

CPAT Report No 1060

Glyn Valley Tramway, Chirk, Wrexham

SURVEY AND ASSESSMENT



THE CLWYD-POWYS ARCHAEOLOGICAL TRUST

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R Hankinson & N Jones

October 2010

Report for Thirty Inch Railways Ltd
on behalf
Glyn Valley Tramway Trust



CPAT

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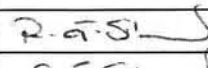
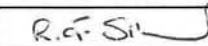
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1 INTRODUCTION

- 1.1 In July 2008, the Field Services Section of the Clwyd-Powys Archaeological Trust (CPAT) was asked by Mr C Phillimore of Thirty Inch Railways Ltd to provide a specification and quotation for undertaking a preliminary assessment of a proposal to reinstate the Glyn Valley Tramway, which formerly ran between Chirk (SJ 283 383) and its terminus at Hendre Quarry (SJ 190 346) in the upper part of the Ceiriog Valley in Wrexham County Borough. This formed part of a tender for a range of works related to the reinstatement which was approved by the Glyn Valley Tramway Trust in August 2008.
- 1.2 The work initially comprised two main elements, a desk-based study of the whole route of the tramway and a walkover survey of the proposed first phase of reinstatement which runs from Chirk Station (SJ 2836 3832) to the trout farm (SJ 2756 3713) near Pontfaen in the Ceiriog Valley. Subsequent examination of the proposed route also led to a detailed survey of the nearby Chirk canal tunnel, in order that the relationship between this structure and the route of the tramway could be accurately compared.
- 1.3 The desk-based assessment formed an early part of the work together with the walkover survey of Phase 1, which was completed on 26th February 2009. The survey of the canal tunnel was not carried out until 3rd August 2010. This report includes all the above elements but focuses primarily on the potential impacts of Phase 1 of the proposed tramway reinstatement. It was completed towards the end of October 2010.

2 LOCATION

- 2.1 The former route of the Glyn Valley Tramway commences at its eastern end at the mainline railway station at Chirk (SJ 2836 3832), from where it runs south for about 900m before turning south-west and descending over the course of the next 800m to the floor of the Ceiriog Valley near Pontfaen at NGR SJ 2756 3713. This constitutes the proposed Phase 1 of the tramway reinstatement works.
- 2.2 From the end of the Phase 1 route, the course of the tramway follows the base of the valley to the west as it meanders upstream for 8.5km, as far as the village of Glyn Ceiriog (SJ 2026 3780), where the route splits. One branch runs west for about 1.4km to the site of the former Cambrian Slate Quarries, while the other continues up the main valley to the south-south-west for about 2km to the small settlement of Pandy, where there are two short branches of about 250m. Beyond Pandy, the route continues to the south-south-west for a further 1.7km to its terminus at the former Hendre Quarry (SJ 1899 3463).

3 DESK-BASED ASSESSMENT

- 3.1 The desk-based element of the assessment covers the entire route of the tramway and relates to all of the cultural heritage assets that have been identified in an area which extends for 100m to either side of the tramway route. The main sources which were used in the identification of the assets were the Regional Historic Environment Record (HER) held by CPAT in Welshpool and the detailed 1:2500 maps produced by the Ordnance Survey in the latter part of the 19th century. Both the first and second edition mapping was consulted, dating respectively from the 1870s and 1890s, a time when the tramway took its final form. There are a small number of written sources which also refer to the tramway and these are listed in the references at the end of the report.

- 3.2 In total, 279 sites were identified within the assessment area; no attempt is made to detail these individually within this section but they are listed in a gazetteer at the end of the report (Appendix 1). Of these sites, only 31 seem to relate directly to the tramway, but many of the others, particularly the various quarries and mills, would have been indirectly dependent on it. Fig. 1, below, shows the line of the tramway and the location of those archaeological sites within 100m of its course as well as that part of the route proposed for the Phase 1 reinstatement programme.
- 3.3 Designated cultural heritage assets within 100m of the Phase 1 route are dealt with in section 5. Elsewhere along the route no Scheduled Ancient Monuments were identified within 100m of the tramway, although one listed buildings of Grade II* status is recorded, namely the Ceiriog Institute in Glyn Ceiriog (PRN 12187).
- 3.4 The total length of the route is approximately 14km, but only about 10km, between Chirk and Glyn Ceiriog, was used in its heyday for passenger traffic. This is hardly surprising as the main impetus for the original construction of the tramway was to provide cheaper transport for the industrial enterprises of the upper Ceiriog Valley. It was primarily the various quarries that were exploited, but also the flannel mills that grew up exploiting the power provided by the waters of the River Ceiriog via a series of leats and weirs.
- 3.5 The first Act of Parliament relating to the tramway was passed in 1870, and this led to the construction, by about 1873, of a horse-drawn route between the Gledrid Wharf on the Shropshire Union Canal and Glyn Ceiriog. Further Acts were passed in 1878 and 1885, the latter allowing the extension of the route at the upper end of the valley beyond Glyn Ceiriog to a number of quarries and the introduction of steam traction. It also led to the closure of the section between Gledrid Wharf and Pontfaen and it is worth noting here that there is no intention to reinstate this part of the route.
- 3.6 The tramway continued in use throughout the latter part of the 19th century and the beginning of the 20th century up to about 1935. The Glyn Valley Tramway company was finally wound-up in 1938. Much fuller histories have been recounted by Davies and Kidner (1991) and Millner (1984), to which the reader is referred.

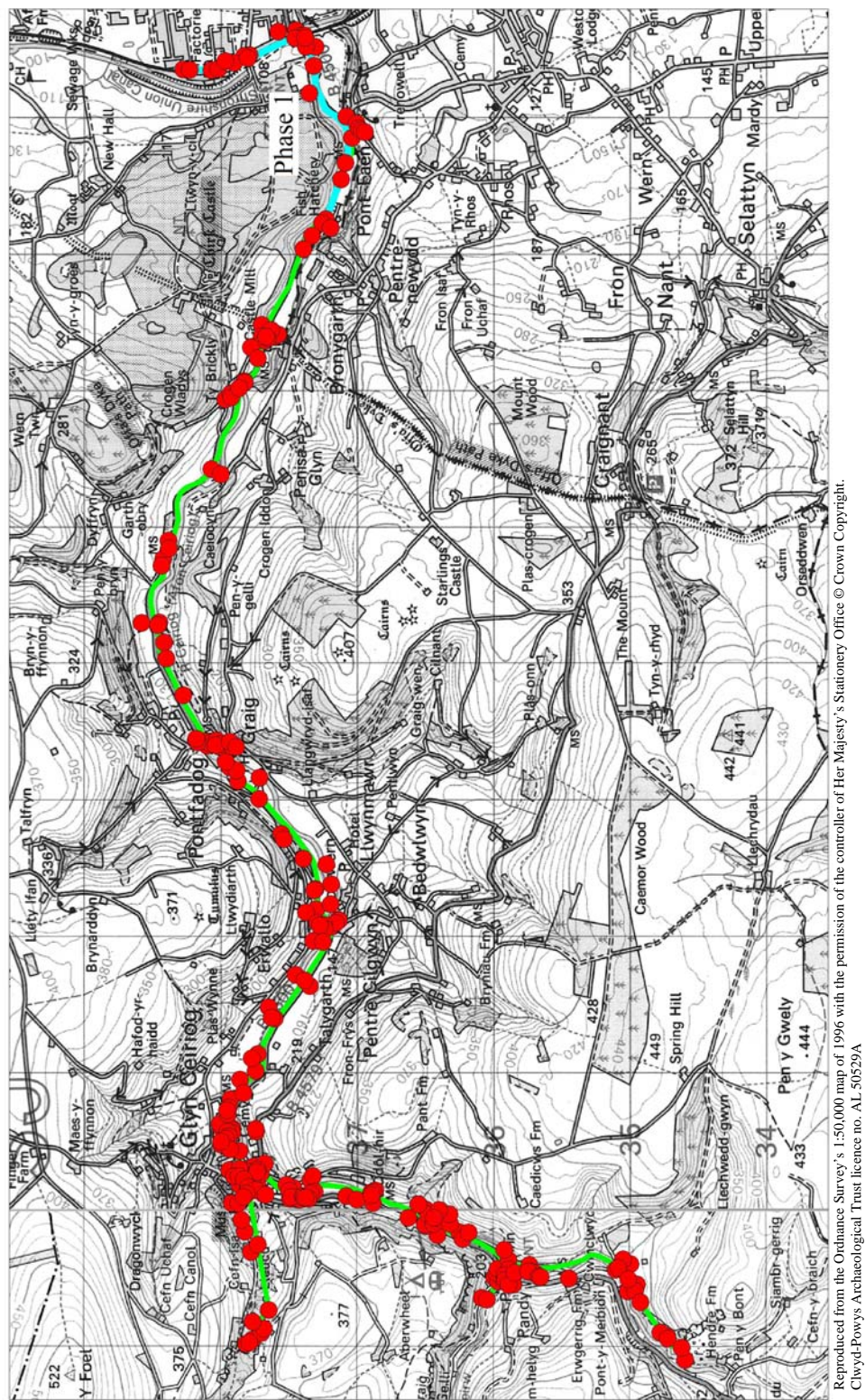


Fig. 1 The route of the Glyn Valley Tramway showing proposed Phase 1 reinstatement and distribution of known archaeological sites.

