



Trent & Peak  
ARCHAEOLOGY

**AN ARCHAEOLOGICAL  
SURVEY AT LONER'S LAIR,  
DUFFIELD BANK, DUFFIELD,  
DERBYSHIRE, 2010**



A SHORT TUNNEL ON DUFFIELD BANK RAILWAY



The University of  
**Nottingham**

**AN ARCHAEOLOGICAL  
SURVEY AT LONER'S LAIR,  
DUFFIELD BANK, DUFFIELD,  
DERBYSHIRE, 2010**

A report for Sitwell Investments Ltd

*by  
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and David Walker*

OS Grid Ref. SK 353 431 (centred)  
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## SUMMARY

- In August 2010 Trent & Peak Archaeology was commissioned to carry out a topographic and photographic survey of an area of land around Loner's Lair, a 20<sup>th</sup> century bungalow with detached garage, situated at Duffield Bank, near Duffield, north of Derby. Permission had been granted to demolish these structures and to erect a new house to the south of the existing plot, on condition that an archaeological survey was conducted first.
- The intended development lies within the footprint of Duffield Bank Private Railway (Derbyshire HER no. 19412), a narrow gauge railway built and operated between 1874-1916 in the grounds of Sir Arthur Percival Heywood's mansion on Duffield Bank. The railway was largely an experiment in the possibilities of the 15 inch gauge for commercial military and recreational uses and various developments and alterations were made during its period of use. It consisted of a winding track-bed (on generally sloping ground), along with tunnels, a viaduct, bridges, stations, sheds and signal boxes. The owner also had built locomotives and rolling stock and his staff wore uniforms with D.B.R. (Duffield Bank Railway) insignia.
- Parts of the disused track-bed and several tunnels still survive in the area around Loner's Lair, including a tunnel that runs very close to the existing building, emerging on the south side into a garden area. The existing tunnel will be incorporated into the basement of the new structure, thereby hiding or obscuring aspects of its fabric and aspect.
- The survey of the tunnel and land around it affected by the development consisted of a photographic record being made (both film and digital), together with a topographic survey, carried out using a Leica HDS6100 laser scanner to provide an accurate site survey plan at an appropriate scale showing earthwork features, the track-bed where discernable and the tunnel. Some documentary research for maps and written sources about the Railway was also carried out at Derbyshire Local Studies Library.
- Although the track-bed north of the bungalow (together with a former carriage shed) are now lost or hidden, the track-bed was believed to be still intact as it ran south from the south end of the Long Tunnel. When first seen in December 2009 this area was covered by dense vegetation. Following the removal of this vegetation in September 2010 it was initially feared that this part of the track-bed may have been damaged by potential landscape alteration. However, the survey has shown that this has not happened and that the line of the track-bed still survives. Also, that a lot of walling remains in place on the slopes below.
- The Duffield Bank Railway is historically significant as an experiment in the potentials of railway transport, and today as a surviving industrial archaeological resource. Although no longer intact due to subsequent quarrying and encroachment, sufficient lengths of the former track-bed and associated features survive, albeit in variable states of repair. Some repair work is recommended, together with some awareness on the part of the new owners of what is still present in the grounds and its relative importance. Care will also be required to uncover the approaches to the Long Tunnel when building work commences.

## LIST OF CONTENTS

Summary	page 2
List of Contents	page 3
List of Illustrations	page 4
A. Introduction	page 7
B. Background history	page 8
C. The Duffield Bank Railway today	page 9
D. Conclusions	page 11
E. References	page 12

### Illustrations:

Figures 1-14

Plates 1-22

Appendix 1: Copy of Planning Archaeologist's Brief

Appendix 2: OASIS form

# LIST OF ILLUSTRATIONS

## FIGURES

Figure 1: Location of the building at Loner's Lair, Duffield Bank (highlighted by arrow) in relation to the River Derwent and Little Eaton near Derby. Scale 1:12,500. *Ordnance Survey maps reproduced with permission of Her Majesty's Stationery Office © Crown Copyright Licence No. AL 100020618.*

Figure 2: Modern Ordnance Survey plan showing boundary of the property at Loner's Lair, Duffield Bank, Derbyshire. Scale 1:2,500.

Figure 3: The study area at Loner's Lair, Duffield Bank shown on the First Edition 25 inch scale Ordnance Survey map of 1881. Scale 1:1,000.

Figure 4: Course of the Duffield Bank Railway as shown in Smithers 1995.

Figure 5: Architect's plan showing proposed new building at Loner's Lair, in relation to the existing Long Tunnel of Duffield Bank railway (highlighted in dashed lines).

Figure 6: The study area at Loner's Lair, Duffield Bank as shown on the Ordnance Survey maps of 1881 (blue lines and yellow buildings) and 1900 (red lines and green buildings). Scale 1:500.

Figure 7: The study area at Loner's Lair, Duffield Bank as shown on the Ordnance Survey maps of 1881 (blue lines and yellow buildings) and 1900 (red lines and green buildings) overlain on a contour survey at 250mm intervals. Scale 1:500.

Figure 8: Hachure plan of the study area at Loner's Lair, Duffield showing former railway trackways and structures, former and surviving walls and areas of generally flatter ground. Scale 1:500.

