

Archaeological Monitoring of Site Investigations at Clongawny More and Drinagh Bogs, County Offaly

Part 1 – Licensed Archaeological Monitoring - FINAL REPORT

Excavation Licence No. 19E0095X (Miriam Carroll)

Planning Ref: Pre-Planning

Planning Status: Pre-Planning report

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1 REPORT DETAILS

Excavation report	Part 1
Excavation Licence No.	19E0095X
Licensee:	Miriam Carroll
Planning Ref:	Pre-planning
Townland:	Clongawny More, Derrinlough, Drinagh, Timolin, Carrick, Balliver, Galros East, Clooneen, Cortullagh or Grove
County:	Offaly
ITM Coordinates (Centre point)	ITM E608014, ITM N714674
Planning Status:	Pre-planning report

2 INTRODUCTION

2.1 SCOPE OF WORK

Archaeological monitoring of site investigations at Clongawny More and Drinagh Bogs, Co. Offaly was undertaken over a number of days in January, August, October and November 2019 by Tobar Archaeological Services. The client intends to develop lands at Clongawny More and Drinagh Bogs for a proposed wind farm, although there is no planning application for such a development at this time. The purpose of the site investigations is to determine general ground conditions on the proposed wind farm site. Monitoring of site investigations in the form of geotechnical trial pits was carried out under licence (19E0095) from the National Monuments Service (NMS) of the Department of Culture, Heritage and the Gaeltacht (DCHG). It must be noted that the sole purpose of this phase of the project was for geotechnical / engineering investigations the results of which were used to assess ground conditions on site. While the trial pits were archaeologically monitored under licence, it was not a full archaeological investigative exercise. An opportunity to assess for the presence or otherwise of potential archaeological features was presented however, albeit limited by the programme timeframe and Health and Safety constraints. As agreed in the archaeological method statement, potential features would be preserved in-situ.

2.2 DEVELOPMENT DESCRIPTION AND SITE LOCATION

The site of the proposed development is situated c. 7km north of Birr in west county Offaly and at its nearest point c. 2km south-east of Cloghan. It is located in cut-over peat bog which is centred around an existing peat briquette factory at Derrinlough. The eastern portion of the proposed development site comprises Drinagh Bog, at the west side of which is the aforementioned briquette factory. Drinagh Bog is over 75% cutaway and is separated from the western portion of the proposed development site by the N62. The west side of the site comprises Clongawny More bog which is located at the south-western extent of the Boora Group. The site has a total area of 2360ha. The cutaway areas are densely vegetated. The central portion of the bog is forested and overgrown and the eastern side of the bog, which is located on the western side of the N62, is flooded. The south-eastern extent of the bog is also covered in dense heather growth. The proposed development site is almost entirely comprised of raised peat bog which has been commercially worked by Bord na Móna for many years.

The purpose of the site investigation is to determine general ground conditions on the proposed wind farm development. The site investigation is also required to inform peat stability risks on the site. Approximately 69 trial pits were excavated on the site, the majority of which were subject to archaeological monitoring.

3 STATUTORY CONTEXT

3.1 CURRENT LEGISLATION

Archaeological monuments are safeguarded through national and international policy, which is designed to secure the protection of the cultural heritage resource. This is undertaken in accordance with the provisions of the European Convention on the Protection of the Archaeological Heritage (Valletta Convention). This was ratified by Ireland in 1997.

Both the National Monuments Acts 1930 to 2004 and relevant provisions of the Cultural Institutions Act 1997 are the primary means of ensuring protection of archaeological monuments, the latter of which includes all man-made structures of whatever form or date. There are a number of provisions under the National Monuments Acts which ensure protection of the archaeological resource. These include the Register of Historic Monuments (1997 Act) which means that any interference to a monument is illegal under that Act. All registered monuments are included on the Record of Monuments and Places (RMP).

The Record of Monuments and Places (RMP) was established under Section 12 (1) of the National Monuments (Amendment) Act 1994 and consists of a list of known archaeological monuments and accompanying maps. The Record of Monuments and Places affords some protection to the monuments entered therein. Section 12 (3) of the 1994 Amendment Act states that any person proposing to carry out work at or in relation to a recorded monument must give notice in writing to the Minister (Environment, Heritage and Local Government) and shall not commence the work for a period of two months after having given the notice. All proposed works, therefore, within or around any archaeological monument are subject to statutory protection and legislation (National Monuments Acts 1930-2004).

Under the Heritage Act (1995) **architectural heritage** is defined to include '*all structures, buildings, traditional and designed, and groups of buildings including street-scapes and urban vistas, which are of historical, archaeological, artistic, engineering, scientific, social or technical interest, together with their setting, attendant grounds, fixtures, fittings and contents...*'. A heritage building is also defined to include '*any building, or part thereof, which is of significance because of its intrinsic architectural or artistic quality or its setting or because of its association with the commercial, cultural, economic, industrial, military, political, social or religious history of the place where it is situated or of the country or generally*'.

The Planning and Development Act 2000 (as amended), sets out the legal framework for the protection of buildings/structures which are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest. Such protection is afforded through the mechanism of the Record of Protected Structures (RPS). In relation to a protected structure or proposed protected structure, the term 'structure' includes the interior of the structure, the land lying within the curtilage of the structure, any other structures lying within that curtilage and their interior, and all fixtures and features which form part of the interior or exterior of that structure. The protection also extends to any features specified as being in the attendant grounds.

