

**REPORT**

**for**

**LAND CLASSIFICATION**

**of**

**LAND**

**at**

**CARWIN FARM  
HAYLE, CORNWALL**

**for**

**HAYLE COMMUNITY RUGBY FACILITIES LTD**

**17<sup>th</sup> September 2010**

**Prepared by  
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## LAND CLASSIFICATION AT CARWIN FARM, HAYLE

### **1.0 PERSONAL**

1.1 I am Ivor Humphry Mann, sole trader and owner of John Coad & Son, Chartered Surveyors, Valuers, Land Agents and Auctioneers, of 7 Coinagehall Street, Helston, Cornwall, TR13 8ER.

1.2 I left the Royal Agricultural College, Cirencester, with a Diploma in Rural Estate Management in 1975 and in 1977 became an Associate of the Royal Institution of Chartered Surveyors (RICS). In 1979 I became a Full Member of the Central Association of Agricultural Valuers and in 1990 I became a Fellow of the RICS.

1.3 When I left Cirencester in 1975, I worked for the agricultural professional arm of the Ministry of Agriculture, Fisheries and Food (MAFF), based in Truro, before pursuing the profession in private practice.

1.4 During my time at MAFF, among other tasks, I was engaged to carry out Land Classification of areas of land adjacent to large towns or urban areas where development was proposed in the future (the future being 25-50 years ahead).

### **2.0 INSTRUCTIONS**

John Coad & Son has been requested to carry out Land Classification on behalf of Hayle Community Rugby Facilities Ltd and in a letter of 'confirmation of instructions' between the two parties, dated 19<sup>th</sup> August 2010, the following instructions were confirmed:

*"To visit the above land (at Carwin Rise, Hayle), to inspect the fields, take notes on slope, altitude, exposure and take soil samples, to completion of a report with plans (as required) to give an indication of land classification and advise on various aspects of a professional nature".*

### **3.0 LAND CLASSIFICATION**

3.1 The "Revised Guidelines and Criteria for Grading the Quantity of Agricultural Land", dated October 1988, state:

3.2 The Agricultural Land Classification provides a framework for classifying land according to the extent to which its physical or chemical characteristics impose long-term limitations on agricultural use. The limitations can operate in one or more of four principal ways: they may affect the range of crops which can be grown, the level of yield, the consistency of yield and the cost of obtaining it. The classification system gives considerable weight to flexibility of cropping, whether actual or potential, but the ability of some land to produce consistently high yields of a somewhat narrower range of crops is also taken into account.

3.3 The principal physical factors influencing agricultural production are climate, site and soil. These factors together with interactions between them form the basis for classifying land into one of five grades; Grade 1 land being of excellent quality and Grade 5 land of very poor quality. Grade 3, which constitutes about half of the agricultural land in England and Wales, is now divided into two subgrades designated 3a and 3b.

3.4 The main climatic factors are temperature and rainfall although account is taken of exposure, aspect and frost risk. The site factors used in the classification system are gradient, microrelief and flood risk. Soil characteristics of particular importance are texture, structure, depth and stoniness.



3.5 The grade or subgrade of land is determined by the most limiting factor present. When classifying land the overall climate and site limitations should be considered first as these can have an overriding influence on the grade. Land is graded and mapped without regard to present field boundaries, except where they coincide with permanent physical features.

#### **4.0 INSPECTIONS**

4.1 Field OS 0088 at Carwin was inspected on 23<sup>rd</sup> August 2010 and soil samples were taken.

4.2 The other fields were inspected on 10<sup>th</sup> September 2010 and soil samples were taken.

#### **5.0 WEATHER**

5.1 On both occasions the weather was fine and dry following a generally dry spell.

#### **6.0 AREA**

6.1 It was originally explained to us that the proposal involved one field only, OS No 0088, being the first field on the left hand side going up the old A30 from Loggans Roundabout to Connor Downs.

6.2 On meeting with the owners of the land, we were told that the proposal was to include the area to the east of the said field OS 0088, i.e. also to include the western portions of fields OS Nos. 0003 and 3000.

