

## **APPENDIX A8.1: SPECIES PROTECTION PLAN - OTTERS**

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## SPECIES PROTECTION PLAN - OTTERS

### 8.1 Introduction

#### **Background**

8.1.1 Consent for the Gordonbush Extension Wind Farm was granted in September 2017 for a 15 Turbine Wind Farm with an approximate generation capacity of 52.5 MW.

8.1.2 A section 36C application to vary the consent for the development (the Proposed Varied Development) was submitted in January 2019, allowing for a reduction in turbine numbers from fifteen to eleven, whilst increasing the tip height of the remaining turbines to 149.9m, and the rotor diameter to up to 136m. As part of pre-application discussions (see Appendix 6.1: Pre-Application Advice Pack of the EIA Report (January 2019), Scottish Natural Heritage (SNH) advised that:

*“We note that previous otter surveys (2010 & 2013) show differences in how otters use the development area and water courses adjacent to it. The most recent survey work (2013) shows an active otter holt approximately 200m from what will be turbine 37. In addition, there are five otter holts within 200m from the proposed works compound, the nearest being c. 75m.*

*The impacts of this development should be assessed against the [Caithness and Sutherland Peatland] SAC as part of a Habitat Regulations Appraisal...*

*“A Species Protection Plan will be required within the EIA Report to ensure that this development can be taken forward with SAC otters living alongside. We also recommend that otter surveys within and adjacent to the development boundary should be updated to inform an appropriate mitigation plan...”*

8.1.3 Subsequent to the submission of the EIA Report (January 2019), further variations to the project are proposed. These changes, forming the Proposed Varied Development (Addendum), include (see Figure A1.4):

- Relocation of T4 by 113m to grid reference NC 85796 13484, and renaming to T4b;
- Construction of an additional c.300m section of access track between the proposed Lidar station and T12;
- Removal of borrow pit search area (2) from beside T4;
- Creation of new a new borrow pit search area (3) in the Bullburn plantation to the west of the Allt a' Mhuilinn;
- Construction of a temporary water crossing on the Allt a' Mhuilinn to access borrow pit search area (3); and
- Relocation of the concrete batching plant.

8.1.4 Figure A4.1 of this Addendum provides an overview of the revised Proposed Varied Development (Addendum).

8.1.5 In their consultation response letter to the EIA Report (January 2019) for the Proposed Varied Development (06 March 2019), SNH advised that in order for likely significant effects on otter, and hence adverse effects on the integrity of the Caithness and Sutherland Peatlands SAC, to be avoided the otter holt identified on the Allt a' Mhuilinn should be monitored with remote cameras to ensure that construction of the access track for Turbine 8 does not affect females otters and/or dependent cubs. This recommendation has therefore been incorporated into the wider package of mitigation measures prescribed herein.



## Document Aims

8.1.6 The aims of this document in meeting the requirements of SNH are to:

- summarise the results of otter surveys completed for the development to date;
- set out actions which should be implemented to safeguard otters during the construction of the Proposed Varied Development (Addendum); and
- outline monitoring which should be implemented to ensure that the local otter population and their use of the watercourses associated with the Proposed Varied Development (Addendum) and surrounding area are not detrimentally affected.

## 8.2 Otter Survey Results

8.2.1 Table 8.1 provides the otter survey results from assessments completed of the proposed wind farm development area and surrounding suitable habitats. Surveys were completed in 2013, 2018 and 2019. Monitoring methods are described in detail in the relevant sections of the 2015 ES, the EIA Report (January 2019) for the Proposed Varied Development, and Chapter 8 of this Addendum for the Proposed Varied Development (Addendum). Figures A8.2 and A8.3 provide the results of the 2013 and 2018 surveys, respectively.