4 ARCHAEOLOGICAL PLANNING REQUIREMENTS

The archaeological monitoring of site investigation trial pits was carried out at the pre-planning stage of a proposed wind farm development and therefore there is currently no associated planning reference.

Licensed Archaeological Monitoring of Site Investigations at Clongawny More and Drinagh Bogs, County Offaly - FINAL REPORT

Part 2 Report (Archaeological)

Excavation Licence No. 19E0095 (Miriam Carroll)

January 2020

5 ARCHAEOLOGICAL MONITORING RESULTS

5.1 ARCHAEOLOGICAL BACKGROUND

A number of recorded monuments are located within the Drinagh and Clongawny More Bogs. There are ten sites listed in the Sites and Monuments Record within Clongawny Bog (OF030-070 to OF030-079). These sites are all in Clongawny More townland in the southern part of the bog. They consist of one Road-Class 2 Togher (OF030-077), seven Road-Class 3 Toghers (OF030-070, 071, 073, 074, 075, 076 & 079) and two now 'redundant' records (OF030-072 & 078). Two of the Road-Class 3 Toghers were dated, OF030-076 and OF030-079 and returned middle Bronze Age dates.

A total of 14 sites recorded in the Sites and Monuments Record are located within Drinagh Bog. These are located in an area referred to by Bord na Móna as 'Drinagh West'. The sites include a north-south oriented middle Bronze Age Road-Class 1 Togher (OF030-060), five Road-Class 3 Toghers (OF030-053 and OF030-061, 062, 063 & 069) and 12 now 'redundant' records of smaller brushwood sites (OF030-050, 051, 052, 054, 056, 057, 064 to 068).

No site investigation trial pits were excavated at or in the immediate vicinity of any recorded monuments.

5.1.1 Classification of Toghers

Road - class 1 togher

A peatland trackway/causeway constructed of wood and intended to traverse a bog which have a known orientation. In most instances they comprise substantial timber planks and have good structural definition. They may have several phases of construction indicative of long-term use and reuse. These may date from the Neolithic (c. 4000-2400 BC) to the medieval period (5th-16th centuries AD).

Road - class 2 togher

A length of peatland trackway, constructed of wood, believed to be over 15m in length. They have a clear orientation and good structural definition. Class 2 Toghers may date from the Neolithic (c. 4000-2400 BC) to the medieval period (5th-16th centuries AD).

Road - class 3 togher

A short stretch of peatland trackway, constructed of wood, up to 15m in length with a discernible orientation. It may not be possible to trace them beyond a single sighting. They have evidence of deliberate structure and are interpreted as laid down to cross a small area of bog. Such sites may date from the Neolithic (c. 4000-2400 BC) to the medieval period (5th-16th centuries AD).

5.1.2 Descriptions of the Toghers within the Site Boundary

OF030-053 Class 3 Togher: A deposit of three distinct layers of roundwoods, brushwood and twigs (Wth 1.28m; D 0.34m) in opposing drain faces. The substructure consists of five roundwoods and some brushwood orientated WSW-ENE. The superstructure is composed of two layers. The upper layer consists of densely packed brushwood and beds of twigs orientated WSW-ENE. The lower layer is primarily composed of widely spaced brushwood and beds of twigs orientated NNW-SSE. The site is deepest at its centre, tapering towards the edges, with a number of possible outlying elements above and below the main concentration. The majority of these outliers may constitute separate sites as their association to the site is unclear. A small number of metal-cut toolmarks are present but these are quite degraded. Wood species include birch, hazel, ash and Pyrus/Malus. The site is in poorly humified Sphagnum peat with Eriophorum, Phragmites and ericaceous remains.

OF030-060 Class 1 Togher: The site (L 278.91m; Wth 0.7m; D 0.2m) is orientated N-S on the field and contains two structural layers. The substructure is composed of split timbers, roundwoods and brushwood, laid both longitudinally and transversely. The superstructure is composed of longitudinal planks and roundwoods. Planks (L 6m max.) are the predominant component of the superstructure. Pegs are utilised in places to secure the planks. The planks are both radially and tangentially split with flat and pointed ends. One of the planks has a broken or incomplete mortice. The site is in Sphagnum peat with Eriophorum and ericaceous remains. The site was dendrochronologically dated to 1411-1410 BC (Q9791). At one sighting SMR OF030-064---- is 0.3m below the site. Compiled by: Irish Archaeological Wetland Unit (University College Dublin).

OF030-061 Class 3 Togher: A deposit of roundwoods, brushwood, occasional twigs and a peg (L 1.1m; Wth 1.07m; D 0.26m) on the field surface. The majority of the elements are closely spaced, orientated NNW-SSE and are longitudinally laid. There is no discernible substructure, the different elements being interspersed to form a layer approximately four pieces deep with the heaviest pieces concentrated towards the centre. Some pieces have been broken and displaced as a result of milling. Metal-cut toolmarks are evident on one piece of brushwood and on one roundwood. The site is in moderately humified Sphagnum peat with Phragmites and many Menyanthes seeds.

