East Nethershields Woodland Creation

Final Landscape Report

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May 2023

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East Nethershields Woodland Creation Landscape Report

Introduction

This report was commissioned by TIlhill Forestry to undertake a landscape and visual assessment of a proposed Woodland Creation scheme at East Nethershields Farm in South Lanarkshire. It is based on site survey carried out on 27th March 2023 and desk-based assessment. Although it has been managed as one unit, Nethershields Farm consists of two separate land holdings, Lot 1 to the north and Lot 2 to the south. During the site survey visit, in the company of Tilhill staff, a number of adjoining properties were visited and meetings were held with residents at 5 adjoining properties at Beechwood, Burn and Maiden Lea adjoining Lot 1 area and Cloverhill and Cloverhill Cottage adjoining Lot 2. The weather conditions on the day of the site visit were dry and sunny with excellent visibility.

Location and Context – see Figure A below

The site occupies an undulating area of land between East Kilbride and Strathaven. The Lot 1 area at Nethershields is generally north and east facing with gentle slopes running down towards the Darngaber Burn flowing east. The Lot 2 area is gently south west facing and drains towards the Powmillon Burn which runs south. Both burns are tributaries of the Avon Water which joins the River Clyde near Motherwell. The highest point of the site is the convex rise between Nethershields Farm and East Nethershields in Lot 1 and is around 250m AOD. The lowest point is around 210m AOD where the southern end of Lot 2 meets the Powmillon Burn. The site area within the red line boundary is just under 98ha. There is no existing woodland cover within the site area although there are individual hedgerow trees in places and there is a small strip of woodland adjoining Lot 1 to the east of the A723 and adjoining Lot 2 at High Coldstream. The draft area proposed for planting, including designed open ground, is just under 72ha.

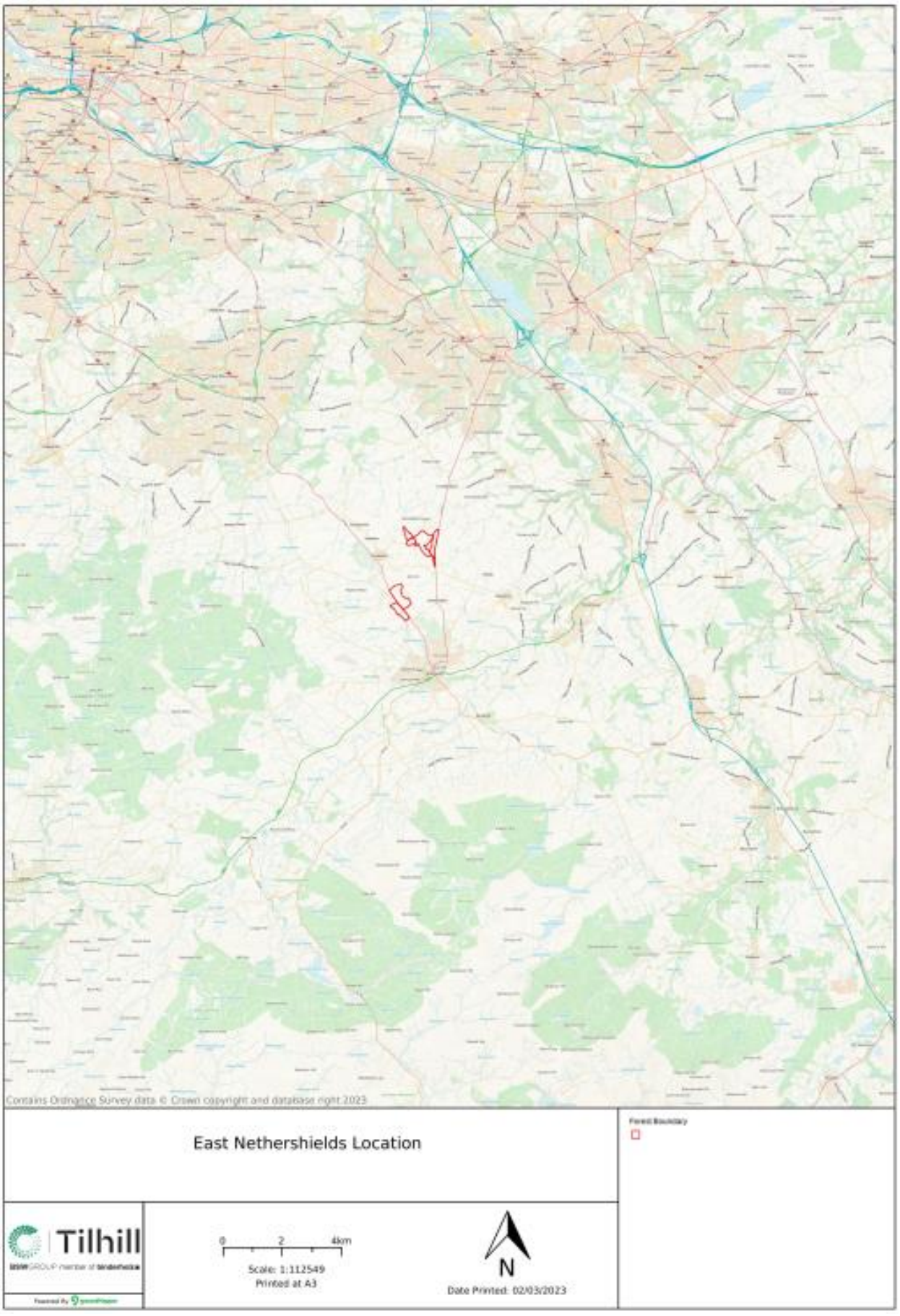


FIGURE A: SITE LOCATION

Landscape Character Assessment

The whole of Scotland has been surveyed to define a series of landscape character areas which are described in a standard format. Each Landscape Character Type (LCT) can be considered to be broadly consistent within the described area although, of course, transitions normally occur around the boundaries. These LCTs are described in the NatureScot "Scottish Landscape Character Types Map and Descriptions" (2019). This identifies that the study site lies within Landscape Character Type LCT 201: – Plateau Farmland – Glasgow & Clyde Valley.

The citation for LCT 201 describes the location and context as:

The Plateau Farmland - Glasgow & Clyde Valley Landscape Character Type occurs on the lower slopes of all the Plateau Moorland areas encircling Glasgow and the Conurbation. They are characterised by their transitional location between the sheltered landscapes of Rolling Farmland – Glasgow & Clyde Valley and Broad Valley Lowland – Glasgow & Clyde Valley, and exposed uplands and moorlands.

The Plateau Farmland – Glasgow & Clyde Valley is located in the following areas Barrhead, Western Plateau and Central Plateau, falling within North Lanarkshire, South Lanarkshire, East Renfrewshire and Glasgow Local Authority areas.

The following key characteristics are given:

- *Extensive, open, flat or gently undulating landform.*
- *Dominance of pastoral farming, but with some mosses surviving.*
- *Limited and declining tree cover.*
- *Visually prominent settlements and activities such as mineral working.*
- *Rural character of the Plateau Farmland has reduced as tree cover has declined and the visual influence of settlements, transport infrastructure and mineral working has increased*.

The section of the citation describing Landcover contains the following text in relation to tree and woodland cover:

Tree cover is generally limited to a few windblown trees along field boundaries. However, there are also patterns of deciduous and coniferous shelterbelts which define and shelter the fields, sometimes enclosing them altogether (e. g. near Newbigging). Some of these are remnants of policy landscapes and designed landscapes and where these occur, they make an important contribution to landscape character, sometimes providing valuable screening in the otherwise open landscape. The general trend in the tree population is towards overmaturity. Large areas of forestry occur in several areas of the Plateau Farmland – Glasgow & Clyde Valley, for example to the north of Carnwath and Carstairs. Many more recent commercial forestry areas are located on higher, less productive ground.

It is evident that the study site does fit within these broad descriptions with existing tree cover being limited to individual hedgerow trees and no existing woodland.

Landscape Policies

Landscape designation

The site does not lie within any designated landscape.