**Table 8.1 – Summary of otter survey results from 2013, 2018 and 2019**

| Sign Number                | Species Sign    | Easting | Northing | Brief Description  |
|----------------------------|-----------------|---------|----------|--|
| <b>2013 Survey Results</b> |                 |         |          |  |
| 1                          | Holt            | 2843    | 9138     | 4 entrances, 2 with chambers and fresh spraint at entrance and inside.   |
| 2                          | Spraint         | 2838    | 9133     | 30m south of nearby Beauly to Dounreay tower.  |
| 3                          | Spraint         | 2845    | 9139     | On tussock in the Allt nan Nathraichean burn where small burn joins from south   |
| 4                          | Potential Couch | 2847    | 9140     | Alongside the Allt nan Nathraichean burn, north side   |
| 5                          | Spraints        | 2833    | 9127     | 3 spraints on rock by old hut circle.  |
| 6                          | Prints          | 2833    | 9127     | Otter prints in sand.  |
| 7                          | Spraint         | 2835    | 9131     | Spraint on rock beside Allt a' Mhuilinn.   |
| 8                          | Couch           | 2839    | 9137     | Fresh and old spraints under overhanging rock by stream 50m west of Beauly- Dounreay tower.  |
| 9                          | Couch           | 2842    | 9149     | Couch in rock by Allt a' Mhuilinn bank.  |
| 10                         | Couch           | 2839    | 9139     | Couch under bridge 80m from tower.   |
| 11                         | Potential couch | 2851    | 9118     | Potential couch under rock.  |
| 12                         | Spraints        | 2851    | 9122     | Spraint on rock beside Allt Smeorail.  |
| 13                         | Potential couch | 2851    | 9124     | Potential couch under tree.  |
| 14                         | Spraints        | 2843    | 9138     | Spraints on rock.  |
| <b>2018 Survey Results</b> |                 |         |          |  |
| 1                          | Spraint         | 2843    | 9138     | Very old and grey spraint on rock on east bank.  |
| 2                          | Holt            | 2843    | 9138     | Holt between boulders on west bank of burn covered in heather and moss. Old spraint inside. Chamber extends 1m into rockface with some bedding material at the back. |
| 3                          | Spraint         | 2833    | 9127     | Two old spraints on rock on west bank.   |
| 4                          | Spraint         | 2835    | 9134     | Old spraint on rock on west bank.  |
| 5                          | Spraint         | 2844    | 9142     | Old spraint on rock on west bank.  |
| 6                          | Spraint         | 2841    | 9147     | Recent spraint on moss tussock on west bank.   |
| 7                          | Spraint         | 2833    | 9126     | 1 fresh spraint and 1 recent spraint on rock on east bank.   |
| 8                          | Couch           | 2837    | 9135     | 1 couch under the roots of an over turned silver birch tree 1m from water's edge on east bank  |



| Sign Number                | Species Sign | Easting | Northing | Brief Description  |
|----------------------------|--------------|---------|----------|--|
| 9                          | Spraint      | 2837    | 9135     | 5 old spraints on rocks inside couch under overturned silver birch roots. 1m from river's edge on east bank  |
| 10                         | Couch        | 2839    | 9137     | Couch on rock overhang on east bank half a meter from water's edge   |
| 11                         | Spraint      | 2839    | 9137     | 4 old spraints in couch in rock overhang on east bank half a meter from the water's edge   |
| 12                         | Couch        | 2839    | 9139     | Couch on north bank under old timber bridge.   |
| 13                         | Spraint      | 2839    | 9139     | 5 old spraints on north bank under an old timber bridge. On south bank under the bridge there were 3 old and 1 slightly more recent spraints.  |
| 14                         | Spraint      | 2840    | 9141     | Old spraint on west bank outside an active badger sett which is possibly used by the otters. However 2 prints were found (possibly badger) and badger hair was found at the entrance to the sett.  |
| 15                         | Couch        | 2842    | 9149     | Small cave on east bank 1m from water's edge. Cave covered with overhanging heather but is quite open.   |
| 16                         | Spraint      | 2842    | 9149     | 3 old spraints found on rocks in a couch on east bank 1m from water's edge   |
| 17                         | Slide        | 2824    | 9107     | Half a metre from water's edge on east bank. Half dug hole with slide into water, within 1m there was another half dug hole with an active wasps nest inside along with salmon eggs. Grass in area was well trodden with paths into surrounding grass. |
| 18                         | Spraint      | 2824    | 9107     | Fresh spraint at the top of the slide in TN 17 above entrance to half dug hole.  |
| 19                         | Spraint      | 2824    | 9106     | Recent spraint on small moss mound on a mammal paths that follow the line of grass up the watercourse.   |
| <b>2019 Survey Results</b> |              |         |          |  |
| 20                         | Spraint      | 2842    | 9139     | Recent spraint on a boulder in the Allt non Nathraichean   |
| <b>Notes:</b>              |              |         |          |  |

8.2.2 As shown in Table 8.1 and Figures A8.2 and A8.3, otter utilisation of the area was similar between survey years. Otter were found to consistently use the Allt a' Mhuilinn and to a lesser extent its associated tributaries. However, the Allt Smeorail to the east of the Proposed Varied Development (Addendum) boundary showed limited evidence of otter use. This is likely due to the steep, gorge-like initial reaches of the burn from Loch Brora inhibiting otter access to the higher ground. Sprainting, couches and holts were found during both survey years.

