

Tree Survey and Report
BS 5837

Snaith Road, Snaith

for Harron Homes Ltd

SEPTEMBER 2015

RICHARD LANCASTER: TREES & LANDSCAPE
ENVIRONMENTAL CONSULTANCY

TREE REPORT

Snaith Road, Snaith

September 2015

1. Instructions

- To carry out a survey and inspection of the trees and hedges located around the proposed development site to the south of Snaith Road, as indicated on the plan prepared by Sten Architecture (SK03), and to record information with reference to: *BS 5837: 2012: Trees in relation to design, demolition and construction.*
- To comment and advise on the development proposals in relation to the survey findings and to detail measures required for the protection of any trees to be retained.

2. Inspection Details

The site and trees were inspected in summer conditions on 7th September 2015.

3. Site Context

The site comprises open fields to the south east side of the settlement of Snaith, adjacent to West Cowick. There are no mature trees *on* the site, the vegetation consisting of field boundary hedges with a few associated trees. Some off-site trees were also assessed.

The development proposal is for a new estate of housing, with highway access from Snaith Road to the north. An area is to be left undeveloped along the southern boundary, with a belt of new planting to act as a landscape screen and buffer.

4. Condition of Trees

The condition of all trees inspected accompanies this report in schedule form, and locations are noted on the accompanying survey drawing. Information is detailed and described as follows:

- Tree type with reference number,
- Species in Latin, with English common name,
- Maximum height, and trunk diameter at 1.5m above ground level,
- Crown spread, and height from ground to lowest part of crown,
- Age Class,
- Physical and structural condition,
- Preliminary Management Recommendations,
- Estimated remaining contribution (RC); (or Safe useful life expectancy; SULE),
- Tree Quality Assessment in relation to BS 5837: 2012,
- Root protection areas calculated in accordance with BS 5837: 2012,
- In addition, photographs were taken and filed.

Recommendations have been made with regard to the development proposals and likely construction methods, and also in relation to the general management of the trees.

5. Wildlife and Countryside Act

Where birds and bats may be affected by work to trees and hedges, consideration should be given to the timing of the work and whether the work is essential. Bats are protected under the Wildlife & Countryside Act 1981 and subsequent legislation and it is an offence to deliberately or recklessly disturb them or damage their roosts. No indications of bat roosts were apparent from this inspection; however if the presence of bats is suspected when works commence then contact should be made with Natural England, or via the UK Bat Line and 'The Bat Conservation Trust' (0345 1300 228). It is also suggested that tree felling and major pruning should be avoided in the bird nesting season, generally specified as March 1st to July 31st, though often extending through August.

TREE REPORT

Snaith Road, Snaith

September 2015

6. Development Comments

6.1. General

The proposed development area comprises most of two open fields. The easternmost is relatively level with boundary hedges in fair to good condition and some hedgerow trees; the western field gently slopes to the south west but has little or no definition from hedging.

The proposal is for an estate of mixed housing, comprising detached and semi-detached properties, with associated service roads, and parking and driveway provision. A large area on the west side is allocated as future public open space and the proposed site layout allows the potential for linkage with the existing adjacent public open space on Brierley Close.

Site and construction access will be via the new junction on Snaith Road which will require some removal and reconfiguration of existing Thorn hedging. However the width of the existing grass verge beyond the hedge will assist with establishing appropriate sightlines.

6.2. Tree Constraints Plan - Summary

The locations of the trees are shown on the attached plan drawing, along with allocated grades in relation to criteria in BS5837: 2012. Trees of grades 'A' and 'B' are normally considered as features to be retained in any proposed development, with grade 'C' trees retained only where they do not significantly affect proposals. Trees graded 'U' are those with recommendations to fell, and/or with only minimal amenity or conservation contribution.

The lack of significant vegetation *within* the site and likely retention of the better quality hedges *surrounding* the site ensures there should be no significant loss of amenity value from removing trees and hedges, to facilitate the proposed development. All on-site vegetation is graded C.

