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Preliminary Building Assessment – Bats



West Cumberland Infirmary Buildings 1 & 2

Prepared for North Cumbria University Hospitals NHS Trust

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Quality Assurance

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The information, results and observations recorded within this document were accurate at the time of survey. We accept no liability for any errors or activities and changes to the survey area which may have occurred post survey.

S.A.P Ecology & Environmental Ltd will submit any records of protected species to the appropriate biological records centre on an annual basis.

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1. Executive Summary

1.1 Survey summary

S.A.P Ecology & Environmental Ltd were contacted by CCL Solutions on behalf of North Cumbria University Hospitals NHS Trust. The Trust are in the process of restructuring West Cumberland Infirmary, current plans include the demolition of several buildings including building 1 and 2 as detailed in this report.

S.A.P. Ecology and Environmental Ltd were commissioned to undertake a preliminary building assessment of buildings 1 and 2, to assess their suitability to support roosting bats.

A desk study was carried out which did not highlight any records of bats within 1km of buildings 1 and 2.

The preliminary building assessment was completed out on 1st August 2019. Building 1 recorded a number of features such as gaps in lead flashing, in door frames, in soffit boxes and in window frames. Building 2 recorded a number of features such as gaps in soffit boxes, fascia boards, missing mortar, gaps at wallheads and under windowsills. A single bat dropping was recorded beneath a windowsill on building 2.



Prior to any works being carried out, one presence/absence survey for bats should be undertaken on building 1, and two presence/absence surveys on building 2 to determine if bats are currently using any of the features to roost. These surveys should be carried out during the bat activity season, May – September inclusive, and take the form of either a dusk emergence, or a dawn return to roost survey for building 1 and one dusk emergence and one dawn return to roost survey for building 2.

If bats are confirmed to be using buildings 1 or 2, the information gathered will be used to produce a species protection plan and to design appropriate mitigation and compensation measures. A European Protected Species Licence will then need to be attained from Natural England.

The recommended surveys will ensure that the development is compliant with legislation and planning policy relating to bats.

1.2 Recommendations

The following recommendations are in line with good practice guidelines:

-  **Building 1:** This building has been assigned a low level of suitability; therefore, one presence/likely absence survey should be carried out to confirm if any of the features highlighted during the preliminary inspection are being used by bats. This should take the form of one dusk emergence or one dawn return to roost survey and be undertaken during the months of May – September, inclusive;
-  **Building 2:** This building has been assigned a moderate level of suitability; therefore, two presence/likely absence survey should be carried out to confirm if any of the features highlighted during the preliminary inspection are being used by bats. This should take the form of one dusk emergence and one dawn return to roost survey and be undertaken during the months of May – September, inclusive;

2. Introduction

2.1 Project background

S.A.P Ecology & Environmental Ltd were contacted by CCL Solutions, on behalf of North Cumbria University Hospitals NHS Trust (hereafter referred to as 'the Trust'). The Trust propose to carry out a number of phased building demolitions at the West Cumberland Infirmary in Whitehaven. S.A.P Ecology & Environmental Ltd were commissioned to undertake bat preliminary building assessments on seven buildings located at West Cumberland Infirmary, to assess their suitability to support roosting bats. This report relates to two of the buildings, buildings 1 and 2.

The West Cumberland Infirmary is located in Hensingham, Whitehaven, directly off Homewood Road. Building 1 is located at grid reference NX 98951 15876 and building 2 is located at grid reference NX 98935 15863. The buildings are situated in an urban environment, with several residential buildings in the immediate vicinity. The surrounding area is comprised of amenity grassland, with small areas of broadleaved woodlands.

The River Keekle and one of its tributaries are located within 1.6km to the east and Bellhouse Gill approximately 650 metres to the south. Four small ponds are located within 1.2km.

2.2 Project brief

S.A.P Ecology & Environmental Ltd were commissioned in August 2019, to carry out a preliminary building assessment of buildings 1 and 2. The brief was to:

- ✪ Conduct a preliminary building assessment of buildings 1 and 2. The survey would include a thorough external, and where possible internal inspection of the buildings;
- ✪ To record all potential access and egress locations along with any evidence of roosting bats, or bats themselves;
- ✪ Assign each building an appropriate level of suitability to support roosting bats;
- ✪ Produce a detailed report of the preliminary building assessment of buildings 1 and 2, outlining relevant methodologies, results and any legal and planning policy issues and our recommendations for how these may be overcome;
- ✪ The report is to be supported by appropriate digitised mapping.