8.2.3 As discussed in Chapter A8 of the EIA Report Addendum, additional surveys have been completed in April and May 2019 of the otter holt on the Allt a' Mhuilinn and the surrounding watercourses within 150m of this structure. Camera trapping of the holt was completed between 17 and 24 May 2019 with no otters recorded. Surveys of the watercourses completed on 25 April and 17 May found only a single spraint.

### 8.3 Species Protection Protocol

#### *Construction Specific Protection*

8.3.1 Table A8.1 details the historical use of the site and surrounding watercourses by otters as collated through surveys for the proposed wind farm development. Use of the site appears to be limited to the western boundary on the Allt a' Mhuilinn and its associated tributaries; however, prior to construction works commencing a pre-construction survey should be undertaken of any



watercourse falling within 250m of the development's footprint to ensure a current baseline of otter utilisation is known. Surveys will search for indicative signs as described in Bang and Dahlstrøm (2001)<sup>1</sup> and SNH (2008)<sup>2</sup> and will be undertaken in appropriate weather conditions and as close to the commencement of construction as possible, but no greater than eight months preceding commencement of works.

8.3.2 In addition to the pre-construction surveys, the following guidelines should be complied with throughout the construction phase of the wind farm to ensure impacts to otters and their habitats are limited:

- An Ecological Clerk of Works (ECoW) should be present on site to oversee enabling works and construction and contribute to all relevant construction method statements as required by Condition 24: Ecological Clerk of Work, for the Consented Development. They should be a suitably experienced individual, whose role would ensure works are carried out in accordance with the Construction Environmental Management Plan (CEMP) produced for the development, ensuring compliance with international and national legislation and planning conditions. Once works are underway, the ECoW would work full time on site providing ecological and pollution control advice and supervision for all relevant mitigation measures;
- No work should be carried out within 30m of any otter shelter or 200m of any breeding holt, except under license from SNH. Should a licence be required for any works, the ECoW will be responsible for ensuring compliance with any licensing conditions;
- The Allt a'Mhuillin otter holt should be monitored with remote cameras (under licence) to ensure that construction of the access track for Turbine 8 does not coincide with a female otter having dependant cubs (i.e. <10 months old);
- No works resulting in large scale noise or vibration such as pile driving or blasting should be undertaken within 100m of any otter shelter, unless under license from SNH;
- Any excavations, including trenches and trial pits more than 0.5m deep will be covered in the evening to prevent animals falling in. Where pits and trenches cannot be closed or filled on a nightly basis, ensure that a plank is placed into the excavation so an animal can use this as a means of escape if necessary;
- Any open pipes, whether installed or being stored, should be closed to prevent any animals entering and becoming trapped;
- Any new or upgraded bridges or culverts within the site boundary which cross watercourses suitable for use by otters for commuting or forage will include suitable ledges to ensure free passage to otters during periods of high water-flow in line with the Scottish Environment Protection Agency (SEPA) Best Practice Guidelines (2010)<sup>3</sup>. The requirement for suitable ledges will be determined by the onsite Ecological Clerk of Works;
- Ensure all rubbish and materials will be collected and removed from site on a regular basis to prevent trapping or injury of any wildlife;
- In the unlikely event of discovering any evidence suggesting otter presence within the footprint of the works, work must stop immediately and the ECoW should be contacted for advice on how to proceed;

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<sup>1</sup> Bang, P. Dahlstrøm, P. (2001) – Animal Tracks and Signs. Oxford University Press. Oxford.

<sup>2</sup> Scottish Natural Heritage (2008) – Scottish Wildlife Series: Otters and Development. SNH. Inverness.

