HPK/2017/0613 Land At Burlow Road And Heathfield Nook Road, Burlow Road, Harpur Hill, Buxton, Derbyshire.

1. Arboricultural issues - Tree survey and Arboricultural Method Statement (AMS)

1.1 This is based on the proposed layout. Any changes to the layout will need these plans to be revised.

1.2 The main issues are the installation of services. The Water main encroaches on the root protection areas (RPA) of T10 and T11 as well as trees in G5. The high voltage cable installation impacts on more trees groups G1, G2 and G7 as well as trees 5-6 and 12 and 13.

1.3 It would be preferable to relocate the services outside the RPA but given the other constraints this may not be possible. Therefore it is necessary to use trenchless excavation to ensure that these trees were not damaged to the extent that they would require removal for safety grounds, particularly as some of these trees appear to be in third party ownership.

1.4 A number of other trees RPA's are encroached on where hard surfacing needs to be laid using a 'non' dig' methodology.

1.5 On the basis of the above it is essential, that as stated in the AMS that these works are carefully supervised by the Arboricultural Consultant.

2. Landscape and biodiversity

2.1 Detailed landscaping plans have been provided but some amendments are required

2.2 <u>Species Diversity</u>

2.2.1 The diversity of tree species is important to provide a resilient and sustainable tree population a mixture of varieties will ensure that should a pest or disease occur that a large percentage of the tree population will not be lost in a short time. This must be balanced with the need to reflect the landscape character of the surrounding area and the need for enhancement of biodiversity.

2.2.2 The detailed scheme has been assessed to see how if it complies with a 10-20-30 test of tree diversity. So there will be no more than 10% of one species 20 % of a genus and 30% . Table one below shows the results

				10%	20%	30%
Trees				**% species**	**% genus**	**% family**
Aceraceae	Acer campestre	14-16	native	**28.5**	**28.5**	28.5
Betulaceae	Betula utilis	14-16		**22.1**		
Betulaceae	Corylus avellana	14-16	native	**19.7**	**41.8**	**41.8**
Fagaceae	Quercus robur	14-16	native	**15.2**	15.2	15.2
Rosaceae	Prunus avium	14-16	native	**14.5**	14.2	14.5
Hedging						
Aquifoliaceae	Ilex aquifolia		Native	5.2	5.2	5.2
Betulaceae	Corylus avellana		native	10.1	10.1	10.1
Rosaceae	Crataegus monogyna		native	**69.3**	**69.3**	
Rosaceae	Rosa carnia		native	10.1	10.1	**79.5**
Adoxaceae	sambucus nigra		native	5.2	5.2	10.4

2.2.3 There is a very limited selection of species across both sites and some amendments to the scheme are required to enhance the diversity of tree planting as well as make it more in keeping with landscape character where appropriate.

2.2.4 The master plans presented a slightly more varied selection of trees but this has not been translated across to the detailed plans. Even this selection of species is too limited for a development of this size.

2.2.5 Tree species can be used to define areas of the site and give sense of place. Species selection should be reasonably distinctive in these areas

- Larger area of POS and amenity land, Trees of larger stature eg maple, lime, beech, oak, elm. some landscape typical species but opportunities for more variety and some non native species

- Attenuation ponds - species typical of wetter ground Including Alder, willow, oak and river birch

- Boundaries with existing residential areas to soften transition will need to be species suitable for residential gardens

- Boundary with open country and transition zones see section 2.3.4

2.3 <u>Species selection</u>

2.3.2 The species selection is narrow. The species selected to do not relate the landscape character of the area. There is a very heavy reliance on hazel and field maple. The species should be much more diverse. eg

Norway Maple
Red Horse chestnut
Alder spp
Snowy mespilus
Hornbeam
Sorbus spp
Crataegus spp
Malus spp
Lime spp
Elms (disease resistant)
Sycamore
Beech

2.3.3 I do not consider that the quantity of tree planting is adequate for the site I have addressed more detailed comments to particular areas of the site

2.3.4 Landscape Character

Where there landscaping addresses the open countryside care needs to be taken to ensure that the landscaping reflects the landscape character. These sites lie with the white peak Limestone plateau areas here is a table showing native species suitable for planting in this area

