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**From:** Edmund Hobday <edmund@beandscape.co.uk>  
**Sent:** 25 May 2022 11:43  
**To:** Michael Graham  
**Cc:** Holly Tisson  
**Subject:** RE: Planning application 21/00857/FUL Acornfield Road, KBP  
**Attachments:** 21-59-03F@A0 Planting Plan.pdf; 21-59-02D@A0 Tree Protection Plan.pdf

Hi Michael,

Please find attached as requested the amended Planting Plan and Tree Protection Plan revised in line with the planners requirements.

We have replaced the native shrub planting with a hedge and wildflower grass as requested to Acornfield Road however we have not extended the hedge behind the existing utility building as the width is too narrow between the retaining wall and boundary fence for a viable area of wildflower grass. We have therefore included an area of native shrub planting here.

The planting area adjacent to W1 has been simplified and *Pinus sylvestris*, *Carpinus betulus* and *Acer campestre* tree species introduced.

We have also reviewed the tree retention to W1 and included for the retention of an additional two trees to the boundary however space will be required for the installation of the 'sandbag retaining wall' which precludes the retention of further trees.

If you should have any queries, please do not hesitate to contact us,

Kind Regards,

For and on behalf of,

**Bea Landscape Design Limited**

**Edmund Hobday** B.A.(Hons), B.L.A, C.M.L.I, Dip.Arb(L4), AaPS

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**From:** Michael Graham <mgraham@hale-adm.com>

**Sent:** 20 May 2022 13:24

**To:** Sheridan, Jo (Planning & Regeneration) <Jo.Sheridan@knowsley.gov.uk>

**Cc:** Edmund Hobday <edmund@bealandscape.co.uk>; Tom Aldridge <tom.aldridge@ptaconsult.co.uk>  
**Subject:** RE: Planning application 21/00857/FUL Acornfield Road, KBP

Hi Jo

Thanks for the further comments from the landscape officer. My comments on these in red below.

Kind regards

Michael

Michael J Graham

Associate Director

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**From:** Sheridan, Jo (Planning & Regeneration) <[Jo.Sheridan@knowsley.gov.uk](mailto:Jo.Sheridan@knowsley.gov.uk)>

**Sent:** 20 May 2022 12:20

**To:** Michael Graham <[mgraham@hale-adm.com](mailto:mgraham@hale-adm.com)>

**Subject:** Planning application 21/00857/FUL Acornfield Road, KBP

Hi Michael,

We are nearly there on this one, just a few comments from the landscaping officer - I've numbered the comments to make it easier:

1. Revised levels plan Rev P04. – **Fine, just note comments on 4b in terms of mounding.**
2. Relocation of car park spaces - **Fine**
3. Retaining wall fronting the site faced in blue engineering brick with a new black paladin security fence varying between 1 and 2m high will then be placed on top. – **To provide a proper frontage to the streetscape on Acornfield Road, there needs to be constancy, in that the retaining wall should run along this frontage. Further, more firmed up details need to be provided of the wall: eg: is these reinforced concrete units, are they to be built in situ or prefabricated, is there a product reference for the Blue engineering brick and also the coping detail, also please confirm if this is to be a plain stretcher bond, will it be anchor tied into the concrete etc (as this will be an important element on the streetscape) – this could be done via condition. There is only the need for a retaining wall as shown on PTA's levels drawing to the site frontage facing Image Business Park's existing visitors' parking area which is to the north side of the main Image Business Park entrance and security lodge. This will be terminated as shown behind the existing cabin which is located at the northern end of this parking area. We are happy for the approval of the details of this section of retaining wall to be conditioned.**
- 4a, BEA Landscape's updated landscape plan ref 21-59-03E in which the hedge to the internal site access road matches the hedge in 21/00857/FUL (species is *escallonia rubra macrantha*). – **Apologies this was not the hedge referred to it was the one with the mix (as this will be seen from the main streetscape along Acornfield Road), so please replace the mix:**

