

Arboricultural Statement

Bryn Glas
Rhosllanecrugog
Wrexham

Ref:
APS/BGR/08/15
Rev B

Date:
1st November 2018

Commissioned by:
Blueprint Architectural

Prepared by
S. Shields

Arboricultural Impact Assessment

Land at
Bryn Glas
Rhosllanechrugog
Wrexham

This Arboricultural Impact Assessment has been prepared in accordance with the protocols, standards and procedures set out in BS 5837: 2012 'Trees in relation to design, demolition and construction'.

Summary

The proposed development site is situated to on land at Bryn Glas, Rhosllanechrugog.

There are a number of trees on the site and an arboricultural assessment has been undertaken in accordance with the procedures and protocols set out in BS 5837: 2012. This assessment has identified and recorded 20 individual trees, 4 groups of trees and one area of woodland which are categorised as 9 cat. A (high value) 7 cat. B (moderate value) 8 cat. C (low value) and 1 cat. U (unsuitable for long term retention).

The proposed development will require, in addition to the cat U tree, the removal of 2 individual trees and 4 groups of trees. These are not significant specimens and any loss of amenity can be mitigated through new tree planting forming part of the development of this site.

The trees to be removed are low amenity value specimens and the impact of the development on the current arboricultural resource is considered to be very low in the short term and, through new planting and woodland management will provide a positive contribution in the medium to long term.

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Date	Revision	
18 th August 2015	Original	
29 th June 2017	A	Updated Site Layout
1 st November 2018	B	Revised Site Layout

Instruction

- 1.1 Shields Arboricultural Consultancy received instructions from Mr D. Edwards on behalf of Blueprint Architectural LTD to provide an arboricultural impact assessment in respect of the above site. This report is provided to support an application for planning permission at the site. The client may copy and distribute the report as required for the purpose of applying for planning permission for or preparing any documents or plans for this or future applications at this site.
- 1.2 Outline planning permission has been granted to allow the development of the land to provide residential housing under ref: P/2011/0779. Full planning permission is now being sought.

Scope & Limitations

- 2.1 The purpose of the report is to assess the environmental and amenity values of all trees on or adjacent to the area affected by the proposed development. The report will assess the long-term contribution that the trees can make to the area and the arboricultural implications of retaining them and seek to find a satisfactory juxtaposition between the trees and the new development. The report will assess the potential impact that may arise as a result of the proposed construction works and make recommendations for protecting trees, hedges and shrubs where appropriate.
- 2.2 The report is prepared in accordance with the recommendations of the British Standard Document BS 5837: 2012 'Trees in Relation to Construction'.
- 2.3 This report is not an ecological assessment and does not identify habitats or constitute a protected species survey.

Statutory Controls & Obligations

- 3.1 Forestry Act; the felling of trees is controlled by the Forestry Act, which requires that a felling licence is obtained prior to cutting down any trees. The Forestry Act does not apply to the felling of trees growing within an orchard, private garden, churchyard or public open space. The Forestry Commission has the responsibility for enforcing the Forestry Act.
- 3.2 Tree Preservation Orders & Conservation Areas; Local Authorities have specific powers under the Town & Country Planning Act 1990 as amended, to protect trees through the use of Tree Preservation Orders. Where trees are protected under such orders it is a criminal offence (subject to any exemptions for which provision may be made by the act or order) to undertake, cause or permit the cutting down, topping, lopping, uprooting, wilful damage or wilful destruction of trees except with the consent of the local planning authority. Similar controls apply to all trees growing within a designated Conservation Area.

- 3.3 Bats, wild birds and other protected species; The Wildlife & Countryside Act & the Conservation (Natural Habitats & C.) Regulations make it an offence to disturb or destroy bats and bat roosts and wild birds and their nests. Other species of plant and animal are also protected. These creatures often inhabit trees and sufficient care must be taken to ensure they are not affected during forestry and arboricultural works.

Site description

- 4.1 The proposed development site is situated to at the south end of a residential cul de sac, Bryn Glas, within the village of Rhosllanecrugog, Wrexham. A derelict dwelling currently stands on the site.
- 4.2 There are numerous trees on the site, mainly over grown garden conifers or self set saplings. There is also an area of broadleaf woodland in the north-west corner. A small water course runs along the west and south boundary of the site and there is a foot path to along the east boundary. The north boundary is adjacent to the highway.
- 4.3 The site extends to approximately 0.5 ha and is at an elevation of 170m AOD and is slightly exposed to the west.

