosure of hidden defects cannot therefore be expected. Whilst the survey is not specifically commissioned to report on matters of tree safety, we report obvious defects that are significant in relation to the existing and proposed land use. We do not carry out detailed safety inspections unless specifically instructed to do so in writing and have not carried out such inspections of trees on the proposal site.
- 1.4 One hundred and forty-four individual trees (T1-T144), twenty-one groups (G1-G21) and four woodlands (W1-W4) were surveyed and mapped on a Preliminary Tree Constraints Plan and Impact Assessment Plan Ref: 21/AIA/CHORLEY/12 Drawing No. 1&2 at **Appendix 2/3**. All arboricultural information recorded during the survey is presented within a schedule at **Appendix 1**.
- 1.5 The Arboricultural Impact Assessment is based on the proposed landscape layout plan Ref: 376-L-P-162 provided by the project landscape architects Tom Stuart-Smith.

2.0 STATUTORY CONTROLS

- 2.1 A search on Chorley Council interactive maps on 21/03/2021 revealed all trees within the site boundary are subject to Tree Preservation Order Ref: Chorley BC TPO 8 (Cuerden) 2013. As such, statutory planning consent is required prior to undertaking the tree works proposed that are not granted consent under this planning proposal.

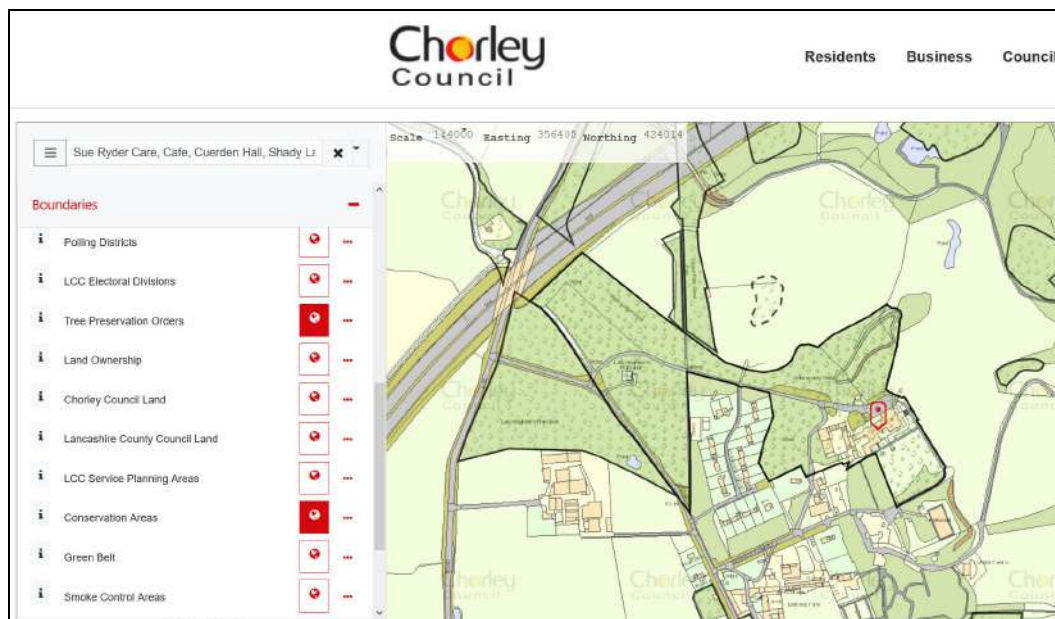


Plate 1- extract from Chorley Council interactive map indicating location of TPO around boundary of site

2.2 Protected Species

2.2.1 Mature trees often contain cavities, crevices and hollows that offer potential habitat for species such as bats and barn owls. Both are afforded protection under the Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Bats are also protected under The Conservation of Habitats and Species Regulations 2010 (as amended). Refer to Rachel Hacking Ecology report for further details.

2.3 Wildlife Habitats

2.3.1 Trees and hedgerows of most species provide valuable nesting sites for a wide range of birds and it is likely that nesting birds will be present on the site during the period March to September.

3.0 THE SITE

3.1 The site contains Cuerden Hall a Grade II* listed Hall with ancillary buildings that has most recently been used as a Sue Ryder Neurological Care Centre. It is set within extensive grounds that contain areas of woodland, a lake, and unkempt formal gardens/parkland.



Plate 2 – Site location plan

4.0 DEVELOPMENT PROPOSAL

4.1 Redevelopment of existing hall from care home to residential dwelling.

5.0 GENERAL CONSTRAINTS DATA - CONSTRUCTION EXCLUSION ZONES (CEZ's)

5.1 GENERAL

5.1.1 The three phases of an AIA were outlined in Section 1. In addition, during the development process for retention trees, there may be three and even four constraints to consider: Construction Exclusion Zone (CEZ's):

- CEZ 1: Root Protection Area (see 5.2)
- CEZ 2: Tree Crown Protection (see 5.3)
- CEZ 3: Tree Dominance (see 5.4)
- CEZ 4: New Tree Planting Zone (see 5.5)

CEZ's are explained below:

5.2 CEZ 1: ROOT PROTECTION AREA (RPA)

- 5.2.1 The RPA, calculated in m², should be protected before and during any demolition/construction works. This ensures the effective retention of trees by safeguarding a reliable quantum of functioning tree roots. The RPA is based on a radial measure from the centre of the tree stem, which is calculated by multiplying the stem diameter by a factor of twelve or by the (mean stem diameter²) x number of stems for multi-stemmed trees. With the AIA 1, the RPA is only shown indicatively on the preliminary TCP, as its shape may be subject to amendment as the design progresses.
- 5.2.2 During the AIA 2, the derived radial measure is converted by the arboriculturalist into the actual area to be protected, having due regard to prevailing site conditions and how these may have affected the tree(s), particularly in relation to factors affecting their likely rooting disposition. The RPA for each tree should initially be plotted as a circle centred on the base of the stem. Where pre-existing site conditions or other factors indicate that rooting has occurred asymmetrically, a polygon of equivalent area should be produced. Modifications to the shape of the RPA should reflect a soundly based arboricultural assessment of likely root distribution.
- 5.2.3 The means of protecting the RPA will include the installation of tree protective fencing prior to the start of any demolition or construction work on site. The prohibition of various activities within the RPA must be adhered to (e.g. mechanical excavation, soil stripping, fire lighting, material storage, lowering levels and creating excessive sealed surfacing) and may include the use of temporary ground protection and/or special engineering solutions where construction is proposed near to retention trees or within the RPA.

5.3 CEZ 2: TREE CROWN PROTECTION ZONE

- 5.3.1 This is the area above ground occupied by the crown (branches) of the tree, along with allowances for working space (safe working area) and if appropriate, for future growth. The extent of CEZ 2 is determined by considering the existing and future crown spread of the tree(s), bearing in mind the possibility of this being modified by an acceptable quantum of pruning.

5.4 CEZ 3: TREE DOMINANCE ZONE

- 5.4.1 This is the area above ground dominated by the tree in relation to issues of shading, seasonal debris and safety apprehension. This area is calculated by considering the height and spread of the tree relative to the proposed buildings, cross referenced with intended end use. As such, what is assessed is the likely psychological effect of the tree on the end user.
- 5.4.2 The purpose of identifying CEZ 3 is to protect trees from post development pressure (resentment) by the site's end users, who may, if resentful of the trees, seek to procure excessive pruning treatments or even to have them removed.
- 5.4.3 The means of protecting CEZ 3 is likely to include optimising the site layout and room type (especially in relation to new residential dwellings), such that any adverse psychological impacts of the trees are reduced to an acceptable minimum. Key principles include ensuring adequate separation distances between trees and new buildings, in the context of the buildings' end use relative to the location of the tree(s) and avoiding excessive obstruction by trees of critical solar access.

5.5 CEZ 4: NEW PLANTING ZONE

- 5.5.1 In some cases, it may be appropriate to identify and protect areas intended for new landscape planting, which can fail to establish if the soil has been heavily compacted or contaminated during the demolition/construction process. The means of protecting CEZ 4 will either be by fencing it off prior to the start of works on site, or by soil remediation once construction has finished (and prior to the start of planting). Topsoil protection in areas destined for new planting is frequently an economy measure, saving on plant replacement and soil structure remediation.

6.0 SURVEY METHODOLOGY

6.1 The method used in the preparation of this report is based on the principles of BS 5837: 2012.

1. Tree heights were surveyed to the nearest 1m.
2. Trunk diameters were measured by use of forestry girth tape
3. The category assessment (Table 1) on which the trees is based include current and long-term arboricultural, landscape, cultural and conservation values (BS5837: 2012). This table can be found at **Appendix 1**
4. For clarity, the grading system is summarised from **Table 2** of the BS as follows:

U grade – trees for removal, effective for less than 10 years

A grade – trees of high quality and value, effective for more than 40 years

B grade – trees of moderate quality and value, effective for more than 20 years

C grade – trees of low quality and value, effective for 10 years

Note: We have indicated colour coding on the drawing and therefore a monochrome copy should not be relied on.

6.2 SOIL ASSESSMENT

6.2.1 A soil assessment should be undertaken by a competent person to inform decisions relating to:

- the root protection area (RPA)
- tree protection
- new planting design; and
- foundation design to take account of retained, removed and new trees (potential soil subsidence/heave)

Tree Solutions do not undertake soil assessments and the client is advised to seek specialist advice in this respect.

