Ecological Consultants
Environmental and Rural Chartered Surveyors

Client: Genesis Homes Ltd
Site: Land at Parkside Road,
Cleator Moor, Cumbria

Arboricultural Impact Assessment for Proposed Development

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CONTENTS

1. SITE

A. SITE DESCRIPTION

1. The proposed development site is comprised of an area of enclosed grazing land at Parkside Road, Cleator Moor, Cumbria.

2. The development area is as indicated in Appendix 5: Tree Constraints / Protection Plan and tree stock is as detailed within Appendix 1: Tree Schedule and Appendix 2: Tree Location Plan.

3. The survey area consists of the existing agricultural land and its boundaries.

4. There is an absence of tree stock within the site boundaries with limited tree stock located adjacent to the established boundaries. Vegetation within the site is comprised of field boundary hedges.

B. SURVEY DETAILS

1. The site was surveyed on 13/12/2023, tree heights were estimated via use of clinometer (Suunto PM-5), measurements of DBH taken at 1.5m height and crown spread was taken by ground measurements. The position of tree references within the site are taken from the supplied site plan. All images were taken at the date with Samsung A32. Sun positions were estimated on site via Sun Surveyor software. Weather conditions were clear with light to no winds.

2. All surveying of tree stock on the site was carried out visually from the ground only. Where ivy cover was encountered on trees then only limited visual checking of structure and potential defects was possible.

3. At the time of surveying all trees were recorded on standard tree record sheets, see Appendix 1: Tree Schedule. Trees were surveyed throughout the entire site, detailed individual details were recorded for all significant trees within the existing site. Where larger numbers of smaller trees were encountered in the survey area these are included as a Group record which includes the approximate height range and maximum Diameter at Breast Height (DBH) of trees within the group, these groups are referred to by group i.e. Group 2 (G2).

4. The surveyed trees are categorized by the standard retention categories as defined in BS5837:2012. Such retention categories seek to inform the design process of trees which may be worthy of consideration for inclusion within the proposed development. All work recommendations relate to trees within the context of the current site layout and usage.

5. **Note**: the report and schedule recommendations form components of a development survey and are not intended to be used as a specific tree hazard assessment

6. Trees and hedges requiring removal to facilitate the proposed development, or which are unsuitable for retention are annotated in red on the Tree Constraints Plan and may be further identified in the work recommendation section of the Tree Schedule.

2. PROPOSED DEVELOPMENT

A. PROPOSED DEVELOPMENT

1. The proposed development layout is for construction of dwellings, associated hard and soft landscaping as illustrated in Appendix 5: Tree Constraints Plan.

3. TREE PRESERVATION ORDERS AND CONSERVATION AREAS

A. SITE DESCRIPTION

1. The site is not located within a Conservation Area.

2. Due to the absence of any significant tree stock, we have not conducted a check for the presence of a TPO (Tree Preservation Order).

3. The status of all trees within and adjacent to the site boundaries should be verified to the undertaking of tree works or removals.

4. It should be noted that trees located outside of maintained grounds and not covered by an active TPO or conservation area are subject to the standard Felling License constraints imposed by the Forestry Commission. These regulations restrict the volume of timber which may be removed in a calendar quarter without a felling licence to 5 cubic metres.

5. Hedgerow regulations cover the protection of certain established field boundary hedges. This would apply to hedges within and around the survey site.

4. IMPACT OF DEVELOPMENT ON TREE STOCK

A. CURRENT TREE STOCK

1. The current tree stock within the survey boundaries as defined by those trees within the area of the proposed development is detailed in Appendix 1 and outlined as follows.

2. Tree stock is confined to a single Sessile Oak T1 which is located off site within gardens to the southwest of the site and a Norway Maple T2 on the boundary of the northwest corner of the site.

3. Group G1 does not contain any significant tree stock, it is comprised of scrub cover, overgrown hedge species and Ash with advanced Ash Dieback. It is located adjacent to the northeast corner of the site.

4. All other vegetation within and around the site boundaries is comprised of hedges.

5. We have listed these hedges as hedge H1 to H7 within the schedule. Hedges within the site boundaries are of mixed condition. They are indicated by dashed lines, we have made these continuous to indicate the location of the hedge and associated banking but many hedges within the site are not continuous / cohesive.

6. The highway boundary hedge H1 is typical of a highway hedge with a single species, even aged composition.

7. H2 is a garden boundary hedge and a mix of native and non-native species.

8. H3 is an unmaintained field / garden hedge, it does not extend along the entirety of the boundary.

9. H4 is an internal field dividing hedge within the central site. The western section has dissolved into occasional scattered single Hawthorns and clumps of Hawthorns. This section of H4 has lost all cohesion as a hedge.

10. H5 is similar to the eastern section of H4 in that it is no longer a cohesive, viable hedge.

11. H6 forms a section of the southwest boundary of the site, it is largely unmanaged with colonisation with Goat Willow.

12. H7 forms the western edge of the overall site. It is unmanaged and extends into a shallow ditch via Blackthorn sucker growth.

13. No other trees or hedges are located within the sphere of the development.

4. IMPACT OF DEVELOPMENT ON TREE STOCK (CONT.)

B. PROPOSED DEVELOPMENT

1. Trees which are within the zone of potential impacts from the proposed development illustrated in Appendix 5: Tree Constraints Plan are detailed as follows.

2. Tree references T1 and T2 are outside of the development area. T1 requires protection via fencing as indicated in Appendix 5.

3. H1 can be retained and protected via fencing off set 1.5 m from the hedge. Two small sections will require removal, one to widen the existing gateway and one to form a new access, these will total 14m.

4. All southern and western boundary hedges can be retained and protected via standard protective barriers. These should be offset from the face of the hedge by 1.5m.

5. The internal hedge boundary line H4 is partially retained within the development. A 35 metre section will require removal, this can be mitigated by replacement / new hedge plating within the site.

6. Two small remnant sections of H5 will require removal, this can be mitigated by the proposed planting.

7. H7 is outside of the development zone, construction access scan be prevented via protective fencing.

8. Group G1 can be retained via protective barriers. As noted, the Ash component requires removal irrespective of the development due to its poor condition.

9. No other trees or hedges are directly or indirectly affected by the proposed development.

5. SUGGESTED MITIGATION MEASURES

A. GUIDELINES

1. Guidance for the protection and retention of trees within the site.
2. Erection of protective fencing as indicated in Appendix 5: Tree Constraints Plan.
3. No material storage should take place in these areas.
4. No mixing of cement-based or other building materials should take place within the root protection area, no storage of fuels should take place within this area.
5. The tree protection must remain in place until work is completed and there is no risk to the RPAs
6. Once construction has been completed and the landscaping phase is complete the protective fencing may be removed.
7. Specific guidance for the site is not required.

B. PROTECTIVE FENCING

1. Once erected all protective fencing will be regarded as sacrosanct and will remain in place until the completion of the construction phase. It shall not be removed, relocated or breached at any time without consultation with the project arboriculturalist.
2. Protective fencing will be constructed of robust barriers fit for the purpose of excluding construction traffic form root protection areas. Details of appropriate fencing types are included in Appendix 6.
3. Signs will be affixed to every third panel stating, ‘Tree Protection Area Keep Out’. See Appendix 6 for example of signage.
4. All fencing will be securely affixed to avoid movement of fencing during the construction phase.
5. For the sections marked in orange on Appendix 5 fences will be constructed of site fencing of ‘Heras’ type which must be securely braced with additional measures to prevent movement of the fence during construction.
6. Indicative positions for protective fencing are indicated in orange on Appendix 5: Tree Constraints Plan. Where hedges are protected the fencing should be placed 1.5m from the maintained outer face of a mature hedge.