4 FIELD SURVEY OF PHASE 1

- 4.1 The line of the proposed Phase 1 reinstatement was walked in the company of Mr C Phillimore of Thirty Inch Railways and Mr I Davies of the Glyn Valley Tramway Trust on 29th February 2009. The route under consideration ran south from Chirk Station (SJ 2836 3832) to a point opposite the fish hatchery (SJ 2756 3713), a distance of about 1.7km.
- 4.2 No previously unrecorded features were seen in the readily observable fields adjacent to the route. The features noted during the walkover were directly related to the tramway – revetments, bridges etc – with the only other structure being a small water trough (PRN 118187) built into the wall between the roadside and the tramway. This was apparently constructed at the same time as the tramway, but was repositioned in the late 20th century and now intrudes on the tramway course. It will apparently be retained in its present position.



Plate 1 The water trough (PRN 118187)

- 4.3 Records were made of the two bridges (PRNs 118100 and 118185) which cross the tramway route and the revetment walls which lie to the south-west of the so-called 'Matchbox Bridge' (PRN 118185), where the tramway runs along a deep cutting. Photographs were taken of these features between the station and the hatchery, as well as of the mouth of the canal tunnel near Chirk Station.
- 4.4 The general condition of the physical structures was good, with just some areas needing the repointing of their stonework. The base of the track bed was mostly also good, although water had caused some erosion and slumping in places which may need to be remedied. There were also some sections near and at Chirk Station which have been filled with soil and debris that would need to be cleared out before any track could be laid. Consideration may need to be given to the possibility that there may be sub-surface remains of the former tramway station at this location.



Plate 2 The bridge taking the public road over the Glyn Valley Tramway at Chirk Station (PRN 118100)



Plate 3 The so-called Matchbox bridge (PRN 118185)

5 ASSESSMENT OF THE IMPACT OF PHASE 1 ON THE CULTURAL HERITAGE

5.1 The information gathered during the desk-based study and field survey has been used to produce an assessment of the potential impact of the proposals for Phase 1 of the development, which extends from SJ 2836 3832 to SJ 2756 3713.

5.2 Impacts and Effects

A development can have one of four types of impact on a cultural heritage asset. These are:

- i) **Direct Impacts:** A direct impact upon a cultural heritage asset involves its physical alteration or destruction as a result of the construction of a development. Direct impacts could include the construction of the tower and visitor centre, the creation of roads and car parks, the planting of trees and the like, and the mounding along the periphery.
- ii) **Indirect Impacts:** An indirect impact involves an impact on a cultural heritage asset or area, or its setting, regardless of whether it is designated or not.
- iii) **Cumulative** – where incremental effects arise due to the presence of other comparable proposed schemes or from the interaction of different effects over time.
- iv) **Uncertain** – where there is a risk that the works might affect an incompletely known cultural heritage asset, for example, when it is unclear where the location or boundaries of a site lie, or where the baseline condition of a site cannot be established satisfactorily.

5.3 The current report does not consider undesignated assets more than a very short distance beyond the boundary of the Development Area, for at the time of writing there are no known direct impacts outside the Development Area. The visual impact of the development will be apparent well beyond the Development Area, and this is considered below in relation to statutorily designated and non-statutorily registered sites and landscapes.

5.4 It is considered that the possibility of any physical impacts on the cultural heritage resource of the area will be at its greatest during the construction phase of the development, and where appropriate mitigation is recommended.

5.5 Assessment Methodology

It is a general tenet in conservation strategies that cultural heritage assets represent a non-renewable resource, and should be avoided wherever this is feasible in order to avoid damage or destruction. All sites can be classified according to a system based on that provided for the assessment of cultural heritage assets in the Design Manual for Roads and Bridges (hereafter DMRB) (2007).

5.6 The classification of any asset (with the exception of nationally important scheduled sites and listed buildings, and non-statutorily registered landscapes) is based on the collective professional judgement and expertise of the field staff of CPAT using information both from existing records and the specific field surveys commissioned as part of this assessment.

5.7 The relative value (importance) of a cultural heritage asset, as given in DMRB (2007) is laid out in Table 1.

Table 1 Factors for Assessing the Value of Cultural Heritage Assets

Factors for Assessing the Value of Cultural Heritage Assets	
Very High	World Heritage Sites (including those nominated). Assets of acknowledged international importance. Assets that can contribute significantly to acknowledged international research objectives.
High	Scheduled Monuments (including those proposed). Undesignated monuments of which could potentially be worthy of scheduling. Grade I and Grade II* Listed Buildings. Assets that can contribute significantly to acknowledged national research objectives.
Medium	Grade II Listed Buildings. Conservation Areas. Designated or undesignated assets that contribute to regional research objectives.
Low	Designated and undesignated assets of local importance. Assets compromised by poor preservation and/or poor survival of contextual associations. Assets of limited value, but with the potential to contribute to local research objectives.
Negligible	Assets with very little or no surviving cultural heritage interest.
Unknown	The importance of the resource has not been ascertained.

- 5.8 Factors that need to be considered in assessing the magnitude of the impact are given in Table 2, based on the DMRB (2007) but in modified form, for each cultural heritage sub-topic has its own set of factors, which are set out in great detail in the Design Manual.

Table 2 Factors in the Assessment of the Magnitude of Impacts (Relevant to this Chapter)

Factors in the Assessment of Magnitude of Direct Impacts	
Major	Change to most or all key cultural heritage elements, such that the resource is totally altered.
Moderate	Changes to many key cultural heritage elements, such that the resource is clearly modified.
Minor	Changes to key cultural heritage elements, such that the asset is slightly altered or different.
Negligible	Very minor changes to cultural heritage elements.
No Change	No change.

- 5.9 The significance of the impact of a development on a particular cultural heritage asset is then established from the matrix (Table 3) also taken from the DMRB (2007).

Table 3 Matrix for Assessing the 'Significance' of Direct Impacts of the Proposed Development upon Cultural Heritage Assets

Magnitude of Impact	Value/Sensitivity of Cultural Heritage Asset				
	Very High	High	Medium	Low	Negligible
Major	Very Large	Large/ Very Large	Moderate/ Large	Slight/ Moderate	Slight
Moderate	Large/ Very Large	Moderate/ Large	Moderate	Slight	Neutral/ Slight
Minor	Moderate/ Large	Moderate/ Slight	Slight	Neutral/ Slight	Neutral/ Slight
Negligible	Slight	Slight	Neutral/ Slight	Neutral/ Slight	Neutral
No change	Neutral	Neutral	Neutral	Neutral	Neutral

- 5.10 No detailed guidelines specific to an assessment methodology of the indirect effects on the setting of a designated feature have been produced by Cadw or other national agencies in Wales, as far as can be established. The methodology adopted here, therefore, utilises the Guide to Good Practice for Assessing Landscapes of Historic Interest (ASIDOHLs) produced by Cadw and CCW in conjunction with ICOMOS UK in 2003. These guidelines were developed to promote good practice in the use of the two volumes of the Register of Landscapes of Historic Interest in Wales produced by Cadw in 1998 and 2001. The guidelines are concerned primarily with historic landscapes rather than specific historic or cultural heritage features, which may or may not represent elements of those landscapes. Nevertheless, some aspects of the ASIDOHL process can be usefully adopted. Specifically, the section on the assessment of indirect visual effects in the 2003 methodology offers useful guidance in the assessment of impacts on historic features that are on, or at some distance from, the development site.
- 5.11 In assessing the significance of indirect impact, the previous matrix set out in Table 3 is useful, although guidance on its effective use provided by the DMRB Volume II Section 3 Part 2 (2007) is less expansive for indirect visual impacts than for direct impacts. It should be noted that for indirect visual impacts, because the cultural heritage assets considered here are all designated as being of national or international importance, their value/sensitivity is automatically classed as high.
- 5.12 Non-Designated Cultural Heritage Assets within 100m of the Phase 1 Route**
A total of twenty-six non-designated assets have been identified, which are summarised in Table 4 which follows.