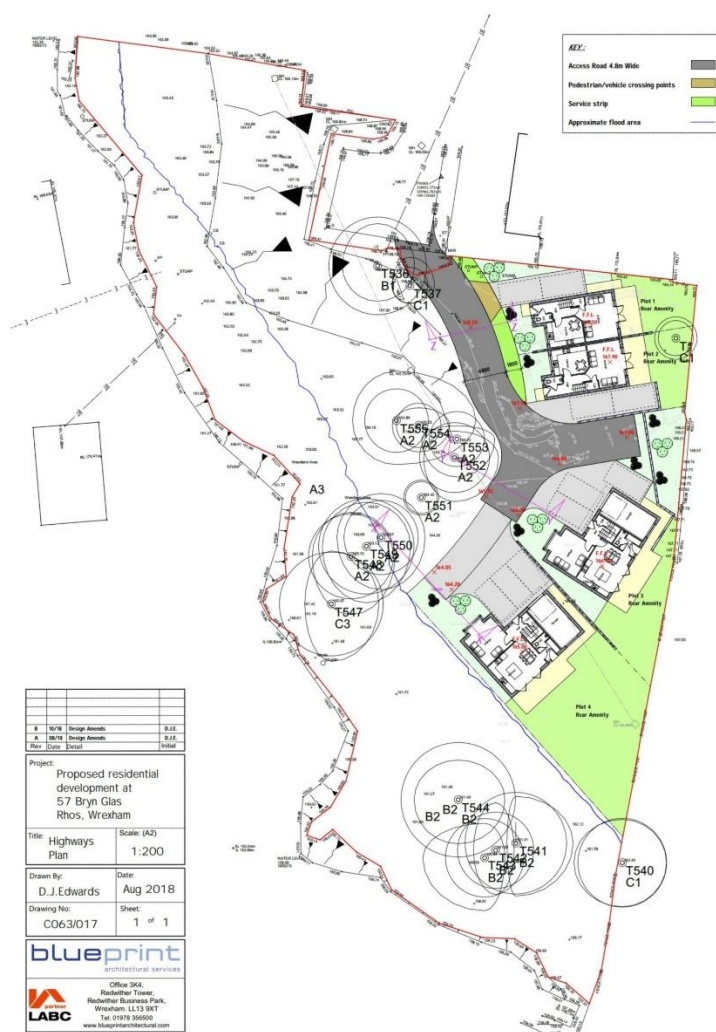


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*NB. This soil assessment is undertaken in situ using visual and manual techniques and is **only** for the purpose of establishing the influence of site soils on tree growth. The assessment **must not** be relied upon to inform any engineering decisions.*

- 5.1 It is proposed to develop the site to provide four dwellings, two semi-detached and two detached, along with an internal site road and associated infrastructure.

Site Layout Plan



Tree Survey Methodology

- 6.1 All trees within and adjacent to the site have been assessed where they are within 15 m of any area that may be disturbed as a result of the proposed development and have a stem diameter over 75mm at 1.5 metres. Measurements have been taken in accordance with the procedures and protocols set out in BS 5837: 2012 and the Forest Mensuration Handbook. Height measurements are approximate unless otherwise stated. Trees have been assessed as individuals, groups or woodlands as appropriate. Where access to trees has been restricted, either as a result of their situation on private land or where vegetation or ground conditions are unfavourable, an estimation of trunk diameter has been made. This entails using a set of callipers to approximate the measurement. Estimates are rounded up to provide a margin. This technique has only been used where there is a sufficient buffer between the RPAs and any area disturbed by development. Where trees are in woodlands or groups only the outside edge trees are assessed unless there are larger trees with RPAs or crowns that would overlap the edge trees.
- 6.2 BS 5837: 2012 provides the framework through which tree can be categorised in terms of their health, amenity value and long-term viability for retention on a development site. There are four categories, A, B, C & U.

Category A: Trees of high quality and value in such a condition as to be able to make a substantial contribution (a minimum of 40 years)

- 1 Trees that are particularly good examples of their species, or essential components of groups or formal arboricultural features.
- 2 Trees, groups or woodlands that provide a definite screening or softening effect to the locality in relation to views into or out of the site, or those of particular visual importance.
- 3 Trees, groups or woodlands of significant conservation, historical, commemorative or other value.

Category B: Trees of moderate quality and value in such a condition to make a significant contribution (a minimum of 20 years)

- 1 Trees that might be included in a higher category but are downgraded because of impaired condition.
- 2 Trees present in numbers, usually as groups of woodlands that form distinctive landscape features.
- 3 Trees with clearly identifiable conservation or other cultural benefits.

Category C: Trees of low quality and value currently in adequate condition to remain until new planting could be established. Trees in this category would not usually be retained if they would pose a significant constraint to development.

Category U: Trees in such a condition that their existing value would be lost within 10 years and which should, in the current context be removed for arboricultural reasons.

The most significant or valuable trees are placed in the categories, A & B. Site design should make provision to retain trees in these categories and most Local Planning Authorities will insist upon this (or in exceptional circumstances will require that significant compensation planting is incorporated into the design), whilst trees that should not be a constraint to development are recorded with a C category. Trees categorised as U are in a poor condition and should be removed prior to the commencement of work.

- 6.3 Where trees are to be retained, it is necessary to ensure that they are suitably protected to avoid damage during the construction phase of the development. It is also important to consider any long-term implications, such as issues with shading or leaf litter that may arise as a result of tree retention.
- 6.4 To ensure that trees are not adversely affected by the construction works it is necessary to:
- The avoidance of physical damage to the aerial parts of the trees (i.e. Impact and other damage to trunk and branches)
 - The avoidance of damage to retained trees as a result of the severance or other physical damage to their roots
 - Preserve of the character of the soil, through the avoidance of any activity that would cause it to become compacted or otherwise disturbed or disrupted, and to avoid contamination by potentially harmful substances
 - To ensure free gaseous exchange is permitted between the upper layers of soil and the atmosphere
 - To ensure adequate (but not excessive) water supply to the soil and hence to tree roots

This would normally be achieved by establishing an area, known as a construction exclusion zone (CEZ) around each tree. The CEZ is derived from the root protection area (RPA) and the crown spread of the tree. The RPA represents the area occupied by the tree's root system and is calculated for each tree based on its stem diameter and the ground conditions present taking account of and any impediment to rooting. The RPA should represent the most probable position of the tree's root system.

The CEZ must be considered sacrosanct and be maintained completely undisturbed. No construction should take place within this area and it should not be used for storage of materials or fuels. Access for vehicles machinery or personnel is prohibited and to ensure that it is not damaged by construction activity it must be suitably protected during the construction phase, using robust fencing or alternative

ground protection methods, to prevent disturbance and damage occurring.

- 6.5 In addition to the implications that a new development may have for existing trees it is also important to assess any long-term issues or concerns that may arise as a result of retaining trees close to a new dwelling or structure. This can include problems associated with leaf litter and other debris that may fall from trees, the potential that a tree has to cause damage to a structure in the future, any on going maintenance requirements that may arise and the level of shade that the tree may cast, it is particularly important to consider the affects of shading where trees are to the south of houses and gardens. Trees can also cause feelings of apprehension to the occupiers of nearby buildings and can have an over bearing impact on a property if adequate space is not provided.
- 6.6 The report assesses all trees with regard to their size, position and natural characteristics, and taking into account of their future growth makes provides recommendations as to their long-term suitability for retention.

