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Update Preliminary Ecological Appraisal Including a Protected Species Assessment of Land Adjacent to Ashlea, Mill Road, Brockley Bury St Edmunds. IP22 3AT.

On behalf of:

Mr & Mrs C & F Driver

October 2019

Updated October 2021

Skilled Ecology Consultancy Ltd.
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Figures, Photographs & Tables

0 SUMMARY

0.1 Skilled Ecology Consultancy Ltd. was commissioned by Mr C & F Driver to update a Preliminary Ecological Appraisal including a Protected Species Assessment of Land Adjacent to Ashlea, Mill Road, Brockley Bury St Edmunds. IP22 3AT. The report is required for a planning application for one new dwelling.

0.2 The original survey was conducted on 3rd October 2019. The update survey was undertaken on 14th September 2021. Both surveys were undertaken by experienced ecologist Roger Spring BSc MCIEEM (licensed to survey for great crested newts *Triturus cristatus* and licenced to survey for bats - level 2). The survey consisted of an inspection for preferred habitat types and signs and evidence of protected and priority species, such as for bats, great crested newts, reptiles, [redacted] *Meles meles* and nesting birds following Natural England (English Nature) Guidelines. A local record search was undertaken.

0.3 The site is small (approximately 0.21ha) and includes a recently fallow arable field with a hedgerow on the western boundary and roadside ditch on the southern boundary. Immature woodland planting is also present in the east which is approximately 0.05ha. North and east of the site are further arable fields. A new housing development is also present east of the site. The hedgerow, ditch and woodland planting is proposed for retention in full. Access is already possible directly from the road, no new access will be required, though improvements for the driveway are likely.

0.4 The site is positioned in a rural location dominated by arable farming with low density housing. The proposed construction zone is very low in ecological value with common habitats very low/negligible in potential to support protected, priority or rare species.

0.5 Further ecological surveys or mitigation were considered unnecessary. However, to minimise any residual risk of impact, precautionary measures for bats, amphibians and hedgehogs are provided later in the report and should be followed.

0.6 With the recommendations followed as described, the development could proceed with a minimal risk of harm or impact to local ecological value or to protected, priority or rare species and notable habitats.

0.7 Biodiversity enhancements are also included in the report in accordance with national planning policy.

1 INTRODUCTION

1.1 Background

1.1.1 Skilled Ecology Consultancy Ltd. was commissioned by Mr C & F Driver to update a Preliminary Ecological Appraisal including a Protected Species Assessment of Land Adjacent to Ashlea, Mill Road, Brockley Bury St Edmunds. IP22 3AT. The report is required for a planning application for one new dwelling.

1.1.2 Wildlife such as nesting birds, bats, reptiles and great crested newts Triturus cristatus are protected by law. Protected and priority species and habitats, are also a material consideration for individual planning decisions under the National Planning Policy Framework, 2021 (NPPF) (MHCLG, 2019).

1.1.3 This study and report complies with the Chartered Institute for Ecology and Environmental Management (CIEEM) 2017 Guidelines for Preliminary Ecological Appraisal.

1.1.4 CIEEM guidelines indicate that ecological surveying typically remains valid for 18 months.

2 METHODOLOGY

2.1 Desk Study

2.1.1 A 2km radius herpetofauna record search was conducted on behalf of Skilled Ecology Consultancy Ltd. by Suffolk Biodiversity Information Service (SBIS) in 2019. No new record search was considered necessary.

2.1.2 A search of the Multi-agency Geographical Information for the Countryside (MAGIC) was also conducted, to check for statutory nature conservation sites.

2.1.3 These results were then combined with the findings of the site survey, in order to assess the risk of ecology issues, relevant to planning, occurring on the site.

2.2 Study Limitations

2.2.1 Botanical assessment was undertaken at a suitable time of year, though some early flowering species and annuals may no longer be present or identifiable to species level.

2.3 Initial Site Survey

Habitats and Surroundings

2.3.1 The site was originally visited on the 3rd October 2019 with an update survey on the 14th September 2021 to survey for ecology issues. This included the following:

- Noting the suitability of habitats present on the site, regarding protected, priority and rare species; including plants, amphibians, reptiles, mammals, nesting birds, invertebrates and protected, priority or red-listed Birds of Conservation Concern (BoCC);
- Assessing the habitats surrounding the site and in the local area;
- Direct survey for evidence of protected species as far as possible, e.g. for bats, reptiles, great crested newts, [redacted] *Meles meles,* and nesting birds;
- Checking for invasive species such as Japanese knotweed *Fallopia japonica* and giant hogweed *Heracleum mantegazzianum*.

Bat Inspection

2.3.2 The assessment for bats was conducted by experienced ecologists, licensed by Natural England to disturb and take bats for science and education. Tees were inspected externally for bat activity, suitability and potential for roosting following English Nature Bat Mitigation Guidelines (English Nature, 2004) and Bat Conservation Trust Best Practice Guidelines, therefore considerations were:

- the availability of access to roosts for bats;
- the presence and suitability of cracks, crevices, gaps, fissures, ivy growth and other places as roosts;
- signs of bat activity or presence, such as; the bats themselves, droppings, grease marks, scratch marks, urine spatter and prey remains.

2.3.3 Equipment available for use during the survey included a ladder, high powered torch, digital camera and binoculars.

2.3.4 The availability of access to roosts was assessed based upon the presence of holes large enough to allow entry to bats and lack of cobwebs and dirt.

2.3.5 The outside of trees were inspected for gaps, cavities, access points and crevices, and any signs of bats (droppings, staining, urine spatter), in accordance with Natural England (English Nature) guidelines (English Nature, 2004).

Reptiles & Amphibians

2.3.6 The site was inspected for potentially suitable terrestrial habitats for foraging, sheltering or dispersing amphibians and foraging, sheltering, breeding and basking habitat for reptiles. High quality terrestrial refuges searched for, included:

- Log piles & rockeries,
- Thick leaf litter,
- Compost & manure heaps,
- Mammal burrows,
- Deep ground cracks;
- Refuse suitable for shelter;
- Tussock grassland;
- Hedgerows and any other potential habitats.

2.3.7 Local ponds were inspected for suitability for great crested newts by undertaking a Habitat Suitability Index assessment as developed by Oldham *et al.* 2000.

3 RESULTS AND RISK

3.1 Site Description & Location

3.1.1 The site is small (approximately 0.21ha) and includes a recently fallow arable field with a hedgerow on the western boundary and roadside ditch on the southern boundary. Immature woodland planting is also present in the east which is approximately 0.05ha. North and east of the site are further arable fields. A new housing development is also present east of the site. The hedgerow, ditch and woodland planting is proposed for retention in full. Access is already possible directly from the road, no new access will be required, though improvements for the driveway are likely.

3.1.2 The site is positioned in a rural location dominated by arable farming with low density housing.

3.1.3 Ponds present within 250m of the site included;

- Pond 1: a medium sized farmyard pond (fish present) approximately 85m south east.
- Pond 2: a medium sized moat pond approximately 125m south east.

3.2 Nature Conservation Sites

3.2.1 No statutorily designated nature conservation sites such as Sites of Special Scientific Interest (SSSI) were present within 2km of the site (MAGIC, 2021).

