

Arboricultural Impact Assessment (AIA)

August 2023

Edgehill Park- Phase 4

Gameriggs Road

Whitehaven

CA28 9RA

U R B A N
G R E E N



QUALITY MANAGEMENT

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1. Executive Summary

- 1.1.1. Urban Green has been instructed by Story Homes, Carlisle to carry out an Arboricultural Survey to British Standard 5837: 2012 guidelines at Edgehill Park, Whitehaven, CA28 9RA and produce our findings in a report.
- 1.1.2. It is proposed to develop the site into 107 plots of residential housing alongside landscape improvements such as parking and soft landscaping. Full details of the proposed site layout can be seen on the plans included in Appendix 4.
- 1.1.3. The proposed development necessitates the removal of one low quality tree and two low quality groups within the site boundary. Pruning of one group is also required. It is recommended that this tree loss is mitigated for by replacement tree planting and the production of a robust soft landscaping scheme.
- 1.1.4. Urban Green completed a Preliminary Ecological Appraisal (PEA) of the site in January 2022. The objectives of which were to identify habitats on site and determine the suitability for any protected and/or notable species that may occur on site. The PEA report should be read and adhered to in conjunction with this report.
- 1.1.5. Tree protection fencing and ground protection will need to be installed at the alignment shown on the Tree Protection Plan in Appendix 4 before any construction activity takes place.
- 1.1.6. It will also be necessary to carry out supervised excavation and potential root pruning of trees within G8, as indicated on the Tree Protection Plan.
- 1.1.7. New parking spaces, pavement and roads proposed within the rooting areas of trees will need to be constructed using an above ground method such as cellular confinement system.
- 1.1.8. An Arboricultural Method Statement (AMS) will be required to provide solutions and working methods so that the impacts identified do not have a detrimental effect on retained trees.
- 1.1.9. Information regarding the layout of new utilities and drainage and final site levels should be submitted to the Arboricultural Consultant so that the impact of these on the retained trees can be assessed.

2. Introduction

2.1. Instructions and References

- 2.1.1. Urban Green have been instructed by Story Homes, Carlisle to carry out an Arboricultural Impact Assessment (AIA) in accordance with BS 5837: 2012 Trees in relation to design, demolition and construction – Recommendations at the site location and produce our findings in a report to be submitted with a detailed planning application.
- 2.1.2. All trees, regardless of their statutory status, are a material consideration in a planning application. BS 5837: 2012 recognises the potential conflict between trees and development. The standard sets out to assist those concerned with trees in relation to construction and aide with decision making. This is achieved by providing impartial and balanced information on trees and their potential impacts.
- 2.1.3. Due to the size and nature of the site, it was decided that the survey methodology would include broadly grouping trees that share very similar characteristics. This method is in line with point 4.4.2.3 of BS 5837: 2012 that states *'Trees forming groups...should be identified and considered as groups where the arboriculturist determines that this is appropriate... It may be appropriate to assess the quality and value of trees as a whole, rather than individuals.'*
- 2.1.4. The site is located in the area shown in Figure 1. The OS Grid Reference is NX 97550 15760.



Figure 1 – Site Location Plan.

2.2. Scope

- 2.2.1. The AIA takes into account any potential impacts on existing trees including the effect of any tree loss required to implement the design and recommendation for the establishment of new trees.
- 2.2.2. The AIA will also assess any potentially damaging activities proposed in the vicinity of retained trees and the effect that the retained trees may have on the development such as potential nuisance caused by excessive leaf/fruit litter, lighting levels and potential damage to structures.

2.3. Documents Provided

- 2.3.1. A scaled plan has been provided with tree positions already plotted. Any extra trees found on site that were not included on the original plan have been plotted according to measurements taken on site and/or using aerial photography.
- 2.3.2. Tree locations which have been estimated are illustrated on the plans included in Appendix 4. The exact locations of these trees must be verified, and any discrepancies discussed with the Arboricultural Consultant before starting works on site.
- 2.3.3. A plan outlining the development proposals has been overlaid with the Tree Constraints Plan in order to assess the potential impacts.

2.4. Limitations

- 2.4.1. This report is based upon a visual inspection. The consultant shall not be responsible for events that happen after the date of the report due to factors that were not apparent at the time, and the acceptance of this report constitutes an agreement with the guidelines and the terms listed in this report.
- 2.4.2. The consultant accepts no liability in respect of the trees unless the recommendations of this report are carried out under their supervision.
- 2.4.3. Assessing the potential influence of trees upon load bearing soils, beneath existing and proposed structures resulting from water abstraction by trees or rehydration of shrinkable soils was not included in the contract brief and is therefore not considered in the report. The consultant cannot be held responsible for damage arising from such action.
- 2.4.4. Trees are living organisms whose health, condition and structure can change over time. The contents of this report are valid for a period of one year from the date of the report.
- 2.4.5. Potentially hazardous trees are highlighted, and appropriate recommendations are made. However, this report is not a substitute for a full tree risk assessment or management plan which are specifically designed to reduce risk and liability associated with responsibility for trees.

3. Legislation

3.1. Tree Protection Status

- 3.1.1. A Tree Preservation Order (TPO) is an order made by a Local Authority to protect specific trees, groups of trees or woodlands in the interests of amenity. A TPO prohibits the cutting down, topping, lopping, uprooting and wilful damage or destruction of trees without the Local Authority's written consent.
- 3.1.2. A check was made with Copeland Borough Council interactive planning map on 03/02/22, the map shows that there are no TPO's on site, nor is the site located within a Conservation Area.
- 3.1.3. It is recommended that the Local Authority is consulted before any tree works are undertaken, as new TPOs may have been created since the time of enquiry, and heavy fines exist for unauthorised works to protected trees.
- 3.1.4. All works to trees covered by a TPO require permission from the Local Authority, including any pruning. However, this does not include trees that are dead or have become dangerous. The removal of dead branches is also excluded from a TPO. Although the above exceptions exist, it is advisable to give the Local Authority five days' notice in writing of any intended removal. Permission is not needed where tree work is required to implement an approved planning application.
- 3.1.5. It is an offence to remove more than 5m³ of timber in any one calendar quarter without having first obtained a felling licence from the Forestry Commission. It must be noted, however, that this excludes sites where planning permission has already been granted.

3.2. Wildlife

- 3.2.1. Prior to the commencement of any tree works, the trees should be assessed for the presence of species which are subject to protection under the *Wildlife and Countryside Act 1981* (as amended) and the *Conservation of Habitats and Species Regulations 2017*.
- 3.2.2. Urban Green have completed a Preliminary Ecological Appraisal of the site (UG_1415_ECO_PEA_01) which should be read and followed should any tree work be required. Where there is evidence that bats, birds or other protected species are present, the advice of a suitably qualified ecologist should be sought.
- 3.2.3. If tree works are carried out during the bird nesting season (March to September inclusive), trees would need to be inspected by a qualified ecologist no more than forty-eight hours prior to the commencement of works.

