APPENDIX 3: FIELD SURVEY METHODOLOGY

Extended Phase 1 Habitat Survey

The Phase 1 Habitat Map is shown in Appendix 1.

The Phase 1 Habitat Survey methodology[19] was used to classify the Application Site into habitat types, as listed in the Phase 1 Manual. Where appropriate, dominant species codes within habitat types were recorded. Descriptive target notes were used for particular areas of interest.

Incidental records of fauna were made during the Phase 1 Habitat survey and the habitats identified were evaluated for their potential to support legally protected species and species of Principal Importance.

Limitations

There were no limitations associated with the Extended Phase 1 Habitat Survey.

Badger field signs survey

A badger field signs survey was carried out during the Phase 1 survey. Badger field signs surveys comprised walking the perimeter and interior boundaries of the Site, searching for evidence of badgers, in accordance with Harris et al[20] (1989) and Scottish Natural Heritage[21] (2018).

Limitations

There were no limitations associated with the badger field signs survey.

Preliminary Bat Roost Assessment

A Preliminary Roost Assessment (PRA) was carried out[22]. This is an external and internal inspection survey, the purpose of which is to search for bats/evidence of bats and assess the likelihood of bats being present and the need for further survey and/or mitigation.

The following equipment was used for the bat survey:

- Binoculars
- Powerful torch to illuminate dark corners from the ground

[19] JNCC, (2010), *Handbook for Phase 1 habitat survey - a technique for environmental audit.* JNCC, Peterborough.
[20] [redacted] (1989). *Surveying Badgers*. Mammal Society.
[21] Scottish Badgers (2018). *Surveying for Badgers: Good Practice Guidelines*. Version 1.
[22] Collins J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn)*. The Bat Conservation Trust, London.

- Ladder
- Collection pots and labels for corpses and droppings;
- Camera to record evidence and potential roosting sites; and
- Personal protective equipment (e.g. boots, gloves, helmet, mobile telephone).

The trees were searched for bats/evidence of bats and assessed for their potential to support roosting bats. The evidence of roosting bats searched for is detailed above with regard to buildings (e.g. bat droppings and feeding remains). The features of bats were searched for on the trees with reference to the three broad categories of Potential Roost Features (PRFs) and sub-categories of PRFs from the Bat Tree Habitat Key[23]. These are as follows:

- Disease and decay PRFs:
    - Woodpecker and squirrel holes;
    - Knot holes;
    - Pruning-cuts;
    - Tear outs;
    - Compression forks;
    - Wounds;
    - Cankers; and
    - Butt rots.
- Association PRFs:
    - Fluting; and
    - Ivy.
- Damage PRFs:
    - Hazard beams;

[23] Bat Tree Habitat Key 2018. *Bat Roosts in Trees – A Guide to Identification and Assessment for Tree-care and Ecology professionals*. Exeter: Pelagic Publishing.

- Frost cracks;
- Subsidence/shearing and helical splits;
- Lightning strikes;
- Desiccation fissures;
- Transverse snaps;
- Welds; and
- Lifting bark.

Limitations

There were no limitations to the Preliminary Roost Assessment.

Bird nesting

Evidence of nesting birds recorded during the PRA and any incidental bird observations/birds heard were noted.