Forestry Policy

The relevant policy document for forestry in South Lanarkshire is the 'Forestry and Woodland Strategy for Glasgow City Region (2020)'
Clydeplan_Forestry_and_Woodland_Strategy_2020_NEW_COVER.pdf (glasgowcityregion.co.uk)

This includes guidance on the potentially suitable locations for new woodlands as follows:

Potential for Woodland Expansion

'Figure 5.1: Indicative potential for woodland expansion' indicates that the whole site area is classed as "Preferred" for woodland creation. 'Figure 5.2: Opportunities for softwood forest' also indicates that the site area is classed as 'preferred'. Figures 5.3 and 5.4 also indicate opportunities for 'energy forests' and 'mixed woodland' respectively within the site area.

Appendix B.1 defines "Preferred" as:

- *Preferred land will be that which offers the greatest scope to accommodate future expansion of a range of woodland types, and hence, to deliver on a very wide range of objectives. Within preferred areas sensitivities are, in general, likely to be limited, and it should be possible to address any particular 'site specific' issues within well designed proposals that meet the UK Forestry Standard and associated guidelines. Future woodland expansion is therefore likely to be focused on preferred areas. Site surveys will be required in line with the UK Forestry Standard, in order to identify project level sensitivities and whether planting is appropriate.*

It is worth noting the statement within this definition that:
'…it should be possible to address any particular 'site specific' issues within well designed proposals that meet the UK Forestry Standard and associated guidelines.'

Spatial Guidance

The strategy also contains Chapter 9 in relation to Spatial Guidance to cover more local priorities and the opportunities and constraints that should be taken into account. For East Nethershields, the relevant zone is described as 'Farmlands' in Table 9.2 and as illustrated in Figure 9.1. Section 9.7 lists the following key issues:

- *Significant fragmentation of native woodland resources; – Presenting an often significant barrier to species' adaptation to the effects of climate change.*
- *Decline and under-management of farm woodlands, shelterbelts and field trees, eroding landscape quality and character;*
- *Difficult economic circumstances, making it hard for farm forestry to compete with other land uses;*
- *Need for support for agriculture in adapting to the effects of climate change;*
- *Forms the immediate setting for much of the region's settlement – but land degradation and abandonment, anti-social behaviour and under-management of woodland resources often undermines the potential contribution to character and distinctiveness;*
- *Generally poor ecological condition of waterbodies, with agricultural diffuse pollution a key issue; and*
- *Significant peri-urban land allocations, particularly for housing.*

Section 9.12 contains some specific comments in relation to Priorities for woodland expansion as follows:

- *Contributing to the development of woodland habitat networks, particularly where these can link to significant existing assets – such as the Clyde Valley woodlands;*
- *Delivering new farm woodlands to aid adaptation to climate change, contribute to diversification and help to expand potential timber and biomass production opportunities;*
- *New softwood and mixed forests, located and designed to reflect the character and quality of the landscape, and local sensitivities such as peatland habitats;*
- *Identifying and prioritising suitable sites for application of Continuous Cover Forestry in more sheltered areas; and*
- *Supporting the delivery of housing development on the fringes of the metropolitan area released through development plans– contributing to landscape character, quality and sense of place.*

Comment

To a greater or lesser extent, all the above remarks can be considered as relevant to the study area. It is worth noting that there is no remaining native woodland although it must have been present in the past. (There are a few hawthorn bushes along the Powmillon Burn that may be of native origin.) Also, there is no farm woodland within the site although there is some in adjoining areas at Maiden Lea and High Coldstream. The principal woodland cover on site is restricted to overmature and declining hedgerow trees, mostly beech, probably themselves of hedgerow origin and some heavily browsed hawthorn hedges that generally provide little shelter. There is also evidence of waterlogging and impeded drainage in the fields with some ground clearly poached by livestock. This must have an effect on the quality of water runoff.

The proposed woodland creation scheme at East Nethershields would to a greater or lesser extent address all the issues identified at section 9.7 and contribute to all the priorities identified at section 9.12 above. In particular, the proposal would contribute to the adaption to climate change and would develop woodland habitat networks.

Analysis of the Site Landform

See Figures B for Lot 1 & C for Lot 2 (below).

The site landform at Lot 1 reflects its hill top location with ridgelines (red arrows) running down the slopes from the high point between Nethershields and East Nethershields. Valley formations are quite gentle features indicated by the green lines running up from lower ground.

At Lot 2, the ridge lines (red arrows) radiate out from a high point at High Coldstream. Although generally south west facing, the landform at Lot 2 is gently undulating without very strong features apart from the steeper sided valley of the Powmillon Burn indicated by green arrows running up the valley from the south.

Landform is an important design feature for woodlands especially in upland areas. As the land flattens out and becomes more lowland in character, landform becomes less visible and therefore less important and surface features such as field patterns, dykes, hedgerow and woodlands become more important as design factors. Lots 1 and 2 can both be considered to be an intermediate case, as might be expected in the upland fringe, where both landform and field pattern have some influence.