4. Arboricultural Impact Assessment (AIA)

4.1. Summary of the Development

- 4.1.1. It is proposed to develop the site into 107 plots of residential housing alongside landscape improvements such as parking and soft landscaping. Full details of the proposed site layout can be seen on the plans included in Appendix 4.

4.2. Tree Constraints

- 4.2.1. BS 5837: 2012 recognises that conflicting requirements of the planning system for development means that trees are only one factor which need to be taken into consideration. Although there may be certain specimens that can pose significant constraints to development due to their importance, it is essential that inappropriate tree retention is avoided.
- 4.2.2. Trees can be adversely affected on development sites if their protection is not factored into the wider project management of onsite operations. We have transposed the tree survey plan over plans detailing current proposals in order to assess the impact on surveyed trees.
- 4.2.3. It is essential that roots are protected from construction works including physical damage from excavation and changes in soil structure from compaction and changes in ground levels.

4.3. Root Protection Areas (RPAs) Explained

- 4.3.1. The RPA is an area of ground around the base of a retained tree, which is calculated in relation to the stem diameter, where disturbance should be kept to a minimum and avoided if at all possible.
- 4.3.2. The majority of tree roots grow within the upper 600mm of the soil profile where most nutrients are available as the result of the decomposition of organic matter close to the surface. Rooting conditions become less favourable at depth as the soil density increases, creating anaerobic conditions.

4.4. Impacts of development

- 4.4.1. Two individual trees, eleven groups of trees, a woodland and four hedges have been surveyed. G2, G3, T7, G8, G10, H11 to H14, W15, G16 and a section of G17 stand off-site. All the other trees and hedges are within the site or on the site boundaries.
- 4.4.2. Offsite Woodland W15 and G16 have been surveyed as BS 5837: 2012 'High Quality' Retention Category 'A'; G2, G3, T7, G8, G10 to H14 and G17 have been surveyed as 'Moderate Quality' Retention Category 'B'; and T1, G4 to G6, G9 and G18 have been surveyed as 'Low Quality' Retention Category 'C'.
- 4.4.3. Low quality tree T1 and groups G4 and G5 will require removal to facilitate the development.
- 4.4.4. G8 also requires pruning of the canopies to allow for the construction of a property. This will be required to be completed by a qualified arborist.

- 4.4.5. All of the remaining surveyed trees and hedges will be retained and protected during the development in accordance with current best practice and the tree protection plan at appendix 4.
- 4.4.6. A new car parking spaces, pavement and a road are proposed within the rooting areas of groups G2 & G8. Section 7.4.2.3 of BS 5837: 2012 states that '*new permanent hard surfacing should not exceed 20% of any existing unsurfaced ground within the RPA*'. Calculations of the area of encroachment have been carried out and are within this range. The new hard standing will need to be constructed using an above ground method such as a cellular confinement system to avoid damage to the roots and allow the trees to be retained with the new surfaces.
- 4.4.7. The proposed levels have not been seen for the entire site; however, it must be noted that no levels are to be altered surrounding the retained trees, other than for the above cellular confinement system.
- 4.4.8. Where excavation will only encroach into a small area of the root protection zone, any roots within this area could be pruned. These areas should be excavated by hand under arboricultural supervision and any root pruning required to be carried out by the arboricultural consultant. These works affect group G8 and the northern elevation of plots 21 & 22, as indicated on the Tree Protection Plan.
- 4.4.9. Temporary ground protection will be required within the predicted RPAs of groups G2 & G8, as indicated on the Tree Protection Plan. Guidance at section 4.7. of this report should be adhered to when installing temporary ground protection.
- 4.4.10. Boundary treatments will be required to facilitate installation of fencing within the predicted RPAs of retained trees. All new boundary treatments should be carried out as per the specification in section 4.8.

4.5. Tree Surgery Works

- 4.5.1. Tree works that are recommended within the Tree Works Schedule (Appendix 4) are works required to facilitate development and also include details or remedial works. Tree works stated in the Tree Data Schedule (Appendix 1) are of a general maintenance nature and can be carried out at any time as per recommendations.
- 4.5.2. Tree works required to facilitate the development will be carried out prior to the commencement of any onsite operations. This should allow sufficient space for approved construction to be carried out.
- 4.5.3. Any unforeseen tree works that become apparent during the construction process will require written consent from the Local Authority Tree Officer.

4.6. Protective Fencing

- 4.6.1. Temporary protective fencing will need to be installed at the alignment indicated on the Tree Protection Plan in Appendix 4, prior to the commencement of any construction activities on site including the delivery of materials and site facilities.
- 4.6.2. Any fencing that is damaged so that it is no longer able to protect retained trees must be replaced/repared immediately with appropriate fencing.
- 4.6.3. The required specification for protective fencing is illustrated in the Tree Protection Plan (Insert 1).

- 4.6.4. The 'in-ground' system involves driving vertical scaffold poles approximately 0.6m into the ground onto which are affixed horizontal scaffold poles and bracing struts. 2m high anti-climb weldmesh panels are then wired to the scaffold framework. The vertical scaffold poles should be at a maximum of 3m apart.
- 4.6.5. No fixing shall be made to any tree and all possible precautions shall be taken to prevent damage to the tree roots when locating uprights.
- 4.6.6. A 600mm x 300mm warning sign reading "TREE PROTECTION AREA KEEP OUT" shall be fixed to every 10m of protective fencing, as illustrated on the Tree Protection Plan (Insert 2).

4.7. Ground Protection for Pedestrians or Light Vehicles

- 4.7.1. The primary method of ground protection is the installation of a compressible layer (e.g. woodchip) over a geotextile fabric with side butting scaffold boards.
- 4.7.2. Ground protection measures whilst working the RPA must be capable of supporting the expected loads and avoid compaction of the soil.
- 4.7.3. The boarding will be left in place until the construction works are finished.
- 4.7.4. Scaffolding may first be erected with the uprights on spreader boards and the ground protection installed around the uprights.

4.8. Boundary Treatments

- 4.8.1. Where fencing is to be installed within RPAs of retained trees, post holes will be excavated by hand and kept as narrow as possible. Trial holes will be dug using a manually operated soil augur in order to position post holes to avoid major roots.
- 4.8.2. Exploratory post holes will be dug before committing to positions. If any roots in excess of 25mm are encountered they are to remain intact and the post hole will be relocated to avoid them. The fencing system must permit such flexibility (i.e. where fixed panel widths are used, all post holes must be excavated before committing to the final location)
- 4.8.3. All post holes will be excavated by hand and kept as narrow as possible (maximum diameter 300mm).

