ADNEWYDDU LLINELL BŴER, BWLCH Y DDEUFAEN & LLANNERCH FEDW/ POWERLINE REFURBISHMENT, BWLCH Y DDEUFAEN & LLANNERCH FEDW

Cloddiad Archeolegol/ Archaeological Excavation





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CRYNODEB ANNHECHNEGOL

Comisiynwyd Atmos Consulting Limited i Ymddiriedolaeth Archeolegol Gwynedd wneud gwaith cloddio archeolegol cyn gwneud gwaith adnewyddu ar linell bŵer 33kv Dolgarrog i Lanfairfechan. Roedd y gwaith adnewyddu yn cynnwys gwaith dros dro ar raddfa fach i seiliau pob coes twr o Dyrau 41 a 45 i 48, i baentio'r concrit 'mwff' sy'n agored uwchben y ddaear (a thua 500mm o dan y ddaear). Mae'r tyrau wedi'u lleoli mewn dwy ardal wedi'i hamserlennu, Meini Sefydlog Bwlch y Ddeufaen (CN129) a'r Ffordd Rufeinig i'r Gogledd o Lannerch Fedw (CN402).

Ymddengys bod yr ardal o amgylch Tŵr 41 wedi cael ei tharfu wrth adeiladu'r tyrau yn ystod y 1950au ac ni ddaethpwyd o hyd i archeoleg yn y fan a'r lle yn ystod y gwaith cloddio. Fodd bynnag, mae'n bosibl bod gweithgaredd cynhanesyddol yn dal i oroesi yn yr ardal. Roedd llai o aflonyddu ar adeiladu Tyrau 45 i 48, gan barchu'r topograffi lleol a chyfyngwyd bron yn llwyr i'r ardaloedd o amgylch 'traed' y tyrau. Mae'n ymddangos bod Tyrau 47 a 48 wedi'u lleoli ar agger y Ffordd Rufeinig CN 402 ac mae'r archeoleg wedi cadw'n dda yn yr ardal hon. Darganfuwyd a chofnodwyd darn wedi'i erydu o Roman Road CN 402 i'r gorllewin o Dwr 48 fel rhan o'r lliniaru.

NON TECHNICAL SUMMARY

Gwynedd Archaeological Trust was commissioned by Atmos Consulting Limited to undertake an archaeological excavation in advance of refurbishment works on the 33kv Dolgarrog Llanfairfechan powerline. The refurbishment works involved small scale temporary work to the bases of each tower leg of Towers 41 and 45 to 48, to paint the concrete 'muff' that is exposed above ground (and approx. 500mm below ground). The towers are located within areas, the scheduled Bwlch Ddeufaen Standing Stones (CN129) and the Roman Road North of Llannerch Fedw (CN402).

The area surrounding Tower 41 appears to have been greatly disturbed during construction of the towers during the 1950's and no in situ archaeology was encountered during the excavations. However, it is possible that prehistoric activity still survives in the area. The construction of Towers 45 to 48 was less disturbed, respecting the local topography and almost entirely restricted to the areas of surrounding the 'feet' the towers. Towers 47 and 48 appear to be situated on the agger of the Roman Road CN 402 and preservation of the archaeology in this area is good. eroded section of Roman Road CN 402 to the west of Tower 48 was discovered and recorded as part of the mitigation.

1 INTRODUCTION

Gwynedd Archaeological Trust was asked by Atmos Consulting Limited to undertake an archaeological excavation in advance of refurbishment works on the 33kv Dolgarrog to Llanfairfechan powerline. The refurbishment works involved small scale temporary work to the bases of each tower leg of Towers 41 and 45 to 48, to paint the concrete 'muff' that is exposed above ground (and approx. 500mm below ground). Other works to the towers themselves required access via an Argo-cat and an agricultural mule with a winch but did not break ground. The work was undertaken under two separate written schemes of investigation which have been combined together to form the basis of this report.

Tower 41 is located within Scheduled Monument **CN129** Bwlch y Ddeufaen Standing Stones (NGR SH71457181; postcode: LL33 0EH; Figure 01).

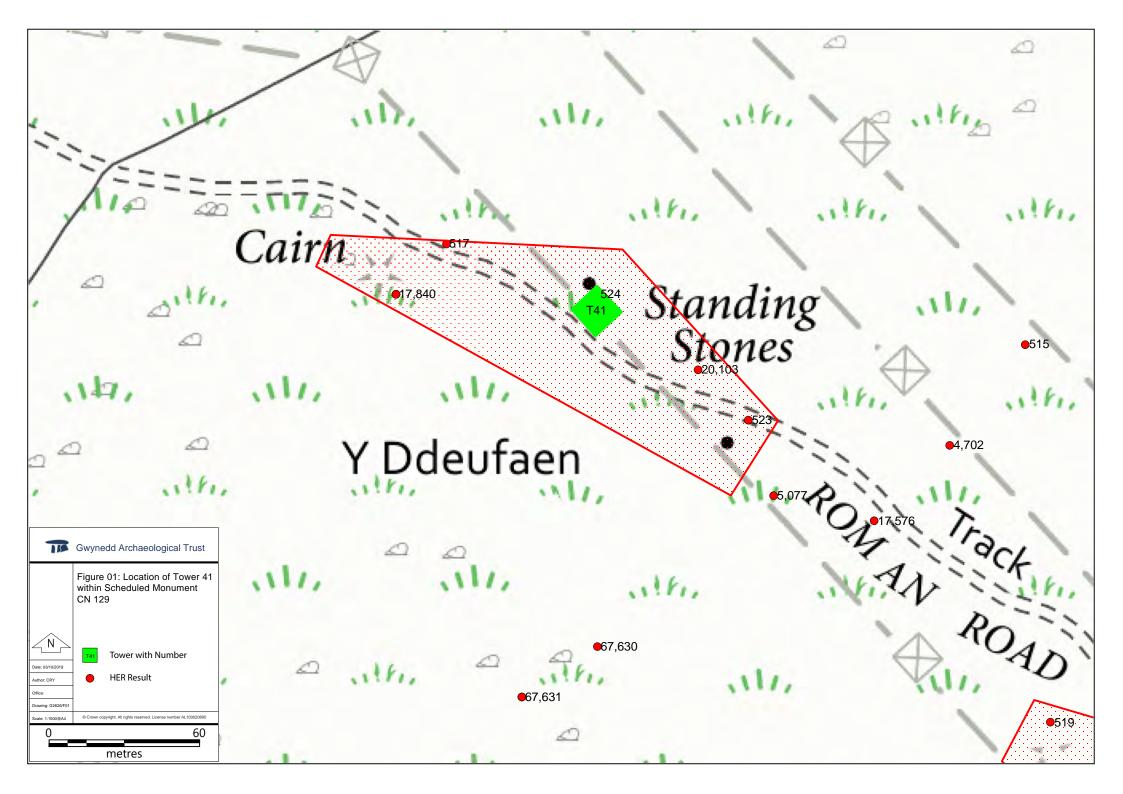
The standing stones are a designated Scheduled Monument and as such, are protected from damage by law under the Ancient Monuments and Archaeological Areas Act 1979, as amended by the Historic Environment (Wales) Act 2016. The work was undertaken subject to, and in accordance with, Scheduled Monument Consent issued by Cadw Welsh Historic Monuments. Authorisation for the works was authorised by Cadw on 02/08/2019.

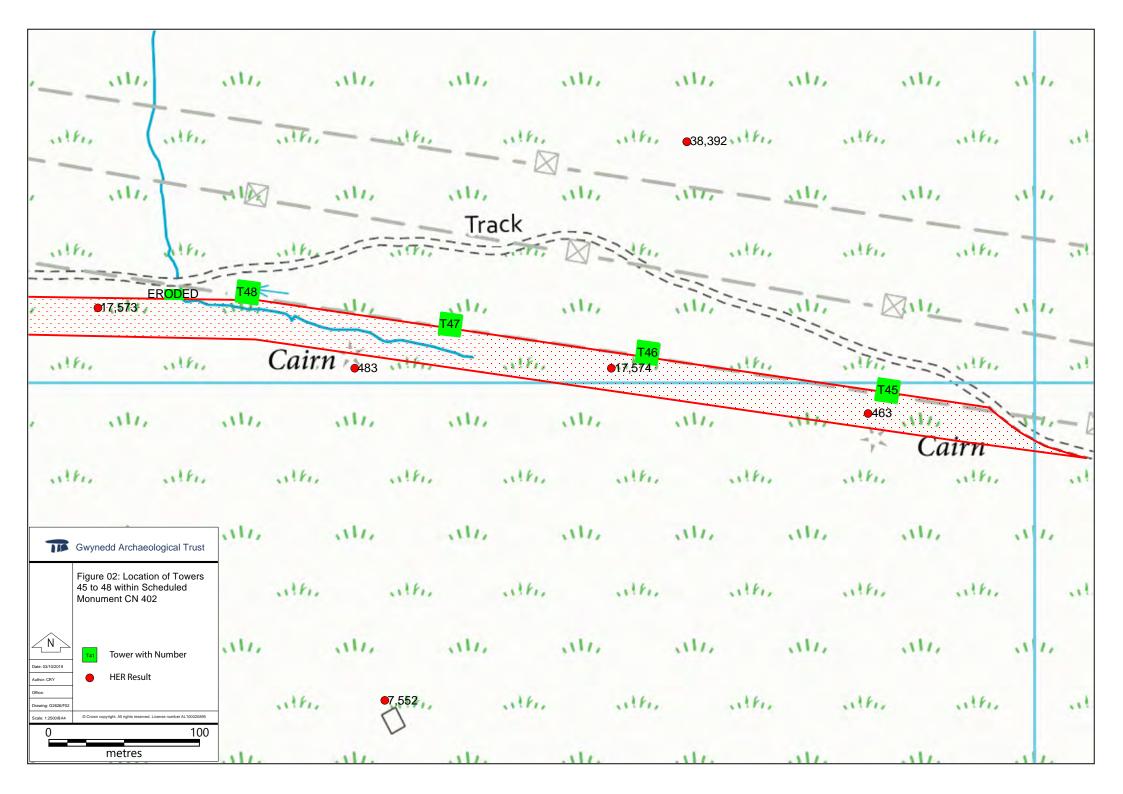
Towers 45 to 48 are located partially within Scheduled Monument **CN402** Roman Road north of Llannerch Fedw (NGR SH70697201; postcode: LL33 0EH; Figure 02). The work was undertaken during September 2019.

The Roman road is a designated Scheduled Monument and as such, is protected from damage by law under the Ancient Monuments and Archaeological Areas Act 1979, as amended by the Historic Environment (Wales) Act 2016. The work will be undertaken subject to, and in accordance with, Scheduled Monument Consent issued by Cadw Welsh Historic Monuments. Authorisation for the works was authorised by Cadw on 02/08/2019.

The excavation was completed in accordance with the following guidance:

- Standard and Guidance for Archaeological Excavation (Chartered Institute for Archaeologists, 2014);
- 2. Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives (Chartered Institute for Archaeologists, 2014);





- 3. Updated Guidelines to the Standards for Recording Human Remains (Chartered Institute for Archaeologists, 2017);
- 4. Management of Archaeological Projects (English Heritage, 1991);
- 5. Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide (Historic England, 2015); and
- 6. Guidelines for digital archives (Royal Commission on Ancient and Historical Monuments of Wales, 2015).

Gwynedd Archaeological Trust is certified to ISO 9001:2015 and ISO 14001:2015 (Cert. No. 74180/B/0001/UK/En) and is a Registered Organisation with the Chartered Institute for Archaeologists and a member of the Federation of Archaeological Managers and Employers (FAME).

2 FIELDWORK AIMS AND OBJECTIVES

The key aim and objective of the archaeological excavation is to:

Hand excavate around each muff at the base of Tower 41 and Towers 45 to 48 to
elucidate the character, extent and significance of any in situ archaeological features
or deposits within the scheduled area and mitigate for any potential disturbance from
the refurbishment works through archaeological excavation and recording.

3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

The Bwlch y Ddeufaen Standing Stones (CN129) are a scheduled monument that comprises two standing stones and a round cairn, set at the western end of Bwlch y Ddeufaen pass between the hills of Foel Lwyd to the north and Drosgl to the south. The site is adjacent to a section of the Roman road (CN402) that connected Canovium to Segontium. It is crossed by a row of pylons and power lines, with Tower 41 placed within the scheduled area (Figure 01).

The monument consists of:

A standing stone that is 3.5m high by 1.5m by 1.2m, rising to a blunt point, with packing stones visible around its base;

A standing stone that measures 2.0m high by 1.2m by 0.5m, with flat faces on the east and west; and

A round cairn, which has an approximate diameter of 18m, at the centre of which one side of a cist is visible with an exposed length of 1.5m.

The scheduled monument CN402 (PRN 17573-4) is a 720m stretch of well-preserved linear agger or raised embankment set on the northern flank of Llannerch Fedw. The road is set within rough upland pasture, measuring 5.0m in width and up to 0.5m in height. It is "a typical example of the early multi-period road on this side of Bwlch y Ddeufaen" (Hopewell, 2013, 33) The road is orientated east – west and is a section of the Roman road that connected Canovium to Segontium. The route of the road is partially overlapped by a row of pylons and power lines, Towers 45 to 48 (Figure 02).

4 METHODOLOGY

4.1 Introduction

The archaeological excavation involved:

 removal of vegetation by hand at the 4 muffs located at the base of the legs of Towers 41 and 45 to 48. The extent of vegetation removal at each muff was to a maximum depth of 500mm and up to 1.0m out from the base of the tower to determine the level of archaeological preservation within the scheduled area at the base of Towers 41 and 45 to 48;

4.2 Fieldwork Methodology

- All attendances, subsurface activity, photographs and contexts records were recorded using GAT pro-formas;
- Photographic images were taken using a digital SLR (Nikon D3100) camera set to maximum resolution (4,608 x 3,072 14.2 effective megapixels) in RAW format and were converted to TIFF and JPEG format for archiving using Adobe Photoshop; a photographic record will be maintained on site using GAT pro-formas and digitised in Microsoft Access as part of the fieldwork archive and dissemination process. When practical, a photographic ID board was used and included site code, image orientation and any relevant context numbers. The archive numbering system is from G2626_001 to G2626_052 (Appendix I);
- Any archaeological features/deposits/structures encountered were manually cleaned and examined to determine extent, function, date and relationship to adjacent activity.
- Any required sections and plans were drawn at a minimum 1:10 scale using GAT A4 or A2 pro-forma permatrace; section datums were recorded (archive reference: Drawing Nos. 1 to 3). (Appendix III)

5 RESULTS

5.1 Introduction

Tower 41 was situated next to one of the standing stones at Bwlch y Ddeufaen (Plate 01). Towers 45 to 48 were situated within Scheduled area CN402, a well-preserved agger set on the northern flank of Llannerch Fedw (Plate 02). The towers were constructed during the 1950's and are of non-standard construction (Per comms, Keltbray). Initially it was envisaged that a trench around each tower would be excavated to a maximum depth of 0.5m up to 1m out from the concrete muff unless archaeology or the glacial horizon was encountered. It became clear during discussions with Keltbray that this would far exceed their requirements. The methodology was therefore altered to investigate the survival of archaeology using a series of strategically placed sondages with agreement from CADW.



Plate 01: Tower 41 adjacent to standing stone (CN129); no scale (archive reference: G2626_023).

Plate 02: View east along Roman Road (CN402) from Tower 48; no scale (archive reference: G2626_021).



5.2 Tower 41 (Plate 03)

Tower 41 was situated approximately 10m to the north east of the access track in what appeared to be a sub-circular terraced area (Plate 03). It was investigated using 3 sondages, two external and one internal to the concrete base of the tower.



Plate 03: Tower 41 - Pre commencement; scale: 1x1m (archive reference: G2626_001).

5.2.1 Sondage 41.1 (Plate 04)

Sondage 41.1 measured 0.8m x 0.5m, was 0.5m deep and was situated external to the tower on its south western side. This sondage contained a turf layer (4101) that was 0.1m in depth. Below this was a deposit of broken shale bedrock and light orange sandy clay (4102) which is backfill associated with the construction of the tower. This backfill material extend out from the concrete muff 0.8m where a dark blackish brown clayey silt layer (4103) was encountered overlying orange shale bedrock (4104) (Plate 04). An ecofact sample was recovered from layer (4103) (Sample 1), further to discussion with Cadw, as this was interpreted as a buried soil horizon.

Plate 04: NE facing section of sondage 41.1; scale: 1x1m (archive reference: G2626_007).



