Woodland Management and Creation Scheme

(2012 – 2017)

Planning Condition 13

Planning reference HPK/2009/0496

Carpenter Ltd, Glossop

Date: July 2012

Report written and checked Sheaf Ecology Ltd

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1.0 Site Information

1.1 This woodland management plan relates to land at Dinting Vale, Glossop which is the subject of a planning approval for the extension of a factory, planning reference: HPK/2009/0496. The centre of the site is at OS Grid Ref: SK 01703 94852. It is in the full ownership of Carpenter UK Ltd.

1.2 The development site lies across land that rises up from the Dinting Brook valley 35m to the north-east with the highest point at the north-easterly junction of the site with Dinting Lane. At the lower part of the site two large ponds occupy the valley bottom (See site plan - Appendix B).

1.3 The woodlands on the site comprise a range of woodland types from mature broadleaved to recently planted immature woodland blocks and screening belts. In addition there are trees associated with waterside habitats and isolated trees within grassland and other habitats throughout the site. Areas of immature woodland in the central eastern part of the site comprise a number of self set immature trees.

1.4 The development as set out in the approved plan, will take over 50% of the total site area which will be developed as a new factory extension or as part of a regraded, landscaped slope that runs from the upper parts of the site to the ground level of the factory.

2.0 Management objectives

2.1 As part of the planning approval (reference HPK/2009/0496) planning condition 13 requires that a Woodland Management and Creation Scheme should be produced and submitted to the LPA for approval. The Woodland Management and Creation Scheme (hereafter referred to as WMCS) is required to contain details on the following:

1) The areas of woodland to be retained and/or enhanced;
2) Areas where new woodland will be established;
3) The methodology for the establishment of new areas of native woodland;
4) Management of existing woodland to enhance its amenity and ecological value;
5) Details of responsibility for the future management of the woodland areas.

2.2 In April 2010 a site meeting was conducted to discuss various aspects of the works with the planning officer, the LPA tree officer, Senior Local Wildlife Sites Officer from Derbyshire Wildlife Trust and the developers ecological advisors, Sheaf Ecology. A wide range of site remediation and long-term management options were discussed in relation to woodlands and overall site ecology. This provided the basis for a number of general and specific woodland management objectives which were summarised in an e-mail of 23rd April 2010 by Sheaf Ecology to those present at the meeting. The text of the e-mail and the desirable site management objectives can be seen in Appendix A.

2.3 The site meeting concluded that a range of woodland management options should be taken up as objectives. There was general agreement that the replacement of the mature woodland by replanting a similar area would not be appropriate given the size and nature of the site and the existing biodiversity value of some of the grassland habitats. Taking a range of other factors into consideration the following woodland management and creation management objectives have been developed. These are:

a) A long term management and responsibility strategy should be developed;
b) New woodland planting to be restricted to areas of low biodiversity value;
c) Standing and lying dead wood should feature as a significant habitat throughout the site;
d) Translocation of woodland ground flora to newer woodland areas;
e) Management of the plantation woodlands to increase biodiversity;

f) The public to be kept informed through interpretation panels on-site;

g) Improved roadside tree planting

2.4 The above objectives have an overall aim which is to **enhance the woodland biodiversity of all areas outside of the construction zone and protect non-woodland habitats**. The adoption of a long-term management strategy and a commitment from the land owners to maintain a positive and active involvement in the biodiversity of the site is an important objective which underpins the achievement of the main aim.

3.0 Woodland Management and Creation Scheme

3.1 Woodland areas to be retained and/or enhanced

3.1.1 As a result of the development works, the main mature woodland on the site will be lost. However, there are areas of mature woodland that will be retained particularly in the lower part of the site in the south and south-eastern boundary area. Around the ponds most of the trees, which are mainly alder, willow, sycamore, oak and ash will be retained. The extent of the construction zone and the impact upon woodland areas is shown in Appendix B. As there will a reduced number of mature trees on site, management activities will focus on the management of these trees to maximise their lifespan and enhance their biodiversity through direct and indirect actions such as thinning around them, arboricultural works and the addition of bat and birds boxes. The small number of mature trees on the northern and western boundaries will be treated similarly.

