

Tree survey report for proposed new house at Newlands Farm, Errogie, Inverness

Grid Ref. NH 56568, 22813

An assessment of the trees and woodland on a proposed new house plot was undertaken on 11th October 2023. The map and data table were subsequently amended following the loss by windthrow of two trees during storm Gerrit on 27th December 2023.

The 0.4 ha site is largely a former conifer plantation which was felled over 10 years ago. Old cut stumps, brash piles and several stems felled to recycle still remain on the open ground area. Occasional seedlings of birch, hazel, rowan, Scots pine and Norway spruce are present. All the broadleaved seedlings exhibited browsing damage. A mixed species shelterbelt and two stands of native broadleaved trees also form part of the site and it is these that have been assessed for the survey.


Tree assessments were based on the guidelines detailed in British Standard 5837:2012 *Trees in relation to design, demolition and construction - Recommendations*, BSI 2012.

All trees adjacent to the access route and to the house site were individually measured and labelled with numbered metal tags affixed to the trunk of the tree. The rest of the woodland was mapped with brief descriptions. The location of the trees and the woodland are in Map 1 and the measurement data and comments are in Table 1.

The root protection areas around some of the measured trees (571, 572, 579, 580 & 581) on Map 1 are likely to be exaggerated on the east side because of the proximity of a ditch adjacent to the old dyke on which these trees are growing. The dyke forms the south-west boundary of the site and the ditch runs parallel to it along the north-east side. It is unlikely that tree roots will extend much beyond this ditch. Consequently, root protection barriers will probably not be required for these trees as the ditch itself will form a useful protective feature.

A total of 13 trees were measured of which five are recommended for removal. One of the latter trees has subsequently fallen during the storm. Two trees should be felled for safety reasons due to disease and/or risk of windthrow (568 & 579) and one felled to facilitate access to the site (573). A fourth tree (578) might also have to be removed if it is likely to interfere with construction works. The removal of the three (or four) trees will not impact on the landscape quality of either the shelterbelt or the broadleaved woodland areas. The owners have indicated that they would be planting hedges and native tree species elsewhere on the site and this would more than mitigate any losses due to the development. All other trees and woodland on the site are to be retained. The owners of the plot also own the land to the north, west and south and a large part of this land is upland birch and wet woodland planted under a Forestry Grant Scheme over twenty years ago. The house site is therefore largely screened on all sides by mature or regenerating native woodland.

Neil MacKenzie

Email: 

24 October 2023. (Amended 8 January 2024)



Proposed house site looking south-east with shelterbelt trees on right of photograph

