3.5 Site 4. Oakfield Road, Long Stratton

Photos

Key Facts:

- Size of the Site: 0.77ha
- Habitats present: **Modified Grassland, Other Neutral Grassland, Mixed Scrub, Individual trees, Developed land; sealed surface, Other Woodland; Broadleaved.**
- Tree Preservation Orders, Conservation Areas, County Wildlife Sites (CWS), Roadside Nature Reserves, Priority Habitats, Statutory Designated Sites present on site? **None.**
- Recommended habitat measures in LNRS: **None.**

Baseline Habitat Description and BNG Calculation

3.5.1 The Site comprised a diverse mosaic of habitats that are already being managed well for biodiversity. There was a more formal play area and mown modified grassland in the north-west of the Site. The remainder of the Site comprised other neutral (and slightly wet) grassland on a slope, mixed scrub on the northern boundary and other woodland; broadleaved on the southern boundary.

3.5.2 The mown grassland within and around the play area was mown short and has approximately four vascular plant species per square metre which has led it to be categorised as **poor condition**.

3.5.3 In the east of the Site was an area of other neutral grassland in **moderate condition** which had been left long and had scattered scrub within it. The grassland was slightly wet as evidenced by abundant soft rush *Juncus effusus* and frequent creeping bent *Agrostis stolonifera*. The grassland had a good diversity and abundance of wildflowers including creeping cinquefoil, meadow vetchling *Lathyrus pratensis,* tufted vetch *Vicia cracca,* wild carrot *Daucus carota* and occasional patches of pendulous sedge *Carex pendula*. A garden variety of sneezewort *Achillea ptamica* was also occasional within the grassland.

3.5.4 The mixed scrub in the north was in **good condition** due to consisting of more than 80% native species, at least three woody native species and no single species comprising more than 75% of the scrub. There is also a good age range of individual scrub plants, a well-developed edge of long grass and clearings and wet glades within the scrub. Species include hawthorn, blackthorn, bramble, willow *Salix sp.*, wild privet *Ligustrum vulgare*, dog rose, hazel and guelder rose.

3.5.5 The other woodland; broadleaved in the south of the Site was planted densely on undulating topography and consisted of young, planted trees (some still in tree guards). Due to the young age of the woodland, it has been assessed to be in **poor condition** as it has yet to establish a canopy, shrub and field layer, the trees are all of similar age, a ground flora has yet to establish and deadwood is largely absent. Invasive snowberry was present within the woodland. Over time, this woodland would reach moderate condition provided thinning is implemented.

3.5.6 Four individual trees in moderate condition were present including two hornbeam, one hawthorn and one goat willow *Salix caprea*.

3.5.7 In total, the habitats on Site represent **3.81 Habitat Units** as shown in Table 5 below.

Table 5. Baseline BNG Calculation of Habitats

Habitat	Area (hectares)	Ecological Distinctiveness	Condition	Habitat Units (HU)
Modified grassland	0.142	Low	Poor	0.29
Other neutral grassland	0.1861	Medium	Moderate	1.49
Mixed scrub	0.0257	Medium	Good	0.31
Mixed scrub	0.1274	Medium	Poor	0.51
Developed land; sealed surface	0.0175	Very low	N/A	0.00
Other woodland; broadleaved	0.2717	Medium	Poor	1.09
Individual trees	0.0163	Medium	Moderate	0.13
Total	**0.77 (excluding trees)**			**3.81***

*Please note that Habitat Units in each row have been rounded for reasons of brevity and the total Habitat Unit figure is taken from the Metric Calculation tool spreadsheet.

3.5.8 A map of the baseline habitats is provided in Figure 4, Appendix 1.

Proposed Biodiversity Enhancements

- Removal of tree guards within the woodland, opening up of dense tree stands through general thinning and creation of glades to promote woodland flora development. Creation of log piles within woodland to improve deadwood abundance;
- Establish a new pond in a pre-existing wet area of the Site; and
- Maintain current management of the other neutral grassland and scrub on the Site.

Specification of Management Actions

3.5.9 Woodland:

- Tree guards will be removed on all trees that have successfully established. Tree guards will be removed and disposed of offsite.
- Dense areas of trees will be thinned to improve the penetration of light to the woodland floor. Dead or struggling trees should be prioritised for removal. Woodland glades (minimum two) measuring a diameter of at least 20m (preferably 30-40m to improve light conditions) should be created within the woodland.
- Thinned trees can be used to create log piles within the woodland. Log piles should consist of stacked timber and be evenly distributed around the woodland (at least 5 woodpiles are suggested). Each log pile should be a minimum of 2m length x 2m width x 1m height and located in both cool shaded areas in the woodland and at the woodland edge to create a variety of microclimates. A variety of large, medium and small diameter logs in the pile should be used as well as bark, dead leaves and twigs to create a 'holey' but closely interwoven structure that can be left in perpetuity to rot down.

3.5.10 New Pond:

- A pond will be created in the location shown in Figure 4, Appendix 2. This is an area that is topographically a low point on the Site and contains a reed bed indicating frequently wet soil conditions. Botanical diversity is limited in this area given its dominance by reed.
- The type of pond that can be created will depend on the underlying soil conditions. If clay is present, the pond may be able to hold water year-round. If no clay is present then the pond will likely be a seasonal pond which is also extremely valuable for wildlife.
- An excavator will be required and should access the proposed pond area using suitable ground protection to avoid damaging the other neutral grassland.