Figure 9: Hachure plan of the study area at Loner's Lair, Duffield showing former and surviving railway trackways, structures and walls, with viewpoints of plates and profiles included in the report. Scale 1:500.

Figure 10: Perspective view from the south-west of the cleared area at Loner's Lair, Duffield Bank, Derbyshire taken from a 3D laser scanner survey with 'point-cloud' detail highlighting walls, the Long Tunnel and flatter areas.

Figure 11: Perspective view of the south end of the Long Tunnel derived from a 3D laser scanner survey at Loner's Lair, Duffield Bank, Derbyshire.

Figure 12: Orthographic plan view of the Long Tunnel at Loner's Lair, Duffield Bank. Tunnel ends highlighted by black lines. Scale 1:200.

Figure 13: West-east profile across the cleared area and through the Long Tunnel at Loner's Lair, Duffield Bank, Derbyshire showing the flatter areas where the upper and lower track beds of the Railway were laid. Scale 1:200.

Figure 14: West-east profile across the cleared area at Loner's Lair, Duffield Bank, Derbyshire showing positions of walls and the track -bed of the former railway, at a position about 30m south of the Long Tunnel. Scale 1:200.

## PLATES

Plate 1: View of the Duffield Bank Railway looking north-west from a point about 100m south of the south end of the long tunnel (from Smithers 1995).

Plate 2: View of the Duffield Bank Railway showing the Tennis Ground Station and a carriage shed in a former quarry south of the study area (from Smithers 1995).

Plate 3: Arthur Percival Heywood standing next to his first completed locomotive engine EFFIE, in 1875 (from Heywood 1898).

Plates 4 and 5: Two views of the Duffield Bank Railway showing the track bed, one with sleepers clearly evident (4), the other without (5) - (from Smithers 1995).

Plate 6: The Bungalow at Loner's Lair, Duffield Bank, with nearby railway tunnel (indicated by arrow), and garage to far right.

Plate 7: The south end of the long railway tunnel at Loner's Lair, (indicated by arrow), hidden by thick vegetation in late 2009.

Plate 8: View looking northwards towards the south end of the Long Tunnel at Loner's Lair, Duffield Bank after the clearance of vegetation and the demolition of The Bungalow (top right) in October 2010. Original edging still shows where the ranging rod is standing.

Plate 9: View looking northwards towards the Long Tunnel, showing brick rubble of a former signal box in the foreground and the edge of the slope behind.

Plate 10: A locomotive shed, the style of which probably resembled the signal boxes at Duffield Bank (from Smithers 1995).

Plate 11: The north end of the Long Tunnel at Loner's Lair, Duffield Bank in October 2010.

Plate 12: The south end of the Long Tunnel at Loner's Lair, Duffield Bank in October 2010.

Plate 13: Laser scanner being operated within the Long Tunnel at Duffield Bank.

Plate 14: View looking south within the Long Tunnel at Duffield Bank.

Plate 15: View looking north within the Long Tunnel at Duffield Bank.

Plate 16: Bridging point taking the railway over a pedestrian underpath just south of the study area at Loner's Lair, Duffield Bank.

Plate 17: Surviving stonework of a former wall marking the junction of the flat trackbed area and the slope down to the west, visible just north of the demolished garage at Loner's Lair.

Plate 18: Surviving terrace walling west of and below the former railway track in the study area at Loner's Lair, Duffield Bank.

Plate 19: Possible east-west running boundary wall close to the lower course of the former railway at Loner's Lair, Duffield Bank.

Plate 20: View looking south at Loner's Lair, Duffield Bank showing, to left, the north end of the Long Tunnel and remains of the Bungalow, and to right the still surviving line of the lower level track bed.

Plate 21: Surviving base stones of a former wall on the east side of the lower rail track, close to where it has been lost.

Plate 22: Surviving base stones showing that the wall showing here in the background once continued along the lower slope.

## *A. Introduction*

In August 2010 Trent & Peak Archaeology (TPA) was commissioned to carry out a topographic and photographic survey of an area of land around Loner's Lair, a 20<sup>th</sup> century bungalow with detached garage, situated at Duffield Bank, near Duffield and Little Eaton, north of Derby (Fig. 1). Permission had been granted to application AVA/2009/0762 to demolish these structures and to erect a new house to the south of the existing plot, on condition that an archaeological survey was conducted first.

The intended development lies within the footprint of Duffield Bank Private Railway (Derbyshire HER no. 19412), a narrow gauge railway built and operated between 1874-1916 in the grounds of Sir Arthur Percival Heywood's mansion on Duffield Bank. Parts of the disused track-bed and several tunnels still survive in the area around Loner's Lair, including a tunnel that runs very close to the existing building, emerging on the south side into a garden area. Much of the original track-bed to the north has been removed by quarrying. The existing tunnel will be incorporated into the basement of the new structure, thereby hiding or obscuring aspects of its fabric and aspect. Part of the track-bed and landscaping south of the tunnel will also be affected by the works. An initial walkover site visit was carried out in December 2009 but because of dense vegetation (see Plate 2) it was evident that the survey would need to be carried out once this had been cut back.

