Tan y Clogwyn, Wybrnant, Betws y Coed, Historic Environment Desk-Based Assessment



Report by: Trysor

For: TGVHydro Ltd

September 2016



Tan y Clogwyn, Wybrnant, Betws y Coed Historic Environment Desk-Based Assessment

Ву

Jenny Hall, MCIfA & Paul Sambrook, MCIfA Trysor

Trysor Project No. 2016/527

For: TGVHydro Ltd

September 2016

38, New Road
Gwaun-cae-Gurwen
Ammanford
Carmarthenshire
SA18 1UN
www.trysor.net
enquiries@trysor.net





Cover photograph: A two part, modern footbridge (ID number 4) across the Afon Wybrnant, in the same location as a footbridge shown on historic mapping

Tan y Clogwyn, Wybrnant, Betws y Coed Historic Environment Desk-Based Assessment

RHIF YR ADRODDIAD - REPORT NUMBER: Trysor 2016/527

DYDDIAD 14^{eg} Medi 2016 DATE 14th September 2016

Paratowyd yr adroddiad hwn gan bartneriad Trysor. Mae wedi ei gael yn gywir ac yn derbyn ein sêl bendith.

This report was prepared by the Trysor partners. It has been checked and received our approval.

JENNY HALL MCIFA Jenny Hall

PAUL SAMBROOK MCIfA Paul Sambrook

Croesawn unrhyw sylwadau ar gynnwys neu strwythur yr adroddiad hwn.

We welcome any comments on the content or structure of this report.

38, New Road, Gwaun-cae-Gurwen Ammanford Carmarthenshire SA18 1UN 01269 826397 Tyllwyd 82, Henfaes Road Tonna Neath SA11 3EX 01639 412708

www.trysor.net

enquiries@trysor.net

Trysor is a Registered Organisation with the Chartered Institute for Archaeologists and both partners are Members of the Chartered Institute for Archaeologists, www.archaeologists.net

Jenny Hall (BSc Joint Hons., Geology and Archaeology, MCIfA) had 12 years excavation experience, which included undertaking watching briefs prior to becoming the Sites and Monuments Record Manager for a Welsh Archaeological Trust for 10 years. She has been an independent archaeologist since 2004 undertaking a variety of work that includes upland survey, desk-based appraisals and assessments, and watching briefs.

Paul Sambrook (BA Joint Hons., Archaeology and Welsh, MCIfA, PGCE) has extensive experience as a fieldworker in Wales. He was involved with Cadw's pan-Wales Deserted Rural Settlements Project for 7 years. He also undertook Tir Gofal field survey work and watching briefs. He has been an independent archaeologist since 2004 undertaking a variety of work including upland survey, desk-based appraisals/assessments, and watching briefs.

Contents

1. Summary	1
2. Copyright	1
3. Introduction	2
4. The Development	3
5. Methodology	3
6. The Development Site	4
7. Archaeological Overview	6
8. Historical Overview	7
9. Data Collation	10
10. Assessment of Significance	11
11. Assessment of Impact	13
12. Conclusion	17
13. Reporting	18
14. References	18
15. Reliability and limitations of sources	19
Appendix A: Specification for historic environment assessment	21
Appendix B: Gazetteer of historic assets within 500 metres	28
Appendix C: Photographs	44

1. Summary

- 1.1 This historic environment assessment has been undertaken by Trysor to examine likely impacts on the historic environment from a hydro scheme on the Afon Wybrnant below Tan y Clogwyn, Betws y Coed, LL25 OHJ.
- 1.2 A site visit was undertaken by Trysor to examine the location of the development. Information was also gathered on the indirect, visual impacts on historic assets within the wider landscape.
- 1.3 The walk-over survey provided no evidence of buried archaeological features at the development site.
- 1.4 The assessment studied the direct and indirect impacts on all recorded historic assets within an area measuring 500 metres in radius, focused on SH7753652910, a central point on the consented development. This an amended grid-reference, updated from that provided in the project specification. The Gwynedd Historic Environment Record and data from RCAHMW and Cadw was consulted. Historical mapping was also consulted as well as aerial photographs and LiDAR.
- 1.5 There are no Scheduled Monuments within a 500 metre radius of the development.
- 1.6 There are no Listed Buildings within a 500 metre radius of the development.
- 1.7 There are no Registered Parks and Gardens within the 500 metre radius of the development.
- 1.8 There is no physical, documentary, cartographic or aerial photographic evidence to suggest that the proposed development site has potential for buried archaeology.
- 1.9 Several archaeological mitigations have been suggested. It is important that the two boundary walls ID numbers 1 & 5 and the stone revetment Id number 6 are not disturbed unnecessarily by the development. There would be unavoidable but slight physical impacts on all three, which should be minimised by not removing or disturbing more stone than is necessary. Care should also be taken not to disturb Wall ID number 2 during pipe-laying operations, as the water pipe will pass through a gateway through the wall.

2. Copyright

2.1 Trysor holds the copyright of this report. Further copies may be made of this report without gaining permission to reproduce but it must be noted that Figures 4, 5 and 7 include other copyrighted material and should not be copied.

3. Introduction

- 3.1 TGVHydro Ltd, c/o CRiC, Beaufort Street, Crickhowell, NP8 1BN, commissioned Trysor heritage consultants, on behalf of their client, to undertake a desk based assessment for a proposed hydro scheme at Tan y Clogwyn, Wybrnant, near Betws y Coed LL25 0HJ, see Figure 1.
- 3.2 A planning application had not been submitted at this time but preplanning advice suggested that a desk-based assessment should be undertaken, see Appendix A, para 3.1.

3.3 Bangor Proposed water pipe route Llanfair Talhaiarn Denbigh Proposed electricity cable route Llanrwst 500m assessment area Listed Building Cadw April 2016 dataset Betws Pentrefoelas Scheduled Ancient Monument Cadw April 2016 dataset y-Coed Blaenau Historic Park and Garden Cadw August 2015 dataset Corwen Frestiniog Man Snowdonia National Park festinioa 1 Cyfyng 29 Designated Historic Asset GIS Data: Contains Natural Resources Wales information The Welsh Historic Environment Service © Natural Resources Wales and Database Right. (Cadw), 08/08/2014 licensed under the Open Government Licence All rights Reserved. Contains Ordnance Survey Data http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/. Ordnance Survey Licence number 100019741.
Crown Copyright and Database Right. Contains Ordnance Survey data © Crown copyright and database right 2010

Figure 1: Location of the proposed development, showing the 500 metre radius assessment area.

4. The development

4.1 It is proposed that a new, small hydro scheme is built on the Afon Wybrnant, near Betws y Coed. The intake would be located at SH7756252921 and the outfall at SH777553238, a total pipe length of 430m. The electricity cabinet would lie to west of outfall, see Figure 1.

5. Methodology

- 5.1 The desk-based assessment considered known historic assets within a 500 metre radius circle centred on SH7762553120, the centre of the proposed development (see Figure 1). This has helped develop an understanding of the archaeology and landscape of the surrounding area as well as assess any direct or indirect impacts. Historic assets have been given an ID number for the purposes of this report, other reference numbers are cross referenced in Appendix B.
- 5.2 Data from the regional Historic Environment Record held by Gwynedd Archaeological Trust was acquired for the 500 metre radius assessment area.
- 5.3 Historic mapping was consulted. The maps used included the early 19th century Ordnance Survey Original Surveyors Drawings, as well as late 19th and 20th century 1:2500 scale Ordnance Survey mapping and the parish tithe map.
- 5.4 A site visit was made by Trysor to the development site, and the surrounding area, on 1st September, 2016. Visible archaeological features within the area that would be directly affected by the development were searched for and any other historic assets on which there may be a direct impact recorded. The wider landscape was also studied taking note of topography, vegetation and structures.
 - 5.4.1 Ground conditions made it impossible to follow the line of the proposed water pipe for some 320 metres, between the intake tank and the boundary wall ID number 2. This area currently has dense ground vegetation and scrub, with impenetrable thickets in places.
- 5.5 Aerial photographs on Google Earth, dating to 2003, 2006, 2009 and 2015, were used to inform the assessment. LiDAR data of 1 metre and 2 metre resolution was available for the assessment area.
- 5.6 Modern mapping was used to assess current public access.
- 5.7 All information gathered during the desktop assessment and site visit was entered into a bespoke database created in Access 2003 to form an assessment dataset.
- 5.8 The final dataset is the source of the material output in this report, including the GIS mapping which illustrates the location of historic assets in the area, and the tables and appendices which provide detailed information on the historic assets within the study area.

- 5.9 Each of the records in the final assessment 500 metre radius dataset was assessed for Period, Rarity, Documentation, Group Value¹, as well as Evidential Value, Historical Value, Aesthetic Value, Communal Value². Once these had been considered the significance of each historic asset was determined and scored in accordance with the categories adopted by the Welsh Archaeological Trusts i.e. Nationally Important, Regionally Important, Locally Important, Minor and Features Needing Further Investigation (Unknown), see Figure 6. Full details of this exercise are given in Appendix B.
- 5.10 The Direct and Indirect impact on each historic asset was assessed taking into account both physical and non-physical impacts. Each impact was assessed within the scale Very Low, Low, Moderate, High and Very High, taken into account the significance of the historic asset and the nature of the impact.