3.3 Data Search

3.3.1 The following information is a summary of modern, local biological records collated from SBIS (2019).

Table 1 - Summary of local records.

Species	Approximate Location	Year
Herpetofauna		
Great crested newt (EU & UK protected)	Pond 125m south east 2018 (Skilled Ecology Consultancy Ltd.)	2018
Grass snake (UK protected)	Brockley	1999
Slow worm (UK protected)	Whepstead	2006
Common lizard (UK protected)	Whepstead	2006

3.3.2 In addition to the above, Skilled Ecology Consultancy Ltd. have undertaken bat surveys on barns 100m south east of the site which identified common pipistrelle, barbastelle and brown long-eared bats.

3.4 Protected, Priority & Rare Species

Vegetation & Habitats

3.4.1 Vegetated habitats on the site included a recently fallow field, hedgerow on the western boundary and wet ditch on the southern boundary:

3.4.2 Grasses and herbaceous plants recorded in the fallow field included; cocksfoot *Dactylis glomerata*, false oat grass *Arrhenatherum elatius*, creeping thistle *Cirsium arvense*, bramble *Rubus fruticosus*, rosebay willowherb *Chamerion angustifolium*, stinging nettle *Urtica dioica* hogweed *Heracleum sphondylium* common orache *Atriplex patula*, black nightshade *Solanum nigrum* spear thistle *Cirsium vulgare*, ox eye daisy *Leucanthemum vulgare*, groundsel *Senecio vulgaris*, dandelion *Taraxacum* agg., cleavers *Galium aparine*, wheat *Triticum* sp., prickly sow thistle *Sonchus asper*, great plantain *Plantago major*, ribwort plantain *Plantago lanceolate*, nipplewort *Lapsana communis*, black knapweed *Centaurea nigra*, hawkweed *Hieracium* sp. and perennial rye grass *Lolium perenne*.

3.4.3 The hedgerow included; bramble *Rubus fruticosus*, goat willow *Salix caprea*, box *Buxus* sp., butterfly bush *Buddleia davidii*, privet *Ligustrum ovalifolium*, hawthorn *Crataegus monogyna*, rose *Rosa* sp., leylandii *Cupressus × leylandii*, snowberry *Symphoricarpos* sp. and apple *Malus domesticus*.

3.4.4 The immature planted woodland in the east included; cherry *Prunus avium,* beech *Fagus sylvatica*, oak *Quercus robur* and silver birch *Betula pendula*.

3.4.5 The roadside ditch was dominated by rosebay willowherb and nettle.

3.4.6 No Schedule 9 invasive plant species or protected or priority plant species were observed. No priority habitat types were present or proposed for impact. The boundary hedgerow did not meet criteria for a UK priority habitat.

Bats

3.4.7 The site and boundary trees were unsuitable for roosting bats with no features potentially suitable for roosting. The boundary hedgerow is likely to be used by foraging/commuting bats.

Other Protected & UK Priority Mammals

3.4.8 The site is small in area and low in suitability for foraging by [redacted] and hedgehog *Erinaceus europaeus* if present locally.

3.4.9 The site lacked waterbodies potentially suitable for water voles *Arvicola amphibius* and otters *Lutra lutra*.

3.4.10 No signs or evidence of any other protected, priority or rare mammals were noted, nor was there any potentially suitable habitat for such present.

Birds

3.4.11 Birds observed or heard on or close to the site during the surveys (2019 & 2021) included; carrion crow *Corvus corone*, wood pigeon *Columba palumbus*, robin *Erithacus rubecula,* great tit *Parus major*, blackbird *Turdus merula*, green woodpecker *Picus viridis*, robin *Erithacus rubecula* and goldfinch *Carduelis carduelis*, jackdaw *Corvus monedula*, blue tit Cyanistes caeruleus. In the distance skylark *Alauda arvensis* were heard in 2019 not 2021.

3.4.12 Skylark is a UK priority species and red-listed Bird of Conservation Concern (BoCC) species. All other species identified were green listed BoCC.

3.4.13 The proposed construction zone which excludes the boundary hedgerow is very low/negligible in suitability for nesting birds. Habitats were too busy and prone to disturbance to be suitable for nesting skylark or other ground nesting species.

3.4.14 The site is very low in suitability for foraging birds of any species, though may be visited on occasions by a variety of common garden and common farmland birds.

3.4.15 The BoCC ratings are summarised as follows:

- Red-listed - highest conservation concern;
- Amber-listed - moderate conservation concern;
- Green-listed - least conservation concern.

Great Crested Newts & Other Amphibians

3.4.16 Ponds are present within close proximity to the site, though both ponds are separated from the site by a farmyard complex including buildings and hardstanding, as well as Mill Road.

3.4.17 The proposed construction zone is poor in suitability or potential as terrestrial habitat for amphibians of any species. The roadside ditch is a thin narrow depression dry at the time of the survey. It may on occasions support water briefly after heavy rainfall. The ditch is unsuitable for breeding amphibians of any species.

3.4.18 Amphibians were not observed during the survey visits.

Reptiles

3.4.19 Habitats lacked suitable structure for safe breeding, basking or foraging by reptiles of any species. The site was recently an arable field unsuitable for reptiles. The surrounding habitat is also unsuitable for reptiles of any species.

3.4.20 No reptiles were observed during the survey visit.

Invertebrates

3.4.21 The site is small in area and very low in suitability or potential to support protected, priority or rare invertebrates.

3.4.22 No such species were observed during the survey visits.

Other Protected, Priority or rare Species

3.4.23 No signs or evidence of any other protected or priority species were observed on the site, nor were there any suitable habitats for such.

4 DISCUSSION OF RISK AND LEGISLATION

4.1 Protected & Priority Species

Bats

4.1.1 Bats are protected under the Wildlife and Countryside Act 1981 as amended by the Countryside Rights of Way Act 2000 and under the Conservation of Habitats and Species Regulations 2017. Some bats are also UK priority species. A summary of the offences likely to be relevant to development are:

- Intentionally or deliberately kill, injure or take a bat;
- Intentionally or recklessly damage, destroy or obstruct access to any place that a bat uses for shelter or protection, whether bats are present or not;
- Damage or destroy a breeding site or resting place of any bat;
- Intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection;
- Deliberately disturb a bat anywhere.

4.1.2 Bats have been recorded locally and may use the adjacent hedgerow for foraging/commuting. The hedgerow is proposed for retention in its entirety. The site is unsuitable for roosting bats.

4.1.3 Overall, it was considered that the risk of significant impact or harm to bats, bat roosts or local bat conservation was negligible.

4.1.4 Further surveys or mitigation were considered unnecessary. However, to minimise any residual risk of impact, precautionary measures, detailed later in the report, should be followed.

Other Protected, Priority & Rare Mammals

4.1.5 The site was considered low in suitability or potential for hedgehogs, [redacted] water voles or any other protected, priority or rare terrestrial mammals. No signs or evidence of such were recorded on the site or adjacent to the site. The risk of significant impact to any other protected, priority or rare mammals was very low/negligible.

4.1.6 However, to minimise any residual risk of impact to the occasional passing hedgehog, recommendations, detailed later in the report, should be followed.

