



Arboricultural Impact Assessment

in Relation to Proposed 88 Unit
Residential Development at



**Former United Utilities site,
Carr Lane, Prescott,
Merseyside, L34 1AX**

Prepared by:

Bowland 
Tree Consultancy Ltd

October 2023

**ARBORICULTURAL IMPACT ASSESSMENT
FORMER UNITED UTILITIES SITE, CARR LANE, PRESCOT**

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**ARBORICULTURAL IMPACT ASSESSMENT
FORMER UNITED UTILITIES SITE, CARR LANE, PRESCOT**

PROJECT DETAILS

Project No.: BTC2750

Site: Former United Utilities site, Carr Lane, Prescott, L34 1AX

Client: United Living Group

Council: Knowsley Metropolitan Borough Council

Survey Date: 4 July 2023

Surveyed by: Ryan Gledhill FdSc MArborA

Prepared by: Ryan Gledhill FdSc MArborA

Checked by: Phill Harris MSc BSc(Hons) HND MArborA CEnv MICFor

Date of Issue: 5 October 2023

Version No: 2

DISCLAIMER

Survey Limitations: Unless otherwise stated all trees are surveyed from ground level using non-invasive techniques. The disclosure of hidden crown and stem defects, in particular where they may be above a reachable height or where trees are ivy clad or in areas of ground vegetation, cannot therefore be expected. All obvious defects, however, are reported. Detailed tree safety appraisals are only carried out under specific written instructions. Comments upon evident tree safety relate to the condition of said tree at the time of the survey only.

Unless otherwise stated all trees should be re-inspected annually in order to appraise their on-going mechanical integrity and physiological condition. It should, however, be recognised that tree condition is subject to change, for example due to the effects of disease, decay, high winds, development works, etc. Changes in land use or site conditions (e.g. development that increases access frequency) and the occurrence of severe weather incidents are also significant considerations with regards tree structural integrity and trees should therefore be re-assessed in the context of such changes and/or incidents and inspected at intervals relative to identified and varying site conditions and associated risks.

Where trees are located wholly or partially on neighbouring private third-party land then said land is not accessed and our inspection is therefore restricted to what can reasonably be seen from within the site. Stem diameters of trees located on such land are estimated. Any subsequent comments and judgments made in respect of such trees are based on these restrictions and are our preliminary opinion only. Recommendations for works to neighbouring third-party trees are only made where a potentially unacceptable risk to persons and/or property has been identified during our survey. Where significant structural defects of third-party trees are identified and associated management works are considered essential to negate any risk of harm and/or damage then we will first attempt to inform the site occupier of the issues and, if not possible, then inform the relevant Council. Where a more detailed assessment is considered necessary then appropriate recommendations are set out in the Tree Survey Schedule.

Where tree stem locations are not included on the plan(s) provided then they are plotted at the time of the survey using, where appropriate and/or practicable, a combination of measurement triangulation and GPS co-ordination. Where this is not possible then locations are estimated. Restrictions in these respects are detailed in the report.

The tree survey and any report information provided is intended as a guide to identify key tree related constraints to site development only. As such, the potential influence of trees upon existing or proposed buildings or other structures resulting from the effects of their roots abstracting water from shrinkable load-bearing soils is not considered herein. The tree survey information in its current form should not therefore be considered sufficient to determine appropriate foundation depths for new buildings. Accordingly, an updated survey, with reference to the current NHBC Standards Chapter 4.2 - Building Near Trees, must therefore be prepared for the specific purpose of informing suitable foundation depths subsequent to planning approval being granted. The advice of a structural engineer must also be sought with regard to appropriate foundation depths for new buildings.

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Statutory Tree Protection: It is the client's responsibility to check for the presence of any statutory tree protection measures, such as the site's location within a Conservation Area and/or the presence of any Tree Preservation Orders, directly with the applicable Council's planning department prior to scheduling or carrying out any tree works. In turn, it is also the client's responsibility to check for the need for a felling licence with the Forestry Commission prior to scheduling or carrying out any tree works. Bowland Tree Consultancy Ltd cannot be held responsible for any decisions made by the client to prune or remove trees where any such statutory protection exists.

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Validity: The findings and recommendations contained within this report are, providing its recommendations are observed and the site conditions are retained as per the date(s) of the survey, valid for a period of twelve months from the last survey date. This period of validity may be reduced should there be any changes in factors affecting both the surrounding environment and/or built structures in relative proximity to the trees. The condition of trees should be re-appraised directly, through a site survey, following major weather events such as storms, changes undertaken to the site's conditions, inclusive of demolition and/or ground works, or the removal of existing site vegetation, including trees.

TREE SURVEY SCHEDULE FOR ARBORICULTURAL IMPACT ASSESSMENT			
Site:	Former United Utilities site, Carr Lane, Prescott, Merseyside, L34 1AX		
Client:	United Living Group		

Surveyor:	Ryan Gledhill FdSc MArborA & Joe Lambert Chartered Arboriculturist
Survey Date:	4 July 2023
Job Reference:	BTC2750

No.	Species	Height	Stem Diam.	Branch Spread	Branch & Canopy Clearances	Life Stage	PC	General Observations and Comments	Management Recommendations	ERC	Cat. Grade	RPA (m²)	RPA Radius (m)	
T1	Sycamore	14	2x400 (ts)#	N E S W	5 5 5 5	3-W 2	EM	G	- Unable to access due to dense vegetation. - Viewed from southern boundary of wetland area. - Limited visibility due to distance of inspection. - Appears to be twin-stemmed and bifurcates from base.	- Remove tree to develop site as proposed. - Compensate for tree's removal through provision of new tree planting as component of a landscaping scheme, in agreement with Local Planning Authority (LPA).	20+	B1	145	6.79
T2	Silver Birch	14	370	N E S W	3 4 3 3	1.7 2	EM	M	- Located within rubble and debris pile from previous demolition works. - Significant canopy suppression east by neighbouring trees. - Signs of a significant reduction in vitality and twig dieback.	- Retain tree in context of proposed development. - Ensure protection of tree's Root Protection Area (RPA) (see Tree Impact Plan (TIP)) throughout development through establishment of a Construction Exclusion Zone (CEZ) in accordance with appended specification. - NB: Tree's protection during development can be assured through imposition of a suitably worded condition attached to a planning approval requiring provision of and adherence to a site and development specific Arboricultural Method Statement (AMS) and Tree Protection Plan (TPP).	10+	C1	62	4.44
T3	Crack Willow	19	800#	N E S W	7 10 13 7	3-E 0.5	M	M	- Unable to access due to dense understory vegetation preventing a clear visual tree inspection. - Tree was subsequently viewed from public footpath west. - Tree bifurcates at a height of 4m. - Full stem failure of eastern leader at a height of 5m. - Arisings have subsequently damaged boundary fence. - Signs of additional failures of primary and secondary branches. - Tree is evidently exhibiting signs of age-related decline.	Remove tree due to poor structural condition and limited future potential.	<10	U	290	9.6

