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Gilmour School

Arboricultural Implication Study

March 2014

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DRAWING(S)

3006_102	Arboricultural Layout
3006_103	Tree Retention

APPENDICES

1	Spread Sheets
2	Method Statement

1.0 INTRODUCTION

1.01 A. C. S. Consulting is instructed by Mouchel Property to report on trees and the implications of development. The assessment and report was undertaken by Ian Murat, Registered Consultant of the Arboricultural Association.

1.02 In accordance with Guidance on information requirements and validation for planning applications, this report fulfils the recommended national list criteria for tree survey/arboricultural information. More specifically, it contains the following:

- *A full tree survey to the requirements of BS5837 (2012) Trees In Relation To Design, Demolition and Construction – Recommendations.*
- *A plan showing tree survey information, retention categorisation and root protection areas,*
- *An assessment of the arboricultural implications of development detailing trees to be retained/removed and appropriate protection measures,*
- *An arboricultural method statement detailing the means of tree protection, implementation and phasing of works.*

1.03 The site was visited in March 2014. A survey of the trees was completed recording; *species type, age, height, crown spread, diameter-at-breast-height, and condition*.

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2.0 BACKGROUND

The Site

2.01 The site comprises a level rectangular shaped parcel of land located in a residential area of South Liverpool.

Statutory Protection/Planning Policies

2.02 The application is subject to the saved Planning Policies of Liverpool City Council. The application will not be subject to National Planning Policy Framework. This document is only concerned with Veteran Trees which do not appear on this site. An examination of the council's online resources suggests the site is not located within a Conservation Area.

Policy HD22 applies.

HD22
1. In order to protect and integrate existing trees and landscape features within new developments, the City Council will:
i. require the retention of key ecological and natural site features, such as trees, hedges, walls and ponds;
ii. require the submission of a full independent tree survey to enable the effect of the proposal on the trees to be fully assessed;
iii. refuse planning permission for proposals which cause unacceptable tree loss, or which do not allow for the successful integration of existing trees identified for retention following consideration of the tree survey;
iv. require layouts to provide adequate spacing between existing trees and buildings, taking into account the existing and potential size of trees and their impact both above and below ground level; and
v. require retained trees and woodland to be protected and managed during construction, preventing all site works within the branch spread of any retained tree.
2. The City Council will protect existing trees and woodland areas by:
i. making tree preservation orders on trees or groups of trees, where appropriate;
ii. only allowing the removal of any protected tree in exceptional circumstances, such as where the tree is a danger to public safety or is diseased, and on condition that appropriate replacement planting takes place;
iii. ensuring the proper and beneficial management of trees and woodland areas in its ownership; and
iv. carrying out a review of existing Tree Preservation Orders.

3.0 TREE SURVEY

3.01 I have identified twenty-five individual trees and two groups. The group classification is intended to identify trees that form cohesive arboricultural features either aerodynamically, visually or culturally. A Constraints Plan was produced.

3.02 The tree data can be found at Appendix 1. There is no requirement in BS 5837 to repeat the details of the Constraints information save for confirming that the trees were surveyed for *species type, age, height, crown spread, diameter-at-breast-height, condition,* and their suitability for retention from ground level. Heights were measured with a Nikon Forestry 550 Hypsometer and diameters were taken, where possible, with a diameter tape to give an average stem measurement. Canopy spreads have been measured at the cardinal points or where they significantly extend in other directions.

Each tree has been assessed using the BS 5837 2012 category ratings (see Appendix 1). Consideration has been given to any Supplementary Planning Documents. The data collection is compliant with the advice set out at Subsection 4.4.2.5 of BS 5837:2012.

4.0 DEVELOPMENT IMPLICATIONS

4.01 The site comprises a level rectangular shaped parcel of land located in a residential area of South Liverpool.

Development Implications

4.02 The proposal includes three single-storey extensions to the existing Gilmour Infants School. The extensions will provide two additional classrooms, additional floor area to the existing staff room and additional floor area to the existing ICT classroom that will be converted to Reception Classroom. The floor areas of the extensions are 154 sqm, 9 sqm and 12 sqm respectively. Also the works will include new ramp to provide level access to the existing classrooms, new canopy to provide external covered play area and associated external works.

