
16th October 2018

Land East of Chipping
Lane, Longridge –
Phase 2 and 3

Arboricultural Impact
Assessment and
Arboricultural Method
Statement

Report Number: 11319_R04a_CG_LP

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Section 1: Introduction

Scope and Instruction

- 1.1. This Arboricultural Method Statement (AMS) has been prepared by Tyler Grange LLP (TG) to accompany a Reserved Matters application for the approved Phase 2 & 3 development layout at land east of Chipping Lane, Longridge (hereafter referred to as the 'site').
- 1.2. The purpose of this report is to set-out the required tree retention, removals and tree protection measures during the construction of Phases 2 & 3 development, as requested by the Planning Officer during pre-application engagement and as required under Condition 16 of the outline planning consent, which reads:

“Prior to the commencement of each phase of the development, should the LPA consider the surveys for that phase to be out dated an updated Tree Survey report and associated documents shall be submitted to the local planning authority in writing in relation to that phase. The development shall thereafter be carried out in complete accordance with the approved details. All trees identified to be retained in or adjacent to the application site shall be protected during construction in accordance with BS5837: 2012 Trees in relation to design, demolition and Construction.”
- 1.3. This report has been guided by the recommendations set-out within the British Standard 5837:2012 'Trees in Relation to Design, Demolition and Construction – Recommendations' (hereafter BS5837:2012).

Site Description

- 1.4. The site is demarked by the red line boundary as illustrated on the **Tree Constraints Plan (TCP) (11319/P05)** located to the rear of this report, and consists of agricultural fields, bounded by hedgerows containing scattered mature trees. Residential developments are adjacent to the eastern boundary, and a retail outlet to the south. The site is currently under phased construction and the following AMS applies to the reserved matters application for phases 2 & 3.

Tree Survey Updates

- 1.5. TG completed a tree survey of the site in 2015 to inform the previously consented outline application. TG have since revisited the Phase 2 and 3 site on 11th October 2018 to update and verify the tree survey data to inform this report.
- 1.6. The tree survey was undertaken in accordance within BS5837:2012 (see tree survey explanatory notes at **Appendix 1**) by a suitably qualified Arboricultural Consultant from TG. Findings for each of the trees surveyed are detailed in the Tree Survey Schedule (Ref. 11319/TSS02) found in **Appendix 2** and their distribution across the site is illustrated on the **TCP**. The Tree Survey Schedule provides a record of the site's existing tree cover, including: tree reference numbers, species composition, tree dimensions, life stage, physiological and structural condition, and the arboricultural value of each tree or group of trees.



Limitations

- 1.7. The comments made are based on observable factors present at the time of inspection. Although the health and stability of trees in their current context is an integral part of their suitability for retention, it must be understood that this report is not a tree risk assessment and should not be construed as such. While every attempt has been made to provide a realistic and accurate assessment of the trees' condition at the time of inspection, it may have not been appropriate, or possible, to view all parts or all sides of every tree to fulfil the assessment criteria of a risk assessment.
- 1.8. No tree can be considered entirely safe, given the possibility that exceptionally strong winds could damage or uproot even a mechanically 'perfect' specimen. It is therefore usually accepted that hazards are only recognisable from distinct defects or from other failure-prone characteristics of the tree or the site. An assessment of the potential influence of trees upon existing buildings or other structures resulting from the effects of trees upon shrinkable load-bearing soils or the effects of incremental root or branch growth, are specifically excluded from this report.

Un-assessable Risks

- 1.9. Any alteration to the application site or development proposals could change the current circumstances and may invalidate this report and any recommendations made.
- 1.10. The Wildlife and Countryside Act (WCA) 1981 (as amended) makes it an offence to disturb nesting birds or recklessly endanger a bat or its roost. Bats are also a European protected species and are additionally protected under the Conservation (Habitats & c) Regulations 1994 and 2017. The survey findings, constraints, opportunities and design or mitigation recommendations included within any separately prepared ecology report must be read alongside this document.
- 1.11. A lack of recommended work does not imply that a tree does not pose an unacceptable level of risk and likewise, it should not be implied that a tree will present an acceptable level of risk following the completion of any recommended work.

Statutory Designations Relating to Arboriculture

- 1.12. As confirmed using interactive mapping provided by Ribble Valley Council's website, none of the trees on the site of the proposed works are subject to a Tree Preservation Order (TPO) report (Accessed 17th October 2018).



Section 2: Arboricultural Method Statement

- 2.1. The **Tree Retention and Removal Plan (11319/P06) (TRRP)** and **Tree Protection Plan (11319/P07) (TPP)** located to the rear of this report must be read in conjunction with this AMS. Both plans identify the aspects of key work and protective measures in relation to trees during the construction of the Phases 2 & 3.
- 2.2. Copies of this report must be available for inspection on site and all personnel must be made aware of the key implications of this AMS during the construction phase(s) of the development:
- 2.3. The site manager and all other personnel must be provided with this document to ensure that:
 - All requirements of this Tree Protection Scheme are adhered to;
 - The site manager and site personnel are updated of any approved changes or variations to this document (approval for alterations must be obtained in writing from the LPA);
 - Site personnel must work in accordance with this document at all times, or in accordance with any approved variation; and
 - The tree protection measures are left in place until the construction phase of development is completed, except with the written consent of the LPA.

Tree Removals and Pruning

- 2.4. The tree removals necessary to implement the development are denoted by a 'Red' tree canopy outline on the **TRRP**. Tree removals will be restricted to:
 - **T32**: removal due to direct conflict with proposed emergency link and footpath / cycleway, along with raised levels adjacent to culvert as illustrated on the **TRRP**;
 - **T29**: dead tree adjacent to proposed new road.
 - **G5** removal to facilitate construction of plots 1-13 and to allow for installation of new footpath / cycle route as illustrated on the **TRRP**;
 - **G6 (Partial)**: partial removal of group to facilitate construction of footpath / cycleway as illustrated on the **TRRP**;
 - **G7 (Partial)**: partial removal of group to facilitate construction of footpath / cycleway into future phases as illustrated on the **TRRP**;
 - **G12 (Partial)**: partial removal of group to facilitate construction of internal roads and footways as illustrated on the **TRRP**;
 - **G13 (Partial)**: partial removal of group to facilitate construction of internal roads and footways as illustrated on the **TRRP**;
 - **G4 (Partial)**: trimming / pruning back of section of boundary group to facilitate construction of driveway to eastern side of group.
- 2.5. Following completion of the proposed tree removal works, the Arboricultural Works Audit (included at **Appendix 5**) must be completed and issued to the LPA's Tree Officer.
- 2.6. Trees to be removed should be clearly identified on-site (via spray marking / taping / tagging as required) by an appointed project Arboriculturist to avoid erroneous tree felling.
- 2.7. Tree removals must be carried out prior to the installation of tree protection barriers.



