

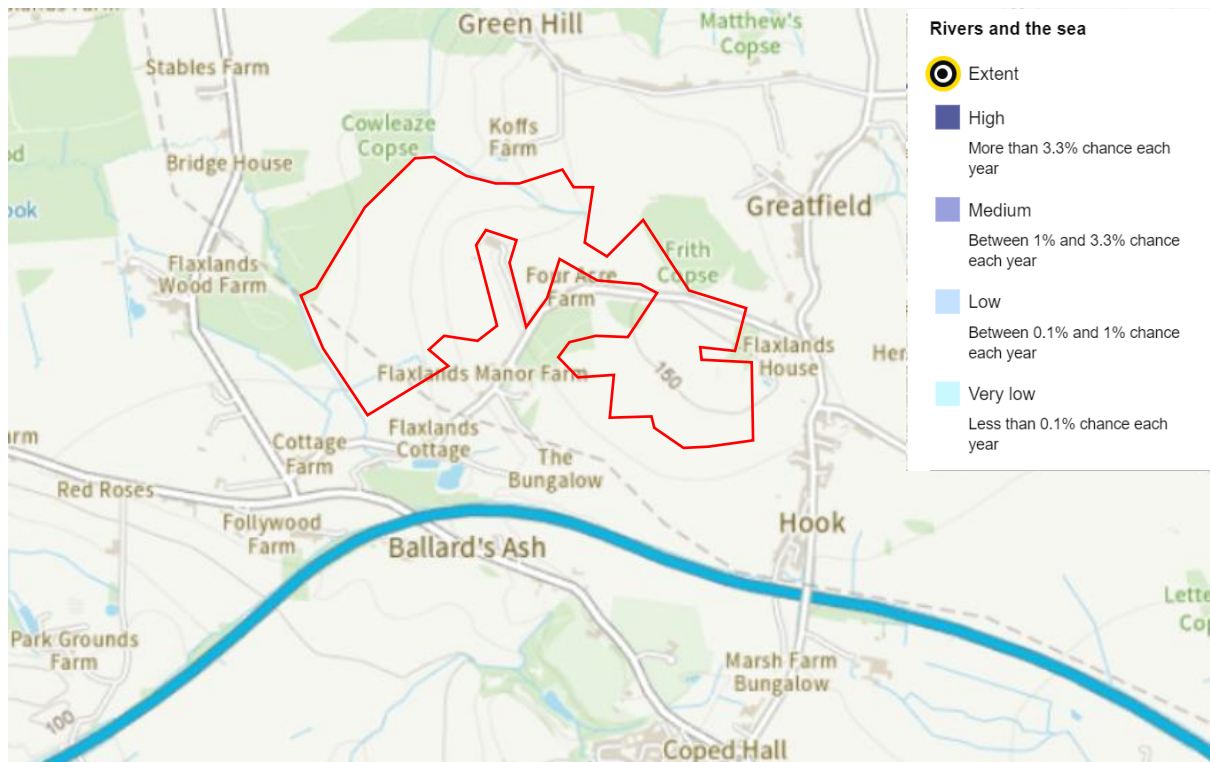


Figure 5: Long Term Local Flood Risk from Rivers or the Sea for the Site and Surrounding Area (approximate site boundary defined in red)

After reviewing the long-term flood risk map (**Figure 5**) the site is classed as having a less than Very Low probability of flooding from rivers and sea.