Headings and Abbreviations:

No.	Allocated sequential reference number - Tree ('T'), Group ('G'), Woodland ('W') or Hedge ('H') reference number - refer to plan and to numbered tags where applicable
Species:	Common name
Height:	In metres, to half nearest metre – where possible approximately 80% are measured using an electronic clinometer and the remainder estimated against the measured trees. In the case of Groups and Woodlands the measurement listed is that of the highest tree
Stem Diam.:	Stem diameter in millimetres, to nearest 10mm - measured and calculated as per Annex C of BS5837:2012. MS = multi-stemmed, TS = twin-stemmed
Branch Spread:	Crown radius measured (or estimated where considered appropriate) from the four cardinal points (north, east, south and west) to give an accurate visual representation of the crown
Branch & Canopy Clearances:	Existing height above ground level, in metres, of first significant branch and direction of growth (e.g. 2.5-N) and of canopy at lowest point – to inform on crown to height ratio, potential for shading, etc.
Life Stage:	Estimated age class - Y = young, SM = semi-mature, EM = early-mature, M = mature, PM = post-mature
PC:	Physiological Condition - a measure of the tree(s)' overall vitality, i.e. D = Dead, MD = Moribund, P = Poor, M = Moderate, G = Good
General Observations and Comments:	Comments relating to the tree(s)' overall condition and any other pertinent factors including structural defects, current and potential direct structural damage, physiological decline, poor form, etc.
Management Recommendations:	Either Preliminary or In Consideration of the Proposal - In the case of Arboricultural Constraints Surveys the recommended management works only take existing site and tree circumstances and conditions into account and not proposed developments. Arboricultural Impact Assessment and Method Statement related Surveys take the proposed development into consideration with recommendations made accordingly. More than one option may be given if considered appropriate
ERC:	Estimated Remaining Contribution - in years as per BS5837:2012 (i.e. <10, 10+, 20+, 40+)
Cat. Grade:	Category Grading - tree retention value listed as U, A, B or C - in accordance with BS5837:2012 Table 1
RPA m²:	Root Protection Area in m² - calculated area around the tree that must be appropriately protected throughout the development process in order avoid root damage
RPA Radius (m):	Root Protection Area Radius - in metres measured from the centre of the stem to the line of tree protection
# (Estimated Dimensions):	Where trees are located off-site, or are inaccessible for any other reason, and accurate measurements or other information cannot be taken then the information provided is estimated and is duly suffixed with a "# symbol

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T4	Crack Willow	20	1x900 1x790 (ts)	N 7 E 10 S 7 W 6	1.5-E 2	M	M	- Bifurcates at base. 2m x 150mm area of partially occluded bark damage. - Several secondary branch failures to a diameter of approximately 250mm east, with arisings currently on boundary fence line. - Numerous instances of longitudinal bark fractures within primary and secondary branch architecture. - Hanging branch at a height of approximately 12m, to a diameter of 120mm.	- Retain tree in context of proposed development. - Ensure protection of tree's RPA (see TIP) throughout development through establishment of CEZ in accordance with appended specification. - Tree contractor to remove hanging branch at a height of 12m, remove arisings from boundary fence line and remove western primary branch at a height of 3m, to a diameter of approximately 320mm, exhibiting longitudinal fracture approximately 8m in length and 200 mm in diameter. - NB: Tree's protection during development can be assured through imposition of a suitably worded condition attached to a planning approval requiring provision of and adherence to a site and development specific AMS and TPP.	10+	C1	649	14.37
T5	Crack Willow	18	6x600 (ms)#	N 6 E 6 S 6 W 6	3-S 8	M	M	- Unable to access due to dense understorey vegetation and possible location of mine shaft, preventing a clear visual tree assessment. - Tree was subsequently viewed from public footpath west. - Multiple leaders form base. - Signs of a significant stem cavity to central leader. - Significant canopy gap north and south, indicative of historic loss of central leader.	- Retain tree in context of proposed development. - Ensure protection of tree's RPA (see TIP) throughout development through establishment of CEZ in accordance with appended specification. - Install acoustic fencing within RPA using special construction methods as part of site landscaping following completion of main construction phase and removal of temporary protective fencing (see TIP). - NB: Tree's protection during development can be assured through imposition of a suitably worded condition attached to a planning approval requiring provision of and adherence to a site and development specific AMS and TPP.	10+	C1	707	15

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T6	Hybrid Black Poplar	16	550	N 8 E 6 S 4 W 5	2-E 1	SM	M	- Situated on eastern side of dry ditch with approximately 1m drop. - Slight stem lean west. - Numerous dead branches west, up to approximately 150mm diameter within lower canopy. - Pruning wounds over highway averaging 100mm diameter. - Open spreading crown.	- Retain tree in context of proposed development. - Ensure protection of tree's RPA (see TIP) throughout development through establishment of CEZ in accordance with appended specification. - Construct proposed hard-surfaced footpath, where it encroaches into RPA, in accordance with s7.4 of BS5837:2012 using a 3d cellular confinement system, using appropriate hand-held tools in accordance with s7.2 & s7.3 of BS5837:2012 and in accordance with manufacturer's detailed method statement and design, including detailed level information. - NB: Tree's protection during development can be assured through imposition of a suitably worded condition attached to a planning approval requiring provision of and adherence to a site and development specific AMS and TPP.	10+	C1	137	6.6
T7	Hybrid Black Poplar	17.5	750	N 5 E 7 S 8.5 W 5	5-S 4	M	M	- Soil raised and path installed immediately north of stem as part of highway alteration works associated with adjacent residential development. - Lower stem covered with climbing Honeysuckle. - Unable to access or view stem base due to dense bramble, close board fencing and Honeysuckle. - Large 300mm diameter pruning wound with decay to stem at approximately 2m height. - Stem bifurcates at approximately 3m height. - Primary branch of approximately 350mm diameter previously removed at 2m west, now largely obscured but decay evident. - Further partially occluded pruning wounds to 250mm diameter up stem, with evident decay pockets indicating likely connecting internal decay column. - Multiple branches up to 200mm diameter failed to north-east of canopy. - Approximately 250mm diameter branch at approximately 8m height over road on east side has sustained secondary branch failure with resultant 150mm wide x 1m long wound at 3m distance from stem.	Remove tree due to poor structural condition and subsequent risk of harm to third party road and path users upon further branch/stem failures.	10+	U	254	9