Cornus sanguinea 15%  
Corylus avellana 15%  
Crataegus monogyna 15%  
Euonymus europaeus 5%  
Ilex aquifolium 3L 10%  
Ligustrum vulgare (\*) 10%  
Rosa canina (\*) 5%  
Sambucus nigra 5%  
Viburnum lanata 10%  
Viburnum opulus 10%

With a simpler hedge mix, which should be set as a double staggered row 5/Lm, within this space (either at the front or back of the bed, with the wildflower grass seed mix over the rest of the area):

Acer campestre (\*) 20%  
Corylus avellana (\*) 20%  
Crataegus monogyna (\*) 40%  
Ilex aquifolium (\*) 3L 10%  
Viburnum opulus (\*) 10%

Noted, the landscape plan is being amended as requested and the hedge will be located at the front of the sloping bed and so be immediately behind the existing fencing to this section of the frontage.

If the developer wants to add some colour, I'm fine with accepting small amounts of Rosa canina or Cornus sp, as they will provide this, but they are not very compact in their form, which is the reason for omitting the other species as they will cause maintenance issues going forward.

With regard to the planting area by W1: This needs to have tree species introduced into the whip mix for this area to help strengthen the reduced woodland, so species like Quercus robur, Carpinus Betula and Pinus Sylvestris (these can be planted at 2m centres with understorey species i.e. Corylus, ilex etc in between). Noted, the landscape plan will be amended accordingly whilst having in mind the proximity of new tree planting relative to the building itself.

4b, Flex MSE / Geogrow 'Rootlock' retaining structures – Happy with either (v similar from our perspective) they will need to be hydroseeded to ensure longevity, would be good to know the proposed facing angle of the structure. Please note that with the retaining wall structures going in the steepness of the slope to the northern planted area can be a lot less than 1 in 3 (as shown), so that could help save more trees in this area. I suggest for their Arboricultural consultant to monitor the tree removal works to advise on what goes and what stays. If needed, our Arboricultural Officer (Tom Skipworth) can provide advice / guidance when they are on site. Noted and is being looked at by our landscape architect as well.

5, Conditioning bird nesting boxes. – Fine.

6, In the meantime, attached is a generic drawing of the new substation to Site 2 as was requested some time ago. This is the same as for Site 3 which was issued to you back in March. Added to the application.

7, Finally, can you confirm the likely timing of the planning decision under delegated powers, please, for both applications. Both applications are to be delegated. I am working on the reports and both will be subject to S106 so timescales are difficult to judge, however, please be assured we will determine as soon as we are able. Can you let me know when the draft decision notice and planning conditions will be available for us to consider, please, and also as there has not been any feedback on drainage matters, presumably the approval of the final drainage details will be conditioned in the usual way?

Kind regards.

Jo Sheridan  
Principal Planner  
Planning

Telephone: 0151 443 2376  
Mobile: 07833481030

Knowsley Council, Nutgrove Building - Second Floor, Westmorland Road, Huyton, Knowsley, L36 9GD



PLANNING NOTES (SOFT LANDSCAPE):

1. SOILS: Subgrade / subsoil to be prepared in accordance with BS 8601:2013 and BS 4428:1989 and scarified or ripped to 300mm depth (excluding root protection areas of retained trees refer to Tree Protection Plan) prior to spreading topsoil to alleviate compaction and promote drainage. Imported and as saved topsoil to be in accordance with BS 3882:2015 'Multipurpose Grade' with minimum soil organic matter contents 1% greater than the minima value (or as approved). Imported topsoil (and 'as saved' if requested) is to be laboratory tested to BS 3882:2015 and ameliorated as required to meet the required characteristics as detailed within Table 1 of BS 3882:2015 specification. Wildflower areas to be unimproved topsoil or low fertility topsoil to BS 3882:2015. Grass areas to be a minimum depth of 150mm. Shrub & hedge beds 450mm depth. Any weed / grass growth to be sprayed out with appropriate herbicide at least 10 days prior to cultivation. All areas to be cultivated to a minimum depth of 150mm removing weeds and rubbish / stores greater than 20mm in size. Incorporate proprietary non peat compost to BS PAS 100 to 50mm depth evenly worked into soil during cultivation.