<sup>3</sup> Scottish Environmental Protection Agency (2010) – Engineering in the Water Environment: Good Practice Guide – River Crossings. Second Edition



- Speed restrictions on site should be kept to a maximum of 15mph for all vehicles. This should be reduced to 10mph within 25m either side of any watercourse crossings or mammal paths identified by the ECoW as likely to be used by otters;
- The following works will finish one hour before dusk and commence one hour after dawn to ensure minimum disturbance during otter's main activity times;
  - construction/upgrade of the Allt a'Mhuillinn crossing associated with the access track to the Bullburn Borrow Pit; and
  - works within 100m of any confirmed otter shelter.
- Elsewhere on site, night working should be avoided wherever possible. Where this is not possible, lighting should be focussed on the works area(s) and directed away from watercourses and areas of potential otter foraging. Lighting should be kept to an absolute minimum within 100m from any identified otter shelter;
- Toolbox talks on otters should be given to all construction staff on site and an emergency procedure protocol given to contractors in the event of encountering an otter or discovering a new shelter. If a new otter shelter is found within 30m of the construction footprint, micro-siting away from this area or an application to SNH will be required;
- All otter shelters within the site boundary will have a clearly demarcated 30m protection zone surrounding them which will be deemed to be out of bounds to all site personnel. Toolbox talks given during site inductions will clearly highlight these areas to ensure all personnel are aware of these restricted areas. Vegetation will not be cleared from these areas without consultation and appropriate licensing from SNH; and