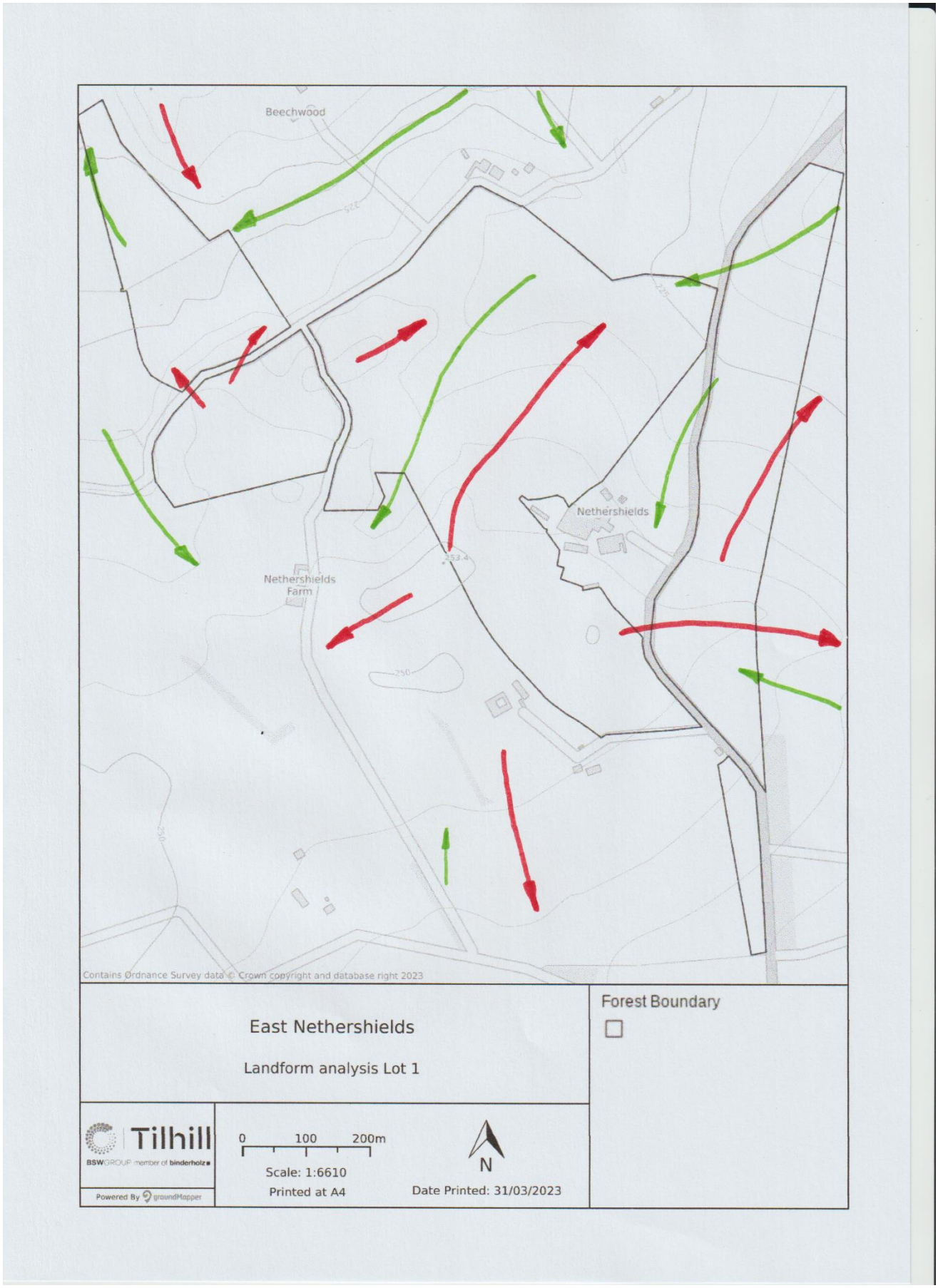


FIGURE B: LANDFORM ANALYSIS FOR LOT 1

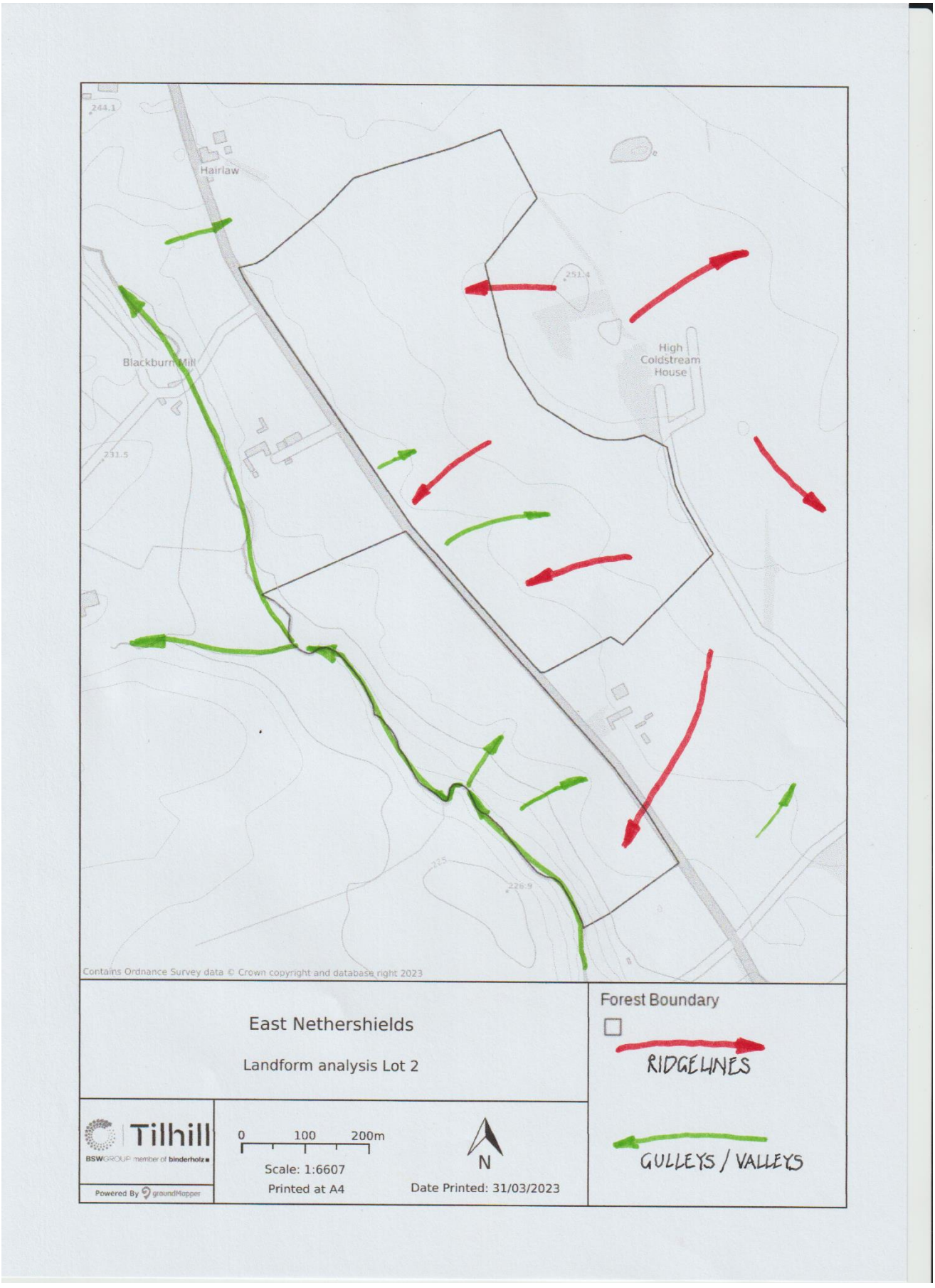


FIGURE C: LANDFORM ANALYSIS FOR LOT 2

Assessment of Potential Visual Effects

Survey viewpoints are identified at Figure D below.

FIGURE D: SURVEY VIEWPOINT LOCATIONS (See Appendix A for Viewpoint Grid References)

The viewpoints highlighted in yellow at Appendix A have been selected for more detailed appraisal using the 'Mapmaker Prospect' visualisation software.

A selection of views of the site is provided below:

VP2: View over the Lot 1 area past East Nethershields looking NE towards Hamilton.

VP4 looking N towards Burnpark. (Note gaps in existing hedge.)

VP6: Views N from Lot 1 towards neighbouring properties at Burn (on the right) and Beechwood (on the left).

VP10: Wide angle view from Beechwood looking S towards the site, just on the skyline.

VP11: Wide angle view from The Burn looking S (above) towards East Nethershields Farm and SW (below). (Note dead and declining hedgerow trees in the middle distance.)

VP15: In Lot 2 looking S showing part of Powmillon Burn and possible remnant native trees.

VP18 at High Coldstream looking W toward Blackburnmill. Note open character of Lot 2 ground.

VP19 (above): Part of the view from Cloverhill looking NW towards A726 and VP23 (below) looking SE from A726 towards Cloverhill.

Conclusions from Landscape Character, Landform and Visibility Analysis and Interim Recommendations

The design proposals as at 11/03/2023 are illustrated at Figures F (for Lot 1) and H (for Lot 2) below and were the basis for the comments and recommendations contained in the Interim Report dated March 2023.

Landscape Character

With the exception of the upper north facing slopes in Lot 1, where pine and spruce are proposed, all the other parts of the scheme are to create broadleaved woodland. As identified in the Nature Scot Landscape Character Assessment and confirmed during the site visit, the area is currently very open and the lack of tree cover means that any human structures are likely to be exposed thus weakening the rural character of the landscape. In addition, what tree cover there is, in the form of hedgerow trees, is mostly in decline and can be expected to diminish further in the near future. The proposed woodland creation offers an opportunity to re-set the landscape character towards a much more sheltered and visually diverse and more wooded landscape. This would come at the expense of the loss of some distant views in some places. On the basis that design details ensure a good fit with landform and field pattern, it is considered that the proposed scheme will strengthen the rural character of the landscape and enclose and screen many of the man-made features in and around the site. It is intended to manage the broad leaves as a long-term carbon store, without harvesting and the commercial planting areas on a 'continuous cover' basis. This means that the woodland character of all areas should diversify as trees mature and age and size structure gradually increases due to differential growth, and future harvesting and re-stocking. All this can be seen as a positive influence on landscape character in the long term.

Visual Analysis

In terms of visual analysis, there are 2 main classes of receptor at this location namely the views from roads and paths and also the views from individual properties adjoining the site or with views onto or over it. Far more people will view the site from the road network but views from properties are particularly sensitive because they are seen continuously. It is clear from the meetings held during the site visit that some neighbouring owners, although not all, have concerns about the proposed woodland in general and the effects on views in particular. Despite or perhaps because of the scarcity of existing tree cover, some neighbours feel that their properties will be adversely affected both by unwanted views onto forest and also because new woodland might obstruct existing views to distant hills. On the other hand, there are views from the public road onto the sides of existing farm and business premises on or near the site that might benefit from the screening that woodland would provide. It is also important to consider that different people can, quite legitimately, see the same view from very different perspectives. In order to address the concerns expressed, it was decided to prepare visualisations from all the affected properties and to use these to inform and, if necessary, revise the design.

Proposed design changes as per Interim Report dated March 2023

The recommendations for planting design were:

1. Use the prepared visualisations and other information to minimise potential visual obstruction as seen from principal residential viewpoints of neighbouring properties (e.g. at a front entrance or conservatory). This will involve preparing more detailed designs or at least some design adjustments in the affected areas. This should at least

partially mitigate expressed concerns. In particular, consider pulling planting back down the slope opposite Cloverhill and Cloverhill Cottage.