4.9. Temporary Site Cabins

- 4.9.1. All storage facilities and deliveries will make use of existing hard surfaces to avoid unnecessary compaction within RPAs. The locations will be agreed in writing with the LPA prior to delivery and will remain in the agreed locations unless approved by the LPA.
- 4.9.2. If storage facilities require siting within RPAs, every effort will be made to ensure that any damage to aerial parts of retained trees is avoided and that appropriate footings are used to avoid root damage or compaction of the soil.

4.10. Utilities

- 4.10.1. At the time of writing Urban Green have not been made aware of any new utilities or service runs that will be associated with the development. Information regarding the layout of new utilities and drainage and final site levels should be submitted to the Arboricultural Consultant so that the impact of these on the retained trees can be assessed.

4.11. Recommendations

- 4.11.1. An Arboricultural Method Statement (AMS) will be required to provide solutions and working methods so that the impacts identified do not have a detrimental effect on retained trees.
- 4.11.2. All operations that could affect trees on and adjacent to the site must be considered as part of the project management of the Proposed Development. It is therefore recommended that an Arboricultural Consultant is appointed as part of the design and management team to advise on pre-development issues and supervise on-site operations.
- 4.11.3. The Arboricultural Consultant may also have an advisory role in the preparation of site including tree surgery works and the protection of trees during demolition processes.
- 4.11.4. The Arboricultural Consultant shall be responsible for inspecting all protective fencing prior to the commencement of all onsite activity.

Appendix 1 - Tree Data Schedule

The following pages contain information gathered during the site survey. The reader should refer to Appendices 2 and 3 in order to correctly interpret the tree data.

Reference T = Tree G = Group H = Hedge W = Woodland	Age & Species	Height (m)	Crown Ht (m)	DBH (mm)	Crown Spread (m)			Notes	Recommendations		Physiological Condition	Life Expectancy (yrs)	RPA Radius
					N	W	E		Priority	Inspect Freq (yrs)			
T1	Early-Mature Elder Sambucus nigra	3	1.5	180	1	2	0.5	1: Offsite natural colonization adjacent to demolished structure. 2: Acceptable condition at present.	No action required.	Good	10-20	2.16	
									n/a	3	Fair		C1.2
G2	Early-Mature Mixed Species	av 6	av 1.5	av 210	3	3	3	1: Offsite natural colonization consisting predominantly willow with elder, apple and hawthorn. 2: Potential wildlife habitat. 3: Has not seen any recent management. 4: Acceptable condition at present.	No action required.	Good	40+	2.52	
					each				n/a	3	Fair		B2
G3	Early-Mature Alder (common) Alnus glutinosa	av 7	av 1.5	av 300	4	4	4	1: Four trees within group. 2: Natural colonization. 3: Not pruned to any extent. 4: Localized deadwood is of little concern. 5: Canopies merge together.	No action required.	Good	40+	3.60	
					each				n/a	3	Good		B1.2
G4	Early-Mature Mixed Species	av 3	3	av 150	2.5	2.5	2.5	1: Gorse with elder. 2: Natural colonization. 3: Potential wildlife habitat.	No action required.	Good	40+	1.80	
					each				n/a	3	Fair		C1.2
G5	Early-Mature Mixed Species	av 1	3	av 100	1	1	1	1: Gorse. 2: Natural colonization. 3: Acceptable condition at present.	No action required.	Good	40+	1.20	
					each				n/a	3	Fair		C1.2
G6	Early-Mature Elder Sambucus nigra	av 3	av 2	av 240	2	2	2	1: 3x trees abutting and abrading old iron fence. 2: Fire damage to western most tree and possibly other to also. 3: Significant crown dieback on southern side of canopies. 4: Acceptable condition at present.	Monitor for signs of decline.	Fair	10-20	2.88	
					each				Low	3	Poor		C1

Reference T = Tree G = Group H = Hedge W = Woodland	Age & Species	Height (m)	Crown Ht (m)	DBH (mm)	Crown Spread (m)			Notes	Recommendations		Physiological Condition	Life Expectancy (yrs)	RPA Radius
					N	W	E		Priority	Inspect Freq (yrs)			
T7	Semi-Mature Alder (common) Alnus glutinosa	6	2.5	280	3	3	3	1: Offsite natural colonization. 2: Canopy to south slightly overhangs into the site by 1m. 3: Acceptable condition at present.	No action required.		Good	40+	3.36
	n/a								3	Good			
G8	Semi-Mature Mixed Species	av 7	av 1.5	av 300	2.5	2.5	2.5	1: Predominantly natural colonization of sallows with blackthorn, hawthorn, pine, apple, alder. 2: Offsite group. 3: Dense spacing prevented a detailed inspection. 4: Potential wildlife habitat. 5: Acceptable condition at present.	No action required.		Good	40+	3.60
	n/a								3	Fair			
G9	Early-Mature Privet Ligustrum ovalifolium	av 2.5	av 0.3	av 150	1.5	1.5	1.5	1: Unmanaged boundary planting bordering existing residential properties. 2: Acceptable condition at present.	No action required.		Good	40+	1.80
	n/a								3	Fair			
G10	Semi-Mature Goat Willow Salix caprea	av 4	av 1.5	av 280	2	3	2	1: Approximately 3x willow trees are offsite with under storey of coralberry. 2: Contributing to screening from adjacent residential properties. 3: Acceptable condition at present.	No action required.		Good	40+	3.36
	n/a								3	Good			
H11	Early-Mature Hawthorn Crataegus monogyna	av 4	1	280	2	3	2	1: Unmanaged boundary hedgerow. 2: Ivy clad stems. 3: Has been allowed to grow on. 4: Potential wildlife habitat provides screen.	No action required.		Good	40+	3.36
	n/a								3	Good			
H12	Early-Mature Hawthorn Crataegus monogyna	av 4	1	280	2	3	2	1: Unmanaged boundary hedgerow. 2: Ivy clad stems. 3: Has been allowed to grow on. 4: Potential wildlife habitat provides screen.	No action required.		Good	40+	3.36
	n/a								3	Good			