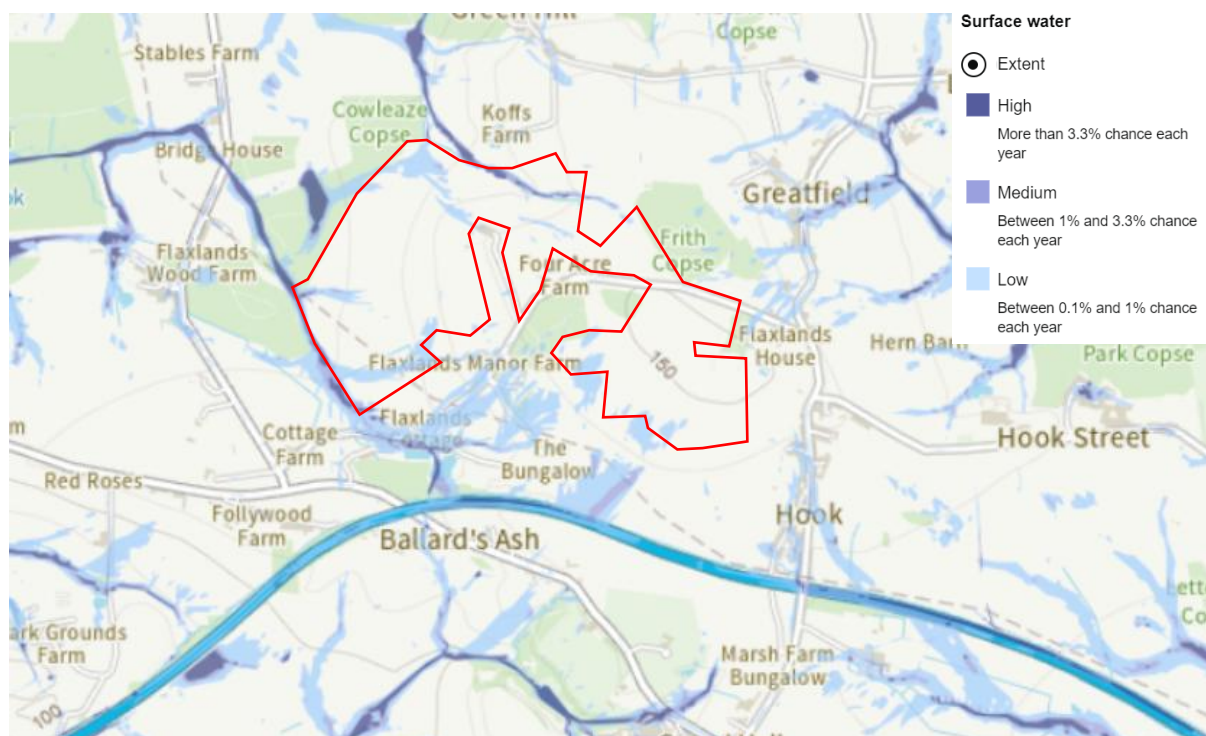


Figure 6: Flood Risk Present from Surface Water for the Site (approximate site boundary defined in red).

Figure 6 shows that the site has a number of areas indicated as having a Low to High Risk from surface water flooding. There are areas in the eastern boundary and the southwest of the site that are indicated as having Low Risk from surface water flooding, whilst the western boundary and an area in the central north of the site is indicated as having a High risk of surface water flooding.

The impact of flood risk is assessed to confirm if it can pose a limitation to the ALC grade of the site, in accordance with the guidance available (MAFF, 1988).

Table 3: Summary of Flood Risk from Environment Agency Data

ALC Grade	Frequency and Duration
1	Rare (short)
2	Rare (medium)
	Occasional (short)
3a	Rare (long)
	Occasional (medium)
	Frequent (short)
3b	Occasional (long)
	Frequent (medium)
4	Frequent (long)

The mapping identifies a Low risk of flooding from rivers and the sea within the boundary of the site and a High risk of surface water flooding in some areas across the site.

For the purpose of grading, due to the lack of detailed information relating to duration of flooding, the areas impacted by flooding are considered to be impacted on a Rare frequency and Long duration or Frequently for a Short duration. As such this would limit these areas of the site to ALC Grade 3a based on a potential flood risk limitation (**Table 4**).