6.3 The proposal would incorporate an area at a perpendicular to the old A30 road from the farm lane opposite Carwin Farm and leading out to the new A30 road, eastwards.

6.4 The enclosed Ordnance Survey map (see Appendix 1) shows the areas in question and in particular field OS No 0088, currently corn arrish. In this field there are seven pink "crosses" marked (P1 to P7) all on a grid of 100m and seven yellow "circles" (Y1 to Y7) on the same grid lines but 10 metres off the hedge or ditch or headland. (The reason is to ensure a good sample not affected by mechanical pressure/damage).

#### **7.0 SAMPLES**

7.1 The samples P1, P2, Y1, Y2 and Y4 exhibit a clay-medium loam soil with small stones present in abundance. Samples Y5, Y6 and Y7 are similar. It was expected that Y5, Y6 and Y7 would be clayey with stone, due to the laying of a mains sewer in the headland of this field many years ago, requiring sinking to a considerable depth and poor working conditions. It should be noted that these last sample points are separated from Loggans Moor by the new A30 when considerable fill was necessary to give a hard subbase.

7.2 Sample points P3, P5, P6 and Y3 exhibited a medium sandy loam of a rich brown colour with good depth and lacking stones.

7.3 Sample point P7 is 'under' the hedge or headland and was affected by considerable tracking as access to the sewer many years ago.

7.4 Along the western boundary from point Y7 to P7, there are numerous rushes, reeds and wetland plants similar to those growing on Loggans Moor and adjacent to the water filled ditch running north west – south – south east after passing the old A30 (denoting a wet area).

7.5 On a second visit, core samples were taken in field OS No 3000 at P10, P11 and in OS No 0003 at P12, P13.

7.6 Field OS 3000 – farmers have planted grass in the western corner of the field as somewhat unproductive with grey clayey soil, with huge numbers of small stones present – samples P10 and P11.

7.7 Field OS 0003 has recently had corn harvested and it is quite clear looking through the stubble to see the grey clayey soil again with a huge number of small stones present – samples P12 and P13.

## **8.0 SLOPE**

In field OS 0088 the triangular area to the east of ‘Carwin Lodge’ slopes gently to the west and north west, then ‘plateaus’ for approximately 100 metres to the west, before sloping more to the west and north (towards the new A30) then levelling out to the low lying area adjacent to Connor Filling Station. Here the rushes and reeds are encroaching into the field, denoting a wet area.

## **9.0 ALTITUDE**

9.1 Spot levels in the old A30 road show the following:

- Adjacent to the Connor Filling Station: 11.68m
- Midway Filling Station to Carwin Lodge: 17.30m
- Carwin Lodge 22.0m      Bench Mark: 22.68m
- At eastern end of OS No 0088: 27.30m
- 100m further to the east : 31.50m

So ‘rise’ from the Connor Filling Station to the extent of ‘sample site’ – part of OS No 3000 is 31.5m less 11.68m = approx 20m = 66 feet  
(11.68m = 38 ft above sea level and 31.5m = 103 ft above sea level).

## **10.0 EXPOSURE**

10.1 From the site investigations, it would appear that the site is not exposed, due to it lying in a ‘hollow’. Is this a frost pocket?

## **11.0 OWNERS/FARMERS’ INPUT**

### **11.1 SOILS**

It would be remiss of any ‘sampler’ not to interview/speak to the farmers who have normally been farming the land for numerous years whereas sampling only takes a number of hours.

11.1.1 On interviewing the farmers, they explained that in their opinion a blue/grey clayey loam with spar stone ‘runs’ from the western area of OS No 0088 around the northern and eastern areas of the same field and across into OS 0003 and taking in the western corner of OS 3000. The same soil is found south of the old A30 in fields OS 1078 and OS 2076 at Appendix 2.

11.1.2 All the ‘clayey’ areas, described thus, tend to hold the water and rainfall. On numerous occasions winter harvesting gear has been stuck. There is a limited period when ground can be ‘worked down’.

### **11.2 CROPPING CAPABILITIES**

11.2.1 In field OS No 0088 the ‘wet’ area seen on inspection during August/September 2010 was small, compared to the area retaining the moisture and wet during the winter and spring.