5.2.2 Sondage 41.2 (Plate 05)

Sondage 41.2 measured 0.4m x 0.6m, was 0.5m deep and was situated external to the tower on its north eastern side. This sondage contained a turf layer (4101) that was 0.12m in depth. This gave way to a backfill deposit (4105) consisting of a loose mid-brown silty clay with frequent sub-angular and angular stones. At the base of this sondage were three larger sub-rounded stones (Plate 05). These stones were within the backfill material so are clearly not in situ but could hint at surviving structures in close proximity to the standing stones and within the terraced area.



Plate 05: Plan shot of sondage 41.2; scale: 1x1m (archive reference: G2626_009).

5.2.3 Sondage 41.3 (Plate 06)

Sondage 41.3 measured 0.4m x 0.6m, was 0.5m deep and was situated internal to the tower in the north eastern corner (Plate 06). This sondage contained a turf layer (4101) that was 0.1m in depth. This gave way to a layer of re-deposited natural (4106) that consisted of a yellow grey sandy clay with sparse angular stone inclusions and gravel and was 0.15m deep. Under this was a redeposited layer of dark brown/black silty clay (4107) that was 0.12m deep and very similar in appearance to deposit (4103) found within sondage 41.1. Underlying this was more redeposited material, an orange sandy silty clay (4108) with frequent angular shale inclusions which was 0.15m deep. At the limit of excavation in sondage 41.3 was another orange sandy silty clay deposit (4109) with frequent sub-angular and sub-rounded stones.

Plate 06: Plan shot of sondage 41.3; scale: 1x1m (archive reference: G2626_012).



5.2.4 Discussion

The excavation demonstrated that the section of the Scheduled Area adjacent to the tower was heavily disturbed during the construction of the Tower 41. An area approximately 0.8m out from the base of the tower in all directions appears to have been excavated prior to construction to an unknown depth but certainly greater than 0.5m. The concrete base then appears to have been poured in situ. Sondage 41.2 revealed some larger sub-rounded stones within the backfill material which could hint at surviving structures within the vicinity that were disturbed during the construction of the tower.

5.3 Tower 45 (Plate 07)

Tower 45 was situated approximately 20m to the south of the access track on a north facing sloping hillside covered in heather (Plate 07). Access to this tower involved traversing two large ditches/holloways. Spaced approximately 5m apart this appears to be the remains of the Roman Road therefore placing tower 45 to the south of the monument. Tower 45 was investigated using 3 sondages, two external and one internal to the concrete base of the tower.



Plate 07: Tower 45 - Pre commencement; scale: 1x2m (archive reference: G2626_014).

5.3.1 Sondage 45.1 (Plate 08)

Sondage 45.1 measured 0.95 x 0.5m and was situated external to the tower along its northern eastern side (Plate 08). The turf layer (4501) consisted of close rooted short grass with occasional clover and heather/juniper to a depth of 0.06m. This overlaid a rubble backfill material (4502) which extend out from the north eastern 'foot' a distance of 0.15m. The final context in this sondage was the natural (4503), a mid orangy brown clay with moderate angular schist stone inclusions.

Plate 08: Plan shot of sondage 45.2; scale: 1x1m (archive reference: G2626_016).



5.3.2 Sondage 45.2 (Plate 09)

Sondage 45.2 measured 0.7m x 0.5m and was situated external to the tower along its south eastern side (Plate 09). Turf layer (4501) gave way to backfill material (4504), a mid-brown orangey silty clay material with frequent stone inclusions. The final context in this sondage was the natural (4505), an orange silty clay with frequent large stone schist stone inclusions.



Plate 09: Plan shot of sondage 45.2; scale: 1x1m (archive reference: G2626_018).

5.3.3 Sondage 45.3 (Plate 10)

Sondage 45.3 measured 0.74m x 0.42m and was situated internal to the tower in its south eastern corner (Plate 10). Turf layer (4501) gave way to a dark brown silty clay backfill material (4506) in which a piece of wood was found which appears to have formed part of the concrete former used during construction of the tower. This material extended out from the concrete muff a maximum distance of 0.10m where there was a small amount of redeposited natural (4507). Sondage 45.3 also revealed a mid-brown silty clay topsoil layer (4508) and the natural (4509), an orange yellow silty clay.

Plate 10: SW facing section of sondage 45.3; scale: 1x1m (archive reference: G2626_020).



5.3.4 Discussion

Unlike at Tower 41, the ground disturbance at Tower 45 appears to have been minimal with larger excavations taking place around the 4 'feet' of the concrete muff and minimal ground disturbance along the sides depending on the topography. The concrete appears to have been poured in situ using a wooden former, part of which was found in sondage 45.3. No archaeology was encountered in this area and the tower appears to be situated to the south of the Roman Road CN402.

5.4 Tower 46 (Plate 11)

Tower 46 was situated approximately 55m to the south of the access track on a south to north sloping hillside covered in heather (Plate 11). It was investigated using 3 sondages, two external and one internal to the concrete base of the tower.



Plate 11: Tower 46 - Pre commencement; scale: 1x2m (archive reference: G2626_030).

5.4.1 Sondage 46.1 (Plate 12)

Sondage 46.1 measured 1.0m x 0.39m and was situated external to the tower on its west north western side. The turf layer (4601) consisted of close rooted short grass and midgreyish brown sandy silty clay with occasional gravel inclusions that was 0.10m deep. Under this was a make-up layer (4602) of small and medium fractured schist stones 0.09m in depth. This overlaid large capping stones for a culvert [4603] which ran WNW-ESE directly under the centre of the tower (Plate 12). The capping stones measured up to 0.7m x 0.35m x 0.12m and were local schist stone. As the culvert was still running the capping stones were not removed however the base of the culvert was measured at approximately 0.54m through a gap in the stones. Within the sondage, and to the north of the culvert, the natural glacial horizon (4605) was encountered which consisted of an orangey brown silty clay.

Plate 12: Plan shot of sondage 46.1 showing capping stones of culvert [4603]; scale: 1x1m (archive reference: G2626_034).



5.4.2 Sondage 46.2 (Plate 13)

Sondage 46.2 measured 0.7m x0.5m and was situated external to the tower on its east south eastern side. Turf layer (4601) survived to a depth of 0.02m in this sondage and was overlying the capping stones of the culvert [4603]. In addition to local schist stones, deposits of concrete appear to have been used to form the top of the culvert (Plate 13). Backfill material (4604) is limited to the area around the north eastern 'foot' of the tower. This material consists of a midbrown silty clay with frequent fractured schist stone inclusions and is of unknown depth as it was impossible to excavated further without disturbing the culvert. The remains of part of the wooden former used during construction are still in situ between the capping stones and the concrete muff itself.



Plate 13: Plan shot of sondage 46.2 showing stone and concrete capping of culvert [4603]; scale: 1x1m (archive reference: G2626_035).

5.4.3 Sondage 46.3 (Plate 14)

Sondage 46.3 measured 0.7m x 0.5m and was situated internal to the tower in the south western corner. Turf layer (4601) survived in this area to a depth of 0.07m which was overlying a backfill deposit (4606), a mid-brown silty clay with large stone inclusions (Plate 14). The natural (4607), a yellow sandy clay, was encountered in this sondage but only on the southernmost side under the concrete 'foot' as the rest of the area had been disturbed during the construction of the culvert.

Plate 14: Plan shot of sondage 46.3; scale: 1x1m (archive reference: G2626_040).



5.4.4 Discussion

Ground disturbance at the base of Tower 46 appears to have been restricted to the insertion of a culvert to contain the streams running down the hill to the south and excavations for the 'feet' of the tower. The culvert runs WNW-ESE under the centre of the tower and ends 3.3m to the west and 2.0m to the east. This, in conjunction with the use of concrete as capping in sondage 46.2, indicates that the culvert was constructed especially for the tower to sit on during the 1950's. It is also worth noting that extra concrete was used above ground during the construction of the muff when compared to the others examined, presumably for extra stability (Plate 11). Like Tower 45, Tower 46 appears to be situated to the south of the Roman Road CN402. Although the ditches do not survive as prominently in this area they can still be discerned just to the north of the tower.

5.5 Tower 47 (Plate 15)

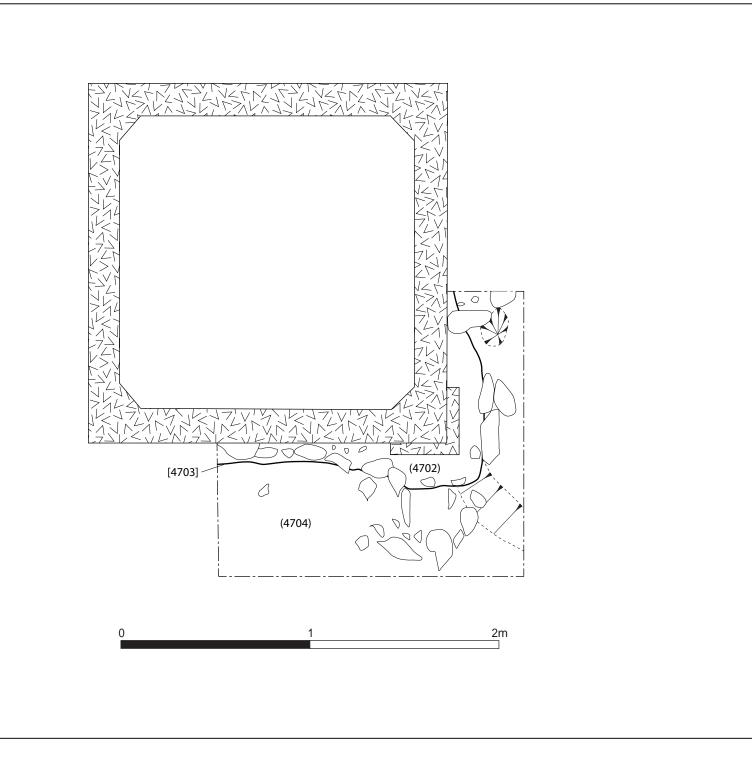
Tower 47 was situated approximately 50m to the south of the access track in an area densely covered in heather (Plate 15). It was investigated using 1 'L' shaped sondage external to the tower wrapping around the north and west sides. The tower is situated on the north side of the agger of the Roman Road, about 1.1m south of the bottom of the northern ditch.



Plate 15: Tower 47 - Pre commencement; scale: 1x2m (archive reference: G2626_045).

5.5.1 Sondage 47.1 (Plate 16)

Sondage 47.1 measured 1.5m x 0.75m east to west and 1.5m x 0.35m north to south. Turf and topsoil layer (4701) consisted of close rooted short grass and a mid-orangey brown silty clay which was 0.06m in depth. Under this was the agger of the Roman road (4704), a firm orangey brown silty clay with gravel inclusions and some small to medium stones. The cut for the foundation of the tower [4703] has been dug through the agger, and then backfilled with (4702), a mid-yellowish brown silty clay with frequent stone inclusions and modern material related to the construction of the tower (Plate 16; Figure 03). There was also a patch of bioturbation (4706) noted in the sondage which is more than likely due to the dense cover of heather.



Gwynedd Archaeological Trust

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Date: 03/10/2019

Drawing: G2626/F03 Scale: 1:20 @A4

Author: CRY

Figure 03: Plan of Sondage 47.1

Concrete Muff

— - Limit of Excavation

Stones

Plate 16: Plan shot of sondage 47.1 showing agger of Roman Road (CN402); scale: 1x1m (archive reference: G2626_048).



5.5.2 Discussion

Tower 47 is situated on the northern edge of the Roman Road very close to its northern most ditch. Layer (4704) was identified as being the remains of the former road surface due to its very firm gravelly nature, unlike the natural that had been encountered elsewhere. It was also reminiscent of a layer (5002) observed in an eroded section of the Roman Road to the west of Tower 48. Again, ground disturbance appears to have been kept to a minimum during the construction of the tower and predominantly restricted to the areas for the 'feet'. The 'natural' topography seems to have been respected and additional concrete used above ground rather than below to provide stability for the tower.

5.6 Tower 48 (Plate 17)

Tower 48 was situated approximately 15m to the south of the access track in an area densely covered in heather (Plate 17). It was investigated using 1 'L' shaped sondage external to the tower wrapping around the north and west sides. The tower is situated on the north side of the agger of the Roman Road.



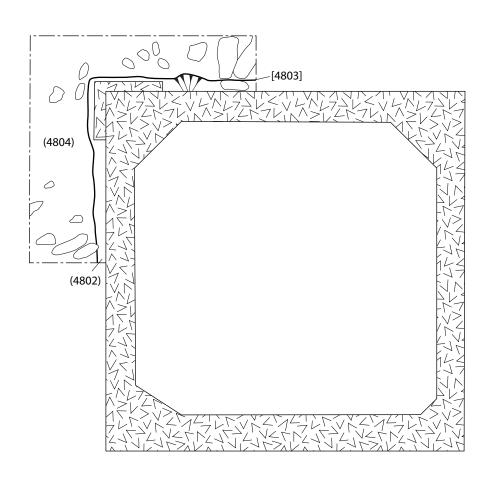
Plate 17: Tower 48 - Pre commencement; scale: 1x2m (archive reference: G2626_049).

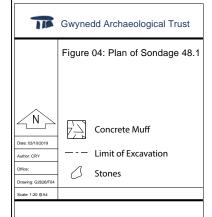
5.6.1 Sondage 48.1 (Plate 18)

Sondage 48.1 measured 1.2m x 0.4m east to west and 1.2m x 0.45m north to south. Turf layer (4801) consisted of close rooted short grass and a mid-greyish silty clay which was covered by heather and contained frequent roots to a depth of 0.08m. This was overlying a firm mid-orangey brown silty clay layer (4804) with small to medium stone inclusions and gravels (Plate 18). Through this the foundation cut [4703] for the tower was placed approximately 0.05m out from the base of the tower (Figure 04). Backfill material (4702) consisted of a mid-orangey brown silty clay with occasional gravel and small rounded and sub-angular stone inclusions and was deposited between the cut and the concrete muff.

Plate 18: Plan shot of sondage 48.1 showing possible agger of Roman Road (CN402); scale: 1x1m (archive reference: G2626_051).







1 2m

5.6.2 Discussion

Layer (4804) is interpreted as possibly being the agger of the Roman Road due to its similarity with the agger found in sondage 47.1 and layer (5002) observed in the eroded section of Roman Road to the west of Tower 48. However, the line of the ditches associated with the road is less easy to discern in this area meaning the relationship between the numerous ditches, the agger and the tower is not fully resolved. Like the other towers examined, the construction appears to have respected the topography of the ground with minimal disturbance to the monument.

5.7 Eroded Section of Roman Road (CN 402) (Plates 19 & 20)

Approximately 10m to the south of the access track and 50m to the west of Tower 48 an eroded section of the agger of the Roman Road was observed (SH7043272059) (Plate 19 & 20). A section of this was drawn to scale (Figure 05) and the deposits were recorded.

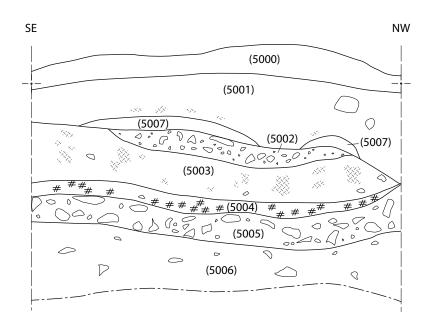
The Roman Road appears to consist of a 0.14m deep stone/gravel base (5005) above the natural clay (5006). This is then covered with a burnt stone/clay road surface (5004) which contains burnt daub and charcoal flecks and was 0.05m in depth. The road then undergoes a repair with a clay layer (5003) which was 0.06m deep with a gravel layer (5002) of 0.07m depth above it producing a later road surface. This is again covered in a mid-orangey brown clay (5001) 0.10m deep which is probably a late repair.

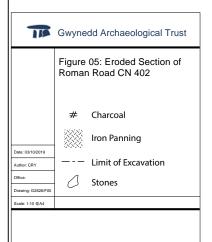


Plate 19: Overview of eroded section of Roman Road (CN402); scale: 2x1m (archive reference: G2626_042).



Plate 20: Close up of drawn section of Roman Road (CN402); scale: 2x1m (archive reference: G2626_043).





1m

6 CONCLUSION

Excavations were undertaken around the concrete bases of Towers 41 and Towers 45 to 48 in order to ascertain the archaeological preservation remaining in the scheduled areas after construction of the towers during the 1950's and in order to discharge the conditions of the Scheduled Monument Consent obtained for the essential maintenance work to the towers.

The area surrounding Tower 41 appears to have been greatly disturbed during construction. No in situ archaeology was encountered during the excavations but the discovery of some anomalous larger stones within sondage 41.2 could point to possible prehistoric structures remaining in the surrounding area. The area below the standing stone (PRN 524) nearest to the tower appears to have been purposefully terraced which again could point to surviving archaeology in the vicinity.