OF030-062 Class 3 Togher: A deposit of brushwood, laid 3-4 pieces deep, and occasional twigs (L 1.7m; Wth 1.15m; D 0.11m) which has suffered extensive milling damage. The site may represent two phases of construction or two separate sites. Heavy brushwood dominates the upper layers, with lighter, more uniform brushwood beneath. Some of these lighter elements may have been interwoven. The majority of the pieces are orientated E-W while others are perpendicular. A single metal-cut chisel point was noted. Wood species include hazel, birch, holly and yew. The site is in moderately humified Sphagnum peat with Eriophorum and ericaceous remains.

OF030-063 Class 3 Togher: The site (L 9.47m; Wth 1.72m; D 0.19m) is orientated E-W consisting of roundwoods and brushwood with two structural layers evident. The substructure consists of roundwoods and brushwood, longitudinally and transversely laid, three pieces deep. The superstructure consists of roundwoods, two pieces deep, and brushwood (diam. 0.027-0.06m), three pieces deep. The elements are longitudinally laid. The heel of a coppiced piece of brushwood has toolmarks. Wood species include hazel, ash, alder and birch. The site is in poorly to moderately humified Sphagnum peat with Eriophorum. The site was radiocarbon dated to 341 BC-AD 48 (UCD-9943).

OF030-069 Class 4 Togher: A deposit of light brushwood, laid five pieces deep, two roundwoods and occasional twigs (Wth 1.4m; D 0.27m). The roundwoods (diam. 0.07m-0.09m) and pieces of brushwood are irregularly laid. Two pieces of brushwood have toolmarks.

OF030-070 Class 3 Togher: The site (L 14.21m; Wth 1.25m; D 0.2m) is orientated NNE-SSW and consists of a compact structure of longitudinally laid pieces of brushwood and roundwoods set below a single plank and roundwood. This created a central walking surface (Wth 0.4m). The oak plank was irregularly split. It appears to dive under the central roundwoods to the W. The woodworking is degraded but suggests metal tools. This material is set in poorly-humified fen peat which contained Phragmites, bark fragments and occasional Menyanthes seeds.

OF030-071 Class 3 Togher The site (L 2.94m; Wth 0.44m; D 0.12m), in opposing drain faces, composed predominantly of two parallel roundwoods and a plank. Within a small area examined, the two roundwoods and the plank are orientated NNE-SSW, with two pieces of light brushwood set roughly at right angles. The pieces of light roundwood (and plank are loosely set 0.04-0.19m apart. The plank (L 2.3m; Wth 0.11m) was a tangential outer quarter split and was poorly preserved. The site is located on the field surface within moderately-humified peat which contains Phragmites, Menyanthes seeds and some ericaceous remains.

OF030-073 Class 3 Togher: Broken pieces of interspersed brushwood and roundwood (L 12m; Wth 0.94m; D 0.07m) traced across the field in a NE-SW direction. Where examined, the site consists of longitudinally laid irregular pieces of brushwood and roundwood (diam. 0.02-0.055m). Two small pegs (diam. 0.02-0.03m), mark the limit of the site to the N. The wood is in poor condition with no wood working evident. The site is located within poorly humified Sphagnum peat, with some traces of Eriophorum, ericaceous remains and Menyanthes seeds, 8.46m N of a deposit of bog iron.

OF030-074 Class 3 Togher: The site (L 0.4m min.; Wth 2.11m; D 0.1m) is formed of pieces of brushwood with some twigs and roundwoods orientated roughly E-W, immediately below the field surface. Within the area examined it consists of two deposits of brushwood, twigs and a roundwood set 0.2-0.3m apart. The N deposit is denser and the S side more dispersed and fragmented. A single tool marked roundwood had been worked to a pencil point with a metal tool. This material was located within moderately humified Sphagnum peat with frequent Phragmites and occasional ericaceous remains.

OF030-075 Class 3 Togher: The site (L 10.9m min.; Wth 0.74m; D 0.07m) is orientated NNE-SSW evident at two sightings. At the NE extent the site consists of compactly set, longitudinally laid roundwoods (diam. 0.6m) with some pieces of brushwood (diam. 0.01-0.042m) and twigs used to fill the voids in the structure. Only one degraded tool mark was recorded. The site is within poorly humified Sphagnum with Eriophorum and

ericaceous remains and occasional *Menyanthes* seeds. To the SSW the site was similarly constructed but in poorer condition and disappears toward an area of high bog, located in the centre of this bog.

OF030-076 Class 3 Togher: Two parallel planks, roundwoods and pieces of brushwood with occasional twigs (L 8.2m; Wth 0.96m; D 0.1m), orientated NE-SW evident at two separate sightings. The site was examined near the NE extent where the components are longitudinally laid and secured in place with two pegs. This material was overlain by a small deposit of branch wood and roundwoods on the SW side of the site. The planks (L 3.5m min.; Wth 10.1-19.7m) are an irregular inner split and an outer tangential split and the pieces of brushwood and roundwoods are mixed. The site is located within poorly humified and laminated peat that contained *Phragmites* and *Menyanthes* seeds. This site has been radiocarbon dated to 1734-1440 cal. BC (UCD-9956).