Reference T= Tree G = Group H = Hedge W = Woodland	Age & Species	Height (m)	Crown Ht (m)	DBH (mm)	Crown Spread (m)			Notes	Recommendations		Physiological Condition	Life Expectancy (yrs)	RPA Radius
					N	W	E		Priority	Inspect Freq (yrs)			
H13	Early-Mature Hawthorn Crataegus monogyna	av 3	1	300	1.5	1.5	1.5	1: Unmanaged field boundary hedgerow, dense bramble under story. 2: Ivy clad stems prevented detailed inspection. 3: Potential wildlife habitat. 4: Acceptable condition at present.	No action required.		Good Fair	40+ B2	3.60
										n/a			
H14	Early-Mature Hawthorn Crataegus monogyna	av 3	1	300	1.5	1.5	1.5	1: Unmanaged field boundary hedgerow, dense bramble under story. 2: Ivy clad stems prevented detailed inspection. 3: Potential wildlife habitat. 4: Acceptable condition at present.	No action required.		Good Fair	40+ B2	3.60
										n/a			
W15	Early-Mature Mixed Species	av 14	av 2	av 500	av 6	6	6	1: Mixed broadleaf woodland consisting of ash, sycamore, willow, hawthorn, oak and alder with a blackthorn under story. 2: Good age structure, moderate species mix. 3: Valuable wildlife habitat. 4: Recommend buffer adjacent to any development.	No action required.		Good Good	40+ A2	6.00
										n/a			
G16	Early-Mature Mixed Species	av 10	av 1	av 500	av 6	6	6	1: Offsite linear group following course of stream. 2: Species include ash, oak, sycamore, alder, willow and hawthorn mix. 3: Restricted access and limited inspection. 4: Potential wildlife habitat. adequate clearance from site boundary. 5: No evidence of previous pruning work.	No action required.		Good Good	40+ A2	6.00
										n/a			
G17	Early-Mature Hawthorn Crataegus monogyna	av 4	av 1	av 300	2.5	2.5	2.5	1: Unmanaged boundary hedgerow surroundings farm house. 2: Has not seen any recent management. 3: Some ivy clad stems. 4: Acceptable condition at present.	No action required.		Good Fair	20-40 B2	3.60
										n/a			
G18	Early-Mature Mixed Species	av 3	av 0.5	av 250	av 2	2	2	1: Unmanaged ornamental hedge boundary surrounding the farmhouse. 2: Privet, barberry, hawthorn and lawson cypress mix. 3: Offsite group. 4: Cypress trees to northern side of group have been topped and also exhibit either historic fire damage or animal damage. 5: Acceptable condition at present.	Monitor for signs of decline.		Fair Fair	10-20 C2	3.00
										Low			

Appendix 2 - Tree Schedule Definition of Terms

Tree Referencing	Individual Trees T (+number) Grouped Trees G (+number) Hedgerows H (+number) Woodlands W(+number)
Age Category	Young Usually <15 years Semi-mature Significant growth expected, approximately one third of life expectancy complete Early-Mature Full height achieved with further significant growth possible, up to two thirds of life expectancy complete Mature Full height has been achieved with possible spreading of the canopy, usually past two thirds of overall life expectancy Veteran Usually a tree of significant age with characteristics that give additional cultural, landscape and conservation benefits, Over-mature A tree declining due to age as indicated by deterioration in the health and condition of its crown and trunk.
Species	Botanical Name conforming to the International Code of Nomenclature for algae, fungi, and plants (ICN). For universal plant recognition. Common Name commonly used names usually on a local and national scale.
Tree Height	The vertical distance between the base of the tree (where soil and buttress meet) and the tip of the highest branch on the tree.
Crown Height	Measured from ground level to the height at which the main crown begins.
Stem Diameter (DBH)	Stem diameter is measured at 1.5 m above ground level
Crown	Measurements taken from all four cardinal points in metres.
Notes	Notes are made to inform of any possible defects, peculiarities or points of interest that may relate to the trees position, physiology, safety and possible effects on developments.
Recommendations	Recommendations are made in accordance to good arboricultural practice. Recommendations are made regardless to the end usage of the site.
Priority Scale	Priority is given dependant on the perceived threat and the likelihood of failure given to a possible hazard. The priority of work is given regardless of the end usage of the site. Urgent To be carried out as soon as possible. Very High To be carried out within 1 month. High To be carried out within 3 months. Moderate To be carried out within 1 year. Low To be carried out within 3 years.
Physiological Condition:	Good Usually healthy with no symptoms of poor health or disease. Fair Exhibiting signs of poor health or minor disease infections that are not considered to be hazardous. Poor Disease present in considerable quantities or with very poor physiological vigour. Very Poor Tree is in a moribund state in extremely poor condition, usually with little chance of recovery.
Structural Condition:	Good A tree with no significant structural defects. Fair Minor defects may have been observed but are not considered to be immediately hazardous. Poor Significant defects found. Tree requires monitoring or remedial works. Very Poor Major defects that require immediate remedial work or the removal of the tree.
Life Expectancy:	The estimated number of years before the tree may require removal should no unexpected mechanical or environmental impacts occur to the tree.
Retention Category:	Please refer to Tree retention categorisation table on the next page.

Appendix 3 - Tree Retention Category

The following table provides an explanation of retention categories used.

Trees to be removed		Colour on Plan
Category U Includes trees of very low quality that offer little or no amenity value.	Trees that are in such a condition that they should be removed as a matter of good arboricultural practice regardless of given proposals.	RED
Trees to be considered for retention		
Category A Trees of a high quality, with an estimated life of expectancy of at least 40 years	Trees that are excellent examples of their species, usually mature, especially if rare or unusual including veteran trees. Category A trees are likely to enhance a development and should be retained wherever possible.	GREEN
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.	Trees that are good examples of their species. B category trees are usually mature or younger trees with the potential to reach A category in the future. Although the retention of these trees is desirable, some losses may be acceptable.	BLUE
Category C Trees 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.	GREY

NOTE: Trees that are viewed as borderline and do not fit neatly into either of the categories are given a plus or minus rating (+/-) in the tree data schedule. Therefore, C+ would denote a tree being borderline C/B although C is deemed to be the most appropriate category. Similarly, B- would denote a tree being borderline B/C with B seen as the most appropriate category.