Birds

4.1.7 Wild birds are protected under the Wildlife and Countryside Act 1981 and, with certain exceptions (e.g. pest species) in certain situations, it is an offence to intentionally:

- Kill or injure any wild bird;
- Take, damage or destroy the nest of any wild bird while it is in use or being built;
- Take or destroy the egg of any wild bird.

4.1.8 Some bird species (such as barn owls) are also specially protected under Schedule 1 of the Wildlife and Countryside Act 1981 and others are UK priority species.

4.1.9 The site is small in area and very low in suitability or potential for birds of conservation concern. The risk of significant impact to nesting or foraging protected or priority birds was very low/negligible. Further bird surveys were considered unnecessary.

Great Crested Newts & Other Amphibians

4.1.10 Great crested newts are protected under the Wildlife and Countryside Act 1981 as amended by the Countryside Rights of Way Act 2000, and the Conservation of Habitats and Species Regulations 2017. Great crested newts are also UK priority species. A summary of the offences likely to be relevant to development are:

- Intentionally or deliberately capture or kill;
- Intentionally injure;
- Deliberately disturb, or intentionally or recklessly disturb in a place of shelter or protection;
- Damage or destroy a breeding site or resting place;
- Intentionally or recklessly damage, destroy or obstruct access to a place used for shelter or protection.

4.1.11 Great crested newts have been recorded in low numbers in a pond approximately 125m south east of the site (Skilled Ecology Consultancy Ltd., 2018). However, the only two ponds within 250m of the site are separated from the site by amphibian dispersal obstacles and the site is small in area and dominated by habitat very low/negligible in suitability as terrestrial habitat for amphibians of any species, including great crested newts. No impact to the roadside ditch is required as vehicle access onto the site is already present.

4.1.12 Overall, it was considered that the risk of presence or significant impact to great crested newts or a significant population of any other amphibians was very low.

4.1.13 Further surveys or mitigation for great crested newts or other amphibians were considered unnecessary. However, to minimise any residual risk of impact precautionary measures, detailed later in the report, should be followed.

Reptiles

4.1.14 Widespread reptile species including, grass snake, adder, slow worm and common lizard, are protected from intentional killing and injuring under the Wildlife and Countryside Act 1981. They are also UK priority species.

4.1.15 As detailed for amphibians, the site is small in area and dominated by habitat very low/negligible in suitability for reptiles of any species. The adjacent habitats are also very low/negligible in suitability for reptiles.

4.1.16 Therefore, the risk of presence or significant impact to reptiles was very low/negligible.

4.1.17 Further reptile surveys or mitigation were considered unnecessary.

Plants & Invertebrates

4.1.18 No rare, protected, priority or Schedule 9 invasive species were present.

4.1.19 Further botanical surveys or mitigation were considered unnecessary.

4.1.20 Regarding invertebrates, the risk of presence of a significant assemblage of invertebrates of conservation concern was considered very low/negligible. Further invertebrate surveys or mitigation were considered unnecessary.

Other Protected & Priority species

4.1.21 No signs or evidence of other protected, priority or rare species were observed on the site and it was considered that there was a very low risk of such species occurring on the site or being impacted by the proposed development.

4.2 Other Issues

Sensitive Habitats

4.2.1 The site is small in area, supporting common and widespread habitats and is positioned a significant distance from statutorily designated nature conservation sites. The risk of direct impact to such habitats or wildlife using those habitats was considered negligible. The risk of indirect impact was also considered very low/negligible given the small scale of the proposed development.

4.2.2 No further surveys or mitigation for statutorily designated nature conservation sites were considered necessary.

5 RECOMMENDATIONS

5.1 Precautionary Measures & Compensation

Bats

5.1.1 To minimise any residual risk of impact to foraging bats, the following precautionary measures should be undertaken:

- Any proposed external lighting should be minimised. Where external lighting is required it should be warm white LED lamps with glass glazing, rather than plastic, as these produce the least amount of heat and UV light possible, minimising the attraction effects on insects and minimising disturbance to local bats;

- Any external lighting proposed for the development should be aimed carefully, to minimise illumination of boundary habitats and avoid light spillage into the sky, or horizontally out from any buildings, by using hoods or directional lighting;

Amphibians & Hedgehogs

5.1.2 The risk of presence and potential for impact to amphibians and hedgehogs was considered very low. To minimise any residual risk of harm or impact, the below precautionary measures should be followed:

- Ground vegetation should be cut short with hand tools (strimmers etc.) before works commence to displace wildlife that may be present. The vegetation reduction should be undertaken in fine and dry weather conditions between March and October when amphibians and hedgehogs should be active.
- During development, any construction materials should be stored on hardstanding or off the ground on pallets, to prevent wildlife from sheltering in the materials and being harmed by movement of the materials;
- Any excavations should be covered at night or have a roughly sawn plank placed in them to facilitate escape for any wildlife which may fall in;
- The site should be well drained and ground vegetation maintained short throughout the development, to prevent attracting wildlife into harm's way;
- No construction work at night when hedgehogs and amphibians are mostly active;
- In the unlikely event that an amphibian or hedgehog is found on the site, it should be allowed to disperse of its own accord. If rescuing is required, an ecologist should be contacted for advice.

5.2 Enhancements

5.2.1 By undertaking the following biodiversity enhancements, the site will benefit from improvements for local wildlife and provide a net-gain in accordance with national planning policy (NPPF, 2019).

5.2.2 The addition of integrated bat boxes and bird boxes fitted into the masonry of the new property would increase the potential roosting and nesting sites for local bats and birds. Specifically, the following boxes should be used;

- 2 x Schwegler Eco Integrated Bat Boxes;
- 2 x Vivara Pro WoodStone House Sparrow Nest Box;

5.2.3 The boxes should be installed high on the new building (just below the roofline) and should be free from obstruction and light sources. Bat boxes should ideally be positioned facing a southerly aspect, while the bird boxes should be facing a northerly direction or otherwise out of direct sunlight. Bat and bird boxes can be purchased on-line through suppliers such as The Wildlife Shop and NHBS.

5.2.4 Any new proposed soft landscaping for the development should be native and wildlife attracting. Any new proposed lawn areas should include a wildflower seed mix such as EM1 from Emorsgate Seeds.

5.2.1 A new mixed native hedgerow is proposed in the soft landscaping. This will create a significant ecological benefit and net gain. To maximise the ecological value of the new hedgerow it will be planted in double staggered row sections, preferably 5 whips per linear metre, with spiral tree guards and include: 60% Hawthorn (*Crataegus monogyna*) 20% Field maple (*Acer campestre*), 10% Hazel (*Corylus Avellana*), 5% wild cherry (*Prunus avium*), 5% guelder rose (*Viburnum opulus*).

6 CONCLUSION

6.1 The site is small in area with common and widespread habitats present. The site was considered very low/negligible in potential to support protected, priority or rare species.

6.2 Further ecological surveys or mitigation were considered unnecessary. However, to minimise any residual risk of impact, precautionary measures, detailed in the report, should be followed.

6.3 With the recommendations followed as described, the proposed development could proceed with a minimal risk of harm or impact to protected, priority or rare species or notable habitats.