The construction of Towers 45 to 48 appears to have been far less disturbed, respecting the local topography and almost entirely restricted to the areas surrounding the 'feet' of the towers. Rather than digging large foundations, more concrete appears to have been used above ground to add stability to the structure. At Tower 46 a culvert was constructed under the tower in order to constrain the streams running down the northern slopes of Llanerch Fedw, however there was no damage to the Scheduled Monument as the tower is positioned to the south of the route of the Roman Road CN 402. Towers 47 and 48 appear to be situated on the agger of the Roman Road CN 402 however there are numerous criss-crossing ditches and holloways in the area that make tracing the true route of the road problematic. Preservation of the archaeology in this area is again good due to the construction respecting the topography and minimal ground disturbance concentrated around the 'feet' of the concrete muff. The eroded section of Roman Road CN 402 to the west of Tower 48 illustrates nicely the 'multi period road' (Hopewell, 2013, 33), with the many areas of repair evident.

It is recommended that the ecofact recovered from context (**4103**) within sondage 41.1 is processed and analysed as part of a post-excavation program in order to ascertain a date for the buried soil horizon.

7 SOURCES CONSULTED

- 1. Brunning, R and Watson, J 2010, Waterlogged Wood: Guidelines on the Recording, Sampling, Conservation and Curation of Waterlogged Wood (3rd edition);
- Chartered Institute for Archaeologists, 2014, Standard and Guidance for Archaeological Excavation;
- 3. Chartered Institute for Archaeologists, 2014, Standard and guidance for the collection, documentation, conservation and research of archaeological materials;
- 4. English Heritage, 1991, Management of Archaeological Projects (MAP2);
- 5. English Heritage, 2011, Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation;
- 6. English Heritage, 2012, Waterlogged Organic Artefacts, Guidelines on their Recovery, Analysis and Conservation;
- 7. Gwynedd Archaeological Trust, 2014, Historic Environment Record (HER) Guidelines for Archaeological Contractors (Version 1.3; draft);
- 8. Historic England, 2004, Human Bones from Archaeological Sites Guidelines for producing assessment documents and analytical reports;
- 9. Historic England, 2015, Management of Research Projects in the Historic Environment (MoRPHE);
- 10. Hopewell, David, 2013, Roman Roads in North-west Wales;
- 11. Royal Commission on Ancient and Historic Monuments of Wales, 2015, Guidelines for digital archives;
- 12. Watkinson, D and Neal, V, 2001, First aid for finds (3rd edition).

APPENDIX I

Photographic Register Metadata

PHOTO RECORD NUMBER*	DESCRIPTION*	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	ORIGINATING ORGANISATION	PLATE
G2626_001	Pre-commencement T41	-	NW	2x1m	Carol Ryan Young	12/09/2019	Gwynedd Archaeological Trust	03
G2626_002	Test Section to establish extent of made ground	-	SE	1x1m	Anne Marie Oattes	12/09/2019	Gwynedd Archaeological Trust	
G2626_003	Test Section to establish extent of made ground	-	SE	1x1m	Anne Marie Oattes	12/09/2019	Gwynedd Archaeological Trust	
G2626_004	Sondage at S corner showing stone	(4102)	SE	1x1m	Anne Marie Oattes	12/09/2019	Gwynedd Archaeological Trust	
G2626_005	Pre-ex of sondage 41.3	(4102) (4103)	SW	1x1m	Bethan Marie Jones	12/09/2019	Gwynedd Archaeological Trust	
G2626_006	SE facing section sondage 41.1	(4102) (4103)	SE	1x1m	Anne Marie Oattes	12/09/2019	Gwynedd Archaeological Trust	
G2626_007	NE facing section sondage 41.1	(4102) (4103) (4104)	NE	1x1m	Anne Marie Oattes	12/09/2019	Gwynedd Archaeological Trust	04
G2626_008	SW facing section sondage 41.2	(4105)	SW	1x1m	Carol Ryan Young	12/09/2019	Gwynedd Archaeological Trust	
G2626_009	Plan shot sondage 41.2	(4105)	SW	1x1m	Carol Ryan Young	12/09/2019	Gwynedd Archaeological Trust	05

PHOTO RECORD NUMBER*	DESCRIPTION*	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	ORIGINATING ORGANISATION	PLATE
G2626_010	NW facing section in sondage 41.3	4106 4107 4108 4109	NW	-	Bethan Marie Jones	12/09/2019	Gwynedd Archaeological Trust	
G2626_011	DELETED						Gwynedd Archaeological Trust	
G2626_012	SW facing section through sondage 41.3 showing extent of muff	4109	SE	1x1m	Bethan Marie Jones	13/09/2019	Gwynedd Archaeological Trust	06
G2626_013	Pre-commencement T45	-	NE	2x1m	Robert Evans	13/09/2019	Gwynedd Archaeological Trust	
G2626_014	Pre-commencement T45 showing Roman Road	-	E	1x2m	Robert Evans	13/09/2019	Gwynedd Archaeological Trust	07
G2626_015	Pre-ex shot of sondage 45.3 in southern internal corner of T45	-	E	1x1m	Bethan Marie Jones	13/09/2019	Gwynedd Archaeological Trust	
G2626_016	Shot of sondage 45.1 showing concrete foot to the muff, natural clay at the NE corner of Tower 45	4502 4503	NNE	1x1m	Robert Evans	13/09/2019	Gwynedd Archaeological Trust	08
G2626_017	Shot of sondage 45.1 showing concrete foot to the muff, natural clay at the NE corner of Tower 45	4502 4503	ESE	1x1m	Robert Evans	13/09/2019	Gwynedd Archaeological Trust	
G2626_018	Post-ex of sondage 45.2	4504 4505	ESE	1x1m	Carol Ryan Young	13/09/2019	Gwynedd Archaeological Trust	09

PHOTO RECORD NUMBER*	DESCRIPTION*	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	ORIGINATING ORGANISATION	PLATE
G2626_019	Plan shot of sondage 45.3	-	NE	1x1m	Bethan Marie Jones	13/09/2019	Gwynedd Archaeological Trust	
G2626_020	View of section (SE facing) in sondage 45.3 (no photo board)	4506 4507 4508 4509	SE	1x1m	Bethan Marie Jones	13/09/2019	Gwynedd Archaeological Trust	10
G2626_021	View East along Roman Road CN402 from Tower 48	CN402	ESE	-	Robert Evans	13/09/2019	Gwynedd Archaeological Trust	02
G2626_022	View West along Roman Road CN402 from Tower 48	CN402	WSW	-	Robert Evans	13/09/2019	Gwynedd Archaeological Trust	
G2626_023	View of standing stones and Tower 41, CN129	CN129	NW	-	Bethan Marie Jones	13/09/2019	Gwynedd Archaeological Trust	01
G2626_024	View of standing stones and Tower 41, CN129	CN129	N	-	Bethan Marie Jones	13/09/2019	Gwynedd Archaeological Trust	Front
G2626_025	View from southern standing stone towards tower 41	CN129	S	-	Bethan Marie Jones	13/09/2019	Gwynedd Archaeological Trust	
G2626_026	View towards cairn from south standing stone CN129	CN129	NW	-	Bethan Marie Jones	13/09/2019	Gwynedd Archaeological Trust	
G2626_027	View from cairn towards standing stones and Tower 41	CN129	SSE	-	Bethan Marie Jones	13/09/2019	Gwynedd Archaeological Trust	

PHOTO RECORD NUMBER*	DESCRIPTION*	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	ORIGINATING ORGANISATION	PLATE
G2626_028	View from cairn towards standing stones and Tower 41	CN129	SE	-	Bethan Marie Jones	13/09/2019	Gwynedd Archaeological Trust	
G2626_029	View from cairn towards standing stones and Tower 41	CN129	SSE	-	Bethan Marie Jones	13/09/2019	Gwynedd Archaeological Trust	
G2626_030	Pre-Commencement T46	-	ESE	1x2m	Robert Evans	16/09/2019	Gwynedd Archaeological Trust	11
G2626_031	Pre-Commencement T46	-	NNE	1x2m	Robert Evans	16/09/2019	Gwynedd Archaeological Trust	
G2626_032	Pre-ex view of sondage 46.3	-	NE	1x1m	Bethan Marie Jones	16/09/2019	Gwynedd Archaeological Trust	
G2626_033	View of sondage 46.1 on W side of tower 46 muffs	4601 4602 4603	NNE	1x1m	Robert Evans	16/09/2019	Gwynedd Archaeological Trust	
G2626_034	View of sondage 46.1 on W side of tower 46 muffs	4601 4602 4603	WNW	1x1m	Robert Evans	16/09/2019	Gwynedd Archaeological Trust	12
G2626_035	ESE facing section of sondage 46.2	4604 4601 4603	ESE	1x1m	Carol Ryan Young	16/09/2019	Gwynedd Archaeological Trust	13
G2626_036	ESE facing section of sondage 46.2	4604 4601 4603	ESE	1x1m	Carol Ryan Young	16/09/2019	Gwynedd Archaeological Trust	
G2626_037	Plane of sondage 46.2	4604 4601 4603	ESE	1x1m	Carol Ryan Young	16/09/2019	Gwynedd Archaeological Trust	

PHOTO RECORD NUMBER*	DESCRIPTION*	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	ORIGINATING ORGANISATION	PLATE
G2626_038	Post-ex view of sondage 46.3 and stones	4605 4606	NE	2x1m	Bethan Marie Jones	16/09/2019	Gwynedd Archaeological Trust	
G2626_039	Post-ex view of sondage 46.3	4606	NW	1x1m	Bethan Marie Jones	16/09/2019	Gwynedd Archaeological Trust	
G2626_040	SE facing section through sondage 46.3	4605 4606	SE	1x1m	Bethan Marie Jones	16/09/2019	Gwynedd Archaeological Trust	14
G2626_041	View of eroded section through Roman Road (close-up)	CN402	N	2x1m	Bethan Marie Jones	16/09/2019	Gwynedd Archaeological Trust	
G2626_042	View of eroded section through Roman Road (in plan)	CN402	N	2x1m	Bethan Marie Jones	16/09/2019	Gwynedd Archaeological Trust	19
G2626_043	NE facing eroded section showing Roman Road Agger	CN402	NE	2x1m	Bethan Marie Jones	16/09/2019	Gwynedd Archaeological Trust	20
G2626_044	NE facing eroded section showing Roman Road Agger (No photo board)	CN402	NE	2x1m	Bethan Marie Jones	16/09/2019	Gwynedd Archaeological Trust	
G2626_045	Pre-commencement T47	-	NNE	1x2m	Robert Evans	17/09/2019	Gwynedd Archaeological Trust	15
G2626_046	Pre-commencement T47 (no board)	-	WNW	1x2m	Robert Evans	17/09/2019	Gwynedd Archaeological Trust	

PHOTO RECORD NUMBER*	DESCRIPTION*	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	ORIGINATING ORGANISATION	PLATE
G2626_047	View of sondage 47.1 showing surface of Roman Agger on the road	4702 4703 4704 4705 4706	NNE	1x1m	Robert Evans	17/09/2019	Gwynedd Archaeological Trust	
G2626_048	View of sondage 47.1 showing surface of Roman Agger on the road	4702 4703 4704 4705 4706	WNW	1x1m	Robert Evans	17/09/2019	Gwynedd Archaeological Trust	16
G2626_049	Pre-commencement T48	-	E	1x2m	Robert Evans	18/09/2019	Gwynedd Archaeological Trust	17
G2626_050	Pre-commencement T48	-	NNW	1x2m	Robert Evans	18/09/2019	Gwynedd Archaeological Trust	
G2626_051	View of sondage 48.1 after excavation. It is and 'L' shaped trench around the north and west sides of the muff of Tower 48	4802 4803 4804	W	1x1m	Robert Evans	18/09/2019	Gwynedd Archaeological Trust	18
G2626_052	View of sondage 48.1 after excavation. It is and 'L' shaped trench around the north and west sides of the muff of Tower 48	4802 4803 4804	N	1x1m	Robert Evans	18/09/2019	Gwynedd Archaeological Trust	

APPENDIX II

Context Register Metadata

CONTEXT NO.	SITE SUB DIVISION	TYPE	GROUP	DESCRIPTION	INITIALS	DATE
4101	Tower 41	Layer	41	Turf	CRY	12/09/2019
4102	Tower 41	Deposit	41.1	Broken Stone, light orange brown	AMO	12/09/2019
4103	Tower 41	Layer	41.1	Blackish Brown Layer	AMO	12/09/2019
4104	Tower 41	Layer	41.1	Shale Bedrock - orangey yellow	AMO	12/09/2019
4105	Tower 41	Deposit	41.2	Mid Brown stoney backfill	CRY	12/09/2019
4106	Tower 41	Layer	41.3	Re-deposited natural (leached)	ВМЈ	12/09/2019
4107	Tower 41	Layer	41.3	Layer of black silty clay	ВМЈ	12/09/2019
4108	Tower 41	Deposit	41.3	Bright orange loose 'backfill'	ВМЈ	12/09/2019
4109	Tower 41	Layer	41.3	Bright yellow clay at base of sondage	ВМЈ	12/09/2019
4501	Tower 45	Layer	45	Turf	CRY	13/09/2019
4502	Tower 45	Deposit	45.1	Rubbely Stone fill around muff	RE	13/09/2019
4503	Tower 45	Layer	45.1	Stone and Natural	RE	13/09/2019
4504	Tower 45	Deposit	45.2	Backfill material	CRY	13/09/2019
4505	Tower 45	Layer	45.2	Natural	CRY	13/09/2019
4506	Tower 45	Deposit	45.3	Dark Brown backfill material	ВМЈ	13/09/2019
4507	Tower 45	Deposit	45.3	Re-deposited natural	ВМЈ	13/09/2019
4508	Tower 45	Deposit	45.3	Medium brown silty clay	BMJ	13/09/2019
4509	Tower 45	Deposit	45.3	Bright orange yellow backfill	ВМЈ	13/09/2019
4601	Tower 46	Layer	46	Turf	CRY	16/09/2019
4602	Tower 46	Deposit	46.1	Stone and clay backfill deposit	RE	16/09/2019

CONTEXT NO.	SITE SUB DIVISION	ТҮРЕ	GROUP	DESCRIPTION	INITIALS	DATE
4603	Tower 46	Structure	46.1 & 46.2	Culvert - stone capping still running	RE	16/09/2019
4604	Tower 46	Deposit	46.2	Stone and earth backfill	CRY	16/09/2019
4605	Tower 46	Layer	46.1 & 46.3	Natural	RE	16/09/2019
4606	Tower 46	Deposit	46.3	Stone & topsoil backfill	BMJ	16/09/2019
4701	Tower 47	Layer	47.1	Turf	RE	17/09/2019
4702	Tower 47	Deposit	47.1	Mid yellowish brown backfill	RE	17/09/2019
4703	Tower 47	Cut	47.1	Cut for muff foundation	RE	17/09/2019
				Firm orangey silty clay - possible road surface		
4704	Tower 47	Layer	47.1	(pos same as 5002)	RE	17/09/2019
4705	Tower 47	Structure	47.1	Concrete muff foot	RE	17/09/2019
4706	Tower 47	Deposit	47.1	Bioturbation soils	RE	17/09/2019
4801	Tower 48	Layer	48.1	Heather and Turf layer	RE	18/09/2019
4802	Tower 48	Deposit	48.1	Backfill around footing for tower	RE	18/09/2019
4803	Tower 48	Cut	48.1	Cur of trench for muff foundations	RE	18/09/2019
				Mid orangey brown silty clay - possible road		
4804	Tower 48	Layer	48.1	surface.	RE	18/09/2019
5000	Eroded Section	Layer	Eroded Section	Turf	RE	16/09/2019
				Clay (mid orangey brown) renewed road		
5001	Eroded Section	Layer	Eroded Section	surface	RE	16/09/2019
5002	Eroded Section	Layer	Eroded Section	Gravel road surface	RE	16/09/2019

CONTEXT	SITE SUB	TYPE	GROUP	DESCRIPTION	INITIALS	DATE
NO.	DIVISION					
5003	Eroded Section	Layer	Eroded Section	Clay road packing	RE	16/09/2019
				Burnt stone/clay layer. Contains burnt daub		
5004	Eroded Section	Layer	Eroded Section	and charcoal flecks	RE	16/09/2019
5005	Eroded Section	Layer	Eroded Section	Main stone/gravel road surface	RE	16/09/2019
5006	Eroded Section	Layer	Eroded Section	Natural clay	RE	16/09/2019
5007	Eroded Section	Layer	Eroded Section	Clay lens below (5001) and above (5002)	RE	16/09/2019

APPENDIX III

Drawing and Ecofact Register Metadata

DWG	SHEET	SIZE	SCALE	SUB-DIVISION	DESCRIPTION
NO.	NO.				
1	1	A4	01:10	Eroded	NE facing section through eroded area of
				Section	Roman Road
2	2	A4	01:20	Tower 47	Plan of Tower 47 with Roman Road
					surface (4704)
3	3	A4	01:20	Tower 48	Plan of Tower 48 with Roman Road
					surface (4804)

SAMPLE NO.	CONTEXT NO.	CONTEXT TYPE	PURPOSE OF SAMPLE	NO. OF TUBS
1	(4103)	Layer	GSE	1

APPENDIX IV

Reproduction of Gwynedd Archaeological Trust approved WSI

POWERLINE REFURBISHMENT: CN129 BWLCH Y DDEUFAEN (G2626)

WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL EXCAVATION

Prepared for

Atmos Consulting Limited

August 2019



	Role	Printed Name	Signature	Date
Originated by	Document Author	STYART REILLY	Street	14/08/19
Reviewed by	Document Reviewer	JOHN ROBGETS	garas	14/08/19
Approved by	Principal Archaeologist	JOHN POBERTS	Jan	14/08/19
Approved	Cadw			

Revision His	tory	
Summary of Changes	Ref Section	Purpose of Issue
Inclusion of most recent versions of application for scheduled monument consent & scheduled monument consent	Appendix I & II	Cadw Approval
documents. Date of authorisation from Cadw updated	1.0	
	Inclusion of most recent versions of application for scheduled monument consent & scheduled monument consent documents.	Inclusion of most recent versions of application for scheduled monument consent & scheduled monument documents.