6.3. Root Protection Areas

Root protection areas (RPAs) for any retained trees are derived from area calculations based on the stem diameter, overlapped to create a zone of root protection (Construction Exclusion Zones (CEZ)). Suggested construction details for these fences are included in BS5837:2012, and locations are as shown on the attached tree protection plan (TPP).

7. Arboricultural implications assessment

7.1. Tree constraints and design/proximity to structures - Discussion

T1, G1 and G2 are retained off site and thus will give the proposed development some protection. The hedges H1 (including T2 within it) and H2 are retained, except for the site access, and should be assessed for management and infill planting on completion to improve their future health and amenity value. H3 may be retained or improved, as required on site.

The Ash T3 and T4 do currently provide *some* amenity value in the north east corner, but due to their declining health and low risk of branch failure are not recommended to be retained within the layout as proposed..

It is recommended that CEZ fences be positioned along the northern boundaries as show, as far from the hedges as possible (minimum 2m, preferably 4m) which will protect both the hedges and existing retained topsoil so that new planting has an increased chance of establishment.

7.2. Tree Management and New Planting

The proposed scheme offers opportunity for a comprehensive and appropriate tree planting scheme to enhance the development and to improve local and surrounding amenity.

Tree types and species should include a full range of suitable specimens to improve amenity and conservation and to contribute to microclimate improvement. All new planting should receive appropriate and specific maintenance to maximize growth and speed of establishment.

TREE REPORT

Snaith Road, Snaith

September 2015

Arboricultural Method Statements and Tree Protection Plans

1. General

The following arboricultural method statement and tree protection plan should be read in conjunction with the accompanying tree report. The report details and comments on all the significant trees present on site in relation to BS 5837 2012, and this statement includes general notes and advice relating to the relationship between trees, development and construction.

Site personnel, employees and contractors, will be made aware of these Arboricultural Method Statements (AMS) before development commences and will attend a site induction meeting, if required. A copy of the AMS and notes / plans will also be kept in the site office file so that it can be referred to or viewed at all times.

2. Tree protection plan

When trees are retained then the Root Protection Areas indicated on the accompanying drawings should be protected during development. The protected areas are the Construction Exclusion Zones. Fencing must be erected prior to any site works commencing, including demolition, preparatory excavations and materials delivery. No storage of materials, mixing of concrete, parking of vehicles or site cabins etc. is to take place within the protected areas designated on the attached drawing. These areas to be protected with secure fencing which will prevent access throughout the development and which will be installed prior to starting and not be removed until completion. Depending on the scale of the development and the trees to be protected, the protection fencing should be appropriate to the degree of protection required. On a small scale development such as this, the fencing may be 'Heras' type fencing some 2m tall with supports driven into the ground so that the fencing cannot be easily adjusted.

The fencing must be clearly labeled "TREE PROTECTION: DO NOT MOVE".

All fencing should be checked on site by a Tree Consultant to ensure it is placed in the correct locations and is adequate for the purpose.

No materials, equipment, site huts, fuels or other items shall be placed or stored within the areas enclosed by the fencing so erected and the ground levels within those areas shall not be altered, nor shall any excavation be made, without the prior written consent of the Local Planning Authority. Burning of materials or other items shall not take place within 3 metres of the crown spread of any of the trees to be retained.

Services shall not be routed under the spread of the crowns of the trees to be retained without the prior written consent of the Local Planning Authority. No retained tree shall be cut down, up-rooted, destroyed, topped or lopped without the prior written consent of the Local Planning Authority and if any tree which is to be retained dies within five years beginning with the date on which the development is commenced it shall be replaced with a tree of such size and species as may be specified in writing by the Local Planning Authority.

3. 'No-dig' roads, paths and driveways:

Method statement for the Construction of 'No-dig' roads, paths and driveways

Not applicable.