6. The Development Site

- 6.1 The linear development area is found along a 370 metre stretch of the western side of the narrow, steeply descending and often rocky Wybrnant valley. The stream has many cascades and some sections are gorge-like in character.
- 6.2 This section of the Wybrnant valley has been sparsely populated in the past and present, with only a few farms and cottages scattered across the area. The area has not seen significant industrial development and therefore has remained a quiet, rural corner, although its proximity to a main, east to west, communication route along Glyn Lledr means that it is not as remote as it might appear.
- 6.3 The valley has patches of deciduous woodland along its length, with more dense woodland and conifer plantations to the eastern side. The steep slopes to the western side of the valley were formerly cleared and enclosed but have been abandoned by agriculture and are now mostly covered with scrub and dense ground vegetation making access difficult.
- 6.4 Only at the northern part of the development area is the land still maintained as clean, improved pasture. An irregular field is still grazed and well-maintained on the gentler slopes between the proposed site of the turbine housing and Cyfyng chapel and cottage.
- 6.5 Access is gained by a minor, single track, public road which runs along the western side of the valley, passing Cyfyng, and proceeding up the valley to Tan y Clogwyn and the historic homestead of Ty Mawr, the 16th century birthplace of the renowned Bishop William Morgan, translator of

¹ Period, Rarity, Documentation and Group Value are criteria defined in the Welsh Office Circular 60/96, 1996.

² Evidential Value, Historical Value, Aesthetic Value and Communal Value are criteria defined in Cadw's Conservation Principles publication, 2011.

the Welsh Bible. The road continues southwards to Penmachno, but is lightly used. Intermittent views northeastwards towards Glyn Lledr are possible from this road as it ascends towards Tan y Clogwyn, but otherwise the density of the surrounding woodland prevent views out of the valley.

6.6 The location is underlain by strata of the Ordovician Cwm Eigiau Formation. These mudstones and siltstones were laid down approximately 455 to 457 million years ago when the local environment was dominated by shallow seas in which mud, silt, sand and gravel were deposited. The Wybrnant valley has been carved through these relatively soft rocks, with the high ground to the east being composed of harder volcanic tuffs to the east, and sandstones to the west. There was some minor quarrying of the mudstones at Cyfyng during the 19th century, with the area immediately to the northeast of the proposed turbine housing site formerly quarried (ID number 12).

7. Archaeological Overview

- 7.1 There are no records of artefacts or sites predating the Post Medieval period recorded within a 500 metre radius of the proposed turbine site, with the exception of a single Bronze Age palstave axe (ID number 13). This was found on land at Bwlchymaen Farm, to the east of the proposed development area, during ploughing before 1912. No archaeological features have been recorded in association with this find. The find indicates that there was a Bronze Age presence in the area, supported by occasional examples of Bronze Age funerary cairns recorded on higher ground in the wider district (e.g. Carn Iwerddon, Penmachno, which is recorded by the RCAHMW in the National Monuments Record (NPRN 404095). Little is known of Bronze Age society in the district however.
- 7.2 Only three other historic assets were recorded in the HER, within 500 metres of the proposed development. These were a minor quarry, poorly located and named as the Glyn Lledr Slate Quarry (ID number 12), the ruined cottage of Ty'n y Nant (ID number 11) and a minor agricultural building on high ground to the west of the Wybrnant valley (ID number 14). None of these historic assets are of more than local importance and all probably of 19th century date.
- 7.3 The RCAHMW's National Monuments Record (NMR) includes a record for a single historic asset within 500 metres of the development area. This is for the former Cyfyng Methodist Chapel (ID number 7) that later became Cyfyng Council School (ID number 8), which was founded in 1900 and closed in 1958. The building is now used for domestic purposes associated with the adjacent Cyfyng cottage (ID number 9).
- 7.4 Ten historic assets have been recorded by Trysor for this assessment, which do not appear at present in either the HER or NMR (ID numbers 1 10). These are mostly minor features associated with land management, but include the former Cyfyng Calvinistic Methodist Chapel (ID number 7), Cyfyng Cottage (ID number 9), and the former latrine for Cyfyng Council School (ID number 3).
- 7.5 The foundation of Cyfyng Chapel was perhaps the most significant event in the history of the immediate area. It is not clear when the chapel was constructed, but it seems likely that this occurred in 1850 or shortly afterwards. It was built to serve the scattered rural community of the area and was used until the end of the 19th century. In 1900, the chapel was converted for use as a Council School. The school had as many as 32 children by 1905, indicating that a somewhat larger population lived in the vicinity that at present. Pupil numbers, along with the local population, were in decline by the mid-20th century and the school closed in 1958, when only 8 children were in attendance.
- 7.6 It is not clear whether Cyfyng Cottage predates the attached chapel. A tradition is recorded in genealogical sources that two shepherds'

- cottages stood here as early as 1720, but the earliest Ordnance Survey map of 1818 does not show any buildings at this location (see Figure 2).
- 7.7 The decline of the rural population during the 20th century has also been matched by a change in the extent of agricultural activity, with some marginal land which had been enclosed and improved by previous generations reverting to scrub, woodland or becoming afforested. This means that the Wybrnant valley presents a much wilder character than would have been likely a century of more ago.

8. Historical overview

8.1 Map evidence

8.1.1 The Ordnance Survey's Original Surveyors Drawings (Harlech sheet), surveyed in 1818, was the first detailed map series of the whole country. It did not map field boundaries but does differentiate between enclosed and unenclosed land as well as woodland. This map shows that the area immediately north of the development area, between Cyfyng and Glyn Lledr was a large wooded parcel. The valley between Cyfyng and Tan y Clogwyn is not shown as wooded however. There is no evidence on this map of a house at Cyfyng, although further up the valley to the south a scattering of properties is labelled collectively as Y Wybrnant, connected by road to Glyn Lledr.

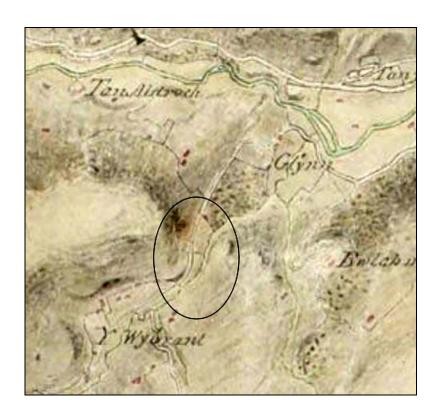


Figure 2; The 1818
Ordnance Survey Original
Surveyors Drawing of the
development area
(circled). There are no
buildings shown at
Cyfyng, where the chapel
and cottage stood by the
later 19th century

8.1.2 When the Ordnance Survey published their 1 inch to 1 mile scale First Series map for the area in 1840 (Sheet 75, Harlech), based on the 1818 survey, a similar picture is presented, but there are also some important changes in detail, see Figure 3. A cottage seems to be shown at Cyfyng and the area to the east of the Afon Wybrnant is also now depicted as woodland.



Figure 3; The 1849 Ordnance Survey First Series map of the development area (encircled) appears to show a building at Cyfyng.

- 8.1.3 The tithe map for Dolwyddelan parish, which dates to 1840, does not show any details of the field systems on the various properties within the parish. Only holding boundaries are shown. This shows that the area of the proposed development would be at the eastern edge of Tan y Clogwyn farm, but no other detail is shown.
- 8.1.4 The tithe apportionment, which accompanies the map and was prepared in 1841, records that Tan y Clogwyn farm was a 179 acre holding owned and occupied by one Thomas Pritchard.

- 8.1.5 The 1889 1:2500 scale Ordnance Survey map shows the field system around the proposed development in detail for the first time. Most of the field parcels found in the modern landscape around the development are recognisable. The map shows the area around the proposed turbine housing as deciduous woodland, with further wooded parcels further up the valley to the south and a larger wooded area to the east of the valley. Mixed woodland is shown in the area to the north of the turbine housing. The western side of the valley was mostly rough pasture at this time, with an improved pasture field between the site of the turbine housing and the chapel and cottage at Cyfyng. The 1900 and 1913 editions of the 1:2500 map show a similar landscape.
- 8.1.6 During the 20th century there have been a number of significant changes to the local landscape. The western side of this section of the Wybrnant valley has now become dominated by scrub and woodland, with the field in front of Cyfyng now the only parcel maintained as improved pasture. The valley bottom is largely cloaked in deciduous woodland, but the slopes to the east of the Afon Wybrnant are now covered by a large coniferous plantation, which appears to have first been planted during the 1960s.

9. Data Collation

- 9.1 The HER enquiry for the 500 metre radius assessment area yielded 4 records for historic assets.
- 9.2 After the site visit, the historic map search, and the rapid assessment of the readily available data the final dataset for the 500 metre radius assessment area contained 14 records for historic assets.
 - 9.2.1 Ten new records were created in the project database by Trysor. These were for historic assets on or near the proposed development and included records for Cyfyng chapel and county school (ID numbers 7 & 8), adjoining cottage (ID number 9) and latrine (ID number 3), and a footbridge over the Wybrnant (ID number 4). Other records were created for possible clearance feature (ID number 10) as well as walls and revetments (ID numbers 1, 2, 5 and 6).

10. Assessment of Significance

- 10.1 The significance of each historic asset was determined and scored in accordance with the categories adopted by the Welsh Archaeological Trusts i.e. Nationally Important, Regionally Important, Locally Important, Minor and Features Needing Further Investigation (Unknown), see Figure 4. Full details of this exercise are given in Appendix B.
- 10.2 Within the 14 records there were no Scheduled Monuments, Listed Buildings or Registered Historic Parks and Gardens.