POWERLINE REFURBISHMENT: CN129 BWLCH Y DDEUFAEN (G2626)

WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL EXCAVATION

Prepared for Atmos Consulting Limited, August 2019

Historic Environment Record Enquiry Number GATHER1156 and Event Primary Reference Number 45464

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1 INTRODUCTION

Gwynedd Archaeological Trust has been asked by *Atmos Consulting Limited* to undertake an archaeological excavation in advance of refurbishment works on the 33kv Dolgarrog to Llanfairfechan powerline. The refurbishment works will involve small scale temporary work to Tower 41 and the bases of each tower leg to paint the concrete 'muff' that is exposed above ground (and approx. 500mm below ground). Other works to the towers themselves will require access via an Argo-cat and an agricultural mule with a winch but won't break ground. Tower 41 is located within Scheduled Monument **CN129** Bwlch y Ddeufaen Standing Stones (NGR SH71457181; postcode: LL33 0EH; Figure 01). The work is scheduled during September/October 2019.

The standing stones are a designated Scheduled Monument and as such, are protected from damage by law under the Historic Environment (Wales) Act 2016 and the Ancient Monuments and Archaeological Areas Act 1979. The work will be undertaken subject to, and in accordance with, Scheduled Monument Consent issued by Cadw Welsh Historic Monuments. Authorisation for the works has been granted by Cadw on 02/08/2019 (see Appendix I; Appendix II).

The excavation will be completed in accordance with the following guidance:

- Standard and Guidance for Archaeological Excavation (Chartered Institute for Archaeologists, 2014);
- 2. Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives (Chartered Institute for Archaeologists, 2014);
- 3. Updated Guidelines to the Standards for Recording Human Remains (Chartered Institute for Archaeologists, 2017);
- 4. Management of Archaeological Projects (English Heritage, 1991);
- 5. Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide (Historic England, 2015); and
- 6. *Guidelines for digital archives* (Royal Commission on Ancient and Historical Monuments of Wales, 2015).

Gwynedd Archaeological Trust is certified to ISO 9001:2015 and ISO 14001:2015 (Cert. No. 74180/B/0001/UK/En) and is a Registered Organisation with the Chartered Institute for

Archaeologists and a member of the Federation of Archaeological Managers and Employers (FAME).

1.1 Fieldwork Aims and Objectives

The key aim and objective of the archaeological excavation is to:

 Hand excavate around each muff at the base of Tower 41 to determine the level of archaeological preservation within the scheduled area and mitigate for any potential disturbance from the refurbishment works.

1.2 Monitoring Arrangements

The archaeological excavation be monitored by Cadw; the content of this WSI and all subsequent reporting by GAT must be approved by Cadw prior to final issue.

Cadw will need to be informed of the project timetable and of the subsequent progress and findings. This will allow the Cadw Inspector time to arrange monitoring visits and attend site meetings (if required) and enable discussion about the need or otherwise for further archaeological works (if required) as features of potential archaeological significance are encountered.

The Cadw inspector contact details are:

• Ian Halfpenney: ian.halfpenney@gov.wales | 07968 609837

1.3 Historic Environment Record

In line with the Gwynedd Historic Environment Record (HER) requirements, the HER will be contacted at the onset of the project to ensure that any data arising is formatted in a manner suitable for accession to the HER and follows the guidance set out in *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (The Welsh Archaeological Trusts, 2018). The HER will be informed of the project start date, location including grid reference, estimated timescale for the work, and further relevant information associated with the project.

The GAT HER Enquiry Number for this project is GATHER1156 and the Event PRN is 45464. The GAT HER will also be responsible for sourcing the Primary Reference Numbers (PRN) for any new identified and recorded assets.

2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

The Bwlch y Ddeufaen Standing Stones (CN129) are a scheduled monument that comprises two standing stones and a round cairn, set at the western end of Bwlch y Ddeufaen pass between the hills of Foel Lwyd to the north and Drosgl to the south. The site is adjacent to a section of the Roman road (CN402) that connected Canovium to Segontium. It is crossed by a row of pylons and power lines, with Tower 41 placed within the scheduled area (Figure 01).

The monument consists of:

A standing stone that is 3.5m high by 1.5m by 1.2m, rising to a blunt point, with packing stones visible around its base;

A standing stone that measures 2.0m high by 1.2m by 0.5m, with flat faces on the east and west; and

A round cairn, which has an approximate diameter of 18m, at the centre of which one side of a cist is visible with an exposed length of 1.5m.

3 METHODOLOGY

3.1 Introduction

The archaeological excavation will involve:

- removal of vegetation by hand at the 4 muffs located at the base of the legs of Tower
 41. The extent of vegetation removal at each muff will be to a depth of 500mm and up to 1.0m out from the base of the tower to determine the level of archaeological preservation within the scheduled area at the base of Tower 41;
- Upon completion of the excavation work, the trenches will be lined and backfilled in preparation for the main SPEN works.

3.2 Fieldwork Methodology

- All attendances, subsurface activity, photographs and contexts records will be recorded using GAT pro-formas (Appendices III and IV);
- Photographic images will be taken using a digital SLR (Nikon D3000) camera set to maximum resolution (3,872 x 2,592 10.75 effective megapixels) in RAW format and will be converted to TIFF and JPEG format for archiving using Adobe Photoshop; a photographic record will be maintained on site using GAT pro-formas (Appendix V) and digitised in *Microsoft Access* as part of the fieldwork archive and dissemination process. Photographic images will be archived in TIFF format using Adobe Photoshop; the archive numbering system will start from the next sequential number to be used after completion of the pre-commencement survey. When practical, a photographic ID board will be used and will include site code, image orientation and any relevant context numbers;
- Any archaeological features/deposits/structures encountered will be manually cleaned and examined to determine extent, function, date and relationship to adjacent activity. The following excavation strategy will generally apply: 50% sample of each sub-circular feature, 25% sample of each linear feature (terminal ends and intersection points with other features will be prioritised). However, if discrete features are identified, these will be 100% excavated. Any features that comprise a spread of material rather than a cut feature, will be completed in quadrants (if fully extant) or 100% excavated if present as a discrete spread;

- Any required sections and plans to be drawn at a minimum 1:10 scale using GAT A4 or A2 pro-forma permatrace; section datums will be recorded; and
- Should dateable artefacts and/or ecofacts be recovered, an interim report will be submitted summarising the results, along with an assessment of potential for analysis specification (in line with the MAP2 process).

3.3 Human Remains

Although it is highly unlikely that human remains will be identified during the archaeological excavation, if any human remains are identified that are to be excavated, and cannot be preserved in situ this will take place under appropriate regulations and with due regard for health and safety issues. In order to excavate human remains, a Ministry of Justice licence is required under Section 25 of the Burials Act 1857 for the removal of any body or remains of any body from any place of burial. In accordance with the Ministry of Justice licence, recovered remains will be reburied once the investigation and/or assessment/analysis are complete.

Non-fragmented skeletal remains will be excavated using wooden tools and collected and stored in polyethylene bags (with appropriate references for context, grave number, et al) and placed in a lidded cardboard archive box (note: separate boxes for each grave) and stored in a suitable manner within GAT premises. If significant quantities of human remains are encountered, a human osteologist should be contacted and appointed to advise the team during the fieldwork. The osteologist will be an external appointment: Dr. Genevieve Tellier | Tel: 01286 238827 | email: northwalesosteology@outlook.com who will assist in devising the excavation, recording and sampling strategy for features containing human remains. The osteologist should also help to ensure that adequate post-excavation processing of human remains is carried out so that the material is in a fit state for assessment during the post-excavation stage. For inhumations, this will involve washing, drying, marking and packing.

If human remains are recovered that are deemed suitable for further assessment/analysis, this will be completed in accordance with the osteologist's requirements and with *Human Bones from Archaeological Sites Guidelines for producing assessment documents and analytical reports* (Chartered Institute for Archaeologists, 2017).

3.4 Ecofacts

Should any archaeological features and/or sealed deposits be identified that are deemed suitable for dating, ecofact samples will be taken. The sampling procedure will be informed by specialist advice upon discovery, particularly for waterlogged/organic deposits. The specialist contact will be Jackeline Robertson (AOC Archaeology | telephone: 0208 843 7380). The sampling strategy will also be undertaken in accordance with the principles set out in *Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation* (Historic England, 2011).

3.5 Artefacts

Diagnostic artefacts and artefacts from sealed deposits will be retained for further examination and identification. The artefacts will be treated according to guidelines issued by the UK Institute of Conservation, in particular the advice provided within *First Aid for Finds* (Watkinson and Neal 2001).

Any waterlogged artefacts (e.g. wood or leather) that are to be recovered for post-excavation assessment and analysis will be processed in accordance with *Environmental Archaeology:* a guide to the theory and practice of methods, from sampling and recovery to post-excavation (English Heritage, 2011) and specifically in accordance with Brunning and Watson (2010) for waterlogged wood and Historic England (2012) for waterlogged leather. In such cases an external specialist will be contacted to agree an appropriate sampling and recovery strategy via Lucy Whittingham | Project Manager (post-excavation) | AOC Archaeology | telephone: 0208 843 7380 | email: lucy.whittingham@aocarchaeology.com).

All finds are the property of the landowner; however, it is Trust policy to recommend that all finds are donated to an appropriate museum (in this case Conwy Archive Service, Old Board School, Lloyd Street, Llandudno LL30 2YG), where they can receive specialist treatment and study. Access to finds must be granted to the Trust for a reasonable period to allow for analysis and for study and publication as necessary. Trust staff will undertake initial identification, but any additional advice would be sought from a wide range of consultants used by the Trust, including National Museums and Galleries of Wales at Cardiff.

All finds of treasure must be reported to the coroner for the district within fourteen days of discovery or identification of the items. Items declared Treasure Trove become the property of the Crown, on whose behalf the Portable Antiquities Scheme acts as advisor on technical matters, and may be the recipient body for the objects.

The Treasure Valuation Committee, based at the British Museum, and informed by the Portable Antiquities Scheme, will decide whether they or any other museum may wish to acquire the object. If no museum wishes to acquire the object, then the Secretary of State will be able to disclaim it. When this happens, the coroner will notify the occupier and landowner that he intends to return the object to the finder after 28 days unless he receives no objection. If the coroner receives an objection, the find will be retained until the dispute has been settled.

GAT will contact the landowner (via client) for agreement regarding the transfer of artefacts, initially to GAT and subsequently to the relevant museum (Conwy Archive Service). A GAT

produced pro-forma will be issued to the landowner where they are given the option to donate the finds or to record that they want them returning to them once analysis and assessment has been completed. Artefacts will be transferred to the Conwy Archive Service in accordance with their guidelines.

3.6 Fieldwork Archiving

Following the completion of the fieldwork, a programme of field work archiving will be completed based on following task list;

- 1. Pro-formas: all cross referenced and complete;
- 2. Photographic Metadata: completed in *Microsoft Access* and cross-referenced with all pro-formas;
- 3. Sections: all cross referenced and complete;
- 4. Survey data: downloaded using a Computer Aided Design package;
- 5. Plans: all cross referenced and complete;
- 6. Artefacts (if relevant): quantified and identified; register completed;
- 7. Ecofacts (if relevant): quantified and register completed;
- 8. Context register (if relevant): quantified and register completed.

All data will be processed, final illustrations will be compiled and a report will be produced which will detail and synthesise the results.

4 REPORTING

Following completion of the stages outlined above, a report will be produced within one month incorporating the following:

- 1. Non-technical summary (Welsh and English)
- 2. Introduction
- 3. Aims and objectives
- 4. Background
- 5. Methodology
- 6. Results
- 7. Conclusions and further recommendations
- 8. List of sources consulted.
- 9. Appendix I approved GAT project design
- 10. Appendix II photographic metadata

Should dateable artefacts and ecofacts be recovered, an **interim report** will be submitted summarising the results, along with an assessment of potential for analysis written scheme of investigation (in line with the MAP2 process).

Illustrations will include plans of the location, site plans and sections. Historical maps, when appropriate and if copyright permissions allow, will be included. A draft copy of the report will be sent to Cadw and to the client prior to production of the final report.

Dependant on the outcome of the archaeological excavation the *Research Framework for* the *Archaeology of Wales* will be consulted to help to provide context and to help inform the archaeology identified within the site boundary.

5 DISSEMINATION AND ARCHIVING

A full archive including plans, photographs, written material and any other material resulting from the project will be prepared. The archaeological excavation outlined in this written scheme of investigation is expected to commence in September/October 2019. A draft report will be submitted within one month of fieldwork completion; a final report will be submitted to the Historic Environment within six months of submitting the draft report.

On completion, the following dissemination will apply:

- A digital report will be provided to the client and Cadw (draft report then final report);
- A paper report plus a digital report will be provided to the regional Historic Environment Record, Gwynedd Archaeological Trust within six months of project completion (final report only). If appropriate, digital information such as the project database, GIS table(s) and photographs, will also be submitted to the required standards set out in *Guidance for the Submission of Data to the Welsh Historic* Environment Records (HERs) (Version 1.1); and
- A digital report and archive (including photographic and drawn) data will be provided to Royal Commission on Ancient and Historical Monuments, Wales (final report only), in accordance with the RCAHMW Guidelines for Digital Archives Version 1. Digital information will include the photographic archive and associated metadata.

6 PERSONNEL

The project will be managed by John Roberts, Principal Archaeologist GAT Contracts Section with attendances on-site undertaken by a GAT Project Archaeologist(s). The Project Archaeologist will be responsible for the archaeological excavation on site, including all field management duties, e.g., Cadw/client/consultant liaison, artefact, osteologist or palaeoenvironmentalist liaison (if relevant). The Project Archaeologist will be responsible for completing all on site pro-formas and the fieldwork archive itemised in para. 3.2. The Project Archaeologist will also be responsible for submitting a draft final report (or interim report) for project manager review and approval. The report will then be submitted as per the arrangements defined in para. 5.

7 HEALTH AND SAFETY

The GAT Project Archaeologist(s) will be CSCS certified. Copies of the site specific risk assessment will be supplied to the client and sub-contractor prior to the start of fieldwork. Any risks and hazards will be indicated prior to the start of work via a submitted risk assessment. All GAT staff will be issued with required personal safety equipment, including high visibility jacket, steel toe-capped boots and hard hat. All GAT fieldwork is undertaken in accordance with the Trust's Health and Safety Manual, Policy and Handbook which were prepared by Ellis Whittam. All work will be undertaken in accordance with the client and site contractors Health and Safety requirements.

8 SOCIAL MEDIA

One of the key aims in the GAT mission statement is to improve the understanding, conservation and promotion of the historic environment in our area and inform and educate the wider public. To help achieve this, GAT maintains an active social media presence and seeks all opportunities to promote our projects and results. With permission, GAT would like the opportunity to promote our work on this scheme through our social media platforms. This could include social media postings during our attendance on site as well as any postings to highlight results. In all instances, approval will be sought from client prior to any postings.

Any social media will be with the agreement of the client and Cadw.

9 INSURANCE

Public/Products Liability

Limit of Indemnity- £5,000,000 any one event in respect of Public Liability

INSURER Aviva Insurance Limited

POLICY TYPE Public Liability

POLICY NUMBER 24765101CHC/UN/000375

EXPIRY DATE 21/06/2020

Employers Liability

Limit of Indemnity- £10,000,000 any one occurrence.

The cover has been issued on the insurers standard policy form and is subject to their usual terms and conditions. A copy of the policy wording is available on request.