N.B Proposed services (electric, water, gas etc) in landscape areas should be installed as a minimum below the required topsoil depths and clearly identified in accordance with service / utility requirements.

2. BUILDING FOUNDATION DESIGN: All tree and shrub planting proposals are to be referred to by the structural engineer during building foundation design.

3. PLANT STOCK: Unless agreed otherwise all trees and shrubs are to be of UK provenance where plants have been propagated and/or grown on for a minimum of 5 years in the UK for trees and 2 years for shrubs. All plants are to comply with the requirements of all current British Standards including BS3338 'Specifications for Nursery Stock' and BS8849 'Trees from nursery to independence in the landscape and be supplied in accordance with the Plant Schedule. Should planting be required outside of the planting season (November - March) any bare root or rootballed stock selected 'Anemity Bark Mutch' (or similar approved by the landscape architect) to the approval of the landscape architect prior to ordering.

4. EXISTING TREES: Where trees are to be retained they should be subject to a full arboricultural inspection to assess condition and safety. Retained trees shall be protected from damage by erection of 2.3m wellhead fencing on a scaffold framework in accordance BS 5837:2012 Figure 2. These barriers shall be maintained in position and in good condition until work is complete. Fencing to be located in accordance with Table D.1 at a radius of 12 times the stem diameter (single stem trees) or based on the combined stem diameter for multi-stem trees (trees with more than one stem arising below 1.5m above ground level) refer to Clause 4.6. Further precautions are to be taken as detailed within BS 5837:2012 6.2.4.

5. TREE SURGERY / REMOVAL: Tree surgery and tree removal to be carried out by an Arboricultural Association approved Tree surgeon in accordance with BS 3882:2010. Arisings to be removed to a licensed tip.

6. TREE PLANTING: All trees to be in accordance with BS 3936, BS8545 and The National Plant Specification - 'Rootballed Trees' recommendations. Trees to be planted in accordance with BS 4428:1989, double staked (10-12cm - 14-16cm girth trees) and tied with webbing loops in prepared pits. Tree pits in open field / un-compacted ground conditions or shrub beds to be 1000mm x 1000mm (at least 75mm greater than that of the root system) with pit depth to be based on the planting depth of the tree (distance from root flare to underside of rootball) in accordance with BS 8545:2012. Topsoils and subsoils to be excavated and stored separately for reuse. Tree pit to be backfilled with stored subsoil and topsoil at depths to replicate the existing soil horizons. Topsoil to be mixed enriched with a peat free tree planting compost, incorporating Rootgrow professional (RGPto as supplied by Empathy) and Siemsen N-Mag Pre-planter Fertiliser in accordance with manufacturers recommendations. Root balls to be encircled by Root Rain Metro or similar irrigation pipe. Well water after planting. The base of trees to be planted in grass areas are to be covered with 75mm amenity grade bark mulch such as Melcourt Amenity Bark Mutch (or similar approved by the landscape architect) to 1.0 metre diameter and kept weed free.

Where trees are to be planted in heavily compacted ground, tree pits are to be excavated to achieve the an uncompacted growing volume with pits being approximately 4m x 4m x900mm backfilled with excavated subsoil and topsoil (as described above) mixed with 100L of peat free tree planting compost.

Generally all trees are to be planted as shown ensuring a minimum of 5 metres from buildings and 3 metres from drainage or services. In locations close to footpaths and roadways linear root barriers Greenbutle Urban, ReRoot, or similar are to be installed in accordance with manufacturers instructions. Where proposed tree locations conflict with services, trees are to be relocated in accordance with the appropriate utilities guidance notes subject to client / local authority approval. Proprietary root barrier Greenbutle Urban, ReRoot or similar to be installed in accordance with manufacturers instructions where relocation is not considered appropriate.