ID Number	Historic Asset Name	Historic Asset Type	Significance	Site Status
	MIDDLE BRONZE AGE	FINDSPOT	Regionally	None
13	PALSTAVE - FINDSPOT, PENMACHNO		Important	
3	CYFYNG COUNCIL SCHOOL	LATRINE	Locally Important	None
4	AFON WYBRNANT	FOOTBRIDGE	Locally Important	None
7	CYFYNG CALVINISTIC	CHAPEL	Locally Important	None
/	METHODIST CHAPEL			
8	CYFYNG COUNCIL	SCHOOL	Locally Important	None
	SCHOOL			
9	CYFYNG	COTTAGE	Locally Important	None
1	AFON WYBRNANT	WALL	Minor Importance	None
2	AFON WYBRNANT	WALL	Minor Importance	None
5	AFON WYBRNANT	WALL	Minor Importance	None
6	AFON WYBRNANT	REVETMENT	Minor Importance	None
10	AFON WYBRNANT	CLEARANCE CAIRN?	Minor Importance	None
11	STRUCTURE, TY'N Y NANT	COTTAGE	Minor Importance	None
12	SLATE QUARRY,	SLATE	Minor Importance	None
	CHWAREL GLYN LLEDR	QUARRY		
14	BUILDING, SW OF CYFYNG	BUILDING	Minor Importance	None

Table 1: Assessed significance of historic assets

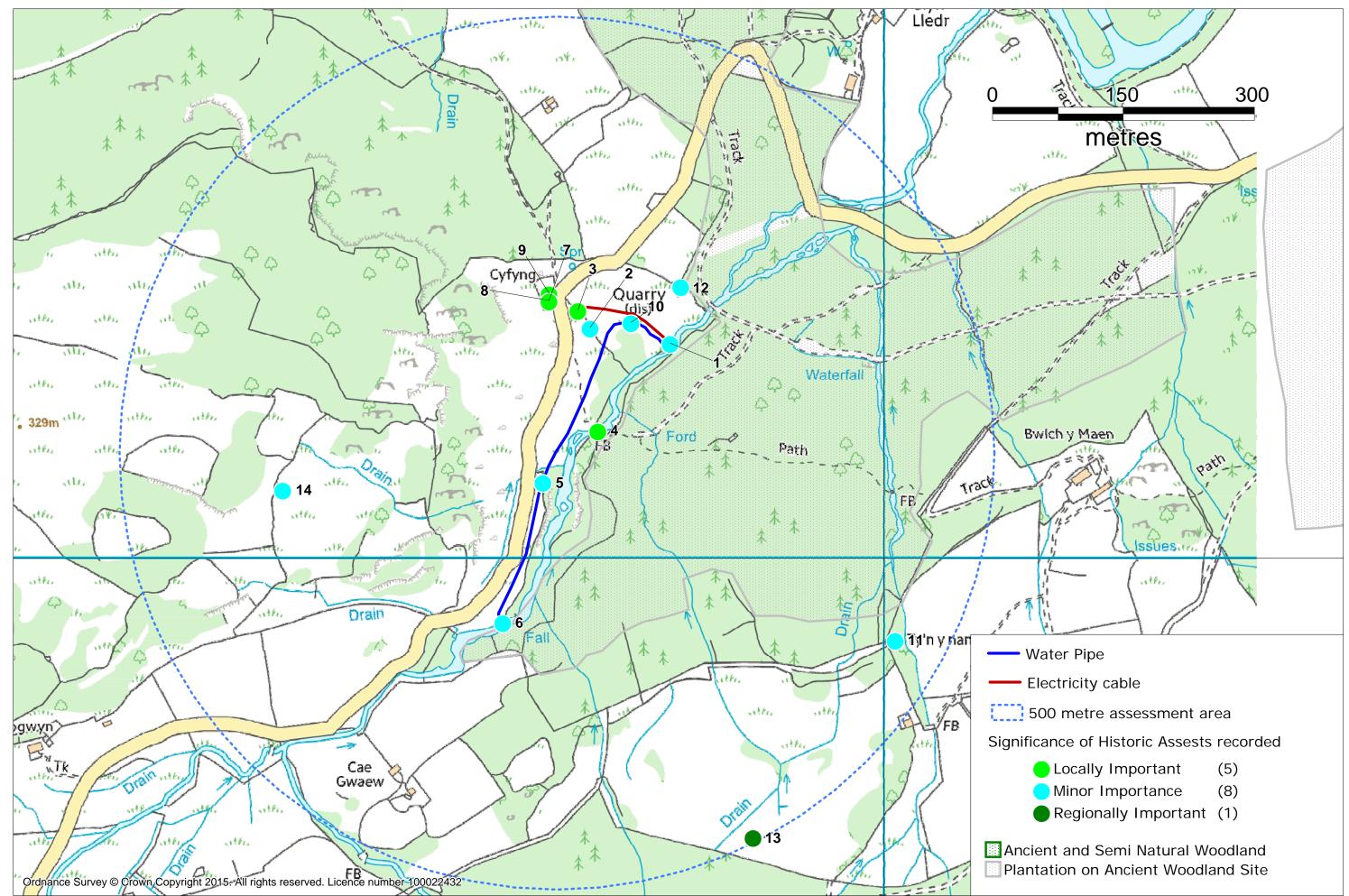


Figure 4: The 500 metre radius assessment area showing significance of historic assets recorded, labelled with Project ID number

11. Assessment of Impact

11.1 The Direct and Indirect impact on each historic asset was assessed taking into account both physical and non-physical impacts. Each impact was assessed within the scale Very Low, Low, Moderate, High and Very High, taken into account the significance of the historic asset and the nature of the impact. A full table is found in Appendix B but a summary is tabulated in Table 2 below and illustrated in Figure 5.

ID Number	Historic Asset Name	Historic Asset Type	Level of Direct Impact	Level of Indirect Impact	Level of Impact on Setting
5	AFON WYBRNANT	WALL	Low	None	None
6	AFON WYBRNANT	REVETMENT	Low	None	None
1	AFON WYBRNANT	WALL	Very Low	Very Low	None
2	AFON WYBRNANT	WALL	None	Low	None
3	CYFYNG COUNCIL SCHOOL	LATRINE	None	None	None
4	AFON WYBRNANT	FOOTBRIDGE	None	None	None
7	CYFYNG CALVINISTIC METHODIST CHAPEL	CHAPEL	None	None	None
8	CYFYNG COUNCIL SCHOOL	SCHOOL	None	None	None
9	CYFYNG	COTTAGE	None	None	None
10	AFON WYBRNANT	CLEARANCE CAIRN?	None	None	None
11	STRUCTURE, TY'N Y NANT	COTTAGE	None	None	None
12	SLATE QUARRY, CHWAREL GLYN LLEDR	SLATE QUARRY	None	None	None
13	MIDDLE BRONZE AGE PALSTAVE - FINDSPOT, PENMACHNO	FINDSPOT	None	None	None
14	BUILDING, SW OF CYFYNG	BUILDING	None	None	None
2	AFON WYBRNANT	WALL	None	Low	None

Table 2: Impact on historic assets within the 500 metre assessment area

- 11.2 As Table 2 shows, no recorded historic assets within the 500 metre assessment area would be exposed to any significant impact from the development. Full details of the assessment of direct and indirect impact for each of the historic assets in Table 2 can be found in Appendix B.
 - 11.2.1 Eleven historic assets would be unaffected.
 - 11.2.2 Two historic assets, Wall ID number 5 and Revetment ID number 6, would experience a Low, Direct, physical impact. Wall ID number 1 would also have a Very Low, direct, physical impact. The

pipeline would cross both of these walls, whilst the intake tank would be built against the revetment and be likely to disturb a small portion of it (see Plate 15 in Appendix C). All three are minor features and the damage to each would not be significant.

- 11.2.3 There would be a potential Low indirect impact on Wall (ID number 2) where unintentional damage to the wall could occur.
- 11.3 There are no Scheduled Monuments within 500m of the development area.
- 11.4 There are no Listed Buildings within the 500m assessment area
- 11.5 There are no Registered Parks and Gardens within the 500m assessment area.
- 11.6 There are no World Heritage sites within the 500m assessment area.
- 11.7 The development site does not lie within a registered Historic Landscape.
- 11.8 The proposed development would stand in the Wybrnant Iwerddon LANDMAP Historic Landscape Aspect Area (SNPHL124), see Figure 6, which is described as;
 - "Massive block of Forestry Commission-owned forestry covering the uplands between Cwm Penmachno and the Lledr valley. There are some unplanted areas within the block, and more importantly a number of important houses such as Fedw Deg (a massive, scheduled, submedieval house) and Ty Mawr Wybrnant (birthplace of Bishop Morgan, and now owned by the National Trust)."
 - 11.8.1 The overall evaluation of this aspect area is High "for what survives of the 16th century and for its cultural associations." These elements would not be affected by the development.
 - 11.8.2 There are no other LANDMAP Historic Landscape Aspect Areas within 500 metres of the development area.
- 11.9 There are no Conservation Areas within the 500m study area. The development area does lie within the Snowdonia National Park.
- 11.10 During the field visit, no physical, visible evidence was noted suggestive of buried archaeology on land which would be affected by the development. There is no documentary, cartographic or aerial photographic evidence of buried archaeology at this location.
- 11.11 No palaeoenvironmental potential was identified, the development site lays on well-drained slopes.