2. Develop the design further by differentiating the various proposed broadleaf mixes such as wet woodland, oak woodland etc. on the submitted plans and by leaving unplanted some of the observed wet hollows as well as other ecological and heritage features. This will help create a woodland mosaic and reduce any impression of monoculture.
3. In the detailed design it is also desirable to vary the distance between the woodland edge and the roadside to provide a more interesting and varied view from the road. A set back from the road edge of 5m plus identified sightlines should be a sufficient minimum although the woodland edge should be pulled further back in places to provided variation.
4. From a landscape perspective the intention to manage the conifers on a continuous cover basis is very much supported as it will avoid future visual and other problems. However, to ensure that this objective is successfully implemented on this quite exposed site, early thinning of the conifer areas is strongly recommended. This should be written in to the site management plan.
5. Consider using species mixes for the proposed conifer areas to increase diversity e. g. add some birch (up to 20%) into the Scots pine area and perhaps some aspen and other conifer species into the spruce area. This will help to reduce any impression of monoculture. It should also assist the viability of future continuous cover areas by improving stability and increasing seed sources.
6. For both landscape and biodiversity interest, and rather than leaving a long thin belt of low density shrubs, consider the potential to develop some riparian native woodland along the Powmillon Burn where existing hawthorn are suffering browsing pressure. (It may be that this can be done in patches using tree shelters with open ground grazed by deer, hares etc to help conserve the identified calcareous grassland?).
7. To achieve a well developed age structure and maximise future woodland understorey and thereby improve the appearance of the developing woodland, a plan for future deer management should be included. The area along the Powmillon Burn has potential to provide a safe backdrop with good grazing for deer control.
8. Test the design with Mapmaker Prospect visualisations looking at the site from viewpoints 1, 10, 11, 12, 19 & 20 and adjust designs accordingly.

As a result of these recommendations, amended designs dated 23/05/2023 were prepared and these are shown at Figures G (for Lot 1) and J (for Lot 2) below. The amended 23/05/2023 designs were then used to prepare visualisations as per recommendation 8 above to see if any further changes were indicated.