Table 4: Flood Risk Limitation in Winter for the Site

ALC Grade	Frequency and Duration	Area Affected (ha)
1	Rare (short)	~80.50
2	Rare (medium)	0.00
	Occasional (short)	
3a	Rare (long)	~7.00
	Occasional (medium)	
	Frequent (short)	
3b	Occasional (long)	0.00
	Frequent (medium)	
4	Frequent (long)	0.00

As the areas are small, localised sections of the site and are not representative of the overall site. It is considered that due to the impacted areas being of Low risk, with only small areas of High risk on the boundary of the site, the flood risk is not considered to pose enough of a limitation to the cultivation of the site to reduce the overall site ALC Grade.

5. Intrusive Survey Findings

The survey identified Two Soil Types across the entire site. Generalised profiles of the soil types encountered have been described as below (**Table 5**) however, please note some localised variations were recorded. Complete soil logs are provided in **Appendix II** and photographs of the surveyed soils are presented in **Appendix III**.

Table 5: Summary of Soils Identified on Site

	Depth (cm)	Texture	Colour	Stones (%)	Mottles	Structure
Soil Type 1	0-20	Silty Clay (ZC)	Dark Yellowish Brown (10YR 4/4)	5	No	Subangular Blocky
	20-70	Clay (C)	Dark Brown (7.5YR 3/4)	5	Fine Grey Mottles (GLEY 1 7/N)	Coarse Prismatic
	70-120	Clay (C)	Pale Brown (10YR 6/3)	5	Few Fine Ochreous (5YR 5/8) and Grey (GLEY 1 7/N) Mottles	Coarse Prismatic
Soil Type 2	0-25	Medium Silty Clay Loam (MZCL)	Brown (10YR 4/3)	5	Fine Ochreous Mottles (5YR 5/8)	Subangular Blocky
	25-70	Clay (C)	Dark Yellowish Brown (10YR 4/6)	5	Few Fine Ochreous (5YR 5/8) and Grey (GLEY 1 7/N) Mottles	Coarse Prismatic
	70-120	Clay (C)	Pale Brown (10YR 6/3)	5	Few Fine Ochreous (5YR 5/8) and Grey (GLEY 1 7/N) Mottles	Coarse Prismatic

The general profiles for the soil types identified on the Site has been used to assess the Wetness Class (WC) for the Soil Type (see **Appendix V** for the MAFF decision flow chart). The general profile is reflective of the findings in the soil pit associated with the Soil Type identified on site. The assessment process and results of the in-field wetness assessment is provided within **Table 6** below with a plan of the distribution of the soil types across the site shown in **Appendix I**.

Table 6: Wetness Class Assessment for Soil Types Encountered on Site

Soil Type	Parameters (Figure 6, MAFF)					
	Disturbed	FCD	SPL (depth cm) Justification	Colour	Gleying (depth cm) Justification	Ref
Soil Type 1	No	161.84	At a depth of 70cm, the SPL was identified to be present due to the following characteristics: Clay (C) coarse prismatic structure weakly developed less than 0.50% biopores greater than 0.50mm diameter evidence of wetness in the layer; gleying	Other	At a depth of 70cm, gleying was identified to be present due to the following characteristics: Pale colours dominant in the matrix and at least 2% ochreous mottles	Figure 8* II
Soil Type 2	No	161.84	At a depth of 25cm, the SPL was identified to be present due to the following characteristics: Clay (C) coarse prismatic structure weakly developed less than 0.50% biopores greater than 0.50mm diameter evidence of wetness in the layer; ochreous mottles	Other	At a depth of 70cm, gleying was identified to be present due to the following characteristics: Pale colours dominant in the matrix and at least 2% ochreous mottles	Figure 8* III

Notes: This Table follows the flow chart of Figure 6 of the MAFF ALC guidance to identify the wetness classification per Soil Type. *The soil wetness class has been tentatively assessed using the in field factors

6. Conclusions

The ALC grading for the site area is summarised below within **Table 7**, overall findings of this assessment can be found in **Appendix IV**. The table below identifies the grades of the areas of agricultural land present across the site (**Appendix I**).