- In the unlikely event of an otter being injured or killed, or shelters damaged, the ECoW will be contacted immediately. They will attend the site and make a written and photographic record. This will record the time, location, personnel involved, and the details of the incident. This information will be supplied within 24 hours to SNH and the developer.

8.3.3 In addition to the above protection measures, commitments have been made to safeguard otter populations and their associated environmental receptors such as watercourses and areas used for foraging and commuting during the construction, operational and decommissioning phases of the wind farm.

8.3.4 A water quality monitoring plan has been produced in consultation with the Scottish Environment Protection Agency (SEPA) as part of the wider remit of the wind farm's Construction Environmental Management Plan (CEMP). Full details and commitments regarding water quality and the monitoring programme during all phases of the development can be seen in the Draft CEMP (see Appendix 4.1 of the EIA Report (January 2019)), however a synopsis of commitments to ensure protection of all watercourses includes:

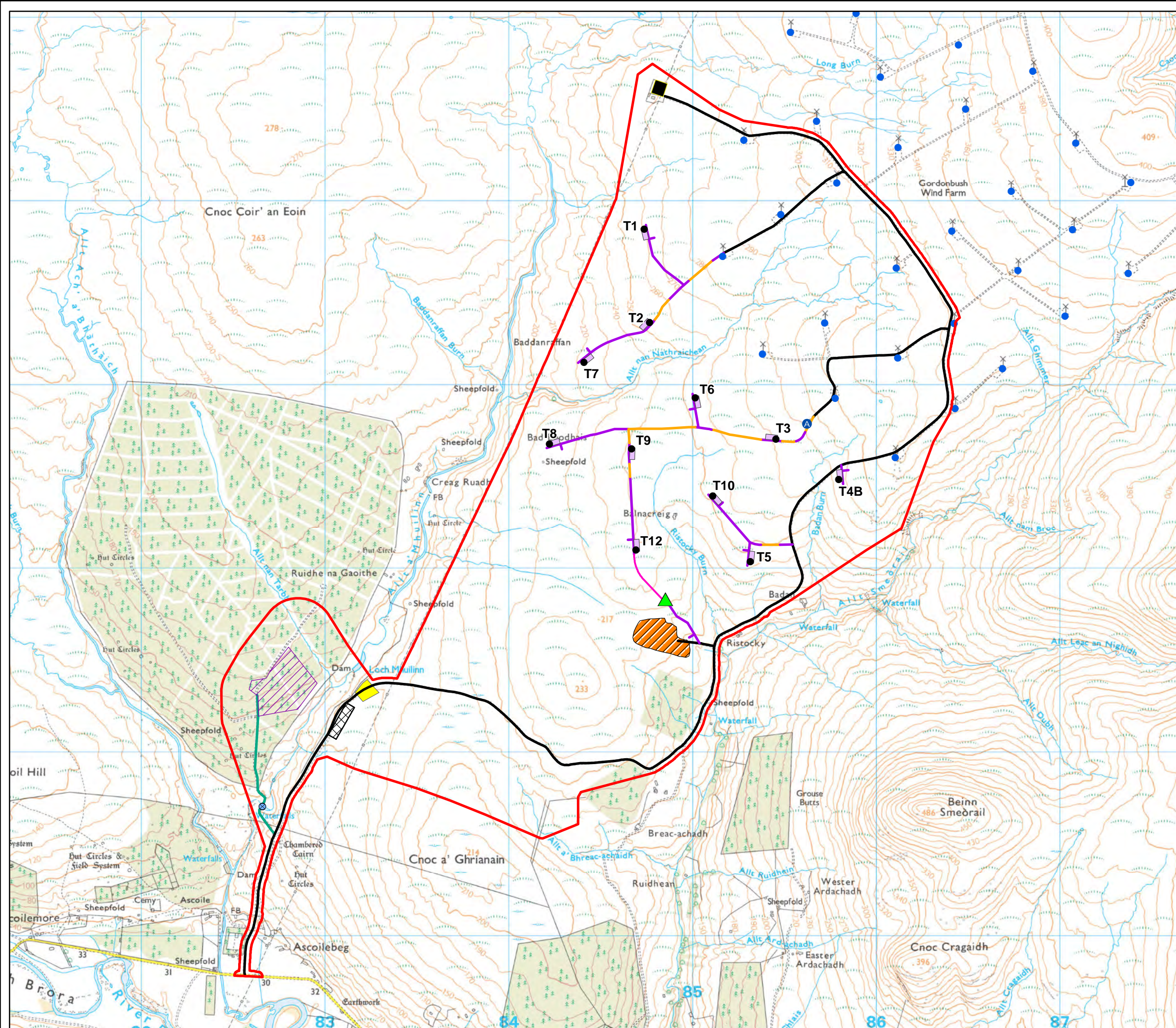
- All equipment, materials and chemicals will be stored 50m from any watercourses. Chemical, fuel and oil stores will be sited on impervious bases within a secured bund;
- Standing machinery will have drip trays placed underneath to prevent oil and fuel leaks causing pollution. Where practicable, refuelling of vehicles and machinery will be carried out in one designated area, on an impermeable surface, and 50m from any watercourse;
- Only emergency maintenance to construction plant will be carried out on-site, in one designated area, on an impermeable surface well away from any watercourse or drainage, unless vehicles have broken down necessitating maintenance at the point of breakdown, where special precautions will be taken;