INSURER Aviva Insurance Limited

POLICY TYPE Employers Liability

POLICY NUMBER 24765101 CHC / UN/000375

EXPIRY DATE 21/06/2020

Professional Indemnity

Limit of Indemnity- £5,000,000 in respect of each and every claim

INSURER Hiscox Insurance Company Limited

POLICY TYPE Professional Indemnity

POLICY NUMBER 9446015

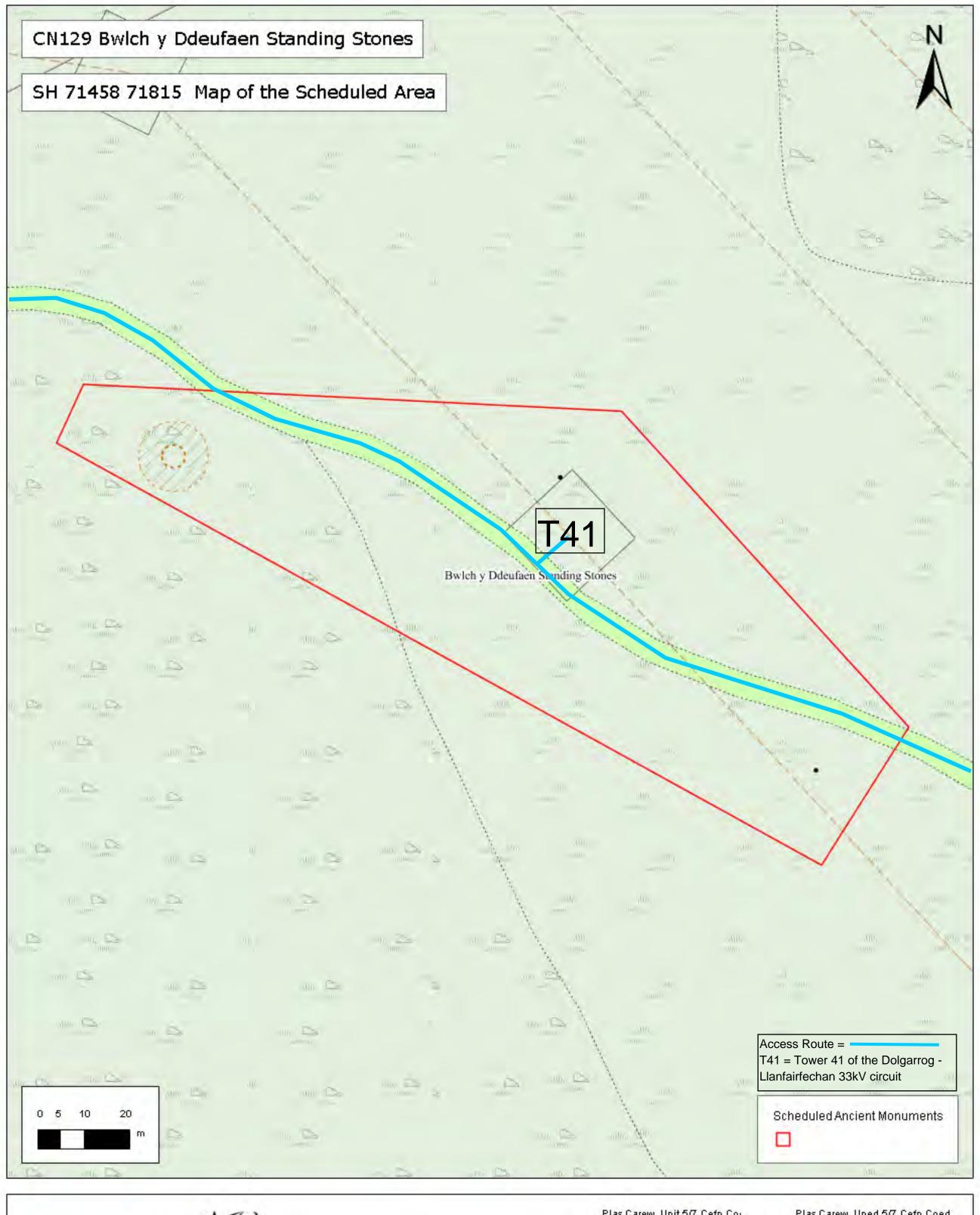
EXPIRY DATE 22/07/2020

10 SOURCES CONSULTED

- Brunning, R and Watson, J 2010, Waterlogged Wood: Guidelines on the Recording, Sampling, Conservation and Curation of Waterlogged Wood (3rd edition);
- 2. Chartered Institute for Archaeologists, 2014, Standard and Guidance for Archaeological Excavation;
- 3. Chartered Institute for Archaeologists, 2014, Standard and guidance for the collection, documentation, conservation and research of archaeological materials;
- 4. English Heritage, 1991, Management of Archaeological Projects (MAP2);
- 5. English Heritage, 2011, Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation;
- 6. English Heritage, 2012, Waterlogged Organic Artefacts, Guidelines on their Recovery, Analysis and Conservation;
- 7. Gwynedd Archaeological Trust, 2014, Historic Environment Record (HER) Guidelines for Archaeological Contractors (Version 1.3; draft);
- 8. Historic England, 2004, Human Bones from Archaeological Sites Guidelines for producing assessment documents and analytical reports;
- 9. Historic England, 2015, Management of Research Projects in the Historic Environment (MoRPHE);
- Royal Commission on Ancient and Historic Monuments of Wales, 2015, Guidelines for digital archives;
- 11. Watkinson, D and Neal, V, 2001, First aid for finds (3rd edition).

FIGURE 01

Reproduction of CN129 Bwlch y Ddeufaen Standing Stones Map







Plas Carew, Unit 5/7 Cefn Co-Parc Nantgarw, Cardiff, CF15 7QQ Tel: 01443 336600

Fax: 01443 336001 Email: cadw@wales.gsi.gov.u Plas Carew, Uned 5/7 Cefn Coed Parc Nantgarw, Cardiff, CF15 7QQ Ffôn: 01443 336000 Facs: 01443 336001 Ebost: cadw@wales.gsi.gov.uk

This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office @ Crown copyright.

APPENDIX I

Application for Scheduled Monument Consent

APPLICATION for Scheduled Monument Consent

ANCIENT MONUMENTS AND ARCHAEOLOGICAL AREAS ACT 1979

To be completed by or on behalf of the applicant in BLOCK CAPITALS or typescript

1. Applicant

Name Richard Rainford

Address SP Energy Networks, Gateway House, Old Hall Rd, Bromborough

Postcode CH62 3NX

Telephone number 0141 614 7133 / 07808 637 081

2. Occupier of monument (if not the applicant)

Name Mr Tom Williams

Address Rhydlanfair Fm, Pentrefoelas, Betws y Coed, Conwy

Postcode LL24 OSS

Telephone number 01690 710267 / 07792 712 731

3. Monument to which application relates

Name (if any) of monument Bwlch y Ddeufaen Standing Stones

Address or location Roman Rd, Llanfairfechan, Conwy, LL33 0EY

County Monument Number CN129

National Grid reference SH 71458 71815

4. Description of proposed works

Proposed works include the refurbishment of an existing 33kV overhead electric power line which runs on steel towers from Dolgarrog to the south east of Llanfairfechan. The activity within this SAM includes crossing it with all terrain vehicles (ATV's) that include an Argo-cat and a 4x4 Mule and also refurbishment works which includes vegetation clearance at the tower muffs so they can be painted.

The SAM will need to be crossed during two outage periods, the first of which will be in July using an Argocat to transfer personnel to each tower position so that a visual condition based assessment can be completed. The second outage will take place during August & September during which an Argo-cat and a 4x4 Mule will be used to transfer personnel and materials across the SAM to each tower position so that the refurbishment works can be completed. During this second outage, the refurbishment works within the SAM will include the removal of vegetation by hand at the 4 muffs located at the base of the legs of tower 41. The extent of vegetation removal at each muff will be to a depth of 500mm and up to 1m out from the base of the tower so that each exposed muff can then be painted as part of the refurbishment works.







CN129 Bwlch y Ddeufaen Standing Sto	<u>'</u>
Dolgarrog - Llanfairfechan Access Rout	е Мар
CN129 Bwich y Ddeufaen Standing Stones Map Dolgarrog - Llanfairfechan Access Route Map Tower Muffs Picture Any other information relevant to application In order to obtain vehicle access to towers 42 to 49 to undertake the condition based assessment (in Juna of the refurbishment works (in August / September), this SAM will be crossed using ATV's along the existing stoned access track. No deviation will be taken from this track apart from when taking ATV access to tower 41. The only vegetation removal within the SAM will be undertaken at the muffs of tower 41 as described in Section 4 of this form. The remaining refurbishment works at this tower (which includes the replacement of the anti-climbing devices, tower signage, insulators, fixtures, fittings and steelwork) will rinvolve any ground disturbance works. I/We hereby apply for scheduled monument consent for the works described in this application and shown on the accompanying plans and drawings. Name Gethin Gibbon Signature Date 06-06-2019	
Any other information releva	nt to application
Arry Other Information releva	ти то аррисатіон
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CERTIFICATE of Ownership

A.

ANCIENT MONUMENTS AND ARCHAEOLOGICAL AREAS ACT 1979

One of the following certificates must be completed by or on behalf of the applicant

Certificate in accordance with paragraph 2(1)(a) of Schedule 1 to the Act

	·	an the applicant was the owner (note x) of the monument to it the beginning of the period of twenty-one days which ended	
	Signature	Date	
B.	Certificate in accordance with	paragraph 2(1)(b) of Schedule 1 to the Act	
	persons other than the applicant who, at the	ven the requisite notice of the accompanying application to all the beginning of the period of twenty-one days which ended on the) of the monument to which the application related, namely	
	Mr Tom Williams, Rhydlanfair fm, Pentre	efoelas, Betws y Coed, Conwy, LL24 0SS	
	Signature	Date 06-06-201	9
C.	Certificate in accordance with	paragraph 2(1)(c) of Schedule 1 to the Act	
	It is hereby certified:		
	(1) that the applicant is unable to issue a cer Schedule 1 to the Ancient Monuments and A	rtificate in accordance with either paragraph 2(1)(a) or (b) of archaeological Areas Act 1979;	
		notice of the accompanying application to the following persons y-one days which ended on the date of the application, were the application relates, namely (note y)	S
		; and	
		, and	
		s are reasonably open to him to ascertain the names and who at the beginning of that period were owners (note x) of that	t
	Signature	Date	

D. Certificate in accordance with paragraph 2(1)(d) of Schedule 1 to the Act

It is hereby certified that the applicant is unable to issue a certificate in accordance with paragraph 2(1)(a) of Schedule 1 to the Ancient Monuments and Archaeological Areas Act 1979, but has taken such steps as are reasonably open to him to ascertain the names and addresses of the other persons who, at the beginning of the period of twenty-one days which ended on the date of the accompanying application, were owners (note x) of the monument to which the application relates and has been unable to do so.

Signature	Date

Footnotes

(note x) 'owner' means a person who is for the time being the estate owner in respect of the fee simple in the monument or is entitled to a tenancy of the monument granted or extended for a term of years certain of which not less than seven years remain unexpired.

(note y) Insert names and addresses.

APPENDIX II

Scheduled Monument Consent



Plas Carew, Uned 5/7 Cefn Coed
Parc Nantgarw, Caerdydd CF15 7QQ
Ffôn 0300 025 6000
ebost cadw@llyw.cymru
www.cadw.gov.wales

Plas Carew, Unit 5/7 Cefn Coed Parc Nantgarw, Cardiff CF15 7QQ Tel 0300 025 6000 email cadw@gov.wales www.cadw.gov.wales

Gethin Gibbons SP Energy Networks

By email:

ggibbon@spenergynetworks.co.uk

Eich cyfeirnod Your reference

Ein cyfeirnod Our reference

CN129

Dyddiad Date

2 August 2019

Llinell uniongyrchol Direct line 0300 0256007

Ebost Email: scheduledmonuments@gov.wales

Dear Mr Gibbons,

ANCIENT MONUMENTS AND ARCHAEOLOGICAL AREAS ACT 1979 APPLICATION FOR SCHEDULED MONUMENT CONSENT Bwlch y Ddeufaen Standing Stones (CN129

1. Introduction

- 1.1 Thank you for your application of 6 June 2019 to Cadw for scheduled monument consent for essential access and maintenance works to 1 pylon base located within the scheduled area of the above scheduled monument.
- 1.2 Cadw is a Department within the Welsh Government that undertakes the statutory functions of the Welsh Ministers in determining applications for scheduled monument consent.
- 1.2 Each application for scheduled monument consent is considered on its own merits in accordance with Conservation Principles for the Sustainable Management of the Historic Environment in Wales (Conservation Principles) and Annex A of Technical Advice Note 24: The Historic Environment (TAN 24). In particular, TAN 24 explains that the main purpose of scheduling is to ensure the preservation of ancient monuments and, when considering an application for scheduled monument consent, there is
 - a presumption against proposals which would involve significant alteration or cause damage or which would have a significant impact on the setting of

remains.

2. Assessment

2.1 Your application and supporting documentation has been assessed by our Regional Inspector of Ancient Monuments who has recommended that conditional scheduled monument consent should be approved to undertake essential maintenance works to 1 pylon (Tower 41 of the Dolgarrog to Llanfairfechan 33kV circuit) located within the boundary of the scheduled

Mae Gwasanaeth Amgylchedd Hanesyddol Llywodraeth Cymru (Cadw) yn hyrwyddo gwaith cadwraeth ar gyfer amgylchedd hanesyddol Cymru a gwerthfawrogiad ohono.







- area of Bwlch y Ddeufaen Standing Stones. The reasons for the Inspector's conclusions are set out in Annex A of this letter.
- 2.2 I have carefully considered the impact of the proposed development on the scheduled monument and its setting in light of the advice that I have received from our Regional Inspector of Ancient Monuments.
- 2.3 After very careful consideration I have no reason to disagree with the advice of our Regional Inspector and am satisfied that his recommendation is consistent with the objectives of Conservation Principles and TAN 24.

3. Decision

- 3.1 Accordingly, I hereby approve conditional scheduled monument consent for the proposed essential access and maintenance works to the muffs on the pylon base that lies within the boundary of Bwlch y Ddeufaen Standing Stones (CN129) As I have mentioned previously, I have no reason to disagree with the advice of our Regional Inspector and the rationale for my decision is therefore explained in Annex A.
- 3.2 In reaching this decision, I have taken into account the requirement of sections 3 and 5 of the Wellbeing of Future Generations Act. I consider that this decision is in accordance with the Act's sustainable development principle through its contribution towards the Welsh Ministers' well-being objective of A Wales of vibrant culture and thriving Welsh Language.
- 3.3 Any development control issues associated with wider development will be a matter for any application for planning permission. It is the responsibility of the applicant to establish whether any further approval or consents are required for the proposed development.

4. Proposed Conditions

- 4.1 The following proposed conditions are intended to protect the monument from damage or significant alteration as set out in *TAN 24: The Historic Environment* and ensure that details of the project are archived.
 - a) Works shall be undertaken strictly in accordance with the application of 6 June and the accompanying documents;
 - b) The applicant shall provide Cadw with reasonable advance notice of commencement of works on site (notice via email is acceptable) and will afford access at all reasonable times to any Cadw official or archaeologist nominated by Cadw to monitor progress of the works;
 - c) Prior to the start of works the applicant shall submit a method statement for undertaking the works to Cadw for approval;
 - d) The works shall be carried out in accordance with the Method Statement submitted in advance and formally approved in writing by Cadw. The Method

Statement shall be adhered to throughout the works and no works shall commence until the Method Statement has been formally approved by Cadw;

- e) No works, including site clearance, shall commence until Cadw has been informed in writing of the name of an appropriately qualified archaeologist operating to CIFA published standards and guidance¹ who will carry out an appropriate programme of archaeological mitigation works in accordance with a written scheme of investigation (WSI) which has been submitted to and approved in writing by Cadw. No work shall commence until Cadw has confirmed in writing that the proposed archaeologist and archaeological works are acceptable;
- f) The appointed archaeologist shall provide regular updates to the Cadw Inspector on progress with the works;
- g) That any significant historic or archaeological features not previously identified which are revealed when carrying out the works shall be retained in-situ and reported to the Cadw Inspector within two working days. Works shall be halted in the area/part of the site affected until provision has been made for retention and/or recording of the feature by a suitably qualified archaeologist in accordance with details submitted to and approved in writing in advance by Cadw;
- h) That upon completion of the works the disturbed ground shall be reinstated and the site shall be left in a stable and tidy condition;
- i) A digital copy of the archaeological report shall be submitted to Cadw for approval within 8 weeks of the archaeological fieldwork being completed².
- j) A digital copy of the approved archaeological report shall be submitted to the regional Historic Environment Record (HER) and National Monuments Record (NMR) of Wales to be incorporated into these public records.