Appendix 4 - Site Plans

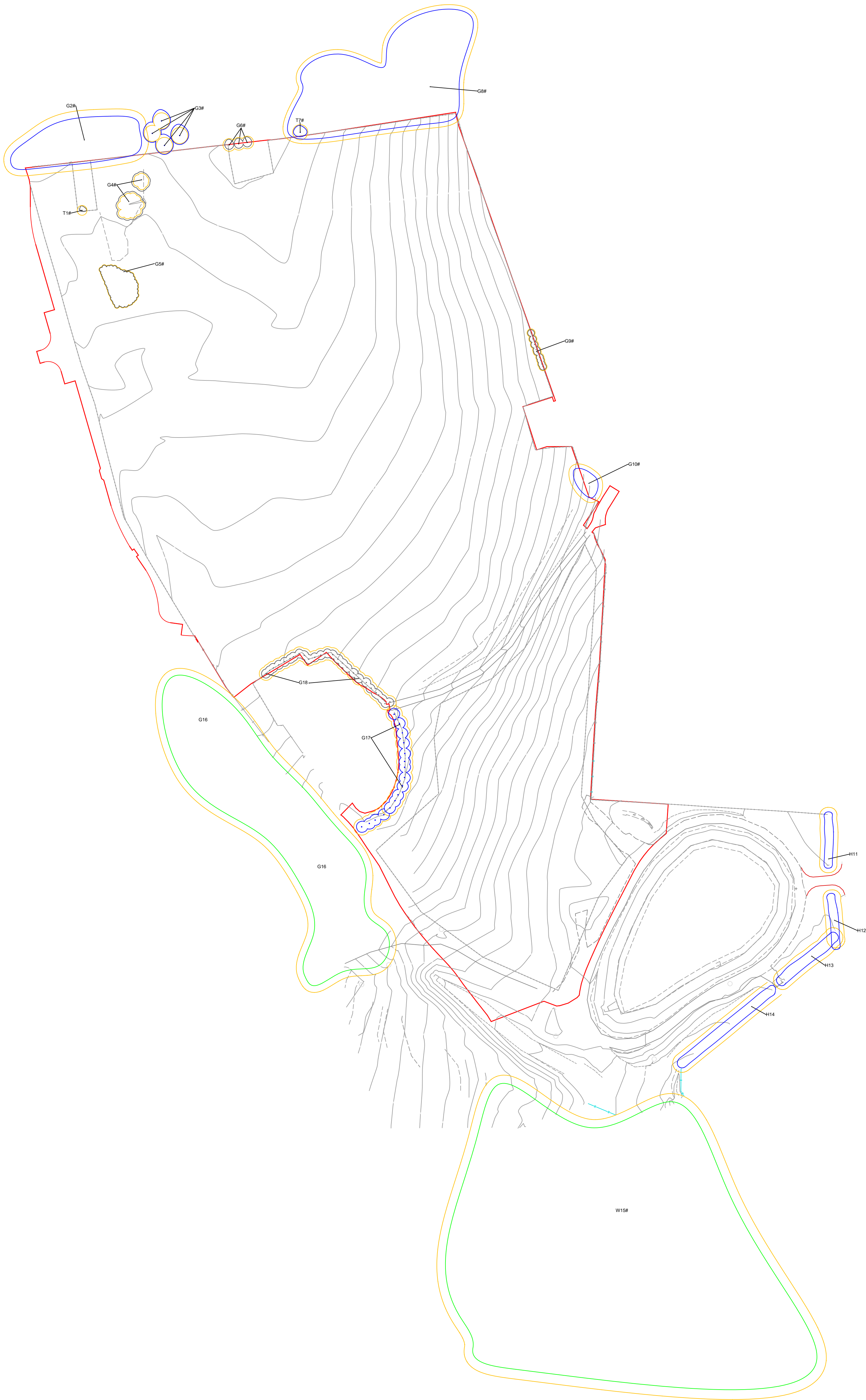
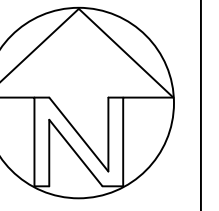
The site plans referred to in the report follow this page which include the following:

- Tree Constraints Plan
- Tree Removal Plan
- Tree Works Schedule
- Tree Protection Plan
- Tree Protection Inserts

Although included plans are usually to scale, they are only intended to indicate positions of surveyed trees and dimensions should not be taken from these drawings.

Do not scale this drawing (printed or electronic version).
 Contractors must check all dimensions from site.
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Notes:-



	Category A tree, group or hedge
	Category B tree, group or hedge
	Category C tree, group or hedge
	Category U tree, group or hedge
	Root Protection Area (RPA)
	Position estimated on site
	Redline site boundary

REV.	DATE	DESCRIPTION	DRAWN	CHK'D

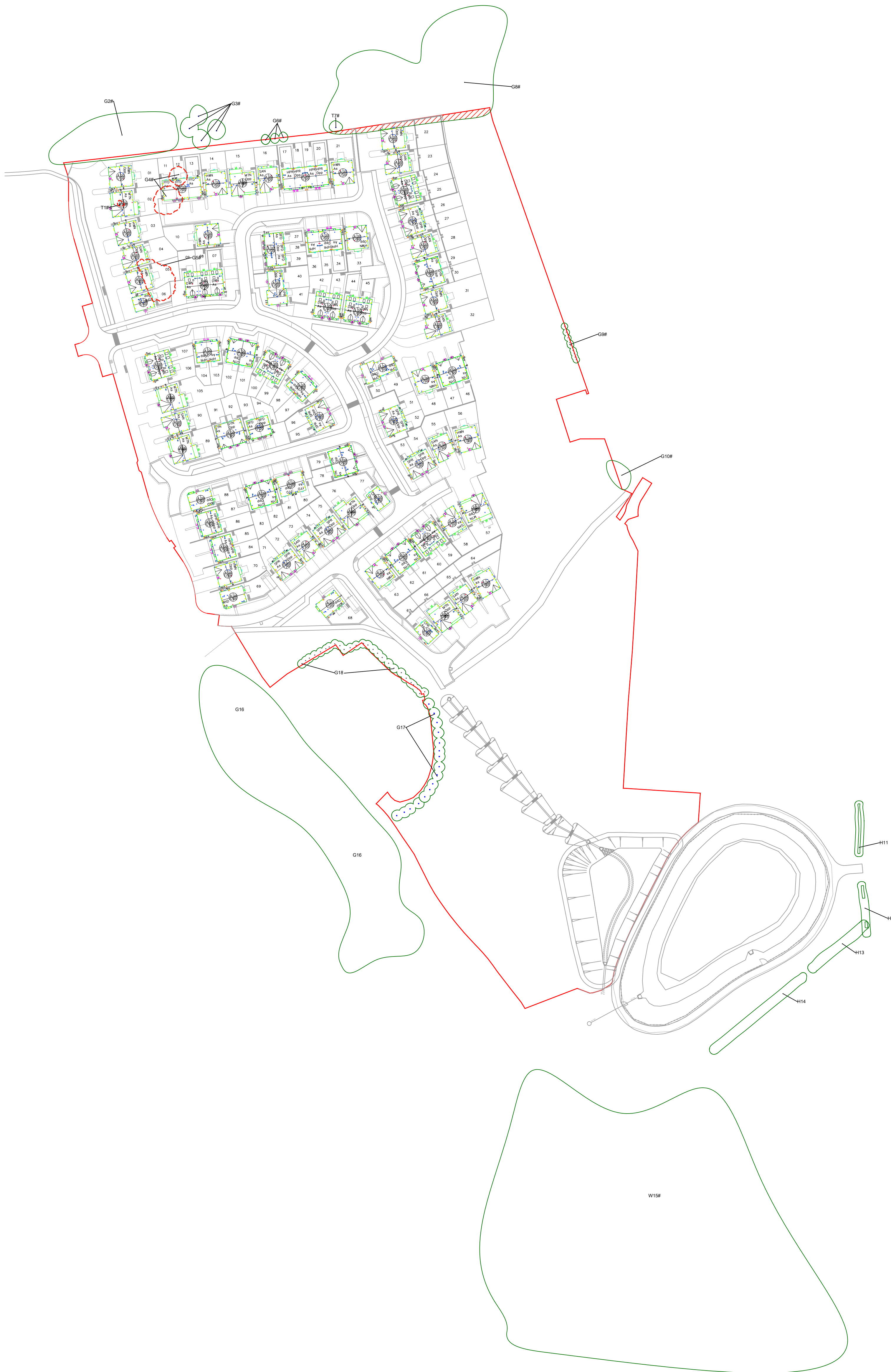
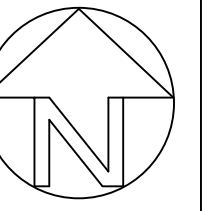
Client: STORY HOMES-CARLISLE	Project: EDGEHILL PARK PHASE 4	Drawn: AB	Checked: EA	Approved: AB	Date: 18/03/22
Issue: PLANNING	Title: TREE CONSTRAINTS PLAN	Dwg No: UG_1415_ARB_TCP_01	Scale @ A1: 1:1000	Revision: 00	