7.0 JUXTAPOSITION OF TREES AND STRUCTURES

7.1 Below ground constraints

7.1.1 The below ground constraints are generally summarised as the root protection area (RPA). The shape of the RPA and its exact location will depend upon arboricultural considerations including likely tolerance of the tree to root disturbance; morphology and disposition of the roots when known influenced by past or existing site conditions; soil type and structure; and topography and drainage.

7.1.2 The purpose of the RPA is to prevent physical damage to tree roots and to prevent damage to the soil structure. Tree roots are damaged by soil compaction, changes in soil levels or soil contamination which could reduce tree health and/or stability.

7.1.3 Root patterns are affected by topography and characteristics of the soil or substrate. Where trees are located within proximity to existing hard standing or underground physical barriers, they are unlikely to have an even distribution of lateral roots due to restrictions in root growth created by compacted sub-grades beneath. The RPA of trees adjacent to the main hall, stables and southern section of the lake have been modified and are shown running in line with the building and edge of lake. The RPA volume has been maintained by extending further in the opposite direction where a more favourable rooting environment exists. The RPA of trees to the north of the lake have been plotted unmodified as the lake in this area has silted over and now contains naturally colonised woodland. All other RPA's have been plotted unmodified as there were no significant underground barriers present to prevent good radial root spread.

7.2 Underground Services

- 7.2.1 We have considered the broad implications of the provision of underground services but the locations of existing and proposed were not identified on the plans supplied and, in this regard, our advice is of a general nature.
- 7.2.2 As the proposal is predominantly redevelopment works, the existing service runs will be utilised where possible.
- 7.2.3 Drainage and service runs may need to be constructed within the rooting areas of retained trees. If this is a requirement of the development it will be necessary to retain significant roots and methods of excavation, such as thrust boring or hand digging, may need to be adopted to ensure that these impacts are acceptable.
- 7.2.4 As with foundation design, low impact construction methods for services installation are now well established. For more information regarding underground services, reference should be made to the National Joint Utilities Group (NJUG) Publication No. 10. Volume 4 *'Guidelines for the Planning, Installation and Maintenance of Utility Services in Proximity to Trees' 2007.*

8.0 DEVELOPMENT IMPACT TO TREES

- 8.1 Tree Solutions carried out a stage one preliminary tree survey and provided the project landscape architect with a report in which all existing trees and their respective Root Protection Areas (RPA) were identified and plotted on a tree constraints and impact assessment plan. The architect has incorporated the design and layout advice contained within the stage 1 survey and input from Tree Solutions to ensure the best quality trees can be retained with no significant adverse construction impacts. We are satisfied that the proposal has taken the long-term future of the most important trees into account and the layout is therefore in accordance with Chorley Council Planning Policies and recommendations contained with BS5837: 2012.
- 8.2 In order to accommodate the proposed redevelopment/restoration works it will be necessary to remove the following trees as detailed within the survey schedule:
- Tree numbers – 2-20, 26, 29, 32, 33, 62, 63, 105, 124, 125
 - Group numbers – G1-G4, G15, G18
 - Woodland numbers – W3 & W4 trees within pond only

Tree Retention Category	Number of Trees Lost to Development		
	Individual	Group	Woodland
A	0	0	0
B	15	4	2 sections
C	13	2	0

- 8.3 Trees surveyed within this report cover those on and adjoining any potential construction or landscape restoration/enhancement works as per guidance contained within the BS. These trees represent a small number of those present within the wider grounds that are all retained and unaffected by this proposal. It is worth noting that no high value 'A' category trees are to be removed and those listed above are all moderate 'B' to low 'C' category. Trees to be removed are predominantly semi-mature specimens planted in and around the main hall and offer little individual or collective amenity or landscape benefits to the listed site or wider locale. Removal allows for the grounds to be completely restored and enhanced as detailed within the landscape proposals with many new specimen trees being included within the scheme. This restoration proposal is a unique opportunity to see these unmanaged grounds brought back into formal management and as such we can see no valid arboricultural grounds for refusal.
- 8.4 There are several construction impacts to retained trees as listed below:
1. The proposed extension to the southern gable of the stable block encroaches within the RPA of tree number 25. Whilst this incursion is marginal <3m, the NW corner of the building will be supported on a pile and beam foundation in order to prevent any damage to underlying tree roots. Details of the foundation design will be submitted by the project structural engineer and will comply with the recommendations contained at section 7.5 of BS5837: 2012. Tree protection measures during construction will be documented within the Arboricultural Method Statement (AMS) and Tree Protection Plan (TPP).

2. Footpath links through the 'woodland walk' that run within the RPA of tree number 34 will be installed by hand, the use of mechanical excavator is prohibited. A geotextile membrane will be laid below the hummus layer with a top dressing of bark chippings. There will be no adverse impact on the future health and vitality of this important tree as a result of the works.
3. The proposed polytunnel and compost store encroaches slightly within the RPA of tree number 34. There will be no adverse impact as the floor slab will be concrete paving slabs dry-bedded with a timber edge restraint. No excavation in the construction exclusion zone is proposed.
4. The vehicular access road is to be realigned within the RPA of tree number 30. In order to comply with the provisions of the BS this road section will be installed to a no-dig design specification using a three-dimensional cellular confinement system such as 'Infraweb' or 'Cellweb'. A detailed specification including cross sections will be submitted by the project structural engineer for approval by the Council. Installation will typically involve the removal of the existing turf and installing of a layer of plastic cells above a geotextile membrane. The cells will be back filled with a free draining washed stone that contains no fines in order to help maintain adequate gaseous diffusion for tree roots below. The top dressing will be a porous material to be agreed with the LPA. This specification complies with recommendations contained within para. 7.2 of BS5837: 2012. The rooting environment of this tree will be markedly improved as a result of the existing road to the NE being removed, subsoil decompacted and returned to open grass. This area will also be ameliorated by mycorrhizal inoculant during the landscape restoration works. Tree protection details can be included with the AMS & TPP.

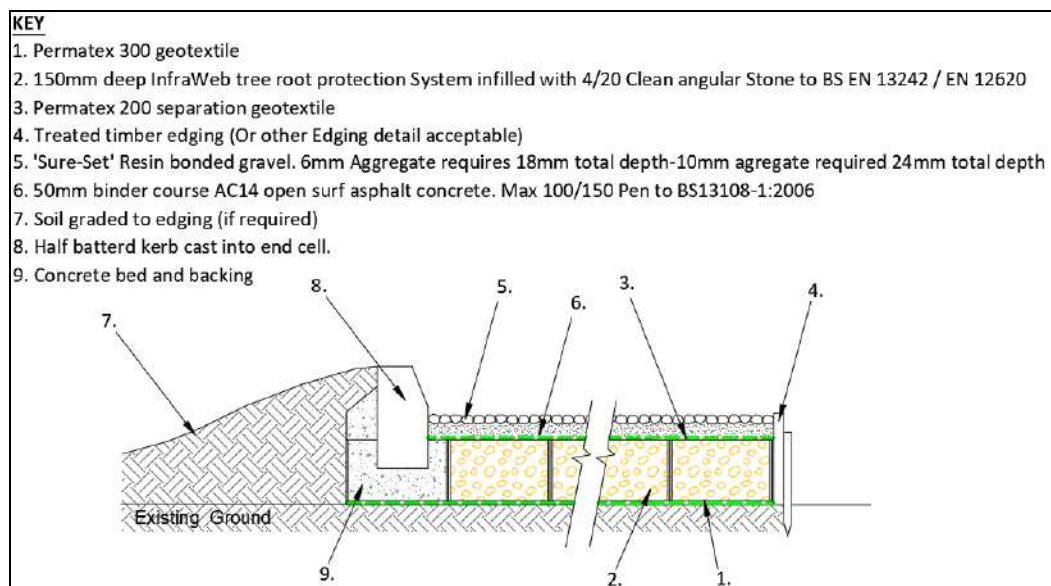


Plate 3 – Example cross section of no dig road section with porous resin bonded gravel surface dressing

5. The proposed new vehicular car park encroaches within the RPA of tree numbers 31, 59-61. As for the new road section, the northern parking bays will be laid to a no-dig design specification with a porous surface dressing. A full specification with cross sections will be submitted by the project structural engineer for approval. Tree protection measures will be detailed within the AMS & TPP.
6. The location of the proposed gate lodges has been realigned to fall outside the RPA of tree number 129 ('A' category Beech) following consultation with Tree Solutions. We advised that a slight incursion within the RPA of tree number 122 ('B' category Sycamore) would be preferable as this tree would tolerate some minor disturbance better than the shallow rooted fully mature Beech. We are satisfied that this minor incursion is less than the 20% tolerance specified with the BS and as such is acceptable as it will have no long-term adverse impact on the health and vitality of this tree. The excavation for the foundation can be undertaken by hand or air spade under the direct supervision of the project Arboricultural consultant who will be responsible for any root pruning if found to be necessary. Note, the removal of trees marked within the vicinity will enhance the site entrance by restoring the formal landscape character and increase the amenity value afforded by the retained trees in particular the magnificent Beech (T129).

