



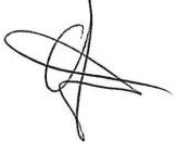
Biodiversity Net Gain Matrix

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Unit B, Glasiers Yard
15 Chambers Road
Barnsley
S74 9SA
Reference: Q12317

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1. Introduction

ProHort Limited have been commissioned by Andrew O’Callaghan to conduct a Biodiversity Net Gain Assessment for Unit B, Glasiers Yard, 15 Chambers Road, Barnsley, S74 9SA (grid reference: SE 36957 01392).

The plan of the Site involves the extension of the existing commercial building along the southwestern aspect. The Local Planning Authority has requested that a Biodiversity Net Gain (BNG) Assessment is completed to support the planning application. The new developed area will result in the removal of an area of derelict land.

The Barnsley Council requires developments in the town to achieve a net gain in biodiversity, with a minimum of a 10% gain compared to the pre-development value of the site. A quantitative measure of the base value of a site for biodiversity, and the value of a site post-development, is arrived at by using a recognised Biodiversity metric. Biodiversity metrics measure the value of a site in terms of Biodiversity Units. Biodiversity Units are a proxy measure of biodiversity, arrived at by assessing the type, area and condition of semi-natural habitats on site. A limitation of the use of metrics is that they only measure habitat areas, and do not take into account species-specific measures which may nevertheless make meaningful contributions to gains in local biodiversity.

2. Site and Surroundings

The area surveyed was Unit B, Glasiers Yard, 15 Chambers Road, Barnsley, S74 9SA (grid reference: SE 36957 01392, Figure 1), hereafter referred to as the 'Site'. The Site is a commercial building with a large area of concrete which is used as a carpark. The Site also contains an area of derelict land, 4 individual trees, and a margin of artificial unvegetated and unsealed surface. The Site is just off Chambers Road and Mason Way, in the town of Hoyland, South Yorkshire. The Site is a 0.66-hectare parcel of land and is surrounded by urban areas, predominately commercial in use. There are some green space areas within Hoyland that could act as stepping stones for the movement of species.

There are 2 priority deciduous woodlands within 500 metres of the Site. However, a major road (A6195) acts as a major dispersal barrier. There are no designated sites within 500m of the Site.



Figure 1 – Site location (redline).

Taken from Bing Maps (©2024 Microsoft Corporation, ©2024 Maxar, ©CNES(2024) Distribution Airbus DS)

3. Methodology

The pre-development (baseline) and post development (proposed) value of the habitats have been calculated using the DEFRA/Natural England's Biodiversity Metric 4.0 calculator (Small Sites Metric). The methodology for determining habitat distinctiveness and condition values, follows the guidelines set out the User Guide and Technical Supplement for Biodiversity Metric 4.0 and The Small Sites Metric (Statutory Biodiversity Metric) user guide.

Site Boundary

The following data sources have been used to define the boundary for the BNG calculation and determine the relevant attributes for BNG (e.g. size, condition and habitat type) for the pre and post-development habitats.

The boundary used for the BNG assessment is the red line application boundary for the project.

Baseline Habitats:

In order to generate the site baseline habitat data (e.g. habitat type, condition), a phase 1 habitat survey was undertaken, where the site was systematically walked over and the dominant habitat type in each area recorded. Dominant plant species were noted, as were any that are legally protected (Schedule 8 of the Wildlife and Countryside Act 1981), invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981. Finally, all trees were assessed for condition, species and size.

The information collected during the site visit was used to baseline any applicable habitats and satellite mapping was used to calculate habitat areas. The areas and conditions of any onsite habitats were inputted into DEFRA/Natural England's Biodiversity Metric 4.0 calculator. The metric includes 3 broad categories of habitats and biodiversity units for which scores are calculated differently:

- Area habitats, such as grasslands, woodlands and ponds
- Linear hedgerows and lines of trees
- Linear rivers and ditches

4. Habitat Baseline

4 habitats were identified within the Site:

- Developed land; sealed surface
- Vacant or derelict land
- Artificial unvegetated, unsealed surface
- Individual trees

No linear features were included within the red line boundary of the Site.

The location of all baseline habitats can be seen in Appendix 1.

4.1. Habitat descriptions

Each of these habitats are described in Table 1 below. All photographs of the Site can be found in Appendix 3.