Arboricultural Assessment

- 7.1 Full details of the tree surveyed are provided in appendix A. and their relative positions, crown spreads, root protection areas are indicated on the attached plans.
- 7.2 No checks have been undertaken to establish the status of the trees with regards to Tree Preservation Orders or Conservation Areas, however all the trees will be subject to the Forestry Act (see section 3.1) and all hedges subject to the Hedgerow regulations (see section 3.3). No trees or hedges should be felled, lopped, topped or in otherwise removed or damaged without prior permission.
- 7.3 The survey recorded 20 individual trees, 4 groups of trees and 1 area of woodland, which were categorised as follows:

Category	Quantity
Category A: Trees of high quality and value in such a condition as to be able to make a substantial contribution (a minimum of 40 years)	9
Category B: Trees of moderate quality and value in such a condition to make a significant contribution (a minimum of 20 years)	7
Category C: Trees of low quality and value currently in adequate condition to remain until new planting could be established. Trees in this category would not usually be retained if they would pose a significant constraint to development.	8
Category U: Trees in such a condition that their existing value would be lost within 10 years and which should, in the current context be removed for arboricultural reasons.	1

Arboricultural merits and the significance of the trees in the landscape

- 7.4 The site is characterised by a mixture of overgrown conifers, presumably planted as screening of hedging when the site was maintained as a garden, numerous saplings and areas of scrub, groups and individual larger mature trees along the south and east boundary and an area of mixed broadleaf woodland to the north and west.
- 7.5 The majority of the trees are of limited amenity value being either out grown ornamental planting or immature self set trees. The exception to this is the area of woodland, which provides both an interesting landscape feature and a valuable conservation resource. The group of mature sycamore trees on to the south of the site provides some level of screening from external view points. There are no veteran trees or areas of ancient woodland impacted by this development.

Design Considerations

- 7.6 The site design has taken account of the benefits of the significant trees and the site layout allows for the retention of the woodland and the trees making up the group on the south boundary.

Arboricultural implications of the development

- 7.7 The proposed development will require that, in addition to the removal of the category U tree, 2 individual trees and 4 groups of trees are removed.
- 7.8 Although a number of trees will be removed, in general these are either overgrown garden conifers or self-set saplings that have been allowed to establish through the neglect of this site and are not important elements in the landscape or character of the area. The most significant trees and particularly the area of woodland along the stream to the west are to be retained and integrated into the site layout. This will provide a mature landscape setting for the site which can be enhanced through new tree planting forming part of the landscaping of the development. This will provide the opportunity to increase the number of trees along the south and east boundary and provide screening for the site.
- 7.9 The development in a sufficient distance from the woodland to protect the trees and avoid damage from the construction works.
- 7.10 Another consideration is whether any retained trees could exert a negative influence over the proposed dwellings and interfere with a future owners' reasonable quiet enjoyment of their property. Guidance provided in the British Standard BS 5837: 2012, advises that:

"A realistic assessment of the probable impact of any proposed development on the trees and vice versa should take into account the characteristics and condition of the trees, with due allowance for space for their future growth and maintenance requirements."

and that the following factors are given consideration:

Shading

Privacy and Screening

Direct Damage

Future Pressure for Removal

Seasonal Nuisance

- 7.11 In this case there is adequate space within the woodland to allow for the future management requirements of the trees. The distance between the trees and the buildings, and the fact that the trees are on land at a lower level, ensures that they do not dominate the site or create an overbearing presence. There will be some seasonal leaf fall, but as the trees are not directly over the proposed properties, this will be limited and will not create an unreasonable future maintenance requirement.
- 7.12 The trees are to the south west of the proposed dwellings and have some potential to shade part of the site, particularly during the latter part of the day. Shading of buildings can be a problem and sites should be designed to take account of existing trees, their ultimate size and density of the foliage and that garden areas should be designed to meet the normal requirement for direct sunlight for at least part of the day. Building Research Establishment guide to good practice (BR209) Site Layout Planning for Daylight and Sunlight advises that, in order to appear reasonably sunlit a dwelling should have at least one main window wall that faces within 90° of due south and that on this wall, all points on a line 2m above ground level are within 4m of a point which receives at least a quarter of the annual probable sunlight hours. The guide also advises that for gardens to appear adequately sunlit, no more than two-fifths and preferably no more than a quarter should be prevented from receiving any sunlight on 21st March.
- 7.13 To assess the extent to which the trees interfere with sunlight to the proposed dwellings and their gardens, an assessment was undertaken using the ArborShadow R4 software. The shadow path for June is provided in the Tree Shading Plan and shows the shadow path on 21st June (sun at highest point in northern hemisphere) and also the shadow position at midday.
- 7.14 Analysis of the shadow paths indicate that the layouts allow for significantly better sun lighting than the minimum requirement as advised in the guidance. With the shading only affecting the front of the properties during the afternoon. A further consideration is that the type of shade cast by trees differs from that cast by buildings and solid objects in that some level of light passes through the crowns. Thus, the houses affected would receive dappled shade during the hottest part of the day which can be quite pleasant and advantageous.
- 7.15 Under the proposed site layout there would be no loss of significant trees and there is considerable opportunity for new planting. The potential impact of the development of this land on the existing arboricultural resource could be very low and provide a positive contribution in the medium to long term.

Arboricultural Operations

- 8.1 Tree removal and pruning will be required, subject to a grant of planning permission, to implement this development the work and should be undertaken by a suitably qualified person, holding public liability insurance for the sum of £5,000,000. All operators must hold relevant NPTC certificates. A site-specific risk assessment must be prepared and operators must work to a health and safety method statement.
- 8.2 The contractor undertaking the work is responsible for any loss or damage arising as a result of the operations and agrees to indemnify the owner against such occurrences.
- 8.3 All tree protection measure specified in the following section and shown on the accompanying TPP are to be fully installed prior to the commencement of the arboricultural works. Where access is required to the trees, then suitable ground protection must be used in lieu of the tree protection fences.
- 8.4 The contractor undertaking the work is required to ensure that an emergency spill kit, suitable for use with all fuels, oils and chemicals brought on to site is available during all operations.