Plans of the site close to the existing buildings and drawings of the intended new building were supplied by Montague Architects. Because of difficulties with site access a survey planned for early September 2009 was delayed until 22<sup>nd</sup> September, with subsequent visits made in early October. In mid September the site was heavily stripped back, with trees cut down, shrubs removed and demolition of the buildings undertaken. Areas of former track bed were affected by machinery and debris was piled up close to the ends of the tunnel, hiding the approaches to this structure. Nonetheless, the general site clearance, by opening up the sloped area proved beneficial to the topographic survey. The area surveyed (referred to here as the study area) covered an area from the north approach to the existing buildings and included the area to the south and west stripped of vegetation – it is shown highlighted on Figures 2-5. At the south end the survey went as far as where the railway both curved off towards the so-called Tennis Court Loop and also continued straight on over a bridge above a sunken walkway.

The survey consisted of a photographic record being made of the tunnel and areas around it affected by the development. Photographs were taken by a 35mm SLR camera with black and white film, and by a DSLR for high-resolution digital photography. The topographic survey was carried out using a Leica HDS6100 laser scanner in conjunction with a Leica Zeno GPS to tie the site into the National Grid and Ordnance Datum (Plate 13). This allows for an accurate site survey plan at an appropriate scale showing earthwork



features, the track-bed where discernable and the tunnel. This report includes a plan based on Ordnance Survey maps of 1881 and 1900 (the 3<sup>rd</sup> edition from 1914 being little changed), a scaled hachured plan, a detailed scaled contour plan, a plan of the tunnel and two west-east profiles across the site. The full data and records from the laser survey will be included in the site archive.

Documentary research for maps and written sources was carried out at Derbyshire Local Studies Library in Matlock. The archive number supplied by Derby Museum and Art Gallery is DBYMU 2010-46. The site archive will be deposited by the end of March 2011. The TPA code is LLD.1.

## ***B. Background history***

The Duffield Bank Railway was built and operated by Sir Arthur Percival Heywood between 1874 and his death in 1916, in the grounds of his home at Duffield Bank. Heywood studied Applied Science at Cambridge and during that time his already established interest in railway engineering was fostered by visits to local locomotive sheds. When he married in 1872 his father Sir Thomas Percival Heywood gave him and his bride Duffield Bank and its grounds as a wedding present. The grounds were sloping, partly forested and indented with former quarries. With time and finance at his disposal, within two years the younger Heywood had built his own narrow gauge railway. This was not due to whimsy but was a serious experiment in seeing whether so-called 'minimum gauge railways' could be proved practicable for moving munitions, farm materials and goods and people for recreational purposes.

Due to the pioneering efforts of the Festiniog Railway (its older spelling) in moving slate to the port of Portmadoc in North Wales, narrow gauge railways were accepted as technically and commercially viable by the later 19<sup>th</sup> century. This particular railway had a gauge of 23½ inches and others were built elsewhere with a smaller 18 inch gauge. Heywood experimented with a tiny gauge of only 9 inches but eventually settled on a gauge of 15 inches as the minimum one for his purposes. A similar gauge of 40 centimetres (equivalent to 16 inches) was arrived at independently by M. Décauville in France. However, unlike Décauville's railway which was intended to be pulled by animals and portable, Heywood's was steam-driven and permanent (Smithers 1995). Duffield Bank, being on sloping ground above the River Derwent, would prove to be a favourable location for Heywood's experiments in hauling and shunting.

The course of the Duffield Bank Railway ran for several miles, up a slope from a farm and workshops at the north end to a figure of 8 route along the hill-slope. Along its route there were three tunnels, two bridges, a viaduct (91 feet long, 20 feet high), two signal boxes with telephone communication, six

stations and sheds for rolling stock and numerous signal posts. A locomotive could haul a train with eight bogie cars carrying 120 passengers up a 1 in 20 slope (Heywood 1898). Three engines were built – EFFIE in 1875 (Plate 3; named after his wife), ELLA in 1881 and MURIEL in 1894. There were open and closed bogies, brake vans, sleeping cars and open wagons. Rails were initially laid on elm or chestnut sleepers but these were later relaid and then replaced by light cast-iron sleepers, in preference to steel ones. Staff wore uniforms with the insignia D.B.R.

Three open days were held in 1894. One of the visitors was a representative of the Duke of Westminster and the exhibition had some success in convincing the Duke to establish his own railway at Eaton Hall in Cheshire. It opened in 1895 with ELLA having been sent to start the enterprise. This larger railway was used to move coal and visitors around the Duke's estate. However, despite this particular success, Heywood's style of railway failed to be taken up generally for estate or industrial usage as he had long intended. This was despite his authorship of a book on the subject that ran to three editions. During its use many photographs were taken of the railway that are now in print and several of these are included in this report (Plates 1-5).

### *C. The Duffield Bank Railway today*

The extent and course of the railway was altered during its period of existence, as can be seen from Ordnance Survey maps (Figs 3, 6). Some features were short-lived and failed to appear on maps, such as an open-topped signal box from which the view on Plate 1 was taken, and which shows on another photograph taken at the time. The overall development of the railway is shown in Figure 4, a plan that is included in Smithers book of 1995. Although this is perhaps the definitive text on the railway and its rolling stock, there remain aspects of the railway that still stimulate discussion and disagreement amongst enthusiasts.

