

LLAY PARK PRIMARY
SCHOOL
SCHOOL ROAD
LLAY
WREXHAM
LL 12 0TR

Report Prepared by

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Chartered Arboriculturist*

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Summary

The purpose of this report is to provide a survey of trees adjacent to proposals to construct a new drain run and a new car park in the grounds of Llay Park Primary School, School Road, Llay, LL12 0TR. This survey fulfils the requirements of BS5837 and provides an overview of the trees and the proposals to construct a new drain run and a new car park on land nearby. The report concludes that both the proposals are achievable without risking the future health of nearby trees.

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1 INTRODUCTION

- 1.1 **Brief:** I am instructed by Jayne Valentine of Wrexham Council to survey the trees near to a proposed car park area and an area of easement for a drain run at Llay Park School, School Road, Llay, Wrexham, LL12 0TR. This survey will form the basis for an arboricultural report on it to fulfil the requirements of BS5837 Trees in Relation to Construction-2005-Recommendations
- 1.2 **Qualifications and experience:** I have based this report on my site observations and the provided information, and I have come to conclusions in the light of my experience. I have experience and qualifications in arboriculture, and include a summary in Appendix 1.
- 1.3 **Documents and information provided:** I was provided the following drawings by Wrexham Council which are listed below.
- Site plan showing proposed car park area and easement area for drainage run
- 1.4 **Scope of this report:** This report is only concerned with surveying the trees on site to BS5837. It includes a preliminary assessment based on the site visit and the documents provided, listed in 1.3 above.
- 1.5 **Previous Reports:** I carried out an individual survey of the single Oak in the area of the proposed car park in August 2010 for Wrexham Council

2 SITE VISIT AND OBSERVATIONS

- 2.1 **Site visit:** I carried out an unaccompanied site visit on the 26th August 2010. All my observations were from ground level without detailed investigations and I estimated all dimensions unless otherwise indicated. I did not have access to trees outside the boundaries adjacent to the car park and have confined observations of them to what was visible from within the property. I walked through the woodland to the north of the school site on the public footpath. The weather at the time of inspection was overcast and dry with good visibility.

- 2.2 **Brief site description:** The site is a school set within a residential area. The areas concerned are an existing green space fenced off with gated access south of the main school building areas and an area of hard standing to the north of the school buildings. The playing field area is managed as a sports grass area and the hard standing is used as a playground. There is woodland to the north of the playground which overhangs the school site. The grassed area of the site is reasonably flat and the hard standing slopes to the north. The overall site is not particularly exposed.
- 2.3 **Identification and location of the trees:** The trees in question are located outside site boundaries. I have illustrated the approximate locations of the trees on the sketch plan included at Appendix 4 as Figure 1. These plans are for illustrative purposes only and should not be used for directly scaling measurements. All the relevant information on them is contained within this report and the provided documents.
- 2.4 **Collection of basic data:** I inspected the trees and have indicated the location on the site plan extract enclosed as Fig 1 in Appendix 4. For these trees, I collected information on species, height, diameter, maturity and potential for contribution to amenity in a development context. I have recorded this information in the tree schedule included as Appendix 2. I stress that my inspection was of a preliminary nature and did not involve any climbing or detailed investigation beyond what was visible from accessible points at ground level.
- 2.5 **Tree Preservation Orders:** An enquiry was made to Wrexham District Council regarding the presence of any Tree Preservation Orders or Conservation Area status. This enquiry indicated that at this time the woodland to the north of the site had Tree Preservation Order Status.