- The depth of excavation for the pond will depend on the soil profile. If a layer of clay is encountered, excavation can cease and the clay can form the bottom of the pond.
- Create plenty of shallow water (less than 10cm deep) around the edges of the pond as this is important for many pond species and mammal and amphibian access to the pond. Pond slopes should be less than 1:5. A variety of pond depths and perimeter 'shelves' should be created to maximise opportunities for amphibian use and aquatic plants.
- Remove excavated topsoil from the Site and do not spread around the edge of the pond as topsoil is rich in nutrients and likely to encourage the development of rank vegetation.
- Further guidance on pond creation with suitable example images should be referred to Sayer, C et al., 2023[11].
- Following pond creation, leave the pond to be naturally colonised by aquatic and semi-aquatic plants, there is no need to apply seed or plug plants. Annual monitoring of water levels will be required to ensure that the pond is at least seasonally wet. If the pond doesn't hold water (particularly in spring), re-excavation will be required as necessary. Annual monitoring should also check for the establishment of any invasive species which may colonise the pond, for example *Crassula helmsii*, and remedial action taken as necessary to remove the invasive species.

3.5.11 Existing Other Neutral Grassland and Scrub Habitats:

- Existing management of the other neutral grassland and scrub habitats must be maintained with the aim of retaining the gradual gradation of dense scrub in the north to scattered scrub and then grassland. This gradation may need to be maintained by thinning any dense scrub that forms in the scattered scrub areas.
- The existing other neutral grassland should be hay cut twice per year to maintain its floral diversity. The arisings could be used as green hay which may be spread on other Sites where wildflower seeding has been suggested. Green hay would need to be spread within a couple of hours of cutting being completed. If green hay is not being harvested, arisings should be removed offsite or to a designated compost heap to remove nutrients from the underlying soil.

[11] Sayer, C.D., Biggs, J.,Greaves, H.M., & Williams, P. (2023) Guide to the restoration, creation and management of ponds. University College London, London, UK. Available at: https://norfolkponds.org/wp-content/uploads/2023/10/guide_to_restoration_creation_management_ponds.pdf

Five Year Biodiversity Enhancement Plan

3.5.12 Following the management specification and guidance above, the Table below provides the timing of management actions over five years.

Habitat	Management Action and Timing				
	2025/2026	2027	2028	2029	2030
Woodland	Remove tree guards.	Thin woodland and create at least five deadwood/log piles within woodland.	Create two woodland glades.	N/A	N/A
Pond	Excavate pond.	Monitor pond for water levels and any invasive species.	Monitor pond for water levels and any invasive species.	Monitor pond for water levels and any invasive species.	Monitor pond for water levels and any invasive species.
Other neutral grassland and mixed scrub	First grassland cut and collect in late February/ early March. Second cut in late August/early September. Remove arisings after 1-7 days. Mow over winter. Thin scattered scrub to maintain scrub density and gradation.	Same as 2025/2026.	Same as 2025/2026.	Same as 2025/2026.	Same as 2025/2026.

Annual Monitoring Checklist

3.5.13 The checklist below is devised as a quick annual check to be carried out and completed by the responsible Community Asset Manager to ensure that the recommended enhancements measures above have taken place. The items in the checklist below have been replicated in a separate Annual Monitoring excel spreadsheet for ease of completion.

Annual Monitoring Checklist for Oakfield Road, Long Stratton

Habitat	Management Action	Tick relevant column if completed				
		2025/2026	2027	2028	2029	2030
Woodland	Tree guards removed?					
	Thinning undertaken in 2027?					
	Two glades created in 2028?					
	At least five deadwood piles created in woodland?					
Pond	Pond excavated?					

Habitat	Management Action	Tick relevant column if completed				
		2025/2026	2027	2028	2029	2030
	Pond annually monitored for water levels and invasive species?					
Other neutral grassland and mixed scrub	First cut undertaken?					
	Second cut undertaken?					
	Winter cutting undertaken?					
	Scrub thinned as necessary?					

Post-enhancement BNG Calculation

3.5.17 The proposed enhancements to the grassland and hedgerow will generate a BNG uplift of Habitat Units of **19.97%** over **10 years**.

3.5.18 The uplift in Habitat Units derives from the creation of a non-Priority Habitat pond in moderate condition and enhancement of the other broadleaved; woodland from poor to moderate condition.

3.5.19 It should be noted that the BNG Metric 'trading rules' have not been met for this Site given the loss of other neutral grassland to create a pond. Within the Metric, other neutral grassland is categorised as a medium distinctiveness habitat which should only be traded for the same type of broad habitat (i.e. grassland) or a high or very high distinctiveness habitat. As the proposed pond is only medium distinctiveness, this has generated the trading rules error within the Metric calculation tool. It is considered that the wider biodiversity benefits of a pond and onsite water to invertebrates, mammals and birds outweighs the loss of a small area of grassland within the Metric.