TREE REPORT

Snaith Road, Snaith

September 2015

4. Barriers and ground protection within the Root Protection Area

Not applicable.

5. Progress of development

Prior to the commencement of installation of access road, services and foundations, a predevelopment meeting should be held between the Local Authority Tree Officer, Tree Consultant, site manager/foreman, and Supervising Officer, to ensure that the Construction Exclusion Zone fencing is in place and preparatory tree works have been undertaken. The meeting will also discuss all the practical aspects of tree management in relation to the development so that all the trees to be retained can be kept in a healthy and safe condition.

The site will be visited on a regular basis by a tree consultant once development has begun, if required, to ensure that all protection measures are being adhered to and any problems in relation to retained trees and vegetation are resolved.

6. Preparatory Tree works

All recommended preparatory tree works and shrub clearance should be carried out prior to development of the site including the erection of protection fencing. All tree pruning and felling is to be undertaken by professional tree contractors and in accordance with BS 3998: 2010: Recommendations for Tree Work.

7. Pile foundations within the Root Protection Area:

Not applicable.

Tree No.	Species	Hgt (m)	Diam (mm)	Spread N, E, S, W	Hgt 1 st brch	Hgt to crown	Age Class	Physiological and Structural Condition. Preliminary Management Recommendations	Est RC years	Grade BS5837	RPA rad (m2)	Photo
T1	Sycamore <i>Acer pseudo-platanus</i>	10	MS 7 no @300	6, 5, 5, 5	1	1	M	Multiple stems, possible a hedge remnant. Fair form good health, off site beyond boundary. <i>Off site, no works recommended.</i>	10-20	C	6m	
G1	Group: Birch Cherry Oak Field Maple	5-7	150- 250-	As plan, 4 east	2	2	SM	Recent planting in public open space. Good and fair condition, off site beyond boundary. <i>Off site, no works recommended.</i>	20-30	B	2m from boun- dary	
H1	Hedge: Hawthorn Holly, Oak Elder	2-4 4-6 to S	-	As plan	-	-	M	North-west boundary, fair condition, with some gaps, younger Oak and invasion by Elder Southern section taller & more mature. <i>Retain and manage as boundary.</i>	10-20	C	2m min.	
T2	Sycamore <i>Acer pseudo-platanus</i>	7	260	2, 3, 3, 4	0	0	EM	Hedge tree fair condition. Ivy present. <i>Can be retained, cut and remove Ivy, and crown lift above hedge line.</i>	10-20	C	3m (30)	
H2	Hedge: Hawthorn Blackthorn to east end (Dog Rose)	2-3	-	As plan	-	-	M	Northern boundary, generally good condition, has had regular maintenance. Some invasion by Sycamore and Elder, more gaps to east. <i>Retain and manage as boundary</i>	20-30	B	3m min	
T3	Ash <i>Fraxinus excelsior</i>	16	MS 4 no @ 300	7, 3, 6, 7	4	2	M	Hedge re-growth, multi stem form. Poor form, dieback and deadwood. West stem semi fallen, with decay and fungal bracket present. <i>Not recommended for retention in housing</i>	10-20	C	N/A	
T4	Ash <i>Fraxinus excelsior</i>	14	MS 4 no @ 300	6, 6, 5, 3	3	2	M	Hedge re-growth, previous pruning at 2m, Medium deadwood over road junction, crown deterioration in remainder. <i>Not recommended for retention in housing</i>	10-20	C	N/A	