5. SUGGESTED MITIGATION MEASURES (CONTINUED)

C. GENERAL PRINCIPLES TO AVOID DAMAGE TO TREES.

1. Protective fencing installed to prevent mechanical damage to trees adjacent to the development.
2. An indicative list of recommended practices during construction phase is listed below:
3. Once installed tree protection must remain in place and be observed at all times.
4. No fires within 10m of the crown of any retained trees.
5. Soil levels in rooting areas to be retained with minimal level changes, no greater increases than 300mm from existing levels.
6. No cement mixing/washout to take place within 15m of any retained trees.
7. No chemicals, bitumen etc. to be stored within 10m of any retained trees.
8. Any spillage of fuel, chemicals or contaminated water occurring within 2m of the root protection areas to be reported to project supervisor.
9. No additional underground services have been indicated to us at this time but they may be safely routed to avoid rooting zones, if additional services require routing through the root zones of trees for retention then appropriate sub surface or hand trenching methods should be used and guidance sought prior to any works being undertaken. See BS3857:2012.

D. MITIGATION PLANTING.

A landscaping plan has been supplied to us at this time.

The proposed development layout includes significant volumes of landscaping / planting including tree, shrub and hedge planting.

6. CONCLUSION

1. The proposed development will not require the removal of any f tree stock

2. The existing and remnant hedges within and around the site are largely retained within the development. Where small sections require removal, this can be mitigated by replacement planting and enhancement of the existing sparse section of hedges.

3. No other trees are impacted upon by the development and no future conflicts with retained trees have been identified.

7. RECOMMENDATIONS

It is recommended that

The management of the development reflects the guidance contained within this report both for the management of trees for retention and the protection of same during the proposed development phase and that due consideration is given to the position of any development in relation to retained trees and the removal of trees which are unsuitable for long term retention from the site prior to any development.

Type	Name	Age	DBH	Height	1stB	N	E	S	W	Cond	Life Exp	Comments	Recommendations	RPR m	RPA m^2	Category
H1	Crataegus monogyna (Hawthorn)	EM	100	1.5	0.5	0.5	0.5	0.5	0.5	Fair	20+	Single species maintained highway boundary hedge. Would benefit from period without flail trimming followed by laying to improve long term condition of hedge. All hedge DBH are estimated at base	Retain and protect in development. Two sections require removal to widen and form access points 14 m total	1.2	4.52	B2
H2	Crataegus monogyna (Hawthorn),Lonicera nitida,Prunus spinosa (Blackthorn)	M	120	1.5	0.5	1	1	1	1	Mix	20+	Mix of remnant field boundary and colonisation by garden hedging species	Retain and protect in development	1.44	6.52	C2
T1	Quercus petraea (Sessile Oak)	M	450	12	5	5	5	5	5	Good	20+	Off site located between boundary fence and garage. DBH estimated	Retain and protect in development	7.63	182.92	B2
H3	Crataegus monogyna (Hawthorn),Ilex aquifolium (Holly),Salix caprea (Goat Willow)	M	120	4	0	1.5	1.5	1.5	1.5	Mix	10+	Section of unmaintained hedge along garden / field boundary	Retain and protect in development	1.44	6.52	C2
H4	Crataegus monogyna (Hawthorn),Ilex aquifolium (Holly),Acer pseudoplatanus (Sycamore),Ulex europaeus (Gorse),Corylus avellana (Hazel)	M	150	5	0	2	2	2	2	Mix	10+	Unmaintained field boundary hedge on banking. W section has dissolved into occasional scattered small trees, more cohesive hedge in central to E section of site	Retain and protect sections in development with bolstering via new planting. 35m section require removal.	1.8	10.18	C2
H5	Crataegus monogyna (Hawthorn),Sorbus aucuparia (Rowan)	M	150	4	1	2	2	2	2	Poor	10+	Remnant hedge on banking. No cohesive hedge remaining. Scattered trees / plants have grazing damage and decay in lower stems	Majority of hedge retained and protect in development with additional planting to enhance / re-establish. Two small scattered remnant sections require removal 3.5 and 11m	1.8	10.18	C2
H6	Betula pendula (Silver Birch),Crataegus monogyna (Hawthorn),Corylus avellana (Hazel),Ligustrum vulgarae (Privet),Salix caprea (Goat Willow),Sambucus nigra (Elder)	M	150	5	0.5	3	3	3	3	Mix	10+	Mixture of sections of hedge and colonisation by smaller multi stemmed trees (Goat Willow / Silver Birch)	Retain and protect in development	1.8	10.18	C2
T2	Acer platanoides (Norway Maple)	EM	170	9	2	3.5	3.5	3.5	3.5	Good	20+	Tree located adjacent to site boundary	Outside development area, protect in development.	2.88	26.06	C2
H7	Corylus avellana (Hazel),Crataegus monogyna (Hawthorn),Ilex aquifolium (Holly),Sambucus nigra (Elder),Prunus spinosa (Blackthorn)	M	150	6	0	2	2	2	2	Fair	20+	Unmanaged hedge, main section along shallow depression / ditch has suckered / colonised edge of field up to single strand stock fence	Outside development area, protect in development.	1.8	10.18	B2
G1	Corylus avellana (Hazel),Crataegus monogyna (Hawthorn),Fraxinus excelsior (Ash),Ilex aquifolium (Holly),Salix caprea (Goat Willow)	M	150	12	0	6	6	6	6	Mix	10+	Cluster of unmanaged hedge plants and 2 Ash. Both Ash have advanced Ash Dieback infection with <5% live crown	Retain and protect in development	1.8	10.18	C2/U

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 *NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see **4.5.7**.*			See Table 2
	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)	See Table 2
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value	See Table 2
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	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value	See Table 2

Tree Location Plan

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Tree Locations by retention category
Tree A
Tree B
Tree C
Tree U

Root Protection Area (radius)
RPA Category A
RPA Category B
RPA Category C
Category U tree, unsuitable for retention

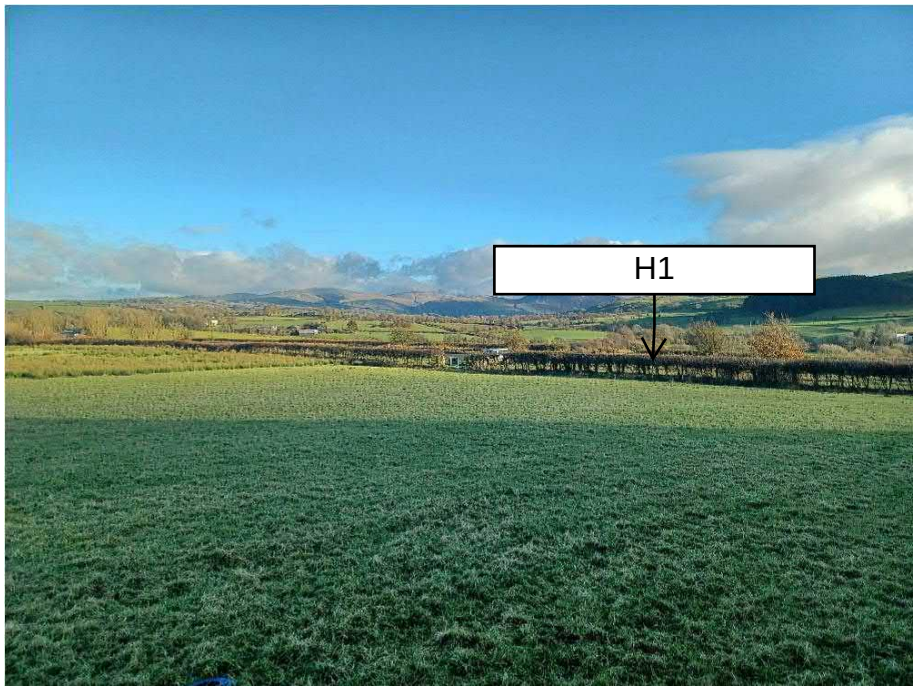
Restricted Root Protection Area (polygon)