3. Methodology

3.1 Desk Study

Biological records were purchased from the Cumbria Biodiversity Data Centre (CBDC) for records of all protected species and species of conservation concern within 1km of buildings 1 and 2. In addition, NBN Atlas (2017) and the S.A.P Ecology protected species database were checked for known roosts. These were then compared with the Cumbria Local Biodiversity Action Plan.







3.2 Preliminary Building Assessment

The Preliminary Building Assessment (PBA) was undertaken during daytime hours of Thursday 1st August 2019. The assessment comprised of an external building inspection of buildings 1 and 2 to assess each buildings suitability to support roosting bats. The surveys were carried out with the aid of high-powered binoculars, a high-powered torch and an endoscope (Rigid CA100) to ensure that all accessible features could be adequately assessed.

All surveys were conducted in line with the BCT Good Practice Guidelines, 3rd edition (Collins, 2016).

External Inspection

A thorough external inspection was carried out on building 1 and 2 to look for any signs of past or current use by roosting bats. As evidence of bats is not always easy to find on the external of a building, due to adverse and changing weather conditions, the inspection also recorded areas which may have the potential to support roosting bats. Specific attention was given to:

-  Any gaps in brickwork and stonework and their internal structure;
-  Windowsills and panes and the floor underneath;
-  Walls and lifted paintwork;
-  Gaps at the wallheads;
-  Gaps in soffit boxes;
-  Gaps under felt roof.

Any areas which offered bat roosting potential were recorded and mapped to ensure adequate coverage for any required activity surveys.

3.3 Surveyors

The preliminary building assessment was undertaken on Thursday 1st August 2019 by Stephen Parkin, BSc (Hons), NE bat licence number 2016-23679-CLS-CLS and Shannon Clifford, BSc (Hons), assistant ecologist.

3.4 Limitations

The survey was undertaken at the correct time of year for this type of survey.

Access could not be gained into the internal of buildings 1 and 2, however as the majority of the 'roof' was flat, this is not considered to have a significant impact on the results.

4. Results

4.1 Desk Study

The desk study highlighted no records of any UK bat species within 1km of buildings 1 and 2. The surrounding habitat is suitable to support a number of UK bat species.

4.2 Preliminary Building Assessment

Building 1

Building 1 is comprised of a two-storey section with a pitched felt roof and soffit boxes, and single-storey section with a flat roof. Both sections are brick wall construction (plate 1 & 2).



Plate 1: Building one (S aspect).



Plate 2: Building one (NW aspect).

External

Several potential roosting features were recorded on the external of building one which included gaps under lead flashing (plate 3), gaps around door frames (plate 4), gaps in soffit boxes (plate 5) and in window frames.



Plate 3: Lifted lead flashing.



Plate 4: Gap in door frame.



Plate 5: Gaps in soffit box.

Building 1 has been assigned a low level of suitability to support roosting bats.

Internal access could not be gained therefore only an external inspection was carried out.

Building 2

Building 2 consists of two residential units adjoined by a single storey garage with a flat roof (plate 6). The two-storey sections are comprised of brick, rough-cast render and flat felt roof construction (plate 7). The building has both wooden and plastic soffit boxes.



Plate 6: Building 2 (NW aspect).



Plate 7: Building 2 (S aspect).

External

A number of features including gaps in soffit boxes (plate 8), fascia boards (plate 9), missing mortar (plate 10), gaps at wallheads (plate 11) and under windowsills were recorded.

A single bat dropping was located beneath a windowsill on the north-eastern aspect of the property.



Plate 8: Gap in soffit box.



Plate 9: Gap in fascia board.



Plate 10: Missing mortar.



Plate 11: Gap at wallhead.

Due to the features present on this property and the presence of a bat dropping, this property has been assigned a moderate level of suitability to support roosting bats.