Whilst it is acknowledged that all trees within the planning process are a material consideration, it is generally accepted that those trees rated as C or U are excluded from consideration regarding development implications, retained only where they pose no constraint on development.

Based on the proposals, a number of implications were noted. These have been summarised in the table below:

Impact	Reason	A	B	C
Trees lost for development	Construction – new development/retaining wall	0	0	0
Retained trees that **may be** affected by disturbance	Construction – new development/retaining wall	0	0	0
Trees to be pruned	None	0	0	0

Loss for Development

There are no losses for development.

Retained Trees that May be Affected by Disturbance

None.

Trees to be Pruned

None.

Policy

4.03 The over-arching policy guidance in respect of the site is that contained within Liverpool's saved policy document. The application recognises that the retention of existing trees can add scale and maturity to the proposed development. The development in arboricultural terms, accords with the council's saved policies.

5.0 CONCLUSIONS

Summary

5.01 The application is described in detail in the submissions of Mouchel Property. In arboricultural terms, the development results in the loss of one tree that is exempt from planning control by virtue of its condition. Overall, the proposed development has a satisfactory relationship, retaining trees in good spatial positions giving scale and maturity as landscape features.

Conclusions

5.02 The applicant submits an Implication Study that accords with Central Government advice and the requirements of the Council in respect of Best Practice.

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ACS Consulting
March 2014

Appendix 1

CONTENTS

Key

BS5837: 2012

Tree Tables

KEY

Age	Y – Young: Out-planted trees that have not yet established SM – Semi-mature: Established trees up to 1/3 of expected height and crown EM – Early mature: Between 1/3 and 2/3 of expected height and crown M – Mature: Between 2/3 and full expected height and crown FM – Fully mature: Full expected height and crown OM – Over mature: Crown beginning to break-up and decrease in size S – Senescent: Crown in advanced stage of break-up
Physiological Condition	Good – Very few defects a reasonable long life expectancy depending on age class Adequate – Some defects giving the tree a shortened life expectancy Poor – Limited life with major problems
Structural Condition	Good – Very few defects Adequate – Some defects rectifiable with minor tree surgery Poor – Significant defects only rectifiable with major tree surgery or felling

Table 1 – Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)			Identification on Plan
Trees unsuitable for retention (see Note)				
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.	• Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other U category trees (i.e. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning). • Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline. • Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality. *NOTE Category U trees can have existing or potential conservation value which might be desirable to preserve; see 4.5.7*			RED
	1 Mainly arboricultural qualities	**2 Mainly landscape qualities**	**3 Mainly cultural values, including conservation.**	
Trees to be considered for retention				
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 essential components of groups, or of formal or semi-formal arboricultural features (e.g. the dormant 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)	GREEN
Category B **Tress of moderate quality** with an estimated remaining life expectancy of at least 20 years.	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation.	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality.	Trees with material conservation or other cultural value.	BLUE
Category C **Tress 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 benefits	GREY

Tree Ref No.	Species	Height M	Stem Diameter MM	Branch Spread M	Height of Crown Clearance M	Clear Branch Height M	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations/ Comments	Estimated Remaining Contribution Years	Category Grading
4073	Holly	8	250	N 2 E 2 S 2 W 2	3	3	EM	Good	Good	Located in landscaped area. Restricted root development. A tree of low quality and value in the landscape. Retain.	10+	C1/2
4074	Elm	14	440	N 3 E 4 S 3 W 4	5	5	M	Good	Good	Multi-stemmed. Restricted root development. A tree of moderate quality and value in the landscape. Retain	20+	B1/2
4075	Sycamore	6	120	N 3 E 3 S 3 W 3	2	2	SM	Good	Good	A tree of moderate quality and value in the landscape. Retain	20+	B1/2
4076	Holly	8	270	N 4 E 4 S 2 W 4	2	3	M	Good	Good	A tree of moderate quality and value in the landscape. Retain	20+	B1/2
4077	Lime	20	#700	N 6 E 6 S 6 W 8	4 (S)	5	FM	Good	Good	Dead wood up to 100mm in diameter - typical of species. Profusion of epicormic growth. Significant tree in the landscape. A tree of high quality and value in the landscape. Retain	40+	A1/2
4078	Holly	5	150	N 2 E 2 S 2 W 2	2	3	SM/EM	Good	Good	Suppressed by adjacent lime. A tree of low quality and value in the landscape. Retain	10+	C1/2