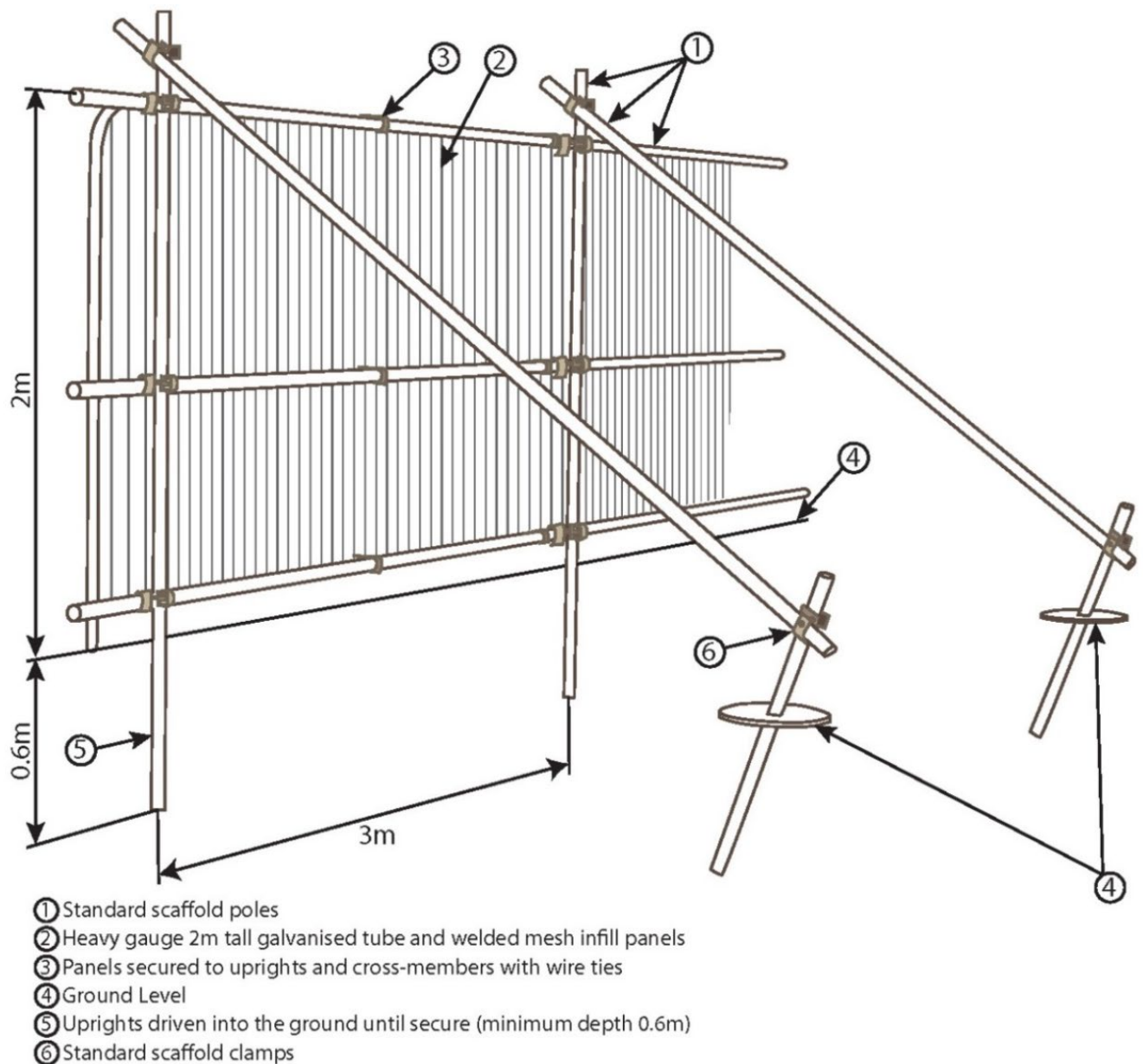
- 2.8. Remaining stumps from felled trees and vegetation must be carefully ground out as opposed to pulled out with a machine where within the Root Protection Areas of retained adjacent trees. This is required to avoid up-rooting and disturbance within the rooting environment of adjacent retained trees.
- 2.9. Tree works must be undertaken in accordance with BS3998:2010 by a competent tree contractor and should avoid the main nesting season for birds between 1st March and 31st August each year. If such timescales are unachievable, the advice of an ecologist will need to be sought to determine any further necessary protective and precautionary working measures to avoid disturbance to nesting birds and other wildlife.

Tree Protection Barriers

- 2.10. In order to protect the above and below ground features and characteristics of retained trees from damage during construction, tree protection fencing will be installed as illustrated on the **TPP**.
- 2.11. The locations of tree protection barriers have been informed by the RPAs and canopies of retained trees, groups of trees and hedgerows. The barriers will serve to prohibit any access into the RPAs, and unless otherwise stated in this AMS, tree protection barriers will remain in place for the duration of construction works until the construction work is deemed completed.
- 2.12. Tree protection fencing will consist of the default specification recommended within BS5837:2012, comprising a scaffold framework, well braced to resist impacts, with vertical tubes spaced at a maximum of 3m to add further stability. Onto this, weldmesh panels will be securely fixed with wire or scaffold clamps (see extract of BS 5837 - Figure A, overleaf).
- 2.13. Special attention is essential in maintaining the protective barriers during the construction phases, ensuring that it remains rigid and complete as well as fit for the purpose intended. To avoid disturbances to the protective barriers once installed, they will be inspected frequently, including during site visits by the project Arboriculturist. Repairs shall be made immediately, where required.
- 2.14. All-weather notices will be attached to the barriers with words such as 'Construction Exclusion Zone – No Access' (see signage example at **Appendix 3**).
- 2.15. Following the erection of tree protection barriers and any required repositioning, the Arboricultural Works Audit (see **Appendix 4**) will be completed and issued to LPA's Tree Officer.