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T8	Common Hawthorn	7	1x160 1x120 1x100 (ms)	N E S W	3 2.5 2.5 2	0.5 1.5	SM		▪ Ground levels raised by approximately 1m approximately 1.5m north of stem beyond boundary fence as part of highway alterations associated with adjacent development. ▪ Stem trifurcates at a height of approximately 0.5m with tight included bark union. ▪ Stem of approximately 160mm diameter arising to south-east has been removed at 0.5m height with a 300mm long stub remaining.	▪ Remove tree to develop site as proposed. ▪ Compensate for tree's removal through provision of new tree planting as component of a landscaping scheme, in agreement with LPA.	10+	C1	23	2.68
T9	Sycamore	12	240	N E S W	2 3 2.5 2	3 2	SM	G	▪ Stem wound of approximately 150mm diameter at 4m height on east side, which has partially occluded just below tight bifurcation point.	▪ Retain tree in context of proposed development. ▪ Ensure protection of tree's RPA (see TIP) throughout development through establishment of CEZ in accordance with appended specification. ▪ Construct proposed hard-surfaced footpath, where it encroaches into RPA, in accordance with s7.4 of BS5837:2012 using a 3d cellular confinement system, using appropriate hand-held tools in accordance with s7.2 & s7.3 of BS5837:2012 and in accordance with manufacturer's detailed method statement and design, including detailed level information. ▪ NB: Tree's protection during development can be assured through imposition of a suitably worded condition attached to a planning approval requiring provision of and adherence to a site and development specific AMS and TPP.	10+	C1	26	2.88
T10	Common Elder	5	80#	N E S W	2 2 1 1	N/A 0	SM	MD	▪ Located in dense bramble and subsequently not accessed to inspect. ▪ Largely dead.	▪ Remove tree due to evident poor physiological condition and short remaining life expectancy.	<10	U	17	2.35
T11	Sycamore	11	1x250 1x210 (ts)	N E S W	3 4.5 3 0	0.6 2	SM	G	▪ Moderately severe stem lean south-east. ▪ Stem in contact with concrete manhole cover at 300mm height, which is causing contact damage to stem. ▪ Stem likely to cause displacement of concrete structure through future incremental growth.	▪ Remove tree due to ongoing structural displacement of adjacent manhole and subsequent limited future potential.	<10	U	48	3.92

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T12	Sycamore	12	260	N 3 E 3 S 5 W 3	2.5 2	SM	G	- Slight stem lean east from ground level. - Moderately severe squirrel damage to bark in upper canopy.	- Retain tree in context of proposed development. - Ensure protection of tree's RPA (see TIP) throughout development through establishment of CEZ in accordance with appended specification. - NB: Tree's protection during development can be assured through imposition of a suitably worded condition attached to a planning approval requiring provision of and adherence to a site and development specific AMS and TPP.	10+	C1	31	3.12
T13	Common Lime	8	200	N 2.5 E 2 S 1.5 W 2.5	2 2	SM	G	- Part of moderately spaced group of Limes extending north and west around perimeter of roundabout. - Minor encroachment below streetlight. - Not projected to be impacted by proposed development works.	Retain tree in context of proposed development.	20 +	B1	18	2.4
G1	1no. Common Laburnum, 1no. Common Hawthorn	≤ 6	≤ 330	N ≤ 2 E ≤ 2 S ≤ 2 W ≤ 2	1.5-N ≥ 1	SM	M	- Close spaced pair. - Instances of acute primary and secondary unions. - Minor deadwood to a diameter of 60mm. - Significant mutual suppression.	- Remove group to develop site as proposed. - Compensate for group's removal through provision of new tree planting as component of a landscaping scheme, in agreement with Local Planning Authority (LPA).	10+	C2	≤ 49	≤ 3.96
G2	1no. Goat Willow, 1no. Silver Birch	≤ 11	≤ 370	N ≤ 4 E ≤ 4 S ≤ 4 W ≤ 4	3-S ≥ 1	SM	M-G	- Close spaced pair. - Silver Birch bifurcates at base. - Minor deadwood to a diameter of approximately 60mm. - Several instances of secondary branch failures to a diameter of approximately 80mm. - Goat Willow bifurcates at 3m. - Primary union exhibiting signs of displacement within junction holding wood.	- Remove group to develop site as proposed. - Compensate for group's removal through provision of new tree planting as component of a landscaping scheme, in agreement with Local Planning Authority (LPA).	10+	C2	≤ 62	≤ 4.44
G3	2no. Elder, 1no. Hybrid Black Poplar	≤ 6	≤ 150	N ≤ 1 E ≤ 1 S ≤ 1 W ≤ 1	1 ≥ 1	Y	D-M	- Central tree is evidently dead. - Group growing from rubble pile. - Limited future potential.	Remove group due to poor physiological and structural condition.	<10	U	≤ 10	≤ 1.8