- On-site welfare facilities will be adequately designed and maintained to ensure all sewage is disposed of appropriately. This may take the form of an on-site septic tank with soakaway (in accordance with CAR legislation), or tankering and offsite disposal;
- The use of wet concrete in and around watercourses will be minimised and carefully controlled;
- Plans will ensure that emergency equipment is available on site i.e. spill kits and absorbent materials, and that advice is available on action to be taken and who should be informed in the event of a pollution incident; and
- All relevant personnel will be trained in both normal operating and emergency procedures, and be made aware of sensitive areas on-site.

8.3.5 Construction Method Statements would be prepared in accordance with the CEMP to minimise risks to water quality, fish stocks, and otter populations.





# Key

- Site Boundary
- Turbine
- Operational Turbine
- Operational Met Mast
- Watercrossing (Temporary Bridge)
- Proposed LiDAR
- Access Track**
  - Existing
  - Cut
  - Float
  - New Access Track (Cut)
  - Existing Track to Proposed Borrow Pit Search Area
  - Indicative Hardstanding
  - Existing Substation
  - Relocated Batching Plant
  - Borrow Pit
  - Proposed Borrow Pit Search Area
  - Construction Compound

Scale 1:20,000 @ A3

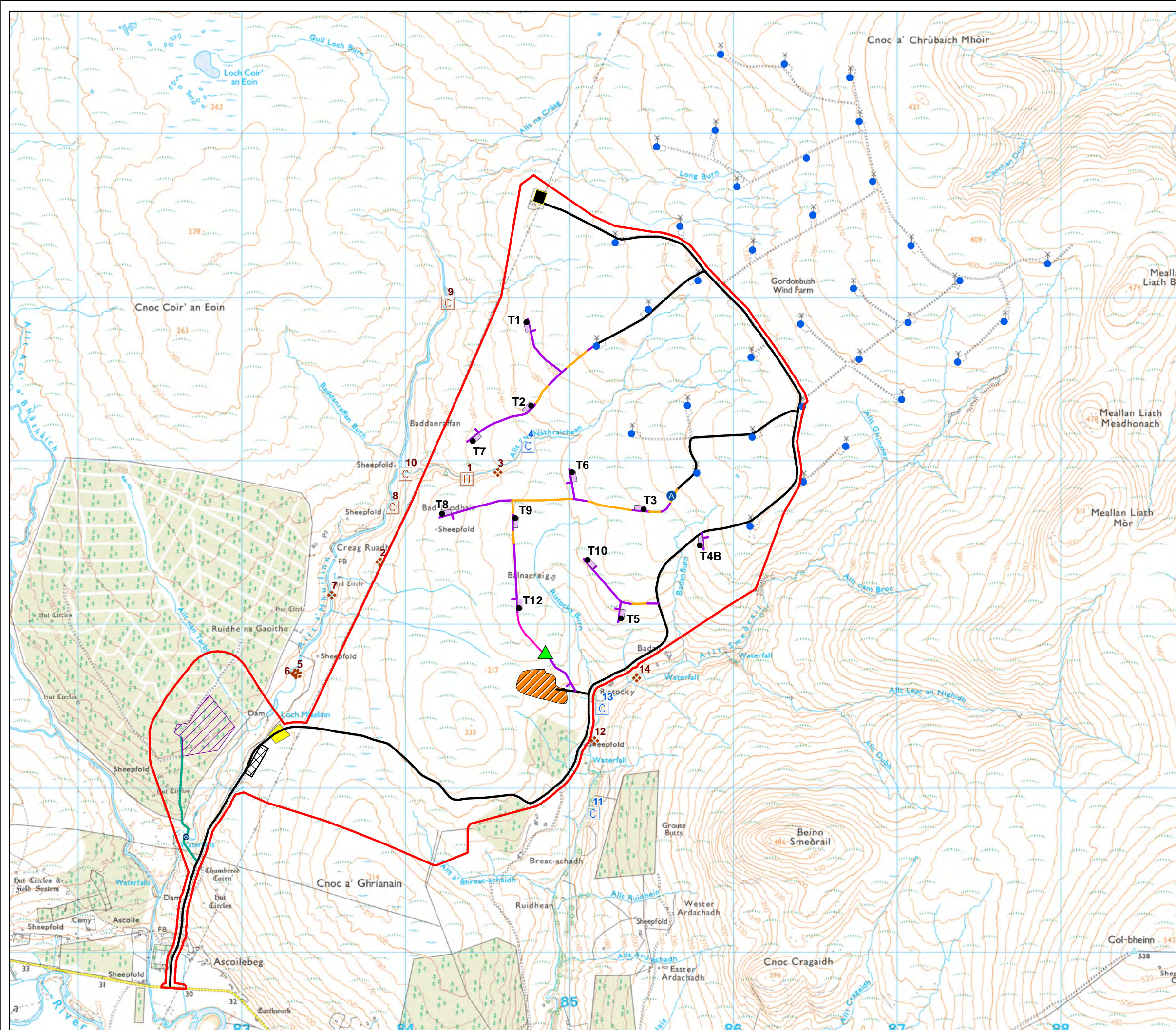
0 0.5 1 Km

N

**Figure A4.1**  
**Site Layout**

**Gordonbush Extension Wind Farm**  
**EIA Report S36C Addendum**





- Key**
- Site Boundary
  - Turbine
  - Operational Turbine
  - A Operational Met Mast
  - X Watercrossing (Temporary Bridge)
  - ▲ Proposed LiDAR
  - Access Track**
  - Existing
  - Cut
  - Float
  - New Access Track (Cut)
  - Existing Track to Proposed Borrow Pit Search Area
  - Indicative Hardstanding
  - Existing Substation
  - Relocated Batching Plant
  - Borrow Pit
  - Proposed Borrow Pit Search Area
  - Construction Compound
  - C Otter couch (3)
  - H Otter holt (1)
  - P Otter print (1)
  - S Otter spraint (6)
  - CP Otter potential couch (3)