7. The large pond to the NE is to be reinstated to its former glory as part of the restoration of the grounds. This area has been left unkempt for many years resulting in areas being completely silted up with a subsequent mass of small diameter first-generation scrub naturally colonising. The trees within the pond area will require removal as part of the restoration works, the visual impact of this will be minimal as they are completely screened from any vantage point outside the site boundary by the surrounding established woodland. As such there will be no adverse impact on the landscape character and setting of the listed building. These works should be considered as landscape enhancement and in arboricultural terms acceptable.
8. In order to dredge the pond as point 7 above, large plant will require access. In order to prevent damage to any retained trees, ground protection boards such as 'bog mats' will be laid from the existing driveway to the pond. The alignment will run within the RPA of tree numbers 86 & 88 and wherever possible will avoid the RPA of tree numbers 79 & 89. Details of the exact route will be included on a TPP and detailed within the AMS.



Bog mat example

9.0 PROPOSED REVISIONS TO THE SCHEME

- 9.1 We advise that all proposed revisions having implications for trees should be referred to us for review.

10.0 CONCLUSIONS

- 10.1 BS 5837: 2012 contains clear and current recommendations for a best practice approach to the assessment, retention and protection of trees on development sites. The proposed development has followed this guidance by:
 - Seeking arboricultural advice and undertaking a phase 1 preliminary tree survey in order to inform the layout and design of the proposed development
 - Respecting the constraints posed to development of the site by high or moderate quality trees
 - Acting upon arboricultural advice throughout the design process in order to obtain the best development proposal whilst considering the current and future tree requirements
 - All tree protection measures can be detailed within an Arboricultural Method Statement and Tree Protection Plan if made a condition of consent

11.0 LIMITING CONDITIONS

Unless stated otherwise:

Information contained in this report covers only those trees that were examined and reflects the condition of those trees at the time of the inspection.

The inspection is limited to visual examination of the subject trees from ground level only and without dissection, excavation, probing or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the subject trees may not arise in the future.

This report has been prepared for the sole use and benefit of the client. Any liability of Tree Solutions shall not be extended to any third party.

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Appendix One
Tree Survey Schedule

TREE SURVEY SCHEDULE (BS5837: 2012)

Tree Solutions

Arboricultural Consultants

Site	CUERDEN HALL, CHORLEY	Surveyor	RUSSELL PEARCE	Page 1 of 11
Client	MR C SHENTON	Assessment Dates	10.03.2021 to 12.03.2021	
Brief	ARBORICULTURAL IMPACT ASSESSMENT	Viewing Conditions	GOOD	
		Job Reference	21/AIA/CHORLEY/12	

Tree Number	Name	Age	Height	Crown clear	North	East	South	West	Diameter	Vitality	Comments	E.R.C	Management	Category	RPA (m)	RPA (m ²)
T1	Oak	SM	6	2	4	4	4	4	220	G	Pruning wounds from previous crown lift. Located in maintained lawn.	20+	No action required	B1	2.6	22
T2	Holly	EM	6	1.5	2.5	2	3	3	320	M	Reduced crown density. Previously topped at 5m	10+	Remove for development	C1	3.8	46
T3	Holly	EM	8	1.5	2.5	2.5	2.5	2.5	290	M	Reduced density crown. Previously topped at 5m with vigorous upright regrowth.	10	Remove for development	C1	3.5	38
T4	Cypress	Y	5	0	1	1	1	1	150	G	Nothing to note	10	Remove for development	C1	1.8	10
T5	Leyland Cypress	Y	2	0	0.5	0.5	0.5	0.5	70	G	Maintained at current dimensions	10	Remove for development	C1	1	2
T6	Holly	EM	5	2	2	3	2	3	280	G	Interesting squat spreading form.	20	Remove for development	B1	3.4	35
T7	Holly	SM	3	1	1.5	1.5	1.5	1.5	150	M	pruning points.	10	Remove for development	C1	1.8	10
T8	Cotoneaster	EM	3	0	2	0	2	2	160	M	Previously topped at 1.5m. Low aesthetic value.	10	Remove for development	C1	1.9	12
T9	Norway maple	SM	6	2	3	5	4	4	250	G	Large pruning stem wound at 1.25m on NW side	20	Remove for development	B1	3	28
T10	Goat willow	EM	11	3	6	7	6	6	450 350 (570)	G	Twin stemmed at base with acute union. Minor deadwood throughout crown.	20	Remove for development	B1	6.8	147
T11	Silver birch	EM	14	2	4	4	4	4	370	G	Minor stem sweep below 1.5m.. Good form.	20	Remove for development	B1	4.4	62
T12	Hiba	Y	4	0	1.5	1.5	1.5	1.5	85	G	Nothing to note	10	Remove for development	C1	1	2
T13	Crab apple	EM	7	1.5	3	3	4	3	250	M	Stem abutting wall at base. Minor lean to SE.	20	Remove for development	B1	3	28
T14	Cypress	SM	5	0	1.5	1.5	1.5	1.5	150	G	Nothing to note	10	Remove for development	C1	1.8	10

HEADINGS & ABBREVIATIONS

TREE NO.	REFERENCE NUMBER. REFER TO PLAN OR NUMBERED TAGS WHERE APPLICABLE (T = TREE, G = GROUP, H = HEDGE)
SPECIES NAME:	COMMON NAME (LATIN NAMES AVAILABLE ON REQUEST)
AGE RANGE/LIFE STAGE:	Y = YOUNG, SM = SEMI MATURE, EM = EARLY MATURE, M = MATURE, PM = POST MATURE
HEIGHT:	ESTIMATED AND RECORDED IN METRES. APPROXIMATELY 1 IN 10 TREES ARE MEASURED USING A CLINOMETER AND THE REMAINDER ESTIMATED AGAINST THE MEASURED TREES
CROWN SPREAD:	MAXIMUM CROWN RADIUS MEASURED TO THE FOUR CARDINAL COMPASS POINTS FOR SINGLE SPECIMENS ONLY (MEASUREMENT FOR TREE GROUPS - MAXIMUM RADIUS OF THE GROUP)
CROWN CLEARANCE & DIRECTION OF GROWTH:	HEIGHT IN METERS OF CROWN CLEARANCE ABOVE ADJACENT GROUND LEVEL (TO INFORM ON GROUND CLEARANCE, CROWN/STEM RATIO AND SHADING)
STEM DIA/MULTI-STEM DIA:	STEM DIAMETER - MEASURED AT APPROXIMATELY 1.5 METRES ABOVE GROUND LEVEL OR A COMBINATION OF STEMS FOR MULTI-STEMMED TREES
VITALITY:	A MEASURE OF PHYSIOLOGICAL CONDITION. D = DEAD, MD = MORIBUND, P = POOR, M = MODERATE, G = GOOD
E.R.C. = ESTIMATED REMAINING CONTRIBUTION:	RELATIVE USEFUL LIFE EXPECTANCY (YEARS)
BS 5837 CATEGORY & SUB-CATEGORY GRADING	A = HIGH QUALITY AND VALUE, B = MODERATE QUALITY AND VALUE, C = LOW QUALITY AND VALUE, U = UNSUITABLE FOR RETENTION (SUB-CATEGORY REFERS TO ARBORICULTURAL, LANDSCAPE AND CULTURAL/CONSERVATION VALUES)
BS 5837 RADIUS & BS 5837 RPA:	PROTECTIVE DISTANCE - RADIUS FROM THE CENTRE OF THE STEM TO THE LINE OF TREE PROTECTION (CONSTRUCTION EXCLUSION ZONE - CEZ) AND PROTECTIVE BARRIER ROOT PROTECTION AREA - BS 5837 (2012) ANNEX D (THE RECOMMENDATIONS STATE THAT THE RPA SHOULD BE CAPPED AT 707 M ²) NOTE - ALL CALCULATIONS ROUNDED TO NEAREST DECIMAL

TREE SURVEY SCHEDULE (BS5837: 2012)

Tree Solutions

Arboricultural Consultants

Site	CUERDEN HALL, CHORLEY	Surveyor	RUSSELL PEARCE	Page 2 of 11
Client	MR C SHENTON	Assessment Dates	10.03.2021 to 12.03.2021	
Brief	ARBORICULTURAL IMPACT ASSESSMENT	Viewing Conditions	GOOD	
		Job Reference	21/AIA/CHORLEY/12	