6.4 With the biodiversity enhancements followed as described, the proposed development would be enhanced for the benefit of local wildlife in accordance with national planning policy.

7 REFERENCES

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8 APPENDICES

8.1 Appendix 1: Figures

Figure 1 - Habitat map of the site.

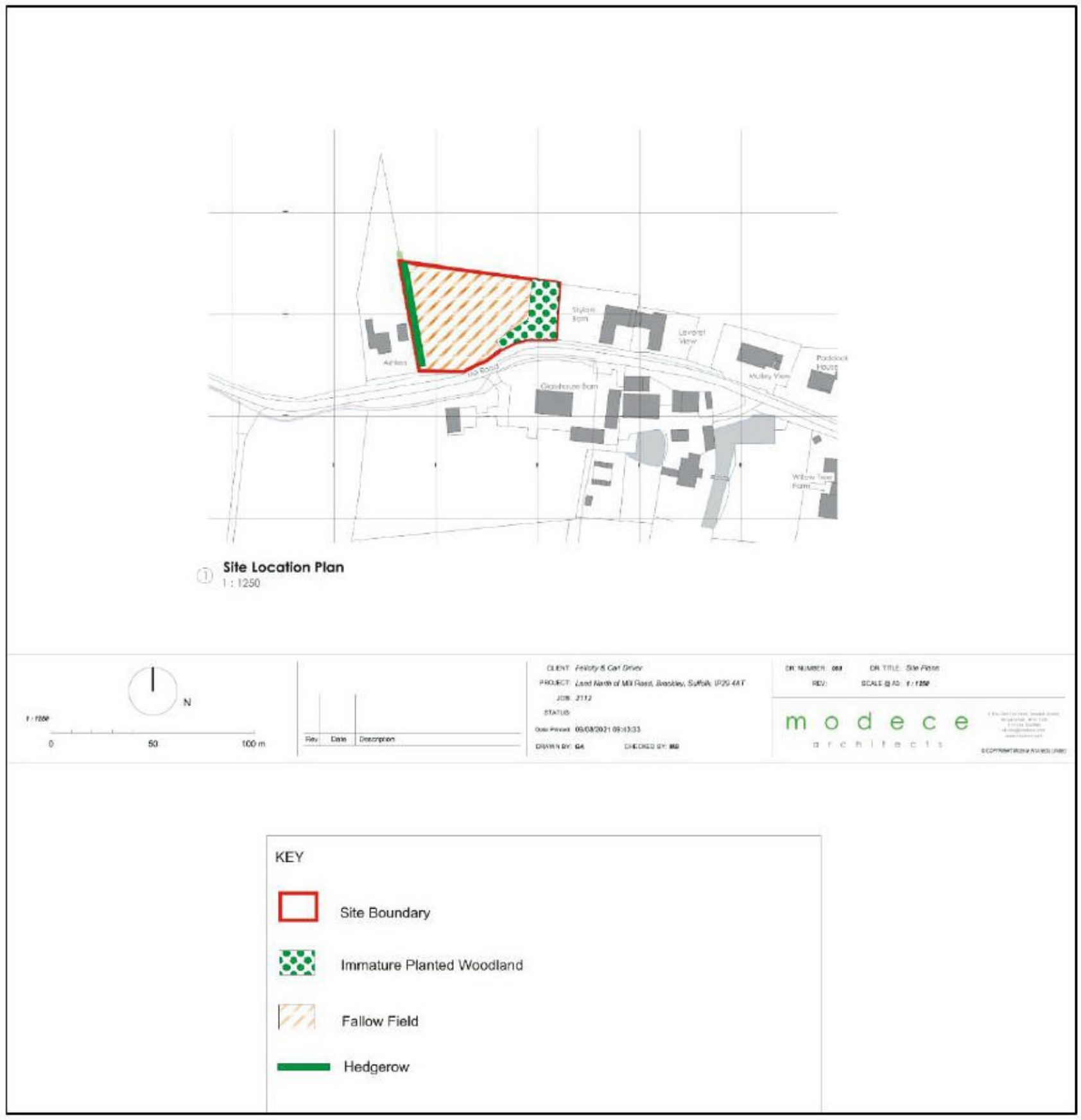
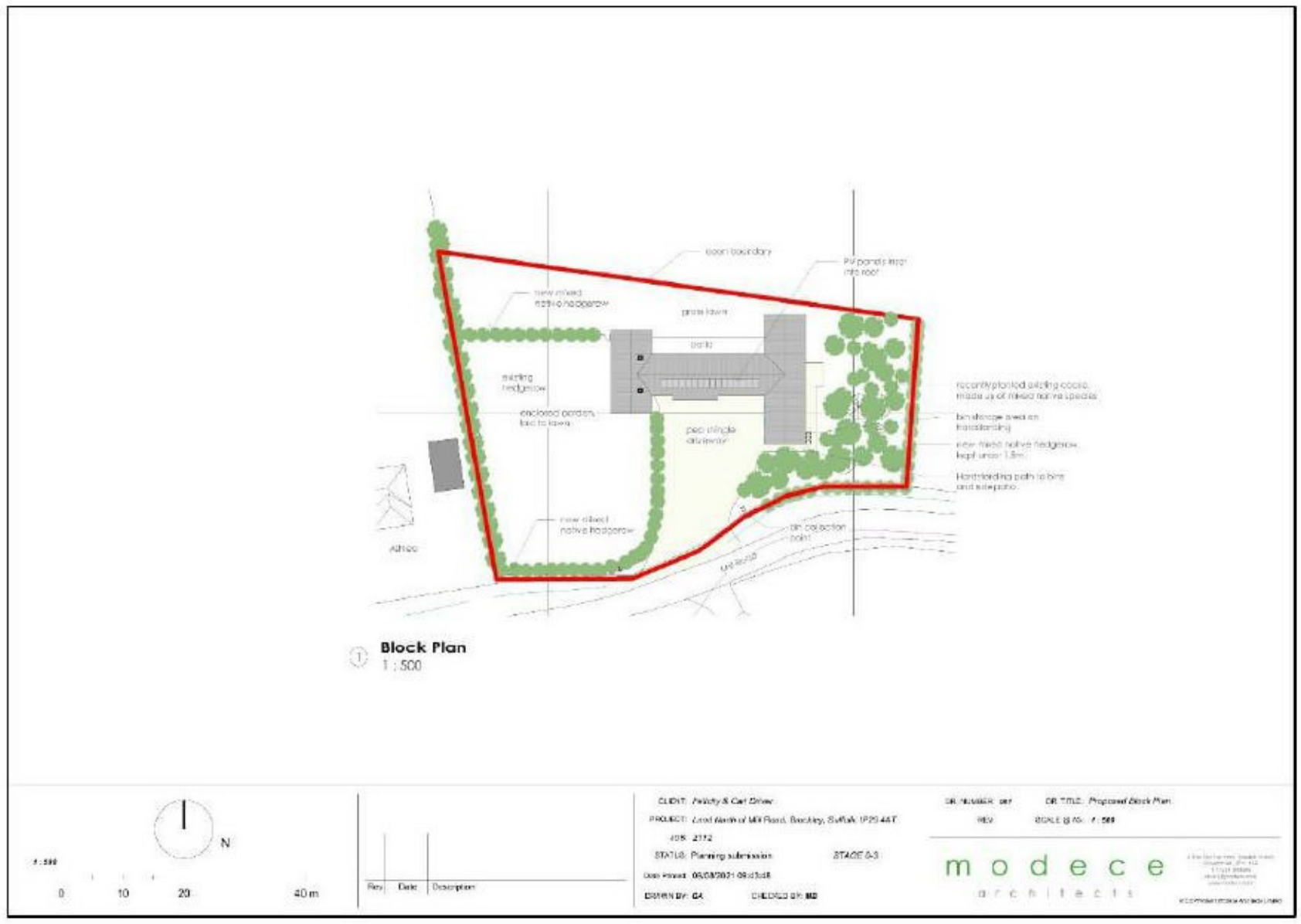
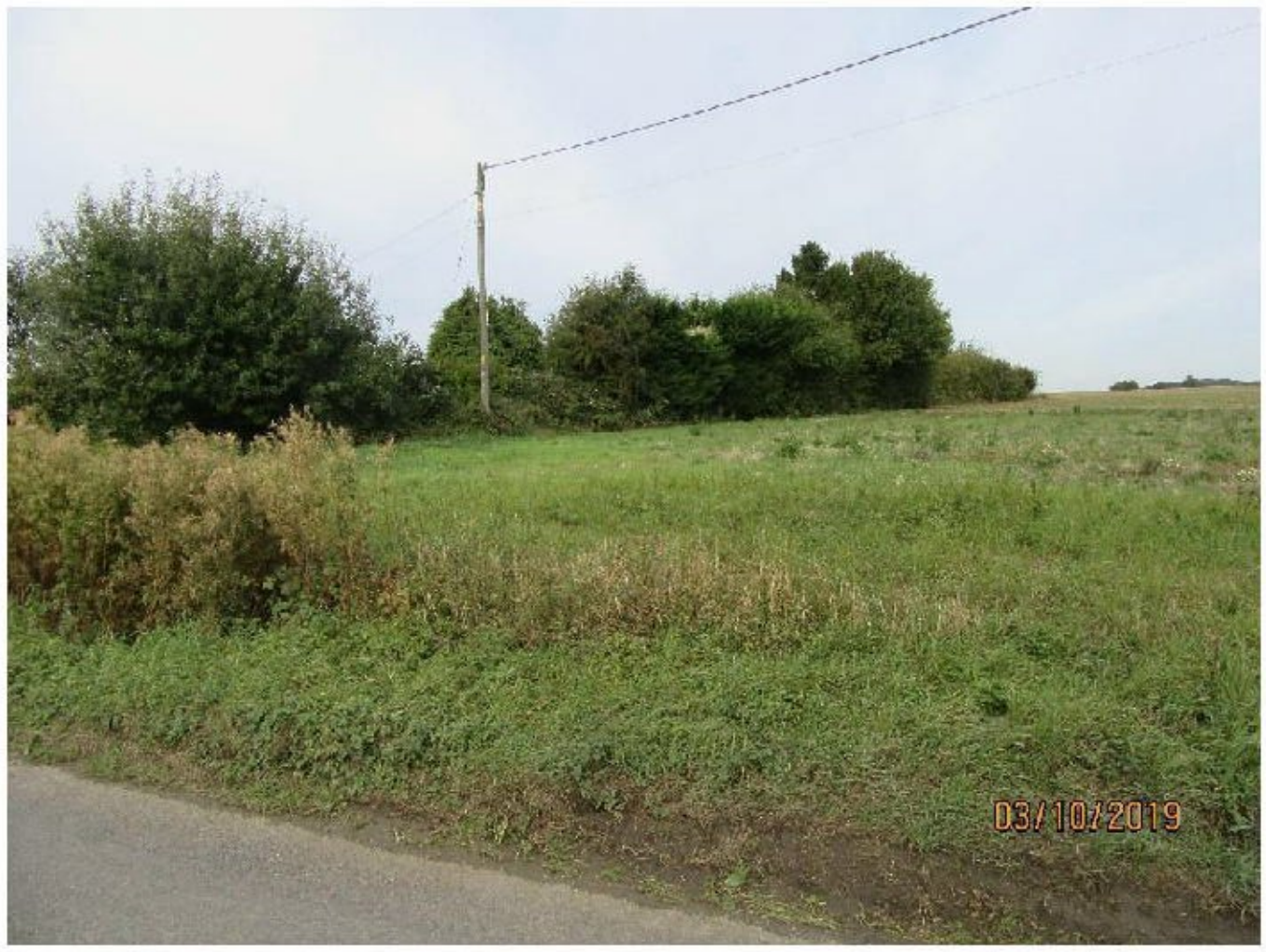