- 11.12 The boundary banks within the development area are all drystone walls of post-medieval date.
- 11.13 There are no field names of archaeological significance at the development site. The parish tithe survey did not record field names.

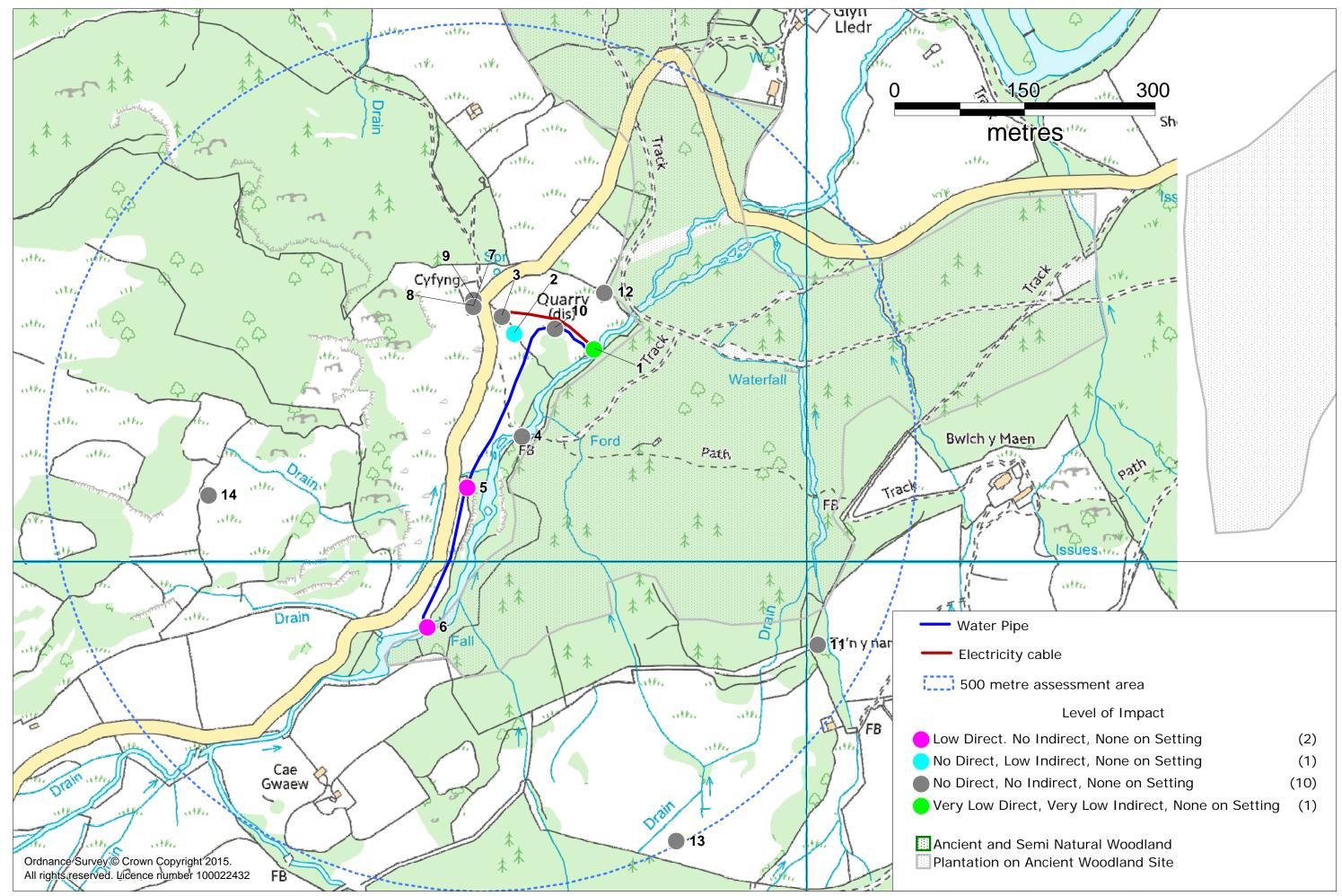


Figure 5: The 500 metre radius assessment area showing the level of impact on historic assets recorded, labelled with Project ID number

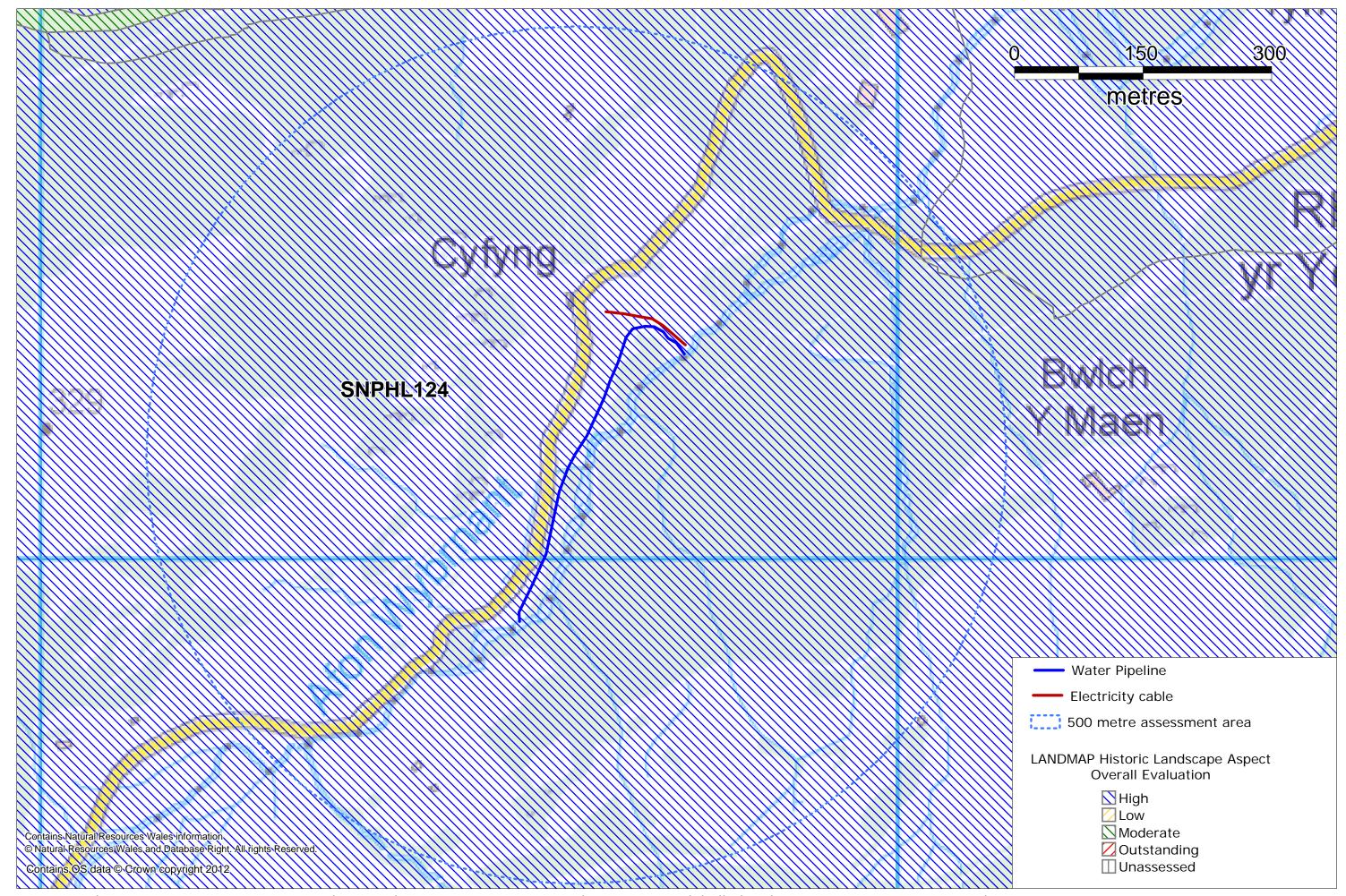


Figure 6: The 500 metre assessment area showing the LANDMAP Historic Landscape aspect, labelled with LANDMAP Aspect Area Number

12. Conclusion

- 12.1 No significant historic assets would experience impact from the proposed development. Only three features of minor importance would experience a Low or Very Low, direct, physical impact.
- 12.2 No statutorily protected historic assets would be affected by the development.
- 12.3 No Conservation Areas or Registered Historic Parks or Gardens would be affected by the development. Although the development area is located within the Snowdonia National Park, its small scale and location within a wooded area means that it will not cause a significant visual or physical impact on the historic landscape.
- 12.4 There is no evidence of buried archaeology within the proposed development area. It should be noted that ground vegetation prevented field examination of a 320m section of the proposed course of the pipe. There is no documentary or cartographic evidence to suggest that any features of historic interest lie within this area, other than field boundary wall ID number 5 recorded by the assessment.
- 12.5 In terms of archaeological mitigations, it is important that the two boundary walls, ID numbers 1 & 5 and the stone revetment, ID number 6 are not disturbed unnecessarily by the development. There would be unavoidable but slight physical impacts on all three, which should be minimised by not removing or disturbing more stone than is necessary.
 - 12.5.1 The water pipe will pass through a collapsed section of Wall, ID number 1, and care should be taken not to disturb the standing wall alongside the gap during pipe-laying operations.
 - 12.5.2 The pipe will also be laid across the line of Wall, ID number 5, which appears to still stand intact. The pipe should be moled underneath the wall, or alternatively any section of the wall which is dismantled should be rebuilt following pipe-laying.
 - 12.5.3 The intake tank will abut Revetment, ID number 6, with the water pipe being laid to connect to its western side. Some slight disturbance of the revetment may occur, but this will not represent a significant impact and care should be taken not weaken the adjacent section of the revetment or remove more stone than is necessary to create the outtake point for the pipe.
 - 12.5.4 Boundary Wall, ID number 2, will not be directly affected by the development, but the water pipe will run through an original gap in the wall where a gate was once positioned. Care should be taken during pipe laying not to disturb the adjacent standing section of walling.