Tree Number	Name	Age	Height	Crown clear	North	East	South	West	Diameter	Vitality	Comments	E.R.C	Management	Category	RPA (m)	RPA (m ²)
T15	Oriental arborvitae	SM	8	0	2	4	4	4	230	G	Minor asymmetry due to proximity of adjacent tree (T16)	20	Remove for development	B1	2.7	24
T16	Yew	SM	6	0	2	2	0	2	220	G	Shaded slightly and suppressed by adjacent tree	20	Remove for development	B2	2.6	22
T17	Amalanchier	SM	4	2	2	2	1.5	1	120	G	Nothing to note	20	Remove for development	B1	1.4	7
T18	Zelkova serrata	SM	6	0.5	3	4	4	4	100 140 120 120 (242)	G	Multistemmed at base with acute compression fork. Pruning wounds from previous crown lift.	20	Remove for development	B1	3	26
T19	Zelkova serrata	SM	2	0	2	2	2	2	90	M	Twinstemmed at base with acute compression fork. Previously topped at 1.25m. Unsightly tree with low aesthetic value.	10	Remove for development	C1	1	4
T20	Ash	EM	14	3	5	4	4	4	420	M	Codominant at 2.25m with acute primary union. Crossing branches in crown. Base of stem abutting wall.	20	Remove for development	B1	5	80
T21	Ash	EM	12	2	4	4	4	4	180 200 290 (396)	M	Nothing to note	20	No action required	B1	4.7	71
T22	Ash	SM	12						310	D	Deadwood throughout crown. Crown retrenching.	0	Remove	U	N/A	N/A
T23	Zelkova serrata	EM	12	2	6	6	6	6	230 280 290 (464)	G	No access to stem. Nothing to note.	20	No action required.	B1	5.6	97
T24	Unidentified dead tree	SM	6	0					230	D	Dead tree.	0	Remove	U	N/A	N/A
T25	Pine	FM	20	4	7	6	6	6	680	G	No access to stem. Dense vegetation. Stunning tree. Ivy covering most of stem.	40	No action required.	A1	8	209
T26	Holly	SM	7	0	5	4	3	2	230 240 (332)	G	Dbh est. Dense veg	20	Remove for development	B1	4	50
T27	Holly		9						290	D		0	Remove	U	N/A	N/A
T28	Sycamore	FM	24	4	8	9	6	7	1130	G	Excellent specimen. Large burr to north side at 2m. Large deadwood in crown. Ivy covering much of stem, inclusive of primary union at 9m.	40	Remove ivy and reinspect.	A1	14	578
T29	Lawsons cypress	SM	10	0.5	3	3	3	3	250 250 (354)	M	Codominant at 1m with included union compression fork, ears forming.	10	Remove for development	C1	4.2	57

TREE SURVEY SCHEDULE (BS5837: 2012)

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T30	Lime	M	10	1	7	6	7	7	1000	M	Dbh estimated. Dense epicormics prevented detailed inspection. Previously reduced with extensive regrowth.	20	Prune back to previous reduction points. Remove epicormic growth to 6m.	B1	12	452
T31	Sycamore	M	18	6	9	9	7	2	900	M	Reduced crown density. Some lions tailing. Possibly in early stages of decline.	20	Monitor	B1	11	366
T32	Beech	FM	24	4	12	12	12	12	1200	M	Strip or barl missing to stem on SE side some deadwood in large hazard beam limb distal. Percussion test indicates some decay at base of stem.	20	Remove for development	B1	14.5	652
T33	Horse Chestnut	M	19	4	6	6	8	8	740	M	Dense ivy covering stem.	20	Remove for development	B1	8.8	248
T34	Beech	FM	19	2	9	8	8	8	1400	G	Dbh est, dense veg. Excellent specimen. Minor historic branch snap outs. Codominant from 6m.	40	No action required.	A1	15	707
T35	Beech	Y	4	2	2	2	2	2	200	G	Crown previously failed. Lateral branches now forming poorly secured crown	0	Remove	U	N/A	N/A
T36	Cherry	SM	6	1	2	4	4	4	300	P	Suppressed by adjacent trees.	10	No action required.	C1	3.6	41
T37	Lime	EM	18	0.5	5	5	3	3	420	G	No defects noted.	20	No action required.	B1	5	80
T38	Horse chestnut	EM	18	0.5	5	5	5	5	590	G	No defects noted	20	No action required.	B1	7	157
T39	Scots pine	EM	20	2	6	6	6	6	660	M	Ivy covered stem	20	No action required.	B1	7.9	197
T40	Scots pine	EM	21	1	4	6	6	6	670	G		20	No action required.	B1	8	203
T41	Lebanon	M	22	2	6	6	7	6	980	G	Excellent specimen. Shed shaded limbs in lower crown.	40	No action required.	A1	12	435
T42	Norway maple	EM	16	1	5	5	4	5	360	G	No defects noted.	20	No action required.	B1	4.3	59
T43	Maple	M	20	2	6	6	6	6	610	G	Trifurcates at 5m.with acute unions.	20	No action required.	B1	7.3	168
T44	Scots pine	M	20	6	5	4	3	4	530	G	Single straight slender stem.	20	No action required.	B1	6.3	127
T45	Larix decidua	M	18	1	9	6	3	5	540	G	Dbh estimated. Wide trifurcation at 4m, possible historic loss of central leader.	10	No action required.	C1	6.5	132
T46	Scots pine		18	3					430	P	Percussion test indicates significant decay at base of stem	0	Remove.	U	N/A	N/A
T47	Larix decidua	M	18	2	7	6	4	6	560	G	No defects noted.	20	No action required.	B1	6.7	142
T48	Holly	EM	20	0.5	3	3	3	3	430	G	Single slender stem.	20	No action required.	B1	5	84
T49	Deodar cedar	M	17	1	6	5	4	5	790	G	Slightly suppressed by adjacent trees.	10	No action required.	B1	9.5	282
T50	Sycamore	SM	11	1	4	3	3	3	290	G	Slightly suppressed by adjacent trees. Dense ivy covering stem and primary branch framework.	20	Remove for development	C1	3.5	38

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Tree Number	Name	Age	Height	Crown clear	North	East	South	West	Diameter	Vitality	Comments	E.R.C	Management	Category	RPA (m)	RPA (m ²)
T51	Beech	M	22	1	10	8	7	7	790	G	Open well balanced crown.	20	No action required.	B1	9.5	282
											Open well balanced crown, slightly suppressed to the south. Some large old pruning wounds with cavities developing. Potential future veteran tree.			A1	12	518
T52	English oak	FM	16	0.5	8	9	9	7	1070	G		40	No action required.			
T53	Sycamore	M	18	4	6	6	6	6	630	M	Dense ivy throughout stem and crown.	20	Remove ivy and reinspect.	B1	7.5	180
T54	Oak	M	18	5	6	6	6	6	650	M	Large deadwood within crown	20	No action required	B1	7.8	191
T55	Oak	M	18	4	7	7	7	7	700	M	Large deadwood within crown.	20	No action required	B1	8.4	222
T56	Oak	EM	17	2	6	6	6	3	450	G	Deadwood throughout crown	20	No action required	B1	5.4	92
T56a	Oak	EM	16	4	4	5	4	4	320	M	Deadwood throughout crown	20	No action required	B1	3.8	46
T57	Sycamore	M	22	5	8	8	8	8	1050	M	Numerous large limbs previously shed. Deadwood in crown.	20	No action required	B1	12.6	499
T58	Sycamore	M	20	4	5	3	5	5	670	G	Minor deadwood in crown.	20	No action required	B1	8	203
T59	Sycamore	M	22	5	6	6	6	6	680	G	Dense ivy cover stem and primary union.	20	No action required	B1	8.2	209
T60	Sycamore	M	26	6	6	4	6	6	830	G	Dense ivy cover stem and primary union.	20	No action required	B1	10	312
T61	Sycamore	M	21	2	5	5	5	6	620	G	Dense ivy cover stem	20	No action required	B1	7.4	174
T62	Sycamore	M	24	3	6	6	6	3	980	G	Dense ivy cover stem. Imbalanced crown due to neighbouring tree that has ben removed.	20	Remove for development	B1	11.7	435
T63	Beech	EM	12	0	6	6	6	6	380	M	Squat form. Possibly historically topped at 1m.	10	Remove for development	C1	4.5	65
T64	Beech	M	12	1.5	2	5	6	5	600	G	Twin-stemmed, codominant at 1.5m. Slender limbs.	20	No action required	B1	7.2	163
T65	Turkey oak	M	25	1	8	7	7	7	1000	G	Pruning wounds and minor deadwood.	40	No action required	A1	12	452
T66	Sycamore	SM	16	2	4	4	4	4	360	M	Suppressed with slender phototropic growth. Dense ivy covering stem.	10	No action required	C1	4.3	59
T67	Sycamore	SM	16	5	4	5	5	5	370	M	Suppressed with slender phototropic growth. Dense ivy covering stem.	10	No action required	C1	4.5	62
T68	Turkey Oak	M	24	6	10	2	8	9	840	P	Multiple large limb tearouts, imbalanced crown as a result. Potential veteran.	40	No action required	A1	10	319
T69	Oak	Y	6	0.5	3	3	3	3	120	G	No defects noted.	10	No action required	C1	7	1.4
T70	Turkey oak	M	20	1	0	0	8	7	600	G	Heavily imbalanced asymmetric crown due to prox of adjacent trees. Dense ivy covering stem and primary branch unions.	20	No action required	B1	7.2	163
T71	Sycamore	SM	18	1	2	2	6	4	290	M	Heavily imbalanced asymmetric crown due to prox of adjacent trees. Dense ivy covering stem and primary branch unions. Slender growth. Suppressed.	10	No action required	C1	3.5	38
T72	Turkey oak	M	22	2	6	7	8	7	610	G	Large deadwood within crown.	20	No action required	B1	7.3	168
T73	Turkey oak	EM	22	6	0	2	5	2	410	G	Slender phototropic growth. Imbalanced crown	10	No action required	C1	4.9	76
T74	Sycamore	M	20	2	5	5	5	5	580	G	Acute union, codominant at 5m.	20	No action required	B1	6.9	152