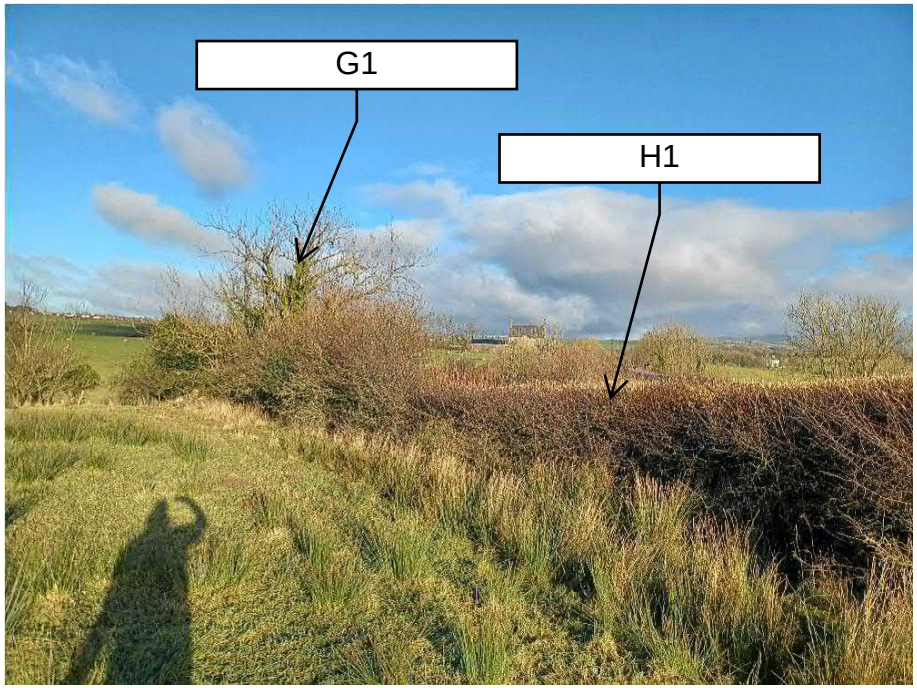
Surveyed Canopy Extents

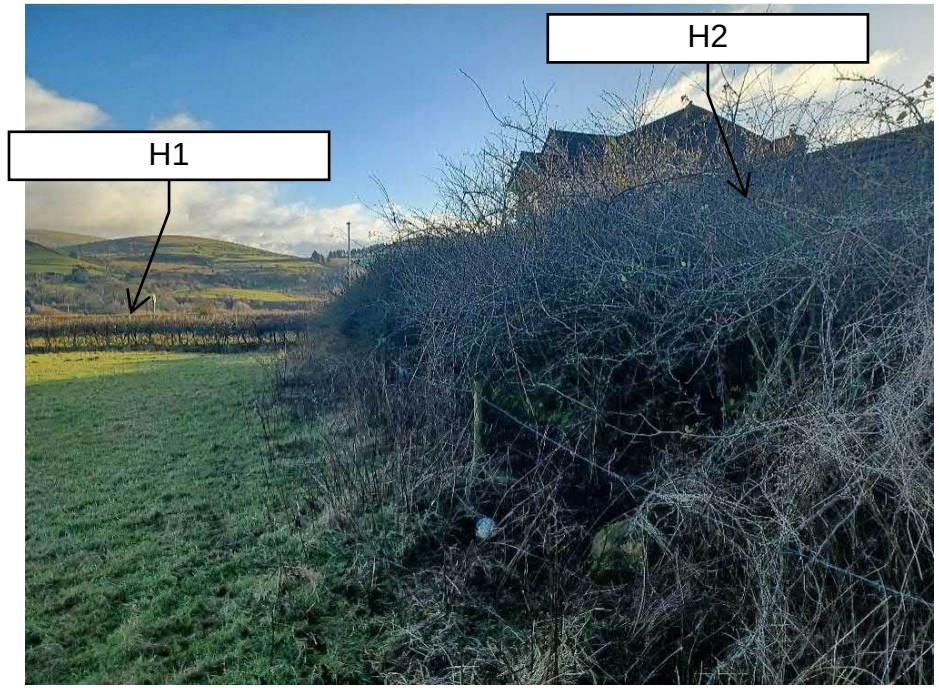
Project Title:
Parkside, Cleator Moor
Date of Survey:
13/12/2023
Surveyor:
A. Wood
Date File Created:
10/01/2024
1:500

Prepared by
Antony Wood Cert Arb RFS
Yew Tree and Gardens
For Envirotech NW Ltd

Note
RPA only indicated for significant trees. Small garden trees and juvenile specimens may not be indicated
Retention Categories:
As defined in BS5837: 2012
RPA
Plotted from individual RPA sheets.
Where restricted rooting conditions are present RPA is also plotted as an area polygon







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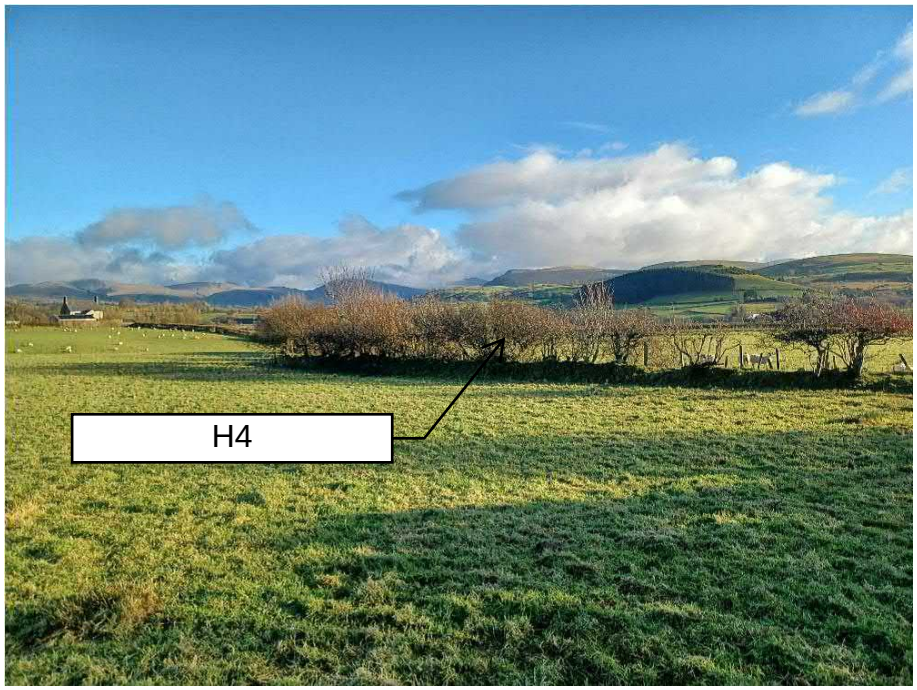