3 APPRAISAL

- 3.1 **Relevant references:** I have based the Tree Protection Zone measurements listed in Appendix 3 on BS5837 2005 Trees in Relation to Construction-Recommendations
- 3.2 I have divided the appraisal between the area concerned with the car park to the south of the school and the area of woodland near to the proposed easement for the new drain run.
- 3.3 **Proposed Car Park:** The trees that have been surveyed are within the curtilage of the adjacent properties to the proposed car park area. For the purposes of completeness I have included the group of trees that runs south from the corner of the proposed car park although only the northern end is within influencing distance of the proposal.
- 3.4 No inspection of the lower stems of any of the trees within the adjacent properties was available and observations are based on what was visible from within the grassed area. There is an individual Cherry and a group of 4 Sycamore which I have classed as T4 and T5. Both of these trees overhang the boundary by 4m. The trees provide a degree of screening for the houses and also a potential noise reduction feature.
- 3.5 The group of trees down the western boundary of the adjacent properties overhangs the site by 3m on average. The species in this group include Cherry, Birch and Sycamore with some Hawthorn present. The group acts as a good dividing screen and is considered to be out of direct influencing distance of the proposal.
- 3.6 **Drainage Easement:** The woodland that is within influencing distance of the proposal runs along the northern boundary of the school and is divided by a secure metal fence. A locked access gate is situated approximately halfway along this fenceline. The woodland is protected by a Tree Preservation Order using woodland status as its designation. The existing hard surface of the playground continues until abutting the grassed area.

- 3.7 The woodland consists of mixed broadleaf base with Oak as the predominant tree. The area the woodland is situated in is a steep sided gully running west to east with stream forming the base. There is a public footpath that runs East west set back from the fence and running parallel to it.
- 3.8 The trees along the boundary are mainly small trees of less than 200mm stem diameter with larger individual trees forming the backdrop. 3 individual trees have been identified as being within influencing distance of the proposal and are discussed in more detail within the report. The average overhang of the woodland is between 3-4m into the school grounds.
- 3.9 It is likely that the edge of the woodland is a forage route for bats in this area and although out of the arboricultural remit of this report is taken into consideration. It should also be noted the potential for bat roosts in T3 having areas of decay in the high crown of the tree.
- 3.10 There are three individual trees adjacent to the edge of the woodland that are considered within influencing distance of the proposal. These are T1 an Oak, T2 an Oak and T3 an Ash. Of these trees the nearest tree to the easement is T1 which overhangs the site by approximately 8m and has a clearance of 3m from ground level. If no works are going to be carried out under the canopy of this tree the lower branches will not be affected, however if works are to be carried out underneath the canopy then crown lifting works will be needed.
- 3.11 The tree is 5m from the edge of the resurfaced area taken to be the existing drain run. Any large roots in this area would have been severed at the time of excavation. It is not known how long ago this occurred but no dieback was noted within the crown of the tree which would indicate that the tree coped with what ever root loss occurred at that time.
- 3.12 T2 and T3 are set back 9m and 8m respectively from the fence line. Their calculated Root Protection Areas (RPA) radiuses are 9.6m and 10.2m respectively. In terms of the excavation of the drain run this puts them at little risk of detriment from the works to be carried out. The area between the metal fence and the edge of the excavation should however be protected during this time where no hard surfacing exists.

- 3.13 T3 has an area of decay at 9m on the southern side of the main crown. This has the potential for a bat roosting area. No works are proposed for this tree at this time.

4 CONCLUSIONS

- 4.1 On the basis of the above information and discussions, I summarise my conclusions as follows:-

- The car park can be constructed in the location indicated with no requirement for no-dig construction techniques. This process can be carried out without serious impact for the trees. The existing fenceline will serve to protect these trees during the construction process. Minor crown lifting works to prevent accidental damage by high sided vehicles will be required to give a 4m clearance
- The majority of the woodland is out of influencing distance of the proposals. Root Protection Areas have been established on the appended Tree Protection Plan and show the measures needed to be taken to ensure the survivability of the nearby trees through the construction process. The Root protection area of T1 does overlap the proposed easement route. Given previous works and the small amount of overlap I do not believe the tree will be at risk because of these proposed works.
- The existing hard surface of the playground should remain in place unless there is an overriding engineering reason for its removal.
- Crown lifting works maybe required to T1 if works are to be carried out underneath the crown spread of the tree. This should be carried out to the minimum height required for the tallest machine working under the canopy. The smallest machine possible should be used to work in this area.
- The edge of the woodland is likely to be a bat foraging area and the area of T3 indicated has the potential for a roosting area. These are observations of potential and not confirmed sightings.