Figure A: Default BS5837:2012 Specification for Tree Protection Barriers



Works within Root Protection Areas

- 2.16. The **TPP** shows the approximate extent of Root Protection Areas (RPAs) of retained trees. The RPAs have been calculated in accordance with the methodology set out within Appendices C and D of BS5837: 2012.
- 2.17. Any sudden and major alteration of the soil or surface conditions within RPAs can affect the health and / or stability of the tree. Disturbance within the rooting environments will can lead to progressive shoot and branch dieback until the roots have adapted to the altered conditions and have been able to source sufficient water and oxygen levels. If damage is progressive or so severe that the tree is

unable to adapt, then it is likely that the tree will ultimately die. It should be noted that in general, with increased maturity of a specimen, the ability of that tree to adapt to dramatic alterations in relation to its root system is lessened.

Supervised Excavations

- 2.18. The **TPP** identifies an area of required excavation within the RPA of G13 to construct a footpath at the periphery of plot 48 and 49. The excavation works will be carried out in accordance with the following protective measures in accordance with BS5837:2012:
- Excavation within the RPAs will be carried out using hand-held tools or by compressed air displacement;
 - A light weight machine will only be used where practical and at the discretion of the supervising Arboriculturist (typically for the displacement hard surfacing and imbedded rocks/rubble);
 - Single roots smaller than 25mm will be cleanly pruned back using a suitable sharp hand tool;
 - Roots found over 25mm and where occurring as clumps will be not be immediately pruned back – the appointed supervising Arboriculturist will record the size and nature of the root, determine its significance to tree health, and specify proceedings accordingly;
 - Any exposed roots will be covered with top soil or a hessian sack to avoid root desiccation;
 - Exposed roots to be retained as part of the construction will be supported by sharp sand; and
 - Due to the highly alkaline leachate produced during the curing of wet concrete, concrete should not be poured within the RPA unless an impermeable liner has been installed.
- 2.19. The Arboricultural Works Audit (see **Appendix 5**) will be completed and issued to LPA's Tree Officer following manual excavation within RPAs. A synopsis of any pruned roots and comment on the tree's suitability for retention should also be provided.

Temporary Ground Protection

- 2.20. The TPP identifies the location of ground protection in relation to the proposed footpath to the rear of plots 48 and 49 adjacent to G13. The ground protection will serve to provide working room within RPAs at the edge of each group to facilitate construction whilst protecting the rooting environments.
- 2.21. As a minimum, ground boarding will comprise of inter-linked scaffold boards placed on top of a compression-resistant layer consisting of 150 mm depth of woodchip laid onto a geotextile membrane. Alternatively, the implementation of Grassform (or similar) Trakmats can provide a gripped and lightweight ground protection solution to safeguard the rooting environment of trees (see **Appendix 4**).
- 2.22. In all cases, the objective should be to avoid compaction of the soil, which can arise from the single passage of a heavy vehicle, especially in wet conditions, so that tree root functions remain unimpaired. Any access across RPAs to undertake tree works must only be undertaken under the guidance of this AMS and overseen by an Arboriculturist to ensure that suitable ground protection is in place.

Summary of Watching Brief / Site Supervision Requirements

- 2.23. Site monitoring by an appropriately qualified Arboriculturist will be undertaken during all key work stages, namely to oversee:
- 'Marking-up' or inspection of the required tree removals;



- Setting out or inspection of Tree Protection Fencing; and
 - During instalment of temporary ground protection with RPAs.
- 2.24. The project Arboriculturist will manage key arboricultural work by completing an Arboricultural Works Audit (see **Appendix 5**). A copy of the Works Audit and supporting photographic evidence will be issued to LPA's Arboricultural Officer following the completion of any above-listed task.

General Site Precautions

- 2.25. The following points must be observed during both advanced works and the construction process:
- No fires will be lit on-site;
 - Cutting down, uprooting, damaging or otherwise destroying any retained tree is prohibited;
 - No access will be permitted inside RPAs (unless authorisation is obtained in writing from the LPA);
 - No materials, equipment or debris will be stored within the RPA at any time;
 - If during construction, there are any excessive levels of dust build-up on retained trees then trees must be hosed down immediately with a clean water supply;
 - Notice boards, telephone wires or other services must not be attached to any part of retained trees; and;
 - Materials which will contaminate the soil (e.g. concrete, cement, chemical toilets, diesel oil, vehicle washings etc.) must not be permitted within, or close to RPAs of retained trees. Consideration must be given to any sloping ground on-site to ensure that contamination of soil in the RPA would not occur if there were spillage, seepage or displacement elsewhere on-site. To avoid any associated damage or injury occurring to the trees as a direct result of contact with contaminants, works including cement mixing, re-fuelling and tool or machine washing will not be permitted within 20m uphill of any retained tree.

Procedures for Incidents

- 2.26. If any breach of the approved tree protection measures occurs:
- The site manager must be informed immediately;
 - The LPA Tree officer (or other Planning Officer) must be informed, as well as the appointed project Arboriculturist at the earliest opportunity;
 - Swift action must be taken to halt the breach and prevent any further breaches; and
 - All preventative action and details of agreed remedial works must be recorded and reported to the LPA.

Amendments

- 2.27. Issues sometimes arise on development sites which require amendments to the previously agreed tree protection details. Any amendments to the AMS will be discussed with the Arboricultural Consultant and agreed in writing with the LPA prior to being implemented.
- 2.28. Copies of paperwork relating to any amendments shall be attached to the site AMS to provide a definitive record of what has been approved.



Appendix 1: Tree Survey Explanatory Notes



Appendix 1: Tree Survey Explanatory Notes

Tree Numbers

'T' prefixes have been used to identify individual trees and commence with 'T1'.