5. Discussion & relevant legislation

5.1 Preliminary Building Assessment Summary

The surrounding area is comprised of amenity grassland and small areas of broadleaved woodlands. A number of watercourses and waterbodies are located within 1.6km of the buildings. The presence of watercourses, woodlands and grassland in the surrounding area provides good roosting and foraging habitat for a number of UK bat species.







Building 1 recorded multiple features suitable for roosting by bats. When considered in conjunction with the surrounding environment, building 1 has been assigned a low level of suitability to support roosting bats.

Building 2 recorded multiple features suitable for roosting by bats. The presence of one bat dropping highlights that the building may be used by bats. The location and exposed location of the dropping suggests that it was likely to have been deposited by a bat roosting opportunistically. When considered in conjunction with the surrounding environment, building 2 has been assigned a moderate level of suitability to support roosting bats.

5.2 Appropriate legislation

Bats

All bat species in the UK are protected from killing, injury and roost disturbance by both national and international law, in the form of the Wildlife and Countryside act (1981) as amended. In England, bats are also protected under The Conservation (Natural Habitats &) (Amendment) Regulations 2007. The legislation that is in place makes it an offence to:

-  Intentionally capture, injure or kill a bat;
-  Intentionally disturb a bat which will likely:
 - Impair its ability to survive, breed, reproduce or rear its young;
 - Impair its ability to hibernate or migrate, or;
 - Affect the local distribution or abundance of the species.
-  Intentionally or recklessly disturb a bat roost;
-  Intentionally or recklessly obstruct access to a roost;
-  Damage or destroy a resting place or breeding site;
-  Keep, transport, sell or exchange any life or dead bat or part of.

Bats tend to re-use the same roosts year after year and therefore a roost is protected whether bats are present or not.

6. Potential Ecological Issues, Impact Assessment & Recommendations

6.1 Bats

Building 1 has been assigned a low level of suitability and building 2 has been assigned a moderate level of suitability.

6.2 Impact Assessment & Recommendations

Considering the results of the preliminary building assessment, the proposed demolition of buildings 1 and 2 could have a negative impact on bats due to the suitable roosting features identified during the external survey of the buildings. Therefore, further bat surveys are required.

It is recommended that a minimum of **one** activity survey should be carried out during the 2019 bat activity season (May - September inclusive) on building 1 to confirm whether bats are using any of the features highlighted to roost. This survey will take the form of one dusk emergence or one dawn return to roost survey.

It is recommended that a minimum of **two** activity surveys should be carried out during the 2019 bat activity season (May - September inclusive) on building 2 to confirm whether bats are using any of the features highlighted to roost. This survey will take the form of one dusk emergence and one dawn return to roost survey.

Depending upon the results of the further surveys recommended, a European Protected Species Licence (EPSL) may need to be attained from Natural England for works to continue legally. The further survey recommended will help to provide a full rounded assessment of buildings 1 and 2, to support and inform a licence application and species protection plan, if necessary.

7. Conclusion

Recommendations have been made for further bat survey of buildings 1 and 2, which will help to provide an accurate assessment of any potential impact to bats.

Subject to the recommendations for further survey being followed, and any post survey mitigation licence being attained (if required) the development should be compliant with relevant legislation and planning policy regarding bats in buildings 1 and 2.

8. References

- Collins, J (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edition). The Bat Conservation Trust, London.
- Mitchell-Jones, A.J. (2004) *Bat Mitigation Guidelines*. English Nature, Peterborough.
- Mitchell-Jones, A.J. & McLeish, A.P. (2004) *Bat Workers Manual* (3rd Edition). Joint Nature Conservancy Committee, Peterborough.
- NBN Atlas Partnership. 2017. *NBN Atlas*. [ONLINE] Available at: <https://nbnatlas.org/> [Accessed 28th August 2019].
- SAP Ecology & Environment (2019). Bat roost database, SAP Ecology & Environmental Ltd, Eaglesfield.