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G4	Goat Willow, Silver Birch, Field Maple, Lilac	≤ 11	≤ 200	N ≤ 4 E ≤ 4 S ≤ 4 W ≤ 4	1.5-E ≥ 1	Y-SM	M-G	- Closely spaced group. - Heavy mutual suppression. - Significant canopy conflicts.	- Remove one tree form group to facilitate installation of acoustic fence. - Retain remaining group in context of proposed development. - Ensure protection of group's RPA (see TIP) throughout development through establishment of CEZ in accordance with appended specification. - NB: Group's protection during development can be assured through imposition of a suitably worded condition attached to a planning approval requiring provision of and adherence to a site and development specific AMS and TPP.	10+	C2	≤ 18	≤ 2.4
G5	7no. Sycamore	≤ 14	≤ 450	N ≤ 5 E ≤ 5 S ≤ 5 W ≤ 5	2.5-S ≥ 2.5	SM-EM	M-G	- Moderate spaced group. - Growing on watercourse embankment. - Viewed from adjacent footpath due to unsafe terrain. - Significant mutual suppression. - Instances of acute primary unions, subsequent of suppressed growth.	- Retain group in context of proposed development. - Ensure protection of group's RPA (see TIP) throughout development through establishment of CEZ in accordance with appended specification. - Install acoustic fencing within RPA using special construction methods as part of site landscaping following completion of main construction phase and removal of temporary protective fencing (see TIP). - NB: Group's protection during development can be assured through imposition of a suitably worded condition attached to a planning approval requiring provision of and adherence to a site and development specific AMS and TPP.	10+	C2	≤ 92	≤ 5.4
G6	Goat Willow, Common Alder, Silver Birch	≤ 6	≤ 150	N ≤ 1.5 E ≤ 1.5 S ≤ 1.5 W ≤ 1.5	1 ≥ 1	Y-SM	M-G	- Close spaced group of self-seeded trees and scrub throughout the centre of the site. - Numerous stands of Japanese Knotweed identified within the southern extents of the group.	- Remove group to develop site as proposed. - Compensate for group's removal through provision of new tree planting as component of a landscaping scheme, in agreement with Local Planning Authority (LPA). - Contractor to treat and remove stands of Japanese Knotweed.	10+	C2	≤ 10	≤ 1.8

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G7	approx. 16no. Sycamore, Ash, Rowan	≤ 10	≤ 250	N ≤ 3 E ≤ 4 S ≤ 3 W ≤ 2.5	1-S ≥ 1	Y	M	- Mostly suppressed self-seeded group with poor form. - On southern side of brook and on banking.	- Retain group in context of proposed development. - Ensure protection of group's RPA (see TIP) throughout development through establishment of CEZ in accordance with appended specification. - NB: Group's protection during development can be assured through imposition of a suitably worded condition attached to a planning approval requiring provision of and adherence to a site and development specific AMS and TPP.	10+	C1	≤ 28	≤ 3
G8	2no. Sycamore	≤ 5	≤ 50	N ≤ 4.5 E ≤ 5 S ≤ 2 W ≤ 4	2-E ≥ 2	SM	M	- Self-seeded group on edge of brook. - Suppressed growth with deadwood in lower crown. - Exposed roots due to brook.	- Retain group in context of proposed development. - Ensure protection of group's RPA (see TIP) throughout development through establishment of CEZ in accordance with appended specification. - NB: Group's protection during development can be assured through imposition of a suitably worded condition attached to a planning approval requiring provision of and adherence to a site and development specific AMS and TPP.	10+	C1	≤ 55	≤ 4.2
G9	4no. Hornbeam 'Fastigiata'	≤ 3.5	≤ 60#	N ≤ 0.25 E ≤ 0.25 S ≤ 0.25 W ≤ 0.25	N/A ≥ 1	Y	M	- Closely spaced group evidently planted as part of adjacent residential development. - All have bark wounds and poor/defective staking and guarding.	- Retain group in context of proposed development. - Ensure protection of group's RPA (see TIP) throughout development through establishment of CEZ in accordance with appended specification. - NB: Group's protection during development can be assured through imposition of a suitably worded condition attached to a planning approval requiring provision of and adherence to a site and development specific AMS and TPP.	10+	C1	≤ 2	≤ 0.72

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G10	4no. Sycamore	≤ 12	≤ 1x220 1x100 (ts)#	N E S W	≤ 2.5 ≤ 2.5 ≤ 2.5 ≤ 2.5	N/A ≥ 1	SM	G	- Not accessed due to dense brambles and undergrowth. - Multiple branches and tight unions from between ground level and 1.2m height. - Moderate stem leans. - Three trees to east are in relatively close proximity to perimeter fence.	- Retain group in context of proposed development. - Ensure protection of group's RPA (see TIP) throughout development through establishment of CEZ in accordance with appended specification. - Construct proposed hard-surfaced vehicle access and footpath, where it encroaches into RPA, in accordance with s7.4 of BS5837:2012 using a 3d cellular confinement system, using appropriate hand-held tools in accordance with s7.2 & s7.3 of BS5837:2012 and in accordance with manufacturer's detailed method statement and design, including detailed level information. - NB: Group's protection during development can be assured through imposition of a suitably worded condition attached to a planning approval requiring provision of and adherence to a site and development specific AMS and TPP.	10+	C1	≤ 26	≤ 2.9

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No.	Species	Height	Stem Diam.	Branch Spread	Branch & Canopy Clearances	Life Stage	PC	General Observations and Comments	Management Recommendations	ERC	Cat. Grade	RPA (m²)	RPA Radius (m)	
G11	Alder, Birch, Buddlea, Dogwood, Oak, Pine, Sycamore	≤ 10	≤ 330	N E S W	≤ 3 ≤ 3 ≤ 3 ≤ 3	N/A ≥ 0	SM	G-D	- Very closely spaced group of planting to south of roundabout, outside site boundary, on moderately steep south facing slope. - Not fully accessed due to barbed wire, broken glass, debris and dense undergrowth. - Evidently recently constructed macadam pavement 3.5m wide to north with concrete kerbs as part of highway alteration works within 2m of northern most stems and several bark scrapes from mechanical machinery. - Canopies pruned and cleared back to path edge and raised to 3m height over new footpath and to clear sightlines to roundabout. - Two Birch in group are dead and stakes and ties occluding into Pine stems at approximately 0.5m height and restricting incremental growth. - Mutual suppression of trees within group and suppression by larger Poplars to south with resulting poor forms. - Two pines have tight included bark unions at approximately 2m height and all have branch stubs of 60mm diameter and up to 1m long from clearance works to adjacent footpath.	- Retain group in context of proposed development. - Ensure protection of group's RPA (see TIP) throughout development through establishment of CEZ in accordance with appended specification. - Removal of approximately 10 young trees required to facilitate construction of proposed footpath. NB: Consulting arborist to advise contractors of extent of required tree removals during on site pre-development meeting. - Construct proposed hard-surfaced footpath, where it encroaches into RPA, in accordance with s7.4 of BS5837:2012 using a 3d cellular confinement system, using appropriate hand-held tools in accordance with s7.2 & s7.3 of BS5837:2012 and in accordance with manufacturer's detailed method statement and design, including detailed level information. - Recommend tree contractor to crown lift boundary trees to a height of 3m and undertake silvicultural thinning works and formative pruning to group extents to prevent suppression of better-quality specimens within, and to remove redundant stakes and ties to prevent further stem damage. - NB: Group's protection during development can be assured through imposition of a suitably worded condition attached to a planning approval requiring provision of and adherence to a site and development specific AMS and TPP.	10+	C2	≤ 49	≤ 1.68
G12	Common Hornbeam	≤ 3.5	≤ 140	N E S W	≤ 0.5 ≤ 0.5 ≤ 0.5 ≤ 0.5	2 ≥ 2	SM	G	- Maintained canopies into 1m cubes as ornamental planting on roundabout. - Not projected to be impacted by proposed development works.	Retain group in context of proposed development.	20+	C2	≤ 9	≤ 1.68