'G' prefixes have been used to identify groups of trees.

Species

Species are listed by their common name, both in the schedule and in the report text.

Height and Stem Diameter

The stem diameter of single stemmed trees is measured at 1.5m above ground level and given in millimetres (mm). The diameter measurement of multi-stemmed trees is taken immediately above the root flare. Tree heights are measured in metres (m).

Crown Spread and Height of Crown Clearance

Radial crown spread is measured in metres and is listed for each of the four cardinal points. The canopy shape for individually surveyed trees depicted on the accompanying plans accurately represents the canopy spread as measured on-site.

The height crown clearance is measured above ground in metres from the attachment point of the first significant branch, or the height to which the lowest (living) branch reaches; whichever is the lower.

Age Class

The age of each tree is defined as follows:

Young - within the first third of life expectancy;

Early-Mature - within the second third of life expectancy;

Semi-Mature - within the last third of life expectancy;

Mature - specimen at full maturity; and

Veteran – tree that, by recognised criteria, shows features of biological, cultural or aesthetic value that are characteristic of, but not exclusive to, individuals surviving beyond the typical age range for the species concerned. For the purpose of this report the term 'ancient tree' and 'veteran tree' are interchangeable.

Physiological and Structural Condition

The physiological or structural condition of each tree is defined as either; good, fair, poor or dead. For each tree, where appropriate, notes on the structural integrity are provided on form, taper, forking habit, storm damage, decay, fungi, pests, etc.

An assessment of a tree's physiological condition is defined as:

Good – fully functioning biological system showing expectant vitality for the species i.e. normal bud growth, leaf size, crown density and wound closure.

Fair – fully functioning biological system showing below average vitality i.e. reduced bud growth, smaller leaf size, lower crown density and reduced wound closure



Poor – a biological system with limited functionality showing clear physiological decline, disease or significantly below average vitality i.e. limited bud growth, small and chlorotic leaves, low crown density and limited wound closure.

An assessment of a tree's structural condition is defined as:

Good – no significant structural defects.

Fair – structural defects which could be alleviated through remedial tree surgery or arboricultural management practices

Poor – structural defects which cannot be alleviated through tree surgery or arboricultural management practices.



Appendix 2: Tree Survey Schedule



No	Species	Height (m)	Stem Diameter (mm)	Branch Spread (m)				Height of Crown Clearance (m)	Age Class	Physiological Condition	Structural Condition	Estimated Remaining Contribution (Years)	Category Grading	Preliminary Management Recommendations	Root Protection Area msq (and off-set radius in metres from stems)
T11	Alder	9.0	X 8 -180 each	6.5	6.5	5.5	5.5	N/a	M	Fair	Fair	20 +	B2	-	(5.10)
Notes: Ditch-side multi stem with some crossing leaders.															
T13	Alder	11.0	560	7.5	8.0	8.0	8.5	N/a	M	Good	God	20+	A1	-	141.9 (6.70)
Notes: Nice hedgerow tree with rounded canopy, growing at ditch junction.															
T14	Ash	8.0	- 320 - 230	4.5	7.0	6.5	6.0	N/a	YM	Fair	Fair	20+	B1	-	48.8 (3.90)
Notes: Ditch side tree with neat compact canopy, formed by two leaders from bole. Average vitality and some deadwood at base.															
T15	Ash	7.5	- 190 - 260 - 320	5.5	4.0	6.5	4.0	2.0+	M	Fair-Poor	Fair-Poor	10-20	C1	Retention optional	64.8 (4.50)
Notes: North west bias, multi-stem tree on ditch side with crossing laterals and minor decay.															
T16	Ash	7.0	930 bole	6.0	6.0	6.5	6.0	N/a	YM	Fair-Poor	Fair-Poor	10-20	C1	Monitor cavity	271.8 (9.30)
Notes: Ditch side tree with multi-stem bole and sprawling canopy. Basal cavity evident but no notable decay. Some deadwood and dieback in lower canopy.															
T17	Willow	14.0	780	7.0	5.5	7.5	6.5	3.0+	M	Good	Good	20+	A1	-	275.3 (9.40)
Notes: Taller tree with westerly bias growing at edge of pond.															
T18	Willow	12.5	480	5.5	6.5	5.5	6.0	3.0+	M	Fair-Good	Fair-Good	20+	B1	-	104.2 (5.80)
Notes: Easterly bias.															
T19	Willow	13.0	500	6.0	7.0	7.0	5.5	3.0+	M	Fair-Good	Fair-Good	20+	B1	-	113.1 (6.00)
Notes: South easterly bias and good vitality overall, although canopy compressed to the west.															
T20	Willow	12.0	680	5.5	6.0	8.5	3.0	3.0+	M	Fair-Good	Fair-Good	20+	B1	Monitor cavity	209.2 (8.20)
Notes: Significant south easterly bias and stem cavity.															
T21	Willow	14.0	810	6.0	6.5	7.0	6.5	3.0+	M	Good	Good	20+	A1	-	296.9 (9.70)
Notes: Upright tree with good form and vitality.															