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Notes:-



	Category A tree, group or hedge
	Category B tree, group or hedge
	Category C tree, group or hedge
	Category U tree, group or hedge
	Retained tree
	Removed tree
	Extents of pruning
	Position estimated on site
	Redline site boundary

REV.	DATE	DESCRIPTION	DRAWN	CHK'D
04	01/08/23	Updated Proposal	AH	AB
03	01/08/22	Updated Proposal	RH	GK
02	10/08/22	Modified Redline & Updated Proposal	EA	GK
01	17/05/22	Modified Redline & Updated Proposal	AB	GK

Client:	Project:	Drawn:	Checked:	Approved:	Date:
STORY HOMES-CARLISLE	EDGEHILL PARK PHASE 4	AB	EA	AB	18/03/22
Issue:	Title:	Dwg No:	Scale @ A1:	Revision:	
PLANNING	TREE REMOVAL PLAN	UG_1415_ARB_TRP_01	1:1000	04	



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Tree Works Schedule

Tree Number	Species	Works Required	Reason
T1	Elder	Fell to ground level and grind out stumps	To Facilitate the Development
G4	Gorse/Elder		
G5		Mixed species	
G8			

REV.	DATE	DESCRIPTION	DRAWN	CHK'D
02	01/08/23	Updated proposal	AH	AB
01	10/06/22	Modified Redline & Updated Proposal	EA	GK



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Client: STORY HOMES,
CARLISLE

Project: EDGEHILL PARK
PHASE 4

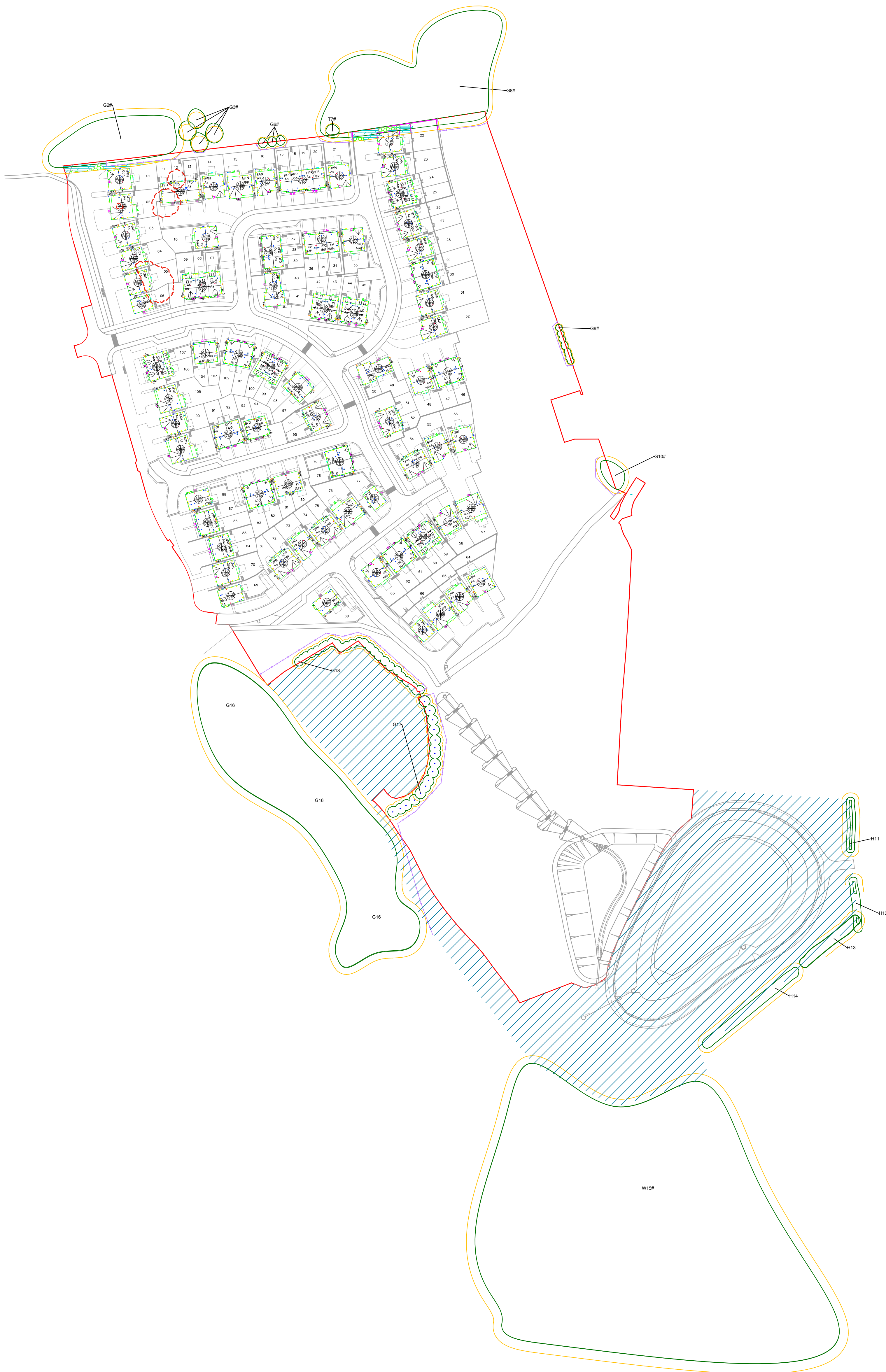
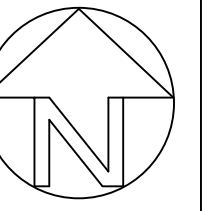
Title: TREE WORKS SCHEDULE