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Tree Number	Name	Age	Height	Crown clear	North	East	South	West	Diameter	Vitality	Comments	E.R.C	Management	Category	RPA (m)	RPA (m ²)
T75	Sweet Chestnut	EM	16	1	0	4	4	1	400	M	Open cavities at base with some decay. Suppressed asymmetric crown.	10	No action required	C1	4.8	72
T76	Turkey oak	EM	22	12	6	4	6	5	640	G	Slender phototropic growth. Deadwood and stubs in crown	20	No action required	B1	7.7	185
T77	Turkey oak	EM	23	10	5	3	5	5	450	G	Dense ivy covering stem. Slender phototropic growth.	20	No action required	B1	5.4	92
T78	Beech	M	25	1.5	6	6	6	6	480 580 (753)	M	Twin-stemmed at 1m, with acute included union and bupge, no current natural braces.	20	No action required	B1	9	257
T79	Sweet chestnut	M	18	1	4	10	9	6	1200	M	Potential veteran in future. Excellent specimen. Minor stem lean to east. Deadwood in crown. Small open cavity at base to north, limited decay.	40	No action required	A1	14.5	652
T80	Beech	EM	21	2	4	4	4	4	480	G	Slender phototropic form.	20	No action required	B1	5.7	104
T81	English oak	M	21	2	6	6	8	6	710	G	Large deadwood within crown. Large stubs within crown. Atop pond embankment.	20	No action required	B1	8.5	228
T82	Turkey oak	EM	18	8	5	4	3	3	310	G	Dense veg. Long slender stem. Dense ivy - stem and primary branch frameworks.	10	No action required	C1	3.7	43
T83	Alder	M	19	7	6	5	5	5	700	G	Excellent specimen. Single upright straight stem	40	No action required	A1	8.4	222
T84	Alder	EM	18	1	2	4	4	4	440	G	Deadwood in lower crown. On pondside embankment <1m from water.	20	No action required	B1	5.2	88
T85	Sycamore									P	Tree in decline. Significant dieback in upper centre of crown. Multiple limbs have been shed. Acute primary union at 1m, included, codominant.	0	No action required	U	N/A	N/A
T86	Sycamore	M	16	4	7	6	10	7	770	G	Multiple small cavity at old pruning wounds. Slightly reduced crown density.	20	No action required	B1	9.2	268
T87	English oak	M	14	1.5	4	5	6	5	730	G	Dense ivy covering stem and primary branch framework.	20	Remove ivy and reinspect.	B1	8.7	241
T88	Lime	M	22	2	6	9	7	7	950	G	Dense basal epicormics prevented detailed inspection. Primary union at 6m - codominant. Previously reduced with extensive regrowth. Large parts of the regrowth is retrenching.	20	Reduce to previous reduction points - approx 4-6m	B1	11.5	408
T89	Turkey oak	M	19	1.5	17	16	13	14	1300	G	Excellent specimen. Broad balanced open crown. Large historically occluded pruning wounds from past crown lifts. Deadwood throughout. Snapouts present. Past husbandry within crown. Possible deadwood removal or crown clean required. Hazard beams in lower crown.	40	No action required.	A1	15	707
T90	Turkey oak	M	22	2	7	5	6	8	480	G	Minor deadwood in crown. Minor suppression by larger adjacent trees.	20	Reduce to previous reduction points - approx 4-6m	B1	5.7	104
T91	Turkey oak	M	22	2	10	8	5	6	580	G	Minor deadwood. Minor suppression due to proximity of larger adjacent trees	20	No action required.	B1	7	152

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Tree Number	Name	Age	Height	Crown clear	North	East	South	West	Diameter	Vitality	Comments	E.R.C	Management	Category	RPA (m)	RPA (m ²)
T92	Weeping willow	EM	14	3	5	6	2	4	380	M	Poor form. Bulge and kink in stem at 1.5m. Small crown. Dense ivy covering stem. Minor deadwood.in crown.	10	Remove ivy and reinspect.	C1	4.5	65
T93	London plane	EM	14	1.5	7	5	6	5	340	G	Snapped out limb in upper centre of crown. Well balanced crown.	20	No action required.	B1	4	52
T94	Spindle tree	EM	6	0.5	2	2	5	4	240	G	Nothing to note.	10	No action required.	C1	2.9	26
T95	Ash	M	18	1.5	6	7	8	7	460 400 (610)	G	Twin stemmed at base. Dense ivy covering stem and primary branch framework. Minor deadwood throughout crown. Open balanced crown.	20	No action required.	B1	7.3	168
T96	Horse Chestnut	M	22	1	9	9	10	10	1330	G	Large limb previously snapped out at 5m on NW side leaving stub. Large balanced open crown. Codominant from 7m. Dogleg hazard beams in lower crown.	20	No action required	B1	15	707
T97	Horse chestnut	M	22	0	9	9	10	9	1420	M	Multiple large historic snapouts with cavities. Large hazard beams x2 extending to the south, some helical limb wounds.	20	No action required	B1	15	707
T98	Scots pine	M	19	2	3	3	3	3	550	G	Historic included union tearout at 4.5m, partially occluded. Straight upright stem.	20	No action required.	B1	6.6	137
T99	Scots pine	M	17	1	5	5	5	5	630	G	Curved stem between 1m and 2.5m. Deadwood throughout lower crown.	20	No action required.	B1	7.5	180
T100	Lime	OM	18	0	7	7	7	7	1100	M	Dense basal epics. Deadwood throughout crown. Watershoots with centre of crown. Appears to be retrenching. With deadwood throughout crown periphery. Gnarled appearance. Veteran potential.	20	No action required.	B1	12.2	547
T101	Oak	M	18	1	6	7	7	4	1100	G	On 3rd party land. No access dbh est. Well balanced tree.	20	No action required.	B1	12.2	547
T102	Oak	M	18	2	6	6	7	6	620	G	Dense vegetation prevented detailed inspection. x2 historic snap outs in upper crown.	20	No action required.	B1	7.4	174
T103	Silver maple	M	16	1	6	6	6	6	490 390 420 (754)	G	Trifurcates at 0.5m. Minor deadwood throughout.	20	No action required.	B1	9	257
T104	Zelkova serrata	M	12	1	7	7	7	7	590	G	Dbh est. Dense ivy throughout. Well balanced crown.	20	No action required.	B1	7	157
T105	Leyland cypress	M	14	1	4	4	4	4	680	G	Dbh est. Dense ivy throughout. Well balanced crown.	20	Remove for development	B1	8	209
T106	Red oak	Y	10	2	4	4	3	2	250	G	No defects noted	10	No action required	C1	3	28
T107	Red oak	SM	14	0	5	5	5	5	400	G	No defects noted	20	No action required	B1	4.8	72
T108	Sycamore	Y	8	2	2	2	2	2	140	G	No defects noted	10	No action required	C1	1.7	9
T109	Turkey oak	M	23	3	8	8	8	8	890	G	Dbh est. Dense ivy covering stem and primary branch framework. Minor deadwood.	20	No action required	B1	10.7	358

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T110	Turkey oak	M	21	4	7	10	7	7	850	G	Dbh est. Large ended weight limb to east side at 3m. Multiple large partially occluded pruning wounds below 8m. Large deadwood throughout crown. Overhanging understorey.	20	No action required	B1	10.2	327
T111	Sycamore	EM	22	2	5	4	4	5	490	M	Dbh est. Upright form. Acute union at 9m, codominant.	20	No action required	B1	5.9	109
T112	Sycamore	EM	20	2	3	1	5	4	340	M	Dbh est. Suppressed by adjacent trees.	10	No action required	C1	4	52
T113	Elder	SM								P	Dbh est. Suppressed by adjacent trees. Leaning stem. Decay at base.	0	Remove	U	N/A	N/A
T114	Sycamore	EM	18	2	5	5	5	6	490	G	Dbh est. Dense ivy covering stem and primary branch framework.	20	No action required.	B1	5.9	109
T115	Cherry laurel	EM	8	0	7	5	4	4	190 180 170 (312)	M	Dbh est. Multistemmed at base. Overhangs footpath. No defects note.	10	No action required.	C1	3.8	44
T116	Sycamore	M	22	3	6	6	6	6	500	G	Dbh est. Large balanced open crown.	20	No action required.	B1	6	113
T117	Sycamore	M	22	8	9	9	9	9	720	G	Dbh est. Large balanced open crown. Minor deadwood through crown. Multiple occluded pruning wounds throughout stem and canopy. Codominant at 3m.	40	No action required.	A1	8.6	235
T118	Sycamore	EM								P	Dbh est. Large balanced open crown. Crown is retrenching. Deadwood throughout. Lesions and missing bark on numerous scaffold limbs.	0	Remove	U	N/A	N/A
T118a	Sycamore	M								D	Dbh est. Dead tree with extensive stem decay within falling distance of rd.	0	Remove	U	N/A	N/A
T119	Sycamore	M	19	2	4	4	6	6	430	M	Dbh est. Acute included union at 2.5m. Some missing bark close to union and on x1 stem.	10	Monitor union	C1	5	84
T120	Lime	EM	19	0.5	6	6	6	6	400	G	Dbh est. Multistemmed at base x4. Long slender limbs from base.	10	No action required.	B1	4.8	72
T121	Turkey oak	EM	22	2	7	7	7	7	580	G	Deadwood throughout crown. Excellent specimen.	40	No action required.	A1	7	152
T122	Sycamore	EM	15	2	7	7	7	7	450	G	Multistemmed at base with acute unions. Open balanced crown.	20	No action required.	B1	5.4	92
T123	Sycamore	SM	16	2	5	5	3	3	200 220 (297)	M	Dbh est. Twinstemmed at base. Suppressed weedy specimen. Low aesthetic value	10	No action required.	C1	3.5	40
T124	Oak	M	26	4	6	6	6	9	500 500 (707)	M	Dbh est. Twinstemmed at 1.25m - codominant. History of branch loss and snapouts. Both leaders have been lost historically. Multiple partially occluded pruning wounds from previous crown lifts.	20	Remove for development	B1	8.4	226
T125	Sycamore	EM	12	1.5	1	5	6	5	230 240 (332)	M	Dbh est. Twinstemmed at base. Suppressed by adjacent trees.	10	Remove for development	C1	4	50
T126	Sycamore	M	16	2.5	5	1	6	6	560	M	Suppressed by adjacent trees with imbalanced crown from.	20	No works	B1	6.7	142
T127	Sycamore	EM	27	3	4	4	4	4	550	M	Slender stem and small crown. Base of stem abutting concrete driveway. Deadwood in lower crown. Dbh est.	20	No action required.	B1	6.6	137