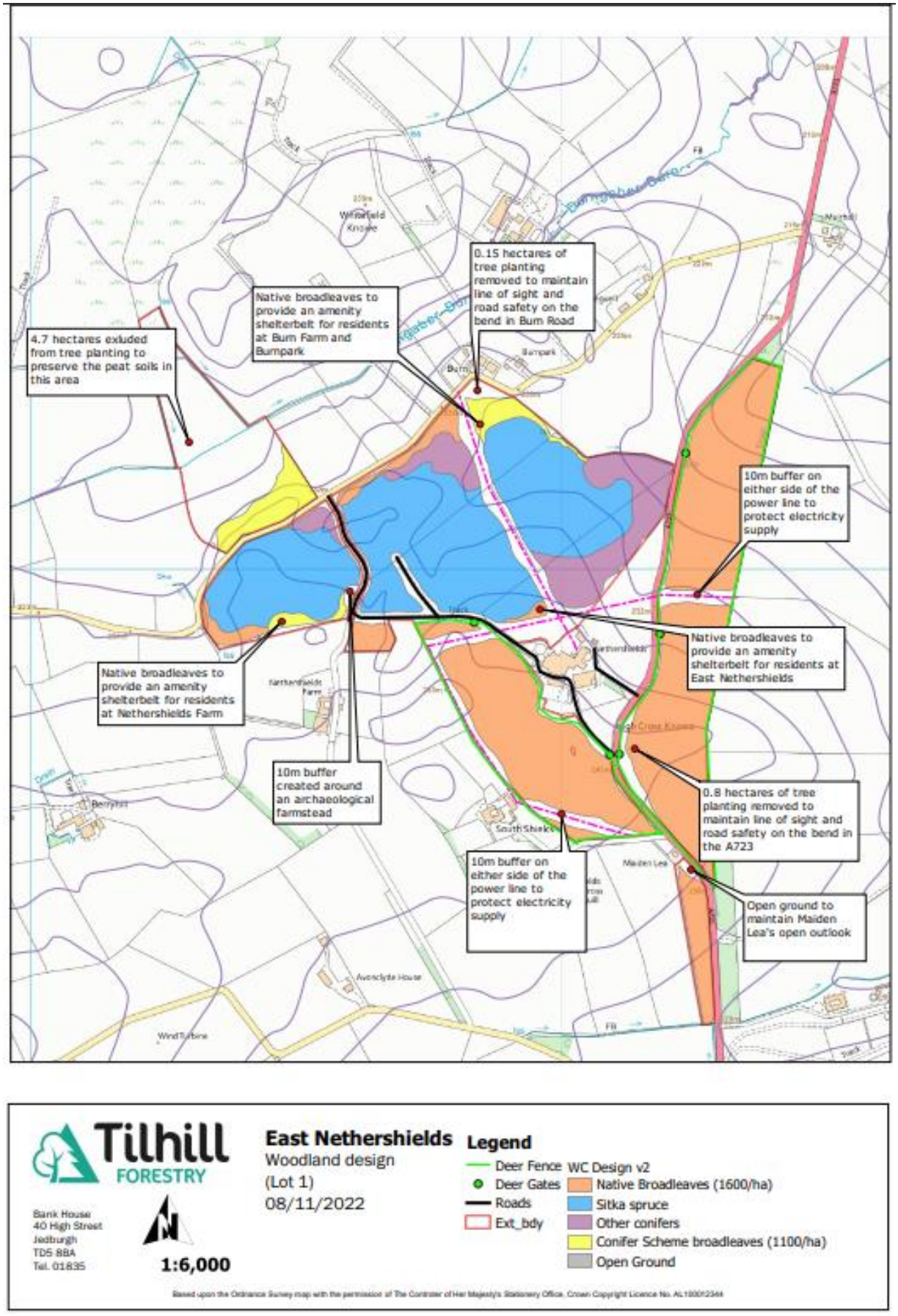


FIGURE E: Design Proposals for Lot 1 as at 08/11/2022

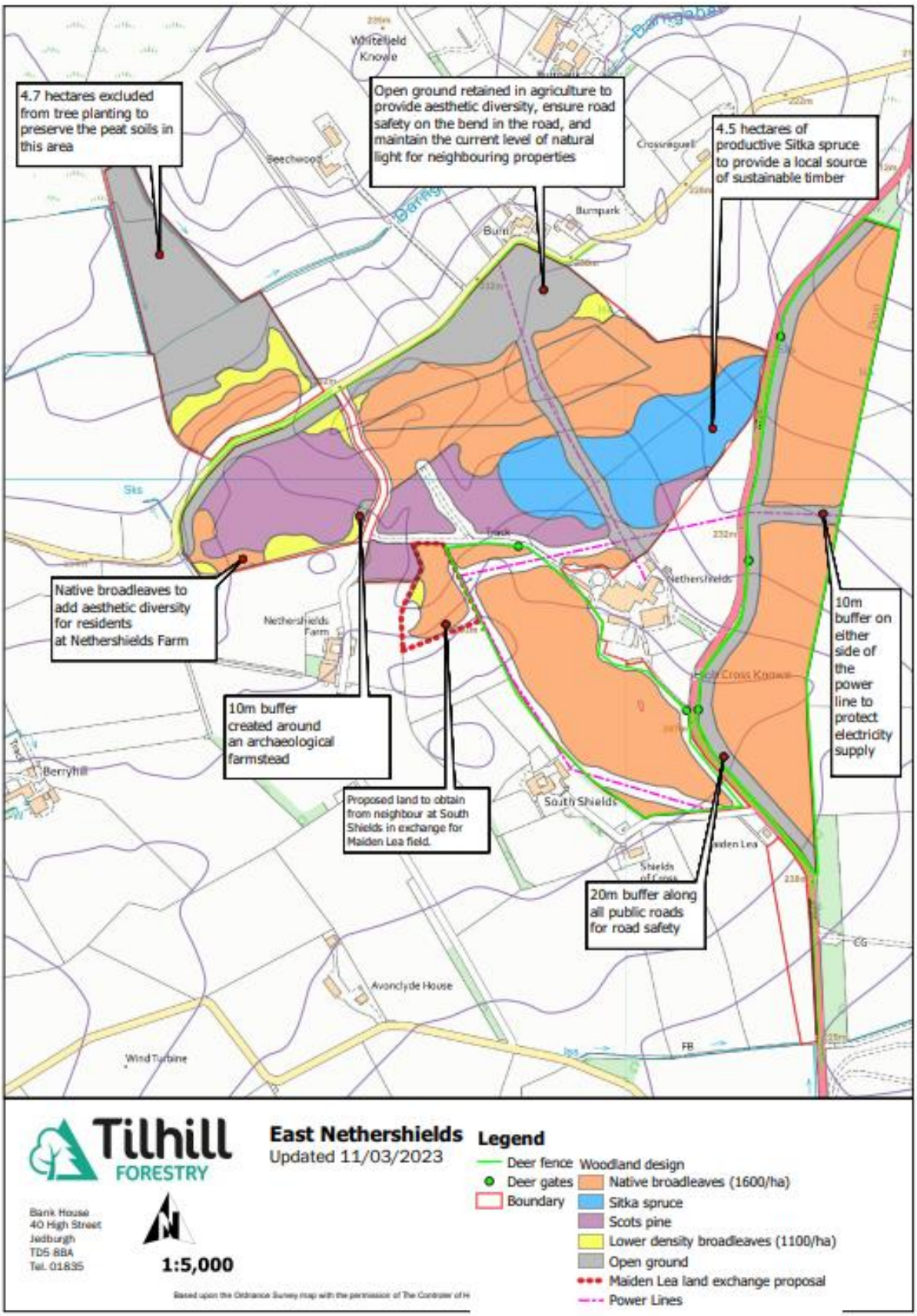


FIGURE F: Design Proposals for Lot 1 as at 11/03/2023

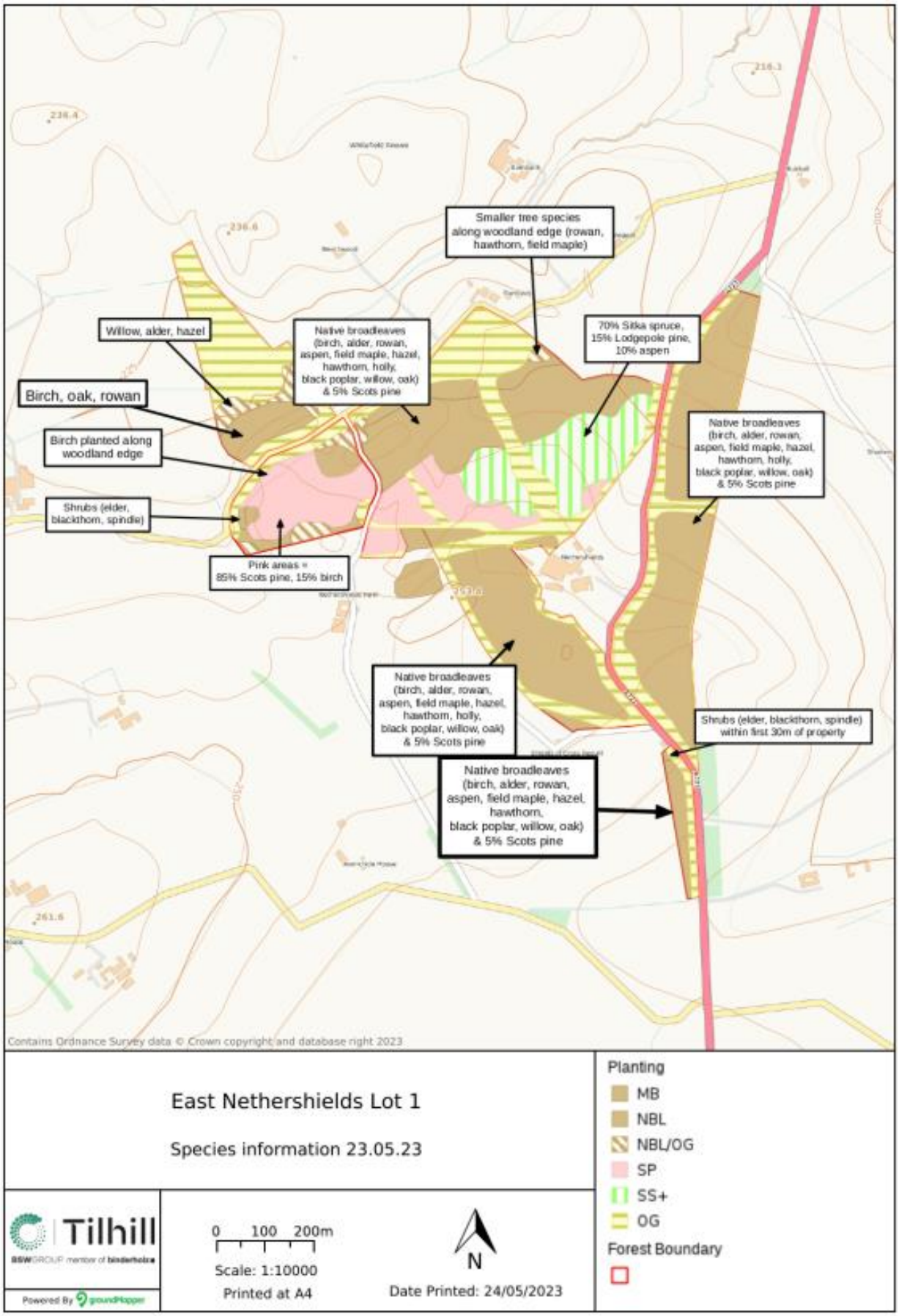


FIGURE G: Design Proposals for Lot 1 as at 23/05/2023

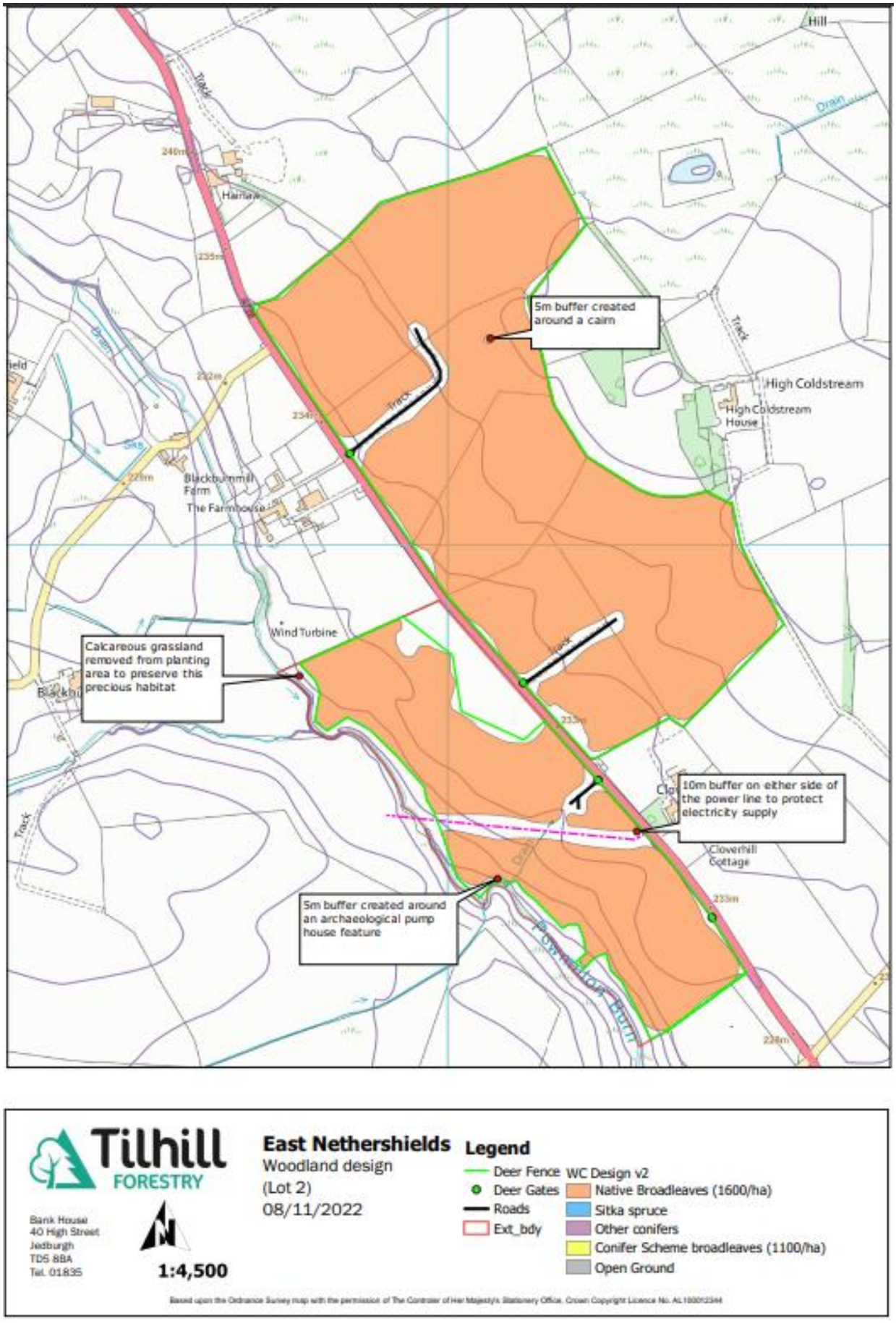


FIGURE H: Design Proposals for Lot 2 as at 08/11/2022

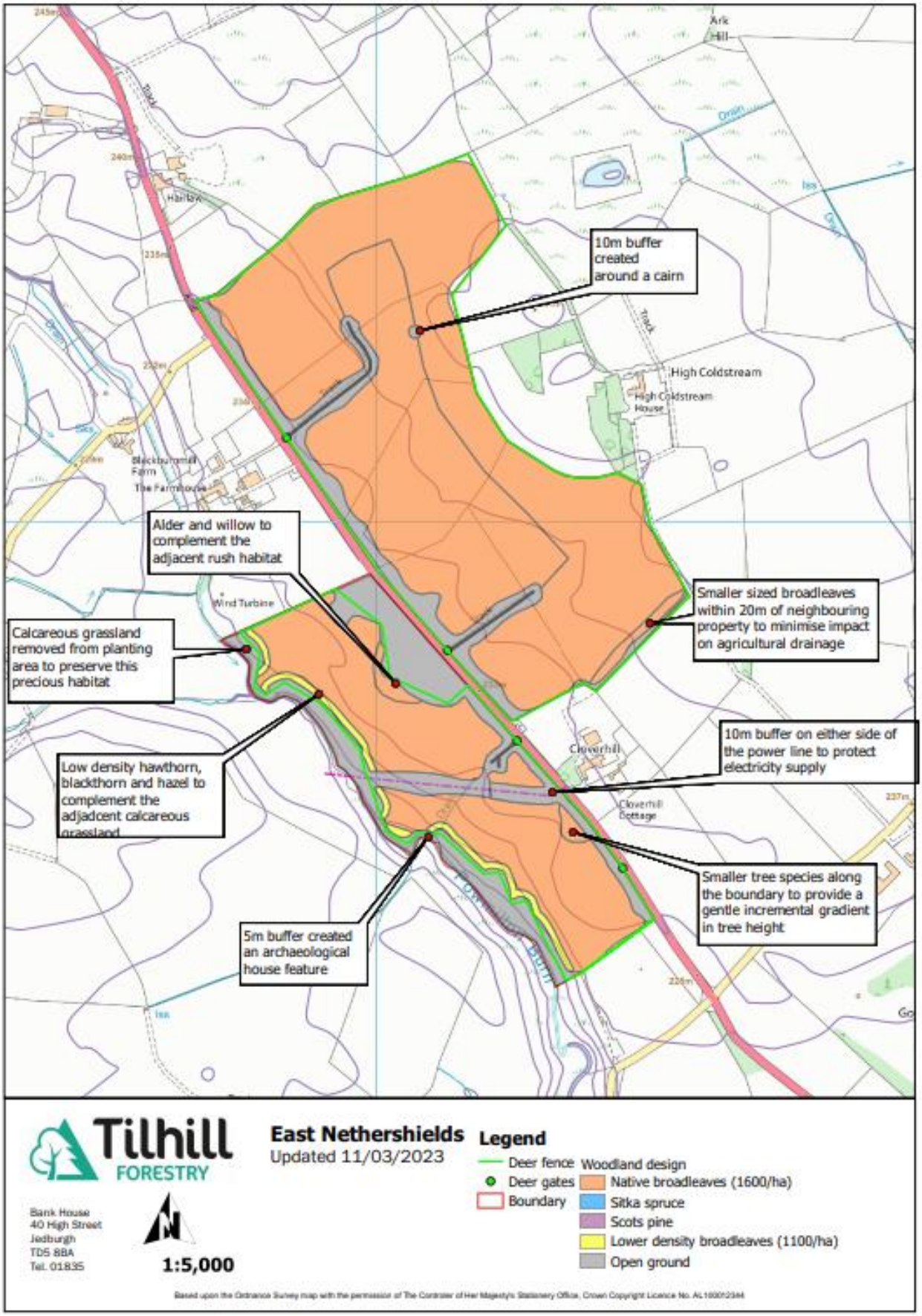