No	Species	Height (m)	Stem Diameter (mm)	Branch Spread (m)				Height of Crown Clearance (m)	Age Class	Physiological Condition	Structural Condition	Estimated Remaining Contribution (Years)	Category Grading	Preliminary Management Recommendations	Root Protection Area msq (and off-set radius in metres from stems)
T25a	Ash	8.5	410	6.0	6.5	6.0	6.5	3.0+	M	Fair	Fair	10-20	B1	-	76.1 (4.90)
Notes: Edge of pond tree with upright form and fair canopy vitality. Some dieback in lower canopy and deadwood at base.															
T26	Oak	7.0	460	7.0	6.0	3.0	3.5	3.0+	M	Fair-Poor	Fair-Poor	10-20	C1	Major cavity – monitor	95.7 (5.50)
Notes: North easterly bias, with hanging deadwood and major stem cavity.															
T27	Oak	8.0	520	5.5	6.0	5.5	5.0	3.0+	M	Fair-Poor	Fair-Poor	10-20	C1	Monitor cavity	122.3 (6.20)
Notes: Dead lateral branch and minor cavity. Retain in favour of T26.															
T28	Alder	6.0	310	3.0	4.5	3.0	3.0	3.0+	M	Fair-Poor	Fair-Poor	10-20	C1	Retention optional	43.5 (3.70)
Notes: Growing on pond margin with roots submerged. Contorted form with sparse canopy and southerly bias.															
T29	Alder	-	-	-	-	-	-	-	-	-	-	-	U	-	-
Notes: Dead.															
T30	Oak	7.0	940	6.0	6.5	7.5	7.0	3.0+	M	Fair	Fair	20+	B1	Monitor stem decay	399.8 (11.30)
Notes: Easterly bias, sprawling canopy associated with existing gateway. Rather stunted canopy but large central stem. Southerly lateral branch previously removed. Some minor decay within main stem.															
T32	Oak	8.0	560	6.5	8.0	6.0	5.0	3.0+	M	Fair-Good	Fair-Good	20+	A1	-	141.9 (6.70)
Notes: Large tree on ditch side near existing culvert exit. Partly stag-headed, with some lower branch dieback and some fused lateral branches.															
G3 G3a	Hawthorn, Blackthorn, Elder, Holly	Up to 5.5m	Av. 100	-	-	-	-	N/a	M	Fair	Fair	20 +	C2	Re-stock and manage.	(1.20)
Notes: Typical ditch/hedgerow. Hawthorn dominated. Conflicting canopies in places. Scattered trees throughout.															
G4	Hawthorn, Elder Blackthorn, Holly	Up to 5.0	Av.80	-	-	-	-	N/a	YM – M	Fair	Fair	10 – 20	C2	Manage and re-stock	(0.96)
Notes: Slightly narrower hedge and shallow ditch. Dominated by Hawthorn, Elder, Blackthorn and forming typical enclosure. One taller hawthorn – 4 stem at 160 dbh to east.															



No	Species	Height (m)	Stem Diameter (mm)	Branch Spread (m)				Height of Crown Clearance (m)	Age Class	Physiological Condition	Structural Condition	Estimated Remaining Contribution (Years)	Category Grading	Preliminary Management Recommendations	Root Protection Area msq (and off-set radius in metres from stems)
				N	S	E	W								
G5	Hawthorn, Blackthorn, Elder	Up to 5.0	Av. 90	-	-	-	-	N/a	YM – M	Fair	Fair	10 – 20	C2	Manage and re-stock.	(1.08)
Notes: As G.4 – typical hedgerow and ditch enclosure. Hawthorn dominated. Slightly denser, previously managed. Decent low level screen. Gaps at either end.															
G6	Birch, Cypress, Sorbus, Cherry, Field Maple	Up to 10.5	Max. 210					N/a	Y – YM	Fair – Poor	Fair – Poor	20 +	C2	-	(1.32/2.52)
Notes: Off-site ornamental planting belt associated with Sainsbury's and standalone boundary Cypress trees.															
G7	Ash, Willow, Hawthorn, Blackthorn	Up to 11.5	Max. 360	-	-	-	-	N/a	M	Fair	Fair	20 +	C2	-	(4.08)
Notes: Dry depression group dominated by double stemmed mature Ash with some visible knot holes.															
G8	Hawthorn, Alder, Holly	Up to 7.5	Max. 120	-	-	-	-	N/a	M	Fair	Fair	20 +	C2	Management required.	(1.44)
Notes: Typical enclosure with some gaps. Would respond well to on-going management.															
G12	Hawthorn Holly	Up to 5.5	Av. 90	-	-	-	-	N/a	M	Fair	Fair	10-20	C2	Re-stock and mange	(1.10)
Notes: Hedge associated with slightly deeper section of ditch. Single row, rather gappy in places albeit with some previous management evident.															
G13	Hawthorn	6.0	Av. 180	-	-	-	-	N/a	M	Fair	Fair	10-20	C2	Re-stock and manage. Remnant boundary hedgerow with signs of historical management in the form of hedge laying to G13	(2.20)
Notes: Rather scattered / defunct hedgerow associated with shallow ditch. Dead tree to north.															
G14	Hawthorn Holly	1.0	Av. 90	-	-	-	-	N/a	M	Fair	Fair	10-20	C2	Re-stock and mange. Flaied hedge.	(1.10)
Notes: Hedge associated with slightly deeper section of ditch. Single row, rather gappy in places albeit with some previous management evident.															



Appendix 3: Tree Protection Barrier Signage





**PROTECTIVE FENCING. THIS
FENCING MUST BE
MAINTAINED IN ACCORDANCE
WITH THE APPROVED PLANS
AND DRAWINGS FOR THIS
DEVELOPMENT.**



**TREE PROTECTION AREA
KEEP OUT !**

(TOWN & COUNTRY PLANNING ACT 1990)

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

**ANY INCURSION INTO THE PROTECTED AREA MUST BE
WITH THE WRITTEN PERMISSION OF THE LOCAL
PLANNING AUTHORITY**

Appendix 4: Temporary Ground Protection (Trak Mats)

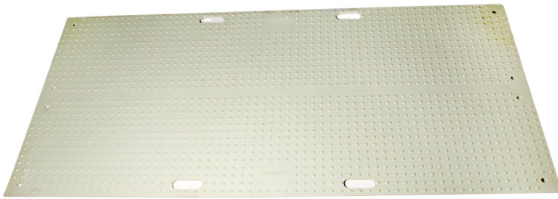


Trakmats

Trakmats | Ground Protection Mats | Industrial Flooring

Suitable for heavy vehicles. Weight bearing is subject to ground conditions, not suitable for 8 wheelers or vehicles alike – please see Tufftrak, Construction Sites, Car Parks, Embankment Stabilisation and more.

We are now offering Trakmats, which are aimed at a variety of industries and applications. Their unique self cleaning gripped surface is aimed at dispelling mud but will still give grip to vehicles or pedestrians as they cross the mat.



Benefits & Description

Trakmats Protect!

One key aspect of the Trakmats that allows for use on sensitive grass areas is their colour a light grey/green. This has been specified to reflect heat and light, and not absorb as many other mat systems do with their black colouring.