7. SHRUB PLANTING: plants to be in accordance with BS 3936 and handled in accordance with NP5 'Handling & Establishment' guidelines and planted in accordance with BS 4428:1989. Nursery stock supplier to be approved by the Landscape Architect. All shrubs to have a minimum of three breaks, except Hedera with a minimum of two. Shrubs to be pit planted incorporating Rootgrow professional in accordance with manufacturers recommendations and Agrolon 'Yellow' tablets evenly distributed around the plant at 200mm depth with 2 tablets for plants up to 3lrs, 3 tablets for plants up to 5 lrs and 4 lrs for plants up to 10lrs. Well water plants immediately after planting and prior to spreading of mulch. Planting areas to be covered with 75mm depth amenity grade bark mulch such as Melcourt 'Ornamental Bark Mutch' (or similar approved by the landscape architect) and kept weed free.

8. NATIVE TREE & SHRUB PLANTING: plants to be in accordance with BS 3936 and planted in accordance with BS 4428:1989. Shrub transplants to be planted at 1 metre centres (or as scheduled) in random groupings of 3-5 and 7-10 shrub species depending on numbers of plants. With tree species at 2m centres randomly planted within the area. Bare root transplants to be root dipped with 'Broadleaf Root Dip' prior to planting. Planted areas to be kept weed free and protected from rabbits, with rabbit fence and / or individual mesh tree guards securely fixed to timber stakes).

9. WILDFLOWER SEEDING: grass areas to be seeded in accordance with BS 4428:1989 during March, April or September. Unimproved or low fertility topsoil to be imported, cultivated and leveled to remove all minor hollows or ridges as required with any debris or stores greater than 20mm diameter removed to provide a fine weed free tilth. Do not apply fertiliser. Weeds to be eradicated by herbicide or repeated cultivation prior to sowing. Lightly rake areas after sowing and keep well watered. Areas to be kept free from unwanted plants and mown every 6 - 8 weeks during establishment year removing arisings. In subsequent years cut in early spring and autumn after setting seed (in accordance with manufacturers recommendations) removing arisings. Seed mixes to be supplied by Emorgate Seeds and include the following sown in accordance with suppliers recommendations.

EM2 'Standard General Purpose Meadow Mixture' to general landscape areas (sown at 4g/m<sup>2</sup>).

EH1 'Hedgerow mix' to woodland edges (sown at 4g/m<sup>2</sup>).

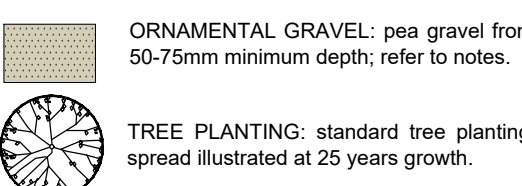
10. MAINTENANCE: To be carried out at approximately monthly intervals during the defects liability / rectification period to include the following:

- Eradicate weeds by hand or appropriate chemical means.
- Cut out dead or / and damaged stock or branches, prune as required.
- Ensure all shrubs and trees are firmed in, securely staked and tied with guards where applicable.
- Collect litter, sweep and tidy site.
- Apply suitable non-residual herbicides, pesticides and water as required.
- Carry out mowing to grass areas when attained 100mm, cut to 35mm (50mm for shaded areas) approximately 2 week intervals during the growing season.
- Carry out mowing to wildflower areas as per Emorgate Seeds Ltd aftercare First year & Established sward guidance.
- All hedges to plot frontages be maintained to a max height of 2.0m.
- At final visit apply granular fertiliser to all planted areas and top up bark mulch depth to 75mm.

13. WATERING: all plant material (including turf) to be watered in dry periods until established during April through to September with a fine rose until the water penetrates the topsoil to at least 5cm depth and achieves field capacity. Frequency of watering regime to be determined by weather conditions, soil conditions and underlying geology, all plant beds to be watered to ensure soil is consistently moist to promote successful establishment. As a guide only it is suggested that during hot, dry periods, plants are to be watered every six to ten days. For individual trees it is suggested that 18 watering visits per year are carried out commencing late March (prior to budburst) and utilising a minimum of 50 litres of water per tree. Soil probe to be used to determine soil saturation to full depth of root ball.