FIGURE I: Design Proposals for Lot 2 as at 11/03/2023

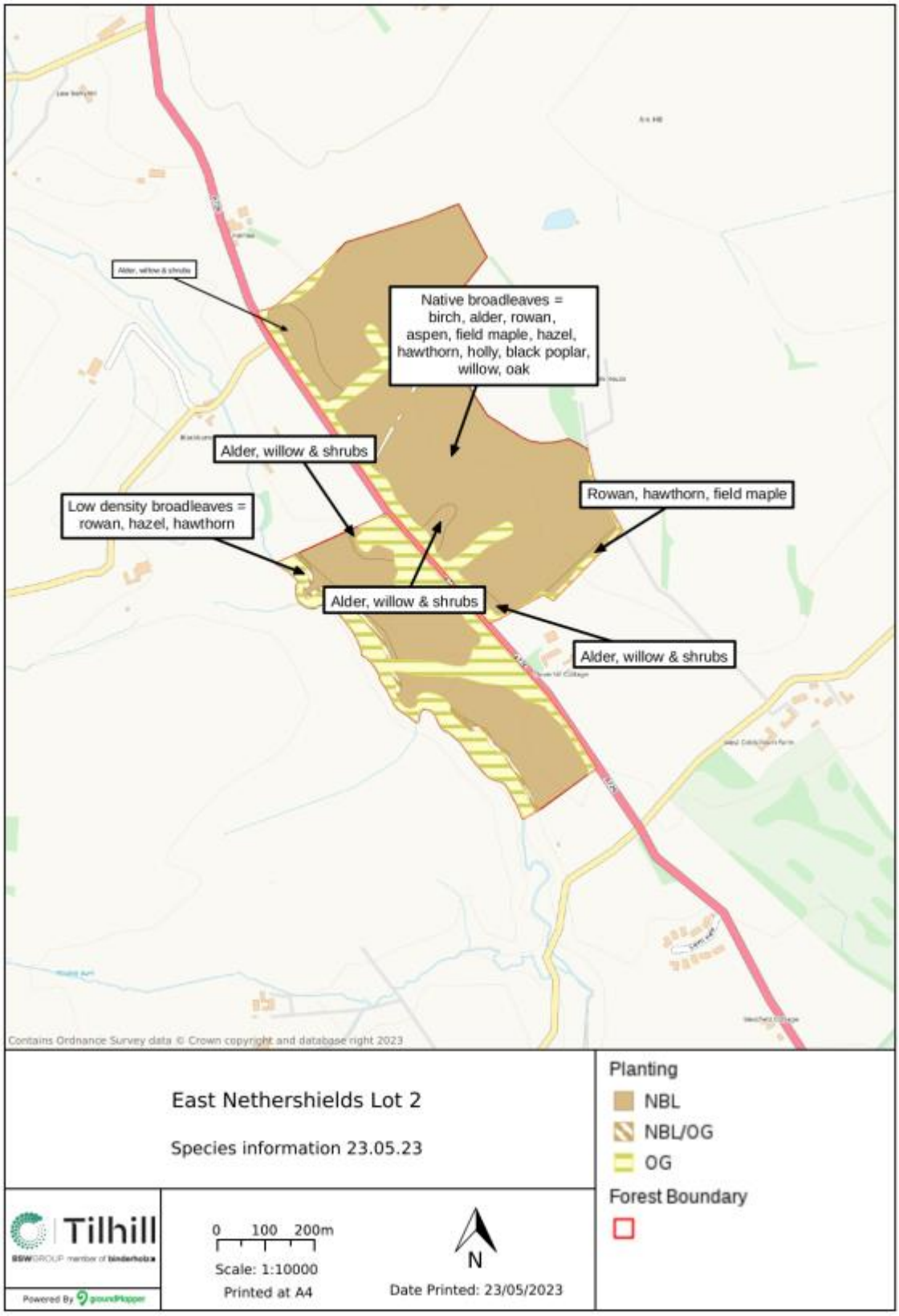


FIGURE J: Design Proposals for Lot 2 Area as at 23/05/2023

Design Development and Use of Mapmaker Prospect

As described above, the designs dated 11/03/2023 were amended to take account of the interim recommendations and a further set of designs dated 23/05/2023 were then used as the basis for Mapmaker Prospect Visualisations and these are shown below.