Figure 1: Site Location

Legend

■ Survey Site

Date: 13/09/2019

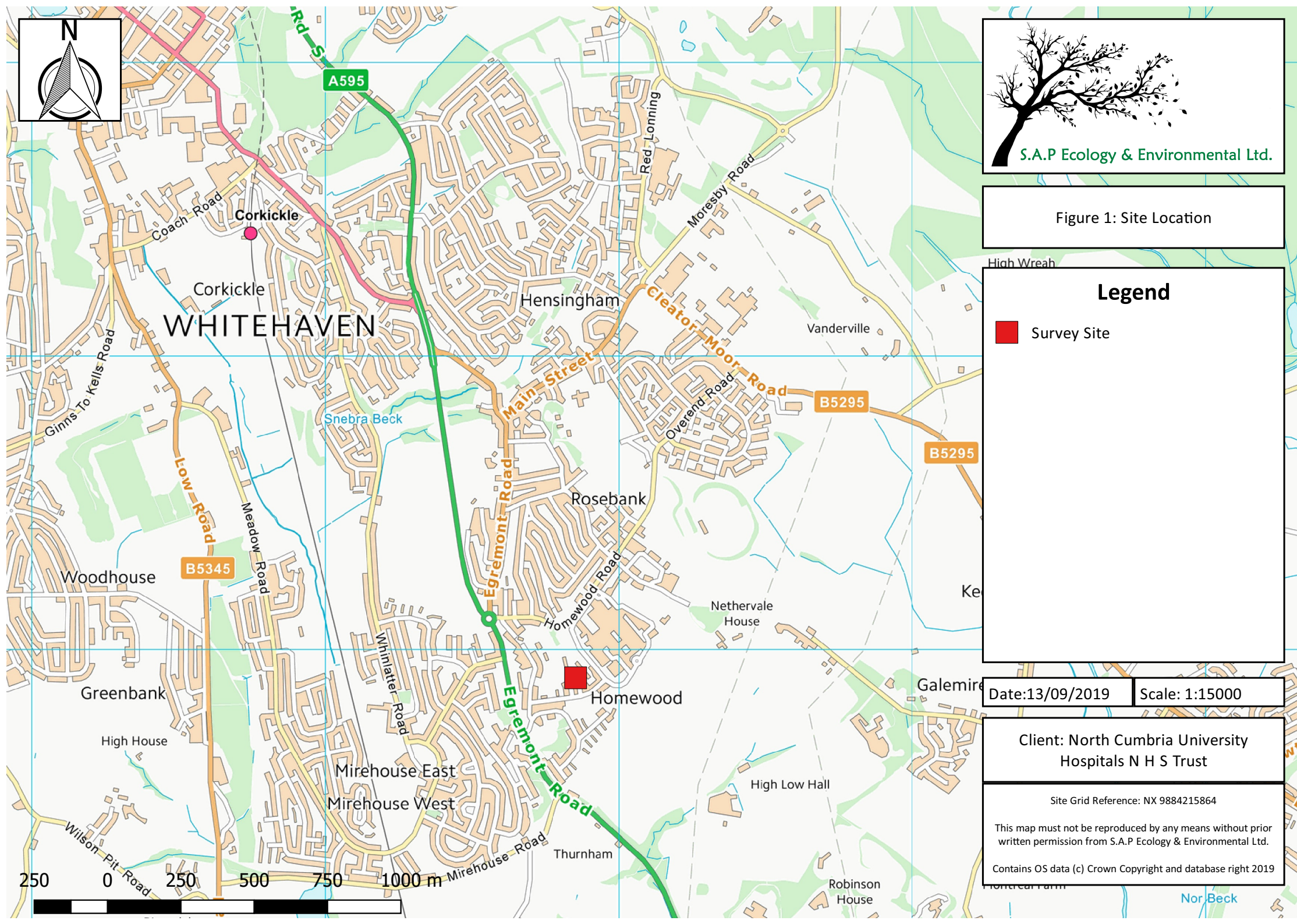
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Client: North Cumbria University
Hospitals N H S Trust

Site Grid Reference: NX 9884215864

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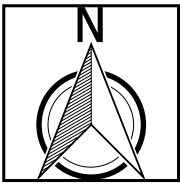


Figure 2: External Survey Results
(Buildings 1 & 2)

Legend

Property Boundaries

- Building 1
- Building 2

Roof Details

- Roof Ridge
- Roof Edge
- Chimney

External Survey Results

- Gap at wallhead
- Missing mortar
- Gap in door lintel
- Gap in soffit box
- Gap in window frame
- Gap under lead flashing
- Gap in fascia board
- Bat dropping