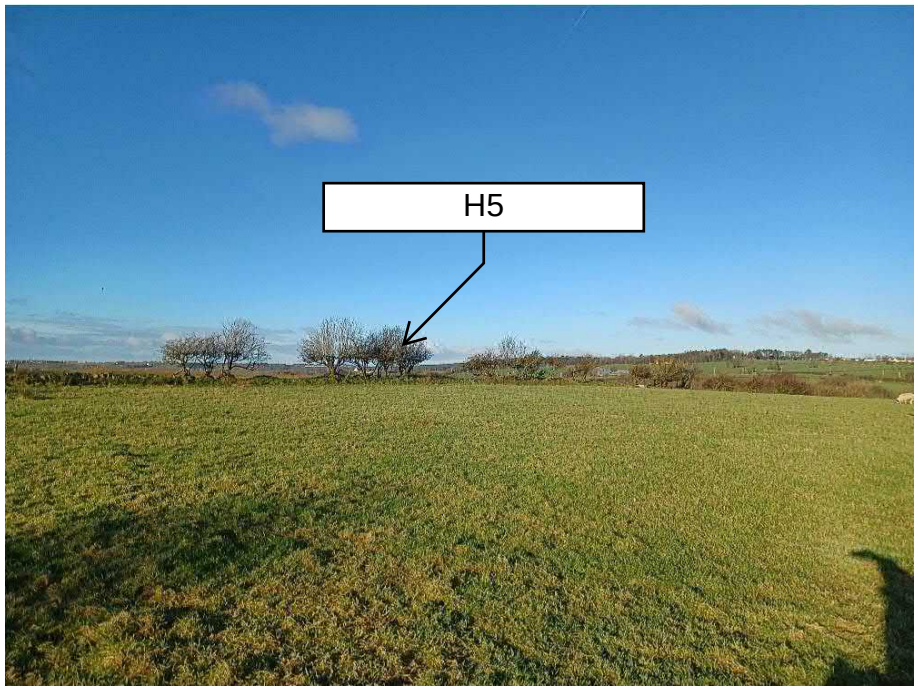

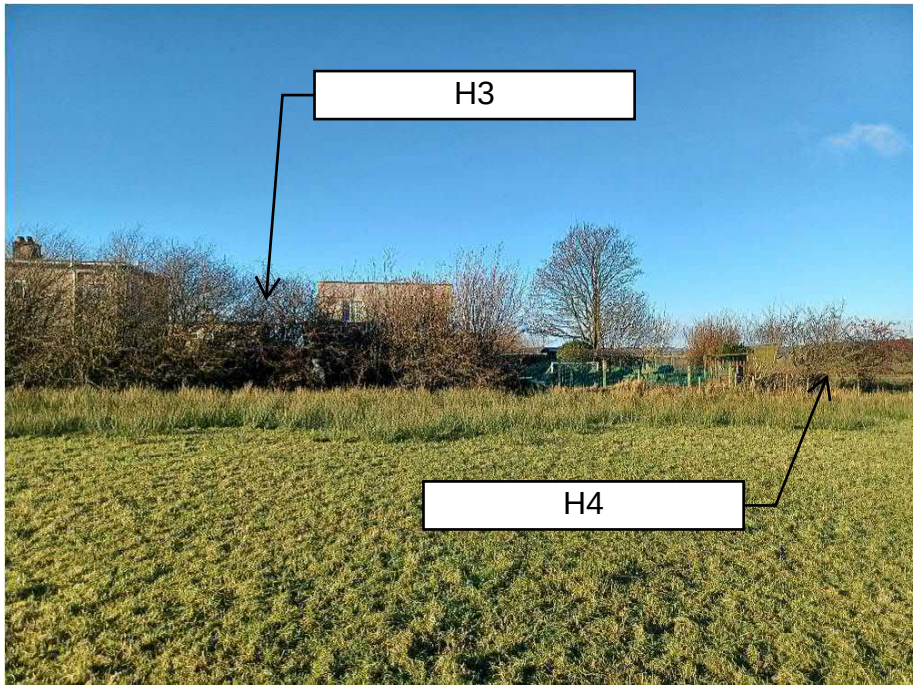

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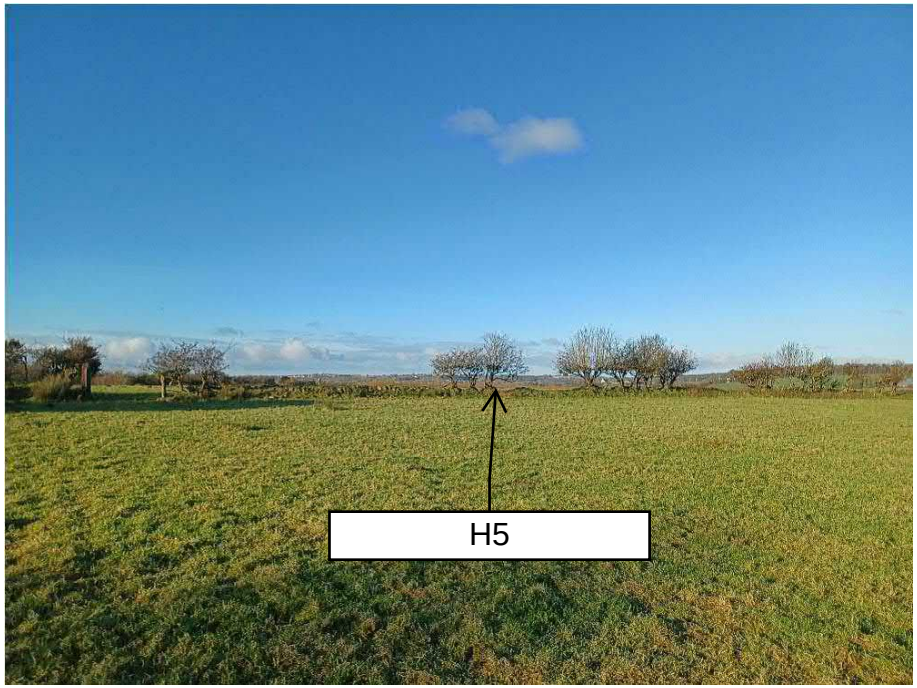