Arboricultural Method Statement

- 9.1 This arboricultural method statement (AMS) sets out the details of tree protection measures afforded to the retained trees on and adjacent to the site.
- 9.2 This document should be read in conjunction with the Tree Protection Plan (TPP) ref: BRG/TPP/08/15/01/Rev. B. The TPP indicates the construction exclusion zone (CEZ) that must be maintained around each retained tree. These areas must remain undisturbed during the construction process and must be protected using suitable fencing or ground protection as specified.
- 9.3 Copies of the TPP & the AMS must be available on site and all tree protection requirements explained to all persons undertaking activities on the site during the site induction process.
- 9.4 All tree protection measures must be installed and inspected prior to bringing onto the site any plant, materials or equipment or undertaking any construction works or demolition or any arboricultural works. The LPA must be informed in writing once the tree protection measures are installed.
- 9.5 The site is to be inspected by the consulting arboriculturalist in accordance with the schedule of inspections.
- 9.6 All measurements are given in metric using standard abbreviations.

Fencing and Ground Protection

- 9.7 The TPP indicates the position all protective fences.

- 9.8 Protective fencing will comprise herres fencing securely fixed and braced against impact or as agreed with the Local Planning Authority.
- 9.9 No ground protection is specified for this site.
- 9.10 The protective fencing and ground protection must be inspected on installation and will remain in place until completion of the construction phase and then only removed with the consent of the LPA.
- 9.11 Other than works approved in writing by the LPA, no works including storage or dumping of materials shall take place within the exclusion zones defined by the protective fencing.

General Precautions

- 9.12 No materials that are likely to have an adverse effect on tree health such as oil, bitumen or cement will be stored or discharged within 10m of the trunk of a tree that is to be retained or within any part of the CEZ. An emergency spill kit of appropriate capacity and suitable for use with all fuels, oils and chemicals brought on to site must available at all times.
- 9.13 No fires will be lit within 20m of the trunk of any tree that is to be retained.
- 9.14 Storage and mixing areas must be outside the CEZ and must be identified prior to the commencement of the construction work. Contractor parking should be in areas indicated on the TPP. It may be possible to situate site huts and toilets within the CEZ, providing that they are:
 - 1. Placed on load distributing pads.
 - 2. Can be positioned and serviced without coming into contact with the crown of the tree or allowing any vehicle to operate within the RPA.
 - 3. All services are connected above ground level.
 - 4. The buildings can be accessed from outside the CEZ or all routes are ground protected.The site buildings would then form part of the tree protection barrier.
- 9.15 Access to the work area is via the main site entrance and must not traverse the CEZ.
- 9.16 All service and drainage routes, below or above ground must avoid the CEZ. All services are to be installed in accordance with NJUG volume 4 Guidelines.
- 9.17 To ensure that all tree protection measures are properly installed it is recommended that the site be monitored by Shields Arboricultural Consultancy to the following schedule. Details of the findings and photographic evidence of the site inspection visits will be reported to the LPA by email within 24 hrs of the visit.

Schedule of Inspection

1. On completion of erection of fencing and installation of ground protection prior to commencement of development works
 2. Monthly through-out the project
 3. On completion of the project prior to removal of the Tree Protection
- 9.18 Prior to the commencement on site of any work, a competent person is to be appointed to monitor the day to day activities on site. In the case of a tree being damaged or where an unexpected event arises it will be for this person to contact Shields Arboricultural Consultancy to seek advice on contingency measures.

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Chartered Forester

18th August 2015

Rev B

1st November 2018

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Arboricultural Assessment

Ref. No.	Species	Top Height	Stem Dia mm	Stems	N	E	S	W	CC	FSB	Age	Rem Cont.	Cat.	RPA m ²	Notes
536	Birch	16	230, 230, 250, 210	4	4.8	4.2	4	4			OM	20+	B1	96	Condition: Fair AIA: 536 is situated on the north boundary of the site at the edge of the area of woodland. Tree is reasonably significant in the landscape and will be retained and protected in accordance with the recommendations of BS 5837: 2012 under the current site layout.
537	Ash	16	170		3.2	2.8	2	2	3	NE	SM	20+	C1	13	Condition: Good AIA: A young tree and a minor specimen. Will be removed to facilitate the development as any loss of amenity will be mitigated through enhancing on-site tree cover through management of the adjacent woodland.

538	Rowan	12	140, 175, 160, 90	4	3.1	3.1	5	3.2			M	10+	C1	38	Condition: Good AIA: Multi-stem tree of below average form with some decay present in the stem, tree will be removed to facilitate the development. Any loss of amenity will be mitigated through new tree planting of the site.
539	Ash	16	250, 180, 190, 160, 100, 100, 140, 160	8	8	0	2	6.2	2	NW	OM	< 10	U	100	Condition: Poor AIA: Extensive decay in root system and stem base. It is advised that this tree is removed.
540	Ash	16	270, 320	2	4.9	5	5	5.5	4		M	10+	C1	80	Condition: Fair AIA: Tree is of minor importance, forming part of the background landscape. This tree can be retained and protected in accordance with the recommendations of BS 5837: 2012 under the current site layout
541	Sycamore	18	480		5.3	6.5	6	1	2	N	M	20+	B2	104	Condition: Good

															AIA: Trees 541 – 546 form a small group along the west boundary of the site. Will be retained and protected in accordance with the recommendations of BS 5837: 2012 under the current site layout.
542	Sycamore	19	360		5.4	2.1	5	2.5			M	20+	B2	59	Condition: Good See 541
543	Sycamore	17	370		3.9	2.3	6	7			M	20+	B2	62	Condition: Good See 541
544	Sycamore	19	540		4.5	5.3	5	5			M	20+	B2	132	Condition: Good See 541
545	Sycamore	19	360		6.3	5.3	5	2			M	20+	B2	59	Condition: Fair See 541
546	Sycamore	18	310, 280	2	2.9	2	6.5	6.5			M	20+	B2	79	Condition: Good See 541
547	Ash	20	490		6	5.4	6.5	3			M	10+	C3	109	Condition: Good AIA: Component of the adjacent woodland. This tree can be retained and protected in accordance with the recommendations of