13. Reporting

13.1 Copies of this report will be provided to the client, National Monument Record and the Regional Historic Environment Record.

14. References

14.1 Map sources

Ordnance Survey, 1818, 2" to 1 mile Original Surveyors drawing, Harlech

Ordnance Survey, 1840, 1" to 1 Mile Sheet 75

Ordnance Survey, 1890, 1:2500, 1st edition

Ordnance Survey, 1900, 1:2500 2nd edition

Ordnance Survey, 1913, 1:2500 3rd edition

Ordnance Survey, 1976, 1:2500

14.2 Web-based materials

CIfA, 2014, Standard and Guidance for historic environment desk-based assessment

Historic England, 2015, *The Setting of Historic assets Historic Environment Good Practice Advice in Planning Note 3*

14.3 Published sources

Cadw, 2010, Conservation Principles for the Sustainable Management of the Historic Environment in Wales

Historic England, 2008, Conservation Principles, Policies and Guidance

14.4 Unpublished sources

Trysor, 2016, Specification for a desk based assessment for proposed hydro scheme at Tan y Clogwyn, Wybrnant, Nr Betws y Coed, LL25 OHJ

14.5 Data Sources

Gwynedd Archaeological Trust, Historic Environment Record, data received 03/08/2016

Cadw, Listed Building all-Wales dataset, downloaded April 2016

Cadw, Parks and Gardens all-Wales dataset, downloaded August 2015

Cadw, Scheduled Ancient Monument all-Wales dataset, downloaded April 2016

Cadw, Registered Historic Landscapes dataset, supplied June 2014

NRW, LiDAR data, accessed online during September 2016

http://lle.gov.wales/Catalogue/Item/LidarCompositeDataset/?lang=en

15. Reliability & Limitations of Sources

- 15.1 In line with the requirements of the CIfA Standards & Guidance notes for Desk-based Assessments (CIfA, 2014, Point 3.3.6), the following observations on the usefulness and reliability of the sources used have been made.
- 15.2 The cartographic sources used include a range of Ordnance Survey maps produced during the 19th and 20th centuries, all of which provided sufficiently clear and accurate representations of the evolving landscape of the assessment area.
 - 15.2.1 The earliest map source was the 1818 Ordnance Surveyors Original Surveyors Drawings, of which an adequate digital copy is available through the British Museum website.
 - 15.2.2 The parish tithe map of 1840 records only holding boundaries, providing no details of the field system or field names within each holding. This and the tithe apportionment were of minimal use.
- 15.3 The main source of existing data for the assessment was the Gwynedd HER, supplied by the Gwynedd Archaeological Trust. This only included four records, two of which were problematic (see Table 3 below).
 - 15.3.1 Historic assets of local significance not included in the regional HER at present include Cyfyng Calvinistic Methodist Chapel (ID number 8), Cyfyng Council School (ID number 7) and Cyfyng Cottage (ID number 9).

PRN 3740	Site_Name Middle Bronze Age Palstave -	Type FINDSPOT	Record created? Record created	Trysor comments The location of this findspot seems to be in doubt.
20155	Findspot, Slate Quarry, Chwarel Glyn Lledr	SLATE QUARRY	Record created	There is no indication of a slate quarry on historic mapping, aerial photographs or LiDAR at the given grid reference. It is probably a record for a quarry to the west at SH7776753311, which is shown on 1st edition Ordnance Survey map. A linear part of this quarry has been disturbed by a forestry track, but a quarry pit still exists at the western end according to LiDAR data.
56640	Building, SW of Cyfyng	BUILDING	Record created	
56643	Structure, Ty'n y nant	STRUCTURE	Record created	

Table 3: Comments on records from the regional HER

15.3.2 The RCAHMW's National Monuments Record only had a single recorded historic asset within the assessment area, namely the Cyfyng

- Calvinistic Methodist Chapel (ID number 8). This record appears to include inaccurate information for the date of the chapel's foundation.
- 15.4 Google Earth aerial images of the assessment area were also used online. These date to 2003, 2006, 2009 and 2015 and provide good coverage for the whole assessment area, although given the wooded valley location of the development they were of limited use.
- 15.5 LiDAR imagery of 2 metre and 1 metres resolution was available from the Lle website. It was of good quality for this area, and helped identify the location and condition of a quarry recorded in the HER (ID number 12).

Jenny Hall & Paul Sambrook Trysor, September, 2016 **Appendix A: Specification**

SPECIFICATION FOR A DESK BASED ASSESSMENT FOR PROPOSED HYDRO SCHEME AT TAN-Y-CLOGWYN, WYBRNANT, NR BETWS-Y-COED, LL25 0HJ

1. Introduction

- 1.1 TGVHydro Ltd, c/o CRiC, Beaufort Street, Crickhowell, NP8 1BN, have commissioned Trysor heritage consultants, on behalf of their clients, to undertake a desk based assessment for a proposed hydro scheme at Tan y Clogwyn, Wybrnant, near Betws y Coed LL25 0HJ.
- 1.2 Pre application documentation has been submitted to the Snowdonia National Park.

2. The proposed development

2.1 It is proposed that a new hydro scheme is built on the Afon Wybrnant, near Betws y Coed. The intake would be located at SH7756252921 and the outfall at SH777553238, a total pipe length of 430m. The electricity cabinet would lie to west of outfall.

3. Planning context of the proposed development

3.1 A pre planning application response from Richard Thomas, Principal Planning Officer, stated that:

"It is likely that an archaeological survey will be required for this location. Initially this will involve a limited desk top and /or walk over survey by a competent professional. Further surveys and a watching brief may be required following the desk top/walkover survey."

4. Objective of the Specification

- 4.1 The objective of specification is to specify the method to be used for the desk-based assessment in order to identify and assess impact, both direct and indirect, on the historic environment from the proposed development.
- 4.2 The Chartered Institute for Archaeologists' Standard and Guidance for Historic Environment Desk-based Assessment (CIfA, 2014) was used to write this specification.

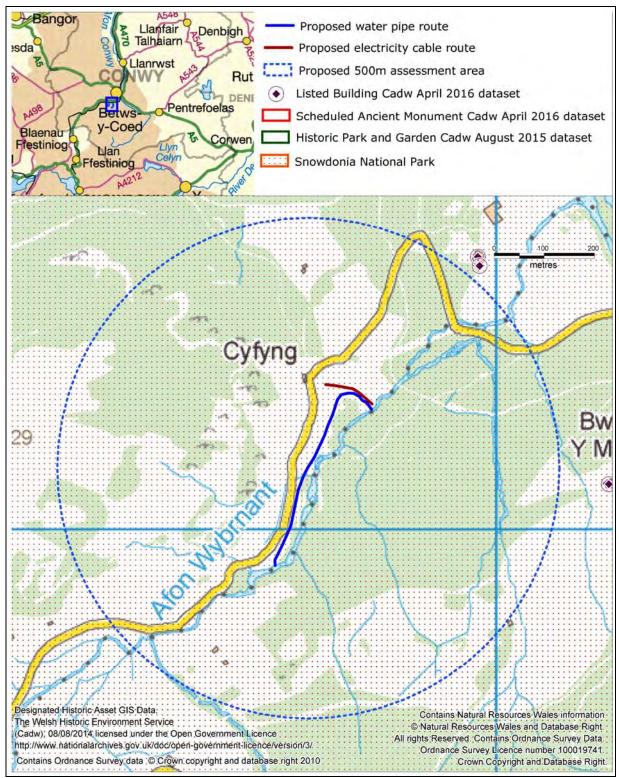


Figure 1: The development area and the proposed 500 metre assessment area.