Table 1 – Limestone pastures species list – Derbyshire CC landscape Character

Limestone pastures	
Primary Tree Species 85%	
Acer pseudoplatanus	Sycamore
Secondary Tree Species 5-15%	
Fagus sylvatica	beech
Fraxinus excelsior	*Ash see **
Ulmus glabra	*Wych Elm see **
Shrubs 0-10%	
Major	
Corylus avellana	Hazel
Crataegus monogyna	Hawthorn
Ligustrum vulgare	Wild Privet
Minor	
Cornus sanguinea	Dogwood
Ilex aquifolium	Holly
Prunus spinosa	Black Thorn
Viburnum opulus	Guelder Rose

***Ash cannot be used at this time due to disease I would welcome the inclusion of some Dutch elm disease resistant elm species and an increase in the used of beech and sycamore or other similar maples as appropriate.**

Full information on this can be found in the Derbyshire County Council landscape character guidance:

http://www.derbyshire.gov.uk/images/Part%201.2%20White%20Peak_tcm44-245609.pdf

2.4 Strategic Landscape Masterplan - Site A ref 11194/P05 dated November 2017

2.4.1 The frontage needs stronger landscaping – including more tree planting that addresses the site in a more structured way. The trees need to be of a reasonable stature eg Oak, Lime, Maple, Beech

2.4.2 Banking to the north west – DWT will comment on the wildflower mix and management. I consider that there could be stronger tree planting of more diverse species

2.4.3 Other than the masterplan I haven't seen any details for the planting on the transitional space between development and open countryside. The species here must be typical of landscape character. Also how they are distributed across the area needs to be carefully considered in respect of filtering wider views and ensuring that the grouping of amenity trees groups is naturalistic and typical of the landscape.

2.4.4 The hedging on the site is very heavily hawthorn which is quite typical of the area but a more mixed hedgerow would help increase the biodiversity of the hedge. This should comprise shrub species in table 1. Also a stone wall would be more in keeping with the landscape character and this should be considered particularly where the boundary is tight up against the road.

2.4.5 There needs to be a strong landscape statement around the playing fields I consider that more formal planting of evenly placed standard trees would be appropriate here.

2.4.6 The tree planting shown in the residential area is limited and very monotonous and could be improved by increase species diversity. I would expect there to be some tree planting in larger front and rear gardens, gardens at focal points and to break up the dominance of hard landscaping/ car parking. It is important here to avoid the temptation to over use of trees in the Rosaceae family.

2.4.7 The tree planting around the attenuation basins should be different to other areas to using species typical of wetter areas eg *Betulus nigra , Alnus spp*

and *salix spp*. Oak would be a suitable addition in the vicinity of the attenuation pond close to Burlow Road

2.5 Strategic Landscape Masterplan - Site B (11194/P05) dated November 2017

2.5.1 This site has the same species selection at Site A therefore limiting diversity and not creating any sense of place.

2.5.2 Entrance to Burlow Road indicates the stone wall will be retained. The trees selected for planting here are inappropriate they should be trees with more prominence

2.5.3 Attenuation pond areas should have distinct tree species as discussed at 2.4.7

2.5.4 Particular attention to the landscape character is needed when detailing landscaping to the south and east.

2.5.5 The POS should have tree planting which reinforce the existing line of trees using landscape typical species (sycamore, beech or disease resistant elm). Other locations with the POS can be use a more diverse selection of species

2.5.6 see comments a 2.4.6 re planting within residential areas

3. Landscape and Habitat Enhancement and Management Plan

3.1 It is important that the LHEMP secures site management and maintenance in perpetually via the s106 agreement.

3.2 The LHEMP should be up dated to refer to any future amendments to the proposed landscaping

3.3 The LHEMP makes not mention in the maintenance schedules of litter picking or general infrastructure maintenance eg fences around ponds. Nor could I find a reference the management of the planned hedgerows planting.

3.4 DWT will comment more full on the ecological aspects in particular with regard to the wildflower meadows, ponds and protected species.

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