															BS 5837: 2012 under the current site layout.
548	Sycamore	20	400		5	5	6.6	4.4			M	40+	A2	72	Condition: Good AIA: Significant tree on the south edge of the woodland area. This area of woodland forms an important amenity for the area and the proposed development layout has been designed to allow the retention of the woodland. The area will not be affected by the development and there is reasonable separation between the woodland edge and the proposed dwellings to limit any negative impacts associated with proximity. The woodland is to the north and west of the dwellings and on lower ground so shade will not have a significant impact. All trees can be retained and protected in accordance with the

															recommendations of BS 5837: 2012 under the current site layout.
549	Sycamore	20	450		5	5	6.4	5			M	40+	A2	92	Condition: Good See 548
550	Sycamore	18	350		5	5	5.9	5			M	40+	A2	55	Condition: Good See 548
551	Beech	14	150		2	2	2	2			SM	40+	A2	10	Condition: Good See 548
552	Beech	18	330		3	5	5	3.5			EM	40+	A2	49	Condition: Good See 548
553	Beech	16	260		1.5	4.3	4.3	4			EM	40+	A2	31	Condition: Good See 548
554	Beech	17	210		2	3.5	3	3			SM	40+	A2	20	Condition: Good See 548
555	Beech	18	300		5.6	9	5	5			EM	40+	A2	41	Condition: Good See 548
G1	Leyland Cypress	18	200		2	2	2	2			M	10+	C1	18	Condition: Good AIA: Essentially a line of conifers that have become a high hedge. Although these trees screen the site, they have become overly dominant and have little in the way of amenity value. This

															group will be removed to facilitate the development. Any loss of amenity will be mitigated through new tree planting of the site.
G2	Ash	3	100		1	1	1	1					C1	5	Condition: Good AIA: A group of ash saplings and one larger tree. Not significant in the amenity of the site this group will be removed to facilitate the development. Any loss of amenity will be mitigated through new tree planting of the site.
G3	Mixed	3	100		1	1	1	1					C1	5	Condition: Fair AIA: Mixed scrub and sapling trees, not significant in the amenity of the site this group will be removed to facilitate the development. Any loss of amenity will be mitigated through new tree planting of the site.

G4	Mixed	12	300		3	3	3	3					C1	41	Condition: Good AIA: A group of mixed species trees, although some trees provide a reasonable level of amenity this is internal to the site. The development of the site is incompatible with the retention of this group and it will be removed to facilitate the development. Any loss of amenity will be mitigated through new tree planting of the site.
W1	Mixed	15	350 (ave)		4	4	4	4					A3	55	This area of mixed broadleaf woodland forms an important amenity for the area and the proposed development layout has been designed to allow the retention of the woodland. The area will not be affected by the development and there is reasonable separation between the woodland edge and the proposed

																dwelling to limit any negative impacts associated with proximity. The woodland is to the north and west of the dwellings and on lower ground so shade will not have a significant impact. All trees can be retained and protected in accordance with the recommendations of BS 5837: 2012 under the current site layout.
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Ultimate Heights of Main Species

Beech 21

Sycamore 21

Ash 21

Notes

BS 5837: 2012 provides the framework through which tree can be categorised in terms of their health, amenity value and long-term viability for retention on a development site. There are four categories, A, B, C & U.

Category A: Trees of high quality and value in such a condition as to be able to make a substantial contribution (a minimum of 40 years)

- 1 Trees that are particularly good examples of their species, or essential components of groups or formal arboricultural features.
- 2 Trees, groups or woodlands that provide a definite screening or softening effect to the locality in relation to views into or out of the site, or those of particular visual importance.
- 3 Trees, groups or woodlands of significant conservation, historical, commemorative or other value.

Category B: Trees of moderate quality and value in such a condition to make a significant contribution (a minimum of 20 years)

- 1 Trees that might be included in a higher category but are downgraded because of impaired condition.
- 2 Trees present in numbers, usually as groups of woodlands that form distinctive landscape features.
- 3 Trees with clearly identifiable conservation or other cultural benefits.

Category C: Trees of low quality and value currently in adequate condition to remain until new planting could be established. Trees in this category would not usually be retained if they would pose a significant constraint to development.

Category U: Trees in such a condition that their existing value would be lost within 10 years and which should, in the current context be removed for arboricultural reasons.

Key

Tag No	Identification number for tree	Species	Species of tree
Top Height	Estimated height of tree	Stem Dia.	Diameter of stem at 1.5 metres
Stems	Number of stems	N, E, S, W	Crown spread at compass points
CC	Crown Clearance	FSB	Direction of first significant branch
Rem. Cont	Remaining safe life expectancy in years	RPA	Root protection area in m ²
Cat.	BS Category (see above)	AIA	Arboricultural Implication Assessment
Age	Y - Young Trees SM Semi Mature EM Early Mature M Mature LM Late Mature exceeds normal life expectancy for species VET Veteran Tree		
Condition	Good Relatively free from defects and / or major pests and diseases Fair Some defects, which could be addressed through tree surgery or minor pests or early symptoms of diseases Poor Substantial defects or terminal decline Dead Dead		

17 August 2015

Bryn Glas

The grid at the western edge of the map is 0° 51' 10.75" due west of true north

The grid at the eastern edge of the map is 0° 51' 07.67" due west of true north



Shields Arboricultural
Consultancy

Tree & Woodland Management Solutions

Tree Constraints Plan

Nantcol
Bryn Glas
Rhos
Wrexham

Legend

- Tree Cat A
- Tree Cat B
- Tree Cat C
- Tree Cat U

- RPA
- RPA Cat C
- Canopy Spread

Woodland

Drawing No: BGR/TCP/08/15/01

DrawnBy: S. Shields

Scale: 1:200 @ A2

Da te: 18th August 2015

Revision:

Do not scale from this drawing all dimensions
to be checked on site

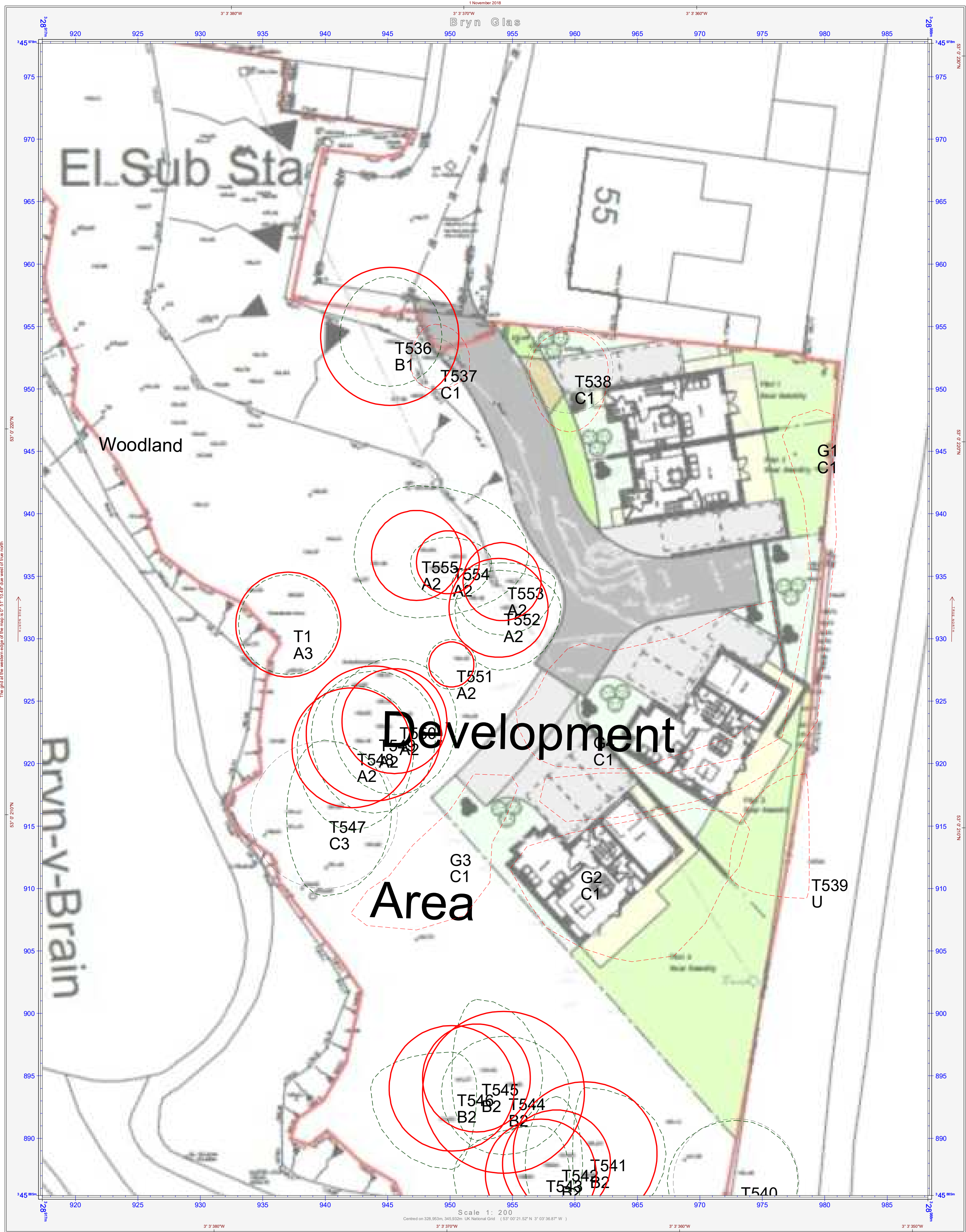
Drawing is colour coded and a monochrome
copy should not be relied upon

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Tree & Woodland Management Solutions

Tree Constraints Plan
Overlay
Bryn Glas
Rhos
Wrexham

Legend

- Tree Cat A
- Tree Cat B
- Tree Cat C
- Tree Cat U
- Canopy Spread
- Woodland
- Trees for Removal