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T128	Ash	EM	16	1	1	3	3	1	310	M	Dbh est. Suppressed crown. Tearout wound to west upper crown.	10	No action	C1	3.7	43
T129	Beech	M	22	0.5	10	8	8	9	1200	G	Dbh est. Large spreading open crown. Excellent specimen. Deadwood throughout crown no targets. Some long slender limbs.	40	No action required.	A1	14.4	652
T130	Lombardy poplar	M	22	6	2	2	2	2	470	G	No access to stem - dense vegetation. No defects noted.	20	No action required	B1	5.6	100
T131	Lombardy poplar	M	20	8	1.5	1.5	1.5	1.5	360	G	No defects noted	20	No action required	B1	4.3	59
T132	Lime		17	0	4	4	4	4	600	P	Tree in decline x3 stem have all failed in upper crown. Retrenching. No access to stem. Dense vegetation and dense basal epicormics. Within falling distance of rd. Reduce to habitat poles.	10	Reduce to habitat pole - 5m	C1	7.2	163
T133	Turkey oak	M	26	2	7	8	6	6	570	G	Good specimen. No defects noted.	20	No action required.	B1	6.8	147
T134	Sycamore	M	19	3	6	6	6	6	600	P	Lesions and missing bark throughout stem from 2m to 10m. Some lions-tailing in crown.	10	Monitor for decline	C1	7.2	163
T135	Sycamore	EM	20	4	5	4	5	2	480	G	Stright upright very slender stem.	20	No action required.	B1	5.7	104
T135a	Sycamore	M	20	4	6	4	4	5	580	G	Sweep in stem from base to 2m. Bifurcation at 6m, co dominant. Minor deadwood.	20	No action required.	B1	7	152
T136	Turkey oak	M	23	14	4	6	8	6	880	P	Bifurcates at 7m. Longitudinal wound from base to 10m with some cavitation. Reduced density crown. Within falling distance of road.	10	Further decay detection analysis and aerial inspection or sunstantial reduction.	C1	10.5	350
T137	Sycamore	SM	18	0.5	4	2	2	2	280	M	Suppressed tree of low aesthetic value.	10	No action required.	C1	3.4	35
T138	Sycamore	M	24	4	4	6	6	6	680	G	Dense ivy covering stem and primary branch framework. Previously pruned back over road.	20	No action required.	B1	8	209
T139	Turkey oak	M	20	6	9	9	11	8	820	G	Large historic pruning wounds from previous crown lifts. High crown break at 10m.	40	No action required.	A1	9.8	304
T140	Turkey oak	EM	20	8	6	6	6	6	470	G	No access. Minor deadwood throughout.	20	No action required.	B1	5.6	100
T141	Turkey oak	EM	20	6	6	6	6	6	470	G	No access. Minor deadwood throughout.	20	No action required.	B1	5.6	100
T142	Turkey oak	EM	20	4	8	4	6	8	580	G	Crown partially suppress by adjacent tree T144. Large deadwood in crown. Multiple tearout wounds.	20	No action required.	B2	7	152
T143	Sycamore	EM	20	3	7	5	5	4	530	G	Stubs and pruning wounds from previous crown lifts.	20	No action required.	B1	6.4	127
T144	Turkey oak	EM	20	4	7	5	5	4	520	G	No defects noted.	20	No action required.	B1	6.2	122

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Tree Number	Name	Age	Height	Crown clear	North	East	South	West	Diameter	Vitality	Comments	E.R.C	Management	Category	RPA (m)	RPA (m ²)
G1	Oriental arborvitae	Y	3	0	1	1	1	1	110	G	Nothing to note	10	Remove for development	C1	1.3	5
G2	Cypress	SM	5	0	1	1	1	1	150 150 150 (260)	G	Nothing to note	20	Remove	B2	3	31
G3	Sycamore	SM	16	4	6	6	6	6	320	M	x7 closely proximated trees. Est avg dbh. x4 stems abutting top of wall causing abrasive damage to stems. Dense veg and brambles prevented detailed inspection.	20	Remove for development	B2	3.8	46
G4	Holly	SM	10	0	4	4	4	4	300	G	Est avg 300dbh. No defects noted.	20	Remove for development	B2	3.6	41
G5	Holly	SM	8	0	2	2	2	2	150	P	Est avg dbh. x5 holly in poor condition. Sparse crowns. In decline.	0	Remove	U	N/A	N/A
G6	Beech	EM	18	0.5	6	6	6	6	500	M	x8 trees est avg. Deadwood, snapped out hanging branches, large stubs.	20	Crown cleans.	B2	6	113
G7	Mixed	SM	8	0	3	3	3	3	200	M	Suppressed shaded out group of predominantly cherry. With rhod, holly and beech saplings present.	10	No action required.	C2	2.4	18
G8	Holly	M	16	0	4	4	4	4	400	M	Group of x8 Holly Upright woodland form. No defects noted.	20	No action required.	B2	4.8	72
G9	Turkey oak	EM	24	5	5	3	5	6	450	G	Slender upright single stemmed trees.	20	No action required.	B2	5.4	92
G10	Oak, Beech and Sycamore	SM/EM	18	3	4	4	4	4	380	G	Woodland group of trees with upright slender form. Some standing deadwood within group. Approx x35 trees.	20	No action required.	B2	4.5	65
G11	Mixed	Y	16	0	2	2	2	2	120	G	120 avg dbh. Approx x 40 trees. Scrubby understorey group on pond embankment. Hawthorn, blackthorn oak and alder. Young with x1 tree within group collapsed.	10	Remove collapsed tree.	C2	1.4	7
G12	Lime	M	20	0	6	6	6	6	950	M	x9 lime tree. Historic heavy reductions / pollards with extensive regrowth. Large deadwood and cavities forming at reduction points. Some significant dieback as result. All require repollarding / reducing. Very dense basal epicormics prevented	20	Repollard tree. Remove epicormics.	B2	11.4	408
G13	Birch	EM	15	1	3	3	3	3	220	G	Avg dbh. x3 birch of low aesthetic value. Suppressed by adjacent trees.	10	No action required.	C2	2.6	22

TREE SURVEY SCHEDULE (BS5837: 2012)

Tree Solutions

Arboricultural Consultants

Site	CUERDEN HALL, CHORLEY	Surveyor	RUSSELL PEARCE	Page 10 of 11
Client	MR C SHENTON	Assessment Dates	10.03.2021 to 12.03.2021	
Brief	ARBORICULTURAL IMPACT ASSESSMENT	Viewing Conditions	GOOD	
		Job Reference	21/AIA/CHORLEY/12	

Tree Number	Name	Age	Height	Crown clear	North	East	South	West	Diameter	Vitality	Comments	E.R.C	Management	Category	RPA (m)	RPA (m ²)
G14	Mixed	Y	16	0	3	3	3	3	120	M	Scrubby suppressed understorey group of approx 20 trees. Snowy mesp, holly, rowan, whitebeam. Low aesthetic value. x1 tree collapsed.	10	No action required.	C2	1.5	7
G15	Mixed	SM	6	0	3	3	3	3	130	G	Neglected shrub bed. Approx x20 trees. Inclusive of cotoneaster tree, zelkova serrrata, yew, cypress and maple. Low value. Dense ivy throughout. Nothing remarkable to note.	10	Remove for development	C2	1.5	8
G16	Mixed poplars	SM to EM	20	4	6	6	6	6	450	M-P	Dbh est avg. x11 trees. x2 in advanced state of decline and. x1 dead within falling distance of road	20	Remove dead and declining trees.	B2	5.4	92
G17	Mixed	Y to SM	8	3	2	2	2	4	130	M	Woodland edge group overhanging road. Suppressed by adjacent trees. Access facilitation pruning? Low aesthetic value.	10	No action required.	C1	1.5	8
G18	Sycamore	SM	12	2	7	7	7	7	420	G	Dbh est avg. Multi-stemmed at base. No defects noted.	20	Remove for development	B2	5	80
G19	Mixed	SM	17	0	5	5	5	5	350	G-M	x15 trees. Sycamore and beech. No defects noted.	20	No action required	B2	4.2	55
G20	Goat willow	SM	8	0	5	5	5	5	300	G	Group x3 willow. Lower branches are layering.	10	No action required	C2	3.6	41
G21	Sycamore	SM	18 to 22	2	5	5	5	5	370	G	Est avg dbh. x20 trees. Upright phototropic woodland form. Minor deadwood throughout.	20	No action required.	B2	4.4	62