Table 4: Non-Designated Cultural Heritage Assets within 100m of the Phase 1 Route

PRN	Name	Type	Period	Grid Reference	Distance in m	Value
70676	Chirk Castle, Baddy's White gate	Gateway	Medieval ?	SJ28183735	60	Medium
118100	Chirk Station bridge	Bridge	19th century	SJ2846037790	0	Low
118101	Chirk Station	Railway station	19th century	SJ2835437829	20	Low
118102	Min-y-waen house	House	Post Medieval	SJ2860237406	50	Low
118103	Min-y-waen building I	Building	Post Medieval	SJ2854637364	20	Low
118104	Min-y-waen well	Well	Post Medieval	SJ2860337386	60	Negligible
118105	Ceiriog Valley sluice I	Sluice	19th century	SJ2754937118	10	Negligible
118175	GVT (Chirk) building I	Tramway building	19th century	SJ2835438277	10	Negligible
118176	GVT (Chirk) building II	Tramway building	19th century	SJ2835138240	10	Negligible
118177	GVT (Chirk) building III	Tramway building	19th century	SJ2835138227	10	Negligible
118178	GVT (Chirk) building IV	Tramway building	19th century	SJ2834838068	20	Negligible
118179	GVT (Chirk) building V	Tramway building	19th century	SJ2835738019	20	Negligible
118180	GVT (Chirk) building VI	Tramway building	19th century	SJ2840237905	10	Negligible
118181	GVT (Chirk) building VII	Tramway station	19th century	SJ2843937802	0	Low
118182	Chirk mainline railway building	Railway building	19th century	SJ2841537966	20	Negligible
118183	Chirk Mill leat	Mill leat	Post Medieval	SJ2852037307	50	Low
118184	Ty Ririd house	House	19th century	SJ2858437457	10	Low
118185	'Matchbox' bridge	Bridge	19th century	SJ2852237378	0	Low
118186	Min-y-waen building II	Building	19th century	SJ2858837384	40	Low
118187	Min-y-waen water trough	Water trough	19th century	SJ2838037320	0	Low
118188	Pont-faen building I	Building	19th century	SJ2795737005	80	Low
118189	Pont-faen buildings II	Building	19th century	SJ2792436991	80	Low
118190	Pont-faen building III	Building	19th century	SJ2790736969	100	Low
118191	Pont-faen Methodist chapel	Chapel	19th century	SJ2789436946	100	Low
118192	Pont-faen tramway bridge	Bridge	19th century	SJ2785237039	20	Low
118193	Pont-faen milestone	Milestone	Post Medieval	SJ2767037086	10	Negligible

5.13 Designated Cultural Heritage Assets within one Kilometre of the Phase 1 Route

5.13.1 The identification of designated assets in Wales within 1km of the Phase 1 route is based on information provided by Cadw and also utilises the published Register of Landscapes, Parks and Gardens. For England the information has been accessed via the Multi-Agency Geographic Information for the Countryside (MAGIC) website, and the Heritage Gateway website.

5.13.2 Each of these designated assets was assessed to establish whether there is likely to be any indirect, visible impact as a result of the proposed overhead line. The location of these assets is shown as point data in Figure 1, and the assets themselves are listed in Tables 5 to 8.

Table 5: World Heritage Sites within 1km of the Phase 1 route

Name	Type	Period	Grid Reference	Distance in km	Value
Pontcysyllte Aqueduct and Canal	Canal	19 th century	SJ270420	0km	Very High

Table 6: Scheduled Ancient Monuments within 1km of the Phase 1 route

SAM Number	Name	Type	Period	Grid Reference	Dist in km	Value
33814	Motte by Oaklands Hall, Chirk Bank	Motte	Medieval	SJ2903037025	0.6	High
36055	Ellesmere Canal at Chirk Bank	Canal	Post-medieval	SJ2921237098	0.26	High
DE117	Castell y Waun castle mound	Motte	Medieval	SJ2912737567	0.55	High
DE175	Pontcysyllte Aqueduct and Canal	Aqueduct	Post-medieval	SJ2704141977	0	Very High
DE288	The Holyhead Road: the Chirk Embankment	Road	19 th century	SJ2899637491	0.31	High

Table 7: Higher Grade Listed buildings within 1km of the Phase 1 route

Listed Building Number	Name	Grid Reference	Grade	Distance in km	Value
615	Church of St Mary, Chirk	SJ2914137636	I	580m	High
618	Chirk Aqueduct	SJ2869937277	II*	80m	Very High
1315	Chirk Castle Gates, Chirk	SJ2810437681	I	300m	High
20202	War Memorial, Chirk	SJ2905137755	II*	540m	High
20209	Chirk Tunnel and Chirk Basin	SJ2864337451	II*	0m	Very High
20210	Railway Viaduct over River Ceiriog, Chirk	SJ2866837285	II*	80m	Very High
255806 (England)	Chirk Viaduct	SJ2869437205	II*	80m	Very High
255806 (England)	Chirk Aqueduct	SJ2872437213	II*	80m	Very High

Table 8: Historic Parks and Gardens within 1km of the Phase 1 route

Number	Name	Grid Reference	Grade	Distance in km	Value
C63	Chirk Castle	SJ2711438207	I	0	High
C15	Brynkinalt	SJ2991137845	II	0.35	High

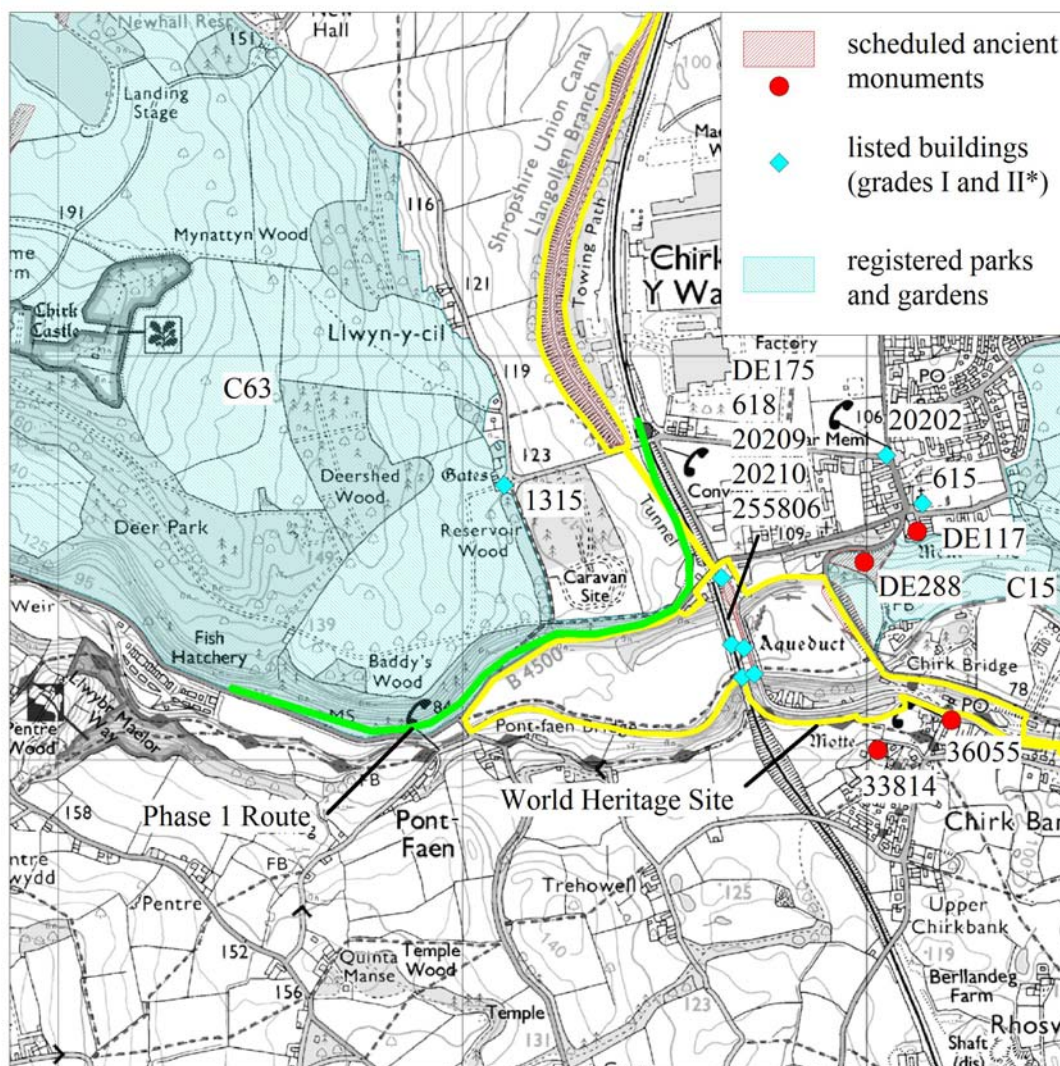


Fig. 2 Designated Cultural Heritage Assets within one Kilometre of the Phase 1 Route
(The yellow line is the World Heritage Site boundary, the green line the Phase 1 development)

5.14 Summary

In summary, 15 designated and registered cultural heritage assets lie within 1km of the Phase 1 route. It should be noted that in the Table 9 summary the figures include multiple entries where assets are both scheduled and listed.

Table 9 Designated Cultural Heritage Assets within one kilometre of the Phase 1 Route

Designated site	Within the development area	Within 1km	Total
World Heritage Sites	1	0	1
SAMs	1	4	5
Listed buildings	1	7	8
Registered historic parks and gardens	1	1	2
Registered historic landscapes	0	0	0

5.15 Assessment of Impacts

5.15.1 Introduction

Impacts on the cultural heritage resource may arise from a variety of sources at any stage in the life-span of the development. For the purposes of this assessment, the terminology follows that laid out in DMRB, Volume 11 Section 3 Part 2, HA 208/07, page 4/2. All impacts are considered to be permanent and irreversible, though it could be argued that the visual impacts are 'long-term temporary' impacts, because in theory though lasting longer than 15 years they could be reversed at some point in the future. Where an impact is identified, an assessment is made of its significance.