OF030-077 Class 2 Togher: The site (L 25.24m; Wth 0.63m; D 0.04m) is orientated E-W across the field surface and consists of longitudinally laid brushwood. The wood (diam. 0.02-0.055m) is in fragmented condition has been badly disturbed by machine milling. Some root-like elements are also present in the deposit. Only a single end showed evidence of having been worked to a chisel point. The site is located in moderately humified *Sphagnum* peat with frequent *Eriophorum* and occasional ericaceous remains, *Menyanthes* seeds and a hazelnut shell.

OF030-079 Class 3 Togher: A concentrated deposit of longitudinally placed pieces of brushwood, twigs and a roundwood (L 6.5m; Wth 0.56m; D 0.12m), orientated in a NE-SW on the field surface. Twigs infilled the small voids between the pieces of roundwood. No evidence of woodworking was recorded as the ends of the pieces were broken and part of the structure may have been removed by peat milling. The site is in moderately-humified *Sphagnum* peat which contained ericaceous remains and some *Menyanthes* seeds. The site has been radiocarbon dated to 1734-1449 cal. BC (UCD-9932).

5.1.3 Previous Archaeological Work Carried out on the Site

5.1.3.1 Peatland Surveys

Clongawny Bog was archaeologically surveyed in 1997 by the IAWU as part of the Archaeological Survey of Ireland Peatland Survey. At that time ten sites were recorded, which consisted of a Road-Class 2 Togher (OF030-077), seven Road-Class 3 Toghers (OF030-070, 071, 073, 074, 075, 076 & 079) and two now 'redundant' records (OF030-072 & 078). Two of the Road-Class 3 Toghers were subsequently dated (OF030-076 and OF030-079) and returned middle Bronze Age dates.

In 2009 ADS Ltd carried out a re-assessment survey of the bog, which was 75% cutaway at that stage. All areas of Clongawny Bog that were in production at the time of survey, were subject to fieldwalking inspection. This area included the north-east extent of the bog, in proximity to the briquette factory at Derrinlough, part of the north-west extent of the bog and the southern extent of the bog. The area in which the previously recorded sites were identified was re-walked and a handheld GPS was used to locate the find spots. This area was covered with scrub, trees and the drains were also overgrown with reeds but where the central portion of the field surface remained visible the fields were subject to inspection. The previously recorded sites were no longer visible but there remains the possibility that some may survive below the vegetation. Immediately west of this area remained in production and two small, previously unrecorded sites, including a possible platform and a deposit of archaeological wood, were identified (Whitaker 2018).

Drinagh Bog was archaeologically surveyed in 1997 by the IAWU as part of the Archaeological Survey of Ireland Peatland Survey. A total of 41 sites were submitted to the records of the Archaeological Survey of Ireland. Of these sites, 18 were concentrated in Derryad and Drinagh townlands along the western extent of Drinagh dryland island. The remainder were located in private turbury plots to the east of the limit of the Bord na Móna boundary in Aghagoogy and Derryad townlands.

A re-assessment survey was carried out by ADS Ltd on behalf of Bord na Móna in 2009 (Rohan 2009). As noted above, over 75% of the bog is now cutaway with large areas of the bog milled out, overgrown or flooded. The northern and central sections of the bog were largely covered with dense vegetation and some areas were under water. It was not possible therefore to field walk these areas. The drains in the south-eastern extent of the bog did not have much vegetation. Fourteen previously unrecorded sites including 13 sightings of archaeological wood and a possible togher and were recorded during the re-assessment survey. One of the

sightings of archaeological wood was located in isolation at the southern end of the bog, while the remaining sites were recorded in proximity to the south-eastern limit of the bog. A previously recorded plank trackway (OF030-060) and a platform (OF030-063) were reidentified. The private turbury plots where the IAWU identified several sites was not re-inspected (Whitaker 2018).