3.1.2 It is also important to protect mature trees that lie close to the construction zone and this will be achieved through the implementation of the tree protection strategy which is detailed in the document: *Tree Protection Strategy, Felling and Pruning Strategy, Arboricultural Method Statement Drives and Parking in relation to Trees.* July 2012 (Sheaf Ecology and Anderson Tree Care) which has been submitted to the LPA in order to discharge Condition 9 of the planning approval.

3.1.3 The less mature and plantation woodlands on the site are affected to different extents by the impact of the development. The woodland blocks are shown in Appendix B as blocks A, B, C, and D from the western area of the site to the south-eastern side. These woodland blocks all seem to have been planted as part of a landscape/nature conservation scheme linked to previous development works.

3.1.4 Block **A** begins as a narrow screening belt of planted conifers, largely in groups of three, alternating with groups of berry-bearing small evergreen trees, principally laurels, in approximately equal proportions. The conifers are two and a half to four meters high and the laurels up to four meters. Within the planted trees are odd specimens of willow species that appear to be self-set. The belt widens in the north-western boundary and northern corner of the site to an area of deciduous trees identified as Wet Woodland. This area was described in habitat surveys as inundated and birch dominates in this wetter area. Apart from the screening belt being completely removed this block will be largely unaffected by the construction zone activities.

3.1.5 Block **B** is a more regularly structured plantation woodland with a range of tree species, a number of which are associated with landscape restoration such as grey and Italian alder as well as native alder, goat willow and Norway maple. Along with these ash, hazel, whitebeam, mountain ash, sycamore birch and oak make up the majority of the native species planted. The species are planted in discrete groups rather than in intimate mixes. The ground flora is rather poor with common grasses dominating such as cock's-foot, creeping soft grass and

Yorkshire fog dominating where there is sufficient light in what is a fairly dense and shaded woodland. On the boundary section of the woodland, trees appear to have grown better with large ash, horse chestnut and sycamore being frequent along with some hazel and whitebeam. The majority of this woodland will be retained with <5% within the construction zone.

3.1.6 Block **C** is very similar in character to block **A** but there is a larger internal area which is cast with heavy shade and hence there is little in the way of ground flora. Up to 70% of this woodland will be lost to the construction zone.

3.1.7 Block **D** is perhaps the most recently planted woodland block. These stands are largely of groups of single species such as silver birch, hazel, alder and rowan. There are associated areas of hawthorn of varying heights, forming dense hedge and scrub areas, particularly towards the north and north-eastern end of the block. In particular, at the boundary with the grassland, there is a hedge of heavily berry-bearing hawthorn around an area of mixed hawthorn and hazel. As with the other blocks, species appear to have been planted in defined groups. No management of the block has been carried out as there are tree guards that are splitting and should have been removed several years ago. Up to 80% of this woodland block will be lost in the western part. This woodland block along with blocks **A, B and C** will be protected by means of the methods outlined in the tree protection strategy. While the trees in the planted blocks are not large mature trees, their survival and continued good growth will be more assured if they are properly protected.

3.2 Establishment of new areas of native woodland

3.2.1 In the meeting of April 2010 the issue of compensatory woodland planting was discussed and there was consensus that new woodland planting would need to balance up the need to maintain areas of grassland and other habitats of biodiversity value. Much of the grassland areas within the construction zone are species poor Mesotrophic Grassland as reported by the HEC report *Hedgerow and Grassland Survey, January 2006*. There are areas where such grassland could be significantly improved by positive management such as cutting and removal of arisings. This would increase species diversity and biodiversity value and this was advocated by the Derbyshire Wildlife Trust at the site meeting. These are towards the north and eastern parts of the application zone but not within the construction zone.

3.2.2 The breeding bird surveys of 2006/2009/2010 identified a range of resident and migratory species within the site. It was particularly noted that the immature woodland provided a rich source of foraging for a number of woodland birds including wren, song thrush, greenfinch, goldfinch, blue tit, great tit and hawfinch. The bird report of 2007 (HEC Ltd.) and to some extent, earlier reports, suggested that tree species such as hazel, hawthorn, rowan and whitebeam within the plantation woodlands were of significant value to the birds forging within these areas. This range of birds include the song thrush which is a red list species with

hawfinch and willow warbler being amber list species according to the quinquennial review of the Population Status of UK birds (see Anon 2007).