Mapmaker Prospect uses spatial landform data to create a '3 dimensional' computer model of the land being studied. It then allows planting proposals to be 'draped' over the landform. It can take account of defined rates of growth for different tree species and show tree heights at different ages. The software can then provide theoretical images, from specified viewpoints, of the proposed forest after a defined growth period. In terms of presentation, proposed conifer trees are shown in varying shades of green, broadleaf trees are shown in autumn colours to provide contrast from the conifers and existing trees/ woodlands are shown as grey.

For the purposes of this study, it was taken that the trees would reach a maximum height at 40 years after planting and that the different proposed species would achieve the following heights:

For sitka spruce – 25metres, for Scots pine – 18m, for mixed broadleaves – 15m and for shrubs – 8m.

N.B. It is important to bear in mind that these can only be estimates and that actual growth will vary widely in response to site variations of soil and climate and due to other possible influences such as herbivore damage. The defined heights given should be regarded as close to the maximum achievable.

It is also important to bear in mind that the visualisations can only give a general indication of the scale and shape of the proposed planting and that the visualisations do not exactly match the bearing and range of view of the accompanying photograph. Neither do they show all of the existing tree and hedge cover that is shown on the photographs. Nevertheless, they should serve to give a reasonable impression of the forest at maximum development.

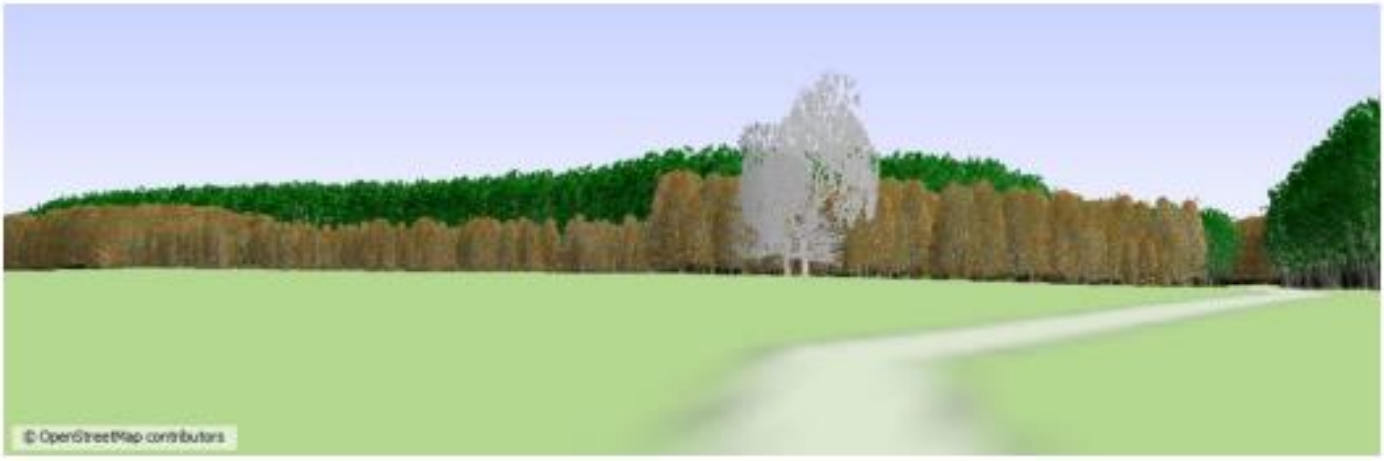
The visualisations for the selected viewpoints (VP1, VP10, VP11, VP12, VP19 & VP20) are shown below:

East Nethershields Woodland Creation Design - 3D visualisation v4

Created using Map Maker Prospect on behalf of Tillhill

VP1 – Drive way north of Nethershields Farm, looking north (NS 696 488)

FoV = 100 degrees, Bearing 340 degrees



Proposed planting would be set back behind the brow of the hill (where the hedge is shown on the photograph) with Scots pine set behind broadleaf trees and shrubs.

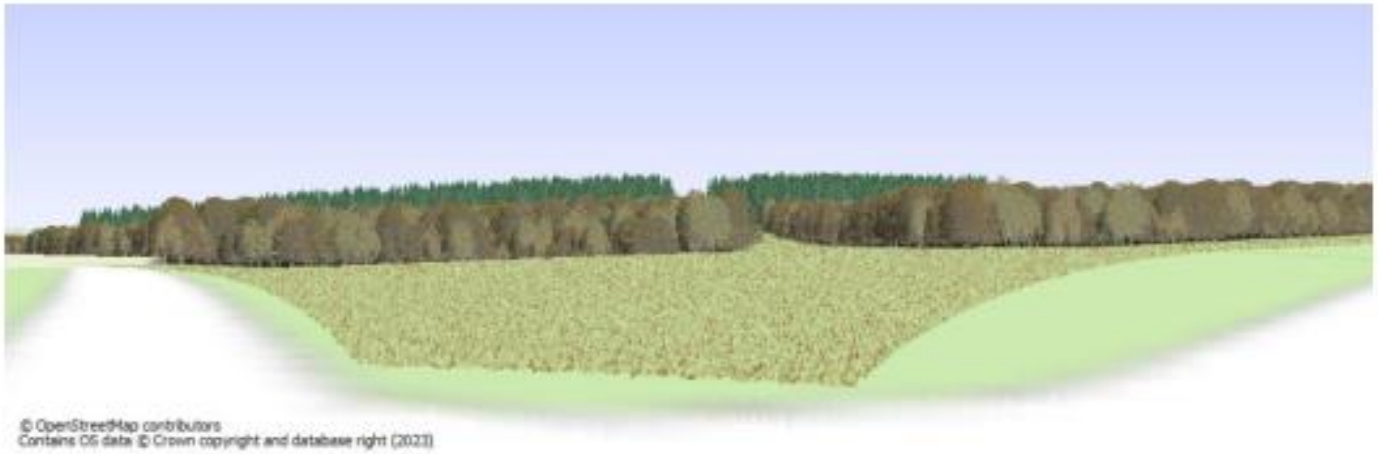
VP10 – Beechwood looking SE (NS 695 494)

FoV = 100 degrees, Bearing 150 degrees

Broadleaf woodland planting would become discernable on the skyline, behind the existing minor road and hedgerow, at a distance of approximately 300m from the viewer.

VP11 – Gateway to Burn House looking S (NS 698 493)

FoV = 100 degrees, Bearing 150 degrees



Sitka spruce would be visible at a distance of about 300m and would screen views of the East Nethershields Farm buildings that currently dominate the skyline. The conifers themselves would be set behind mixed broadleaves which themselves will be set at least 150m back from the viewer.