Tree No.	Species	Hgt (m)	Diam (mm)	Spread N, E, S, W	Hgt 1 st brch	Hgt to crown	Age Class	Physiological and Structural Condition. Preliminary Management Recommendations	Est RC years	Grade BS5837	RPA (rad) (m2)	Photo
H3	<i>Hedge:</i> Hawthorn (Dogwood) (Dog Rose)	2-3	-	As plan	-	-	M	Eastern boundary, fair condition, invaded by Elder, Ivy and Bramble. <i>No works required, to be managed if retained.</i>	10-20	C	2m min	
H4	<i>Hedge:</i> Hawthorn (Elder) (Ash)	2-3	-	As plan	-	-	M	Central hedge, crossing development site. Poor condition, many gaps and thorn in poor health. <i>To be removed for development.</i>	10-20	C	N/A	
H5	<i>Hedge:</i> Hawthorn Cypress Blackthorn (Elder) (Ash)	3-6	-	As plan	-	-	M	Southern boundary - off development site. (Mixed boundary -survey for sake of completion) Various mixed hedges, in fair to poor condition. No hedges or trees of good quality. Mostly grown out Thorn hedges, and overtall Cypress. <i>Off site, no works recommended</i>	10-20	C	N/A	
G2	<i>Group:</i> Off-site, no hedge. Birch Cherry Beech Laurel Spruce	2-6	150 +	Plan	-	-	SM EM M	Trees shrubs and hedges in rear domestic gardens of Brierley Close. Good screening value, mixed evergreens and deciduous, generally appropriate species. No vegetation/hedge on site. <i>Off site, no works recommended</i>	20-30	B	2m from boundary	

KEY

Dimensions	Life St: Life Stage (or age class)	Other Headings & Notes	Grade: Tree Quality based on BS5837:2012
Ht: Maximum height of tree, in metres.	Y – Young	Ref: Reference number (which <i>may</i> refer to a tag fixed to a tree). T – Tree, H – Hedge, G – Group	U – Trees in such a condition where any existing value would be lost in 10 years.
Diam: Stem diameter at ~ 1.5m above ground level (AGL), in mm.	SM – Semi-Mature	Species: Common name, plus Latin name where appropriate. Species in brackets () indicate shrub or subsidiary species, in hedges and in groups.	A – Trees of high quality and value.
Spread: Minimum spread of branches to the 4 cardinal points, in metres.	EM – Early-Mature	Est RC: Estimated remaining contribution, in years.	B – Trees of moderate quality and value.
Ht 1st branch: Height AGL of first significant branch, and growth direction where applicable, in metres.	M – Mature	RPA: Root Protection Area, in m ² , calculated from stem diameter, in accordance with BS5837.	C – Trees of low quality and value. <i>Trees in this category should not be retained where they impose significant constraints on development.</i>
Ht to Crown: Height AGL to lowest significant section of canopy, and direction where applicable, in metres.	OM – Over-Mature	Photo: Photograph reference number, where applicable.	
~ – indicates estimated dimension.	V – Veteran	Other Abbreviations: AGL – Above Ground level CEZ – Construction Exclusion Zone TPP – Tree Protection Plan	*Indicates advice on site that trees and/or hedge rows are not part of site ownership.

Tree Protection Plan:

SNATH ROAD SNATH
PROPOSED RESIDENTIAL DEVELOPMENT
TREE PROTECTION PLAN

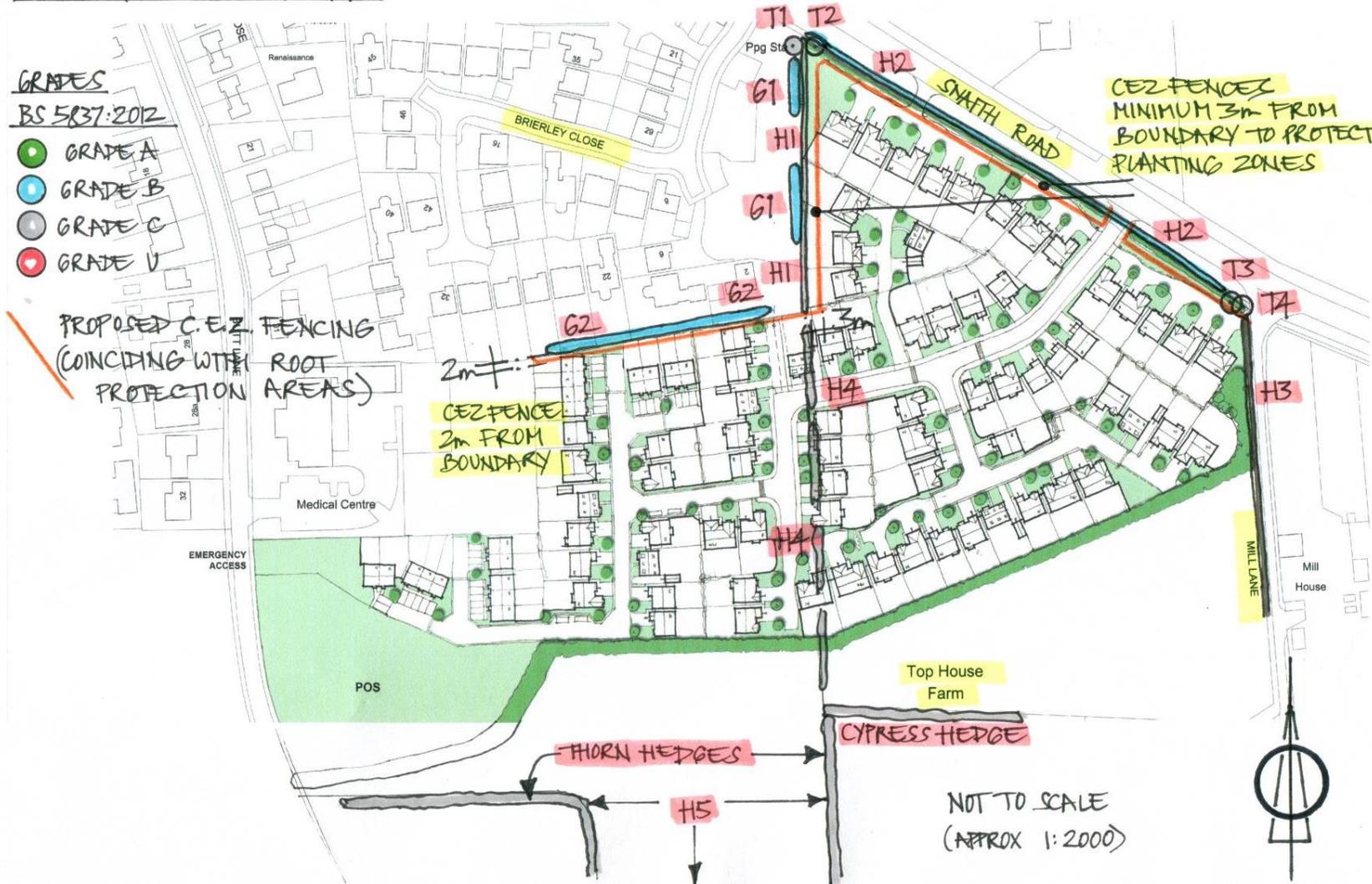
GRADES
BS 5837:2012

- GRADE A
- GRADE B
- GRADE C
- GRADE V

PROPOSED C.E.Z. FENCING
(COINCIDING WITH ROOT PROTECTION AREAS)

CEZ FENCE
2m FROM BOUNDARY

CEZ FENCES
MINIMUM 3m FROM BOUNDARY TO PROTECT PLANTING ZONES



Photographs:



Photo 1: T1, Sycamore from public open space to west



Photo 2: Part of G1, from public open space



Photo 3: H1 to LHS, T1 in centre, T2 in H2 to RHS



Photo 4: H2, eastern end

Photographs:



Photo 5: T3 and T4, Ash, north east corner



Photo 6: H3 from within site, T3 & T4 in background LHS



Photo 7: G2, Off-site group, rear of Brierley Close



Photo 8: Rear of H1 to LHS, and H4 to RHS