#### **Track-bed**

Today much of the course of the track-bed can still be traced, although the rails and sleepers have long been removed and have left no physical trace. Two rails can be found within the Short Tunnel south of the study area (see cover illustration) but these are laid but not affixed to a plaster bed and are set apart further than the original gauge; whether or not they are original rails is unclear. Generally, the track-bed shows mainly as relatively long flatter strips where the ground slopes, or where the railway ran through depressions and also by stone-lined or low-walled edges that were laid in places. Elsewhere it is possible to trace the track-bed with the help of a map. Modern quarrying has removed a long stretch of track-bed just north of the Bungalow, including the site of the viaduct; only a picture of this wooden structure now survives.

## **Tunnels**

The three tunnels remain intact. That affected directly by the development is the longest, thus the name Long Tunnel, and is about 80 feet (24m) in length, about 7 feet high (2.14m) and 5 feet (1.52m) across. It had been partly filled with rubbish and this was removed prior to the survey, revealing a clay base without sign of any flooring or indications of the former track. The side walls are stone-built and cambered, with the upper semi-circular walling built from brick (Plates 14, 15). The tunnel was both laser-scanned and extensively photographed. No markings or graffiti were found but about mid-way along its length dark soot staining on the roof indicated a point at which the locomotives may have been stationary. The survey shows that the tunnel was slightly curved in plan and not as straight as maps suggest (Figs 11, 12). Stonework facing at the two ends remains partly obscured by a build-up of debris but otherwise it was found to be in good condition, despite having been covered by vegetation until quite recently (Plates 11, 12).

## **Buildings**

No buildings remain today, having been largely timber-built and dismantled in the early 20<sup>th</sup> century. Curiously, a pile of bricks shows today within the south part of the study area where a signal box once stood - see Plate 9, with Plate 10 indicating how it might have appeared. South of this there is some field walling that defines where the railway branched off to the south-east into the Tennis Court Loop. It also continued onwards and over a bridge above a sunken walkway reached by steps. Although still partly overgrown, brickwork and a concrete on the stone walling indicate the former bridging point (Plate 16). Edging stones marking the approach to the bridge and the eastwards branch have been dislodged by the vegetation and the process of its removal and will need to be reinstated.

## **Stone walling**

Stone walling can be seen running down the slope to the east of the bridging point and other low walls running along or down the slope that show on Ordnance Survey maps can still be traced, despite heavy vegetation having dislodged some of it (Plates 18, 19). Running away down slope from the south-west corner of the study area a former track-bed, now lined by trees can be followed for some distance. From the south-west corner of the study area the railway once ran northwards at a lower level, alongside a property boundary (the west edge of the study area), rising to a point north-west of the Bungalow, where its course can still be seen (Plate 20). Below this level, much of this track-bed has been lost by encroachment from the west and the widening of a trackway, which may have started as a more southerly route of the railway. Plate 22 shows this in the middle background with stones showing in the foreground that suggest the walling once went much further northwards than now; the start of the former track-bed just shows top right. Although the known lower track-bed has been partly removed, stone walling

defining its position does survive in a number of places (Plate 21). Close to the modern garage by the Bungalow, some stone and brick walling can still be seen, mainly hidden beneath demolition rubble (Plate 17). This may have been from a wall running alongside the former track-bed close to a former carriage shed.

### **Track-bed near the Bungalow**

Although the track-bed north of the Bungalow (together with the carriage shed mentioned above) are now lost or hidden, the track-bed was believed to be still intact as it ran south from the south end of the Long Tunnel. When seen in December 2009 this area was covered by dense vegetation (Plate 2), but a footpath appeared to still follow and indicate the railway's former course. Following the process of removing this vegetation in September 2010 it was initially feared that this part of the track-bed may have been lost or damaged by potential landscape alteration (Plate 8). However, the survey has shown that this has not happened and that the line of the track-bed still survives. This is demonstrated by Figure 7, where a 250mm contour survey has been overlaid on a plan based on Ordnance Survey maps of 1881 and 1900 at a scale of 1:500. The original course of the railway where it ran just west of the Long Tunnel still shows but demolition material is now obscuring the later straight length towards the south entrance to the tunnel. This should be removed with some care.

### ***D. Conclusions***

The Duffield Bank Railway is historically significant as an experiment in the possibilities and potentials of railway transport, and today as a surviving industrial archaeological resource. Although no longer intact because of subsequent quarrying and encroachment, sufficient lengths of the former track-bed and associated features survive, albeit in variable states of repair. The tunnels are in good condition, being largely protected from the elements, but much of the walling is in a state of poor condition due to vegetation and tree root damage. Previously hidden stonework has been exposed in the process of removing the vegetation but some of it has also been disturbed too. Some repair work is recommended, together with some awareness on the part of the new owners of what is still present in the grounds and its relative importance. Care will also be required to uncover the approaches to the Long Tunnel when building work commences.

## ***F. References***

Heywood, Sir A. P., 1898 (3<sup>rd</sup> edition, reprinted 1974). *Minimum Gauge Railways. Their Application, Construction and Working*. Turntable Publications, Sheffield.

Smithers, M., 1995. *Sir Arthur Heywood and the Fifteen Inch Gauge Railway*. Plateway Press.