Figure 2: Proposed Development.



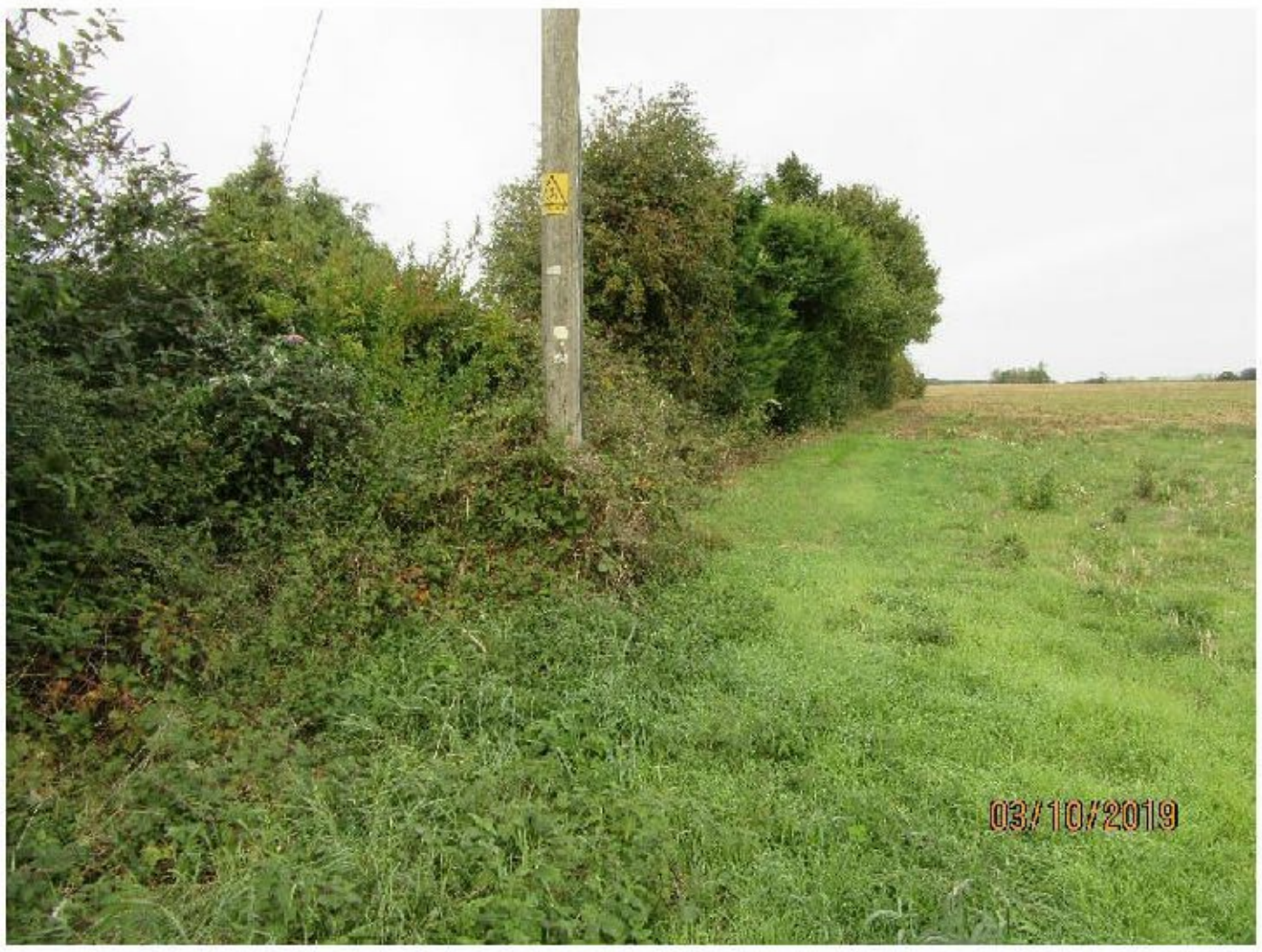
8.2 Appendix 2: Photographs

Photograph 1: Main site area.



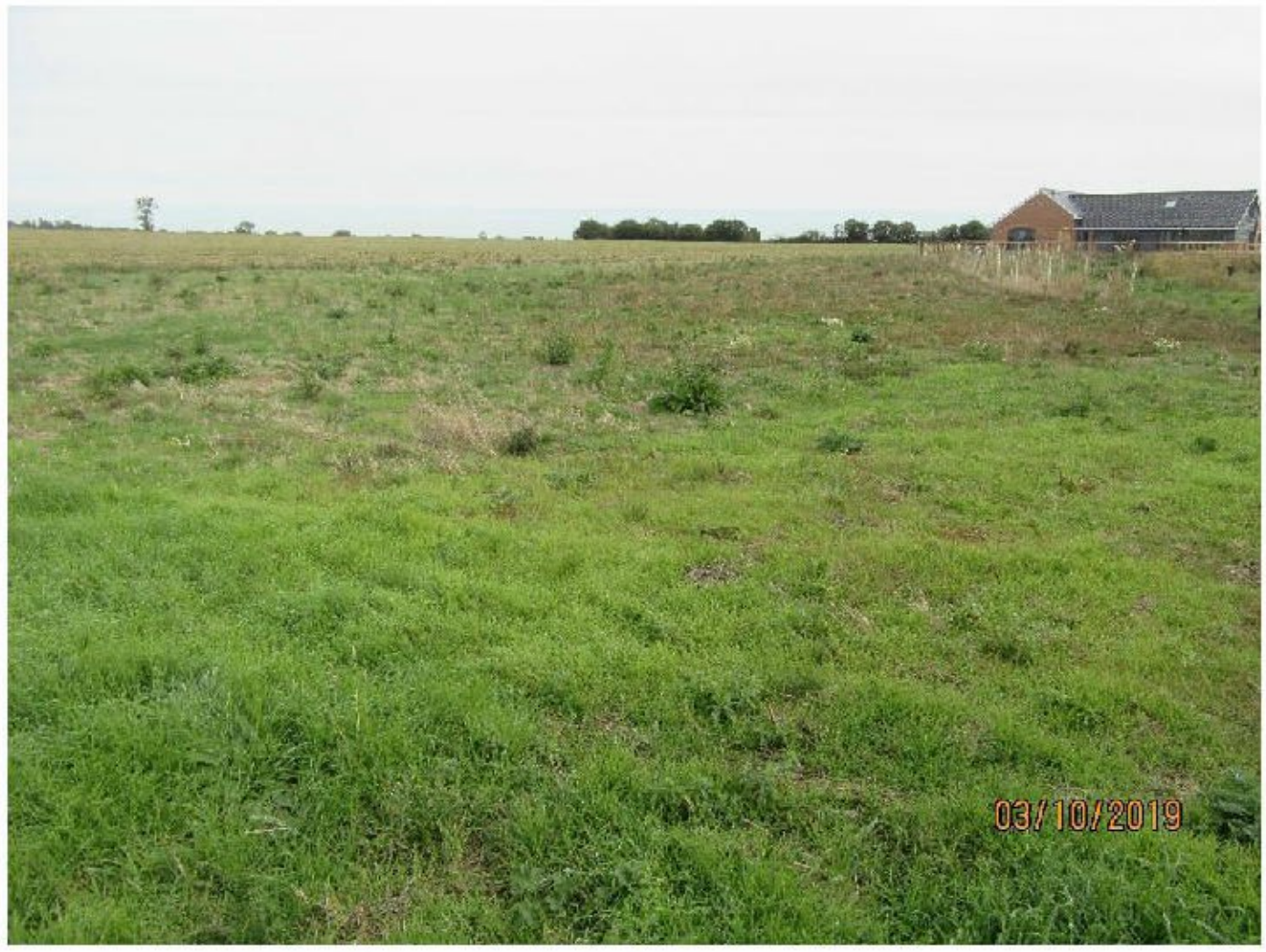
Photograph by Roger Spring 2019

Photograph 2: Boundary hedgerow.