5.15.2 Identified Physical Impacts

There are twenty-six non-designated sites, three designated sites and one historic park and garden within 100m of the Phase 1 route, most of which are either no longer extant or are considered to be at a sufficient distance to have no direct impact. None of the designated sites or the historic park and garden are believed to be subject to a direct impact, even though the route of the tramway crosses the line of the Chirk canal tunnel. This is due to the fact that the tunnel at the point of crossing is some 7.2m below the base of the track bed for the tramway, and there are therefore no features of the tunnel which will be directly impacted by the proposed reinstatement works (see Section 6 for the relationship between the tunnel and tramway). The remaining four non-designated assets which are immediately adjacent to the Phase 1 route are listed in Table 10, although only one (PRN 118181) may actually be affected.

Table 10 Assessment of Direct Impacts on known Cultural Heritage Assets within 100m of the Phase 1 route

PRN	Asset Type	Value	Type of impact	Magnitude of impact	Significance of impact
118100	Bridge	Low	Potential threat, but the site is to be retained as integral part of tramway	No change	Neutral
118181	Tramway station	Low	Reinstatement of track may impact the location of the former building	Moderate	Slight
118185	Bridge	Low	Potential threat, but the site is to be retained as integral part of tramway	No change	Neutral
118187	Water trough	Low	Potential threat, but the site is to be retained as integral part of tramway	No change	Neutral

5.15.3 *Assessment of Indirect Effects*

The following section together with Table 11 summarises the predicted long-term effects on the setting of statutorily designated and registered cultural heritage assets within 1km of the Phase 1 route. The assessment takes the form of a commentary, a tabulation of the data and a brief summary. It should be noted that this assessment has been undertaken entirely as a desk-based exercise.

5.15.4 Only those designated assets that are considered to be of national significance are included: as a consequence Grade II listed buildings and Conservation Areas are omitted.

5.15.5 The Pontcysyllte Aqueduct and Canal World Heritage Site lies adjacent to the Phase 1 route, and in the case of the Chirk canal tunnel it lies beneath the route. However, the Phase 1 route lies entirely within the essential setting of the World Heritage Site, as defined by Cadw. Inevitably, therefore, both the site and its setting will be visually affected.

5.15.6 Of the five scheduled monuments all may have direct views, although for those at a greater distance these are likely to be moderated by intervening features within the landscape. There may also be intervisibility with the setting of a monument which will inevitably be more extensive than the monument itself, and views of, and over, a particular monument from beyond it could also be visually affected.

5.15.7 For higher grade listed buildings three of the seven have no intervisibility, though as with scheduled ancient monuments, there could be impacts on setting and on views over the buildings.

5.15.8 There are two listed parks and gardens within 1km. The Phase 1 route runs within and along the south-eastern edge of the registered area surrounding Chirk Castle, while Brynkinallt lies 0.35km to the east.

5.15.9 In cultural heritage terms, two aspects relating to visual aspect need to be considered: (i) the essential setting and (ii) the critical views to and from the monument. The setting of a monument or building might be considered to be:

- no more than the historic feature itself, together with the curtilage or ancillary land around it, within which associated features interacted with it;
- the ground that surrounds the historic feature such as the surrounding field or the hillslope on which it lies;
- the whole valley or plateau on which the feature lies; or
- the whole landscape around the site.

The term ‘essential setting’ is one that has been adopted to define the area around a designated site that is critical to its function, understanding and appreciation, while the term ‘critical view’ has been coined to describe those important lines of sight from viewpoints to the monument in question and beyond, and also from the monument itself.

5.16 Designated assets

5.16.1 Pontcysyllte Aqueduct and Canal: World Heritage Site

Elements of the world heritage site also have separate statutory designations within the study area, as follows:

SAM DE175	Pontcysyllte Aqueduct and Canal	SJ2704141977
LB 618	Chirk Aqueduct	SJ2869937277
LB 20209	Chirk Tunnel and Chirk Basin	SJ2866837285
LB 20210	Chirk Viaduct	SJ2869437205
255806 (England)	Chirk Viaduct	SJ2869437205
255806 (England)	Chirk Aqueduct	SJ2872437213

5.16.2 The world heritage site is a linear designation following the Llangollen Canal and extending for approximately 17km from the Horseshoe Falls, beyond the study area, to Gledrid, across the English border. The designation coincides with the Phase I Development Area in the area of Chirk Tunnel where the proposed tramway route lies directly above the canal tunnel. Inevitably there will also be views of the development from certain other sections, particularly Chirk Aqueduct and Viaduct. The essential setting of the world heritage site is defined as a zone around it and the Phase 1 route is entirely within this area. However, the visual impact will vary according to the natural topography, although it has not been possible to assess this in detail as part of the present study. In general the magnitude of visual impact is considered to be **Slight** and the significance **Moderate**.

5.16.3 Registered Parks and Gardens

HPG C63 Chirk Castle SJ2711438207

1315 Chirk Castle Gates, Chirk SJ2810437681

The medieval castle and post-medieval stately home complex, together with its extensive, registered historic parkland and also its inalienable National Trust land, occupy a broad hill top above the River Ceiriog. The Phase 1 route follows the original line of the tramway and runs through the south-eastern extent of the registered park, although from the castle and other associated designations will be intermittent at most and are likely to be largely shielded by parkland trees, other woodland and the local topography. The magnitude of impact is thus considered to be **Slight** and the significance **Moderate**.

HPG C15 Brynkinalt SJ2991137845

The registered park and garden at Brynkinalt will be largely screened from the route by the topography, woodland and the embankment for the Holyhead Road. While some areas of the park may have a clearer view, these would be at a greater distance and the magnitude of impact is considered to be **Negligible** and the significance **Slight**.

5.16.4 Scheduled Ancient Monuments

33814(England) Motte by Oaklands Hall, Chirk Bank SJ2903037025

The medieval earthwork motte may is likely to have some views of the route across the Ceiriog valley, although these will to some extent be screened by the aqueduct, viaduct and woodland. The magnitude of impact is thus considered to be **Negligible** and the significance **Slight**.

36055(England) Ellesmere Canal at Chirk Bank SJ2921237098

The section of canal on the English side of the border is screened from the route by topography and woodland. The magnitude of impact is thus considered to be **Negligible** and the significance **Slight**.

DE117 Castell y Waun castle mound SJ2912737567

The medieval earthwork motte will be screened from the route by topography and woodland. The magnitude of impact is thus considered to be **Negligible** and the significance **Slight**.

DE288 The Holyhead Road: the Chirk Embankment SJ2899637491

The large embankment on which Thomas Telford's road was constructed will have direct views of the route along the Ceiriog valley, although these will to some extent be screened by the aqueduct, viaduct and woodland. The magnitude of impact is thus considered to be **Negligible** and the significance **Slight**.

5.16.5 Listed Buildings

615 Church of St Mary, Chirk SJ2914137636

The medieval church of St Mary will be screened from the route by topography and woodland. The magnitude of impact is thus considered to be **Negligible** and the significance **Slight**.

20202 War Memorial, Chirk SJ2905137755

The war memorial will be screened from the route by the topography, together with intervening trees and buildings. The magnitude of impact is thus considered to be **Negligible** and the significance **Slight**.

Table 11: Predicted Indirect Impacts on Designated Assets and their Settings within 1km of the Development Area

Record Number	Name	Grid Reference	Distance in km	Value	Magnitude of Impact	Significance of Impact
	Pontcysyllte Aqueduct and Canal World Heritage Site	SJ2704141977	1.4	Very High	Slight	Moderate
	<i>Scheduled Ancient Monuments</i>					
33814 (England)	Motte by Oaklands Hall, Chirk Bank	SJ2903037025	0.6	High	Negligible	Slight
36055 (England)	Ellesmere Canal at Chirk Bank	SJ2921237098	0.26	High	Negligible	Slight
DE117	Castell y Waun castle mound	SJ2912737567	0.55	High	Minor	Slight
DE175	Pontcysyllte Aqueduct and Canal	SJ2704141977	0	Very High	Slight	Moderate
DE288	The Holyhead Road: the Chirk Embankment	SJ2899637491	0.31	High	Minor	Slight