3.2.3 Bird surveys also noted the presence of small song birds such as black cap, whitethroat, dunnock, wren, blue tit, robin and willow warbler both breeding and feeding within the scrub areas north of the mature lakeside woodlands. These areas, in places dominated by bramble and thistle are becoming populated by hawthorn, willow, hazel and ash seedlings. Where this successional vegetation is developing there appears to be a good range of secluded areas for breeding and feeding.

3.2.4 The evidence from grassland, broad habitat and bird surveys indicate that there are areas outside of the mature woodland that provide a rich and varied habitat for birds.Given the range of species and habitats that will remain on-site it was considered that compensatory woodland required for the loss of the mature woodland should be developed from existing habitats rather than be created as new planting that removes existing grassland of higher biodiversity value. The plantation woodland will be improved by positive management aimed at the development of diverse mature woodland that consistently provides valuable breeding and feeding areas for birds and other species. Successional development of species poor mesotrophic grassland through scrub into woodland will be used as a strategy for woodland creation that ensures a succession of woodland while grasslands of higher biodiversity value will be maintained as grassland habitat. Gilbert and Anderson (1998) mention the high biodiversity value of scrub habitat which is allowed to develop albeit with some management input to ensure that dense hawthorn woodland does not become established. This in turn develops dynamically through to woodland with typical climax tree species being well represented. The management of high value grassland will be dealt with in the ecological management plan.

3.2.5 The creation of a new strip of woodland along the north-eastern boundary will provide a screening section of woodland that will also link into the hedgerow that runs along the north eastern boundary of the site. This woodland will be planted on an area that has relatively species poor grassland thus providing an enhancement in biodiversity for that part of the site. Species such as hazel, hawthorn, holly, rowan and oak will be planted along with suitable understory shrubs to provide a secure and attractive feeding and nesting resource for birds.

3.2.6 It is considered that this approach of positive, direct management of the plantation woodlands and the natural development of scrub from poor grassland that will form the basis of mature climax woodland are the main elements of the Woodland Management and Creation Strategy. The implementation of these strategies is to a large degree a part of the requirement of condition 13 (iv) “Management of existing woodland to enhance its amenity and ecological value” and will be given in more detail in the following section.

3.3 Management of existing woodland to enhance its amenity and ecological value

3.3.1 The major area of mature woodland that would remain following the development would be the broad band of woodland that fringes the northern bank of the large pond in the south east of the development site. This woodland, which combines riparian species such as alder and willow with oak, sycamore, ash and beech occurring more frequently as the land rises to the north. The woodland does show a good deal of recruitment especially of willow in the lower areas and ash in the upper parts. The woodland eventually moves into more scrubby young woodland to the north-eastern and eastern boundaries interspaced with tall ruderal, bramble and thorn scrub and in the north and western boundaries it is merging with the plantation woodland of block **D**. It is not envisaged that this woodland will be managed in any significant way. However, the succession of native alders on the bankside will be ensured through planting if necessary to ensure that willow species do not dominate. The regeneration of other parts of the woodland will be managed so as not to allow ash to dominate. This will be achieved through planting up to 60 native oaks as feathered whips to ensure that this species is part of the climax species mix.

3.3.2 The mature woodland that is to be lost will continue to contribute to the biodiversity value of the site by the use of felled timber as a dead wood resource and the translocation of woodland ground flora to retained areas of plantation woodland. It is recommended that some long sections of felled timber are sited upright to provide potential bat roost sites and woodpecker feeding and nesting sites. The woodland ground flora comprises mainly selected areas of typical woodland species such as wild garlic, male fern, creeping soft grass, enchanters nightshade, bluebell, soft rush and areas where rarer species have been identified such as twayblade and remote sedge. The translocation will use current best practice and specialist equipment to translocate sufficient soil depth to ensure plant survival. Translocations will be located in suitable areas of plantation woodlands where thinning and other management has taken place.

3.3.3 The wet woodland which is part of plot **A** will be retained and be managed by little or no intervention. The dense shade and boggy ground appear to promote a distinctive woodland flora and any interference may reduce its value. In 2016 the management of the woodland will be reviewed and any management recommendations carried out.