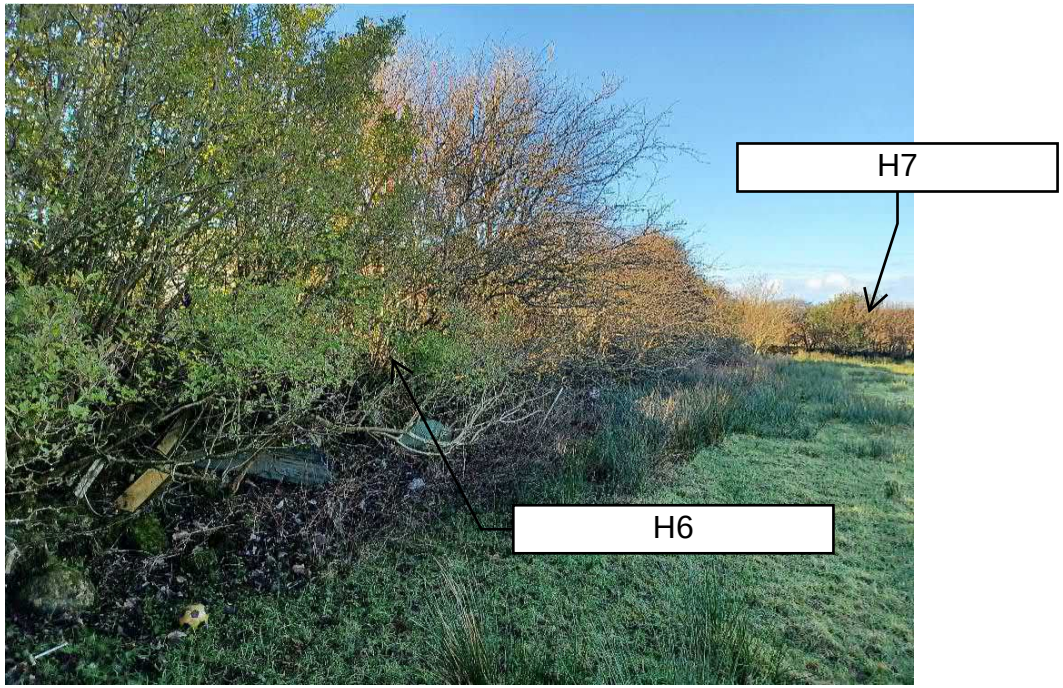

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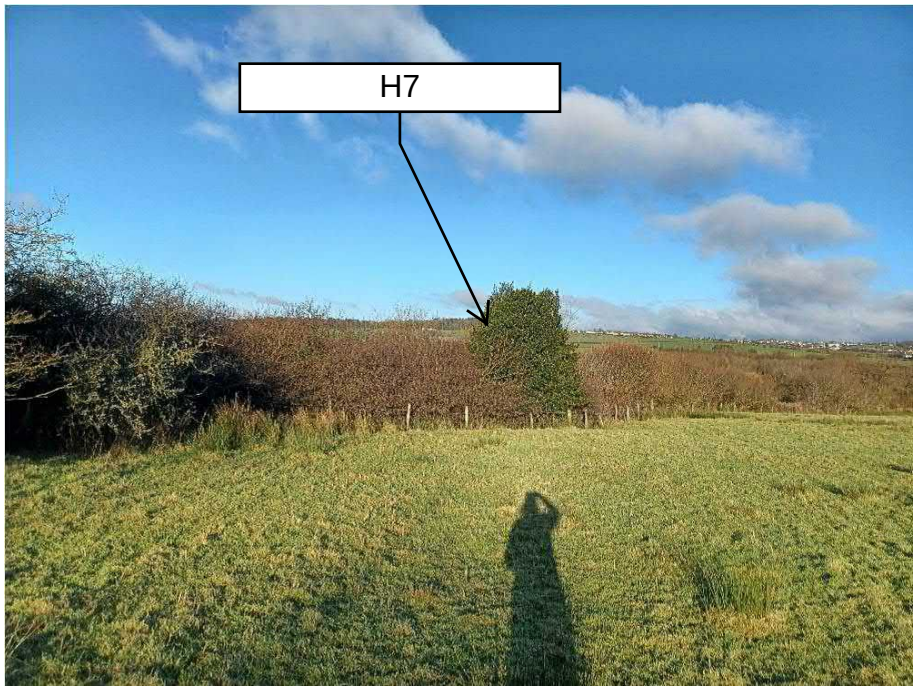


Image date: 13/12/2023

APPENDIX 4

Selected Reference List

The Body Language of Trees by Claus Mattheck & Helge Breloer (1994) London:HMSO.
Diagnosis of ill-health in trees by R.G. Strouts and T.G. Winter. (2000) London:HMSO
Principles of Tree Hazard Assessment and Management by David Lonsdale.(1999) HMSO
BS5837:2012 British Standards Institute
BS3998:2010 British Standards Institute
Trees Their Use, Management, Cultivation and Biology Robert Watson 2006
Tree roots in the built environment (Research for Amenity Trees) (2013) Arboricultural Association
Law of Trees, Forests and Hedges
by Dr. Charles Mynors (Author) Sweet & Maxwell; 2nd Revised edition (14 Dec. 2011)
Assessment of Tree Forks, Assessment of Junctions For Risk Management by Dr. Duncan Slater : Arboricultural Association (Nov 2016)
Collins Tree Guide by Owen Johnson (2006): Harper Collins, London

Native hedgerow extended northwards along the scrub margin as a linear wildlife corridor and defined boundary to the POS

Species rich scrub/woodland copse planting to extend the adjacent habitat with informal tree groups

Area managed as a wildflower meadow with native tree groups. Some areas with amenity grass to accommodate recreational activity

Species rich native hedge to define the field boundary and extend the linear habitat. Wildflower grass margins and occasional native hedge trees

Flowering shrubs with emergent specimens adjacent to the visitor parking to enhance the streetscape

Informal path meanders through the linear open space with flowering trees and drifts of Spring bulbs

Shade tolerant low groundcover with feature plant centred on window

Native trees and shrubs combine to create a small copse habitat to enhance the local biodiversity and wildlife interest

Species rich wildflower grass managed as a meadow with informal groups of native trees

Focal point flowering tree at the end of the cul-de-sac within wildflower grass

Mown grass path meanders through the wildflower meadow POS with native trees

Native species trees and shrubs sub-divides the POS area creating sheltered spaces and connecting with the adjacent hedgerow habitats

enclosure to the POS

Wet meadow wildflower grass to the attenuation basin which will tolerate being submerged periodically

Species rich native hedge to define the field boundary and extend the linear habitat. Wildflower grass margins and occasional native hedge trees

Native marginal planting enriches the habitat and adds flower colour interest

Existing hedge extended with gap infill

Avenue of trees defines the boundary and enhances the road corridor landscape character

Focal point planting on the axis of the road with tall specimens

Feature planting beds flank the entrance and reduce the impact of the hedge ends

Evergreen hedge to enclose the private garden areas and provide some privacy from the adjacent POS

Evergreen shrubs around the bin store for screening

Small trees identified on the Preliminary Ecology Report retained and protected

Small canopy trees within front gardens combine to create an avenue effect

Sparse hedge and small trees retained

Tall shrubs along the sunny aspect wall reduces the monotony of screen boundaries to enhance the streetscape

Remnant hedge sections extended with native trees and shrubs to create a native scrub area to extend the habitat and diversify the site ecology

Spring blossom tree on the axis of the cul-de-sac as a focal point with tall shrubs

POS area partially enclosed with a low evergreen hedge to partition the space from the main access road for safety

Entrance feature planting flanking the path to the POS area

Potential crossing point where forward visibility good- traffic calming measures

Option for gated access to the linear POS for dog walking and nature walks with wildflower grass margins to restored and extended native hedgerow

Native hedge extended where access available for maintenance

Existing hedge retained and protected

Evergreen hedges delineate the some plots and increases the degree of privacy

Hedge retained and improved with infill to the gaps

SuDS Basin

Maintenance Track

Gate

Gate

Site boundary
Existing trees and hedges
Proposed mixed native hedge
Proposed hedge
Proposed tree
Specimen shrub
Proposed shrubs
Proposed amenity grass
Wild flower grass
Native marginals
Native trees and shrubs
Proposed bench seat

NOTES

ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE

ANY DISCREPANCIES ARE TO BE REPORTED TO THE ARCHITECT BEFORE ANY WORK COMMENCES

THIS DRAWING SHALL NOT BE SCALED TO ASCERTAIN ANY DIMENSIONS WORK TO FIGURED DIMS ONLY

LANDSCAPE SPECIFICATION

TOPSOIL CULTIVATION In accordance with BS 3882. Apply glyphosate herbicide prior cultivation and allow the recommended period before further action. Ensure ground is free draining by breaking up subsoil and installation of land drainage as required. Do not work the soil in frozen or waterlogged condition. Remove any debris and stones greater than 50mm from surface and cultivate to suitable tilth for planting. Rake surface to achieve required level flush with adjacent paving for turf and 50mm below for planting to allow for mulch layer and smooth flowing contours for open space areas without hollows or soft areas. Topsoil depths to be minimum 150mm for grass and 450mm for planting and at least 300mm of suitable subsoil beneath the topsoil layer. Site topsoil to be supplemented with imported topsoil in accordance with BS 3882. Shrub beds in grass areas to be neatly cut to layout shown.

PLANTING Plant material shall conform to the National Plant Specification and be healthy, vigorous specimens, well rooted but not pot bound, free from pests and disease, hardy and undamaged by transport operations in accordance with HTA 'handling and establishing landscape plants'. Planting and turfing to be in accordance with BS 3936 and 4428. Plant species substitutes will be permitted to accommodate availability and to include stock of particular good quality in nursery provided these are of a similar habit, size, colour, value etc and that they are **approved in advance** by the Landscape Architect. Native species to be local provenance. Bare root and rootballed plants to be planted between November and March. Backfill of planting holes and tree pits to be excavated topsoil with 25% by volume tree and shrub planting compost. Shrub pits to be generally 300 x 300 x 300mm or 75mm wider and deeper than the root spread. Tree pits to be 900 x 900 x 600mm or 150mm wider than the root spread. Stakes to be two 75mm diameter pointed stakes driven until firm and trimmed to 900mm above G.L. with 50 x 100mm crossbar screwed to stakes. Rubber tree cushion nailed to crossbar and rubber tree belting nailed to secure tree. Single 75mm diameter stake for bare-rooted trees with rubber tree belting with spacer. Apply slow release fertiliser (16:10:10) at rate of 100g/ sq.m. to planting areas and 250g per tree. Thoroughly water planting.