	<i>Listed Buildings</i>					
615	Church of St Mary, Chirk	SJ2914137636	0.58	High	Negligible	Slight
618	Chirk Aqueduct	SJ2869937277	0.8	Very High	Slight	Moderate
1315	Chirk Castle Gates, Chirk	SJ2810437681	0.3	High	Slight	Moderate
20202	War Memorial, Chirk	SJ2905137755	0.54	High	Negligible	Slight
20209	Chirk Tunnel and Chirk Basin	SJ2864337451	0	Very High	Slight	Moderate
20210	Railway Viaduct over River Ceiriog, Chirk	SJ2866837285	0.8	Very High	Slight	Moderate
255806	Chirk Viaduct	SJ2869437205	80m	Very High	Slight	Moderate
255806	Chirk Aqueduct	SJ2872437213	80m	Very High	Slight	Moderate
	<i>Registered Parks and Gardens</i>					
C63	Chirk Castle	SJ2711438207	0	High	Slight	Moderate
C15	Brynkinalt	SJ2991137845	0.35	High	Negligible	Slight

6 TOTAL STATION SURVEY OF THE CANAL TUNNEL

- 6.1 Close to its terminus with the main railway line in Chirk, the route of the Glyn Valley Tramway crosses over the Chirk Tunnel on the Llangollen Canal. Initial assessments of the tunnel and the tramway route highlighted some concerns regarding the relationship between them, particularly in the case of a brick air shaft that had been identified in the tunnel, but which had been capped and was therefore not visible on the surface. It was not known whether the shaft fell within the bounds of the tramway route and the decision was therefore taken to produce a measured survey to determine accurately the spatial relationship between the two infrastructure features.
- 6.2 The main part of the survey was carried out using an EDM and Penmap software, with the results manipulated and placed into GIS using the Mapinfo software package. This provided the topographical model which is reproduced in Figs 3 and 4, with further detail on the tunnel, specifically its height, width and the height of the air shaft, being added by the accurate measurement of each element from surveyed base points using a Leica Disto.
- 6.3 The Chirk Tunnel was designed for the Ellesmere Canal Company by William Jessop and Thomas Telford and opened in 1801-2. It formed a notable development in tunnel building for canals as it incorporated a towpath, all previous examples have been of narrow bore, without this facility. The tunnel was apparently constructed on the cut and cover principle, being formed of a continuous brick arch, with a clay sealant applied to its outer surface prior to backfilling to prevent water ingress. In contrast, the curving facades of the north and south portals of the tunnel are built in stone (information from the RCAHMW online site report on the Chirk Tunnel by Hughes in 2007).



Plate 4 The North Portal of the canal tunnel

- 6.4 As can be seen on the figures, the tunnel measures 4.2m wide including the towpath, on average, and is approximately 3.2m high, measured from the water level; the air shaft is 1.4m in diameter. The survey demonstrated that the centre of the air shaft lies some 140.3m from the north portal and is actually in the field adjoining the Glyn Valley Tramway, some 5m to the west of the boundary. The base of the capping in the shaft is at a level 8.1m above the top of

the tunnel, and only 0.9m below the ground surface at that point. The relationship with the tramway was also assessed during the survey, by the surveying of a transect along the track bed which could then be reproduced as a vertical section to provide a comparison with the tunnel. The results of the survey showed that the tramway passes 7.2m above the top of the tunnel at the point where they cross.



Plate 5 The route of the Glyn Valley Tramway where it crosses above the canal tunnel

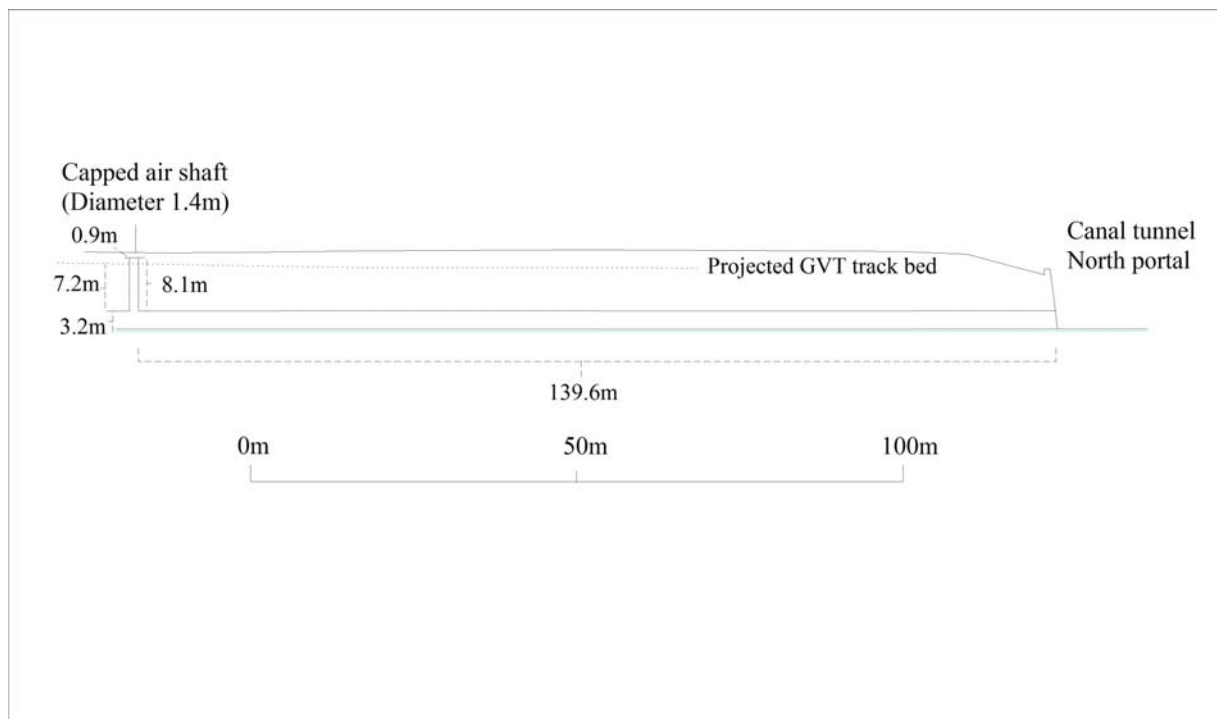


Fig 3 Section showing the canal tunnel, overlying topography, and tramway track bed

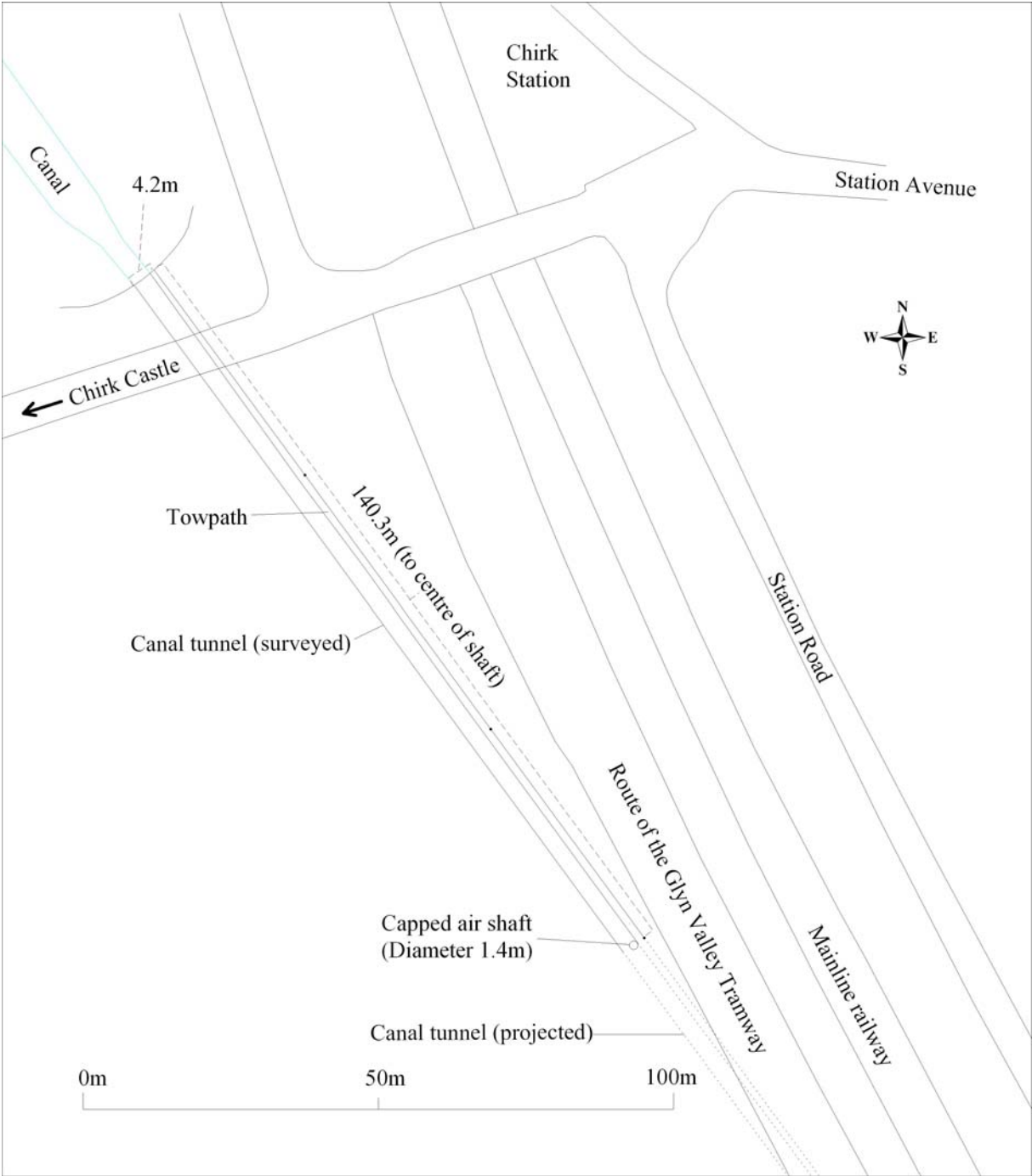


Fig 4 Plan view of the relationship between the Chirk canal tunnel, its air shaft, and the route of the Glyn Valley Tramway