3.3.4 Some of the scattered trees between plots **B** and **C** and to the east of plot **C** will be lost and in the case of the latter will be partially affected. Management of retained trees will focus on enhancing the value of trees as song posts, wind breaks and landscape features with some coppicing to induce multi-stemmed growth.

3.3.5 The treescape of the Carpenter factory boundary has been neglected for a number of years and the existing trees that line the boundary with the main road are in a poor state with poor form, poor species type and are unsuitable for the location. As part of this strategy new boundary planting using heavy standards will be carried out over a 3 year period from

2012 until 2014. Tree species will be selected to provide good form and be able to withstand road traffic impact, pollution and other unfavourable conditions and may include species such as *Crataegus prunifolia* (cock-spur thorn), *Plantanus hispanica* (London plane) and *Tilia tormentosa* 'Brabant'.

3.3.6 The plantation woodland is a major part of the woodland resource that will remain following the development works. The emphasis of management will be to enhance the woodlands so that they form diverse mature woodlands comprising climax species typical of the location. In order to do this a programme of thinning will be initiated prior to the commencement of felling works in the mature woodland and continue through the period 2012-2017. The elements of this management will be:

- Removing up to 80% of the non indigenous species planting such as Norwegian maple, grey alder and Italian alder.
- Remove diseased willow species and kill stumps.
- Remove other diseased and fallen trees but retain some deadwood for habitat enhancement.
- Removal of outgrown tree shelters and stakes on trees to be retained.
- Providing donor areas of woodland floor where the translocated woodland flora can be placed.
- Remove up to 50 of conifers with emphasis on *Pinus nigra*
- Remove excessive amounts of ash regeneration and protect and promote the growth of oak seedlings.
- Plant as feathered whips , additional oak, hazel, hawthorn, holly, wild cherry, bird cherry and a small number of crab apple on woodland edge areas. New plantings up to 500/ha dependent upon existing opportunities. Rabbit spirals and other protection used as deemed necessary.
- Tree removal and planting will aim to break up planting lines and make the woodland more natural in character.
- Interpretive panels and leaflets will be provided to inform the public of the management objectives and operations.

3.4 Details of responsibility for the future management of the woodland areas

3.4.1 The management commitments and operations outlined above can only be fully achieved where stability of ownership and management responsibility are secure. The Owners of the site, Carpenter Ltd. have provided a clear commitment to the management of the

development site over recent years through time and financial input into positive land management. The secure ownership of the development site is an important factor in maintaining operations in the Carpenter plant and this runs in tandem with good land management.

3.4.2 As planning conditions are discharged prior to development, the site owners Carpenter Ltd. will ensure that conditions are not breached through lack of long-term commitment to management where this is a requirement. As a means of ensuring this happens a specialist organisation will be appointed by Carpenter Ltd. to carry out the management of the woodlands over the period 2012-2017. The woodland management company will be employed to carry out planned woodland maintenance and will:

- Develop a full and detailed annual management plan to be submitted to the LPA tree officer each September from 2012 -2017.
- Report any alterations to the planned management to the LPA.
- Provide the LPA with access to a log of all management operations carried out annually.

3.4.3 The planned management of woodlands is shown in the table below (Table 1) and provides a guide to actions over a 6 year period that will outline management proposals and rationale. Although shown in some detail it may be necessary to alter the extent, sequence and necessity as conditions prevail and other factors come to bare.

Table 1: Sequence of planned woodland management works

Year	Operations	Rationale
2012	a) Begin thinning operations in plots A and B to provide donor site for woodland ground flora translocations. Concentrate on removal of willow and non-native alders. b) Remove old tree shelters in retained plantation woodland c) Plant climax species in cleared areas, protect self set oak seedlings and remove excessive ash recruitment. d) Place substantial amounts of felled timber around the site as dead wood habitat. e) Provide interpretive material for public information. f) Site bat and bird boxes in a selection of mature trees	a) To provide donor sites for woodland ground flora and decrease no native presence. b) To promote good growth. c) Re-balance plantation woodlands towards native species. d) Enhance biodiversity of the development site. e) Maintain good community relations. f) Mitigation for roosting/nesting site loss
2013	a) Continue to thin Plots A, B, C and D b) Remove 50% of unsuitable/ unstable boundary trees that are and replace with new specimen trees approved by the LPA tree officer. c) Plant plots A, B, C and D with native climax tree species d) Plant new woodland belt in north east boundary area of the site. e) Management of the lower lakeside woodlands to enhance the woodland and individual trees	a) To create native woodland type b) To improve boundary treescape c) To ensure a biodiversity value of the developing woodland d) A commitment to new planting. e) To enhance the mature woodland.
2014	a) Positive management of scattered trees through arboricultural works b) Remove 50% of unsuitable/ unstable boundary trees that are and replace with new specimen trees approved by the LPA tree officer c) Continue to thin Plots A,.B, C and D. d) Plant further climax species in the above plots	a) To improve there biodiversity value. b) To improve boundary treescape c) To create native woodland type. d) To ensure native species woodland