TREE SURVEY SCHEDULE FOR ARBORICULTURAL IMPACT ASSESSMENT							
Site: Former United Utilities site, Carr Lane, Prescott, Merseyside, L34 1AX							
Client: United Living Group							

Surveyor:	Ryan Gledhill FdSc MArborA & Joe Lambert Chartered Arboriculturist
Survey Date:	4 July 2023
Job Reference:	BTC2750

No.	Species	Height	Stem Diam.	Branch Spread	Branch & Canopy Clearances	Life Stage	PC	General Observations and Comments	Management Recommendations	ERC	Cat. Grade	RPA (m²)	RPA Radius (m)
G13	Alder, Birch Pine etc.	≤ 10	≤ 170#	N ≤ 2 E ≤ 2 S ≤ 2 W ≤ 2	N/A ≥ 0	Y-SM	M-G	- Located on neighbouring land, therefore not accessed to inspect in detail. - Very closely spaced group. - Macadam footpath installed within 1m of stems on south-west side. - Debris within group including rubble around some stems. - Mutual suppression with resulting poor forms. - Not projected to be impacted by proposed development works.	Retain group in context of proposed development.	10+	C2	≤ 13	≤ 2.04
G14	approx. 2no. Goat Willow	≤ 8	≤ 1x120 2x100 (ms)#	N ≤ 3 E ≤ 3 S ≤ 2 W ≤ 1	N/A ≥ 0	SM	G	- Self-set pair north of palisade fence on neighbouring land, and subsequently not accessed or inspected in detail. - Located at base of soil mound and in contact with fence with likely future displacement through further incremental stem and canopy growth. - Not projected to be impacted by proposed development works.	Retain group in context of proposed development.	<10	U	≤ 16	≤ 2.23
G15	4no. Hybrid Black Poplar	≤ 19	≤ 680#	N ≤ 6.5 E ≤ 6.5 S ≤ 9 W ≤ 6.5	5 ≥ 0.5	M-PM	P	- Widely spaced linear group continuing west. - Not fully inspected due to location in dense vegetation and western sections located outside survey extents. - Multiple unoccluded and partially occluded pruning wounds on all trees. - Branch epicormics on all trees. - Overall poor condition and expressing significant reductions in vitality. - Newly installed chain link fence also in contact with stem on south side. - Short projected remaining life expectancies of less than 10 years.	Remove group due to risk of branch and/or stem failures.	<10	U	≤ 209	≤ 8.16

TREE SURVEY SCHEDULE FOR ARBORICULTURAL IMPACT ASSESSMENT			
Site:	Former United Utilities site, Carr Lane, Prescott, Merseyside, L34 1AX		
Client:	United Living Group		

Surveyor:	Ryan Gledhill FdSc MArborA & Joe Lambert Chartered Arboriculturist
Survey Date:	4 July 2023
Job Reference:	BTC2750

No.	Species	Height	Stem Diam.	Branch Spread		Branch & Canopy Clearances	Life Stage	PC	General Observations and Comments	Management Recommendations	ERC	Cat. Grade	RPA (m²)	RPA Radius (m)
W1	Crack Willow, Goat Willow, Sycamore, Silver Birch, Hawthorn	≤ 20	≤ 800#	N E S W	≤ 7 ≤ 7 ≤ 7 ≤ 7	2 ≥ 2	Y-M	M-G	- Close spaced group of mixed Broadleaf Species. - Part of wider woodland area and public parkland, predominantly viewed from neighbouring public park west due to dense understory vegetation preventing access. - Instances of boundary Sycamore trees enveloping security mesh fencing. - Evident signs of significant branch fractures within Crack Willow population, currently a low risk to persons occupying park.	- Retain woodland in context of proposed development. - Ensure protection of woodland's RPA (see TIP) throughout development through establishment of CEZ in accordance with appended specification. - Construct proposed hard-surfaced footpath, where it encroaches into RPA, in accordance with s7.4 of BS5837:2012 using a 3d cellular confinement system, using appropriate hand-held tools in accordance with s7.2 & s7.3 of BS5837:2012 and in accordance with manufacturer's detailed method statement and design, including detailed level information. - Install acoustic fencing within RPA using special construction methods as part of site landscaping following completion of main construction phase and removal of temporary protective fencing (see TIP). - Tree contractor to remove north trees that have enveloped the boundary security fencing. - NB: Woodland's protection during development can be assured through imposition of a suitably worded condition attached to a planning approval requiring provision of and adherence to a site and development specific AMS and TPP.	20+	B2	≤ 290	≤ 9.6

BS5837:2012 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 category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) - Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline - Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality <i>Note: Category U trees can have existing or potential conservation value which it might be desirable to preserve; see BS5837:2012 paragraph 4.5.7.</i>			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 those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	Green
Category B Those of moderate quality and value: those in such a condition as to make a significant contribution. A minimum of 20 years is suggested.	Trees that might be included in the high category, but are downgraded because of impaired condition. Examples include the presence of remediable defects including unsympathetic past management and minor storm damage	Trees present in numbers, usually as groups or woodlands, so they form distinct landscape features which attract a higher collective rating than they might as individuals. But which are not, individually, essential components of formal or semi-formal arboricultural features. For example, trees of moderate quality within an avenue that includes better, A category specimens. Or trees which are internal to the site, therefore individually having little visual impact on the wider locality	Trees with clearly identifiable conservation or other cultural benefits	Blue
Category C Those trees of low quality and value: currently in adequate condition to remain until new planting could be established - a minimum of 10 years is suggested - or young trees with a stem diameter below 150 mm	Trees not qualifying in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater landscape value, and/or trees offering low or only temporary screening benefit	Trees with very limited conservation or other cultural benefits	Grey
	Note – Whilst C category trees will usually not be retained where they would impose a significant constraint on development, young trees with a stem diameter of less than 150mm should be considered for relocation			