This enables our Trakmats to be used for effective ground protection in areas such as gardens, parks, golf courses and cemeteries. Just think of the way our mats can help your application in ground or particularly ground protection where vehicles have to cross.

How are Trakmats different from the competition?

Well their unique self cleaning grip surface is aimed at dispelling mud but will still give grip to vehicles or pedestrians as they cross the grass protection mats. The traction cylinder built into the underside of the mat also aid in gripping the surface, whether that be soil, grass or synthetic turf. These small cylinders prevent sliding and provide stability to the mat.

Light weight and strong

Each high density polyethylene Trakmat comes in standard sheets of 2,440mm x 1,130mm (8 x 4) weighing 33kgs. The light weight track mat means that each is easily moved, loaded, unloaded or stacked with the convenient hand holes. The mats have a weight bearing limit of up to 30 tonnes, this is based upon a level and relatively hard surface. This weight bearing limit goes down when putting over uneven or boggy ground.

To connect the sheets together, Grassform Plant Hire offer urethane connectors for long-term applications, metal connectors for heavy and tracked equipment and U pins for slopes and cambers on soft surfaces. Each system ensures that the track mats do not move as vehicles or plant cross, reducing any potential damage and increasing ground protection.

Buy at £258 per board or hire at £1.20 per mat per day.

When you consider the cost of plywood sheets which do not resist water, snow, ice, mud or oil and are not anti-slip, then investment in our Trakmats will pay off in a short period of time and provide peace of mind, safety and excellent ground protection. Available to buy at £258 per board or **hire at £1.20 per mat per day for Nationwide Delivery** . All major credit cards taken (surcharge may apply), CHAPS, BACS or proforma.

- Tough 1.27cm thick HD polyethylene
- Unique non-slip traction cylinders
- Unaffected by heat or cold
- Hand cutouts for easy lifting and secure storage
- Unbreakable up to 30 tonnes
- Easy fit connectors
- Avoid expensive, heavy and unwieldy steel plates and bog mats
- Avoid slippery, short term and unsafe plywood
- Avoid the overkill of expensive aluminium roadmats
- Avoid oversold pedestrian plastic mats
- Avoid costs of property damage
- Avoid costs of environmental damage
- Avoid costs of bogged down vehicles
- Avoid injuries - provide efficient and safe work conditions
- Easy to transport, carry, lay out and store
- Project a professional image to customers
- Key features hand cut outs, mud dispersion traction, connectors
- 5-7 year field life; 3 year warranty

Specification

Material	100% High Density Polyethylene
Colour	Light green
Optional extras	Neoprene connectors for longer term connection Metal connectors for heavy and tracked equipment Metal U pins for slopes and cambers
Environmentally Friendly	Weather proof, water resistant and unaffected by extreme heat or cold
Description	TM4496-double sided
Dimensions	113cm x 244cm
Weight per sheet	33kg
Thickness	1.27cm

Suitable for

Construction, civil engineering and ground work industries
Emergency access routes
Golf course and sports field maintenance
Sports and leisure facilities

National Parks
Landscaping
Utilities and infrastructure maintenance
Boat regattas
Cemeteries
Temporary roadways and car parks
Military sites
Caravan parks
Heritage sites and eco friendly areas

For more information, photos and videos, or to order this product, visit <https://www.grassform.co.uk/buy/trakmats/>

Appendix 5: Arboricultural Works Audit



Works Requiring Supervision	Tree or Group No	Date Completed and reported to LPA
Pre-commencement onsite meeting with project Arboriculturist and Site Manager to discuss tree protection measures throughout construction phase.	N/A	
Spray marking and inspection of tree removals / pruning as identified on the Tree Retention and Removal Plan as detailed within the AMS	T29 T32 G5 G6 (Partial) G7 (partial) G12 (partial) G13 (partial) G4 (partial)	
Spray marking or inspection of barrier positions as identified in Tree Retention and Removal Plan and as detailed within the AMS	All retained trees and hedgerows	
Installation of ground protection boarding as identified on the Tree Protection Plan and detailed within the AMS.	G13	
General site inspection inputs (monthly basis recommended unless otherwise agreed with LPA) to review tree protection fencing, ground protection and arboriculturally sensitive working methods and general call outs as required (for example, to oversee any encountered roots and site anomalies)	All retained trees	
During manual excavation works or works being undertaken within root protection areas of retained trees and hedgerows.	G13	