Date: 14/11/2019

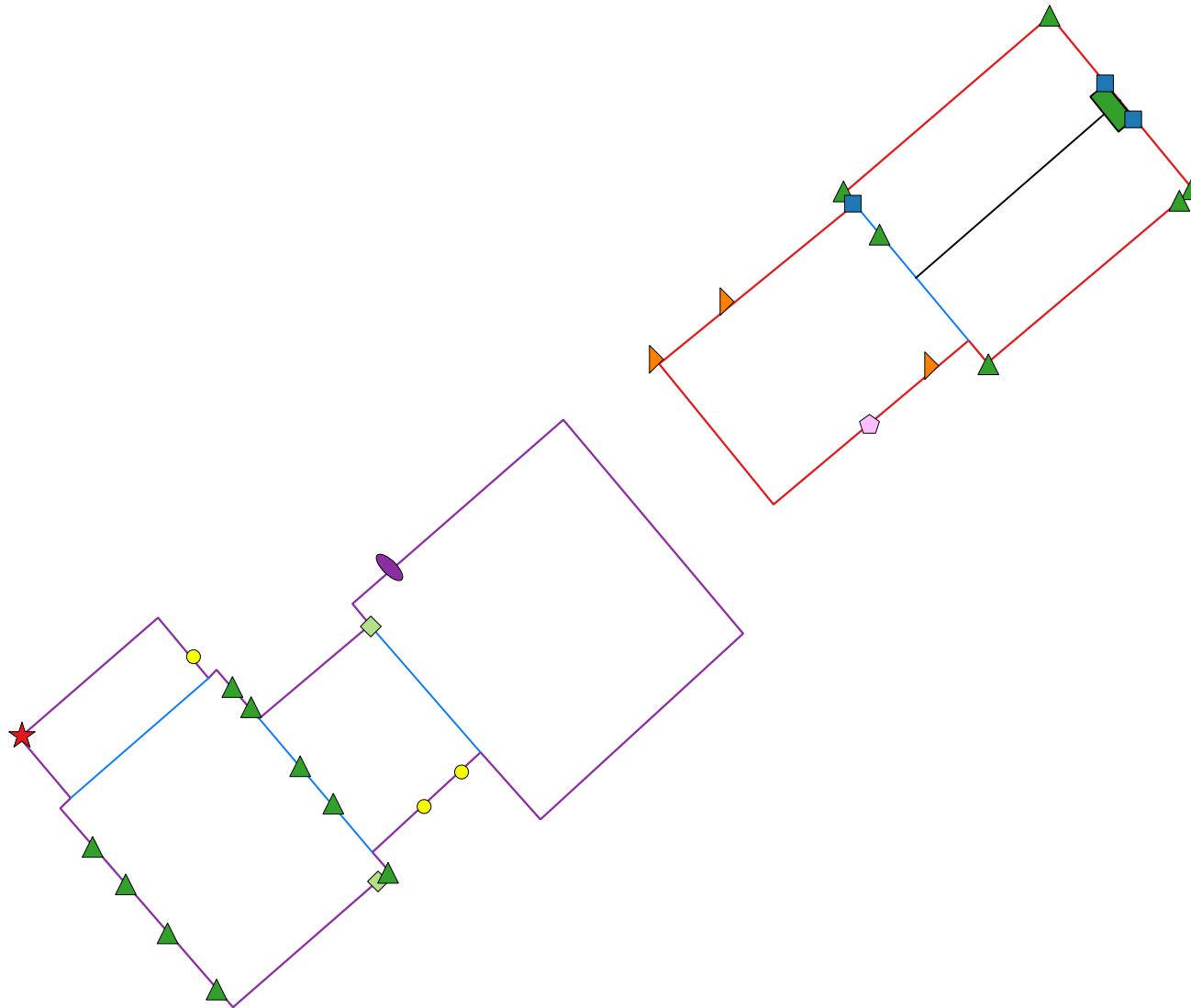
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Client: North Cumbria University
Hospitals NHS Trust

Site Grid Reference: NX98943 15869

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