7 CONCLUSIONS

- 7.1 This report deals primarily with the potential impacts of Phase 1 of the proposed tramway reinstatement on the cultural heritage of the surrounding area. There are twenty-six non-designated sites within 100m of the Phase 1 route, most of which are either no longer extant or are considered to be at a sufficient distance for there to be no direct effect. Four of these sites are immediately adjacent to the Phase 1 route, although only one of these (PRN 118181) may actually be affected as the others form an integral part of the tramway infrastructure and will be retained.
- 7.2 There are three designated sites and one historic park and garden within 100m of the Phase 1 route, although none is believed to be subject to a direct effect, even though the route of the tramway crosses the line of the Chirk canal tunnel, which forms part of the Pontcysyllte Aqueduct and Canal World Heritage Site. A direct comparison of the two features is provided by the plan and section within Section 6 of this report, where it can be seen that the tunnel at the point of crossing is some 7.2m below the base of the track bed for the tramway. There appear, therefore, to be no features of the tunnel which will be directly impacted by the proposed reinstatement works as long as the existing boundary of the tramway is adhered to.
- 7.3 It is inevitable that there will be indirect effects on the essential settings and critical views of both the designated monuments and those historic parks and gardens which lie within 1km of the tramway route; these are thought to vary from moderate to slight in significance and are detailed in Section 5. In some cases, it could perhaps be argued that one of the results of the tramway reinstatement may be to enhance the setting of those monuments which were integral to its function in the late 19th and early 20th centuries, by providing members of the public with a greater appreciation of the nature of the transport network of the period in this locality.
- 7.4 The desk-based element of the assessment extended beyond the Phase 1 area to cover the entire route of the tramway, nearly 16km in length, and recorded all of the cultural heritage assets that were identified in an area extending for 100m on either side of the tramway route. The main sources which were used in the identification of the assets were the Regional Historic Environment Record (HER) held by CPAT in Welshpool and the detailed 1:2500 maps produced by the Ordnance Survey in the latter part of the 19th century. A total of 279 sites were identified within the assessment area, 11% of which were directly related to the tramway, and these are listed in a gazetteer (Appendix 1) at the end of the report.

8 ACKNOWLEDGEMENTS

- 8.1 The writers would like to thank the following people for their help and assistance during the project: Eleri Farley, Ian Davies of the Glyn Valley Tramway Trust and Chris Phillimore of Thirty Inch Railways Ltd.

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APPENDIX 1**Gazetteer of Sites within 100m of the Glyn Valley Tramway route**

PRN	Name	NGR	Type	Period
28350	Offa's Dyke - DC entry	SJ26483770	Linear earthwork	Saxon
28351	Offa's Dyke - DC entry	SJ26403760	Linear earthwork	Saxon
101617	Adwyr Beddau Placename	SJ26403770	Cemetery ?	Medieval ?
105959	Glyn Ceiriog	SJ205380	Settlement	Multiperiod
106791	Offa's Dyke - Chirk	SJ26413758	Linear earthwork	Saxon
25621	Pont-y-meibion	SJ1956035110	Bridge	Post-medieval ?
25630	Pontfaen bridge	SJ2800937082	Bridge	18 th century
12167	Glyn Ceriog, Capel y Llwyn baptist chapel	SJ2057237743	Nonconformist chapel	18 th century
12168	Cae Cor fieldname	SJ205380	Flannel works ?	Post-medieval ?
12169	Glyn Ceiriog horse tramway shed	SJ2018737802	Stable	19 th century
12170	Glyn Ceiriog, 'New Inn' hotel	SJ2016537769	Hotel	19 th century ?
12171	Glyn Ceiriog quarry office	SJ20053792	Quarry office	19 th century ?
12172	Dolywern, Ainon chapel	SJ22073727	Nonconformist chapel	19 th century
12173	Dolywern, Queens Head hotel	SJ2208537245	Hotel	19 th century ?
12174	Y Graig, 'Butchers Arms'	SJ2339137914	Public house	19 th century ?
12175	Y Graig weir	SJ2344038032	Weir	Post-medieval ?
12176	Ty'n-ddol mill	SJ2429638446	Mill (fulling/flannel)	Post-medieval
12177	Glyn Ceiriog, Berwyn Mill weir	SJ2031837753	Weir	Post-medieval ?
12178	Glyn Ceiriog, Berwyn mill	SJ2056337917	Woollen mill	19 th century
12182	Glyn Ceiriog council school	SJ2044237932	School	19 th century
12183	Dolywern, 'Queen Hotel' garage	SJ2212337141	Garage	20 th century
12184	Glyn Ceiriog baptist cemetery	SJ2059137746	Cemetery	Post-medieval
12187	Glyn Ceiriog, Ceiriog institute	SJ2018437865	Village institute	20 th century
12188	Glyn Ceiriog, Hafodygynfor bridge	SJ2027637711	Bridge	Post-medieval ?
12189	Glyn Ceiriog, Pandy Ucha bridge	SJ205380	Bridge	Post-medieval ?
12191	Pontfadog, Felin Lyn bridge	SJ2316637717	Bridge	19 th century
12193	Chirk Castle, cornmill	SJ2644337630	Corn mill	Medieval
12200	Dolywern	SJ222373	Settlement	Multiperiod
12201	Pontfadog	SJ234381	Settlement	Multiperiod
12202	Glyn Ceiriog, Upper Mills	SJ2018037520	Mill	19 th century
12203	Y Graig	SJ234379	Settlement	Multiperiod
12195	Glyn Ceiriog, 'The Star Inn'	SJ2140237604	Public house	19 th century ?
12197	Pontfadog, Tabernacle chapel	SJ2342938096	Nonconformist chapel	Post-medieval
12198	Pontfadog post office	SJ2343238106	Post office	19 th century ?
12199	Pontfadog, 'Swan Inn'	SJ2343238127	Public house	19 th century ?
12204	The Cross	SJ2019137786	Road junction	Post-medieval ?
12205	Glyn Ceiriog fish farm	SJ2016037470	Fishery	20 th century
12209	Coed y Glyn, Ty Pren house	SJ200365	Storehouse	19 th century ?
12210	Coed y Glyn	SJ200365	Settlement	Multiperiod

12211	Pontfadog Church	SJ2322037885	Church	Multiperiod
12212	Pontfadog Church (St John the Baptist's)	SJ2322037885	Church	Medieval
12213	Pontfadog Church (St John the Baptist's), yard	SJ2322037885	Churchyard	Medieval
12214	Pontfadog council houses	SJ2324337937	House	20 th century
12215	Pontfadog council school	SJ2328237965	School	20 th century
12216	Glyn Ceiriog, Maybury Avenue	SJ2022537764	Road	20 th century
12220	Glyn Ceiriog war memorial	SJ2020437799	War memorial	20 th century
12221	Pandy	SJ195360	Settlement	Multiperiod
12230	Pandy post office	SJ1947235969	Post office	19 th century ?
12231	Pentwmpath tithe barn	SJ205380	Tithe barn	Medieval
12236	Pandy baptist chapel	SJ1950035942	Nonconformist chapel	19 th century ?
12237	Pandy, 'Woolpack Inn'	SJ1954835920	Fulling mill	Medieval
12238	Pandy, 'Aberteirw Cottages'	SJ1950835904	House	19 th century
12245	Lower Pandy quarry	SJ1944935860	Quarry	19 th century ?
12246	Glyn Ceiriog, Glyn Valley tramway station	SJ205380	Tramway station	19 th century
12247	Glyn Ceiriog, Greenfield farm	SJ205380	Farm building	Post-medieval ?
12248	Glyn Ceiriog, Glanffrwd terrace	SJ2059337913	House	20 th century
12249	Glyn Ceiriog, Ffos Ddwr leat	SJ2043037862	Leat	Post-medieval ?
12255	Glyn Ceiriog, Berwyn bakehouse	SJ205380	Bakehouse	Post-medieval
12258	Glyn Ceiriog, Upper Mill weir	SJ2021737344	Weir	Post-medieval ?
12260	Pont Hafodygynfawr tram shed	SJ203378	Tram shed	19 th century ?
12261	Dolywern malt house	SJ222373	Malt house	19 th century ?
12262	Dolywern malt house letterbox	SJ222373	Post box	19 th century
12267	Glyn Ceiriog new post office	SJ2023237749	Post office	20 th century
12268	Glyn Ceiriog old post office	SJ2024437768	Post office	19 th century
12270	Glyn Ceiriog, Berwyn stores	SJ205380	Shop	19 th century
12273	Glyn Ceiriog, Toll house (Midland Bank)	SJ2021437806	Toll house	19 th century
12274	Glyn Ceiriog, Y Gamer housing estate	SJ206380	House	20 th century
12275	Glyn Ceirog, Y Maes housing estate	SJ2047738000	House	20 th century
12280	Coed y Glyn granite mine	SJ1981136416	Mine (granite)	19 th century
12285	Glyn Ceiriog, Soar Methodist chapel	SJ2007337429	Nonconformist chapel	19 th century ?
12286	Glyn Ceiriog, Soar Methodist chapel house	SJ2007337417	House	Post-medieval ?
12294	Glyn Ceiriog National school	SJ2025937882	School	19 th century
12296	Glyn Ceiriog county primary school	SJ205380	School	19 th century ?
12297	Pontfadog railway station	SJ234380	Railway station	20 th century
13364	Pontfadog war memorial	SJ2339638011	War memorial	20 th century
13365	Glyn Ceiriog, 'Cambrian hotel'	SJ2026937905	Hotel	19 th century ?