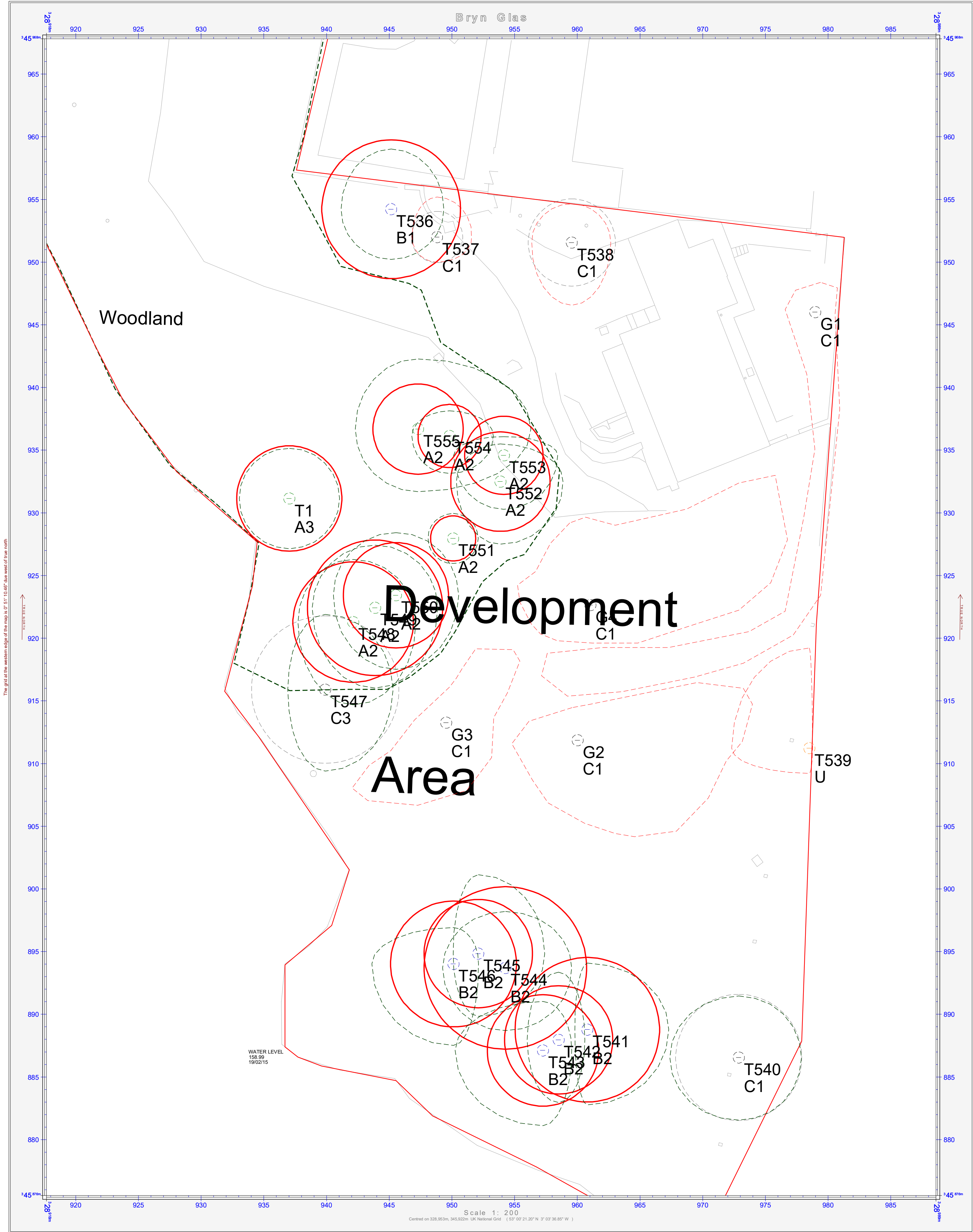
- RPA
- RPA Cat C

Drawing No: BGR/TCP/OL/08/15/01
Drawn By: S. Shields
Scale: 1:200 @ A2
Date: 1st November 2018
Revision: B

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Tree & Woodland Management Solutions

Tree Removal Plan
Bryn Glas
Rhos
Wrexham

Legend

- Tree Cat A
- Tree Cat B
- Tree Cat C
- Tree Cat U
- RPA
- RPA Cat C
- Canopy Spread