Table 1 – onsite habitats

Habitat Type	Habitat Description	Flora Species
Developed land, sealed surface	The majority of the Site was made up of a commercial building and concreted carparking and access areas (Photograph 1)	-
Vacant or derelict land	A large area of derelict land is located in the northwestern section of the Site (Photographs 2 & 3).	Occasional: Scentless mayweed (<i>Tripleurospermum inodorum</i>), creeping bent (<i>Agrostis stolonifera</i>), rosebay willowherb (<i>Chamaenerion angustifolium</i>), ribwort plantain (<i>Plantago lanceolata</i>) and common sowthistle (<i>Sonchus oleraceus</i>) Rare: Broad leaved dock (<i>Rumex obtusifolius</i>) and creeping thistle (<i>Cirsium arvense</i>)
Artificial unvegetated, unsealed surface	A narrow margin of hardcore was located along the northern boundary of the Site (Photograph 4).	-
Individual trees	4 individual small trees were located within the Site boundary. 3 goat willows coppices were located along the northwestern boundary of the Site (Photographs 5-7) and one field maple (Photograph 8) was located along the northern boundary of the Site. Additionally, one hazel shrub is located next to the goat willow trees, however this had a diameter less than 7.5cm so was not included within the metric.	Trees & Shrubs: Goat willow (<i>Salix caprea</i>), field maple (<i>Acer campestre</i>) and hazel (<i>Corylus avellana</i>).

4.2. Baseline Metric

The value of the baseline habitats were calculated using Biodiversity Small Sites Metric and are outlined in Table 2 below.

Table 2 – habitat baseline calculation

Habitat	Notes	Area (m ²)	Habitat Units	Area retained	Area enhanced	Units lost
Developed land, sealed surface	On-site buildings and concreted area	5901	0	5901	0	0
Vacant or derelict land	Small area in the northwestern section of the Site.	610	0.24	251	0	0.144
Artificial unvegetated, unsealed surface	Small hard-cored margin	121	0	121	0	0
Individual trees	4 small trees, all to remain	163	0.1498	163	0	0
Totals		6795	0.3898	6436	0	0.144

The habitat baseline of 0.3898 units must be enhanced by 10% resulting in at least a 0.43 unit baseline post intervention. If this is not achieved onsite, habitat units will be met using offsite credits.

5. Proposed Habitats

All habitats proposed within the Site are outlined below:

- Developed land; sealed surface
- Vacant or derelict land
- Artificial unvegetated, unsealed surface
- Individual trees

The location of these proposed habitats can be seen in Appendix 2.

5.1. Developed land; sealed surface

An extension is proposed on the existing building which will be located on the derelict land.

5.2. Vacant or derelict land

The area of derelict land will be reduced to make way for the extension and allow for access to Mason Way.

5.3. Artificial unvegetated, unsealed surface

The hardcore margin will remain.

5.4. Individual trees

The individual trees will remain.

5.5. Proposed habitats metric

Habitat	Notes	Area (m ²)	Habitat Units Delivered
<i>On-site habitat creation</i>			
Developed land; sealed surface	Extension of the existing building and concreted access to Mason Way	359	0
Totals		359	+0

If all habitats and conditions are met post intervention, then a **-36.47%** depreciation in biodiversity will be achieved. This does not meet the required 10% uplift, and a further **0.183** units will need to be achieved offsite.

6. Achieving a Net Gain in Local Biodiversity

Under the mandatory BNG regime, habitats determined by the LPA to constitute “significant on-site enhancements” must be retained, appropriately managed, monitored and reported on for a minimum of 30-years following completion of development, and this requirement must be legally secured by condition or S106 agreement

The application needs to be supported by clear, site-specific proposals e.g. details of long-term management and monitoring, a draft long-term management plan (Habitat Management and Monitoring Plan [HMMP]) - set out “initial” habitat creation and enhancement works and to demonstrate that appropriate management will be delivered so the predicted target conditions are achieved. In addition to long-term management of these habitats, appropriate long-term management of retained habitats is required to ensure they do not decline / deteriorate in condition.