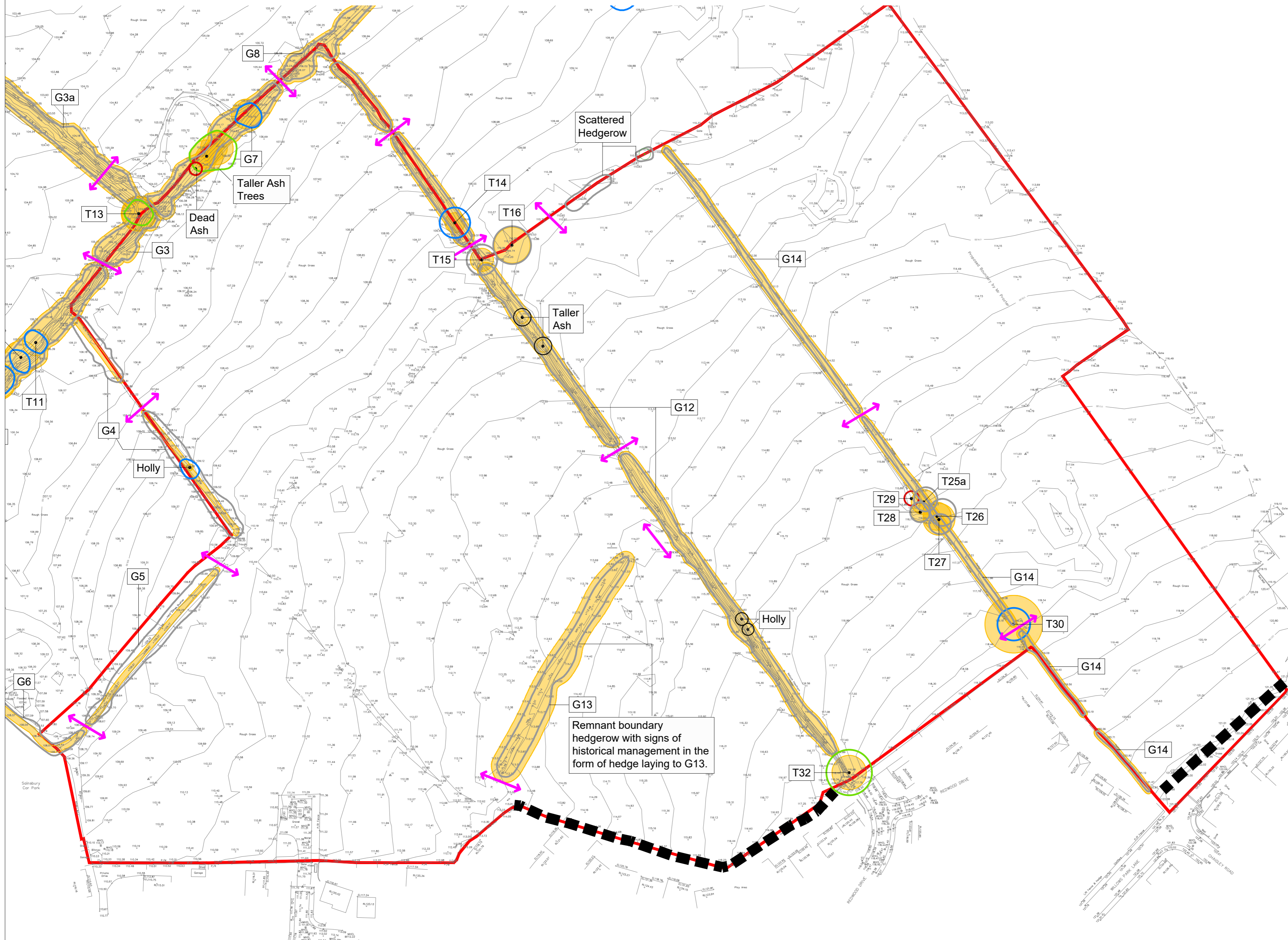
Plans:









Tree Constraints Plan (TCP) (11319/P05)

Tree Retention and Removal Plan (TRRP) (11319/P06)

Tree Protection Plan (TPP) (11319/P07)





- Key
-  Category A - Trees of high quality and value
 -  Category B - Trees of moderate quality and value
 -  Category C - Trees of low quality and value
 -  Category U - Trees recommended for removal
 -  Application Site Boundary
 -  Approximate Extent of BS5837 Calculated Root Protection Areas (RPAs)
 -  Existing / Suitable Access Points
 -  Trimmed Boundary Hedge

Project Name
 Land East of Chipping Lane, Longridge - Phase 2 and 3

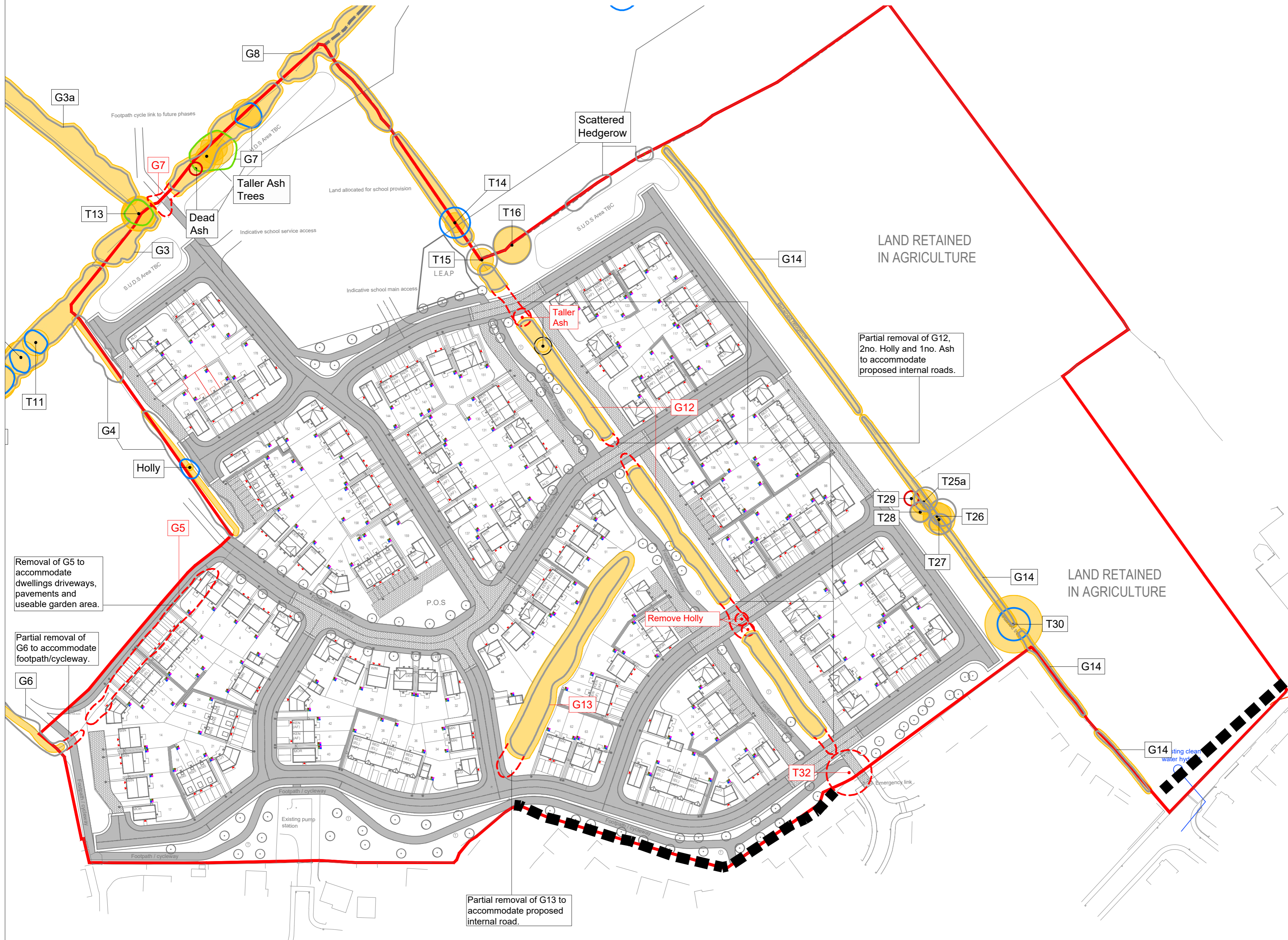
Drawing Title
 Tree Constraints Plan



Scale 1:1000 @ A3	Date October 2018
Drawn by LB	Checked by CG
Drawing No. 11319/P05	Revision -