Table 1 Tree Measurement data

Tree ID	Species	Life stage class	DBH (cm)	Height (m)	Crown spread (m)				Crown Clearance (m)	Life Expectancy (years)	Tree Category	Root Protection Area (m)	Comments, Condition & Recommendations
					N	E	S	W					
567	Scots pine (Pinus sylvestris)	Mature	41							U	–	Moderately healthy tree but a 10 ° lean to north and with lower branch dieback on south side due to closeness of adjacent pine. Remove for safety reasons and to facilitate access. UPDATE - uprooted and fallen over during storm Gerrit 27/12/23.	
568	Scots pine (Pinus sylvestris)	Semi - mature	36	19	2.3	2.2	2.1	2	8 - W	10 +	U	4.3	Healthy tree with normal vigour. Minor branch dieback due to closeness (1.5m) of tree 567. Remove for safety reasons and to facilitate access. UPDATE - Rootplate now part exposed due to fallen pine 567.
571	Norway spruce (Picea abies)	Mature	53	21	3.4	2.8	3	4.1	6 - S	40 +	A2	6.4	Healthy tree of good form growing on old collapsed dyke. Roots on north-east side constrained by ditch.
572	Downy birch (Betula pubescens)	Mature	25 + 28	9	2.7	2.5	4	4	1.1 - S	40 +	A3	6.4	Moderately healthy but with rot holes, broken branches and some minor branch dieback on upper crown. Main trunk splits at 1.5m height. Growing on old dyke. Roots on north-east side constrained by ditch
573	Sycamore (Acer pseudoplatanus)	Young	19 + 20 + 8	9	5	4	4.4	3.5	2 - N	40 +	B2	5.6	Vigorous multi-stemmed tree under canopy of pine. Remove to facilitate access.
574	Scots pine (Pinus sylvestris)	Mature	40							U	–	Healthy tree with normal vigour. Some branch dieback due to close proximity of tree 575. UPDATE - stem split and tree fallen during storm Gerrit 27/12/23	
575	Scots pine (Pinus sylvestris)	Semi - mature	31	16	1.5	1.8	2.1	2.1	7 - NW	40 +	A2	3.7	Healthy tree with normal vigour. Some branch dieback due to close proximity of tree 574.
576	Downy birch (Betula pubescens)	Semi - mature	18 + 11	9	2.4	2.5	3	2.7	0.6 - E	20 +	B3	3.5	Phoenix tree with partly exposed root next to hollow pit. Otherwise healthy regrowth from main trunk.
577	Downy birch (Betula pubescens)	Mature	26	13	2.6	1.9	2.1	2.1	2 - S	40 +	A2	3.1	Healthy tree at edge of young dense stand of regenerating birch and willow.
578	Downy birch (Betula pubescens)	Semi - mature	21	13	2.6	1.4	1.4	1.6	1.7 - W	40 +	A2	2.5	Healthy tree though with some dieback on one upper branch. May need to be removed to facilitate access for building or drainage works.
579	Ash (Fraxinus excelsior)	Mature	41	13	1.8	1.9	1	3.3	1.7 - W	10 +	U	4.9	Tree has 20° lean to north. Growing on old dyke. Roots constrained by ditch to north-east. Several upper and mid branches with dieback. Canopy suppressed by adjacent Norway spruce 580. Remove for safety reasons.
580	Norway spruce (Picea abies)	Mature	64	22	3.8	2.4	3.1	3.8	5 - S	40 +	A2	7.6	Healthy tree of good form growing on old collapsed dyke. Roots on north-east side constrained by ditch.
581	Downy birch (Betula pubescens)	Veteran	78	15	5	3	3.3	3.9	1.3 - W	40 +	A3	9.3	An old birch with low spreading branches growing on dyke. Healthy but with three dead branches, rot holes, sap runs and vigorous epicormic growth.

Table 1 Tree Measurement data

Woodland ID	Main Species	Life stage class	DBH (cm)	Height (m)	Crown spread (m)				Crown Clearance (m)	Life Expectancy (years)	Tree Category	Root Protection Area (m)	Comments, Condition & Recommendations
					N	E	S	W					
W1	Downy birch (<i>Betula pubescens</i>)	Young stand										Area 0.02 ha. Dense stand of Downy birch and Grey willow (<i>Salix cinerea</i>). Most trees under 7 cm DBH. Average height 2-3 m occasional 6 m. Occasional seedlings of birch, willow, hazel, rowan, juniper, Norway spruce and Scots pine. All broadleaved seedlings showed signs of browsing. Recommend selective thinning at 2-3m spacing.	
W2	Downy birch (<i>Betula pubescens</i>)	Mature stand										Area 0.12 ha. A mature birch stand with one large mature Goat willow (<i>Salix caprea</i>) and an understory of young hazel (<i>Corylus avellana</i>). Native broadleaved woodland has benefited from the removal of conifers over a decade ago. Old conifer stumps and some brash still remain. No action required.	
W3	Mixed woodland	Mature shelterbelt										Area 0.03 ha. Linear stand of mature Downy birch, ash and Scots pine along line of old collapsed dyke. An extension of the measured trees which are part of the same shelterbelt. No action required.	

Notes on survey criteria

DBH = Diameter at breast height. Measurement of main stem at 1.5 m height.

Crown spread is estimated at the 4 cardinal points.

Crown clearance is the height to the lowest significant branch and its direction of growth.

Life expectancy is an estimate of how long the tree might live - 10+, 20+ or 40+ years. **Tree**

category is an estimate of the quality of the tree in terms of arboricultural (1), landscape (2), cultural or conservation value (3). A = high quality; B = moderate quality; C = low quality & U = unsuitable.

Root protection area is an area equivalent to a circle with a radius 12 times the DBH.