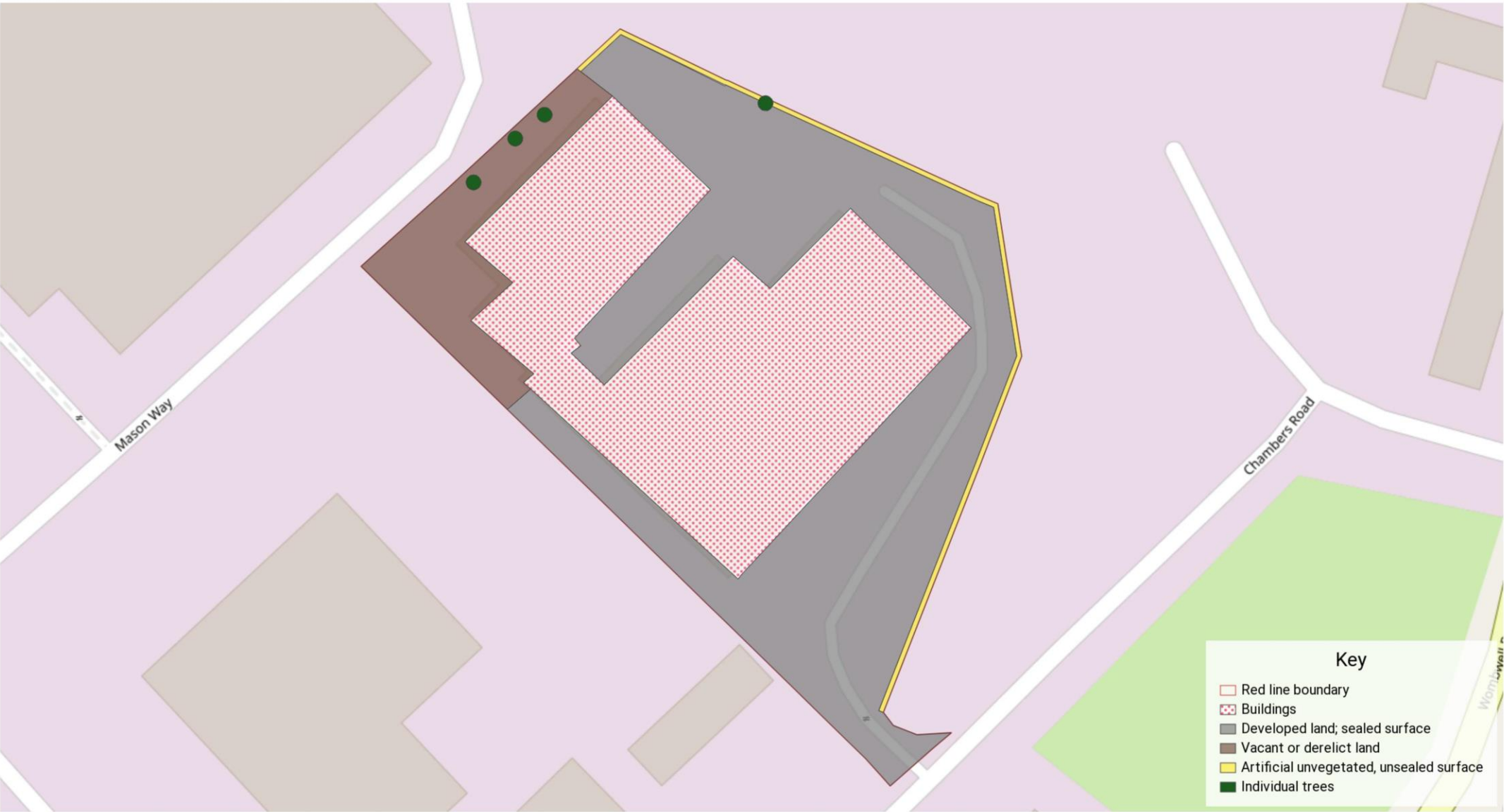
7. Conclusion

The development will result in a measurable loss to local biodiversity and it will not reach the required 10% uplift. The removal of an area of derelict land will result in a loss of 0.144 credits and no part of the remain site area has been designated to uplift biodiversity. Overall, 0.183 units will need to be bought offsite to achieve the 10% biodiversity uplift. These areas will also need to meet the trading rules which currently are not being met by onsite interventions.