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- Key
- Category A - Trees of high quality and value
 - Category B - Trees of moderate quality and value
 - Category C - Trees of low quality and value
 - Category U - Trees recommended for removal
 - Application Site Boundary
 - Approximate Extent of BS5837 Calculated Root Protection Areas (RPAs)
 - Trimmed Boundary Hedge
 - Proposed Tree Removals

Project Name
 Land East of Chipping Lane, Longridge - Phase 2 and 3

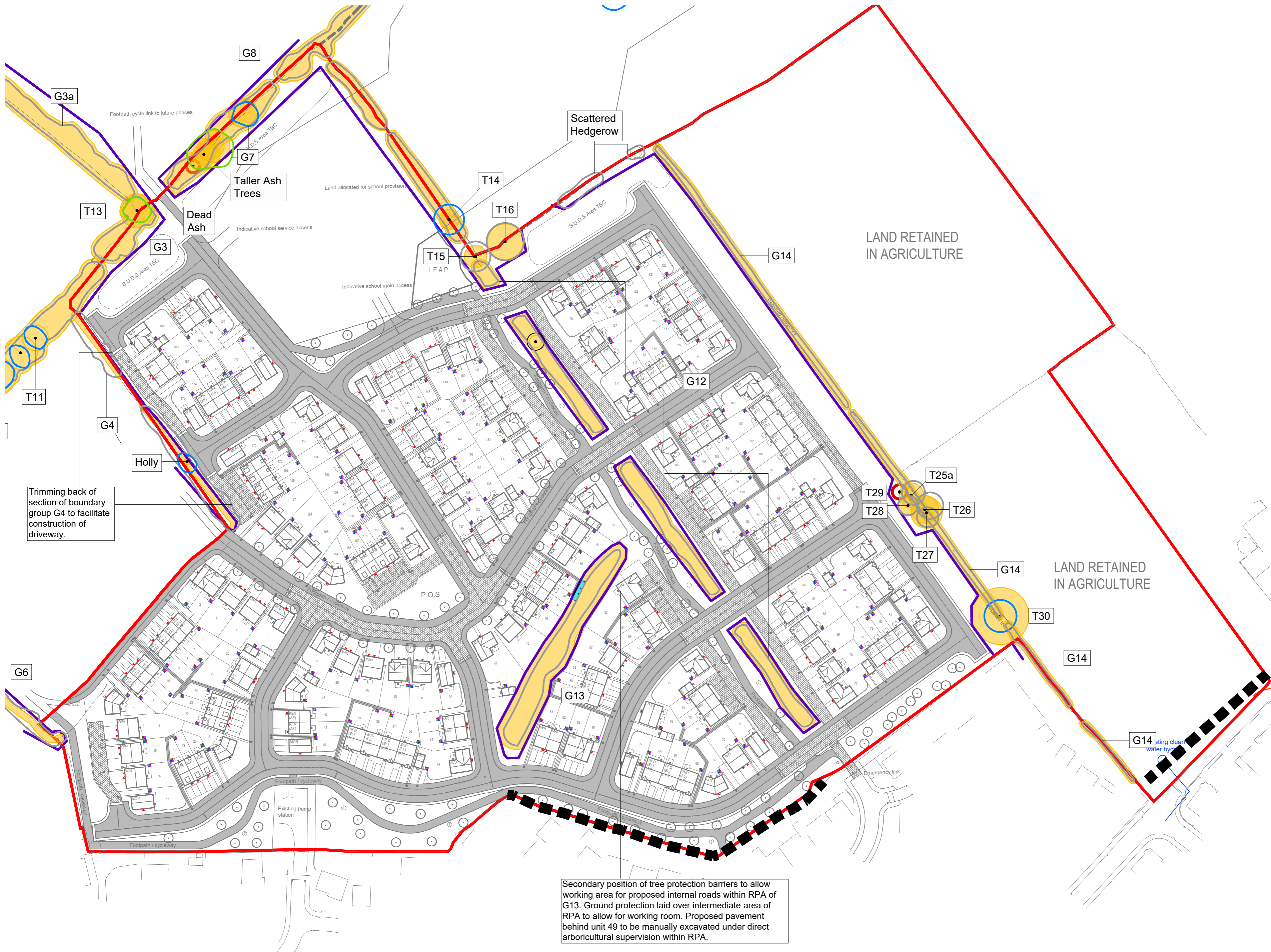
Drawing Title
Tree Retention and Removal Plan



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Drawing No. 11319/P06	Revision -



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- Key
- Category A - Trees of high quality and value
 - Category B - Trees of moderate quality and value
 - Category C - Trees of low quality and value
 - Category U - Trees recommended for removal
 - Application Site Boundary
 - Approximate Extent of BS5837 Calculated Root Protection Areas (RPAs)
 - Trimmed Boundary Hedge
 - Tree Protection Barrier Locations
 - Secondary Tree Protection Barrier Locations
 - Ground Protection (Trakmats)
 - Manual Excavation within RPAs

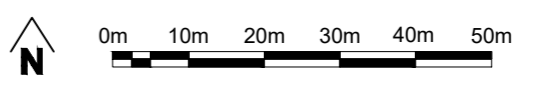
Secondary position of tree protection barriers to allow working area for proposed internal roads within RPA of G13. Ground protection laid over intermediate area of RPA to allow for working room. Proposed pavement behind unit 49 to be manually excavated under direct arboricultural supervision within RPA.

Project Name
 Land East of Chipping Lane, Longridge - Phase 2 and 3

Drawing Title
 Tree Protection Plan



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