**ILLUSTRATIONS**

**FIGURES**

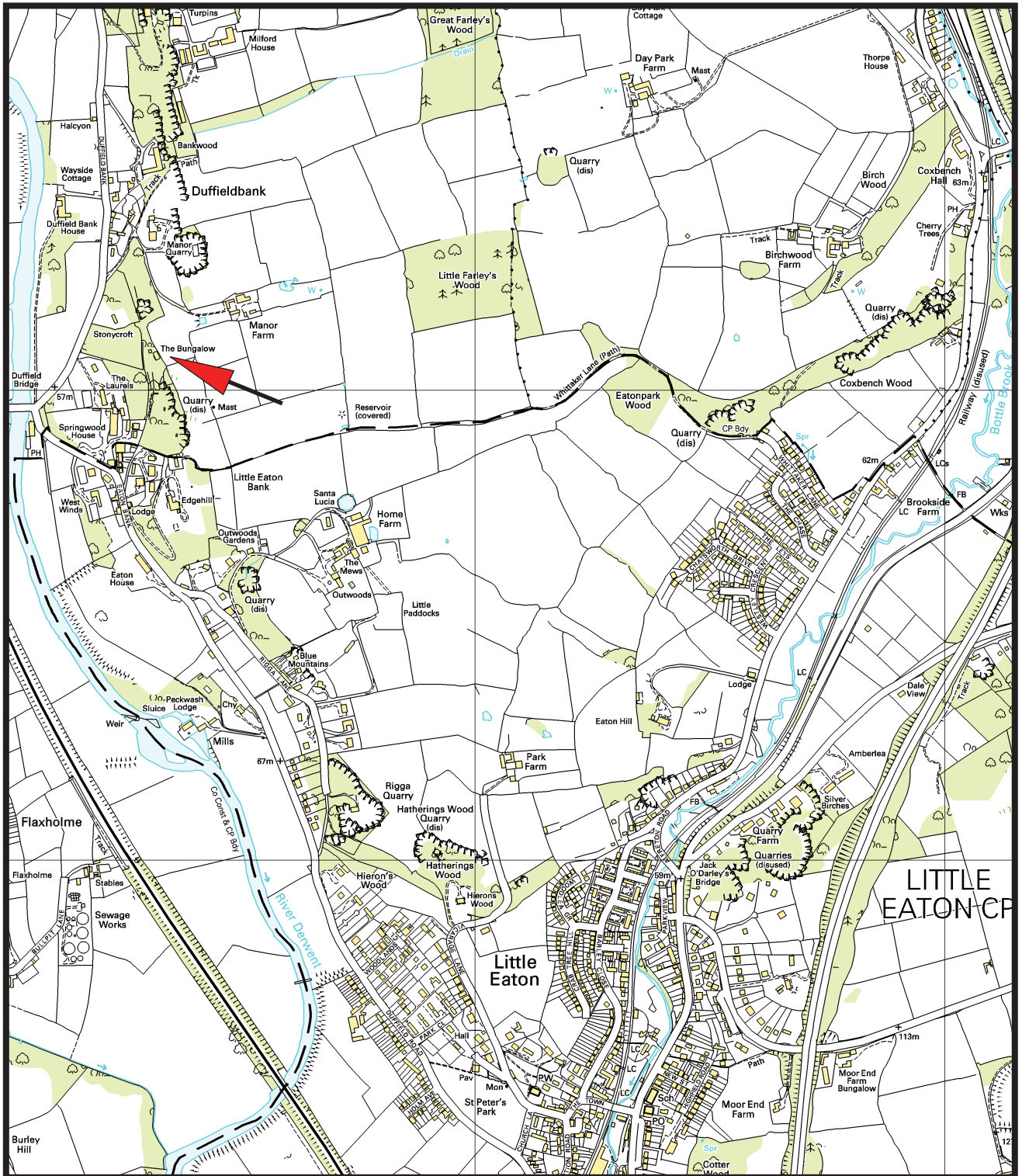


Figure 1: Location of the building at Loner's Lair, Duffield Bank (highlighted by arrow) in relation to the River Derwent and Little Eaton near Derby. Scale 1:12,500. Ordnance Survey maps reproduced with permission of Her Majesty's Stationery Office © Crown Copyright Licence No. AL 100020618.