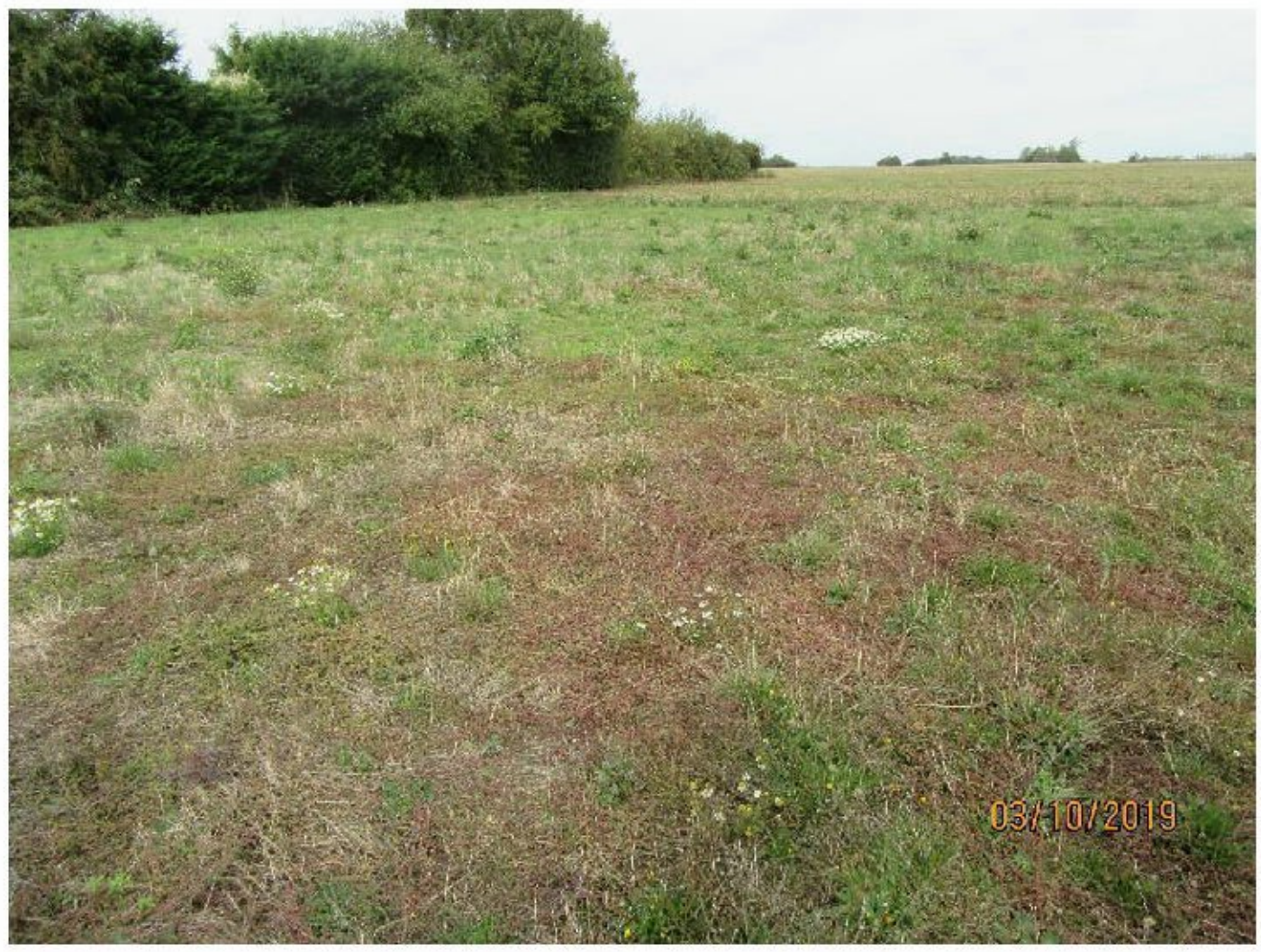
Photograph by Roger Spring 2019

Photograph 3: Main site area looking north east.



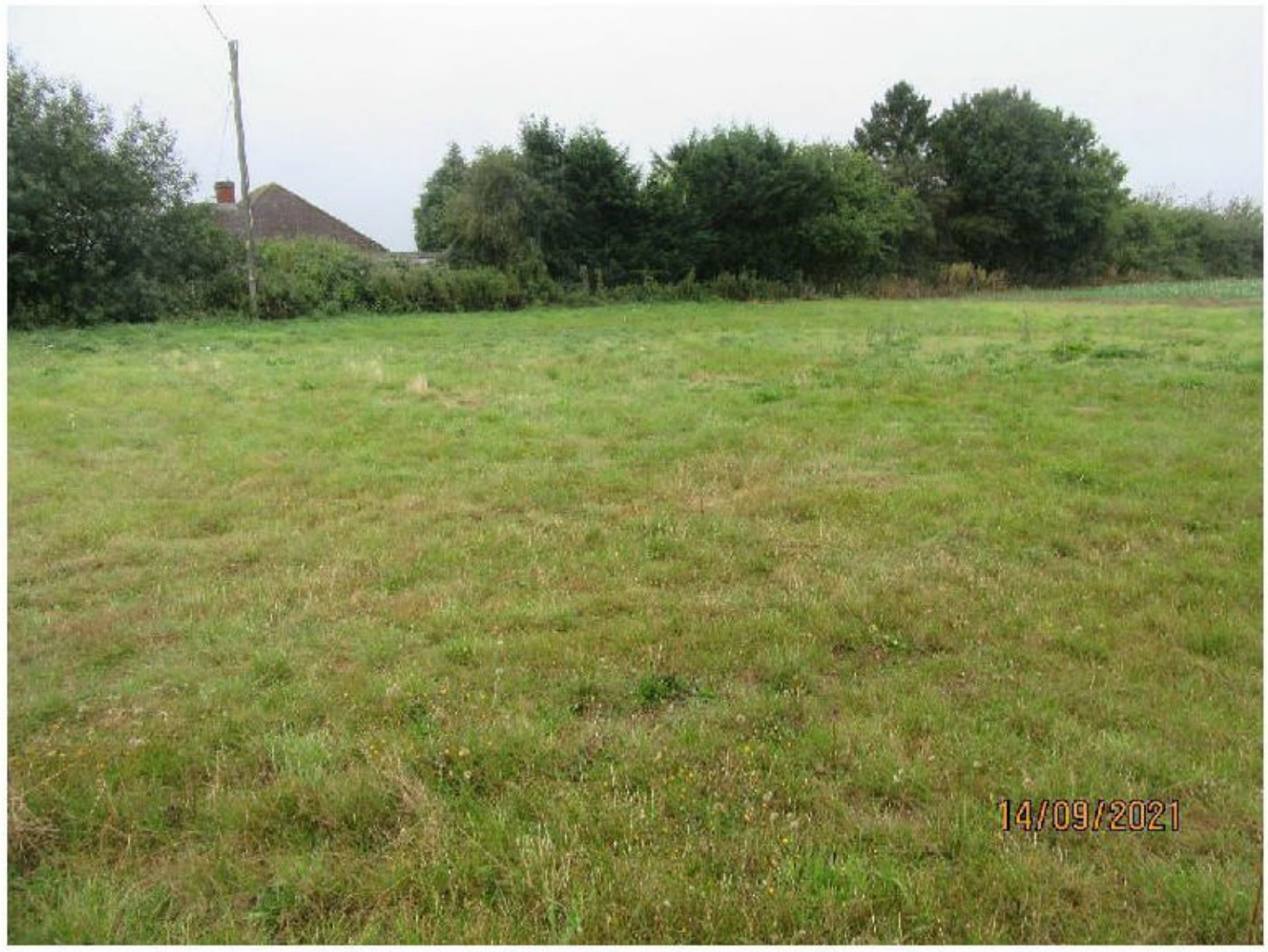
Photograph by Roger Spring 2019

Photograph 4: Main site area looking north west.