- Trees for Removal
- Woodland

NB

Drawing No: BGR/TRP/08/15/01

Drawn By: S. Shields

Scale: 1:200 @ A2

Date: 29th June 2017

Revision: A

Do not scale from this drawing all dimensions to be checked on site

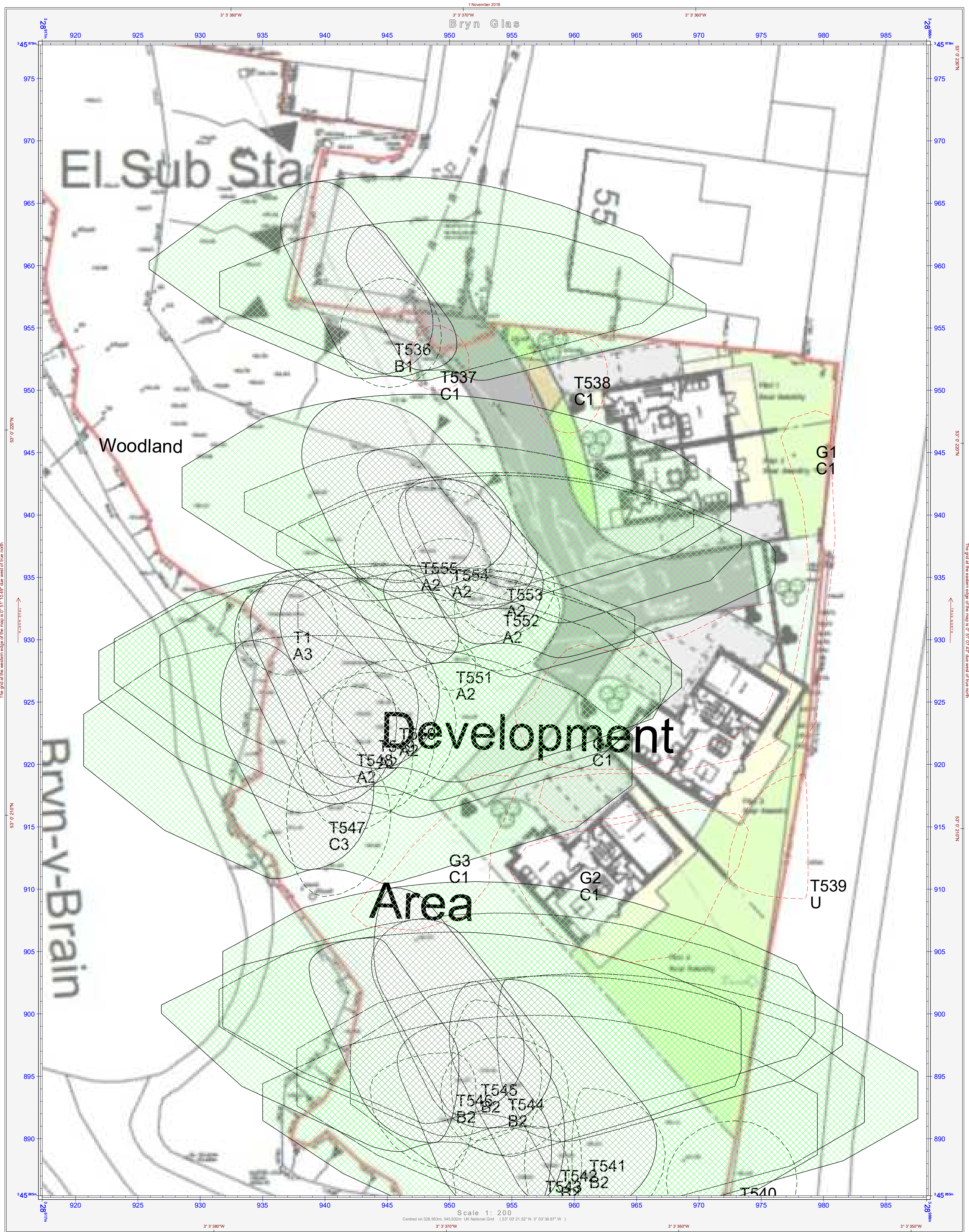
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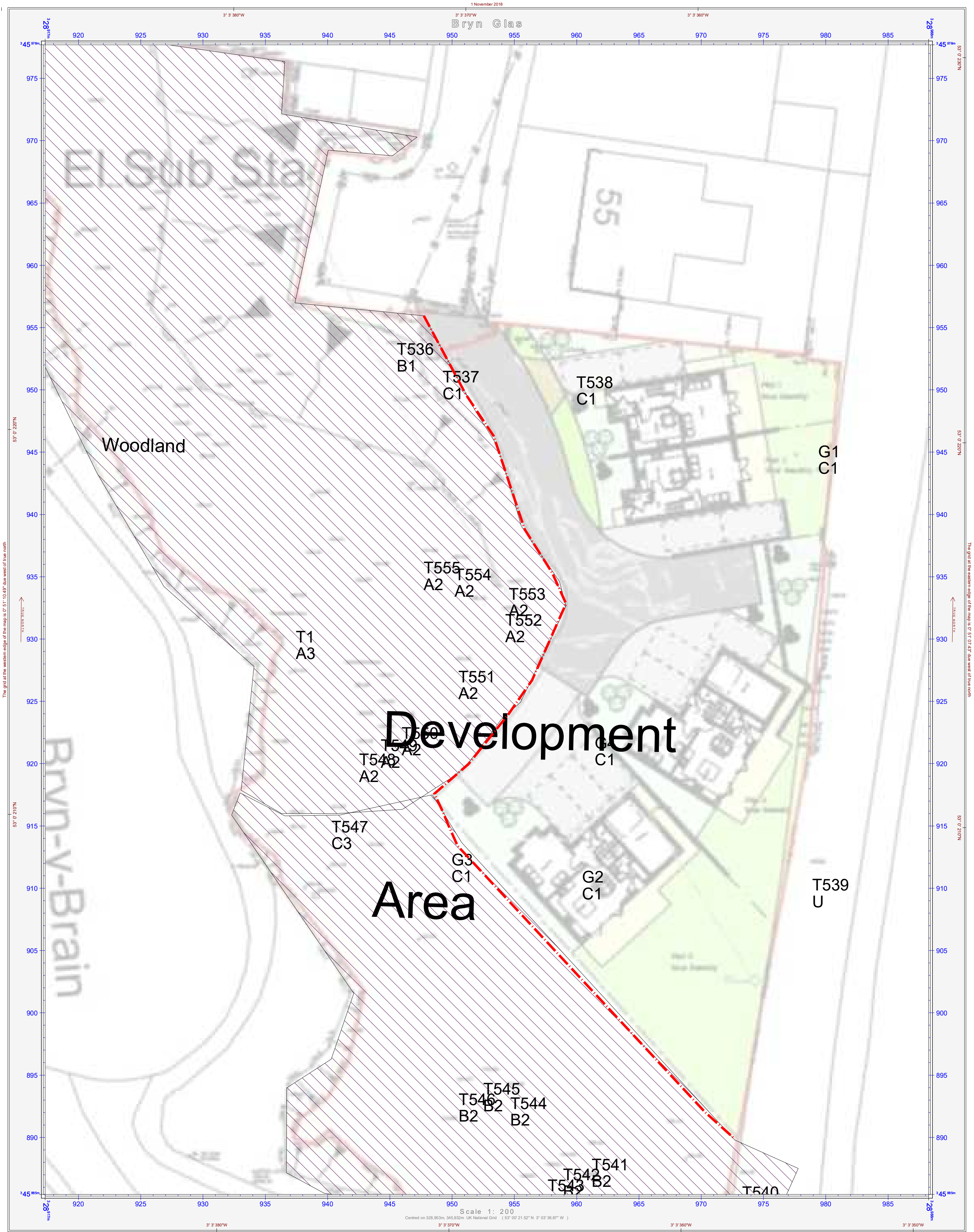
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Shields Arboricultural Consultancy Tree & Woodland Management Solutions	Legend - Tree Cat A - Tree Cat B - Tree Cat C - Tree Cat U - Canopy Spread - Woodland - Trees for Removal	Mid-Day Shadow June 21st Shadow Trace June 21st <i>NB: The shadow trace indicates the path of the trees' shadow over the site from 10am to 5pm on 21st June. The shadow indicates the actual size and position of the trees' shadow at midday on 21st June.</i>	Drawing No: BGR/TSP/OL/08/15/01 Drawn By: S. Shields Scale: 1:200 @ A2 Date: 1st November 2018 Revision: B	Do not scale from this drawing all dimensions to be checked on site Drawing is colour coded and a monochrome copy should not be relied upon © Shields Arboricultural Consultancy T:01691 657189 M:07989 626923 Email:info@shieldsac.co.uk
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Shields Arboricultural Consultancy
Tree & Woodland Management Solutions

Tree Protection Plan
Overlay
Bryn Glas
Rhos
Wrexham

- Legend**
- Tree Cat A
 - Tree Cat B
 - Tree Cat C
 - Tree Cat U
 - CEZ
 - Tree Protection Fencing

Drawing No: BGR/TPP/OL/08/15/01
Drawn By: S. Shields
Scale: 1:200 @ A2
Date: 1st November 2018
Revision: B

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