Tree Ref No.	Species	Height M	Stem Diameter MM	Branch Spread M	Height of Crown Clearance M	Clear Branch Height M	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations/ Comments	Estimated Remaining Contribution Years	Category Grading
4079	Prunus	3	100	N 1 E 1 S 1 W 1	0	0	SM	Good	Good	Weeping specimen. Topped. Stake and tie still attached. A tree of low quality and value in the landscape. Retain	10+	C1/2
4080	Holly	5	230	N 4 E 2 S 2 W 4	2	3	EM	Good	Good	A tree of moderate quality and value in the landscape. Retain	20+	B1/2
4081	Holly	6	M/S	N 1 E 2 S 1 W 2	2	2	SM/EM	Poor	Adequate/ Poor	Poor distribution of leaves. Multi-stemmed. Defective stem unions. A tree of low quality and value in the landscape. Retain	10+	C1/2
4082	Cherry	6	200	N 1 E 4 S 1 W 4	2	2	EM/M	Adequate/ Poor	Adequate	Twin stemmed. Defective stem union. Ooze. A tree of low quality and value in the landscape. Retain	10+	C1/2
4083	Sorbus	8	310	N 4 E 4 S 4 W 4	2	2	EM	Good	Adequate/ Poor	Restricted root development. Root severance to east. Multi-stemmed. Defective stem unions – typical of species. A tree of low quality and value in the landscape. Retain	10+	C1/2

Tree Ref No.	Species	Height M	Stem Diameter MM	Branch Spread M	Height of Crown Clearance M	Clear Branch Height M	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations/ Comments	Estimated Remaining Contribution Years	Category Grading
4084	Beech	19	980	N 6.5 E 10 S 10 W 10	5	10	FM	Good	Good	Restricted root development due to pavement and boundary wall. Dead wood due to natural branch suppression up to 50mm in diameter. Significant specimen. Crown asymmetry following removal of tree to the north. A tree of high quality and value in the landscape. Retain	40+	A1/2
4085	Cherry	5	75	N 1 E 1 S 1 W 1	0	0	SM	Good	Good	Group of self set trees. A group of low quality and value in the landscape. Retain	10+	C1/2
4086	Holly	5	150	N 2 E 2 S 2 W 2	1	1	SM/EM	Good	Good	A tree of low quality and value in the landscape. Retain	10+	C1/2
4087	Cherry	5	235	N 2 E 3 S 3 W 5	2	2	M	Poor	Poor	Old Ganoderma brackets on wound to north east. Poor distribution of buds and twigs. Suppressed. Large pieces of dead wood. Retain	<10	U
4088	Prunus	8	<250	N 3 E 3 S 3 W 3	1	1	EM	Good	Adequate	Group of 5 stems with sucker growth. A group of low quality and value in the landscape. Retain	10+	C1/2