5 RECOMMENDATIONS

- 5.1 **Present requirements:** Crown lifting works for the purposes of access to T1, T4 and T5 will be required to prevent accidental damage of lower branches during the construction process. No other works are required for any of the other trees.
- 5.2 **Tree Protection Zones:** No works of any description shall be carried out within the protective fence areas unless a Method Statement has been submitted to and approved by the Local Planning Authority. The fence should be erected and made secure before any works commence on site.
- 5.3 **Implementation of works:** All tree works should be carried out to BS 3998 *Recommendations for Tree Work* as modified by more recent research. It is advisable to select a contractor from the local authority list and preferably one approved by the Arboricultural Association. Their Register of Contractors is available free from Ullenwood Court, Ullenwood, Cheltenham, Gloucestershire, GL53 9QS. Telephone 01242 522152; website www.trees.org.uk/contractors.htm
- 5.4 **Statutory wildlife obligations:** The Wildlife and Countryside Act 1981 as amended by the Countryside and Rights of Way Act 2000 provide statutory protection to birds, bats and other species that inhabit trees. All tree work operations are covered by these provisions and advice from an ecologist must be obtained before undertaking any works that might constitute an offence. The crown lifting works required to T1 should not impinge on forage routes for bats as the overall edge of the woodland has been maintained.

6 OTHER CONSIDERATIONS

- 6.1 **Arboricultural Impact Statement:** If the car park is built in the present location its construction can be achieved without no-dig techniques being used. The drain easement area can be used for construction purposes without detriment to the trees with the erection of protective fencing being erected at the distances indicated on the Tree Protection Plan

A. L. Smith M. Arb. CEnv. MICFor. F. Arbor A
Chartered Arboriculturist

Appendix 1

Qualifications and experience of Andrew L Smith

1. Qualifications:

Certificate in Arboriculture Royal Forestry Society 1986
Technicians Certificate Arboricultural Association 1988
Master of Arboriculture Royal Forestry Society 1989
Advanced Diploma in Arboriculture and Community Forestry 2001
Cardiff University Accredited Expert Witness 2006
Licensed Practitioner of Quantified Tree Risk Assessment 2006
Professional Tree Inspection, Arboricultural Association / Lantra 2007

2. Professional Body memberships

Fellow of the Arboricultural Association
Chartered Arboriculturist, Institute of Chartered Foresters
Chartered Environmentalist, Society of the Environment
Professional Member of the International Society of Arboriculture

3. Practical experience: I have been involved in arboriculture for 33 years and have experience of private and local authority work practices.

4. Continuing Professional Development: Courses attended in the last year have included

4 Day Visual Tree Assessment with Proff. Dr Claus Mattheck,
International Society of Arboriculture Pest and Disease Seminar,
Tree Morphology 2 Days
County verifier for the Ancient Tree Hunt
Professional Tree Inspection 3 days
Fungal Decay process and Applied Engineering 2 days
Roadside Trees: Planting for quality and passive safety.
Helliwell Amenity Evaluation of Trees 1 day
CAVAT workshop 1 day
Management of decay within trees 2 days

Appendix 2 Tree Data

Tree No	Species	Crown diameter as radii (M)				Height (M)	Age Class	Girth (mm)	Condition
		N	S	E	W				
1	Oak	6	8	9	6	14	M	600	F
2	Oak	7	9	5	6	18	M	800	F
3	Ash	8	8	6	6	18	M	850	F
4	Cherry	8	6	5	4	9	M	350	F
5	Sycamore	5	4	9	4	9	EM	300	F
G1	Various	3	3	3	3	3	EM	200	F

Appendix 3 Comments and Root Protection Areas (RPA)