LEGEND: SOFT LANDSCAPING

- GROUND COVER: deciduous and evergreen shrub ground cover planting with specimen shrubs
- EVERGREEN HEDGE: evergreen shrub hedge as detailed
- SPECIMEN SHRUBS: specimen shrub planting as detailed
- WILDFLOWER MEADOW AREAS: to be seeded with Emorgate EM2 wildflower seed mix to open areas and EH1 to the woodland edge
- DECIDUOUS HEDGE: native tree and shrub species mix hedge as detailed
- NATIVE SHRUB PLANTING: native species planting mix at 500mm centres
- NATIVE TREE & SHRUB PLANTING: native species planting mix at 1m centres, trees at 1m centres to Northern half of area seeded with Emorgate EW1
- ORNAMENTAL GRAVEL: pea gravel from local source; 50-75mm minimum depth, refer to notes.



EXISTING TREES: to be retained in accordance with BS 5837 'Trees in relation to Construction' 2012.

TREES TO BE REMOVED

| Plant Schedule |                                        |                                                                 |       |                           |
|----------------|----------------------------------------|-----------------------------------------------------------------|-------|---------------------------|
| Trees          |                                        |                                                                 |       |                           |
| No.            | Species Name                           | Specification                                                   | Girth | Height                    |
| 1              | Acer campestre                         | 1+1 Transplant 8                                                |       | 80-100cm                  |
| 2              | Amelanchier x grandiflora 'Robin Hill' | 3x Extra Heavy Standard Clear Stem 175-200 5 bks RB-PG 114-16cm |       | 425-480cm Counted         |
| 10             | Carpinus betulus                       | 3x Extra Heavy Standard Clear Stem 175-200 5 bks RB-PG 114-16cm |       | 400-450cm Counted         |
| 7              | Carpinus betulus                       | 1+1 Transplant 8                                                |       | 80-100cm 11m <sup>2</sup> |
| 11             | Carpinus betulus 'Fastigiata'          | 3x Extra Heavy Standard Clear Stem 175-200 5 bks RB-PG 114-16cm |       | 400-450cm No.             |
| 5              | Carpinus betulus 'Fastigiata'          | 3x Extra Heavy Standard Clear Stem 175-200 5 bks RB-PG 114-16cm |       | 400-450cm Counted         |
| 5              | Pinus sylvestris                       | 2+2 Transplant 8                                                |       | 60-80cm 11m <sup>2</sup>  |

| Hedging |                                |                    |            |                                         |
|---------|--------------------------------|--------------------|------------|-----------------------------------------|
| No.     | Species Name                   | Specification      | Girth      | Height                                  |
| 70      | Acer campestre (*)             | 1+1: 3 bks: BR     | 60-80cm    | 0.45Cr Double Staggered at 0.35m offset |
| 70      | Corylus avellana (*)           | 1+1: 2/3 bks: BR   | 50-60cm    | 0.45Cr Double Staggered at 0.35m offset |
| 139     | Crataegus monogyna (*)         | 1+1 Transplant 8   | 60-80cm    | 0.45Cr Double Staggered at 0.35m offset |
| 498     | Escallonia rubra macrantha (*) | Bushy 4 bks C-PG 9 | 40-60cm 3L | 0.45Cr Double Staggered at 0.35m offset |
| 35      | Ilex aquifolium (*)            | Bushy 2 bks        | 50-60cm 3L | 0.45Cr Double Staggered at 0.35m offset |
| 35      | Viburnum opulus (*)            | 1+1: BR: 3 bks     | 60-80cm    | 0.45Cr Double Staggered at 0.35m offset |