2015	a) Selectively thin where necessary in plots A, B, C and D b) Monitor woodland development in plots and scrub areas with quadrats	a) To create native woodland b) To monitor progress of woodland creation.
2016	a) Remove any excessive ash regeneration and plant further oak if necessary.	a) Maintain oak as a co-dominant tree.
2017	a) Carry out major review of aims and objectives and report to LPA tree officer	a) To ensure that the woodland management and creation strategy delivers improvements and that Condition 13 is fully implemented.

Bibliography

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Appendix A - E-Mail Summary of April 2010 Meeting

Dear Liz, Kieron and Monica,

Many thanks for our meeting on-site at Glossop on Wednesday this week. Between us all we seemed to cover most of the issues relating to the development proposals and the future management of the site. Clearly with such a large scale undertaking and habitat loss there needs to be very careful consideration to the measures that will need to be implemented to safeguard and improve the biodiversity interest of the site. As there was quite a lot to discuss I have summarised the basic points from our meeting below. Please let me know if there is anything missing from this or if you have thought of any other issues or suggestions which you feel would be appropriate to the site.

Final site remediation and long-term management

- A careful balance needs to be achieved between tree planting as compensation for the loss of the mature woodland and maintaining the grassland areas of interest.
- The grassland to the east of the site would benefit from regular management (grazing if possible).
- Scarification (with re-seeding) could improve much of the other areas of grassland. Regular management needed.
- Hedge improvement works (gapping up and possibly laying) would be beneficial to wildlife. New hedges may be planted where suitable (e.g. boundary).
- It was felt important to maintain links between the areas of grassland across the site and for the area to the north-east of the site to be used as a community space.
- The upper pond would benefit if the fish could be removed and it was planted up.
- The lower pond would be suitable for floating rafts as wildlife refuges. Water quality could be improved using reed bed creation.
- Larger trees could be re-used as standing dead wood and other felled timber should be retained as dead wood habitat.
- A key aim is for long-term and sustainable management. This could be achieved through community involvement in the project and funding from Carpenter Ltd.
- Ground flora from the mature woodland to be translocated to other areas of the site.
- The young woodland strips (and other wooded areas) would benefit from thinning works and possibly the introduction of final succession trees such as oak and ash.
- The introduction of aesthetically pleasing tree species along the main road at the far south of the site would make the site perimeter more attractive.
- The wet woodland is an important habitat on site and woodland could be planted within this area of the site. The wet woodland may also be a good place for an artificial badger sett.
- Community engagement important, for example, using timber form woodland to create benches etc and providing interpretation would help to mediate negative feelings about the project.

Pre-construction surveys

Much of the survey work is up to date but it would beneficial for shorter surveys to be completed to check there are no changes:

- Woodland ground flora survey to give information for translocation works.
- Reptile survey update (4 instead of 6 visits) as habitat suitable for grass snakes.
- Breeding bird survey to be updated (4 visits only) and to focus on mitigation habitat areas.
- Bat surveys (licensing may be required for roost destruction activities)
- Updated GCN records to be requested from DWT
- Monitoring of badger activity for license application to close sett.

Discharge of planning conditions

- Tree protection strategy etc can only be completed once plans for development activities are finalised i.e. access issues onto the site.
- Would be good to get planning condition discharged as soon as possible, especially woodland management plan and ecological management plan as this would help with getting community on board and getting some positives out of development. But up to Carpenter to decide in light of village green application.

Clearly progress on-site will depend on the outcome of the village green application. For reference HPBC will be debating the application in May 2010. If they reject the application, development work is due to commence in the Autumn 2010. If the application goes to public enquiry this is likely to be in May 2011 with development work commencing in autumn 2011 (if successful).