5. Scope of Work

- 5.1 The assessment will initially consider known historic assets within a 500 metre radius circle centred on SH7762553120 (see Figure 1). This study area may be revised once the importance, proximity and intervisibility of the historic assets have been established. Indirect impact on historic assets of minor importance, or locally important but severely damaged will not be assessed.
- 5.2 The following components of the historic environment will be considered, where relevant;
 - a. Scheduled Ancient Monuments (SAMs) and their settings.
 - b. Listed buildings and their settings.
 - c. Registered Parks and Gardens and their essential settings.
 - d. World Heritage Sites
 - e. Conservation Areas
 - f. Previously recorded non-designated historic assets and their settings,
 - g. Buildings identified as of Local Importance where such buildings have been identified
 - h. Newly identified historic assets and their settings
 - i. Historic Landscapes and their characterisation
 - j. Hedgerows and field patterns
 - k. Ancient woodland
 - 1. Place-name evidence
 - m. Cumulative impacts
 - n. Any agri-environmental interests or requirements, e.g. Environmental Stewardship or Countryside Stewardship scheme
 - o. Potential for buried archaeological
 - p. Potential for palaeoenvironmental evidence
- 5.3 The following data sources will be consulted:
 - Gwynedd Historic Environment Record
 - Cadw Listed Buildings and Scheduled Ancient Monuments
 - Historic Wales portal
 - Historic Ordnance Survey maps
 - Other historic maps including tithe map
 - Aerial photographs
 - LiDAR
 - Documentary sources
 - Published journals
- 5.4 A site visit will be carried out in accordance with Chartered Institute for Archaeologists' *Standard and Guidance for an Historic Environment Desk-based Assessment (CIfA, 2014)*. The site visit will be record any unknown features in the vicinity of the proposed development. It will also assess the condition of known historic assets and an examination and record will be made of the nature of adjacent field boundaries. In addition, if practical the field will be informally fieldwalked to enable recovery and recording of any artefacts. A rapid record of features will be made, including a written description on pro-forma record sheets.

- 5.5 Colour digital photographs will be taken, using a 16M pixel camera. A written record will be made on site of the photographs taken. Appropriate photographic scales will be used.
- 5.6 Once the dataset of existing and new data has been created, the significance of all identified historic assets will be assessed considering their evidential, historical, aesthetic and communal values (Cadw, 2010).
- 5.7 An assessment will be made of the development's possible impact on all historic assets, looking at direct physical and indirect physical and visual impacts. This will include impact on the setting of the historic assets and the potential for buried archaeology at the development site.
- 5.8 Elevation profiles, in conjunction with photos from the site visit and aerial photos, will be used assess to intervisibility, views and impact on setting. ZTV and photomontages from the client will be used if available. If a ZTV is not available Trysor will create one, or more as necessary.

6. Reporting

- 6.1 A written report will be submitted to the client to inform the current planning application. The report will include;
- a. a non-technical summary
- b. a site location plan
- c. a bibliography
- d. a gazetteer of all historic assets included in the assessment giving significance and impact, with descriptions.
- e. an assessment of the value and significance of each heritage asset
- f. an assessment of the impact of the proposed development on the historic assets of the study area impacts will be assessed whether negative or positive, direct or indirect.
- g. statement of the local and regional context of the historic assets identified as have being impacted on by the development.
- h. statement on reliability of resources used during assessment.
- j potential for buried archaeological features within the development plot
- 6.2 The report will be guided by the requirements of Annexe 2 of the Chartered Institute for Archaeologists' *Standard and Guidance for an Historic Environment Desk-based Assessment* (CIfA,2014). Copies of the report will be provided to the client and the Regional Historic Environment Record.

7. Health & Safety

7.1 Trysor will undertake a risk assessment in advance of any field visit in accordance with their health and safety policy.

8. Dissemination

8.1 A summary of the work undertaken and its findings will be submitted to *Archaeology in Wales* if appropriate. A paper copy of the report will be submitted to the regional Historic Environment Record, as well as a copy in pdf format.

9. Archive

9.1 The archive will be deposited with National Monument Record in Aberystywth, including a copy of the final report. This archive will include all written, drawn and photographic records relating directly to the investigations undertaken. Digital archives will follow the guidelines from the RCAHMW, (RCAHMW 2015).

10. Resources to be used

10.1 Jenny Hall, BSC, MCIfA and Paul Sambrook, BA, PGCE, MCIfA of Trysor will undertake the desk-based assessment. During the field visit will be equipped with standard field equipment, including digital cameras, GPS and first aid kit. Trysor have access to the computer hardware and software required to deliver the completed final report and archive to a professional standard.

11. Qualification of personnel

- 11.1 Trysor is a Registered Organisation with the Chartered Institute for Archaeologists and both partners are Members of the Chartered Institute for Archaeologists, www.archaeologists.net
- 11.2 Jenny Hall (BSc Joint Hons., Geology and Archaeology, MCIfA) had 12 years excavation experience, which included undertaking watching briefs prior to becoming the Sites and Monuments Record Manager for a Welsh Archaeological Trust for 10 years. She has been an partner in Trysor since 2004 undertaking a variety of work that includes upland field survey, desk-based appraisals and assessments, watching briefs and evaluations as well heritage interpretation and community-based projects.
- 11.3 Paul Sambrook (BA Joint Hons., Archaeology and Welsh, MCIfA, PGCE) has extensive experience as a fieldworker in Wales. He was involved with Cadw's pan-Wales Deserted Rural Settlements Project for 7 years. He also undertook Tir Gofal field survey work and watching briefs. He has been a partner in Trysor since 2004 undertaking a variety of work including upland field survey, desk-based appraisals/assessments, watching briefs and evaluations as well as community-based, non-intrusive projects and community heritage interpretation.

12. Insurance & Professional indemnity

12.1 Trysor has Public Liability and Professional Indemnity Insurance.

13. Project identification

13.1 The project has been designated Trysor Project No. 2016/527

14. Sources

Chartered Institute for Archaeologists, 2014, Standard and Guidance for an Historic Environment Desk-based Assessment, revised December 2014.

Historic England, 2015, Historic Environment Good Practice Advice In Planning *Note 3* The Setting of Heritage Assets

RCAHMW, 2015, RCAHMW Guidelines for Digital Archives, Version 1

Welsh Office Circular 60/96; Planning and the Historic Environment: Archaeology (1996)

Tan y Clogwyn, Wybrnant, Betws y Coed Historic Environment Desk-based Assessment

NB: Although the Historic Environment (Wales) Act came into being in March 2016, we are still waiting for technical advice notes and guidance documents, so in the meantime existing documentation is being used.

Jenny Hall & Paul Sambrook Trysor, July 2016 Appendix B: Gazetteer of historic assets

HER PRN: NMR NPRN:

NGR: SH7775553246 Grid reference taken at point along linear site

Period: Post Medieval Broadclass: Agriculture and Subsistence

Form: Other Structure Condition: Damaged

Site Status:

SAM number: LB number: grade:

Trysor A section of drystone walling, about 30 metres in length and up to 1 **Description:** metre high, which forms a boundary between a pasture field to the west

and the Afon Wybrnant to the east.

Rarity: Common

Distance from solar array:

On the line of the pipeline

Group Value: Part of the post medieval field system

Evidential Value: Standing wall, some parts have fallen

Historical Value: None

Aesthetic Value: None

Communal Value: None

Setting: The wall runs along the western bank of the Afon Wybrnant.

Significance: Minor Importance

Any Direct Impact?: Yes Very Low

The outflow pipe from the turbine housing would pass through the line

of this wall to return water to the river.

Any Indirect

Yes

Impact?: Very Low

Standing sections of the wall could be damaged accidentally during

construction.

Level of Impact

on Setting:

None

Comment on

Impact:

The outflow pipe from the turbine housing would pass through this wall to return water to the river. The pipe should pass through a collapsed section of the wall, which would mean that the surviving wall would not

be physically affected. Care should be taken not to disturb standing

sections of the wall.

Plates: 8 and 9

HER PRN: NMR NPRN:

NGR: SH7766353264 Grid reference taken at point along linear site

Period: Post Medieval Broadclass: Agriculture and Subsistence

Form: Other Structure Condition: Intact

Site Status:

SAM number: LB number: grade:

Trysor A drystone wall which forms the southwestern boundary of a pasture field below Cyfyng chapel and cottage. It stands up to 1.3 metres high

and is in generally good condition. The southeastern end of the wall runs through an overgrown area of wood and scrub, down a steep

slope, and does not appear to be in good condition.

Rarity: Common

Distance from

On the line of the pipeline

solar array:

Group Value: Part of the post medieval field system

Evidential Value: Standing wall, generally well preserved

Historical Value: None

Aesthetic Value: None

Communal Value: None

Setting: The wall runs down the valley slope to the western side of Afon

Wybrnant, alongside a pasture field before disappearing into

undergrowth within a wooded strip along the riverside.

Significance: Minor Importance

Any Direct No Impact?: No

Any Indirect Impact?:

Accidental impact from machine during construction

Level of Impact

on Setting:

None

Yes

Low

Comment on

Impact:

The buried pipeline would pass through an existing gap in the wall line and should have no impact on the wall. Care should be taken during pipe-laying that machines do not hit the wall and cause damage.

Plates: 10

HER PRN: NMR NPRN:

NGR: SH7764953284 Grid reference taken at centre of site

Period: Modern Broadclass: Water Supply and Drainage

Form: Building Condition: Damaged

Site Status:

SAM number: LB number: grade:

Trysor A small, derelict building which stands downhill and southeast of the former Cyfyng chapel and Council School. It was used when the chapel

had been converted into a school. The building stands on a natural rock outcrop and has been built through a drystone boundary wall. It stands up to 1.5 metres high and had a pitched, slate roof. The entrance was in

the southwest facing wall. It is less than 2 metres square.

Rarity: Not rare

Distance from 20m to

solar array:

20m to the northwest

Group Value: Associated with the former Cyfyng Council School

Evidential Value: Standing structure, derelict

Historical Value: None

Aesthetic Value: None

Communal Value: None

Setting: This small structure stands downslope of the former Cyfyng Chapel &

School, built into the field boundary wall.

Significance: Locally Important

Any Direct No Impact?: No

Any Indirect No Impact?: No

Level of Impact

on Setting:

None

Comment on

on The proposed development would have no physical or visual impact on

Impact: this structure.