Table 7: ALC Classification

ALC Grade	Area (Ha)	Percentage
Grade 1	0.0	0.0%
Grade 2	0.0	0.0%
Subgrade 3a	12.54	14.71%
Subgrade 3b	72.50	85.05%
Grade 4	0.0	0.0%
Grade 5	0.0	0.0%
Non-Agricultural	0.20	0.23%
Total BMV	12.54	14.71%
Total Non-BMV	72.50	85.05%
Total Site Area	85.24	100%

Soil Type 1 – Wetness Limitation

The combination of the topsoil texture (Silty Clay), Wetness Class (II) and the number of Field Capacity Days (161.84) results in **ALC Grade 3b** for Type 1 soils.

Soil Type 2 – Wetness Limitation

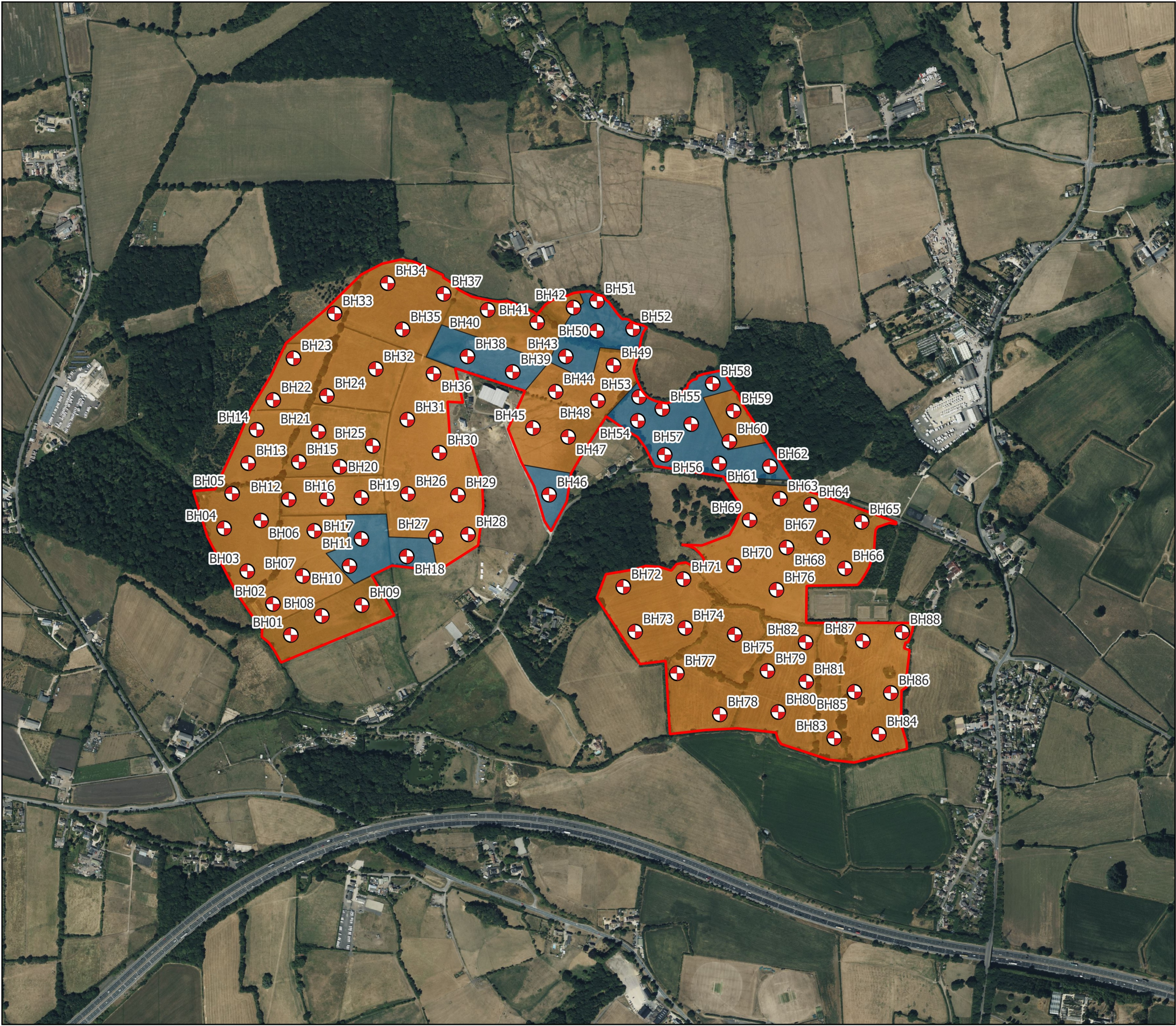
The combination of the topsoil texture (Medium Silty Clay Loam), Wetness Class (III) and the number of Field Capacity Days (161.84) results in **ALC Grade 3a** for Type 2 soils.