11.2.2 Furthermore, the 'clay' areas of the remainder of the field and those in OS 0003 and OS 3000 have limited scope for cropping due to the soil type. As already explained, the farmers have seeded the western corner of OS 3000 to grass, previously set-a-side, as grass is best suited to this area and visa versa, and cannot even sustain a reasonable crop of corn.

### 11.3 TEMPERATURE & FROST RISK

11.3.1 In August/September there is no frost risk, but the farmers state that the lower portion of field OS 0088 and the area along the new A30 in OS 0003 are both very susceptible to frost. See plan/map at Appendix 3 with frost overlay.

## 12.0 ENVIRONMENTAL ISSUES

12.1 We have not carried out any surveys to establish the potential for contamination to the subject property or adjacent sites.

12.2 Neither are we aware of any environmental audit, environmental investigation or soil survey which may have been carried out and we have therefore assumed that the property and its site is not subject to any contamination.

12.3 Where appropriate, testing of Radon Gas should be carried out and, unless otherwise stated in our Report, we have assumed that the property is not affected in this respect.

12.4 The property is located in an area affected by former tin mine workings and we would recommend a mining survey/search be undertaken as part of any planning and development process.

12.5 The property is not located in an area identified on the Environment Agency's flood maps as being potentially susceptible to river or sea flooding.

## 13.0 LIMITATIONS

In making this Report, the following assumptions have been made:

13.1 that the property is not subject to any unusual or especially onerous restrictions.

13.2 the surveyor will be under no duty to verify these assumptions.

13.3 all inspections have been made by I H Mann and the Report will not purport to express an opinion about or to advise upon the condition of uninspected parts and should not be taken as making any implied representation or statement about such parts.

## 14.0 PUBLICATION

14.1 Neither the whole nor any part of this report or any reference thereto may be included in any published document, circular or statement or published in any way without our prior written approval as to the form and context in which it may appear.

## 15.0 THIRD PARTIES

15.1 This report is private and confidential to the Clients and their professional advisors. We accept responsibility to the above mentioned parties for the stated purpose and can accept no responsibility whatsoever to any other persons. We can accept no responsibility if the report is divulged to any other persons or bodies, any such parties rely upon the report at their own risk.

## 16.0 ASSUMPTIONS /SPECIAL INSTRUCTIONS

16.1 We are instructed by Hayle Community Rugby Facilities Ltd to carry out Land Classification of Land at Carwin Rise, Hayle.

16.2 Whilst appointed by the Clients, we owe all parties a duty of care.

16.3 We confirm that in so far as the facts stated in this report are within our own knowledge, we have made clear which they are and we believe them to be true and the opinions we have expressed represent our true and complete professional opinions.

16.4 Various other assumptions have been made in this report and these have been outlined earlier in the body of the report at 3.0 Land Classification , 4.0, 7.0 , 8.0, 9.0 and 10.0.

## 17.0 CONCLUSIONS

17.1 I believe that I have covered the salient points of the Land Classification as to:

- a) Climatic factors: exposure, aspect and frost risk.
- b) Site factors: gradient, microrelief and flood risk.
- c) Soil characteristics: texture, structure, depth and stoniness.

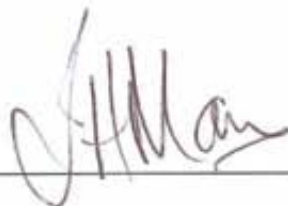
17.2 Having inspected the land, carried out soil samples and interviewed the farmers/owners, I am of the opinion that the majority of the land in question is graded 3b and a small part of OS 0088, graded 3a, as shown at Appendix 4.

17.3 Where soil and site conditions vary significantly and repeatedly over short distances (as in this case) and impose a practical constraint on cropping and land management, a 'pattern' limitation is said to exist. This variability becomes a significant limitation if, for example, soils of a different type and texture occur as a patchwork and with susceptibility to frost, complicate soil management and cropping decisions, or resulting in uneven crop growth, maturation or quality.