PLANTING DENSITIES/ SETTING OUT Refer to the Planting Schedule for densities. Where a bed is indicated as mixed species on the plan, the area should be divided equally between the species shown and the relevant density for that species applied to that proportion of the bed. Taller species to the rear of the bed and smaller species to the front planted in bold groups of single species and not mixtures unless clearly requested on the plan annotations.

TREE RABBIT GUARDS If rabbit activity is noted in the area and guarding is authorised each bare rooted native plant hedge plant to receive a 12/14 weight 900mm cane and 60cm clear spiral guard. Trees to receive 90cm spiral guard. If extensive rabbit activity is observed rabbit fencing to ornamental areas will be required as directed by the Landscape Architect.

MULCH Spread 50mm layer of general purpose bark mulch, free from large sticks, and debris over all shrub areas, 800mm wide strips for hedging and 800mm diameter circles for tree pits in grass with neatly trimmed edge.

TURFING Following cultivation preparation specified above supply and lay Rolawn Hallstone turf or similar approved with staggered joints close butted to uniform levels to finish 25mm above adjacent paving levels once well tamped down. Use sharp sand spread on surface to achieve fine tuning of levels. Thoroughly soak turf on completion and ensure regular watering is arranged until the turf has rooted. Do not turf in waterlogged or frozen conditions.

SEEDING AMENITY GRASS Following cultivation preparation specified above apply Bost on Seeds Low maintenance amenity mix or similar approved at a rate of 35gms/ sq.m. and roll with quad or hand drawn ballast grass roller. Apply water with sprinkler hose in dry conditions to ensure germination. Levels to be flush with adjacent paving following firming and settlement of topsoil. Further stone-picking, top-dressing and re-seeding of bare patches to ensure uniform, level grass is established. Re-roll as required at first cut stage.

SEEDING WILDFLOWER GRASS Prepare as for amenity grass and sow 3-5 g/ sq.m. of mix B51M to general meadow areas B57M to hedge margins and B56M to the SuDS basin and margins supplied by Boston Seeds and applied in accordance with their recommendations.

PLANT SCHEDULE

NATIVE TREES

			Number	
Acer campestre	Field Maple	AC	5	2-2.5m high bare rooted
Acer platanoides	Norway Maple	AP	10	2-2.5m high bare rooted
Alnus glutinosa	Alder	AG	8	2-2.5m high bare rooted
Pinus sylvestris	Scots Pine	PS	2	Oil
Quercus petraea	Sessile Oak	QP	11	2-2.5m high bare rooted
Malus sylvestris	Crab Apple	MS	3	2-2.5m high bare rooted
Prunus avium	Gean	PA	10	2-2.5m high bare rooted
Sorbus aucuparia	Rowan	SAU	13	2-2.5m high bare rooted
TOTAL			**62**	

ROOTBALLED TREES

Betula pendula	Silver Birch	BP	10	8-10 cm rootballed
Carpinus betulus Fastigiata'	Hornbeam	CB	6	10-12cm rootballed
Crataegus Crimson Cloud	Hawthorn	CC	6	10-12cm rootballed
Crataegus Pauls Scarlet	Hawthorn	CP	4	10-12cm rootballed
Malus Red Sentinel	Apple	MR	5	10-12cm rootballed
Prunus Pink Perfection	Cherry	PP	11	10-12cm rootballed
Prunus Hilliers Spire	Cherry	PH	9	10-12cm rootballed
Sorbus Embley	Rowan	SE	9	10-12cm rootballed
Sorbus Joseph Rock	Rowan	SJ	9	10-12cm rootballed
Sorbus aria 'Lutescens'	Whitebeam	SAL	10	10-12cm rootballed
Tilia cordata Greenspire	Lime	TC	14	10-12cm rootballed
TOTAL			**99**	

SPECIMENS	**Key**	**Number**	**Specification**
Amelanchier lamarckii	AL	4	90-100cm CG15
Eleagnus ebbingei Maculata	EB	4	90-100cm CG15
Euonymus Green Spire	EG	1	40-50cm CD30
Photinia Red Robin	PR	4	90-100cm CG15 LOLLIPI
Phormium 'Yellow Wave'	PY	4	90-100cm CG15
Phormium Sundowner	PS	1	90-100cm CG15
Syringa vulgaris	SV	6	60-80cm C10
Skimmia Rubella	SR	4	40-50cm CG10
TOTAL		**28**	

NATIVE TREES AND SHRUB MIX — 0.5/ sq.m. — 1000 sq.m. — 500 plants

Plant name	Common name	% in mix	Number	Specification
Crataegus monogyna	Hawthorn	20%		40/60cm bare root
Corylus avellana	Hazel	20%		40/60cm bare root
Prunus spinosa	Blackthorn	10%		40/60cm bare root
Sorbus aucuparia	Rowan	10%		40/60cm bare root
Ilex aquifolium	Holly	10%		90/40cm in C2 container
Acer campestre	Field Maple	10%		40/60cm bare root
Prunus padus	Bird Cherry	5%		40/60cm bare root
Sambucus nigra	Elder	5%		40/60cm bare root
Viburnum opulus	Geuilder Rose	5%		40/60cm bare root
Rosa canina	Dog Rose	5%		40/60cm bare root

HEDGE: Species rich native mix — 4/ linear metre — NRH — 624m — 2500 plants — Double staggered row — Includes 70m infill to existing hedges

Plant name	Common name	% in mix	Number	
Crataegus monogyna	Hawthorn	58%	1450	40/60cm bare root
Prunus spinosa	Blackthorn	10%	250	40/60cm bare root
Ilex aquifolium	Holly	10%	250	90/40cm in C2 container
Corylus avellana	Hazel	5%	125	40/60cm bare root
Rosa canina	Dog Rose	5%	125	40/60cm bare root
Lonicera periclymenum	Honeysuckle	2%	50	90/40cm in C2 container
Sambucus nigra	Elder	2%	50	40/60cm bare root
Viburnum opulus	Geuilder Rose	2%	50	40/60cm bare root
Prunus padus	Bird Cherry	2%	50	40/60cm bare root
Acer campestre	Field Maple	2%	50	40/60cm bare root
Malus sylvestris	Crab Apple	2%	50	40/60cm bare root

HEDGE: native Holly — 4/ linear metre — NHH — 117m — Double staggered row

Plant name	Common name	% in mix	Number	
Ilex aquifolium	Holly	100%	468	90/40cm in C2 container

ORNAMENTAL HEDGE — 4/ linear metre single row

Plant name	Common name	Key	Number	
50 *Prunus laurocerus*	Portuguese Laurel	PLH	200	90/40cm in C2 container
40 *Fagus sylvatica*	Beech	FSH	160	90/40cm in C2 container
100 *Ilex aquifolium Golden King*	Holly	IAH	400	90/40cm in C2 container
90 *Ligustrum ovalifolium Aureum*	Privet	LOH	360	90/40cm in C2 container
280				

BULBS

			Number	
Crocus Blue/ White mix	Crocus	C	2500	As shown
Narcissus pseudonarcissus	Daffodil	N	2500	As shown

ORNAMENTAL SHRUBS/ PERENNIALS — 660 sq.m.