Overall Site ALC Grade and Conclusions

As the majority of the site is covered by Soil Type 1 resulting in an ALC Grade 3b. A small amount of land containing Soil Type 2 has been identified as ALC Grade 3a as such only 14.71% of land has been identified as Best and Most Versatile. There is a small section (0.2 Ha) that has been classified as Non-agricultural, this Flaxlands lane.

APPENDIX I

SITE PLANS



Legend

Site Boundary

- Site Boundary
- Boreholes
- Soil Type 1
- Soil Type 2

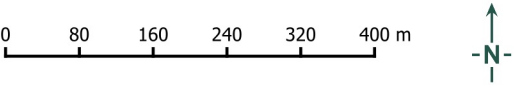
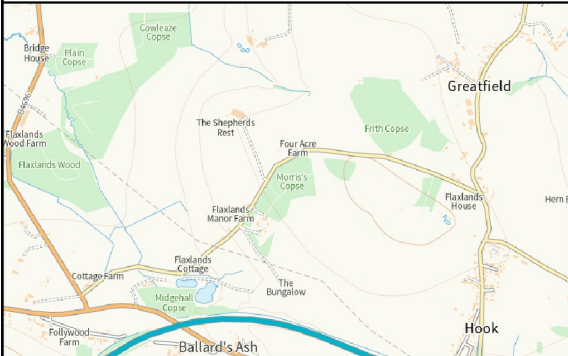


Figure Soil Types		
Job Land at Flaxlands Farm		
Client Aecom		
Figure No. 1	Revision 1	Date 11 October 2024
Drawn by JN	Checked by EH	Scale 1:8,192.649945
Job No. 240732		