13366	Glyn Ceiriog new Baptist chapel	SJ2011737693	Nonconformist chapel	19 th century
13371	Glyn Ceiriog, laundry	SJ205380	Laundry	19 th century
37099	Pandy, Lower quarry mill	SJ196350	Crushing mill	Post-medieval
70676	Chirk Castle, Baddy's White gate	SJ28183735	Gateway	Medieval ?
72513	Afon Ceiriog, disused sluice	SJ1889834602	Sluice	Post-medieval ?
79720	Hendre Powder Works, leat	SJ1945234954	Leat	Post-medieval
68401	Plas-Lleucu, farmstead	SJ1909537704	Farmstead	Post-medieval
68405	Cae Glas, building	SJ2114137729	Building	20 th century
68406	Felin Newydd, footbridge	SJ2101737745	Footbridge	Post-medieval ?
68407	Plas-Lleucu, building I	SJ1904637766	Building	Post-medieval ?
66051	Pandy bache	SJ2301237719	Farmstead	Post-medieval ?
42811	Hendre Quarry, powder works building	SJ1940035020	Warehouse	19 th century
42841	Chirk Canal Basin, including tunnel, the N and S Portals	SJ2864037450	Canal basin	19 th century
42889	Whitewalls	SJ2863037580	House	20 th century
42895	Former Waiting Room, Glyn Valley Tramway, Dolywern	SJ2207037200	Tramway waiting room	19 th century
42896	Former Waiting Room, Glyn Valley Tramway, Pontfadog	SJ2342038080	Tramway waiting room	19 th century
42899	Dolywern, milestone	SJ2208037270	Milestone	19 th century
42900	Pontfadog, milestone	SJ2340338037	Milestone	19 th century
42903	Pontfadog Bridge	SJ2341438000	Bridge	19 th century
42904	Talygarth Isaf Farm	SJ2164037348	House	19 th century
42946	Woolpack, former house s	SJ1953035850	House	17 th century
42949	Ddol Hir, milestone	SJ2004736888	Milestone	19 th century
118106	Glyn Ceiriog Engine Shed	SJ2028337815	Engine Shed	20 th Century
118107	Glyn Ceiriog Tram Shed	SJ2017237730	Tram Shed	20 th Century
118108	Glyn Ceiriog Coal Office	SJ2026237707	Building	20 th Century
118100	Chirk Station bridge	SJ2846037790	Bridge	19 th century
118101	Chirk Station	SJ2835437829	Railway station	19 th century
118102	Min-y-waen house	SJ2860237406	House	Post-medieval
118103	Min-y-waen building I	SJ2854637364	Building	Post-medieval
118104	Min-y-waen well	SJ2860337386	Well	Post-medieval
118105	Ceiriog Valley sluice I	SJ2754937118	Sluice	19 th century
118109	Ceiriog Valley sluice II	SJ2725737229	Sluice	19 th century
118110	Ceiriog Valley sluice III	SJ2722937258	Sluice	19 th century
118111	Ceiriog Valley sluice IV	SJ2713637332	Sluice	19 th century
118112	Castle Mill	SJ2636537681	Mill	Post-medieval
118113	Bridge Inn	SJ2638437657	Public House	Post-medieval
118114	Castle Mill terrace	SJ2639437670	House	Post-medieval
118115	Bron-heulog house	SJ2631537780	House	Post-medieval
118116	Ceiriog Valley sluice V	SJ2607037827	Sluice	19 th century
118117	Castle Mill weir	SJ2605837825	Weir	Post-medieval
118118	Ty Brickly house	SJ2593537967	House	Post-medieval
118119	Ty Brickly well	SJ2597837930	Well	Post-medieval
118120	Herber Gate turnpike house	SJ2542338070	Turnpike House	Post-medieval
118121	Herber Ruins	SJ2490038383	Farmstead	Post-medieval
118122	Herber House	SJ2476738421	House	Post-medieval
118123	Herber Baptist Chapel	SJ2471638434	Chapel	Post-medieval

118124	Ty'n-y-ddol House	SJ2429738579	House	Post-medieval
118125	Ty'n-y-ddol footbridge	SJ2428238461	Bridge	Post-medieval
118126	Ty'n-y-ddol Mill leat	SJ2415538417	Leat	19 th century
118127	Pontfadog Methodist Chapel	SJ2343838183	Chapel	Post-medieval
118128	Pontfadog Smithy	SJ2342738171	Smithy	Post-medieval
118129	Pontfadog buildings	SJ2345238179	Building	Post-medieval
118130	Pontfadog National School	SJ2314137876	School	Post-medieval
118131	Bron-heulog house	SJ2275337558	House	Post-medieval
118132	Ty-isaf Brongyll	SJ2257237397	Farmstead ?	Post-medieval
118133	Glan-yr-afon Weir	SJ2238537192	Weir	Post-medieval
118134	Glyn Mill leat	SJ2253237227	Leat	Post-medieval
118135	Dol-y-wern Weir	SJ2223837195	Weir	Post-medieval
118136	Dol-y-wern well	SJ2217837378	Well	Post-medieval
118137	Dol-y-wern bridge	SJ2210337294	Bridge	Post-medieval
118138	Dol-y-wern sundial	SJ2212337136	Sundial	Post-medieval
118139	Glan-y-wern buildings	SJ2197037324	Building	Post-medieval
118140	Dol-y-wern mill	SJ2210237158	Mill ?	Post-medieval
118141	Tal-y-garth-isaf weir	SJ2172237454	Weir	Post-medieval
118142	Dol-y-wern leat	SJ2196237253	Leat	Post-medieval
118143	Tal-y-garth buildings	SJ2140637628	Building	Post-medieval ?
118144	Tal-y-garth footbridge	SJ2148237650	Bridge	Post-medieval
118145	Felin-newydd Flour Mill	SJ2111037773	Mill (flour)	Post-medieval
118146	Felin-newydd Mill leat	SJ2095337858	Leat	Post-medieval
118147	Felin-newydd weir and flood gate	SJ2081037930	Weir	Post-medieval
118148	Berwyn Flannel Mill tenters	SJ2062938008	Tenter ground	Post-medieval
118149	Glyn Flour Mill	SJ2058537921	Mill (flour)	Post-medieval
118150	Hafod-y-Gynfawr well	SJ2033537679	Well	Post-medieval
118151	Berwyn Mill tailrace sluice	SJ2069937948	Sluice	Post-medieval
118152	Royal Oak public house	SJ2028837937	Public House	Post-medieval
118153	Glyn Ceiriog milestone	SJ2020737774	Milestone	Post-medieval
118154	Glyn Ceiriog weir	SJ2029237731	Weir	Post-medieval
118155	Glyn Ceiriog weir building	SJ2027537736	Mill ?	Post-medieval
118156	Glyn Ceiriog Quarry buildings	SJ2004337871	Building	Post-medieval
118157	Bronydd building	SJ1992337850	Building	Post-medieval
118158	Nant y Dramwys building	SJ1968837781	Building	Post-medieval
118159	New Cambrian Slate Quarries	SJ1901137814	Quarry	Post-medieval
118160	Plas Leucu incline drumhouse	SJ1926437651	Drum house	Post-medieval
118161	Plas Lleucu incline	SJ1974237730	Inclined plane	Post-medieval
118162	Rhos Lan police station	SJ2007937494	Police Station	Post-medieval
118163	Hafod-y-Gynfawr weir	SJ2013537502	Weir	Post-medieval
118164	Rhos-Llan house	SJ2007537446	House	Post-medieval
118165	Hafod-y-Gynfawr tenters	SJ2024637325	Tenter Ground	Post-medieval
118166	Rhos-Llan pound	SJ2009737400	Pound	Post-medieval
118167	Coed-y-glyn-isaf farmstead	SJ2009837082	Farmstead	Post-medieval
118168	Ddol-hir house	SJ2014136869	House	Post-medieval
118169	Coed-y-glyn-canol house	SJ1993936628	House	Post-medieval
118170	Coed-y-glyn-uchaf farmstead	SJ1988136497	Farmstead	Post-medieval
118171	Coed-y-glyn-uchaf well	SJ1988836508	Well	Post-medieval
118172	Coed y glyn structure	SJ1983436255	Sheepfold ?	Post-medieval
118173	Hendre quarry	SJ1906934731	Quarry	Post-medieval