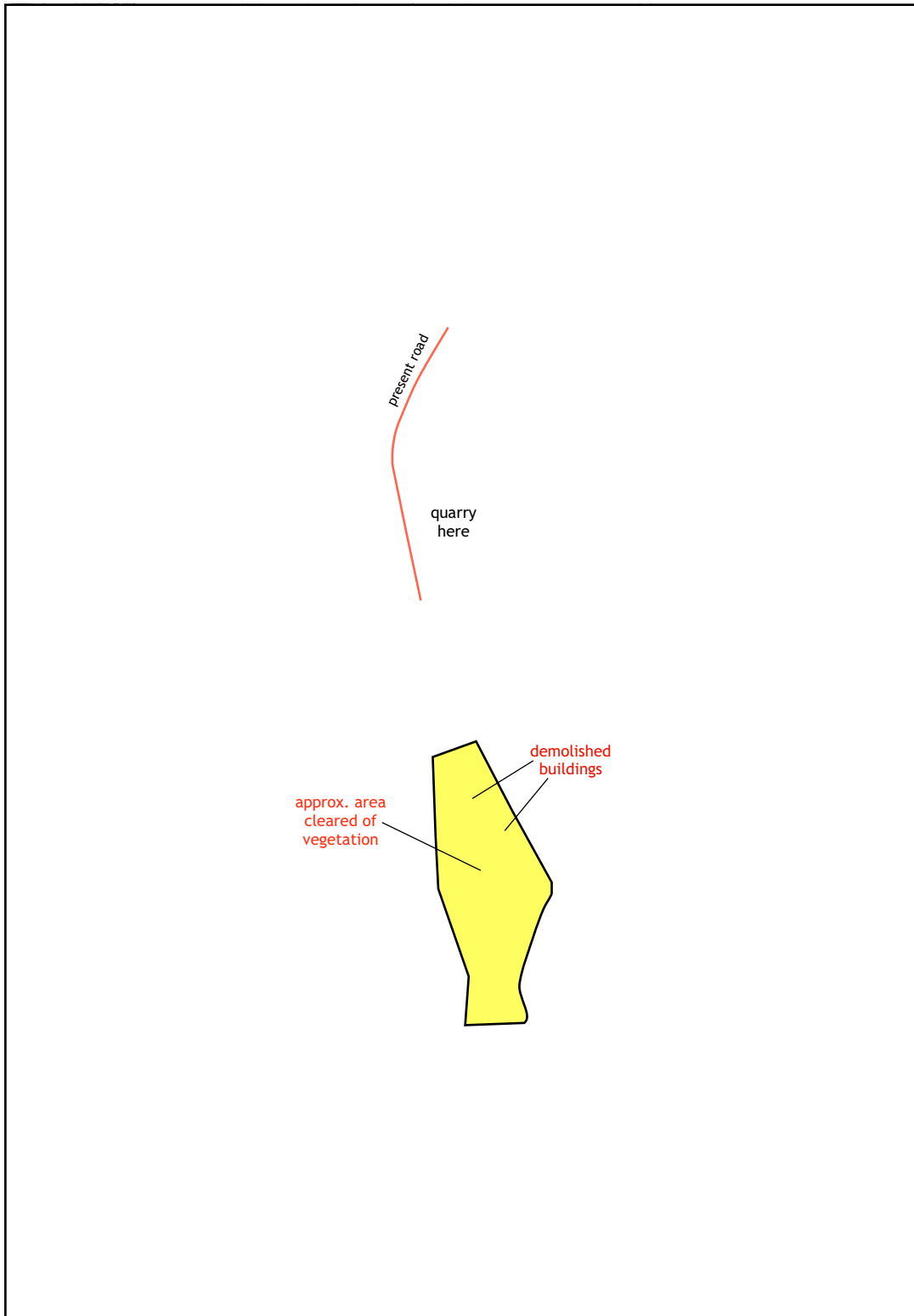


Figure 2: Modern Ordnance Survey plan showing boundary of the property at Loner's Lair, Duffield Bank, Derbyshire. Scale 1:2,500.