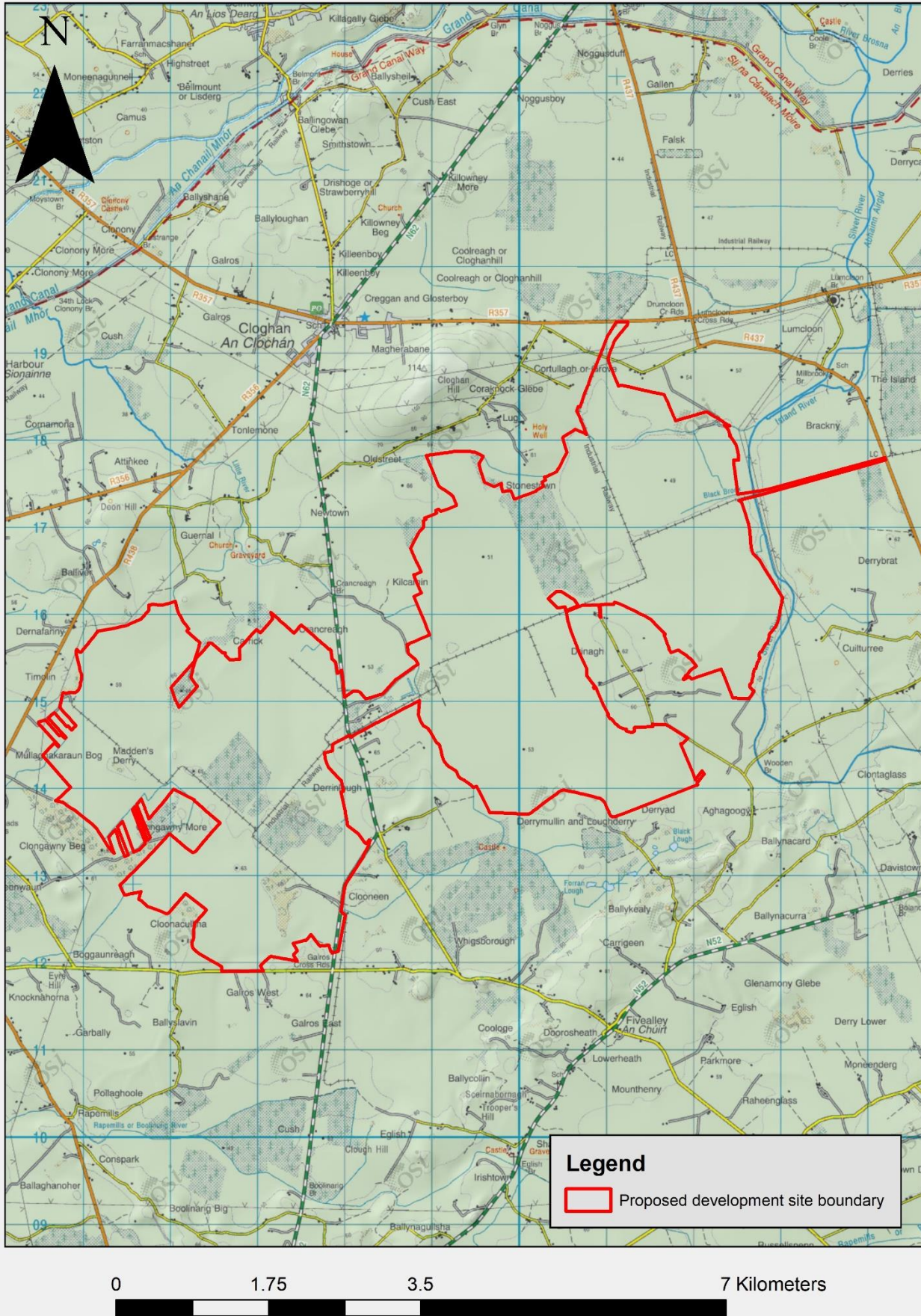


Figure 1: Site location map.