			No/ sq.m.
Astilbe Bressingham Beauty	Ab	20-30cm	C2	4
Berberis chunbergii Atropurpurea Nana	Bc	20-30cm	C2	4
Bergenia cordifolia	Bc	20-30cm	C2	4
Euonymus Emerald Gaiety	Ex	30-35cm	C2	3
Euonymus Blondy	Eb	30-35cm	C2	3
Ceanothus Puget Blue	Cb	20-30cm	C2	3
Choisya Sundance	Cs	30-35cm	C2	3
Cistus Silver Pink	Cp	30-35cm	C2	3
Cornus alba elegantissima	Ce	40-60cm	C2	2
Geranium Johnsons Blue	Gj	20-30cm	C2	5
Hebe Blue Gem	Hb	20-30cm	C5	4
Hebe Autumn Glory	Ha	20-30cm	C5	4
Hebe Sutherlandii	Hs	20-30cm	C5	4
Hebe 'Mrs Winder'	Hw	20-30cm	C5	3
Hebe Marjorie	Hm	20-30cm	C5	4
Heuchera Palace Purple	He	30-35cm	C2	4
Hypericum calicynum	Hp	30-35cm	C2	4
Hypericum Hidcote	Hh	30-35cm	C2	3
Lonicera pileata Maigreen	Lm	30-45cm	C2	3
Pennisetum Rubrum	Pr	20-30cm	C2	4
Pittosporum Silver Ball	Ps	20-35cm	C2	3
Prunus laurocerasus	Pla	30-45cm	C2	2
Potentilla Abbotswood	Pa	30-35cm	C2	4
Potentilla Lovely Pink	Pl	30-35cm	C2	4
Potentilla Elizabeth	Pe	30-35cm	C2	4
Rosemary Miss Jessups Upright	Rm	20-30cm	C2	3
Rosemary prostratus	Rp	20-30cm	C2	4
Pyracantha rogensiana	Pro	30-35cm	C2	3
Rudbeckia Goldstrum	Rg	20-30cm	C2	4
Sedum Autumn Glory	Sa	20-30cm	C2	5
Senecio sunshine	Ss	20-30cm	C2	3
Skimmia japonica Rubella	Sr	20-30cm	C2	3
Spiraea Goldmound	Sg	20-30cm	C2	3
Viburnum davidii	Vd	20-30cm	C2	3
Vinca minor Atropurpurea	Vm	15-20cm	C2	5
TOTAL SHRUBS				

POND MARGINALS

		4/ sq.m.	Number	70 sq.m. 280 plants
Filipendula ulmaria	Meadowsweet	25%	56	9 cm plugs
Iris pseudacorus	Yellow Flag Iris	60%	168	9 cm plugs
Caltha palustris	Marsh Marigold	20%	56	9 cm plugs
TOTAL			280	

Tree Constraints / Protection Plan

envirotech

Tree Locations by retention category
Root Protection Area (radius)
RPA Category A
RPA Category B
RPA Category C
Category U tree unsuitable for retention
Restricted Root Protection Area (polygon)
Surveyed Canopy Extents
Tree / Hedge Removal
Tree Protection Fence
Ground Protection / Specific Working Methods

Project Title:
Parkside, Cleator Moor
Date of Survey:
13/12/2023
Surveyor:
A. Wood
Date File Created:
25/03/2025
1:500

Prepared by
Antony Wood Cert Arb RFS
Yew Tree and Gardens
For Envirotech NW Ltd

Note:
RPA only indicated for significant trees. Small garden trees and juvenile specimens may not be indicated
Retention Categories:
As defined in BS5837: 2012
RPA:
Plotted from individual RPA sheets.
Where restricted rooting conditions are present RPA is also plotted as an area polygon

Rev A 16.12.24 Central SUDS omitted & north SUDS extended BW

Westwood LANDSCAPE DESIGN

CHARTERED LANDSCAPE ARCHITECTS

GENESIS HOMES LTD

PARKSIDE ROAD CLEATOR MOOR

LANDSCAPE PLAN

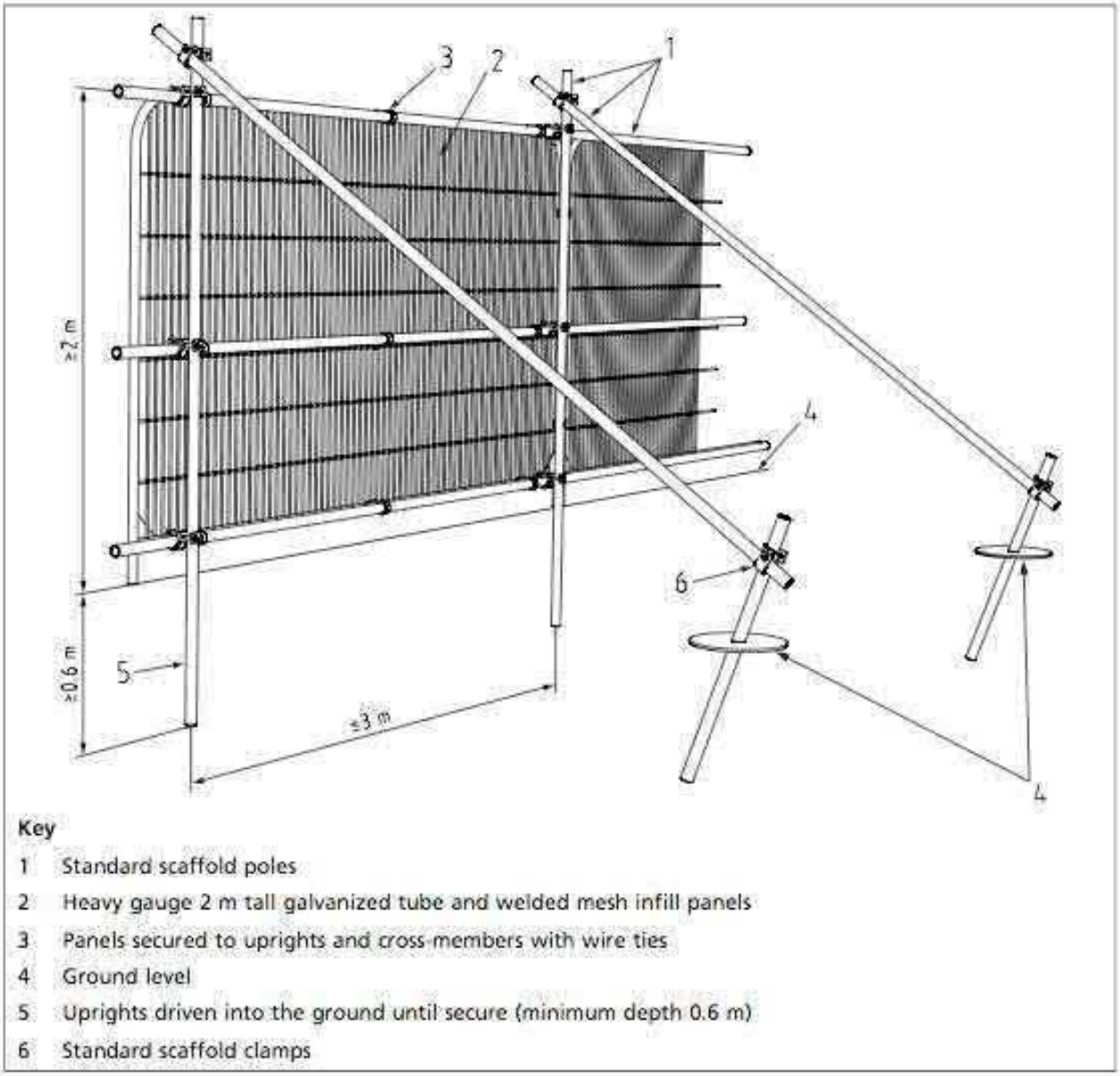
DATE: 02.12.24 **DRAWING NUMBER: WW/L01A**