- TEMPORARY PROTECTIVE FENCING & GROUND PROTECTION SPECIFICATION -

Construction Exclusion Zones (CEZs), shall be enclosed by **Temporary Protective Fencing** and/or, where necessary, **Temporary Ground Protection Measures**. The fencing/ground protection Type(s), locations, and extents shall be agreed, in writing, with the Local Planning Authority (LPA). In turn, the **Temporary Protective Fencing** and/or **Temporary Ground Protection Measures** shall:

1. be constructed as in accordance with the Type 1, Type 2 or Type 3 'Temporary Protective Fencing Construction' sections and, where applicable the 'Temporary Ground Protection Measures' section, as detailed herein and agreed, in advance with the LPA;
2. be retained in place throughout the development process until completion of the project, and only removed following receipt of written permission from the LPA;
3. be sited in the area(s) defined by the Root Protection Areas on the associated Tree Impact Plan, or as the CEZs on the Tree Protection Plan;
4. be erected prior to any construction, demolition or excavation works and remain in place for the duration of the project;
5. preclude any delivery of site accommodation and/or materials and/or plant machinery;
6. preclude all construction related activity, with the sole exception of specified arboricultural works and any other works to be carried out under supervision that have been agreed by all parties;
7. preclude the storage of all development related materials and substances including fuels, oils, additives, cement and/or any other deleterious substance; and
8. be affixed with a 600mm x 300mm warning sign reading "TREE PROTECTION AREA KEEP OUT" (see Figure 1, below), at every 10.0 metre length of protective fencing.
9. Important: Any incursion into CEZs must be by prior arrangement, following consultation with the LPA.

Figure 1: CEZ Warning Sign

**- TREE PROTECTION AREA –
KEEP OUT!**

(TOWN & COUNTRY PLANNING ACT 1990)

**THE TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING
CONDITIONS AND/OR SUBJECTS OF A 'TREE PRESERVATION ORDER',
THE CONTRAVENTION OF WHICH MAY LEAD TO CRIMINAL
PROSECUTION**

THE FOLLOWING MUST BE OBSERVED BY ALL PERSONNEL:

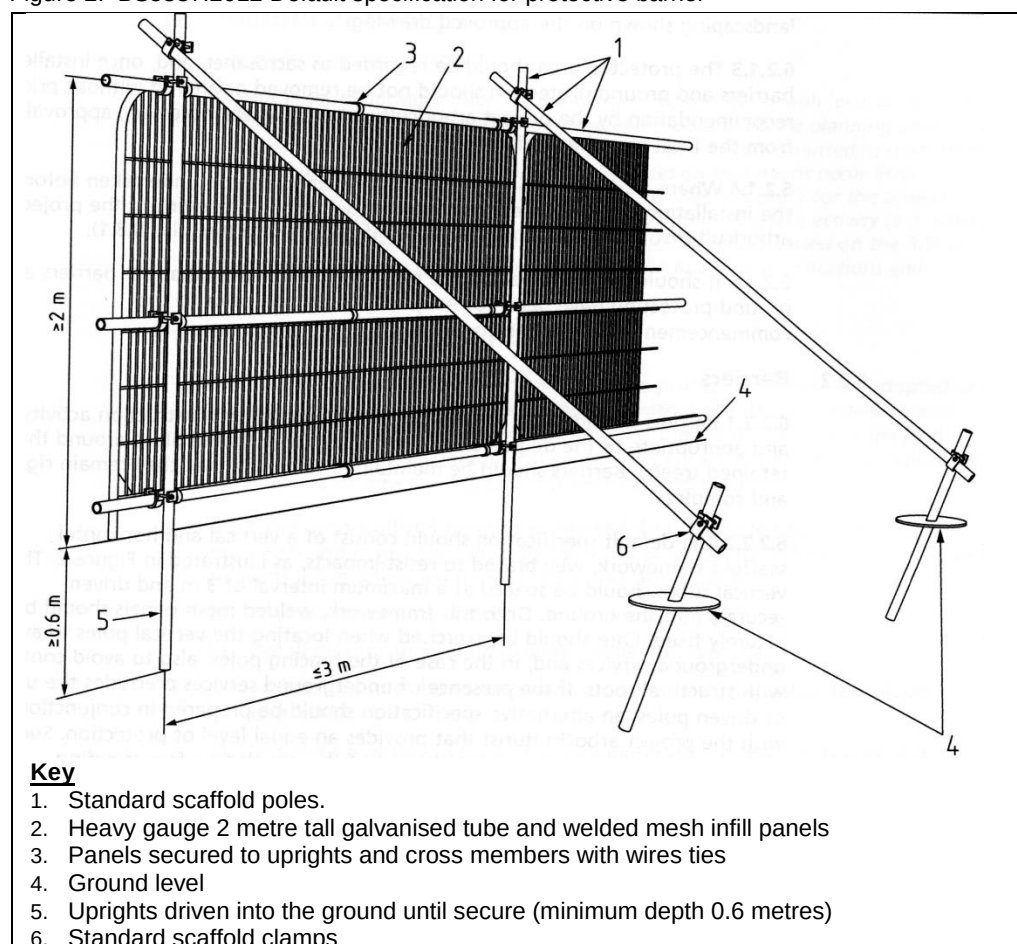
- THE PROTECTIVE FENCING MUST NOT BE MOVED
- NO PERSON SHALL ENTER THE CONSTRUCTION EXCLUSION ZONE
- NO MACHINE, PLANT OR VEHICLES SHALL ENTER THE EXCLUSION ZONE
- NO MATERIALS SHALL BE STORED IN THE EXCLUSION ZONE
- NO SPOIL SHALL BE DEPOSITED IN THE EXCLUSION ZONE
- NO EXCAVATION SHALL OCCUR IN THE EXCLUSION ZONE
- NO FIRES SHALL BE LIT IN THE EXCLUSION ZONE

**ANY INCURSION INTO THE EXCLUSION ZONE MUST BE WITH THE
WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY**

Type 1 (i.e. 'Default') Temporary Protective Fencing Construction (see Figure 2, below)