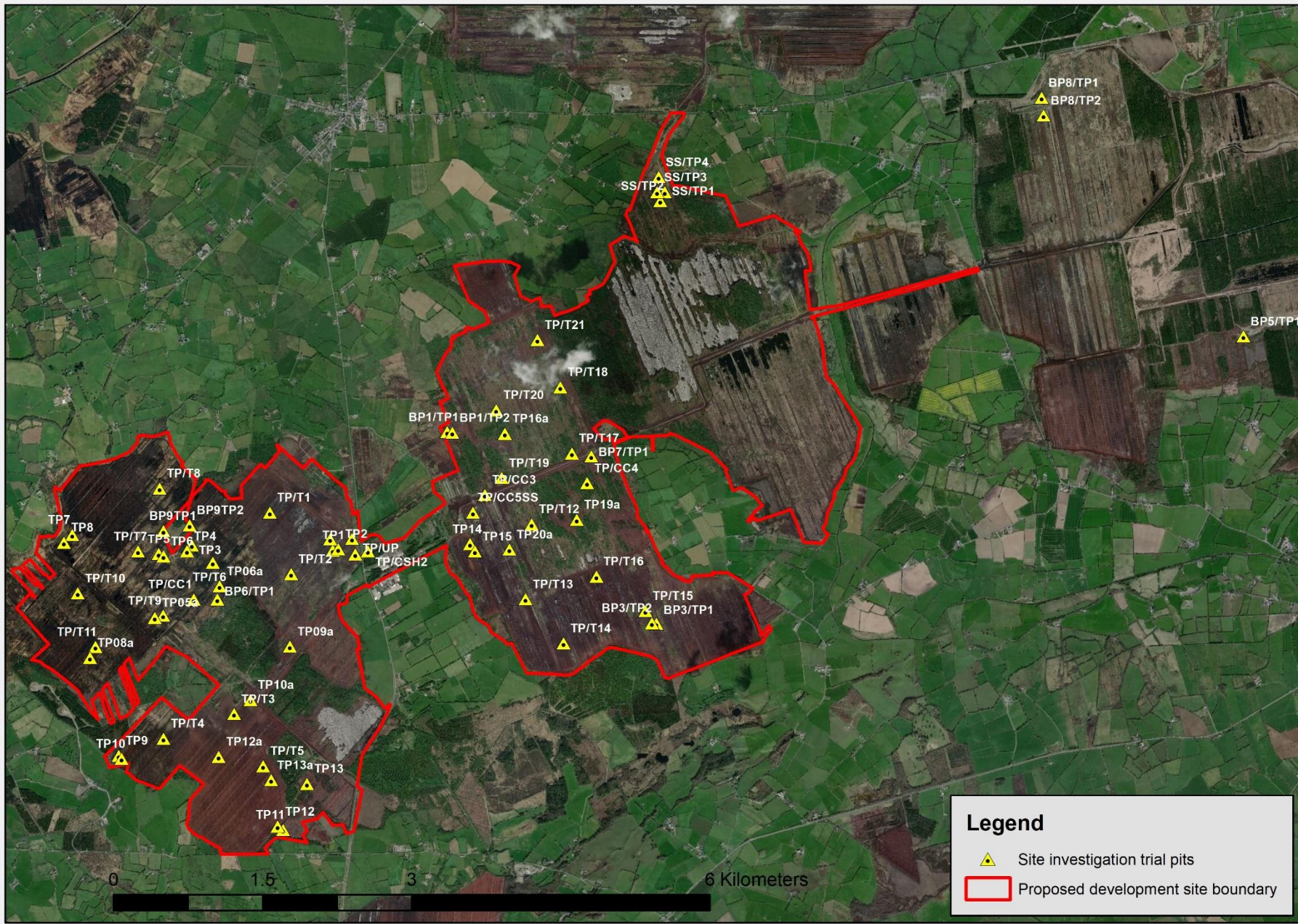


Figure 2: Site investigation trial pits.

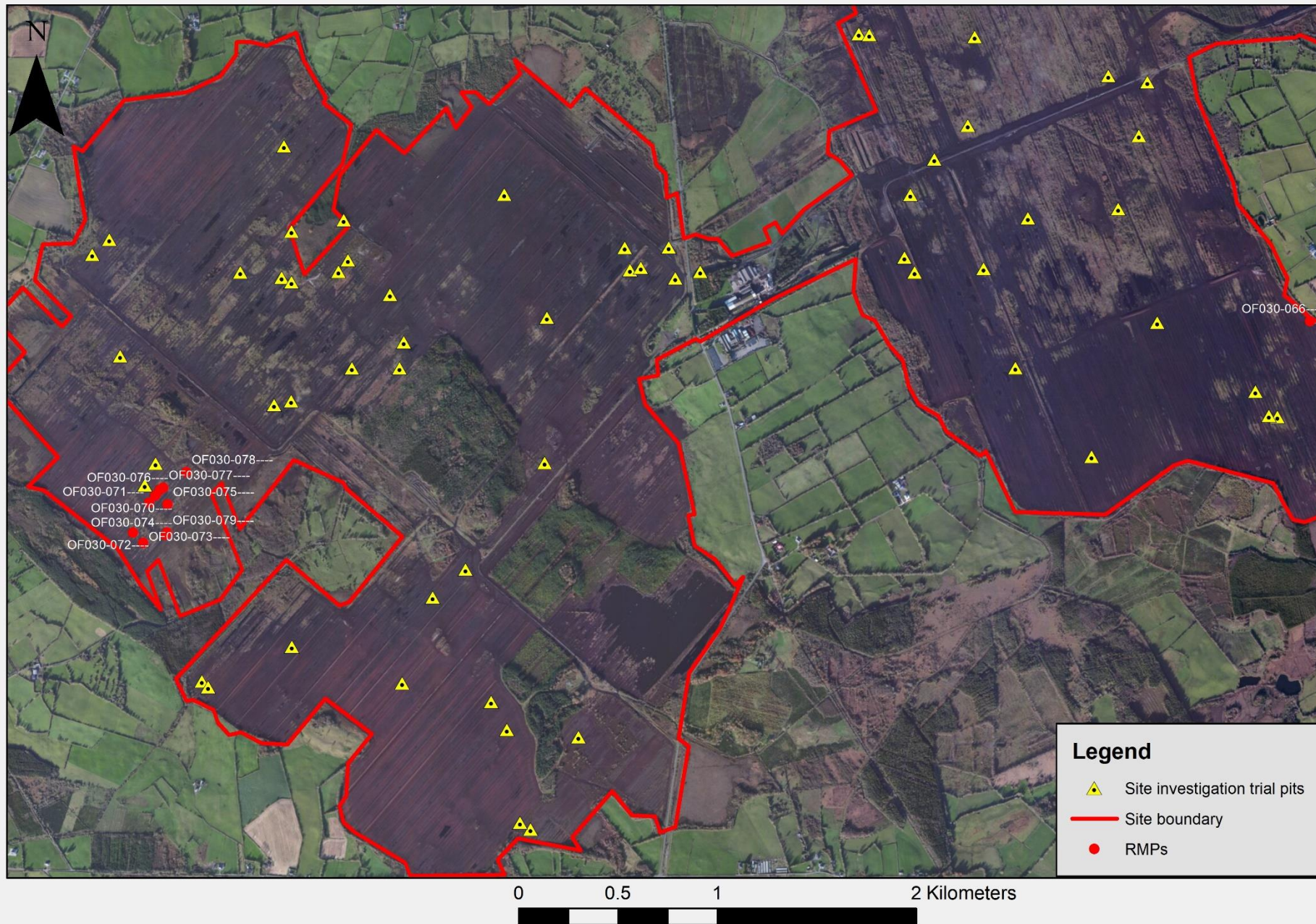


Figure 3: Site Investigation trial pits in relation to recorded monuments within the site boundary.