Plates: 7

ID number: 4 AFON WYBRNANT FOOTBRIDGE

HER PRN: NMR NPRN:

NGR: SH7767253146 Grid reference taken at centre of site

Period: Post Medieval; Modern Broadclass: Transport

Form: Other Structure Condition: Intact

Site Status:

SAM number: LB number: grade:

Trysor A wooden footbridge across the Afon Wybrnant, supported by

Description: drystone abutments at either end and also a natural rock outcrop in the

centre of the river. This central rock means that two bridges actually span the river. A footbridge is shown crossing the Wybrnant at this point on late 19th century Ordnance Survey maps, and the original abutments seem be still in use supporting the current modern bridge.

Rarity: Common

Distance from

25m to the southeast

solar array:

Group Value: None

Evidential Value: Standing structure

Historical Value: None

Aesthetic Value: None

Communal Value: Carries a public footpath over the river

Setting: A footbridge crossing the Afon Wybrnant within a wooded area.

Significance: Locally Important

Any Direct No Impact?: No

Any Indirect No Impact?: None

Level of Impact

on Setting:

None

Comment on Impact: The proposed development would have no physical or visual impact on

this structure.

Plates: See cover photograph

ID number: 5 AFON WYBRNANT

WALL

HER PRN: NMR NPRN:

NGR: SH7760953087 Grid reference taken at point along linear site

Period: Post Medieval Broadclass: Agriculture and Subsistence

Form: Other Structure Condition: Damaged

Site Status:

SAM number: LB number: grade:

Trysor A post-medieval, drystone boundary wall. It encloses a narrow strip between the Cyfyng to Tan y Glogwyn road and the rocky gorge through

which the Afon Wybrnant flows.

Rarity: Common

Distance from

On the line of the pipeline

solar array:

Group Value: Part of the post medieval field system

Evidential Value: Standing structure

Historical Value: None

Aesthetic Value: None

Communal Value: None

Setting: The wall encloses and area along the western valley slope of the Afon

Wybrnant. For most of its length it is hidden in woodland and scrub.

Significance: Minor Importance

Any Direct Impact?: Yes Low

No

Pipeline will pass through the wall

Any Indirect

Impact?: None

Level of Impact

on Setting:

None

Comment on

Impact:

The proposed pipeline will cross the line of this wall. When visited in September 2016 the ground vegetation made it difficult to assess the condition of the wall where the pipeline would run. Damage to the wall should be avoided by either moling the pipe beneath the wall or by restoring the affected section of wall to its present condition once the

pipe has been laid.

Plates: 11

ID number: 6 AFON WYBRNANT REVETMENT

HER PRN: NMR NPRN:

NGR: SH7756352926 Grid reference taken at point along linear site

Period: Post Medieval Broadclass: Agriculture and Subsistence

Form: Other Structure Condition: Intact

Site Status:

SAM number: LB number: grade:

Trysor This drystone revetment is less than 1 metre high and defines the **Description:** western bank of the Afon Wybrnant at this point. It is about 12 metres

long but has a metre wide gap just north of the centre which appears to have been created deliberately to give access to the river. It may be a

continuation of the boundary wall ID number 5.

Rarity: Common

Distance from

On the line of the pipeline

solar array:

Group Value: Possibly a continuation of wall ID number 5

Evidential Value: Standing structure

Historical Value: None

Aesthetic Value: None

Communal Value: None

Setting: A revetment wall along the western bank of the Afon Wybrnant.

Significance: Minor Importance

Any Direct Yes Impact?: Low

Intake tank and dam will be built against this revetment

Any Indirect No Impact?: No

Level of Impact

on Setting:

None

Comment on

Impact:

The intake tank would be positioned at the end of the revetment and the construction of the tank and the inlet pipe are likely to impact on a small section of it. This is a feature of minor importance and the loss of a small section should not be seen as a matter of concern. The

remainder of the revetment is in better condition and would not be

impacted upon.

Plates: 13, 14 and 15

CYFYNG CALVINISTIC METHODIST CHAPEL ID number: 7 CHAPEL

HER PRN: NMR NPRN:

NGR: SH7761653295 Grid reference taken at centre of site

Broadclass: Period: Post Medieval Religious Ritual and Funerary

Form: Building Condition: Converted

Site Status:

SAM number: LB number: grade:

Cyfyng Calvinistic Methodist Chapel was built after 1850 and used as a Trysor place of worship and Sunday School until the end of the 19th century. Description:

From 1900 it was used as the Cyfyng Council School. The school closed in 1958 and subsequently the former chapel was converted for domestic

use in association with the neighbouring Cyfyng cottage.

Rarity: Not rare

Distance from

60m to the northwest

solar array:

Group Value: Attached to Cyfyng cottage (ID number 9)

Evidential Value: Standing building, now in domestic use

Historical Value: Mentioned in historic sources

Aesthetic Value: Small, rural, side-entry chapel

Communal Value: Former place of worship

This former chapel stands alongside a minor road to the west of the Setting:

Afon Wybrnant. Cyfyng cottage is attached to the northern gable end

of the former chapel.

Significance: Locally Important

Any Direct No Impact?: None

Any Indirect No Impact?: None

Level of Impact

on Setting:

None

Comment on

The proposed development would have no physical or visual impact on

Impact: this structure.

1 and 2 Plates:

ID number: 8 CYFYNG COUNCIL SCHOOL SCHOOL

HER PRN: NMR NPRN:

NGR: SH7761653295 Grid reference taken at centre of sitePeriod: Modern Broadclass: EducationForm: Building Condition: Converted

Site Status:

SAM number: LB number: grade:

Trysor This building was originally built as Cyfyng Calvinistic Methodist Chapel after 1850. From 1900 it served as a Council School, with 32 children

attending in 1905. Some modification appears to have been made to the building at this time, with the present porch probably added for the school. The school closed in 1958, when only 8 children attended, and was later converted for domestic use in association with adjacent

Cyfyng cottage.

Rarity: Not rare

Distance from

60m to the northwest

solar array:

Group Value: Attached to Cyfyng cottage (ID number 9)

Evidential Value: Standing building, now in domestic use

Historical Value: Mentioned in historic sources

Aesthetic Value: Small, rural, side-entry chapel

Communal Value: Former place of worship and school

Setting: This former school stands alongside a minor road to the west of the

Afon Wybrnant. Cyfyng cottage is attached to the northern gable end

of the former school.

Significance: Locally Important

Any Direct No Impact?: No

Any Indirect No Impact?: No

Level of Impact

on Setting:

None

Comment on

Impact:

The proposed development would have no physical or visual impact on

this structure.

Plates: 1, 2, 3, 4 and 5

ID number: 9 CYFYNG COTTAGE

HER PRN: NMR NPRN:

NGR: SH7761653303 Grid reference taken at centre of site
 Period: Post Medieval Broadclass: Domestic
 Form: Building Condition: Intact

Site Status:

SAM number: LB number: grade:

Trysor Description: A cottage attached to the northern gable wall of the former Cyfyng Methodist Chapel, which was built after 1850. Genealogical sources suggest that the house was built c.1720 as two shepherds cottages, but this is unverified. It is not clear whether the cottages predate the chapel or are contemporary, or even post date it.

An examination of the front, eastern elevation of the cottage from the roadside shows that there is a blocked up door into what was the southern cottage, at the extreme southern end of the elevation. The position of this doorway suggests that the chapel may have already been standing before the cottage was built, or that the cottage was built at the same time, as it appears that the northern gable end of the chapel was used as the southern gable wall of the cottage.

Late 19th century mapping shows that the garden to the front of the cottage was divided into two portions, and the position of the two chimney stacks on the building also demonstrates that the building was originally two small cottages. The 1841 census for Dolwyddelan parish shows that two quarrymen's families lived in the cottages of "Ty'n y Cyfin", which almost certainly refers to this dwelling. There is no reference to the cottage on the 1851 census, but by 1861 two separate cottages at "Cyfin" were home to two retired women.

During the 20th century, the cottages were merged into a single dwelling. In 2016 the property appears to be in use as a holiday home, with its windows shuttered. The attached former Cyfyng chapel has been converted for use as an extension to the cottage, although it appears that there is no internal access from one building to the other.

Rarity: Common

Distance from solar array:

60m to the northwest

Group Value: Attached to Cyfyng chapel (ID number 7) and school (ID number 8)

Evidential Value: Standing building

Historical Value: Mentioned in historic sources

Aesthetic Value: Cottage adjacent to small rural chapel/school

Communal Value: Associated wit former place of worship/school

Setting: This cottage stands alongside a minor road to the west of the Afon

Wybrnant. The former Cyfyng chapel is attached to the southern gable

wall of the cottage.

Significance: Locally Important

Any Direct No Impact?: No

Any Indirect Impact?:

No None

Level of Impact on Setting:

None

Comment on Impact: The proposed development would have no physical or visual impact on

this structure.

Plates: 1 and 6

ID number: 10 AFON WYBRNANT CLEARANCE CAIRN?

NMR NPRN: HER PRN:

NGR: SH7771053270 Grid reference taken at centre of site

Agriculture and Subsistence Period: Post Medieval Broadclass:

Other Structure Condition: Intact Form:

Site Status:

SAM number: LB number: grade:

A small drystone feature, which may be a neatly constructed clearance Trysor cairn or possibly the remains of a stone wall of unknown purpose. The Description:

stone pile is about 2 metres long, 0.6 metres high by 0.6 metres wide

and roughly coursed.