17.4 The effect on grading is judged according to the severity of the limitations imposed by the pattern on cropping and management and for these reasons I believe that it will be difficult to manage and crop field OS No 0088 other than to a crop suited to the whole field and capable of being grown on the lesser grade 3b.

Dated this seventeenth day of September 2010.

SIGNED \_\_\_\_\_



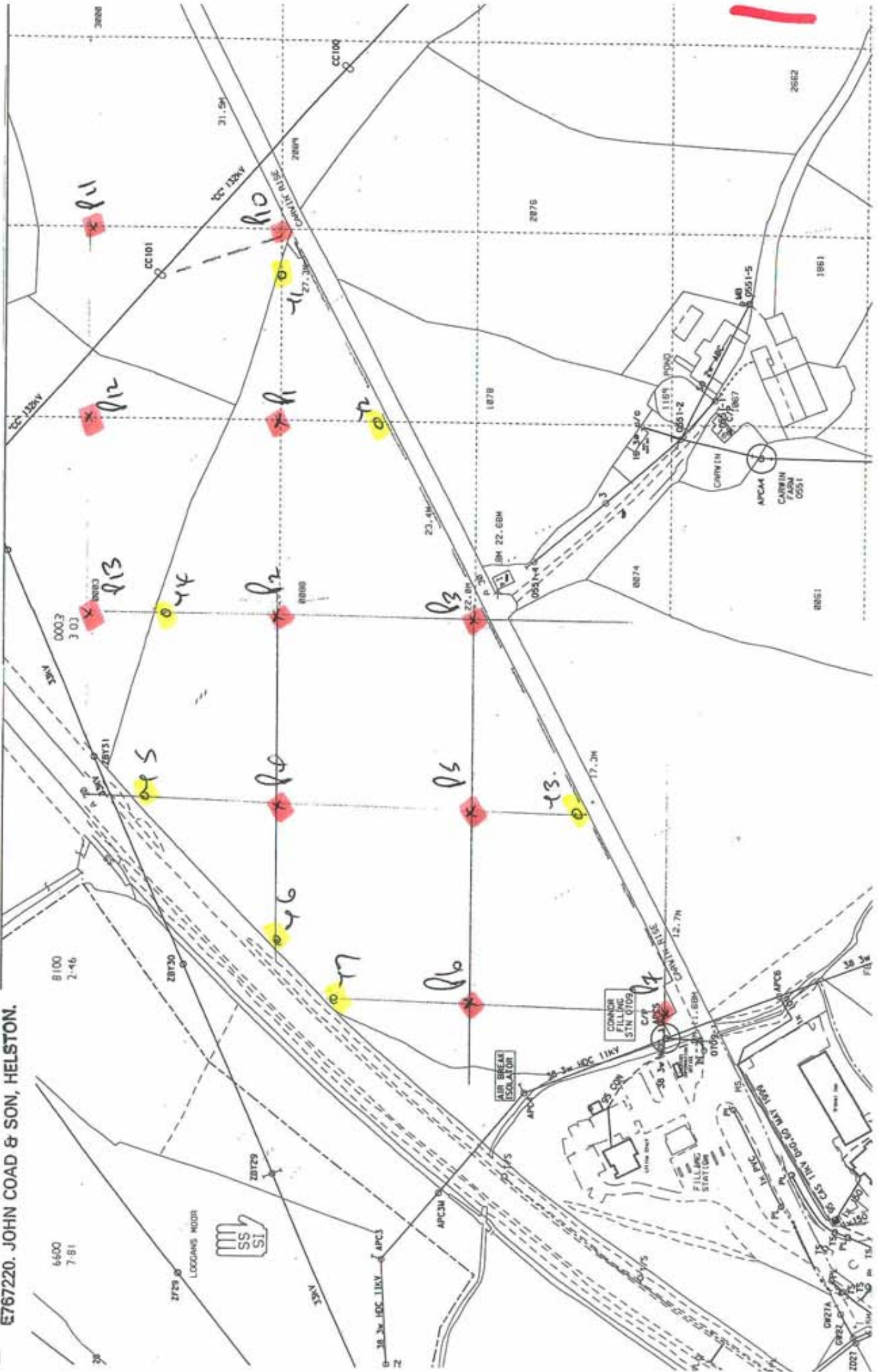
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SOIL SAMPLE POINTS - CARWIN