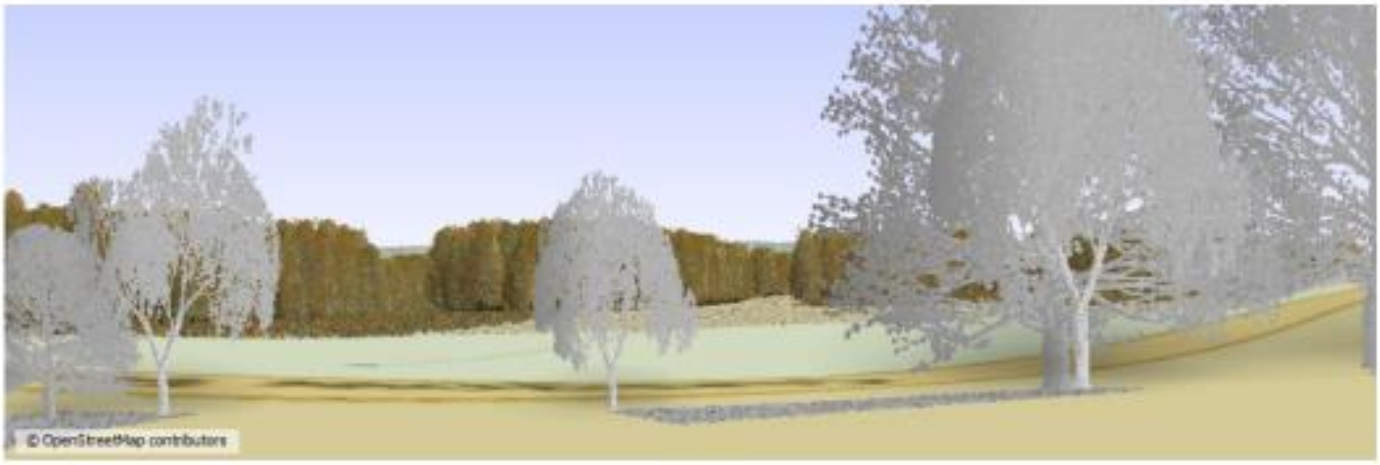
VP12 – Maiden Lea looking S (NS 702 484)

FoV = 070 degrees, Bearing 170 degrees

Following the 1st visualisation, it was decided to pull the planting further away from Maiden Lea Cottage and to plant shrubs along the northern edge – hence the visible change in height in the visualisation. This gives a minimum distance of 9m to the shrubs and 30m to the trees. This is significantly closer to property than the other selected viewpoints but assessment also take account of the narrower field of view towards the proposed woodland which is partially located behind existing trees (not shown to the right on the isualisation). The principal view from the property to the south west would be unaffected. The view from the side window to the south east would be affected as described above.

VP19 – Cloverhill House looking West (NS 693 466)

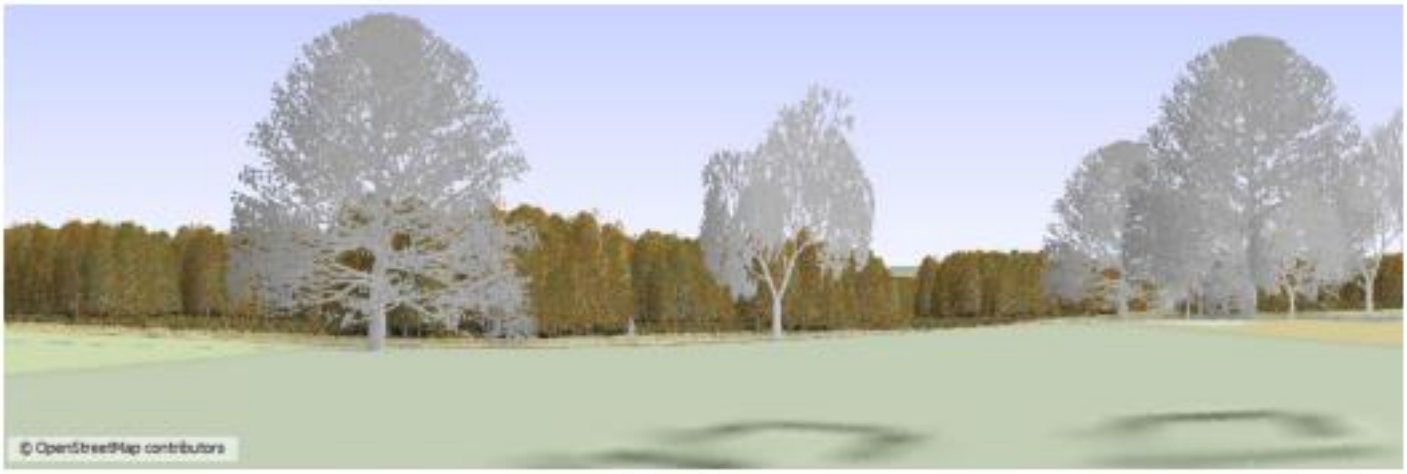
FoV = 100 degrees, Bearing 260 degrees



Following the interim recommendations, broadleaf planting has been moved further back by widening open space associated with the visible power line pole. New planting would be visible at a minimum distance of approximately 80m, on the other side of a busy road and seen through a partial screen of existing trees**.**

VP20 – Cloverhill Cottage looking West (NS 693 465)

FoV = 100 degrees, Bearing 240 degrees



As with the comment for the neighbouring property and following the interim recommendations, broadleaf planting has been moved further back by widening open space associated with the visible power line pole. New planting would be visible at a minimum distance of approximately 85m, on the other side of a busy road and seen through a screen of existing trees not all of which are shown on the visualisation. These, in summer, will themselves provide almost complete screening of the view**.**

General observations in relation to expected visual effects as illustrated by the visualisations

With the exception of VP12 Maiden Lea, no further adjustments to the proposed planting were considered necessary for landscape and visual reasons. The proposed woodland edge is set well back from each of the properties considered.

It is accepted that wherever the proposed woodland is visible, there will be a change to the existing view. However, this is inevitable with any planting scheme and should only become an issue if the planting were to be perceived as overbearing and dominating of a particular property. That is not the case for any of the viewpoints studied although some further adjustment was made for Maiden Lea.

It is accepted that, in time, some vistas of very distant hills that can be seen in conditions of extremely good visibility (such as the day of the site visit) may, in time, become obscured from certain viewpoints. However, it is unlikely that any of these effects would be noticeable given the very long, 40 year time span involved in the change.

Conclusion

Interim Recommendations outlined at pages 17 and 18 have been or are being put in place and the design has been adjusted to respond to comments made by adjoining residents as illustrated by the design iterations of 08/11/22, 11/03/23 and 23/05/23.

This is a rural location and views of trees and woodlands in the middle distance should not be unexpected and are unlikely to be perceived as intrusive. Visual impact assessment needs to consider the effects on all potential receptors including residential properties and also road travellers, walkers and general visitors. Many would consider that the general character of the area would be improved by additional woodland structure that can be attractive in its own right whilst also providing screening of various farm and industrial buildings that are currently exposed. New, predominantly broadleaf woodland will also provide 'non landscape' benefits such as shelter, wildlife habitat and improve water runoff quality as well as sequestering CO2. Although some strongly negative opinions were expressed by some local residents on the day of the site visit, I am of the view that the proposed planting would, in time, be accepted and, eventually, valued by both residents and visitors to the area.

I recommend that in landscape and visual terms, the proposed planting scheme at East Nethershields is approved for FGS grant support.

References:

NatureScot: Scottish Landscape Character Types Map and Descriptions (2019)
Scottish Landscape Character Types Map and Descriptions | NatureScot

'Forestry and Woodland Strategy for Glasgow City Region (2020)'
Clydeplan_Forestry_and_Woodland_Strategy_2020_NEW_COVER.pdf (glasgowcityregion.co.uk)

APPENDIX A

Grid References for photographs for landscape survey viewpoints.

27.03.23	East Nethershields Viewpoints	Grid Ref	E	N
Map	**OS sheet 64**	NS		
	Lot 1			
VP1	N of Nethershields Farm		695	488
VP2	Hill top between Nethershields Farm & E Nethershields		697	487
VP3	N of E Nethershields		700	488
VP4	A723 road where boundary meets road			
VP5	A723 road at NE corner of Lot 1		702	491
VP6	Ridge in field SW of Burn		697	491
VP7	Minor road N of Berryhill looking E		692	488
VP8	N side of Chapeltown		682	487
VP9	Silverrig Farm		689	489
VP10	Beechwood looking SE		695	494
VP11	Gateway to Burn House		698	493
VP12	Maiden Lea looking S		702	484
VP13	Minor road SW of Beechwood gateway		696	492
	Lot 2			
VP14	W site corner S of Blackburnmill Farm			
VP15	Above Powmillon Burn		692	463
VP16	A726 at Cloverhill Entrance looking SW		693	466
VP17	NW of Cloverhill looking NE		692	467
VP18	S of High Coldstream		694	470
VP19	Cloverhill House looking SW		693	466
VP20	Cloverhill Cottage		693	465
VP21	Near cairn NW of High Coldstream		690	473
VP22	N side of Lot 2		688	474
VP23	A726 at access point NW of Cloverhill		691	468
	Sites proposed for Mapmaker Prospect assessment			