| Shrubs |                                   |                                 |            |                   |
|--------|-----------------------------------|---------------------------------|------------|-------------------|
| No.    | Species Name                      | Specification                   | Diameter   | Height            |
| 65     | Brachyglottis 'Sunshine'          | Branches 4 bks C-PG 8           | 30-40cm 3L | 3/3m <sup>2</sup> |
| 15     | Cornus sanguinea                  | 1+1 Transplant Branches 2 bks 8 | 40-60cm    | 1/m <sup>2</sup>  |
| 74     | Cornus sanguinea                  | 1+1 Transplant Branches 2 bks 8 | 40-60cm    | 1Cr               |
| 20     | Corylus avellana                  | 1+2 Transplant Branches 3 bks   | 60-80cm    | 1/m <sup>2</sup>  |
| 74     | Corylus avellana                  | 1+2 Transplant Branches 3 bks   | 60-80cm    | 1Cr               |
| 15     | Crataegus monogyna                | 1+1 Transplant 8                | 60-80cm    | 1/m <sup>2</sup>  |
| 74     | Crataegus monogyna                | 1+1 Transplant 8                | 60-80cm    | 1Cr               |
| 5      | Euonymus europaeus                | 1+2 Transplant Branches 3 bks 8 | 60-80cm    | 1/m <sup>2</sup>  |
| 28     | Euonymus europaeus                | 1+2 Transplant Branches 3 bks 8 | 60-80cm    | 1Cr               |
| 38     | Hebe 'Mrs Winder'                 | Bushy 5 bks C-PG 9              | 30-40cm 3L | 3/m <sup>2</sup>  |
| 38     | Hypericum 'Hidcote'               | Bushy 5 bks C-PG 8              | 40-60cm 3L | 1/m <sup>2</sup>  |
| 15     | Ilex aquifolium                   | Leader With laterals            | 40-60cm 3L | 1/m <sup>2</sup>  |
| 15     | Ilex aquifolium                   | Leader With laterals            | 40-60cm 3L | 1Cr               |
| 11     | Ligustrum vulgare (*)             | 0/2 Cutting Branches 3 bks 8    | 60-80cm    | 1Cr               |
| 50     | Ligustrum vulgare (*)             | 0/2 Cutting Branches 3 bks 8    | 60-80cm    | 1Cr               |
| 147    | Lonicera pileata                  | Bushy 6 bks C-PG 2              | 30-40cm 3L | 3/m <sup>2</sup>  |
| 109    | Prunus laurocerasus 'Otto Luyken' | Bushy 5 bks C-PG 8              | 40-60cm 3L | 3/m <sup>2</sup>  |
| 26     | Rosa carolina (*)                 | 1+1 Transplant Branches 3 bks 8 | 40-60cm    | 1Cr               |
| 26     | Sambucus nigra                    | 1+1 Transplant Branches 3 bks 8 | 60-80cm    | 1Cr               |
| 50     | Viburnum lanata                   | 1+2 Transplant Branches 3 bks 8 | 60-80cm    | 1Cr               |
| 50     | Viburnum opulus                   | 1+2 Transplant Branches 3 bks 8 | 60-80cm    | 1Cr               |

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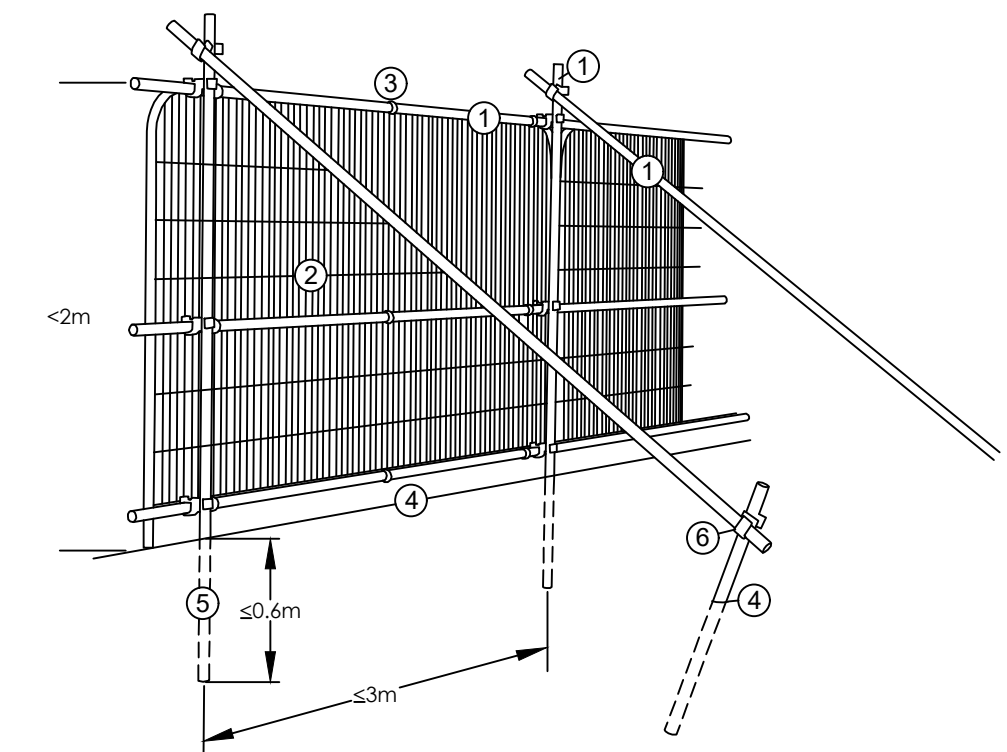
'Trees in relation to design demolition and construction' BS5837:2012