Tree No	Species	Remarks	BS 5837 Classification	Works Required	RPA (m ²)	RPA (M)
1	Oak	On woodland edge, low crown less than 3m	A1	Crown lift to 4m if excavation is to incur under the crown spread	163	7.2
2	Oak	9m from existing fenceline, reasonable form	A1	No works required	290	9.6
3	Ash	8m back from existing fenceline, cavity at 9m on south side of stem	B1	No works required	327	10.2
4	Cherry	Twin stemmed tree, overhanging site by 3m	B1	Crown lift to 4m by tip pruning	55	7.0
5	Sycamore	Group of 4 trees with fire damage on southern side of stems	C1	Crown lift to 4m by tip pruning	41	3.6
G1	Various	Group of Sycamore, Cherry, Birch and Ash within garden area, overhanging site by 3m	B2	No works required	18	2.4

Appendix 4 Tree Protection Plans

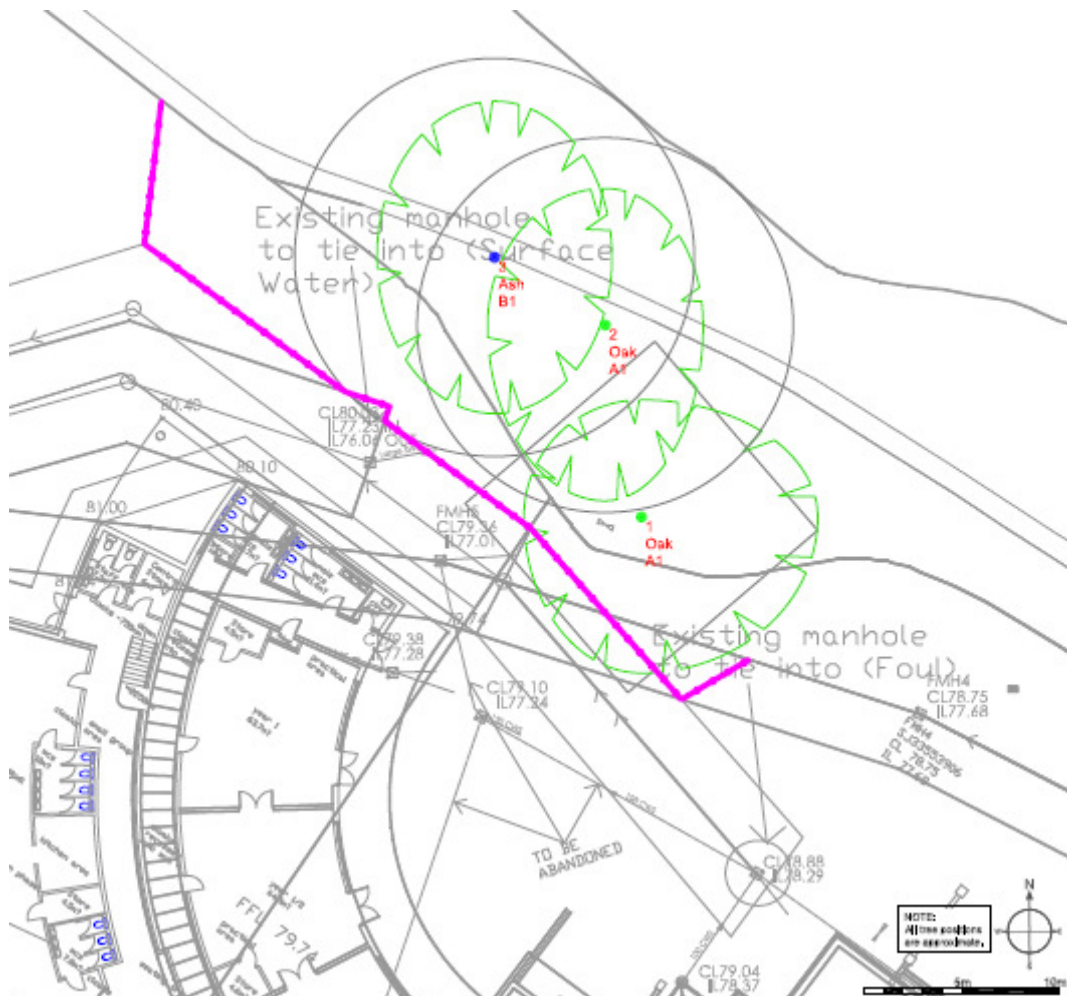


Fig 1 Tree Protection Plan for Drain run*

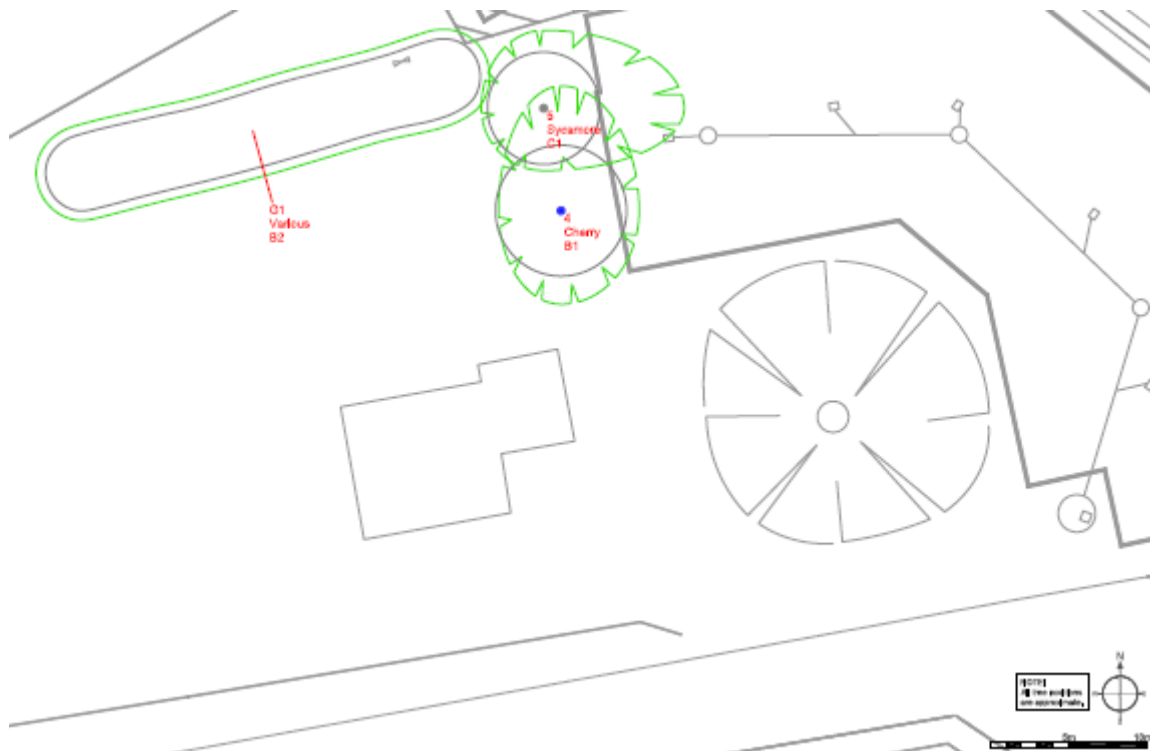


Fig2 Tree Constraints plan for car park area*

**Available electronically and to be read with previous report on adjacent Oak*



Fig 3 Tree Protection Plan for car park area

LIMITING CONDITIONS/DISCLAIMERS

Unless stated otherwise

1. The Service

1.1 Tree Health Consulting Ltd agrees to supply arboricultural consulting services of a preliminary nature or a more thorough service as advised or as commissioned.

2. Fees

2.1 The client(s) will settle the agreed fee in full, within 14 days of receiving the invoice. Reports will remain the property of Tree Health Consulting Ltd until full payment has been received. No liability is accepted for the contents of a report that is not paid in full. Any queries should be notified to Tree Health Consulting Ltd within 7 days of the invoice date.

2.2 If the client(s) fails to pay within the time specified in 2.1 then Tree Health Consulting Ltd shall charge the client(s) interest on the outstanding fee, both before and after any judgment, at the rate of 4% above the Midland Bank base rate, until payment is made in full (A part of a month being treated as a full month for the purposes of calculating interest).