5.2 RESULTS OF ARCHAEOLOGICAL MONITORING

Archaeological monitoring of site investigation works was carried out at Clongawny and Drinagh Bogs, County Offaly over a period of eight days between January and November 2019. The excavation of a total of 59 trial pits was monitored over this period within an area of predominantly cut over bog, some parts of which are colonised with vegetation. Where such vegetation was present it largely took the form of heather and grasses, however, some areas were also under tree cover.

The stratigraphy noted within the trial pits varied throughout the site but typically consisted of an upper layer of loose, soft rooty peat overlying layers of fibrous peat. The underlying natural subsoil comprised a grey clay or gravely clay. The upper loose layer represented milled peat and varied in thickness throughout the site and was dependent on the depth of in situ peat remaining in any given area. The lower peat layers observed within the trial pits generally contained a higher proportion of organic material than the upper layers, in particular tree roots and trunks which appear to represent trees growing in the area prior to the formation of the bog. In some areas only shallow peat cover was apparent (e.g. TPs 6-7, BP3 TP1 & TP2, TP/CSH2, TP/T19, TP/T12, TP20a and TP/T15).

The results of the trial pits are presented below in Table 1. No positively identified archaeological features or structures were uncovered in any of the excavated trial pits. It should be noted that some trial pits were excavated prior to the freezing of the proposed wind farm layout. Consequently, some trial pits were excavated in areas where infrastructure is no longer proposed or infrastructure was subsequently renamed (e.g. compounds 2, 3 and 6).

Pieces of wood were noted within three trial pits excavated at what were then named Compound 2, 3 and 6, respectively. Compounds 2 and 3 were located in Clongawny Bog, while Compound 6 was located in Drinagh Bog (the proposed compound in Drinagh has now been moved further to the east).

At Compound 3 (now proposed security hut in Clongawny) a single isolated piece of wood was identified within the trial pit (TPC SH1), however, no other potentially associated wood or structures were noted. The wood was noted at the base of the peat overlying the natural clay at a depth of 2.8m. No definitive archaeological structure was noted at Compound 3 (proposed Security Hut at Clongawny). At Compound 2 (TPCC2, now proposed Construction Compound 2) two east-west running pieces of wood were identified at a depth of 0.38m below the present ground level. A definitive archaeological structure was not identified here, and no other potentially associated wood or structure were identified within the limits of the trial pit. At Compound 6 (TPCC4, now Construction Compound 4) four horizontal pieces of wood were observed within the trial pit at a depth of 0.65m. Two of the longer pieces were exposed for a distance of 2.4m and 1.2m (NE/SW) and had widths of 0.31m and 0.25m respectively and were 0.80m apart. Between the aforementioned pieces of wood two shorter pieces of wood were noted and measured 0.5m and 0.7m in length NW/SE. While it was not possible to discern a definitive archaeological structure from the wood observed within the limits of the trial pit, it is possible that they have some archaeological potential. The timbers were preserved in situ. The proposed compound and adjacent site road are now located c. 60m to the east of where the trial pit containing the wood was excavated. No direct impact to the wood is therefore anticipated. It does, however, highlight the potential for uncovering potential sub-surface archaeological sites and features during the construction stage of the wind farm development should it proceed.

In general all trial pits excavated measured c. 2.5m-4.5m in length x 1.5m-2m in width x 4.5m in depth. Peat depths varied within each excavated pit as shown below in Table 1.

Table 1: Trial pit details

Trial Pit No.	Peat Depth	Archaeology Present
1	0.6m	No
2	0.6m	No
3	1.1m	No
4	2.6m	No
5	0.6m	No
6	0.2m	No
7	0.4m	No
8	0.8m	No
9	3.6m+	No
10	3.3m	No
11	4.3m	No
12	3.6m	No
13	3.3m	No
14	0.6m	No
15	2.6m	No
BP9 TP1	0.6m	No
BP9 TP2	1.5m	No
BP1/TP1	2.45m	No
BP1/TP2	N/A	No
BP3/TP1	0.35m	No
BP3/TP2	0.35m	No
BP5/TP1	N/A	No
BP6/TP1	0.2m	No
BP7/TP1	0.2m	No
BP8/TP1	0.6m	No
BP8/TP2	0.05m	No
TP/CC1	3.3m	No
TP/CC2	0.55m	No – 2 pieces of wood at 0.38m depth
TP/CSH1	2.8m	No – isolated piece of wood at 2.8m
TP/CSH2	0.4m	No
TP/CC5SS	0.9m	No
TP/CC4 (2 pits excavated)	0.1m & 0.65m	Pieces of wood identified at 0.65m depth
TP/T9	1.9m	No
TP/T6	1.6m	No
TP/T11	1.1m	No
TP/T3	0.6m	No
TP/T5	0.6m	No
TP/T20	0.8m	No
TP/T19	0.25m	No
TP/T12	0.25m	No
TP/T8	0.5m	No
TP/T1	0.95m	No
TP/T7	1.2m	No
TP/T10	1.4m	No
TP05a	1.9m	No
TP06a	1.7m	No

TP08a	1.1m	No
TP/T21	1.1m	No
TP/T18	1.1m	No
TP16a	1.1m	No
TP/T17	0.5m	No
TP/CC3	1.15m	No
TP19a	0.14m	No
TP20a	0.3m	No
TP/T13	0.4m	No
TP/T16	0.5m	No
TP/T14	1.5m	No
TP/T15	0.3m	No
TP/UP	1m	No



Plate 1: TP1.