Rarity: Common

Distance from

solar array:

Within 10m of the pipeline or electricity cable.

Group Value: None

Evidential Value: Stones in situ

Historical Value: None

Aesthetic Value: None

Communal Value: None

This stone feature is found within a pasture field on the lower western Setting:

valley slope of the Afon Wybrnant, in a small area of undergrowth and

scrub.

Significance: Minor Importance

Any Direct No Impact?: None

Any Indirect No Impact?: None

Level of Impact on Setting:

None

Comment on

Although the pipeline and/or electricity cable would pass close to this stone pile, they will not impact upon it physically. Care should be taken Impact:

during construction to avoid any damage from machinery.

ID number: 11 STRUCTURE, TY'N Y NANT **COTTAGE**

HER PRN: NMR NPRN: 56643

NGR: SH7801352906 Grid reference taken at centre of site Broadclass: Domestic Period: Post Medieval Form: Documentary Evidence Condition: Unknown

Site Status:

SAM number: LB number: grade:

Trysor Ty'n y Nant Cottage is shown on the Penmachno tithe map of 1842 Description: when it was occupied by Thomas Cydwaladr and owned by Lord Mostyn.

The cottage was abandoned during the early 20th century and the site

is now hidden in woodland.

Rarity: Common

Distance from

430m to the east-southeast

solar array:

Group Value: None

Evidential Value: Historic mapping

Historical Value: None

Aesthetic Value: None

Communal Value: None

Ty'n y Nant stood at the western side of a minor stream which flows Setting:

northwards to join the Wybrnant. It originally had a small garden

attached. The area is now wooded.

Significance: Minor Importance

Any Direct No Impact?: None

Any Indirect No Impact?: None

Level of Impact on Setting:

None

Comment on

The site of the cottage is hidden in thick woodland and would not be

intervisible with the proposed development. Impact:

ID number: 12 SLATE QUARRY, CHWAREL GLYN LLEDR **SLATE QUARRY**

NMR NPRN: HER PRN: 20155

NGR: SH7776753311 Grid reference taken at centre of site Period: Post Medieval Broadclass: Industrial Earthwork Condition: Unknown Form:

Site Status:

SAM number: LB number: grade:

A small, quarry working shown on the 1889 and 1900 1:2500 scale Trysor Ordnance Survey maps and labelled as an "Old Quarry" on the 1913 Description: edition of the map. It is now in an area of pasture, extending into

adjacent woodland.

Rarity: Common

Distance from

75m to the northeast

solar array:

Group Value: None

Evidential Value: Historic mapping

Historical Value: None

Aesthetic Value: None

Communal Value: None

A small quarry to the western side of the Afon Wybrnant. It is now Setting:

partly hidden in woodland.

Significance: Minor Importance

Any Direct No Impact?: None

Nο Any Indirect Impact?: None

Level of Impact

on Setting:

None

Comment on

Most of this guarry is hidden in dense woodland or overgrown and

would experience no impacts from the development. Impact:

ID number: 13 MIDDLE BRONZE AGE PALSTAVE - FINDSPOT,

PENMACHNO

FINDSPOT

HER PRN: 3740 NMR NPRN:

NGR: SH77855268 Inaccurate

Period: Bronze Age Broadclass: Object Finds Only Condition: Moved Form:

Site Status:

grade: SAM number: LB number:

Trysor A Middle Bronze Age Palstave Axe was found during ploughing on Description: Bwlchymaen Farm before 1912. It was variously reported as being

found 100 yards south of the farm or in a field called Cae Canol Uchaf,

which is 300 metres south-southwest of the farmhouse.

Rarity: Not rare

Distance from

solar array:

Unknown

Group Value: None

Evidential Value: Documentary sources

Historical Value: Mentioned in archaeological sources

Aesthetic Value: A Bronze Age metal artefact

Communal Value: None

Setting: A findspot which has not been accurately plotted and has no reported

archaeological features associated.

Significance: Regionally Important

Any Direct No Impact?: None

Any Indirect No Impact?: None

Level of Impact

on Setting:

None

Comment on

The exact location of the findspot is not known and there are no other

Impact: archaeological features known to be associated with the find. ID number: 14 BUILDING, SW OF CYFYNG BUILDING

HER PRN: NMR NPRN: 56640

SH7731153078 Grid reference taken at centre of site NGR:

Period: Post Medieval Broadclass: Agriculture and Subsistence

Condition: Unknown Form: Building

Site Status:

SAM number: LB number: grade:

Trysor A small building, probably a field barn, which stands on high ground to Description: the west of Afon Wybrnant. The building is shown on late 19th century

Ordnance Survey maps and appears to be standing today.

Rarity: Common

Distance from

300m to the west

solar array:

Group Value: None

Standing building Evidential Value:

Historical Value: None

Aesthetic Value: None

Communal Value: None

In area of mixed scrub, woodland and small agricultural fields, on a Setting:

south-facing slope at circa 260m above sea level.

Significance: Minor Importance

Any Direct No Impact?: None

Any Indirect No Impact?: None

Level of Impact

on Setting:

None

Comment on

This building would not be intervisible with the proposed development

Impact: and would not experience any impacts. Appendix C: Photographs

Figure 7: Location and direction of photographs

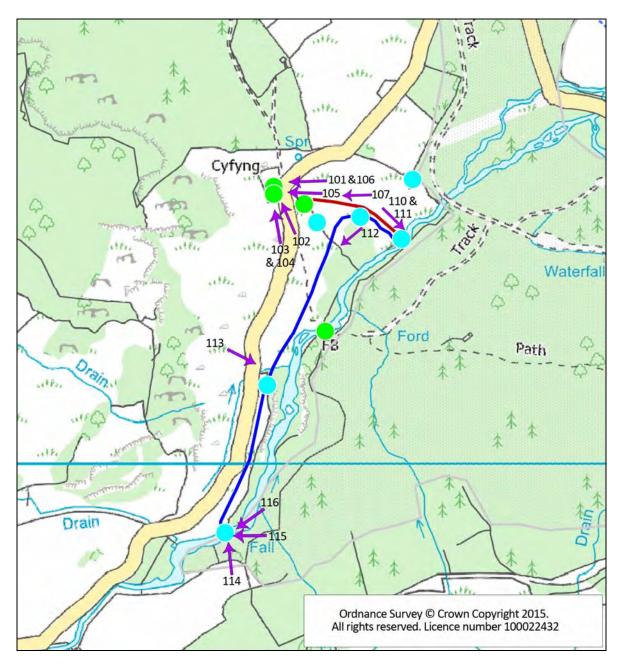




Plate 1: TYC2016_101 – the former chapel/school at Cyfyng, ID numbers 7 & 8 and the attached cottage, ID number 9, looking west.



Plate 2: TYC2016_102 – the former chapel/school at Cyfyng, ID numbers 7 & 8, looking northwest.



Plate 3: TYC2016_103 - the former chapel/school at Cyfyng, ID numbers 7 & 8, looking northwest. The porch was added after 1900 when the building was used as a school.



Plate 4: TYC2016_104 - the former chapel/school at Cyfyng, ID numbers 7 & 8, looking northwest. The outbuilding in the foreground was also added after 1900 when the building was used as a school.



Plate 5: TYC2016_105 – the interior of the small outbuilding added to the former school at Cyfyng, ID numbers 7 & 8, looking west.



Plate 6: TYC2016_106 – Cyfyng cottage, ID number 9, looking west. It was once two cottages, with the lintel of a blocked up doorway still visible at the extreme left hand side of the front elevation.



Plate 7: TYC2016_107 - the latrine of the former school at Cyfyng, ID number 3, looking west-northwest.



Plate 8: TYC2016_110 – a view of the proposed turbine housing site on the western bank of the Afon Wybrnant, looking east. Standing sections of Wall, ID number 1, are visible at the left and right sides of the image.



Plate 9: TYC2016_111- A standing section of Wall ID number 1 close to the proposed site of the turbine housing, looking south.



Plate 10: TYC2016_112 – the pipeline would pass through this former gateway through Wall ID number 2, looking southwest. Note the density of the scrub beyond the wall, in a field which would have been pasture a century ago.



Plate 11: TYC2016_113 – a glimpse of Wall ID number 5 looking east-southeast from the road between Cyfyng and Tan y Clogwyn. This steep slope was enclosed in the 19th century and used as pasture but in modern times has become overgrown as scrub has spread along the valley side.



Plate 12: TYC2016_114 – the section of the Afon Wybrnant below where the intake tank would be positioned, looking north-northwest. The concrete dam of the intake tank would be positioned in the bottom left-hand corner of this image.



Plate 13: TYC2016_115 – the western riverbank below the proposed site of the intake tank has been revetted (ID number 6). This revetment may be a continuation of Wall Id number 5.



Plate 14: TYC2016_116 – another view of the site of the proposed intake tank, looking southwest. The concrete dam of the intake tank would be positioned in front of the small cascade circled in the image. It would slightly disturb the southwestern end of the revetment wall ID number 6, but the impact on this minor feature would not be considered to be significant.



Plate 15: A view of the site of the proposed intake tank, looking southwest, with the outline of the intake tank and outlet overlain. Note the end of the revetment wall (ID number 6) to the right, which would experience some impact from the development. Photograph supplied by TGV Hydro.