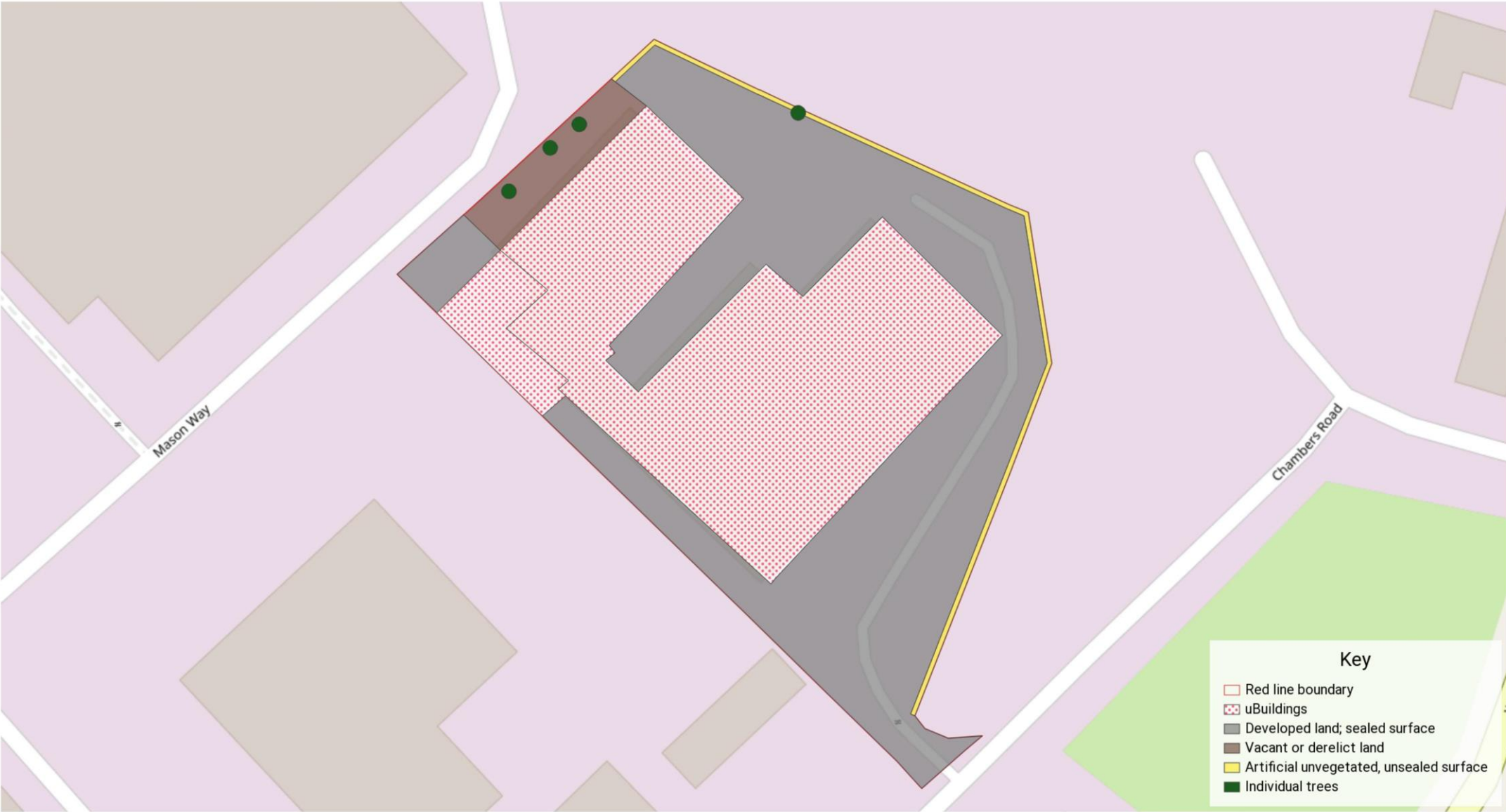
8. Other recommended enhancements

Enhancements for specific species are recommended due to the proximity of the Site to a number of priority woodland parcels. It is likely bats and birds will use the site for commuting and foraging. It is recommended that 2 bat boxes and 2 bird boxes are installed on the Site. This species intervention would enhance local biodiversity.

Appendix 1 Baseline Habitats Map



Appendix 2 Habitat Proposals



Appendix 3 Photographs



Photograph 1 – Concreted car parking area in the southeastern section of the Site.



Photograph 2 – The derelict land located in the western area of the Site

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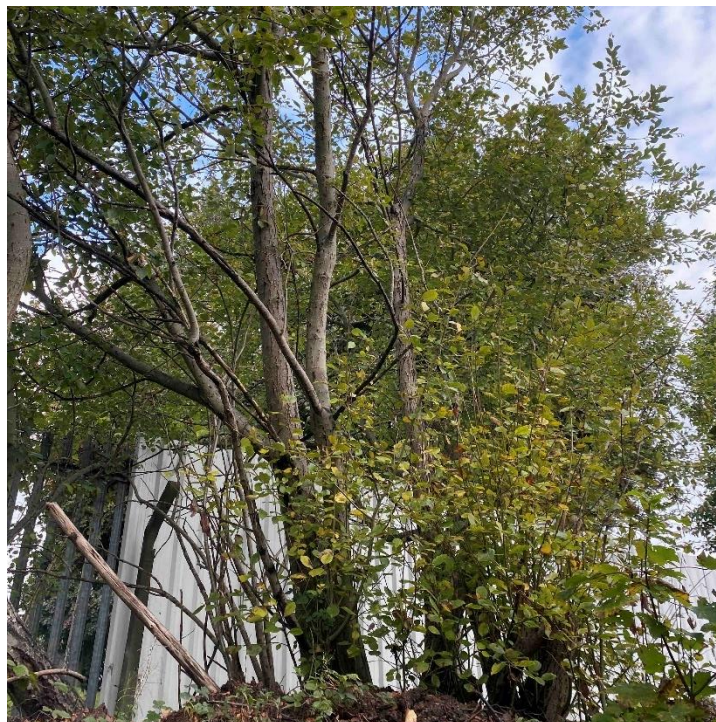
Photograph 3 – The derelict land to the northwest of the onsite building.



Photograph 4 – The hard-core boundary in the northern section of the Site.



Photograph 5 – One of the goat willow coppices.



Photograph 6 – One of the goat willow coppices.



Photograph 6 – One of the goat willow coppices.



Photograph 7 – The field maple individual tree