Tree Ref No.	Species	Height M	Stem Diameter MM	Branch Spread M	Height of Crown Clearance M	Clear Branch Height M	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations/ Comments	Estimated Remaining Contribution Years	Category Grading
4089	Prunus	10	390	N 3 E 4 S 4 W 4	2	2	EM	Adequate	Poor	Twin stemmed. Significant defective stem union. Fused branches. A tree of low quality and value in the landscape. Retain	10+	C1/2
4090	Cherry	5	290	N 3 E 3 S 3 W 3	2	2	EM	Good	Good	Mediocre specimen. A tree of low quality and value in the landscape. Retain	10+	C1/2
4091	Pear	8	300 & 325	N 2 E 3 S 4 W 4	3	3	FM/OM	Poor	Poor	Surrounded by hard surfaces. Poor distribution of buds and twigs. In decline. Loss for condition.	<10	U
4092	Cherry	6	390	N 6 E 4 S 2 W 4	3	2	M	Adequate	Adequate	Extensive exposure of surface roots. Poor form. Stem injury with reasonable occlusion. A tree of low quality and value in the landscape. Retain	10+	C1/2
4093	Pear	5	310 & 320	N 3 E 2 S 2 W 3	2	2	FM	Adequate	Adequate	Mediocre specimens. Surrounded by hard surfacing. Of low quality and value in the landscape. Retain	10+	C1/2
4094	Pear	6	370	N 0 E 1 S 3 W 3	3	3	M	Adequate	Poor	Surrounded by hard surfaces. A number of large cavities. A tree of low quality and value in the landscape. Retain	10+	C1/2

Tree Ref No.	Species	Height M	Stem Diameter MM	Branch Spread M	Height of Crown Clearance M	Clear Branch Height M	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations/ Comments	Estimated Remaining Contribution Years	Category Grading
4095	Pear	6	265	N 2 E 1 S 2 W 3	2	2	FM	Adequate	Adequate	Surrounded by hard surfaces. A tree of low quality and value in the landscape. Retain	10+	C1/2
4096	Group	<21	655, 1055 & 580	N 10 E 10 S 12 W 6	6	6	FM	Good	Good	2 sycamores and 1 plane. Minor rippling of play surfaces. Significant specimens. A group of high quality and value in the landscape. Retain.	40+	A1/2
4097	Lime	20	590	N 10 E 5 S 6 W 8	6	6	FM	Good	Good	Slight lean. Lapsed pollard. Over mature re-growth. Past pruning. A tree of moderate quality and value in the landscape. Retain	20+	B1/2
4098	Plane	5	970	N <1 E <1 S <1 W <1	5	5	FM	Adequate	Poor	Pollarded at 5m. Recently undertaken with two years of re-growth. A tree of low quality and value in the landscape. Retain	10+	C1/2
4099	Lime	19	#700	N 6 E 3 S 6 W 6	9	9	FM	Good	Good	Profusion of epicormic growth to base. Epicormic growth on stem. Restricted root development. Extensively crown lifted over telephone wires. Significant in the landscape. A tree of high quality and value in the landscape. Retain.	40+	A1/2

Appendix 2

CONTENTS

Heads of Terms of an Arboricultural Method Statement

Heads of Terms of an Arboricultural Method Statement

Gilmour School

The purpose of this document is to serve as a live record of the Heads of Terms which are suggested for the proposed development. The Heads of Terms are in draft form and are therefore themselves subject to further discussion and/or agreement. Certain matters listed herein may alternatively be addressed satisfactorily by means of Condition. This requires detailed discussions with the LPA on the principle that conditions should always be used in the first instance as per government guidance.

The Draft Heads of Terms and obligations are as follows:-

Construction Exclusion Zone Fencing

- Timing for setting out, construction and completion of fencing generally in accordance with the phasing plan.
- Specification for fencing to be in accordance with BS 5837:2012.

Storage of Materials/Offices/Fuels

- Identification and reservation of land for storage of materials, parking of vehicles, location of offices and welfare facilities, fuels.

Services

- Location of services including sewerage, water, electricity.
-Timing of excavations where they pass within or close to retained trees in accordance with phasing plan.

Review/Site Inspection

- Review to be undertaken prior to the commencement of development to address: phasing and land uses.
- Arrangements for Review (monitoring).
- Review to allow for amendment / variation by agreement.

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