5. Compliance

- 5.1 Where a condition requires approval or any contact with Cadw you are advised to contact lan Halfpenney by email scheduledmonuments@gov.wales or by telephone on 03000 622027.
- 5.2 When all work has been completed and the conditions have been discharged, please complete and return the 'completion notice' at **Annex B** to Cadw. Section 2(6) of the 1979 Act provides that non-compliance with a condition attached to a grant of scheduled monument consent shall be an offence.

-

¹ Chartered Institute for Archaeologists https://www.archaeologists.net/codes/cifa

² Cadw will retain a copy of the archaeological report for our records

- 5.3 By virtue of Section 4 of the 1979 Act, if no works to which this consent relates are executed or started within 5 years from the date of this letter, the consent shall cease to have effect at the end of that period (unless it is revoked in the meantime).
- 5.4 This letter does not convey any approval or consent required under any enactment, bylaw, order or regulation other than Section 2 of the Ancient Monuments and Archaeological Areas Act 1979. It is the responsibility of the applicant to obtain any such approval or consent where necessary.

6. Mechanism for Challenge

- 6.1 Section 55 of the 1979 Act explains that if you are aggrieved by the decision given in this letter, you may challenge its validity by applying to the High Court within six weeks from the date of my decision. Furthermore, the legislation explains that the grounds on which an application may be made to the Court are:
 - a) that my decision is not within the powers of the Act (i.e. that I have exceeded the powers available under the Act); and
 - b) that any of the relevant requirements set out in the Act have not been complied with and that your interest has been substantially prejudiced by the failure to comply.

The 'relevant requirements' mentioned above are defined in Section 55 of the 1979 Act and it is advisable to seek legal advice before taking any action.

- 6.2 Should you have any queries please do not hesitate to contact me.
- 6.3 Finally, please note that your personal data is managed in compliance with the General Data Protection Regulations.

Yours sincerely,

Nichola Davies
Casework Manager
under authority of the Deputy Minister for Culture, Sport and Tourism, one of the
Welsh Ministers
Annex A

ANCIENT MONUMENTS AND ARCHAEOLOGICAL AREAS ACT 1979
APPLICATION FOR SCHEDULED MONUMENT CONSENT
Bwlch y Ddeufaen Standing Stones (CN129

INSPECTOR'S ADVICE

1. Policy Context

- 1.1 An application for scheduled monument consent (SMC) is considered on its own merits in accordance with *Conservation Principles for the Sustainable Management of the Historic Environment in Wales* (Conservation Principles) and Annex A of *Technical Advice Note 24:* The Historic Environment (TAN 24). In particular, TAN 24 explains that the main purpose of scheduling is to ensure the preservation of ancient monuments and, when considering an application for SMC there is a presumption against proposals which would involve significant alteration or cause damage, or which would have a significant impact on the setting of remains. Therefore, applicants are expected to demonstrate that no practicable alternative route or location, avoiding the scheduled area, exists and that the need to undertake works outweighs the presumption in favour of the protection of the scheduled monument.
- 1.2 The Welsh Government's six principles for sustainable management of the historic environment in Wales are also used as a guide when considering applications for scheduled monument consent. These are:
- Historic assets will be managed to sustain their values.
- Understanding the significance of historic assets is vital.
- The historic environment is a shared resource.
- Everyone will be able to participate in sustaining the historic environment.
- Decisions about change must be reasonable, transparent and consistent.
- Documenting and learning from decisions is essential.

2. Bwlch y Ddeufaen Standing Stones (CN129)

- 2.1 The monument comprises the remains of a two standing stones and a cairn: 1 Standing stone c.3.5m high by 1.5m by 1.2m, rising to a blunt point, with packing stones visible about its base.
 - 2 Standing stone c.2.0m high by 1.2m by 0.5m, having flat faces on the east & west. One of the two stones has been recently resurrected.
 - 3 Round cairn, c.18m in diameter, having one side of a cist, c.1.5m long, exposed at its centre.

The monument is of national importance for its potential to enhance our knowledge of prehistoric ritual. The site forms an important element within the wider later prehistoric context and within the surrounding landscape. The site is well preserved and retains considerable archaeological potential. The scheduled area comprises the remains described and areas around them within which related evidence may be expected to survive

3. The Application

3.1 This monument was last visited in July 2018. The site is generally in good condition, located in a remote upland location and covered with upland heathland vegetation – gorse, rushes, grasses etc. The cairn is particularly overgrown with gorse.

A series of 3 power lines run parallel to the E of the monument, with the westernmost power line crossing through the scheduled area in a NW/SE direction. Pylon Tower 41 lies within the scheduled area of the monument, to the E of the track and close to the standing stones.

SP Energy Networks (SPEN) have submitted this application as they need to undertake essential access and maintenance works to the muffs on the pylon base that lies within the boundary of the scheduled area.

The work will involve:

- i) SPEN will need access to and across the scheduled area using argo cats and a 4x4 mule.
- ii) SPEN will then need to excavate at the base of the pylon tower exposing the muffs at each corner of the tower. The work will involve the excavation of material up to 1m out from the base of the tower feet and down to a depth of 500mm.
- iii) Once excavated the muffs will be refurbished and painted and the original ground levels and vegetation will be reinstated.

4. Assessment

4.1 The proposed works are essential for the continued safe maintenance and delivery of electricity to the area. However, the pylon base is located within an area of high archaeological sensitivity, being located within the scheduled and close to the standing stones. Therefore, there is the possibility of prehistoric features, deposits or artefacts being preserved within the vicinity of the proposed working area. As a consequence, whilst these works are considered essential, they must be carried out under appropriate archaeological supervision.

5. Recommendation

5.1 The proposed works will involve ground disturbance within the scheduled area, close to the standing stones and as a consequence there is the potential for these works to be damaging to the integrity of the monument. However, the works are deemed essential, so that the safe supply of electricity across the area can be maintained. Therefore, having reviewed the application and accompanying documents, spoken with the applicant and reviewed the current visit records and photographs I recommend that Scheduled Monument Consent (SMC) is granted subject to the conditions as detailed in Section 6 (Below).

6. Proposed Conditions

a) That the applicant shall shall provide Cadw with reasonable advance notice of commencement of works on site (notice via email is acceptable) and will afford access at all reasonable times to any Cadw official or archaeologist nominated by Cadw to monitor progress of the works.

- b) That at the end of the works the applicant shall sign and return to Cadw the attached completion notice proforma confirming that the conditions have been discharged
- c) That prior to the start of works SPEN submit a method statement for undertaking the works to Cadw for approval.
- d) That the works shall be carried out in accordance with the **Method Statement** submitted in advance and formally approved in writing by Cadw. The Method Statement shall be adhered to throughout the works and no works shall commence until the Method Statement has been formally approved by Cadw.
- e) No works including site clearance shall commence until Cadw has been informed in writing of the name of an appropriately qualified archaeologist operating to CIFA published standards and guidance³ who will carry out an appropriate programme of archaeological mitigation works in accordance with a written scheme of investigation (WSI) which has been submitted to and approved in writing by Cadw. No work shall commence until Cadw has confirmed in writing that the proposed archaeologist and archaeological works are acceptable.
- f) That the appointed archaeologist provides regular updates to the Cadw Inspector on progress with the works
- g) That any significant historic or archaeological features not previously identified which are revealed when carrying out the works shall be retained *in-situ* and reported to the Cadw Inspector within two working days. Works shall be halted in the area/part of the site affected until provision has been made for retention and/or recording of the feature by a suitably qualified archaeologist in accordance with details submitted to and approved in writing in advance by Cadw.
- h) That upon completion of the works the disturbed ground is reinstated and the site is left in a stable and tidy condition.
- i) A digital copy of the archaeological report shall be submitted to Cadw for approval within 8 weeks of the archaeological fieldwork being completed⁴.
- 6.1 A digital copy of the approved **archaeological report** shall be submitted to the regional Historic Environment Record (HER) and National Monuments Record (NMR) of Wales to be incorporated into these public records⁵.

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³ Chartered Institute for Archaeologists https://www.archaeologists.net/codes/cifa

⁴ Cadw will retain a copy of the archaeological report for our records

⁵ Cadw requires formal confirmation of report deposit to discharge this condition

Name of Inspector: Ian Halfpenney

Date: 16 July 2019

Annex B

COMPLETION NOTICE

Name of Monument: Roman Road N of Llannerch Fedw

Monument Number: CN129

Conditions	Date	Signature
Notification of start of works		
Submission of Method Statement		
Submission of archaeological WSI		
Submission of archaeological report to Cadw		
Submission of archaeological report to the		
NMR and HER		
Completion of works on site		

Applicant Name:	Appl	licant	Name):
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Signature:

When all work has been completed and the conditions have been discharged, please complete and return this completion notice to Cadw at scheduledmonuments@gov.wales

APPENDIX III

Reproduction of Gwynedd Archaeological Trust day record pro-forma

DAY RECORD		Date
Project name	Project number	Compiler
Location		
Description		
imes of travelling and on-site		
rawn record details		
Tawn record details		
hotographic record details		

APPENDIX IV

Reproduction of Gwynedd Archaeological Trust Context Record proforma

GWYNEDD ARCHAEOLOGICAL TRUST CONTEXT RECORD FORM SITE CODE **GRID SQUARE SITE SUB-DIV** CONTEXT NUMBER **CATEGORY/TYPE** PROVISIONAL DATE/PERIOD/PHASE **LENGTH BREADTH DIAMETER DEPTH/HEIGHT DEPOSIT** CUT 1. Compaction 1. Shape in plan 2. Colour 2. Corners 3. Matrix Composition 3. Break of slope top 4. Inclusions 4. Sides 5. Clarity of Interface 5. Break of slope base 6. Other comments 6. Base 7. Methods & conditions 7. Orientation 8. Truncated (if known) 9. Other comments Draw sketches overleaf **FILLED BY** This context FILL OF Stratigraphic matrix **PLANS SECTIONS** Sheet No. Sheet No. Drawing No. Drawing No. PHOTOGRAPHS - Film No./ Frame No. **SAMPLE Nos. FIND Nos. FEATURE No GROUP No CONSISTS OF** INTERPRETATION/DISCUSSION **SAME AS**

CHECKED BY (initials/date)

INITIALS/DATE

SKETCH	

DESCRIPTION/INTERPRETATION CONTINUED

APPENDIX V

Reproduction of Gwynedd Archaeological Trust photographic record pro-forma



Digital Photographic Record Project code and name:

Include main context numbers for each shot, drawing numbers for sections and any other relevant numbers for cross referencing.

Delete any unwanted photos **immediately** from the camera.

Regularly upload photographs to computer.

		2 diese any annual process minimal activity mem and		10 10 6. ap 10	compate.	2	
Project Name:			Project Number:				
Photo No.	Trench	Description	Contexts	Scales	View From	Initials	Date

POWERLINE REFURBISHMENT: CN402 ROMAN ROAD NORTH OF LLANNERCH FEDW (G2626)

WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL EXCAVATION

Prepared for

Atmos Consulting Limited

August 2019



	Role	Printed Name	Signature	Date
Originated by	Document Author	STUART REILLY	Street Coille	14/08/10
Reviewed by	Document Reviewer	JOHN KOBERTS	AM	14/04/19
Approved by	Principal Archaeologist	DOMN FOBLETS	gos	14/00/19
Approved by	Cadw			

	Revision History				
Rev No.	Summary of Changes	Ref Section	Purpose of Issue		
01	Inclusion of most recent versions of	Appendix I	Cadw Approval		
	application for scheduled monument	& 11			
	consent & scheduled monument consent				
	documents.	1.0			
	Date of authorisation from Cadw updated	1.0			
	Correction to tower number				
		3.1			
	A land				

POWERLINE REFURBISHMENT: CN402 ROMAN ROAD NORTH OF LLANNERCH FEDW (G2626)

WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL EXCAVATION

Prepared for Atmos Consulting Limited, August 2019

Historic Environment Record Enquiry Number GATHER1156 and Event Primary Reference Number 45464

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1 INTRODUCTION

Gwynedd Archaeological Trust has been asked by Atmos Consulting Limited to undertake an archaeological excavation in advance of refurbishment works on the 33kv Dolgarrog to Llanfairfechan powerline. The refurbishment works will involve small scale temporary work to the bases of each tower leg of Towers 45 to 48, to paint the concrete 'muff' that is exposed above ground (and approx. 500mm below ground). Other works to the towers themselves will require access via an Argo-cat and an agricultural mule with a winch but won't break ground. Towers 45 to 48 are located partially within Scheduled Monument **CN402** Roman Road north of Llannerch Fedw (NGR SH70697201; postcode: LL33 0EH; Figure 01). The work is scheduled during September/October 2019.

The Roman road is a designated Scheduled Monument and as such, is protected from damage by law under the Historic Environment (Wales) Act 2016 and the Ancient Monuments and Archaeological Areas Act 1979. The work will be undertaken subject to, and in accordance with, Scheduled Monument Consent issued by Cadw Welsh Historic Monuments. Authorisation for the works has been granted by Cadw on 02/08/2019 (see Appendix I; Appendix II).

The excavation will be completed in accordance with the following guidance:

- Standard and Guidance for Archaeological Excavation (Chartered Institute for Archaeologists, 2014);
- 2. Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives (Chartered Institute for Archaeologists, 2014);
- 3. Updated Guidelines to the Standards for Recording Human Remains (Chartered Institute for Archaeologists, 2017);
- 4. Management of Archaeological Projects (English Heritage, 1991);
- 5. Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide (Historic England, 2015); and
- 6. *Guidelines for digital archives* (Royal Commission on Ancient and Historical Monuments of Wales, 2015).

Gwynedd Archaeological Trust is certified to ISO 9001:2015 and ISO 14001:2015 (Cert. No. 74180/B/0001/UK/En) and is a Registered Organisation with the Chartered Institute for

Archaeologists and a member of the Federation of Archaeological Managers and Employers (FAME).

1.1 Fieldwork Aims and Objectives

The key aim and objective of the archaeological excavation is to:

• Hand excavate around each muff at the base of Towers 45 to 48 to determine the level of archaeological preservation within the scheduled area and mitigate for any potential disturbance from the refurbishment works.

1.2 Monitoring Arrangements

The excavation will be monitored by Cadw; the content of this WSI and all subsequent reporting by GAT must be approved by Cadw prior to final issue.

Cadw will need to be informed of the project timetable and of the subsequent progress and findings. This will allow the Cadw Inspector time to arrange monitoring visits and attend site meetings (if required) and enable discussion about the need or otherwise for further archaeological works (if required) as features of potential archaeological significance are encountered.

The Cadw inspector contact details are:

• Ian Halfpenney: ian.halfpenney@gov.wales | 07968 609837

1.3 Historic Environment Record

In line with the Gwynedd Historic Environment Record (HER) requirements, the HER will be contacted at the onset of the project to ensure that any data arising is formatted in a manner suitable for accession to the HER and follows the guidance set out in *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (The Welsh Archaeological Trusts, 2018). The HER will be informed of the project start date, location including grid reference, estimated timescale for the work, and further relevant information associated with the project.

The GAT HER Enquiry Number for this project is GATHER1156 and the Event PRN is 45464. The GAT HER will also be responsible for sourcing the Primary Reference Numbers (PRN) for any new identified and recorded assets.

2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

The scheduled monument CN402 (PRN 17573-4) is a 720m stretch of well-preserved linear agger or raised embankment set on the northern flank of Llannerch Fedw. The road is set within rough upland pasture, measuring 5.0m in width and up to 0.5m in height. It is "a typical example of the early multi-period road on this side of Bwlch y Ddeufaen" (Hopewell, 2013, 33) The road is orientated east – west and is a section of the Roman road that connected Canovium to Segontium. The route of the road is partially overlapped by a row of pylons and power lines, Towers 45 to 48 (Figure 01).

3 METHODOLOGY

3.1 Introduction

The archaeological excavation will involve:

- removal of vegetation by hand at the 4 muffs located at the base of the legs of Towers 45 to 48. The extent of vegetation removal at each muff will be to a depth of 500mm and up to 1.0m out from the base of the tower to determine the level of archaeological preservation within the scheduled area at the base of Towers 45 to 48; and
- Upon completion of the excavation work, the trenches will be lined and backfilled in preparation for the main SPEN works.