TREE SURVEY SCHEDULE (BS5837: 2012)

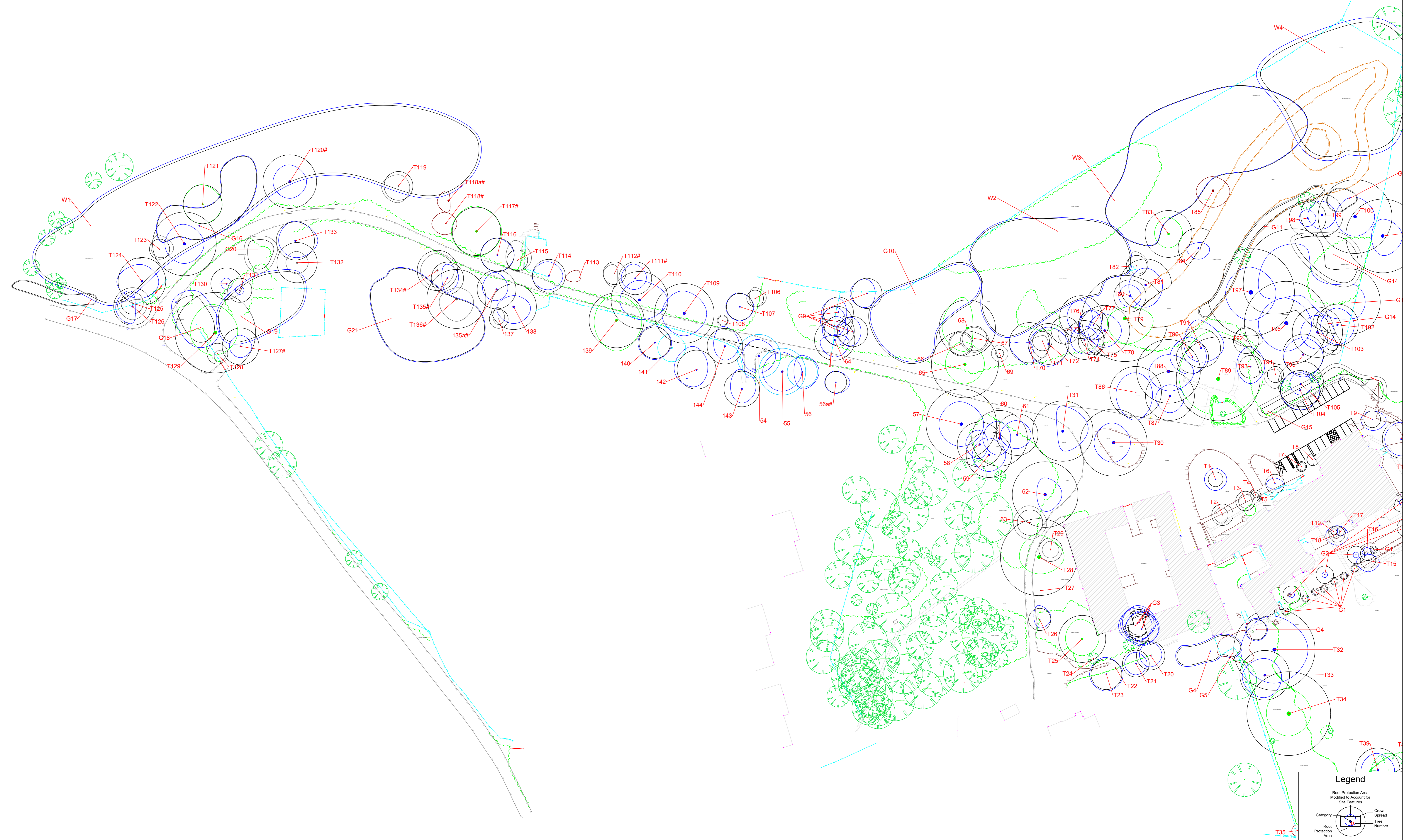
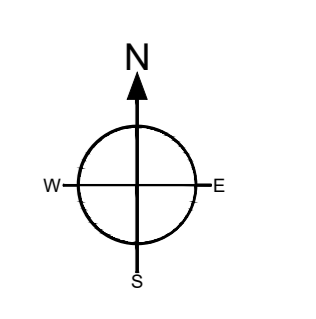
Tree Solutions

Arboricultural Consultants

Site	CUERDEN HALL, CHORLEY	Surveyor	RUSSELL PEARCE	Page 11 of 11
Client	MR C SHENTON	Assessment Dates	10.03.2021 to 12.03.2021	
Brief	ARBORICULTURAL IMPACT ASSESSMENT	Viewing Conditions	GOOD	
		Job Reference	21/AIA/CHORLEY/12	

Tree Number	Name	Age	Height	Crown clear	North	East	South	West	Diameter	Vitality	Comments	E.R.C	Management	Category	RPA (m)	RPA (m ²)
W1	Mixed	SM to EM	16 to 24	0	6	6	6	6	400	G-M	Woodland group with overstorey of turkey oak, beech, Lime, sycamore, and poplar. Understorey of elder cherry hazel and sycamore predominantly. Dense rhododendron cover in places. No access due to dense vegetation.	20	No action required.	B2	4.8	72
W2	Mixed	SM to EM	20	0	4	4	4	4	340	G	Predominantly sycamore, with Turkey oak and beech interspersed throughout and holly understorey. Sledner stems, typical woodland form. Deadwood throughout. Standing deadwood within group.	20	No action required.	B2	4	52
W3	Mixed	Y to SM	16 to 18	0	3	3	3	3	250	G-M	Predominantly Alder and Goat willow, with beech and Turkey oak also present. Holly and Elder understorey. Some White Poplar to northern edge.	20	Remove trees within pond to north in order to allow for reinstatement works	B2	3	28
W4	Mixed	Y to SM	6 to 8	0	3	3	3	3	130	G	Predominantly young Oak and Beech, with goat willow and birch present. Elder and Hawthorn understorey. Some mature Hawthorn on northern periphery.	20	Remove trees within pond to allow for reinstatement works	B2	1.5	8

Appendix Two
Preliminary Tree Constraints Plan



Legend

Root Protection Area Modified to Account for Site Features

Category A (High Quality) ● Category C (Low Quality) ●

Category B (Moderate Quality) ● Category D (Declining/In Decline) ●

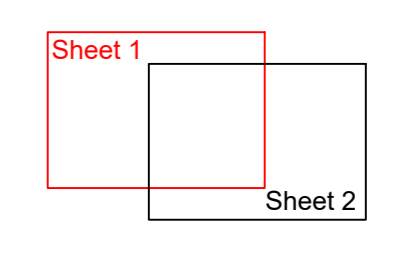
Root Protection Area Crown

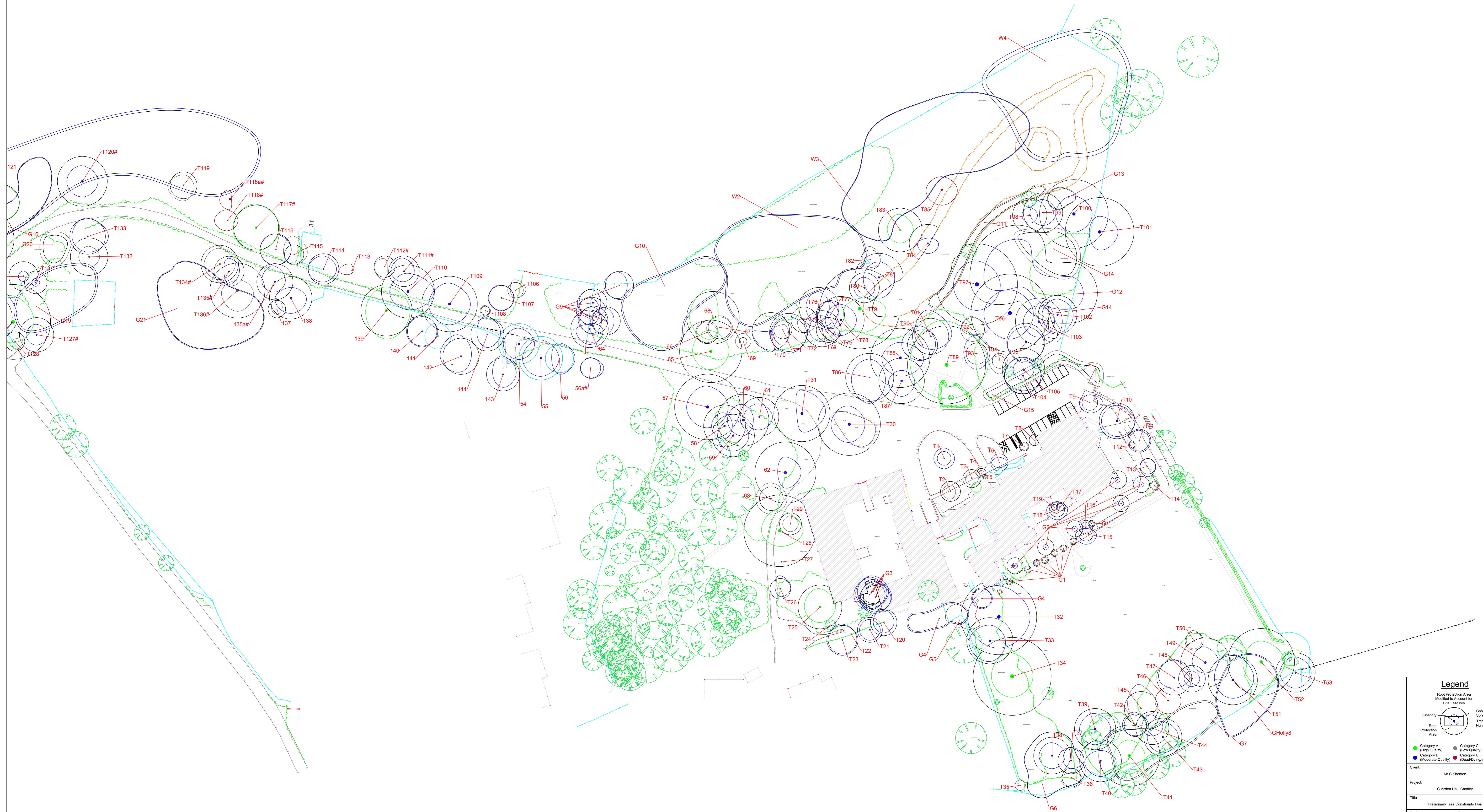
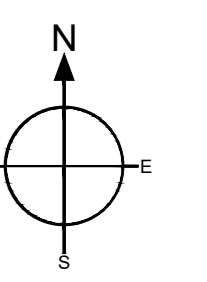
Tree Number ●