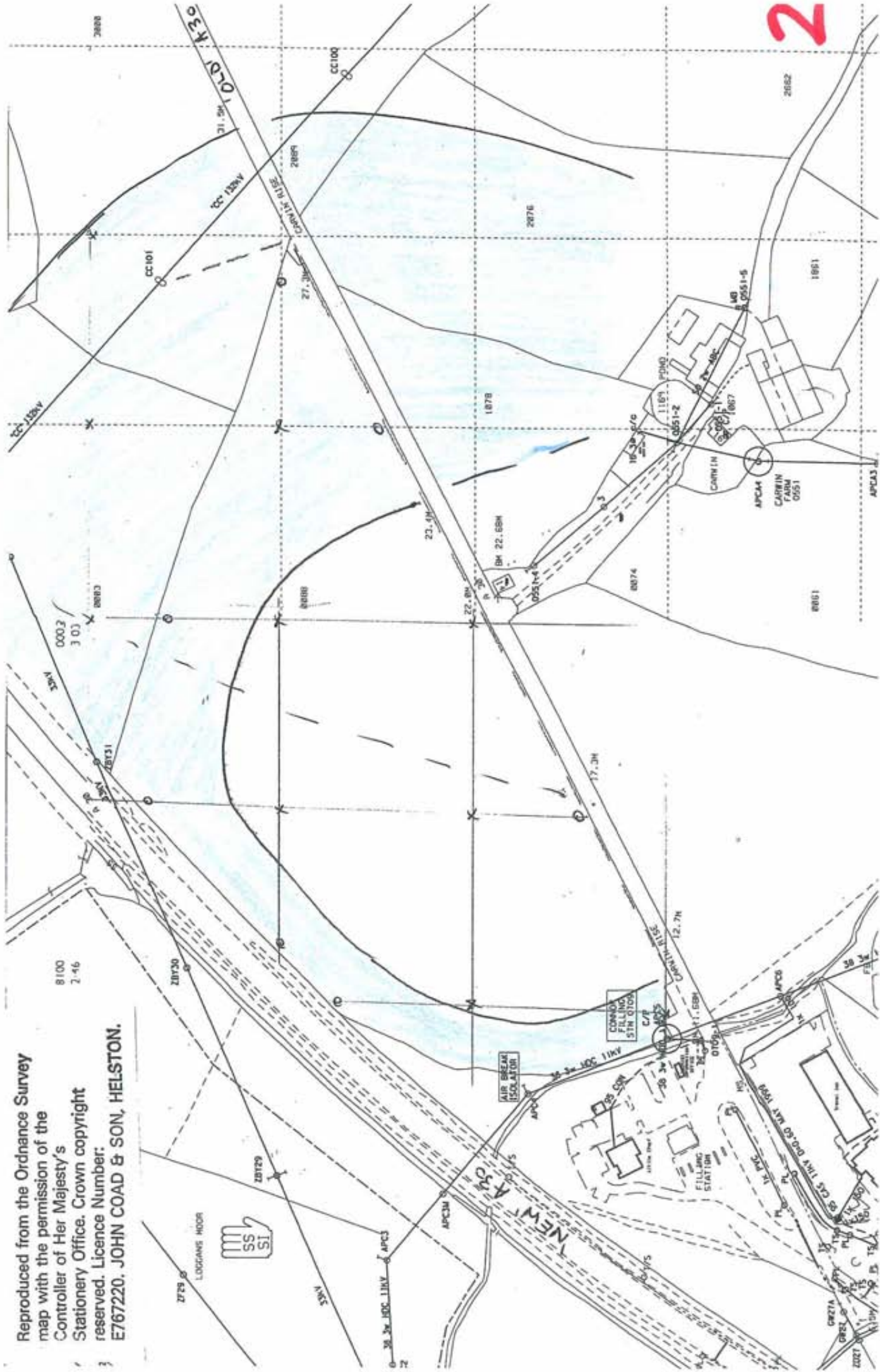


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**LAND AT CARWIN - LAND CLASSIFICATION. CLAY SOIL**

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