If you could please send me a quick reply to confirm I have covered everything I would be grateful.

Thank you again for attending the meeting.

Kind regards,

Lindy Smith Senior Ecologist

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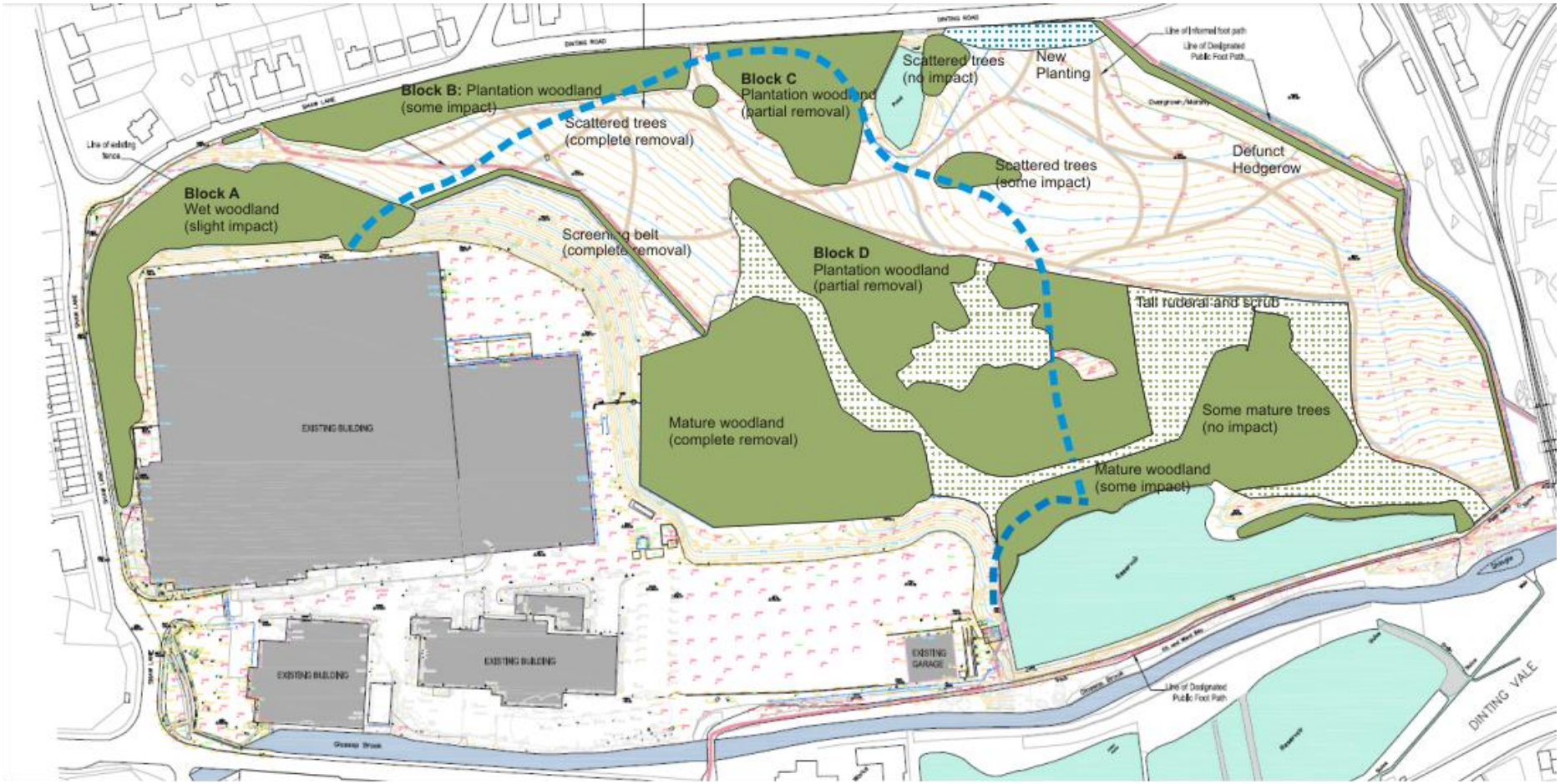
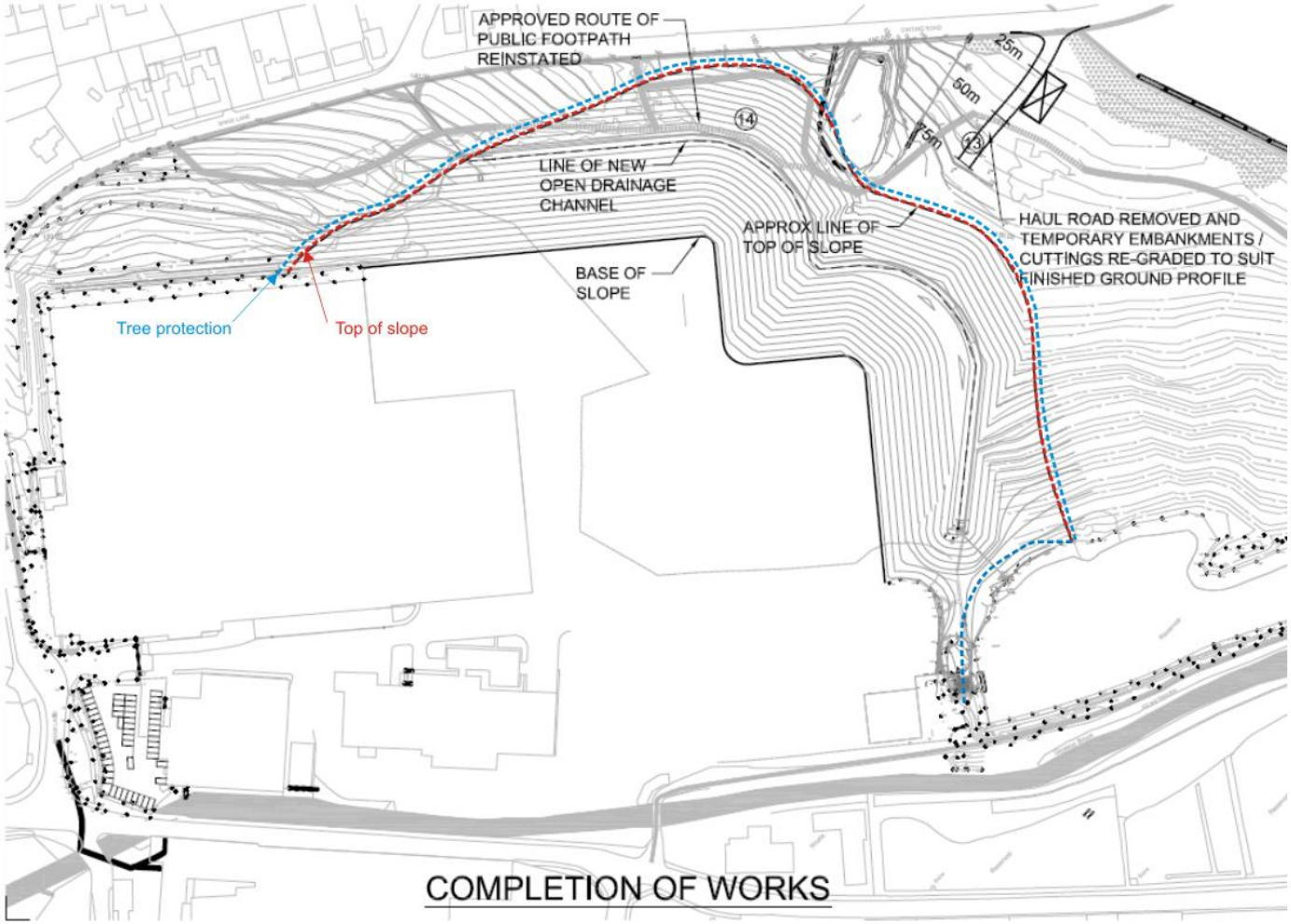
Appendix B - Site plans



Trees to be replaced along the A57 site boundary

Site plan showing existing woodlands with impact and tree protection zone (blue dotted line)

Source: Adapted from site plans by Cassidy Ashton



Showing upper extent of slope (red dotted line) and tree protection zone (blue dotted) line

Source: Adapted from four phase methodology by Clancy Consulting