Plate 3: TP3.



Plate 2: TP2.



Plate 4: TP4.



Plate 5: TP5.



Plate 8: TP8.



Plate 6: TP6.



Plate 9: TP9.



Plate 7: TP7.



Plate 10: TP10.



Plate 11: TP11.



Plate 14: TP14.



Plate 12: TP12.



Plate 15: TP15.



Plate 13: TP13.



Plate 16: BP9 TP1



Plate 17: BP9 TP2.



Plate 19: BP1 TP2.



Plate 18: BP1 TP1.



Plate 20: BP3 TP1.



Plate 21: BP3 TP2.



Plate 23: BP6 TP1.



Plate 22: BP5 TP1.



Plate 24: BP7 TP1.



Plate 25: BP8 TP1.



Plate 27: TPCC1.



Plate 26: BP8 TP2.



Plate 28: TPCC2 showing wood therein.



Plate 29: TPCC2 alt.



Plate 31: TPCSH2.



Plate 30: TPCSH1 - note wood at base of pit.



Plate 32: TPCC5SS.



Plate 33: TPCC4 – wood exposed in trial pit.



Plate 35: TPT9.



Plate 34: TPCC4 alternative trial pit excavated.



Plate 36: TPT6.



Plate 37: TPT11.



Plate 40: TPT20.



Plate 38: TPT3.



Plate 41: TPT19.



Plate 39: TPT5.



Plate 42: TPT12.



Plate 43: TPT8.



Plate 45: TPT7.



Plate 44: TPT1.



Plate 46: TPT10.



Plate 47: TPT5a.



Plate 49: TP8a.



Plate 48: TPT6a.



Plate 50: TPT21.



Plate 51: TPT18.



Plate 53: TPT17.



Plate 52: TPT16a.



Plate 54: TPCC3.



Plate 55: TP19a.



Plate 57: TPT13.



Plate 56: TPT20a.



Plate 58: TPT16.



Plate 59: TPT14.



Plate 61: TPUP.



Plate 60: TPT15.

6 CONCLUSION

Archaeological monitoring of site investigation works was carried out at Clongawny and Drinagh Bogs, County Offaly over a period of eight days between January and November 2019. The excavation of a total of 59 trial pits was monitored over this period within an area of predominantly cut over bog, some parts of which are colonised with vegetation. Where such vegetation was present it largely took the form of heather and grasses, however, some areas were also under tree cover.

The stratigraphy noted within the trial pits varied throughout the site but typically consisted of an upper layer of loose, soft rooty peat overlying layers of fibrous peat. The underlying natural subsoil comprised a grey clay or gravelly clay. In some areas only shallow peat cover was apparent (e.g. TPs 6-7, BP3 TP1 & TP2, TP/CSH2, TP/T19, TP/T12, TP20a and TP/T15).

No positively identified archaeological features or structures were uncovered in any of the excavated trial pits. It should be noted that some trial pits were excavated prior to the freezing of the proposed wind farm layout. Consequently, some trial pits were excavated in areas where infrastructure is no longer proposed or infrastructure was subsequently renamed (e.g. compounds 2, 3 and 6).

Pieces of wood were noted within three trial pits excavated at what were then named as Compound 2, 3 and 6, respectively. Compounds 2 and 3 (now proposed security hut) were located in Clongawny Bog, while Compound 6 was located in Drinagh Bog (the proposed compound in Drinagh has now been moved further to the east).

At Compound 3 (now proposed security hut in Clongawny) a single isolated piece of wood was identified within the trial pit (TPC SH1), however, no other potentially associated wood or structures were noted. The wood was noted at the base of the peat overlying the natural clay at a depth of 2.8m. No definitive archaeological structure was noted at Compound 3. At Compound 2 (TPCC2, now construction compound 2) two east-west running pieces of wood were identified at a depth of 0.38m below the present ground level. A definitive archaeological structure was not identified here, and no other potentially associated wood or structure were identified within the limits of the trial pit. At Compound 6 (TPCC4, now Construction Compound 4) four horizontal pieces of wood were observed within the trial pit at a depth of 0.65m. Two of the longer pieces were exposed for a distance of 2.4m and 1.2m (NE/SW) and had widths of 0.31m and 0.25m respectively and were 0.80m apart. Between the aforementioned pieces of wood two shorter pieces of wood were noted and measured 0.5m and 0.7m in length NW/SE. While it was not possible to discern a definitive archaeological structure from the wood observed within the limits of the trial pit, it is possible that they have some archaeological potential. The timbers were preserved in situ. The proposed compound and adjacent site road are now located c. 60m to the east of where the trial pit containing the wood was excavated. No direct impact to the wood is therefore anticipated. It does, however, highlight the potential for uncovering potential sub-surface archaeological sites and features during the construction stage of the wind farm development should it proceed.

Mitigation measures are presented in Chapter 13 (Archaeology, Architecture and Cultural Heritage) of the EIAR.

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