2.3 In the event that it is necessary to recover any outstanding fees from the client(s), the client(s) will fully reimburse any costs and expenses incurred during the recovery period, including court costs. Tree Health Consulting Ltd reserves the right to make a charge for every letter sent and telephone/fax call made, in connection with the recovery.

2.4 Should the arboriculturist be unable to complete the site investigation as a result of conditions outlined in 3.5, then Tree Health Consulting Ltd will charge the client(s) the costs of travel and time spent.

3. Site Investigation

3.1 The scope of the site investigation is preliminary in nature, unless otherwise agreed with the client(s). Where a more detailed investigation is required, the client(s) will be advised accordingly.

3.2 No investigation will be made of any covered, inaccessible, or underground structures (unless specifically stated).

3.3 Investigation of Private Covenants is to be the responsibility of the client/landowner or agent.

3.4 Site investigations are undertaken by experienced and suitably qualified arboriculturists. Observations are taken from ground level only, within the curtilage of the site and public accessible areas, where this can be done safely and without undue difficulty. Binoculars are used where necessary. Tree heights, age range and future growth potential are approximate. Unless stated otherwise: 1) information contained within our reports covers only those trees that were examined and reflects the condition of those trees at the time of the inspection: and 2) 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.

3.5 During the site investigation if the arboriculturist considers their personal safety is at risk, or that they would breach the conditions of the Health and Safety at Work Act (1974), then they are entitled to abandon the investigation and advise the client(s) accordingly.

3.6 The inspection may require on-site soil profile analysis and excavation and we cannot be held responsible for damage to any underground services not made known to us by the client/landowner or agent.

3.7 Identification of fungi, insects, or tree disorders is based on field observations and does not include a laboratory analysis (unless specifically stated).

3.8 Soil profile samples are extracted using a hand auger. The identification of soil profile types and soil conditions is based on field observations. No samples are taken for laboratory analysis (unless specifically stated).

4. The Report

4.1 If any part of the report is lost, or altered without the written consent of Tree Health Consulting Ltd, then the entire report becomes invalid.

4.2 The general format of reports is a licensed/certified product and cannot be shown, copied or distributed to third parties without the permission of Tree Health Consulting Ltd. No liability is accepted for the contents of the report, other than to that of the client(s).

4.3 The report will purport not to express any opinion or comment as to the condition or structural integrity of any building and no reliance should be made on any such comments.

4.4 The report does not represent legal advice and no reliance should be placed on any such comments.

4.5 If tree/s are on neighbouring land, the tree owner is ultimately responsible and therefore we would advise that the neighbouring tree owner check with his/her insurance company in order to ascertain if adequate building insurance cover is available in the event of any claims arising from the action of the tree/s.

4.6. Trees are dynamic living organisms and constantly change; therefore, all trees to be retained on site should be further inspected every two years by a qualified Consulting Arboriculturist.

4.7. Scale drawings, technical land surveys and accurate tree plotting data will be supplied if necessary and at extra cost. Non-scale sketch plan drawings may be included as part of the report.

5. Insurance Cover

5.1 All work carried out by Tree Health Consulting Ltd is covered by a £5,000,000 Third Party, Public Liability insurance and a £500,000 professional Indemnity insurance.

6. Quality of Craftsmanship

6.1 When appointing a Tree Contractor, please use only suitably qualified and experienced companies (The Local Authority Tree Officer may be able to provide a select list of such companies) and always check that they carry Public and Products Liability Insurance with a minimum of £2 million cover and the relevant Employers Liability Insurance. All tree works must conform rigorously to BS 3998 (1989) 'Recommendations for Tree Work' and as modified by research more recent. Any stump treatment (poisons) must be carried out by a licensed chemical operative.

6.2 Tree Health Consulting Ltd will not accept liability for any works undertaken by any other companies, or contractors.

7. Statutory Provisions

7.1 Before authorising these, or any other tree works, you should contact your Local Planning Authority to ascertain if the trees are the subjects of any Tree Preservation Order or if they are within a Conservation Area, as if either applies, statutory permission will be required before any works can take place