1.1 PRIOR TO COMMENCEMENT: all trees that are being retained onsite shall be protected by barriers and / or ground protection before any materials or machinery are brought onto the site, and before any demolition, development or stripping of soil commences. The 'Root Protection Area' (RPA) associated with existing trees designated for retention shall be protected from damage by erection of scaffold framework barriers in accordance BS 5837:2012 Figure 2 including where specified appropriate ground protection.

1.2 EXTENT OF ROOT PROTECTION AREA (RPA): as shown on the Tree Protection Plan (TPP) the RPA is generally to be in accordance with Annex D, Table D.1 'Root Protection Area.' - as an area equivalent to a circle radius 12 times the stem diameter (single stem trees) or based on the combined stem diameter for multistem trees (trees with more than one stem arising below 1.5m above ground level) refer to Clause 4.6.

1.3 **TREE PROTECTION BARRIER:** a vertical and horizontal scaffold framework, well braced to resist impacts as illustrated below (refer to Figure 2 of BS5837:2012). The vertical tubes should be spaced at a maximum interval of 3 metres and driven securely into the ground. Care should be taken to avoid underground services and contact with structural roots. In the presence of underground services, retained hard surfacing or where special circumstances dictate an alternative specification as illustrated in Figure 3 of BS5837:2012 may be acceptable subject to agreement with the project arboriculturalist and the local planning authority.

All weather site notices should be attached to the barrier with words such as "CONSTRUCTION EXCLUSION ZONE - NO ACCESS". Once installed barriers and ground protection shall be not be removed or altered without prior approval of the project arboriculturalist and where necessary approval from the local planning authority.



1. Standard scaffold poles
2. Heavy gauge 2m tall galvanised tube and weld mesh infill panels
3. Panels secured to uprights and cross members with wire ties
4. Ground Level
5. Uprights driven into ground until secure (minimum depth 0.6m)
6. Standard scaffold clamps

## 2.0 ADDITIONAL PRECAUTIONS:

2.1 Planning of site operations should take sufficient account of wide or tall loads, or plants with booms, jibs or counterweights (including drilling & piling rigs) in order that they can operate without coming into contact with retained tree. The transit or traverse of plant in proximity to trees shall be conducted under supervision of a banksman to ensure adequate clearance from trees is maintained at all times. Access facilitation pruning as agreed with the project arboriculturalist and/or local authority should be undertaken where necessary to maintain clearance. **NB Works to trees protected by a Tree Preservation Order or within a**

2.2 Any materials whose accidental spillage would cause damage to a tree should be stored and handled well away from the outer edge of its RPA e.g. concrete mixings, diesel oil and vehicle washings. Allowances shall be made for sloping ground to avoid damaging materials running towards retained trees.

2.3 Fires on sites should be avoided. Where they are unavoidable, they should not be lit in a position where heat could affect foliage or branches. The potential size of a fire and wind direction should be taken into account when determining its location, and should be attended at all times until safe to leave.