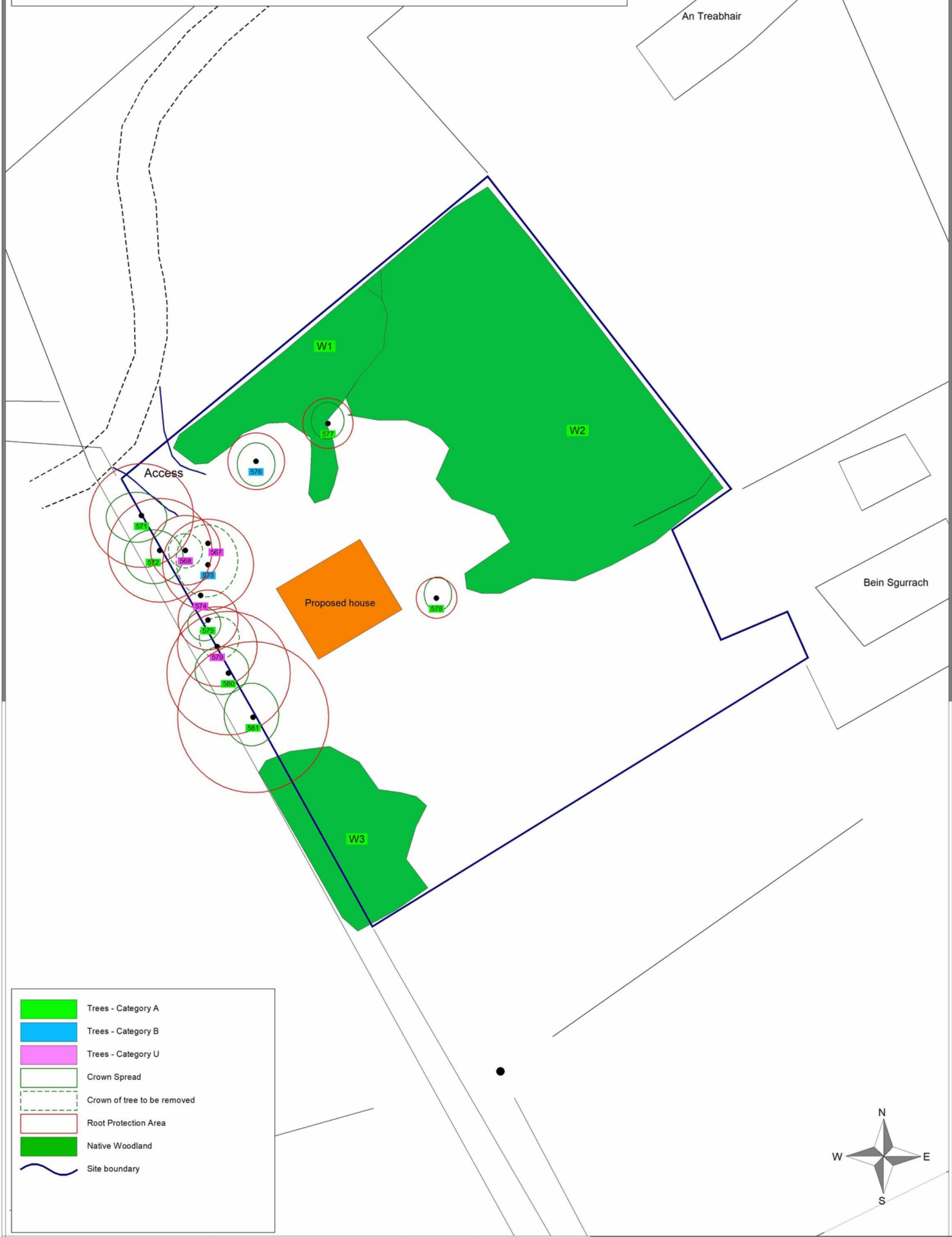
Further details can be found in BS 5837:2012.

MAP 1 Tree Survey for Proposed New House at Newlands Farm, Errogie

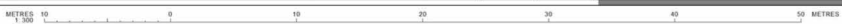
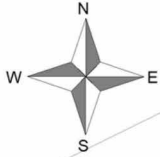
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Scale 1 : 300 (@ A2) Date 21/10/2023 (amended 8/01/2024)

Surveyed by Neil MacKenzie (Email: namackenzie@yahoo.co.uk)



	Trees - Category A
	Trees - Category B
	Trees - Category U
	Crown Spread
	Crown of tree to be removed
	Root Protection Area
	Native Woodland
	Site boundary





Rootplate of windblown Scots pine No. 567.