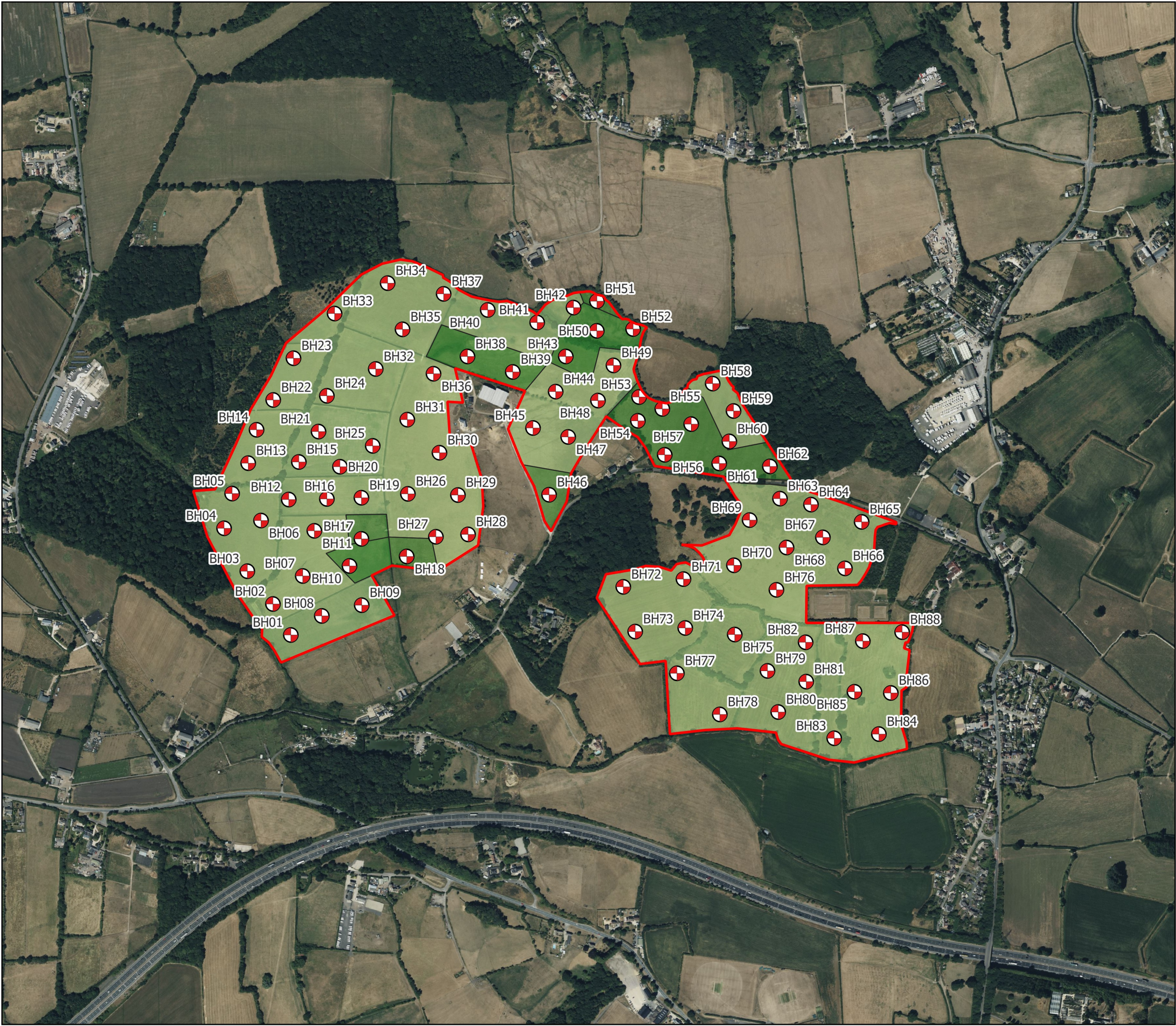


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Legend

Site Boundary

- Site Boundary
- Grade 3A
- Grade 3B

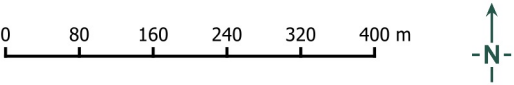
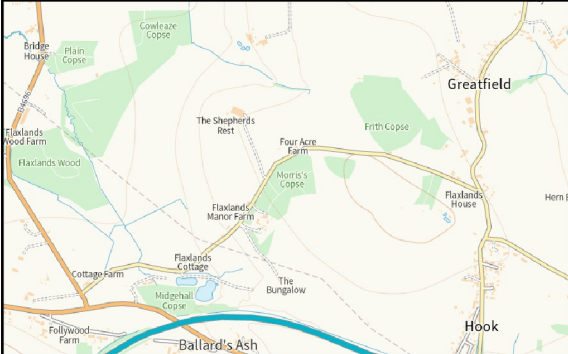


Figure ALC Grade Map		
Job Land at Flaxlands Farm		
Client Aecom		
Figure No. 2	Revision 1	Date 15 October 2024
Drawn by JN	Checked by EH	Scale 1:8,192.649945
Job No. 240732		



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