2.4 Trees are not to be used as anchorages for equipment, or for other purposes. Notice boards, telephone cables, or other services should not be attached to any part of the tree.

2.5 The dumping of spoil or rubbish, placing of temporary accommodation and storage of materials within the root protection area is prohibited.

2.6 The change of ground level, excavating, stripping or disturbing topsoil within the RPA is prohibited.

### 3.0 GROUND PROTECTION DURING DEMOLITION & CONSTRUCTION

3.1 Where construction working space or temporary construction access is specified within the RPA, this should be facilitated by a set-back in the alignment of the tree protection barrier. In such areas, suitable existing hard surfacing that is not proposed for re-use as part of the finished design should be retained to act as temporary ground protection during construction, rather than being removed during demolition. The suitability of such surfacing for this purpose should be evaluated by the project arboriculturalist and an engineer as appropriate.

3.2 Where the set-back of the tree protection barrier exposes unmade ground to construction damage, new temporary ground protection should be installed as part of the implementation of physical tree protection measures prior to work starting on site.

3.3 New temporary ground protection should be capable of supporting any traffic entering or using the site without being distorted or causing compaction of underlying soil, for example:

a) for pedestrian movements only, a single thickness of scaffold boards placed either on top of a driven scaffold frame, so as to form a suspended walkway, or on top of a compression-resistant layer (e.g. 100 mm depth of woodchip), laid onto a geotextile membrane;

b) for pedestrian-operated plant up to a gross weight of 2 t, proprietary, inter-linked ground protection boards placed on top of a compression-resistant layer (e.g. 150 mm depth of woodchip), laid onto a geotextile membrane;

c) for wheeled or tracked construction traffic exceeding 2 t gross weight, an alternative system (e.g. proprietary systems or pre-cast reinforced concrete slabs) to an engineering specification designed in conjunction with arboricultural advice, to accommodate the likely loading to which it will be subjected. If necessary sand should be laid on the ground as a compressible layer.

 TREE PROTECTION FENCE: to be constructed in accordance with


 1. The first step is to identify the problem.

CONSTRUCTION EXCLUSION ZONE: to be protected from construction in accordance with BS5837.

or other existing site features. Phase 2 fencing to be erected prior to removal of Phase 01 fencing.



TREES TO BE RETAINED: with root protection zone illustrated.

**TREE REMOVAL** - trees to be removed to enable construction

Statement 2159/EH/AMSC01 for more detailed information.



EXISTING WOODLAND MANAGEMENT: nursery species (including Cherry, Field Maple, Birch, Alder) and poorer climax species (Ash, Pine, Poplar & Oak) to be thinned out to benefit the better condition climax species.

VEGETATED RETAINING WALL SYSTEM:  
to engineers details, hydraseeded with  
Wildflower mix EH1

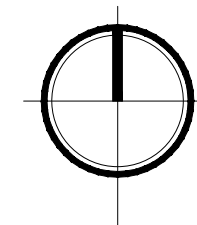
# Key Industries

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Refer any query to office of origination.

| rev | date:      | amendments:                           | alt: |
|-----|------------|---------------------------------------|------|
| A   | 27/10/2021 | Northern boundary amended.            | E.H  |
| B   | 08/12/2021 | Levels amended. Retaining wall added. | E.H  |
| C   | 17/05/2022 | Retaining wall / layout amended.      | E.H  |
| D   | 24/05/2022 | Retained trees amended.               | E.H  |



**bea**  
landscape design ltd

**client:** KNOWSLEY (IMAGE  
BUSINESS PARK) LTD

**project:**  
SITE 2, IMAGE BUSINESS PARK  
KNOWSLEY

**title:**  
TREE PROTECTION PLAN

**status:**  
PLANNING

|                    |                 |                     |
|--------------------|-----------------|---------------------|
| date:<br>MAY'21    | drawn:<br>E.C.H | number:<br>21-59-02 |
| scale@A0:<br>1:250 | checked:<br>(-) | revision:<br>D      |

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