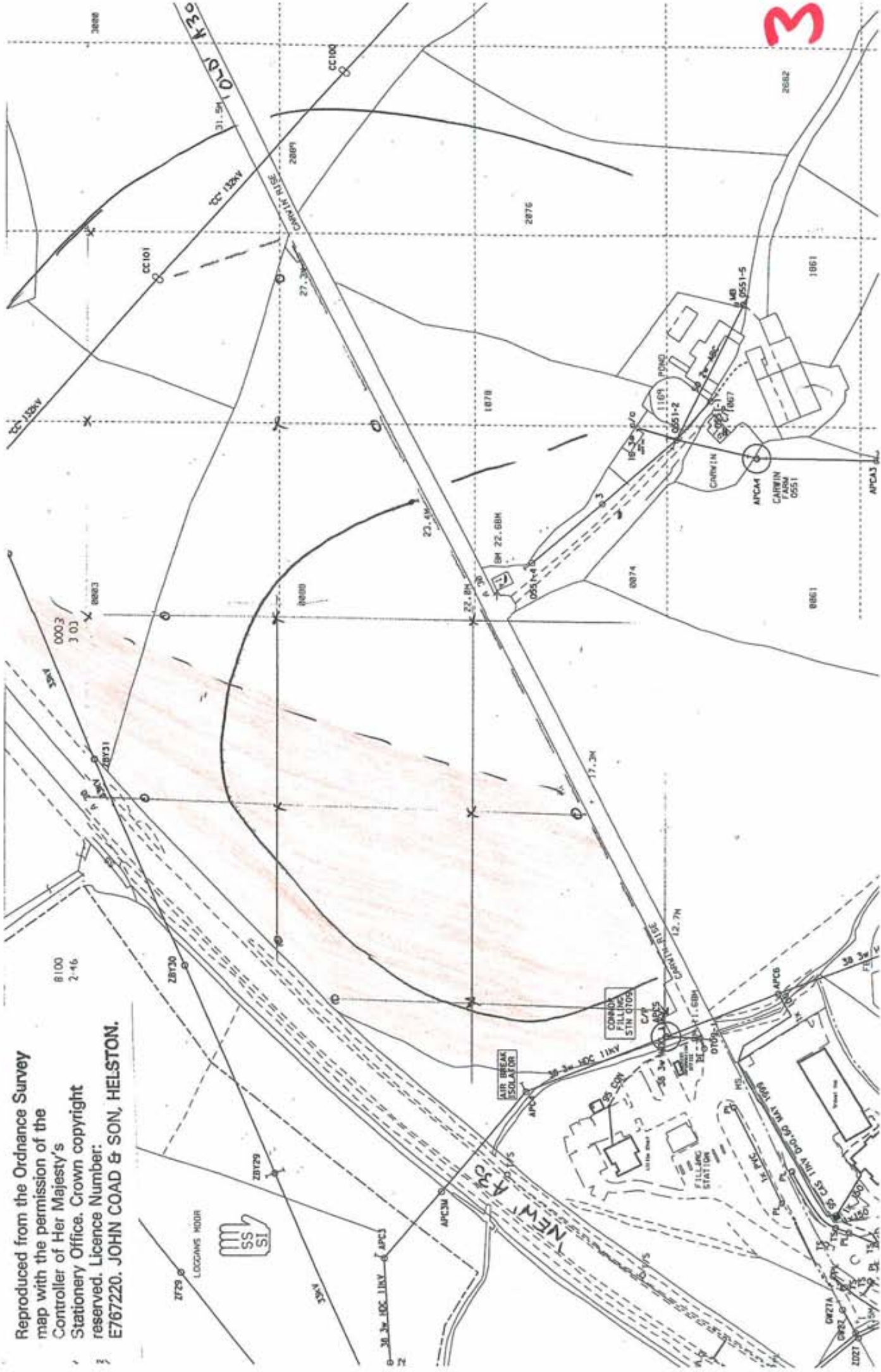


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**LAND AT CARWIN - LAND CLASSIFICATION. Frost Susceptible**