Scale 1:22,500 @ A3

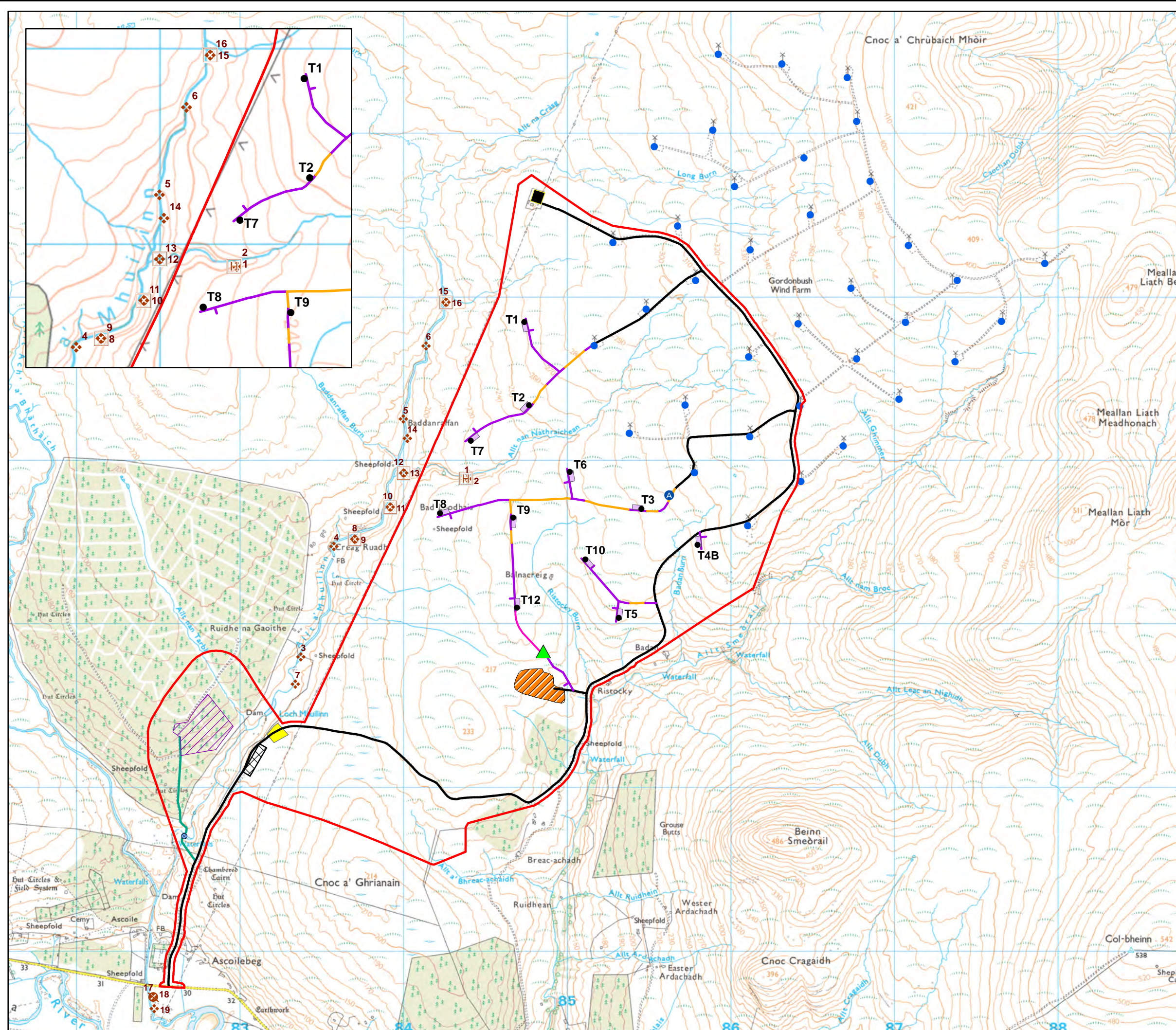
0 0.5 1 Km

N

**Figure A8.2**  
**Otter Survey Results (2013)**

**Gordonbush Extension Wind Farm**  
**EIA Report S36C Addendum**





- Key**
- Site Boundary
  - Turbine
  - Operational Turbine
  - A Operational Met Mast
  - ⊗ Watercrossing (Temporary Bridge)
  - ▲ Proposed LiDAR
  - Access Track**
  - Existing
  - Cut
  - Float
  - New Access Track (Cut)
  - Existing Track to Proposed Borrow Pit Search Area
  - Indicative Hardstanding
  - Existing Substation
  - Relocated Batching Plant
  - Borrow Pit
  - Proposed Borrow Pit Search Area
  - Construction Compound
  - C Otter couch (4)
  - H Otter holt (1)
  - Otter slide or play area (1)
  - ◆ Otter spraint (13)

Scale 1:22,500 @ A3

0 0.5 1 Km

N

**Figure A8.3**  
**Otter Survey Results (2018)**

**Gordonbush Extension Wind Farm**  
**EIA Report S36C Addendum**