SCALE: 1:500 @ A1

0 5 10 25 50M

Tree protective fencing

Figure 2 **Default specification for protective barrier**

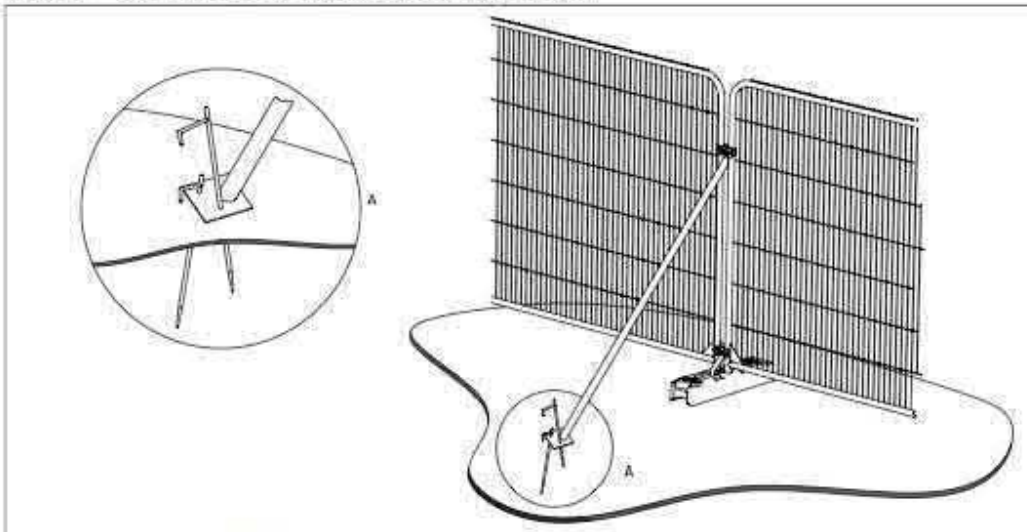


Key

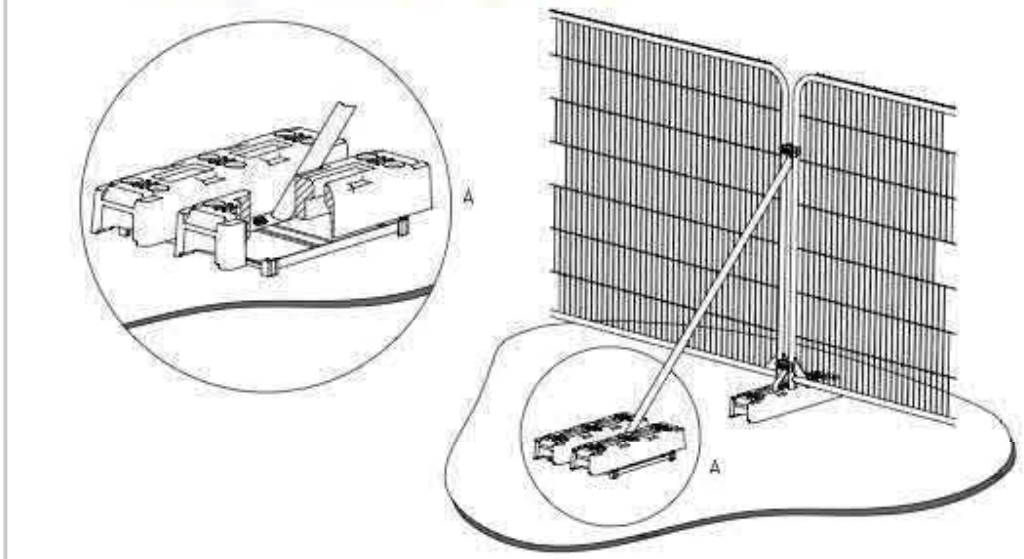
1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

Tree protective fencing

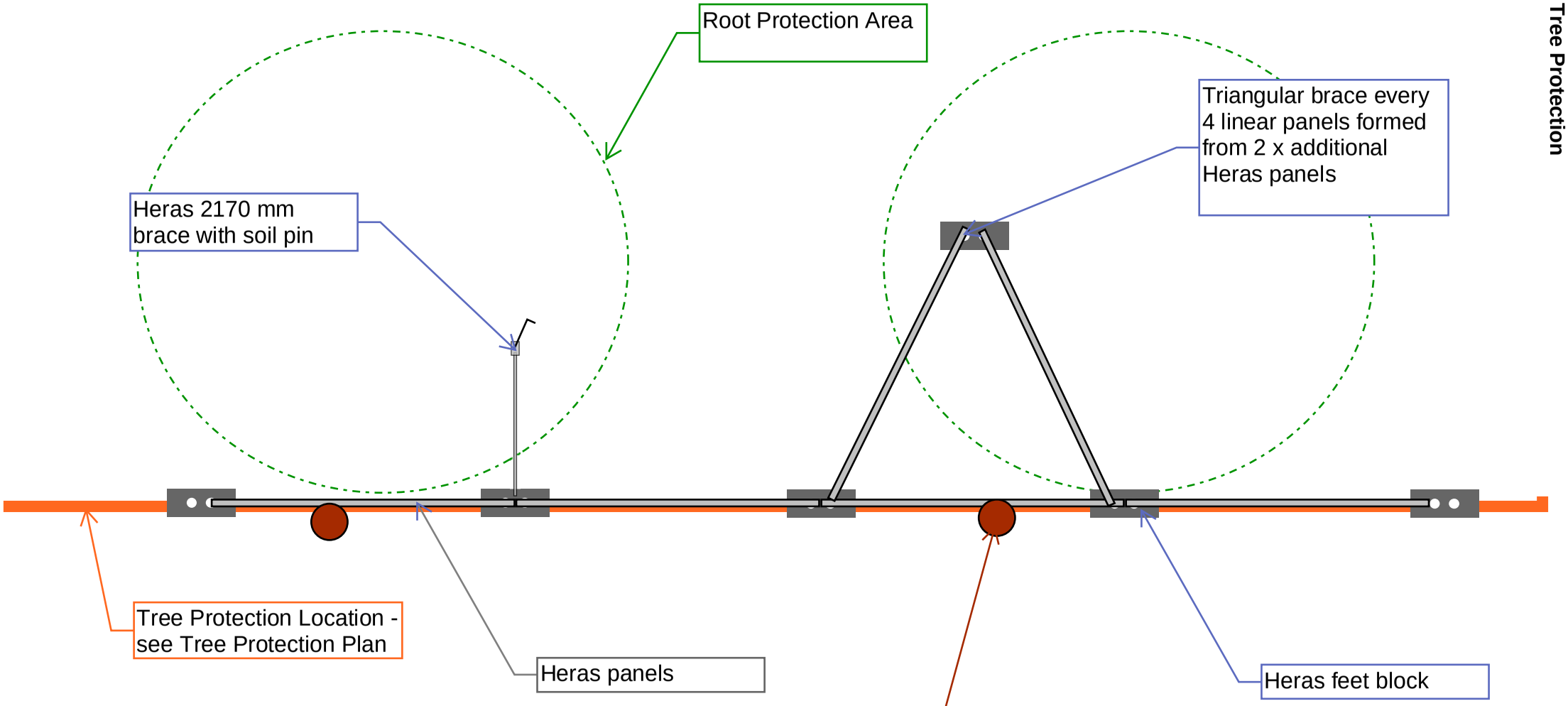
Figure 3 Examples of above-ground stabilizing systems



a) Stabilizer strut with base plate secured with ground pins



b) Stabilizer strut mounted on block tray



Tree Protection Fence
Alternative Bracing Detail

Scale: Not to scale illustrative arrangement only Date: 26/07/2023
Author: AW Yew Tree NW Ltd
Version: 1

TREE PROTECTION AREA

KEEP OUT!

ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE AGREEMENT OF THE LOCAL AUTHORITY OR ARBORICULTURAL CONSULTANT