1. Temporary protective fencing panels shall be weldmesh "Heras" panels of at least 2.0 metres in height.
2. The panels shall butt together and be securely fixed to a scaffold framework, as per points 3 to 5 of Figure 2, overleaf.
3. The scaffold framework shall comprise of upright poles of at least 3.0 metres in length driven no less than 0.6 metres into the ground at maximum 3.0 metre centres with horizontal and diagonal poles fixed to the uprights, as per points 4 to 5.
4. The two horizontal rail poles shall be attached to the uprights at heights of 0.6 and 1.8 metres with 3 no. clamps to each joint.
5. The diagonal scaffold pole struts be clamped to the top rail of the scaffold framework at a 45° angle and extend back into the CEZ and clamped to a 0.7 metre length of scaffold tube that shall be driven no less than 0.5m into the ground.
6. No fixing shall be made to any tree and all possible precautions shall be taken to prevent damage to tree roots when locating posts.
7. A 600mm x 300mm warning sign reading "TREE PROTECTION AREA KEEP OUT" (see Figure 1) shall be fixed to every 10.0 metre length of protective fencing.
8. On completion of erection, and prior to any demolition or construction works, site preparation, excavation or delivery of plant and materials, the Consulting Arboriculturist or the LPA Tree Officer, as agreed, shall inspect the Temporary Protective Fencing.

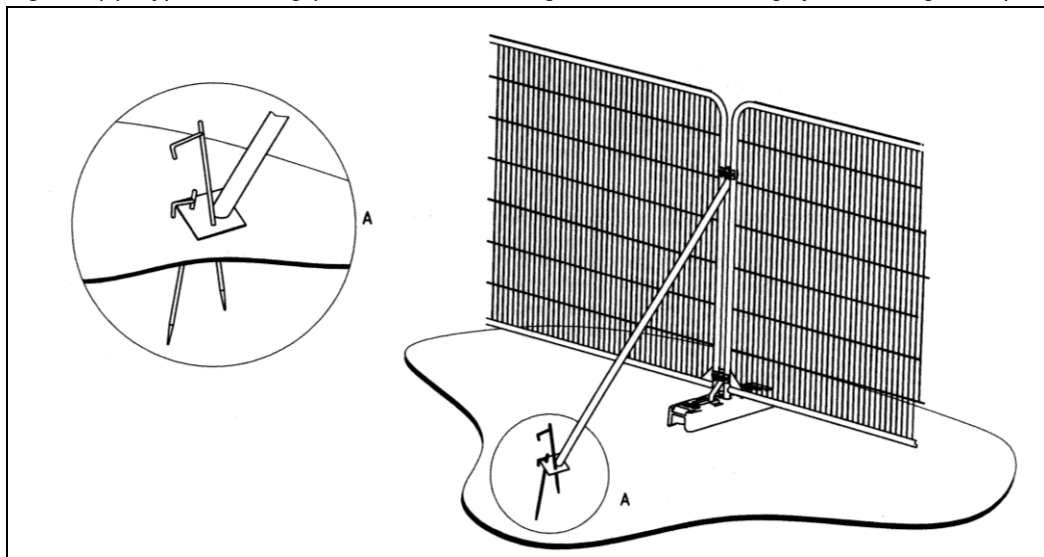
Figure 2: BS5837:2012 Default specification for protective barrier



Type 2 Temporary Protective Fencing Construction (see Figure 3(a), below)

1. Temporary protective fencing panels shall be weldmesh "Heras" panels of at least 2.0 metres in height.
2. The panels shall stand on rubber or concrete feet.
3. The panels shall butt together, and be joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the fence.
4. The distance between the fence couplers shall be at least 1.0 metre, and shall be uniform throughout the fence.
5. The panels shall be supported on the inner side by stabiliser struts, which shall be clamped to the scaffold framework at a 45° angle and extend back into the CEZ and shall be attached to a base plate, which shall be secured to the ground with pins (Figure 3a).
6. No fixing shall be made to any tree and all possible precautions shall be taken to prevent damage to tree roots when locating posts.
7. A 600mm x 300mm warning sign reading "TREE PROTECTION AREA KEEP OUT" (see Figure 1) shall be fixed to every 10.0 metre length of protective fencing.
8. On completion of erection, and prior to any demolition or construction works, site preparation, excavation or delivery of plant and materials, the Consulting Arboriculturist or the LPA Tree Officer, as agreed, shall inspect the Temporary Protective Fencing.

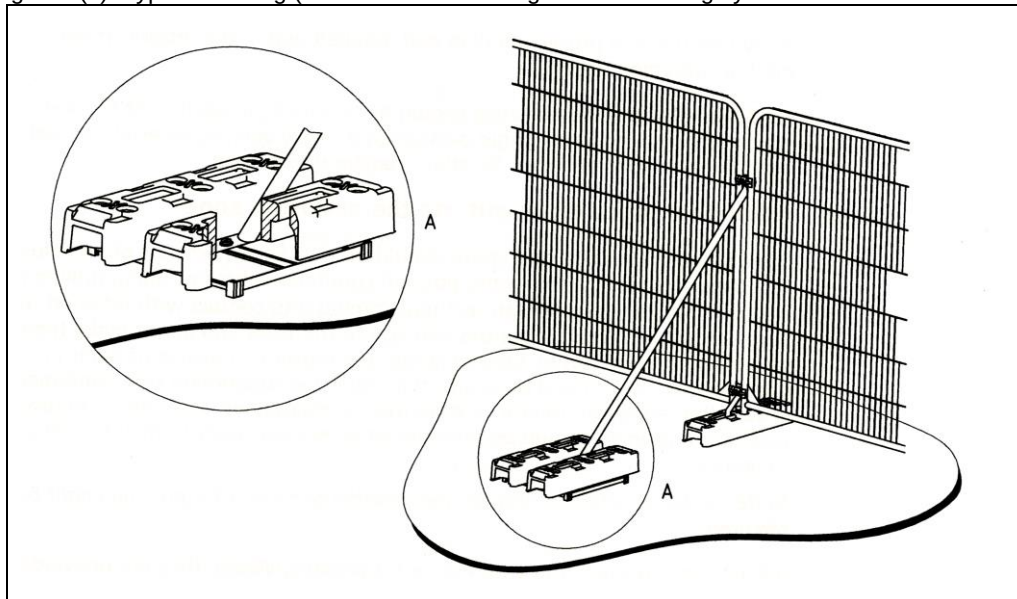
Figure 3(a): Type 2 Fencing (BS5837:2012 above-ground strut stabilising system with ground pins)



Type 3 Temporary Protective Fencing Construction (see Figure 3(b), overleaf)

1. Temporary protective fencing panels shall be weldmesh "Heras" panels of at least 2.0 metres in height.
2. The panels shall stand on rubber or concrete feet.
3. The panels shall butt together, and be joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the fence.
4. The distance between the fence couplers shall be at least 1.0 metre, and shall be uniform throughout the fence.
5. The panels shall be supported on the inner side by stabiliser struts, which shall be clamped to the scaffold framework at a 45° angle and extend back into the CEZ and shall be attached to a block tray base (Figure 3b).
6. No fixing shall be made to any tree and all possible precautions shall be taken to prevent damage to tree roots when locating posts.
7. A 600mm x 300mm warning sign reading "TREE PROTECTION AREA KEEP OUT" (see Figure 1) shall be fixed to every 10.0 metre length of protective fencing.
8. On completion of erection, and prior to any demolition or construction works, site preparation, excavation or delivery of plant and materials, the Consulting Arboriculturist or the LPA Tree Officer, as agreed, shall inspect the Temporary Protective Fencing.