3.2 Fieldwork Methodology

- All attendances, subsurface activity, photographs and contexts records will be recorded using GAT pro-formas (Appendices III and IV);
- Photographic images will be taken using a digital SLR (Nikon D3000) camera set to maximum resolution (3,872 x 2,592 10.75 effective megapixels) in RAW format and will be converted to TIFF and JPEG format for archiving using Adobe Photoshop; a photographic record will be maintained on site using GAT pro-formas (Appendix V) and digitised in Microsoft Access as part of the fieldwork archive and dissemination process. Photographic images will be archived in TIFF format using Adobe Photoshop; the archive numbering system will start from the next sequential number to be used after completion of the pre-commencement survey. When practical, a photographic ID board will be used and will include site code, image orientation and any relevant context numbers;
- Any archaeological features/deposits/structures encountered will be manually cleaned and examined to determine extent, function, date and relationship to adjacent activity. The following excavation strategy will generally apply: 50% sample of each sub-circular feature, 25% sample of each linear feature (terminal ends and intersection points with other features will be prioritised). However, if discrete features are identified, these will be 100% excavated. Any features that comprise a spread of material rather than a cut feature, will be completed in quadrants (if fully extant) or 100% excavated if present as a discrete spread;

- Any required sections and plans to be drawn at a minimum 1:10 scale using GAT A4 or A2 pro-forma permatrace; section datums will be recorded; and
- Should dateable artefacts and/or ecofacts be recovered, an interim report will be submitted summarising the results, along with an assessment of potential for analysis specification (in line with the MAP2 process).

3.3 Human Remains

Although it is highly unlikely that human remains will be identified during the archaeological excavation, if any human remains are identified that are to be excavated, and cannot be preserved in situ this will take place under appropriate regulations and with due regard for health and safety issues. In order to excavate human remains, a Ministry of Justice licence is required under Section 25 of the Burials Act 1857 for the removal of any body or remains of any body from any place of burial. In accordance with the Ministry of Justice licence, recovered remains will be reburied once the investigation and/or assessment/analysis are complete.

Non-fragmented skeletal remains will be excavated using wooden tools and collected and stored in polyethylene bags (with appropriate references for context, grave number, et al) and placed in a lidded cardboard archive box (note: separate boxes for each grave) and stored in a suitable manner within GAT premises. If significant quantities of human remains are encountered, a human osteologist should be contacted and appointed to advise the team during the fieldwork. The osteologist will be an external appointment: Dr. Genevieve Tellier | Tel: 01286 238827 | email: northwalesosteology@outlook.com who will assist in devising the excavation, recording and sampling strategy for features containing human remains. The osteologist should also help to ensure that adequate post-excavation processing of human remains is carried out so that the material is in a fit state for assessment during the post-excavation stage. For inhumations, this will involve washing, drying, marking and packing.

If human remains are recovered that are deemed suitable for further assessment/analysis, this will be completed in accordance with the osteologist's requirements and with *Human Bones from Archaeological Sites Guidelines for producing assessment documents and analytical reports* (Chartered Institute for Archaeologists, 2017).

3.4 Ecofacts

Should any archaeological features and/or sealed deposits be identified that are deemed suitable for dating, ecofact samples will be taken. The sampling procedure will be informed by specialist advice upon discovery, particularly for waterlogged/organic deposits. The specialist contact will be Jackeline Robertson (AOC Archaeology | telephone: 0208 843 7380). The sampling strategy will also be undertaken in accordance with the principles set out in *Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation* (Historic England, 2011).

3.5 Artefacts

Diagnostic artefacts and artefacts from sealed deposits will be retained for further examination and identification. The artefacts will be treated according to guidelines issued by the UK Institute of Conservation, in particular the advice provided within *First Aid for Finds* (Watkinson and Neal 2001).

Any waterlogged artefacts (e.g. wood or leather) that are to be recovered for post-excavation assessment and analysis will be processed in accordance with *Environmental Archaeology:* a guide to the theory and practice of methods, from sampling and recovery to post-excavation (English Heritage, 2011) and specifically in accordance with Brunning and Watson (2010) for waterlogged wood and Historic England (2012) for waterlogged leather. In such cases an external specialist will be contacted to agree an appropriate sampling and recovery strategy via Lucy Whittingham | Project Manager (post-excavation) | AOC Archaeology | telephone: 0208 843 7380 | email: lucy.whittingham@aocarchaeology.com).

All finds are the property of the landowner; however, it is Trust policy to recommend that all finds are donated to an appropriate museum (in this case Conwy Archive Service, Old Board School, Lloyd Street, Llandudno LL30 2YG), where they can receive specialist treatment and study. Access to finds must be granted to the Trust for a reasonable period to allow for analysis and for study and publication as necessary. Trust staff will undertake initial identification, but any additional advice would be sought from a wide range of consultants used by the Trust, including National Museums and Galleries of Wales at Cardiff.

All finds of treasure must be reported to the coroner for the district within fourteen days of discovery or identification of the items. Items declared Treasure Trove become the property of the Crown, on whose behalf the Portable Antiquities Scheme acts as advisor on technical matters, and may be the recipient body for the objects.

The Treasure Valuation Committee, based at the British Museum, and informed by the Portable Antiquities Scheme, will decide whether they or any other museum may wish to acquire the object. If no museum wishes to acquire the object, then the Secretary of State will be able to disclaim it. When this happens, the coroner will notify the occupier and landowner that he intends to return the object to the finder after 28 days unless he receives

no objection. If the coroner receives an objection, the find will be retained until the dispute has been settled.

GAT will contact the landowner (via client) for agreement regarding the transfer of artefacts, initially to GAT and subsequently to the relevant museum (Conwy Archive Service). A GAT produced pro-forma will be issued to the landowner where they are given the option to donate the finds or to record that they want them returning to them once analysis and assessment has been completed. Artefacts will be transferred to the Conwy Archive Service in accordance with their guidelines.

3.6 Fieldwork Archiving

Following the completion of the fieldwork, a programme of field work archiving will be completed based on following task list;

- 1. Pro-formas: all cross referenced and complete;
- 2. Photographic Metadata: completed in *Microsoft Access* and cross-referenced with all pro-formas;
- 3. Sections: all cross referenced and complete;
- 4. Survey data: downloaded using a Computer Aided Design package;
- 5. Plans: all cross referenced and complete;
- 6. Artefacts (if relevant): quantified and identified; register completed;
- 7. Ecofacts (if relevant): quantified and register completed;
- 8. Context register (if relevant): quantified and register completed.

All data will be processed, final illustrations will be compiled and a report will be produced which will detail and synthesise the results.

4 REPORTING

Following completion of the stages outlined above, a report will be produced within one month incorporating the following:

- 1. Non-technical summary (Welsh and English)
- 2. Introduction
- 3. Aims and objectives
- 4. Background
- 5. Methodology
- 6. Results
- 7. Conclusions and further recommendations
- 8. List of sources consulted.
- 9. Appendix I approved GAT project design
- 10. Appendix II photographic metadata

Should dateable artefacts and ecofacts be recovered, an **interim report** will be submitted summarising the results, along with an assessment of potential for analysis written scheme of investigation (in line with the MAP2 process).

Illustrations will include plans of the location, site plans and sections. Historical maps, when appropriate and if copyright permissions allow, will be included. A draft copy of the report will be sent to GAPS and to the client prior to production of the final report.

Dependant on the outcome of the archaeological excavation the *Research Framework for* the *Archaeology of Wales* will be consulted to help to provide context and to help inform the archaeology identified within the site boundary.

5 DISSEMINATION AND ARCHIVING

A full archive including plans, photographs, written material and any other material resulting from the project will be prepared. The archaeological excavation outlined in this written scheme of investigation is expected to commence in September 2019. A draft report will be submitted within one month of fieldwork completion; a final report will be submitted to the Historic Environment within six months of submitting the draft report.

On completion, the following dissemination will apply:

- A digital report will be provided to the client and Cadw (draft report then final report);
- A paper report plus a digital report will be provided to the regional Historic Environment Record, Gwynedd Archaeological Trust within six months of project completion (final report only). If appropriate, digital information such as the project database, GIS table(s) and photographs, will also be submitted to the required standards set out in *Guidance for the Submission of Data to the Welsh Historic* Environment Records (HERs) (Version 1.1); and
- A digital report and archive (including photographic and drawn) data will be provided to Royal Commission on Ancient and Historical Monuments, Wales (final report only), in accordance with the RCAHMW Guidelines for Digital Archives Version 1. Digital information will include the photographic archive and associated metadata.

6 PERSONNEL

The project will be managed by John Roberts, Principal Archaeologist GAT Contracts Section with attendances on-site undertaken by a GAT Project Archaeologist(s). The Project Archaeologist will be responsible for the archaeological excavation on site, including all field management duties, e.g., GAPS/client/consultant liaison, artefact, osteologist or palaeoenvironmentalist liaison (if relevant). The Project Archaeologist will be responsible for completing all on site pro-formas and the fieldwork archive itemised in para. 3.2. The Project Archaeologist will also be responsible for submitting a draft final report (or interim report) for project manager review and approval. The report will then be submitted as per the arrangements defined in para. 5.

7 HEALTH AND SAFETY

The GAT Project Archaeologist(s) will be CSCS certified. Copies of the site specific risk assessment will be supplied to the client and sub-contractor prior to the start of fieldwork. Any risks and hazards will be indicated prior to the start of work via a submitted risk assessment. All GAT staff will be issued with required personal safety equipment, including high visibility jacket, steel toe-capped boots and hard hat. All GAT fieldwork is undertaken in accordance with the Trust's Health and Safety Manual, Policy and Handbook which were prepared by Ellis Whittam. All work will be undertaken in accordance with the client and site contractors Health and Safety requirements.

8 SOCIAL MEDIA

One of the key aims in the GAT mission statement is to improve the understanding, conservation and promotion of the historic environment in our area and inform and educate the wider public. To help achieve this, GAT maintains an active social media presence and seeks all opportunities to promote our projects and results. With permission, GAT would like the opportunity to promote our work on this scheme through our social media platforms. This could include social media postings during our attendance on site as well as any postings to highlight results. In all instances, approval will be sought from client prior to any postings.

Any social media will be with the agreement of the client and Cadw.

9 INSURANCE

Public/Products Liability

Limit of Indemnity- £5,000,000 any one event in respect of Public Liability

INSURER Aviva Insurance Limited

POLICY TYPE Public Liability

POLICY NUMBER 24765101CHC/UN/000375

EXPIRY DATE 21/06/2020

Employers Liability

Limit of Indemnity- £10,000,000 any one occurrence.

The cover has been issued on the insurers standard policy form and is subject to their usual terms and conditions. A copy of the policy wording is available on request.

INSURER Aviva Insurance Limited

POLICY TYPE Employers Liability

POLICY NUMBER 24765101 CHC / UN/000375

EXPIRY DATE 21/06/2020

Professional Indemnity

Limit of Indemnity- £5,000,000 in respect of each and every claim

INSURER Hiscox Insurance Company Limited

POLICY TYPE Professional Indemnity

POLICY NUMBER 9446015

EXPIRY DATE 22/07/2020

10 SOURCES CONSULTED

- 1. Brunning, R and Watson, J 2010, Waterlogged Wood: Guidelines on the Recording, Sampling, Conservation and Curation of Waterlogged Wood (3rd edition);
- 2. Chartered Institute for Archaeologists, 2014, Standard and Guidance for Archaeological Excavation;
- 3. Chartered Institute for Archaeologists, 2014, Standard and guidance for the collection, documentation, conservation and research of archaeological materials;
- 4. English Heritage, 1991, Management of Archaeological Projects (MAP2);
- 5. English Heritage, 2011, Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation;
- 6. English Heritage, 2012, Waterlogged Organic Artefacts, Guidelines on their Recovery, Analysis and Conservation;
- Gwynedd Archaeological Trust, 2014, Historic Environment Record (HER) Guidelines for Archaeological Contractors (Version 1.3; draft);
- 8. Historic England, 2004, Human Bones from Archaeological Sites Guidelines for producing assessment documents and analytical reports;
- Historic England, 2015, Management of Research Projects in the Historic Environment (MoRPHE);
- 10. Hopewell, David, 2013, Roman Roads in North-west Wales;
- 11. Royal Commission on Ancient and Historic Monuments of Wales, 2015, Guidelines for digital archives;
- 12. Watkinson, D and Neal, V, 2001, First aid for finds (3rd edition).

FIGURE 01

Reproduction of CN402 - Roman Road N of Llannerch Fedw







Plas Carew, Unit 5/7 Cefn Co Parc Nantgarw,

Cardiff, CF15 7QQ Tel: 01443 336600 Fax: 01443 336001

Email: cadw@wales.gsi.gov.u

Plas Carew, Uned 5/7 Cefn Coed Parc Nantgarw, Cardiff, CF15 7QQ Ffôn: 01443 336000 Facs: 01443 336001

Ebost: cadw@wales.gsi.gov.uk

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Atgynhyrchir y map hwn o ddeunydd yr Arolwg Ordnans gyda chaniatâd yr Arolwg Ordnans ar ran Rheolwr Llyfrfa 🖯 Mawrhydi 🕄 Hawlfraint y Goron. Mae atgynyrchu heb ganiatâd yn torri Hawlfraint y Goron a gall hyn arwain at erlyniad neu achos sifil. Llywodraeth Cymru. Rhif Trwydded: 100017916 (2011)

APPENDIX I

Application for Scheduled Monument Consent

APPLICATION for Scheduled Monument Consent

ANCIENT MONUMENTS AND ARCHAEOLOGICAL AREAS ACT 1979

To be completed by or on behalf of the applicant in BLOCK CAPITALS or typescript

1.	Appl	icant
- •	, , , , , , , , , , , , , , , , , , , ,	

Name Richard Rainford

Address SP Energy Networks, Gateway House, Old Hall Rd, Bromborough

Postcode CH62 3NX

Telephone number 0141 614 7133 / 07808 637 081

2. Occupier of monument (if not the applicant)

Name	
Address	
	Postcode
Telephone number	

3. Monument to which application relates

Name (if any) of monument Roman Rd N of Llannerch Fedw			
Address or location	Roman Rd, Llanfairfechan, Conwy, LL33 0EY		
County Monument N	Number CN402		
National Grid referer	nce SH 70690 72011		

4. Description of proposed works

Proposed works include the refurbishment of an existing 33kV overhead electric power line which runs on steel towers from Dolgarrog to the south east of Llanfairfechan. The activity within this SAM includes entering small parts of it with all terrain vehicles (ATV's) that include an Argo-cat and a 4x4 Mule and also refurbishment works which includes vegetation clearance at the tower muffs so they can be painted. The SAM will need to be entered during two outage periods, the first of which will be in July using an Argo-cat to transfer personnel to each tower position so that a visual condition based assessment can be completed. The second outage will take place during August & September during which an Argo-cat and a 4x4 Mule will be used to transfer personnel and materials into the SAM to each tower position so that the refurbishment works can be completed. During this second outage, the refurbishment works within the SAM will include the removal of vegetation by hand at the muffs located at the base of the 4 legs of towers 45, 46, 47 & 48. The extent of vegetation removal at each muff will be to a depth of 500mm and up to 1m out from the base of each tower so that each exposed muff can then be painted as part of the refurbishment works.





Delmannan Hanfairfa-la A D. 1. M.	
Dolgarrog - Llanfairfechan Access Route Map	
Tower Muffs Picture	
Any other information relevant to applicat	ion
Any other information relevant to applicat	IOH
The only vegetation removal within the SAM will be under	
described in Section 4 of this form. The remaining refurbis replacement of the anti-climbing devices, tower signage, i	
involve any ground disturbance works.	induatoro, fixtaroo, fittingo and otootwork
3 11 3	rks described in this application
and shown on the accompanying plans and drawings.	rks described in this application
and shown on the accompanying plans and drawings. Name Gethin Gibbon	
and shown on the accompanying plans and drawings. Name Gethin Gibbon Signature	rks described in this application Date 13/06/2019
Name Gethin Gibbon Signature On behalf of Richard Rainford	Date 13/06/2019
and shown on the accompanying plans and drawings. Name Gethin Gibbon Signature On behalf of Richard Rainford	Date 13/06/2019
and shown on the accompanying plans and drawings. Name Gethin Gibbon Signature On behalf of Richard Rainford * Where the application is being dealt with by an agent to who	Date 13/06/2019
I/We hereby apply for scheduled monument consent for the wo and shown on the accompanying plans and drawings. Name Gethin Gibbon Signature On behalf of Richard Rainford * Where the application is being dealt with by an agent to whole Name of agent Gethin Gibbon Address of agent SP Energy Networks, Gateway House, Ol	Date 13/06/2019 * m correspondence should be sent, state the:

CERTIFICATE of Ownership

ANCIENT MONUMENTS AND ARCHAEOLOGICAL AREAS ACT 1979

One of the following certificates must be completed by or on behalf of the applicant

A.	Certificate in accordance	e with paragraph 2(1)(a) of Schedule 1 to the	e Act
		n other than the applicant was the owner (note x) of the monun n relates at the beginning of the period of twenty-one days which	
	Signature	Date	
B.	Certificate in accordance	e with paragraph 2(1)(b) of Schedule 1 to th	e Act
	persons other than the applicant w	ant has given the requisite notice of the accompanying application ho, at the beginning of the period of twenty-one days which enders (note x) of the monument to which the application related, national states are the context of the monument to which the application related, national states are the context of the monument to which the application related, national states are the context of the	ded on the
	Signature	Date	
C.	Certificate in accordance	e with paragraph 2(1)(c) of Schedule 1 to the	e Act
	It is hereby certified:		
		ssue a certificate in accordance with either paragraph 2(1)(a) or ents and Archaeological Areas Act 1979;	(b) of
	who, at the beginning of the period	requisite notice of the accompanying application to the following of twenty-one days which ended on the date of the application to which the application relates, namely (note y)	• .
		; and	t
		ch steps as are reasonably open to him to ascertain the names as persons who at the beginning of that period were owners (note do so.	
	Signature	Date	

D. Certificate in accordance with paragraph 2(1)(d) of Schedule 1 to the Act

It is hereby certified that the applicant is unable to issue a certificate in accordance with paragraph 2(1)(a) of Schedule 1 to the Ancient Monuments and Archaeological Areas Act 1979, but has taken such steps as are reasonably open to him to ascertain the names and addresses of the other persons who, at the beginning of the period of twenty-one days which ended on the date of the accompanying application, were owners (note x) of the monument to which the application relates and has been unable to do so.