Issue: PLANNING

Drawn: AB	Checked: EA	Approved: AB	
Project: UG1415	Scale @ A1: NTS	Date: 18/03/22	
Dwg No: UG_1415_ARB_TWS_01	Revision: 02		

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Notes:-



●	Category A tree, group or hedge
●	Category B tree, group or hedge
●	Category C tree, group or hedge
●	Category U tree, group or hedge
	Retained tree
	Root Protection Area (RPA)
#	Position estimated on site
	Redline site boundary
	Protective fencing (See Insert 1 & Insert 2)
	Boundary Treatment
	Arboricultural Supervised Excavation
	Construction Exclusion Zone (CEZ)
	Cellular Confinement System
	Ground protection (See Insert 3)

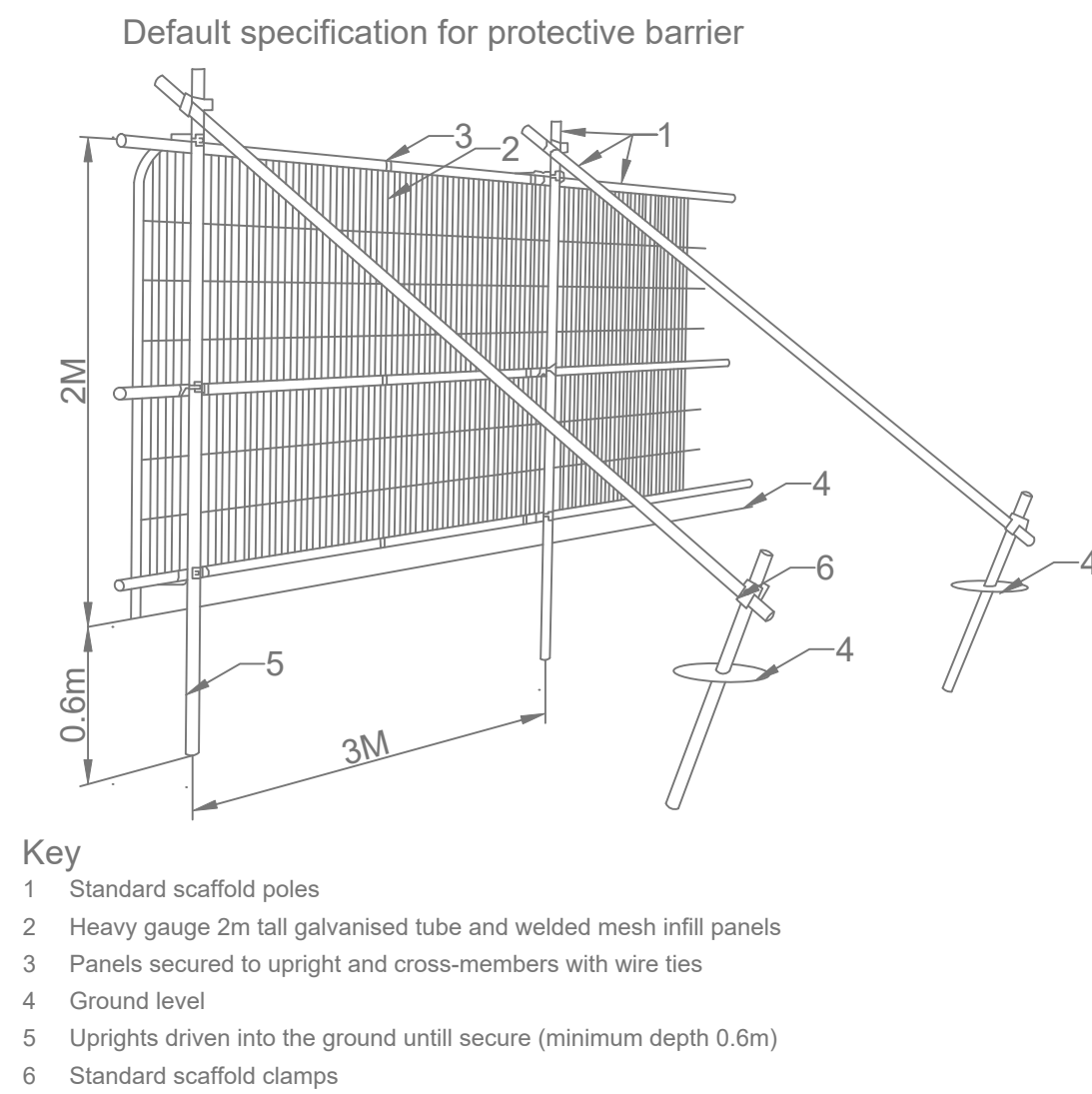
REV.	DATE	DESCRIPTION	DRAWN	CHK'D
04	01/08/23	Updated Proposal	AH	AB
03	01/08/22	Updated Proposal	RH	GK
02	10/06/22	Modified Redline & Updated Proposal	EA	GK
01	17/05/22	Modified Redline & Updated Proposal	AB	GK

Client:	Project:	Drawn:	Checked:	Approved:	Date:
STORY HOMES-CARLISLE	EDGEHILL PARK PHASE 4	AB	EA	AB	18/03/22
Issue:	Title:	Dwg No:	Scale @ A1:	Revision:	
PLANNING	TREE PROTECTION PLAN	UG_1415_ARB_TPP_01	1:1000	04	