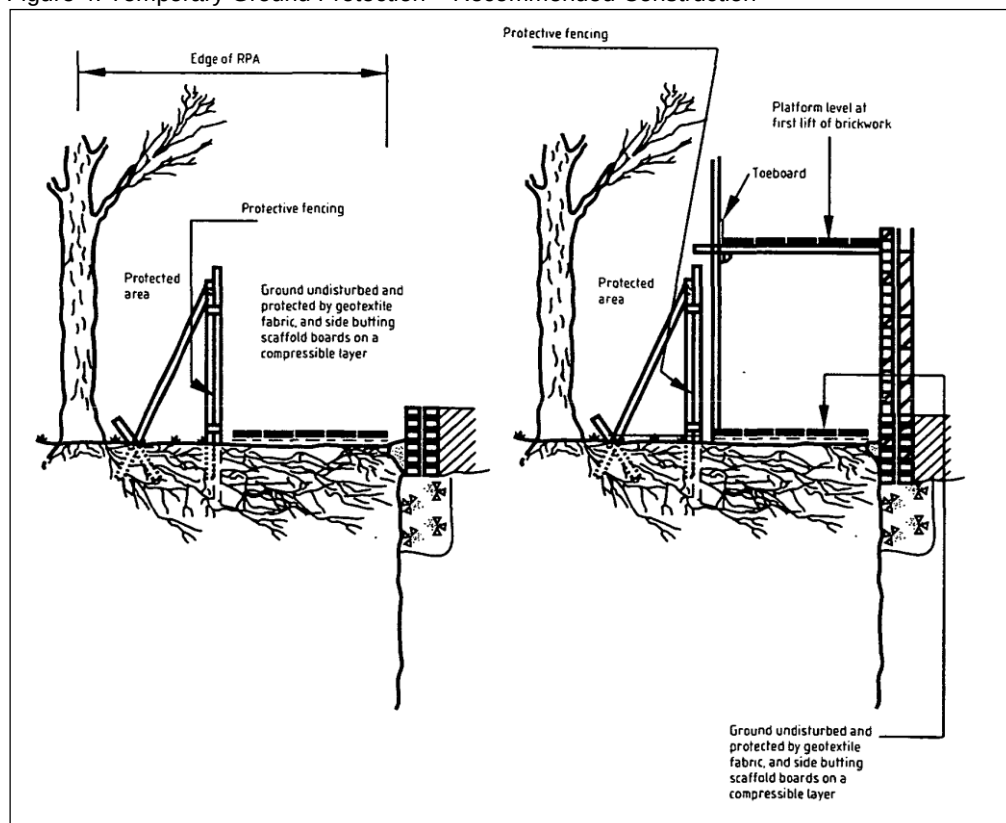
Figure 3(b): Type 3 Fencing (BS5837:2012 above-ground stabilising system with strut on block tray)



Temporary Ground Protection

1. Any necessary Temporary Ground Protection areas shall conform to Figure 4, below, unless otherwise agreed with the LPA.
2. The Ground Protection Area shall be left undisturbed and covered by a semi-permeable geotextile membrane which shall, in turn, be covered by a compressible layer consisting of a material such as woodchip.
3. Side-butting scaffold boards shall then be fitted to cover the Ground Protection Area.
4. On completion of installation, and prior to any demolition or construction works, site preparation, excavation or delivery of plant and materials, the Consulting Arboriculturist or the LPA Tree Officer, as agreed, shall inspect the Temporary Ground Protection.
5. The Temporary Ground Protection shall remain in place until completion of the project and only removed following receipt of written permission from the LPA.

Figure 4: Temporary Ground Protection – Recommended Construction





Important: The original version of this plan was produced in colour, which is essential to the plan's interpretation and usability. As such, a monochrome copy should not be relied upon

KEY

T = Individual Tree
G = Group of Trees
W = Woodland

Please refer to associated Tree Survey Schedule and appendices for specific details in respect of items below:

Tree Categorisations:

Those to be Considered for Retention:

- Category 'A'
Tree/Group/Woodland
Those of a High Quality with an Estimated Remaining Life Expectancy of at Least 40 Years
- Category 'B'
Tree/Group/Woodland
Those of a Moderate Quality with an Estimated Remaining Life Expectancy of at Least 20 Years
- Category 'C'
Tree/Group/Woodland
Those of Low Quality with an Estimated Remaining Life Expectancy of at Least 10 Years, or Young Trees

Those Considered Unsuitable for Retention:

- Category 'U'
Tree/Group/Woodland
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

Note: The locations of the trees T8 - T12, the full extents of groups of trees G3 - G6, G10, G11, G13 and G14, and the woodland W1 were not included on the topographical survey plan provided, and were subsequently plotted by the arboriculturist at the time of the survey using GPS and, where possible, measurement from existing site features or, where not possible, estimation. As such, the locations of these trees and the locations and extents of these groups and woodland cannot therefore be considered to be entirely accurate

Root Protection Areas (RPAs):

- RPAs
Area(s) of Ground Around Trees that Should be Protected Throughout Development Works with Protective Fencing to form a Construction Exclusion Zone - see Temporary Protective Fencing Specification

Project:
FORMER UNITED UTILITIES SITE
CARR LANE
PRESCOT
MERSEYSIDE
L34 1AX

Agent:
UNITED LIVING GROUP

Title:
TREE CONSTRAINTS PLAN
in Relation to Proposed 88 Unit Residential Development

Scale: 1:500@A1
Date: July 2023
Drawn by: MM
Checked by: RG

Bowland

Tree Consultancy Ltd

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