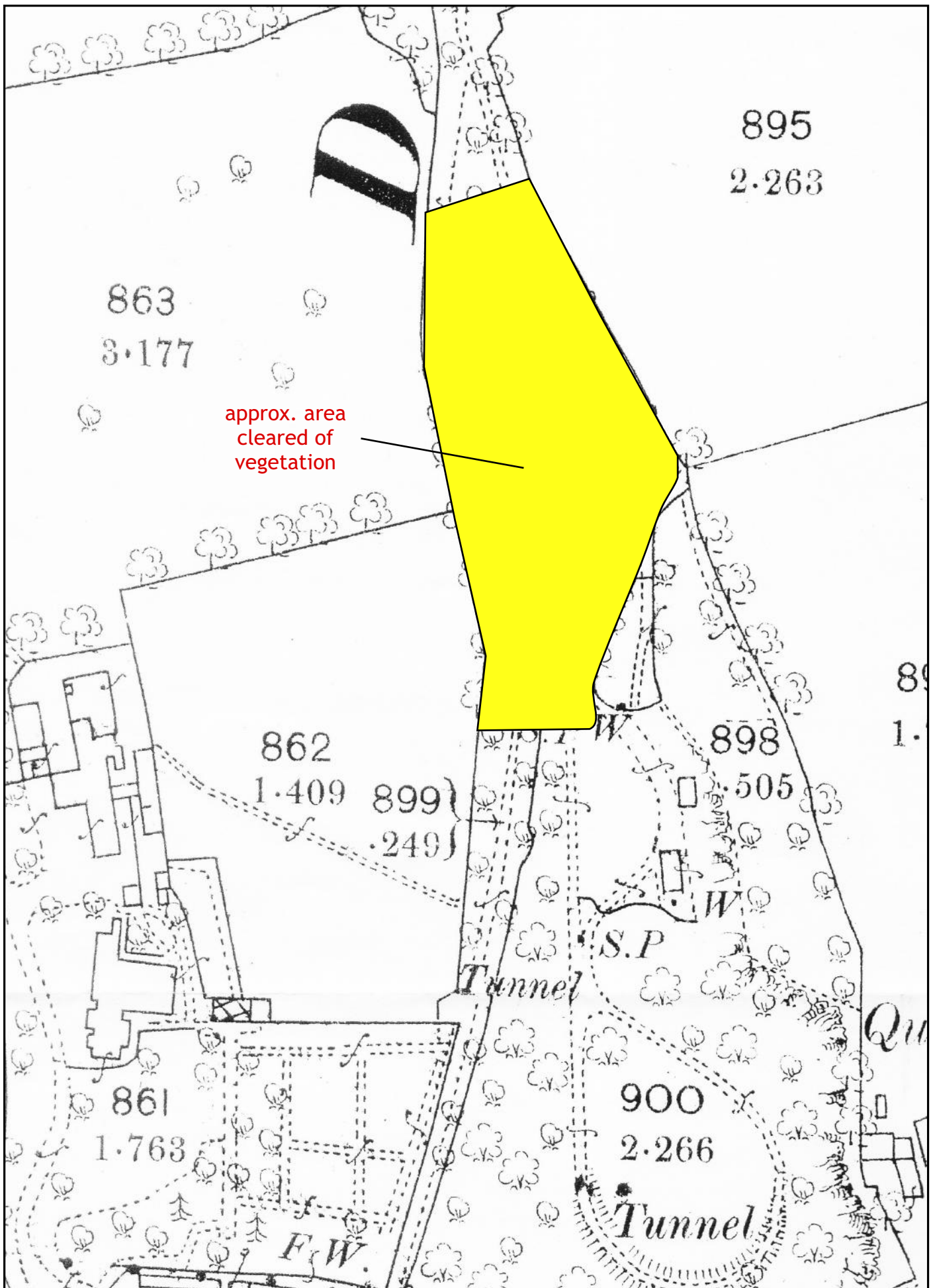


Figure 3: The study area at Loner's Lair, Duffield Bank shown on the First Edition 25 inch scale Ordnance Survey map of 1881. Scale 1:1,000.