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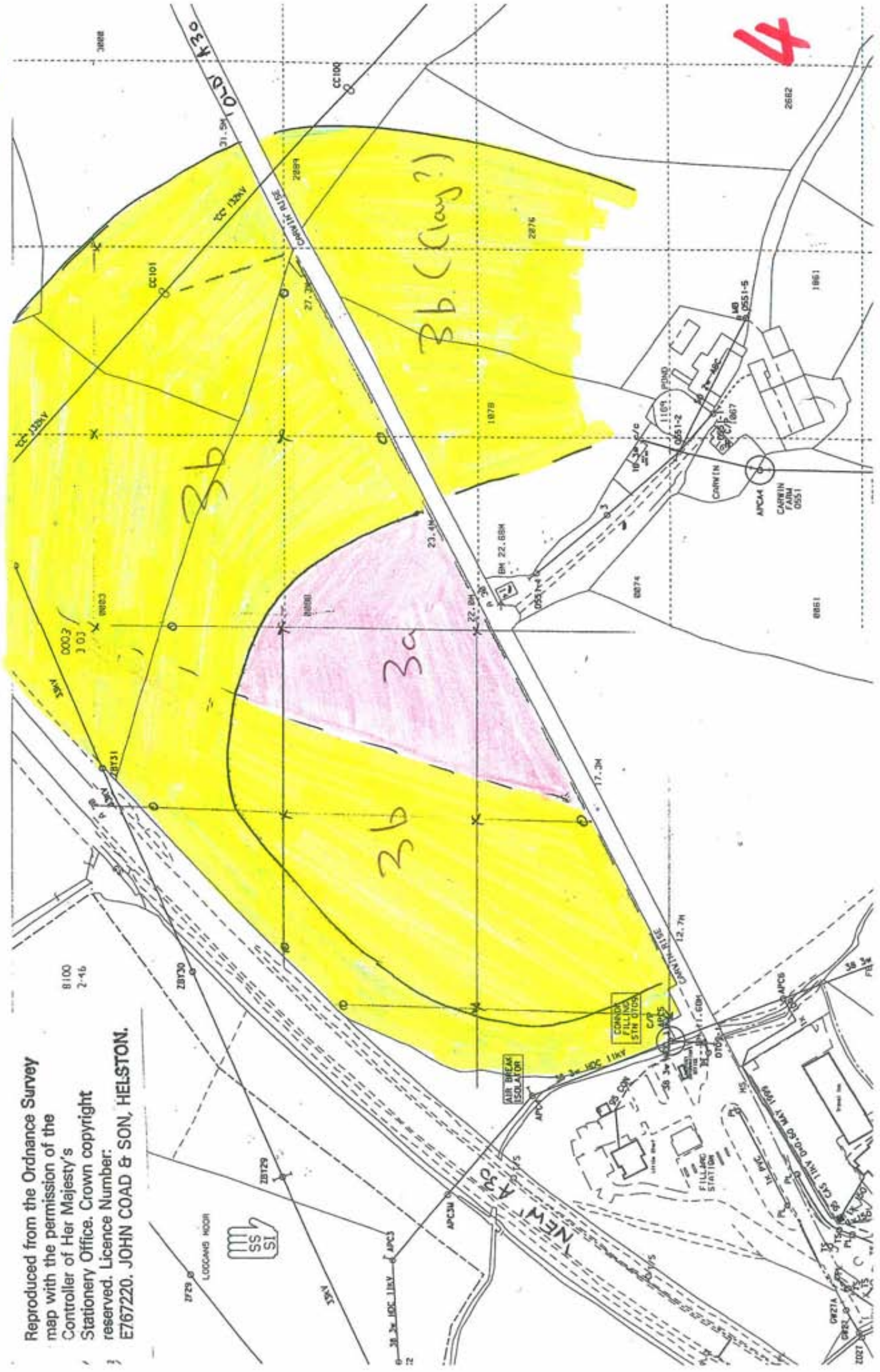




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**LAND AT CARWIN - LAND CLASSIFICATION. GRADES 3a-3b.**

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