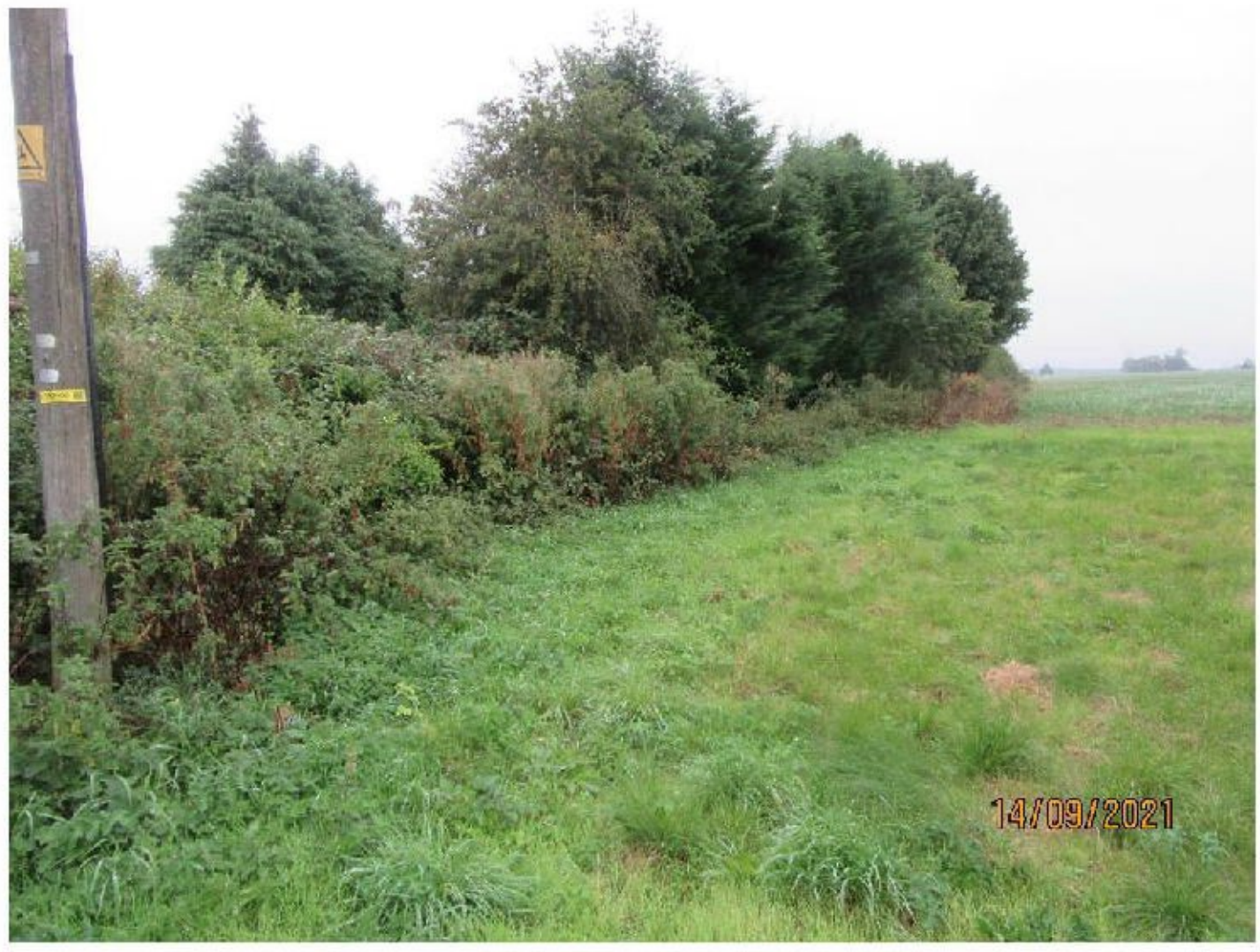
Photograph by Roger Spring 2019

Photograph 5: Main site area.



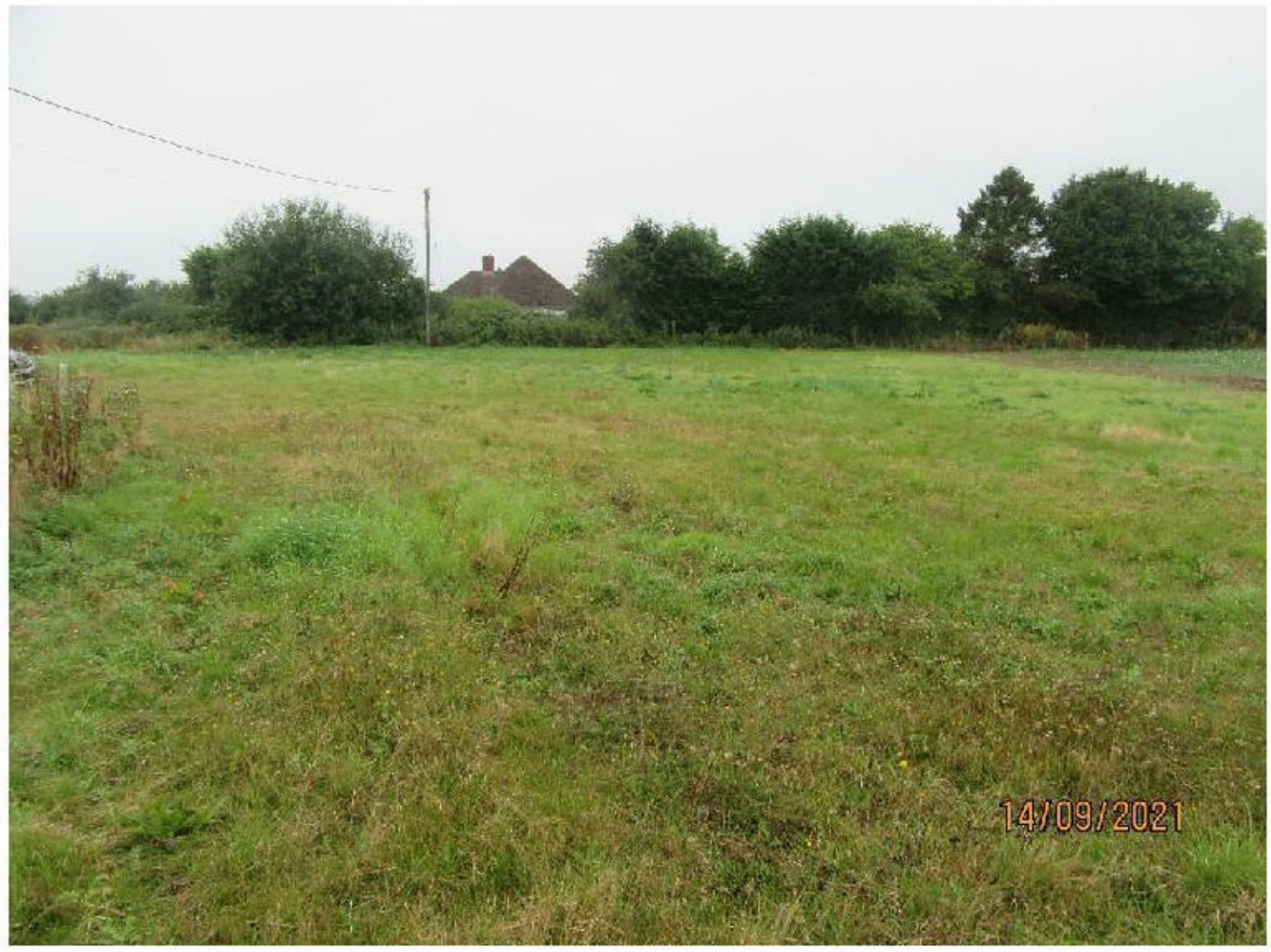
Photograph by Roger Spring 2021

Photograph 6: Western boundary.



Photograph by Roger Spring 2021

Photograph 7: Main site area looking east to west.



Photograph by Roger Spring 2021