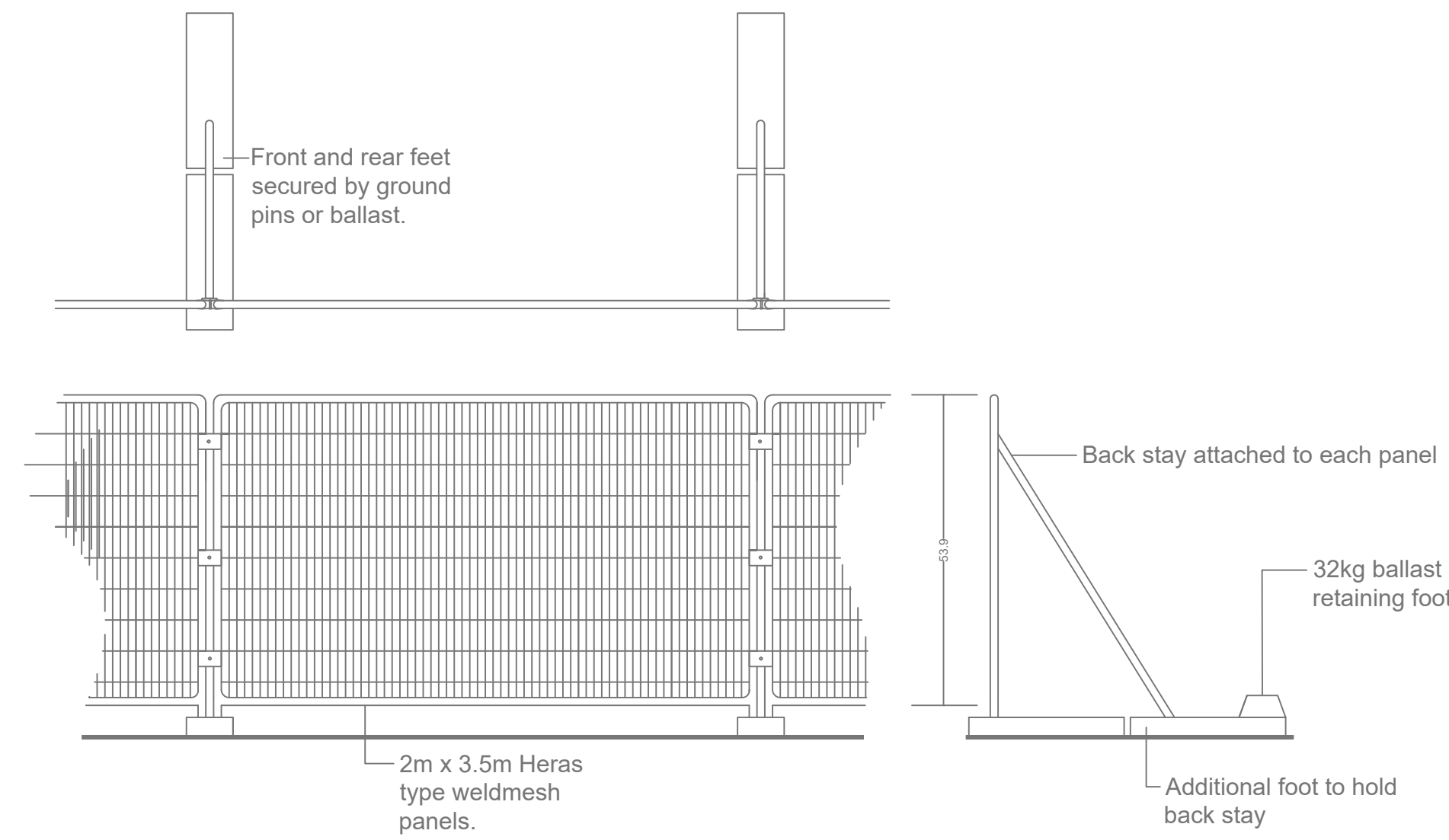


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Insert 1: Tree protective fencing specification



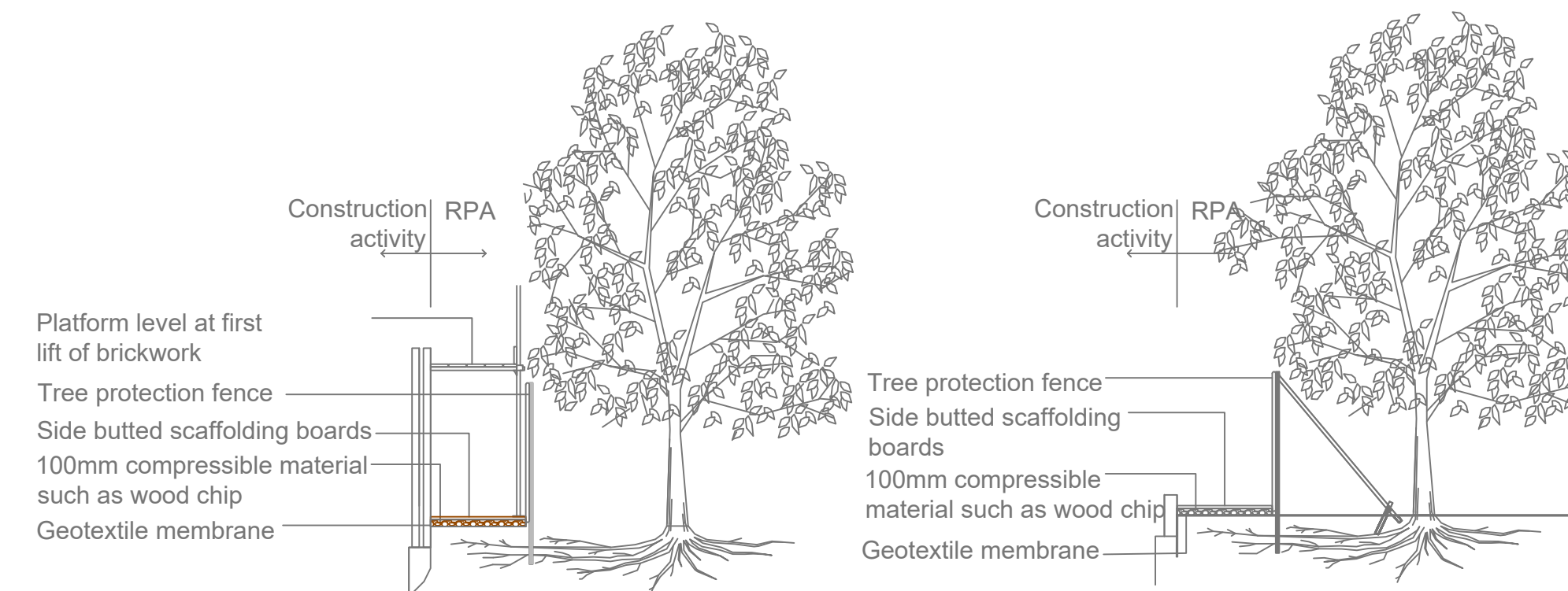
Back-stay support



Insert 2: Tree protection notice



Insert 3: Ground protection specification



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Notes:-

REV.	DATE	DESCRIPTION	DRAWN	CHKD
01	01/08/23	Updated proposal	AH	AB



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Project:	EDGEHILL PARK PHASE 4		
Title:	TREE PROTECTION INDEX		
Issue:	PLANNING		
Drawn:	AB	Checked:	EA
Approved:	AB		
Project:	UG1415	Scale @ A1:	NTS
Date:	18/03/22		
Dwg No:	UG_1415_ARB_TPI_01	Revision:	01