Signature Date 09/07/2019

Footnotes

(note x) 'owner' means a person who is for the time being the estate owner in respect of the fee simple in the monument or is entitled to a tenancy of the monument granted or extended for a term of years certain of which not less than seven years remain unexpired.

(note y) Insert names and addresses.

APPENDIX II

Scheduled Monument Consent



Plas Carew, Uned 5/7 Cefn Coed
Parc Nantgarw, Caerdydd CF15 7QQ
Ffôn 0300 025 6000
ebost cadw@llyw.cymru
www.cadw.gov.wales

Plas Carew, Unit 5/7 Cefn Coed Parc Nantgarw, Cardiff CF15 7QQ Tel 0300 025 6000 email <u>cadw@gov.wales</u> www.cadw.gov.wales

Gethin Gibbons SP Energy Networks

By email: ggibbon@spenergynetworks.co.uk Eich cyfeirnod Your reference

Ein cyfeirnod Our reference BR031

Dyddiad 2 August 2019

Llinell uniongyrchol 0300 0256007 Direct line

Ebost <u>scheduledmonuments@gov.wales</u> Email:

Dear Mr Gibbons.

ANCIENT MONUMENTS AND ARCHAEOLOGICAL AREAS ACT 1979 APPLICATION FOR SCHEDULED MONUMENT CONSENT Roman Road North of Llannerch Fawr (CN402)

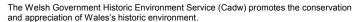
1. Introduction

- 1.1 Thank you for your application of 13 June 2019 to Cadw for scheduled monument consent to undertake essential maintenance works to 4 pylon bases located on and within the northern boundary at the above scheduled monument.
- 1.2 Cadw is a Department within the Welsh Government that undertakes the statutory functions of the Welsh Ministers in determining applications for scheduled monument consent.
- 1.2 Each application for scheduled monument consent is considered on its own merits in accordance with Conservation Principles for the Sustainable Management of the Historic Environment in Wales (Conservation Principles) and Annex A of Technical Advice Note 24: The Historic Environment (TAN 24). In particular, TAN 24 explains that the main purpose of scheduling is to ensure the preservation of ancient monuments and, when considering an application for scheduled monument consent, there is a presumption against proposals which would involve significant alteration or cause damage or which would have a significant impact on the setting of remains.

2. Assessment

2.1 Your application and supporting documentation has been assessed by our Regional Inspector of Ancient Monuments who has recommended that conditional scheduled monument consent should be approved for maintenance works to the 4 pylon bases that lie on and within the northern boundary of the

Mae Gwasanaeth Amgylchedd Hanesyddol Llywodraeth Cymru (Cadw) yn hyrwyddo gwaith cadwraeth ar gyfer amgylchedd hanesyddol Cymru a gwerthfawrogiad ohono.







- scheduled area. The reasons for the Inspector's conclusions are set out in Annex A of this letter.
- 2.2 I have carefully considered the impact of the proposed development on the scheduled monument and its setting in light of the advice that I have received from our Regional Inspector of Ancient Monuments.
- 2.3 After very careful consideration I have no reason to disagree with the advice of our Regional Inspector and am satisfied that his recommendation is consistent with the objectives of Conservation Principles and TAN 24.

3. Decision

- 3.1 Accordingly, I hereby approve conditional scheduled monument consent for the proposed maintenance works. As I have mentioned previously, I have no reason to disagree with the advice of our Regional Inspector and the rationale for my decision is therefore explained in Annex A.
- 3.2 In reaching this decision, I have taken into account the requirement of sections 3 and 5 of the Wellbeing of Future Generations Act. I consider that this decision is in accordance with the Act's sustainable development principle through its contribution towards the Welsh Ministers' well-being objective of A Wales of vibrant culture and thriving Welsh Language.
- 3.3 Any development control issues associated with wider development will be a matter for any application for planning permission. It is the responsibility of the applicant to establish whether any further approval or consents are required for the proposed development.

4. Proposed Conditions

- 4.1 The following proposed conditions are intended to protect the monument from damage or significant alteration as set out in *TAN 24: The Historic Environment* and to ensure that details of the project are archived.
 - a) Works shall be undertaken strictly in accordance with the application of 13 June and the accompanying documents.
 - b) The applicant shall provide Cadw with reasonable advance notice of commencement of works on site (notice via email is acceptable) and will afford access at all reasonable times to any Cadw official, or archaeologist nominated by Cadw, to monitor progress of the works.
 - c) With the exception of the required adjustments and alterations set out in later conditions, works shall be carried out strictly in accordance with the following approved plans and documents listed below. No variations from these plans are permitted unless they have been authorised in advance in writing by Cadw.

Number	Document/ Plan	Reference	Date

		(where applicable)		
1	Scheduled Monument application form submitted by the applicant		13 2019	June
2	Plan showing location of scheduled area, Towers 45 to 48 of the Dolgarrog to Llanfairfechan 33kV circuit and the access route for the proposed works.		13 2019	June
3	Dolgarrog to Llanfairfechan Access Route Map		13 2019	June

- d) Prior to the start of works the applicant shall submit a method statement for undertaking the works to Cadw for approval. The Method Statement shall be adhered to throughout the works and no works shall commence until the Method Statement has been formally approved by Cadw. No variations from the approved method statement is permitted unless they have been authorised in advance in writing by Cadw.
- e) No works including site clearance shall commence until Cadw has been informed in writing of the name of an appropriately qualified archaeologist operating to CIFA published standards and guidance¹ who will carry out an appropriate programme of archaeological mitigation works in accordance with a written scheme of investigation which has been submitted to and approved in writing by Cadw. No work shall commence until Cadw has confirmed in writing that the proposed archaeologist and archaeological works are acceptable.
- f) The appointed archaeologist shall provide regular updates to the Cadw Inspector on progress with the works.
- g) Any significant historic or archaeological features not previously identified which are revealed when carrying out the works shall be retained in-situ and reported to the Cadw Inspector within two working days. Works shall be halted in the area/part of the site affected until provision has been made for retention and/or recording of the feature by a suitably qualified archaeologist in accordance with details submitted to and approved in writing in advance by Cadw.
- h) Upon completion of the works the disturbed ground shall be reinstated and the site shall be left in a stable and tidy condition.

-

¹ Chartered Institute for Archaeologists https://www.archaeologists.net/codes/cifa

- i) A digital copy of the archaeological report shall be submitted to Cadw for approval within 8 weeks of the archaeological fieldwork being completed².
- j) A digital copy of the approved archaeological report shall be submitted to the regional Historic Environment Record (HER) and National Monuments Record (NMR) of Wales to be incorporated into these public records³.

5. Compliance

- 5.1 Where a condition requires approval or any contact with Cadw you are advised to contact Ian Halfpenney by email scheduledmonuments@gov.wales or by telephone on 03000 622027.
- 5.2 When all work has been completed and the conditions have been discharged, please complete and return the 'completion notice' at **Annex B** to Cadw. Section 2(6) of the 1979 Act provides that non-compliance with a condition attached to a grant of scheduled monument consent shall be an offence.
- 5.3 By virtue of Section 4 of the 1979 Act, if no works to which this consent relates are executed or started within 5 years from the date of this letter, the consent shall cease to have effect at the end of that period (unless it is revoked in the meantime).
- 5.4 This letter does not convey any approval or consent required under any enactment, bylaw, order or regulation other than Section 2 of the Ancient Monuments and Archaeological Areas Act 1979. It is the responsibility of the applicant to obtain any such approval or consent where necessary.

6. Mechanism for Challenge

- 6.1 Section 55 of the 1979 Act explains that if you are aggrieved by the decision given in this letter, you may challenge its validity by applying to the High Court within six weeks from the date of my decision. Furthermore, the legislation explains that the grounds on which an application may be made to the Court are;
 - a) that my decision is not within the powers of the Act (i.e. that I have exceeded the powers available under the Act); and
 - b) that any of the relevant requirements set out in the Act have not been complied with and that your interest has been substantially prejudiced by the failure to comply.

-

² Cadw will retain a copy of the archaeological report for our records

³ Cadw requires formal confirmation of report deposit to discharge this condition

The 'relevant requirements' mentioned above are defined in Section 55 of the 1979 Act and it is advisable to seek legal advice before taking any action.

- 6.2. Should you have any queries please do not hesitate to contact me.
- 6.3 Finally, please note that your personal data is managed in compliance with the General Data Protection Regulations.

Yours sincerely,

Nichola Davies Casework Manager under authority of the Deputy Minister for Culture, Sport and Tourism, one of the Welsh Ministers

Annex A

INSPECTOR'S ADVICE

1. Policy Context

Planning Policy Wales Technical Advice Note 24: The Historic Environment states that when considering an application for Scheduled Monument Consent, there is a presumption against proposals which would involve significant alteration or cause damage, or which would have a significant impact on the setting of remains. Therefore, SMC applicants are expected to demonstrate that no practicable alternative route or location, avoiding the scheduled area, exists and that the need to undertake works outweighs the presumption in favour of the protection of the scheduled monument.

The Welsh Government's six principles for sustainable management of the historic environment in Wales are also used as a guide when considering applications for scheduled monument consent.

These are:

- Historic assets will be managed to sustain their values.
- Understanding the significance of historic assets is vital.
- The historic environment is a shared resource.
- Everyone will be able to participate in sustaining the historic environment.
- Decisions about change must be reasonable, transparent and consistent. Documenting and learning from decisions is essential

2. Assessment

This section of Roman Road was last visited in August 2018. The site is generally in good condition, located in a remote upland location and covered with upland heathland vegetation – gorse, bilberry, grasses etc. A series of 3 runs of power lines run parallel to the N of the monument.

SP Energy Networks (SPEN) have submitted this application as they need to undertake essential maintenance works to the 4 pylon bases that lie on and within the northern boundary of the scheduled area.

SPEN will need access to and across the scheduled area – using argo cats and a 4x4 mule. They will then need to excavate at the base of each tower exposing the muffs at the corner of each tower (Towers 45, 46, 47 & 48 on the submitted map). The excavation work will involve the excavation of material up to 1m out from the base of each tower and down to a depth of 500mm.

Once excavated the muffs will be refurbished and painted and the original ground levels and vegetation will be reinstated.

The proposed works are essential for the continued safe maintenance and delivery of electricity to the area. However, the pylon bases are located within an area of high archaeological sensitivity, as they are located within the scheduled and adjacent to the Roman Road. In addition to the remains of the Roman Road there are also two

putative Bronze Age Cairns on the opposite side of the scheduled area - 1 opposite Tower 45 and 1 opposite Towers 47 & 48 and the general area contains significant prehistoric remains. Therefore, there is the possibility of relict prehistoric features being preserved in addition to the potential for Romano-British archaeology being present.

3. Recommendation

Having reviewed the application and accompanying documents, spoken with the applicant and reviewed the current visit records and photographs I recommend that Scheduled Monument Consent (SMC) is granted subject to the conditions as detailed below.

4. Proposed Conditions

- a. That the applicant shall provide Cadw with reasonable advance notice of commencement of works on site (notice via email is acceptable) and will afford access at all reasonable times to any Cadw official or archaeologist nominated by Cadw to monitor progress of the works.
- b. That at the end of the works the applicant shall sign and return to Cadw the attached completion notice proforma confirming that the conditions have been discharged.
- c. That prior to the start of works SPEN submit a method statement for undertaking the works, to Cadw for approval.
- d. That the works shall be carried out in accordance with the **Method Statement** submitted in advance and formally approved in writing by Cadw. The Method Statement shall be adhered to throughout the works and no works shall commence until the Method Statement has been formally approved by Cadw.
- e. No works including site clearance shall commence until Cadw has been informed in writing of the name of an appropriately qualified archaeologist operating to CIFA published standards and guidance⁴ who will carry out an appropriate programme of **archaeological mitigation works** in accordance with a **written scheme of investigation** which has been submitted to and approved in writing by Cadw. No work shall commence until Cadw has confirmed in writing that the proposed archaeologist and archaeological works are acceptable.
- f. That the appointed archaeologist provides regular updates to the Cadw Inspector on progress with the works

⁴ Chartered Institute for Archaeologists https://www.archaeologists.net/codes/cifa

- g. That any significant historic or archaeological features not previously identified which are revealed when carrying out the works shall be retained in-situ and reported to the Cadw Inspector within two working days. Works shall be halted in the area/part of the site affected until provision has been made for retention and/or recording of the feature by a suitably qualified archaeologist in accordance with details submitted to and approved in writing in advance by Cadw.
- h. That upon completion of the works the disturbed ground is reinstated and the site is left in a stable and tidy condition.
- i. A digital copy of the **archaeological report** shall be submitted to Cadw for approval within 8 weeks of the archaeological fieldwork being completed⁵.
- j. A digital copy of the approved **archaeological report** shall be submitted to the regional Historic Environment Record (HER) and National Monuments Record (NMR) of Wales to be incorporated into these public records⁶.

Name of Inspector: Ian Halfpenney

Date: 19 June 2019

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⁵ Cadw will retain a copy of the archaeological report for our records

⁶ Cadw requires formal confirmation of report deposit to discharge this condition

Annex B

COMPLETION NOTICE

Name of Monument: Roman Road N of Llannerch Fedw

Monument Number: CN402

Conditions	Date	Signature
Notification of start of works		
Submission of Method Statement		
Submission of archaeological WSI		
Submission of archaeological report to Cadw		
Submission of archaeological report to the		
NMR and HER		
Completion of works on site		

Applicant Name:

Signature:

When all work has been completed and the conditions have been discharged, please complete and return this completion notice to Cadw at scheduledmonuments@gov.wales

APPENDIX III

Reproduction of Gwynedd Archaeological Trust day record pro-forma

DAY RECORD		Date
Project name	Project number	Compiler
Location		
Description		
imes of travelling and on-site		
rawn record details		
rawn record details		
hotographic record details		

APPENDIX IV

Reproduction of Gwynedd Archaeological Trust Context Record proforma

GWYNEDD ARCHAEOLOGICAL TRUST CONTEXT RECORD FORM SITE CODE **GRID SQUARE SITE SUB-DIV** CONTEXT NUMBER **CATEGORY/TYPE** PROVISIONAL DATE/PERIOD/PHASE **LENGTH BREADTH DIAMETER DEPTH/HEIGHT DEPOSIT** CUT 1. Compaction 1. Shape in plan 2. Colour 2. Corners 3. Matrix Composition 3. Break of slope top 4. Inclusions 4. Sides 5. Clarity of Interface 5. Break of slope base 6. Other comments 6. Base 7. Methods & conditions 7. Orientation 8. Truncated (if known) 9. Other comments Draw sketches overleaf **FILLED BY** This context FILL OF Stratigraphic matrix **PLANS SECTIONS** Sheet No. Sheet No. Drawing No. Drawing No. PHOTOGRAPHS - Film No./ Frame No. **SAMPLE Nos. FIND Nos. FEATURE No GROUP No CONSISTS OF** INTERPRETATION/DISCUSSION **SAME AS**

CHECKED BY (initials/date)

INITIALS/DATE

SKETCH		

DESCRIPTION/INTERPRETATION CONTINUED

APPENDIX V

Reproduction of Gwynedd Archaeological Trust photographic record pro-forma



Digital Photographic Record Project code and name:

Include main context numbers for each shot, drawing numbers for sections and any other relevant numbers for cross referencing.

Delete any unwanted photos **immediately** from the camera.

Regularly upload photographs to computer.

		z diese any annualisez prieses in initiation, in em and			compate.	2	
Project Name:			Project Number:				
Photo No.	Trench	Description	Contexts	Scales	View From	Initials	Date