Client: M/C Shenton	
Project: Cuden Hall, Chorley	
Title: Preliminary Tree Constraints Plan	
Scale: 1:500 @ A0	Date: March 2021
Drawn By: NB	Revised: -
Job Ref: 21A/A/CHORLEY12	Drawing No: 01

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Legend

Root Protection Area Modified to Account for Site Features

Category A (High Quality) Crown Spread

Category B (Moderate Quality) Tree Number

Category C (Low Quality) Root Protection Area

Category U (Overhanging In Decline)

Client: Mr C Shenton

Project: Corden Hall, Chorley

Title: Preliminary Tree Constraints Plan

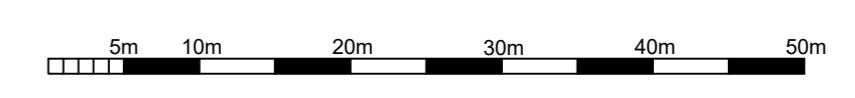
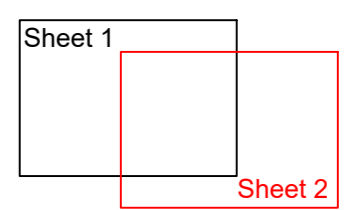
Scale: 1:500 @ A0 Date: March 2021

Drawn By: NB Revision: -

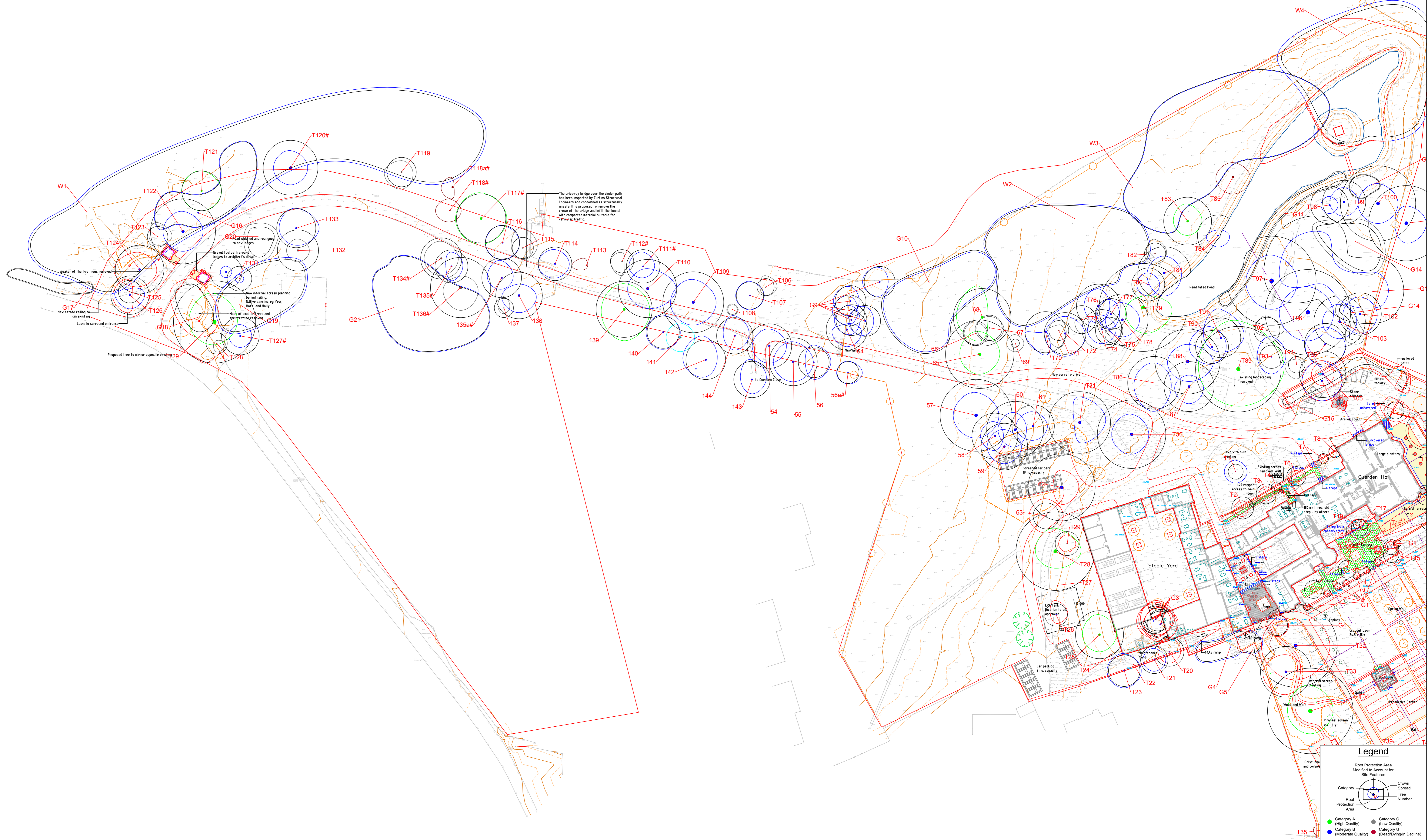
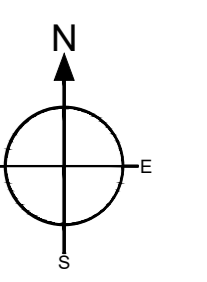
Job Ref: 21AIA/CHORLEY12 Drawing No: 01

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Appendix Three
Impact Assessment Plan



The proposed bridge over the outer path has been inspected by Collins Structural Engineers and confirmed as structurally suitable. It is proposed to remove the crown of the bridge and affix the tunnel with compacted material suitable for vehicular traffic.

Also noted and assigned to new logs
Grant foothold around to generate planter's depth
New informal screen planting
New species, eg Yew, Holly and holly
New formal screen planting
New species, eg Yew, Holly and holly
New estate walling to join existing
Level to surround entrance
Proposed tree to mirror opposite entrance

Legend

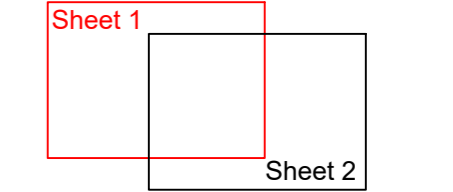
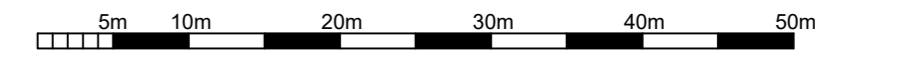
Root Protection Area Modified to Account for Site Features

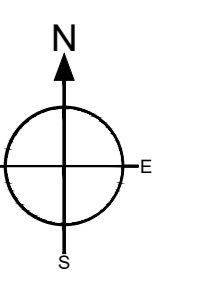
- Category A (High Quality)
- Category B (Moderate Quality)
- Category C (Low Quality)
- Category U (Dead/Dying In Decline)
- Tree Proposed for Removal

Tree Number

Client:	Mr C Shenton
Project:	Cuarden Hall, Chorley
Title:	Arboricultural Impact Assessment
Scale:	1:500 @ A0
Date:	March 2021
Drawn By:	NB
Revised:	
Job Ref:	21AIA/CHORLEY12
Drawing No:	02

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Legend

Root Protection Area Modified to Account for Site Features

Category A (High Quality) ● Category C (Low Quality) ●
 Category B (Moderate Quality) ● Category D (Dead/Dying/In Decline) ●

Tree Proposed for Removal

Crown Spread Tree Number

Client:	M/C Shenton		
Project:	Cuarden Hall, Chorley		
Title:	Arboricultural Impact Assessment		
Scale:	1:500 @ A0	Date:	March 2021
Drawn By:	NB	Revised:	-
Job Ref:	21AIA/CHORLEY12	Drawing No:	02

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