118174	Hendre quarry building I	SJ1909834783	Building	Post-medieval
118175	GVT (Chirk) building I	SJ2835438277	Tramway building	19 th century
118176	GVT (Chirk) building II	SJ2835138240	Tramway building	19 th century
118177	GVT (Chirk) building III	SJ2835138227	Tramway building	19 th century
118178	GVT (Chirk) building IV	SJ2834838068	Tramway building	19 th century
118179	GVT (Chirk) building V	SJ2835738019	Tramway building	19 th century
118180	GVT (Chirk) building VI	SJ2840237905	Tramway building	19 th century
118181	GVT (Chirk) building VII	SJ2843937802	Tramway station	19 th century
118182	Chirk mainline railway building	SJ2841537966	Railway building	19 th century
118183	Chirk Mill leat	SJ2852037307	Mill leat	Post-medieval
118184	Ty Ririd house	SJ2858437457	House	19 th century
118185	'Matchbox' bridge	SJ2852237378	Bridge	19 th century
118186	Min-y-waen building II	SJ2858837384	Building	19 th century
118187	Min-y-waen water trough	SJ2838037320	Water trough	19 th century
118188	Pont-faen building I	SJ2795737005	Building	19 th century
118189	Pont-faen buildings II	SJ2792436991	Building	19 th century
118190	Pont-faen building III	SJ2790736969	Building	19 th century
118191	Pont-faen Methodist chapel	SJ2789436946	Chapel	19 th century
118192	Pont-faen tramway bridge	SJ2785237039	Bridge	19 th century
118193	Pont-faen milestone	SJ2767037086	Milestone	Post-medieval
118194	Ceiriog Valley sluices	SJ2719337196	Sluice	19 th century
118195	Ceiriog Valley sluice V	SJ2703937397	Sluice	19 th century
118196	Bron-heulog milestone	SJ2623837728	Milestone	Post-medieval
118197	Ty Brickly 'old quarry'	SJ2595037924	Quarry	19 th century
118198	Herber Gate bridge	SJ2538638001	Bridge	Post-medieval
118199	Herber milestone	SJ2484238381	Milestone	Post-medieval
118200	Ty Brickly building	SJ2601937867	Building	19 th century
118201	Ty'n-y-ddol weir and sluice	SJ2403838398	Weir	Post-medieval
118202	Tan-y-garth footbridge	SJ2376738276	Bridge	19 th century
118203	Graig terrace I	SJ2342837936	House	Post-medieval
118204	Graig terrace II	SJ2339337889	House	Post-medieval
118205	Pontfadog Rectory	SJ2271437538	Rectory	19 th century
118206	Fron-deg house	SJ2235037306	House	19 th century
118207	Fron-deg 'old quarry'	SJ2234037315	Quarry	19 th century
118208	Dol-y-wern buildings	SJ2205937240	House	Post-medieval
118209	Dol-y-wern milestone	SJ2208237276	Milestone	Post-medieval
118210	Tal-y-garth Cottages	SJ2167837386	House	19 th century
118211	Ty-draw 'old quarry'	SJ2085337835	Quarry	19 th century
118212	Glyn Ceiriog milestone	SJ2074937943	Milestone	Post-medieval
118213	Pont Bell	SJ2072737953	Bridge	Post-medieval
118214	Berwyn Mill building I	SJ2057137951	Building	19 th century
118215	Berwyn Mill building II	SJ2053737943	Building	19 th century
118216	Berwyn Mill building III	SJ2052037964	Building	19 th century
118217	Glyn Ceiriog smithy	SJ2027537923	Smithy	Post-medieval
118218	Glyn Ceiriog building	SJ2030037862	House ?	19 th century
118219	Glyn Ceiriog terrace I	SJ2024437903	House	19 th century
118220	Glyn Ceiriog terrace II	SJ2024437869	House	19 th century
118221	Glyn Ceiriog terrace III	SJ2022337830	House	19 th century
118222	Glyn Ceiriog terrace IV	SJ2016637799	House	19 th century
118123	Glyn Ceiriog building	SJ2014437747	Building	19 th century

118124	Plas-teg house	SJ2010837671	House	Post-medieval
118125	Glyn Ceiriog building II	SJ2011837813	Building	19 th century
118126	Wynne Slate Quarry incline	SJ2009337378	Inclined plane	19 th century
118127	Cambrian Slate Quarries dressing works	SJ1902437793	Slate mill	19 th century
118128	Plas-Lleucu well	SJ1912737686	Well	Post-medieval
118129	Cambrian Slate Quarry building	SJ1917637768	Quarry building	19 th century
118130	Bronydd well	SJ1983737826	Well	Post-medieval
118231	Bryn-derw house	SJ2013037314	House	19 th century
118232	Bryn-derw building I	SJ2011637342	House ?	19 th century
118233	Bryn-derw building II	SJ2007937358	House ?	19 th century
118234	Bryn-derw building III	SJ2008837393	House ?	19 th century
118235	Bryn-derw building IV	SJ2008837380	House ?	19 th century
118236	Rhos-y-coed building	SJ2009237486	House	19 th century
118237	Llangollen Terrace	SJ2007137005	House	19 th century
118238	Ddol-hir weir	SJ2012836898	Weir	19 th century
118239	Ddol-hir road bridge	SJ2012236886	Bridge	Post-medieval
118240	Ddol-hir tramway bridge	SJ1989237055	Bridge	19 th century
118241	Coed-y-glyn tramway building	SJ1996536482	Tramway building	19 th century
118242	Coed-y-glyn Granite Quarry buildings	SJ1989436444	Quarry building	19 th century
118243	Pandy Quarry weighing machine	SJ1993936424	Weighing machine	19 th century
118244	Pandy Quarry	SJ1994236349	Quarry	19 th century
118245	Pandy Quarry building I	SJ1991936370	Quarry building	19 th century
118246	Pandy Quarry building II	SJ1989636322	Quarry building	19 th century
118247	Pandy Quarry building III	SJ1996536326	Quarry building	19 th century
118248	Cae-deicws Quarry incline	SJ1999736403	Inclined plane	19 th century
118249	Ty-newydd farmstead	SJ1963936418	Farmstead	19 th century
118251	Ty-newydd footbridge	SJ1983336187	Bridge	19 th century
118250	Ty-newydd sluice	SJ1983336187	Sluice	19 th century
118252	Pandy Quarry tramway bridge	SJ1993936441	Bridge	19 th century
118253	Coed-y-glyn building	SJ1966536632	Barn ?	19 th century
118254	Tan-y-graig house	SJ1935136089	House	19 th century
118255	Ty'n-y-berllan house	SJ1953635983	House	Post-medieval
118256	Ty'n-y-berllan building	SJ1956435973	Building	Post-medieval
118257	Pandy tramway bridge	SJ1962835894	Bridge	19 th century
118258	Pandy road bridge	SJ1953235907	Bridge	Post-medieval
118259	Pandy weir I	SJ1956135891	Weir	19 th century
118260	Pandy weir II	SJ1951835922	Weir	19 th century
118261	Pandy Mill	SJ1952635925	Mill ?	Post-medieval
118262	Aberteirw building I	SJ1948135918	Building	19 th century
118263	Aberteirw building II	SJ1944735893	Building	19 th century
118264	Pandy smithy	SJ1953735849	Smithy	Post-medieval
118265	Ddol quarry	SJ1959235742	Quarry	19 th century
118266	Ddol Cottages	SJ1954635724	House	19 th century
118267	Ddol building I	SJ1953435700	House ?	19 th century
118268	Ddol building II	SJ1954535752	Building	19 th century
118269	Ddol well I	SJ1950735671	Well	Post-medieval
118270	Ddol well II	SJ1950435659	Well	Post-medieval
118271	Erw-gerrig milestone	SJ1949435454	Milestone	Post-medieval

118272	Granite House	SJ1963335056	House	Post-medieval
118273	Granite Cottage	SJ1957135089	House	Post-medieval
118274	Hendre Granite Works	SJ1940234967	Granite Works	19 th century
118275	Hendre Quarry incline	SJ1931934927	Inclined plane	19 th century
118276	Hendre quarry building II	SJ1905334730	Building	Post-medieval
118277	Hendre quarry building III	SJ1898834627	Building	Post-medieval
118278	Hendre Quarry weighing machine	SJ1949035018	Weighing machine	19 th century
118279	Dan-y-graig structure	SJ1933936053	Structure	Post-medieval
118280	Pandy Quarry leat	SJ1970635926	Leat	19 th century