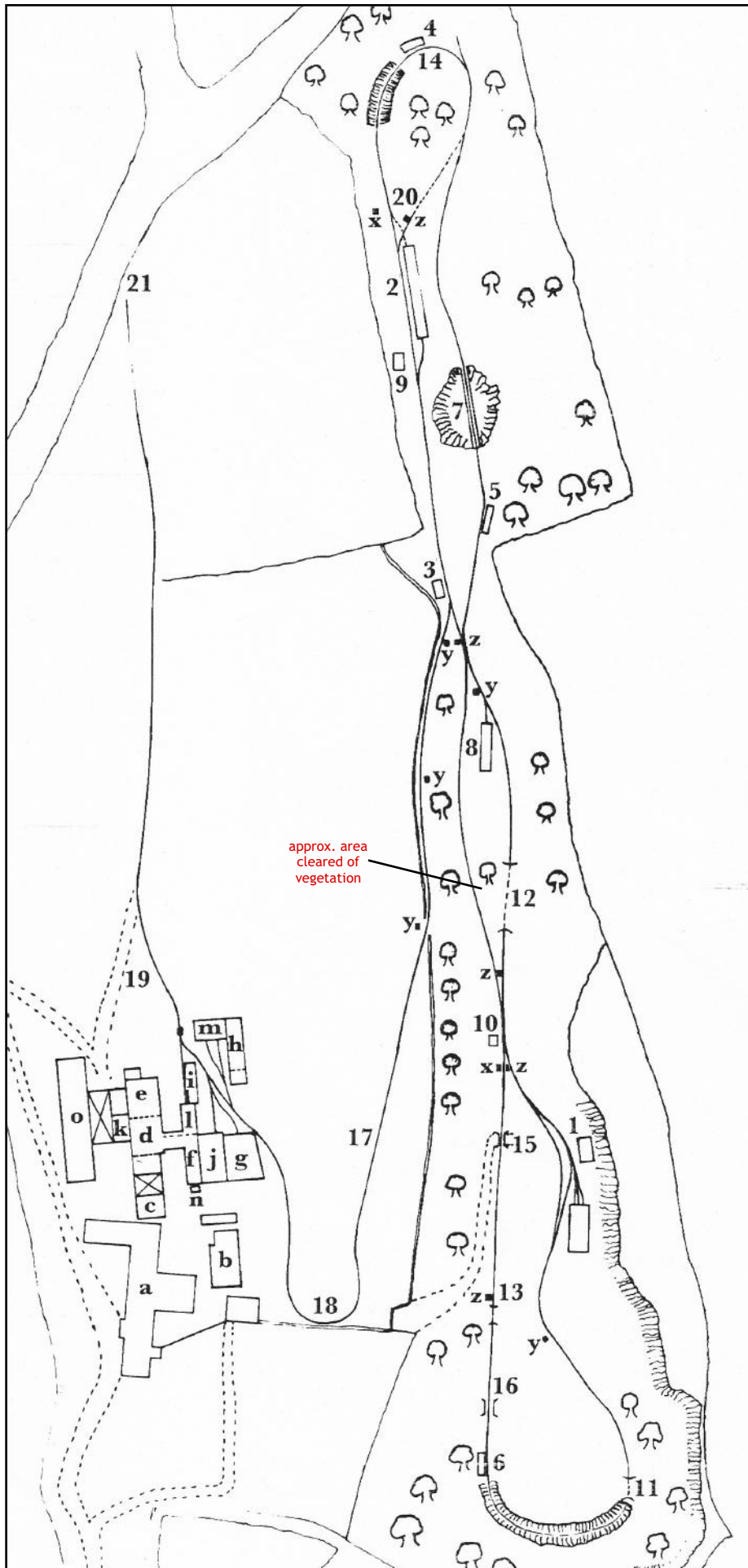
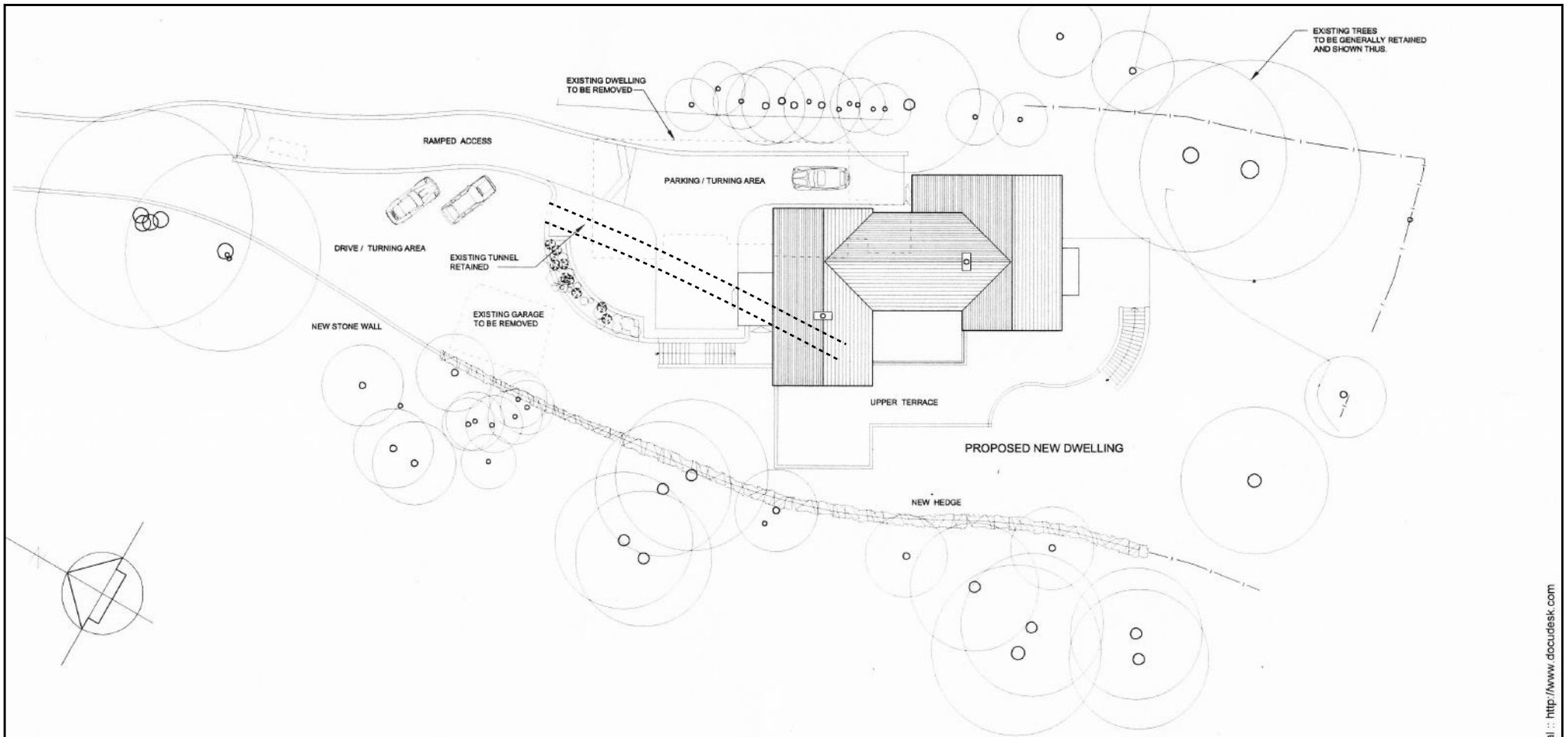


Figure 4: Course of the Duffield Bank Railway as shown in Smithers 1995.



**SITE PLAN**

Figure 5: Architect's plan showing proposed new building at Loner's Lair, in relation to the existing Long Tunnel of Duffield Bank railway (highlighted in dashed lines).

REV C	04 08 06	MINOR AMENDMENTS	
REV B	29 06 05	MINOR AMENDMENTS	
REV A	19 12 04	MINOR AMENDMENTS	BY

SITE FINN HOUSE  
 DUFFIELD BANK, DUFFIELD, DERBYSHIRE.

PROJECT TITLE PROPOSED REPLACEMENT DWELLING

DRAWING PROPOSED SITE PLAN

DRAWING No. 1775 - 205 C

SCALE 1:200

**Montague Architects Ltd.**

8 WILKINSON STREET, DERBY

01332 320291

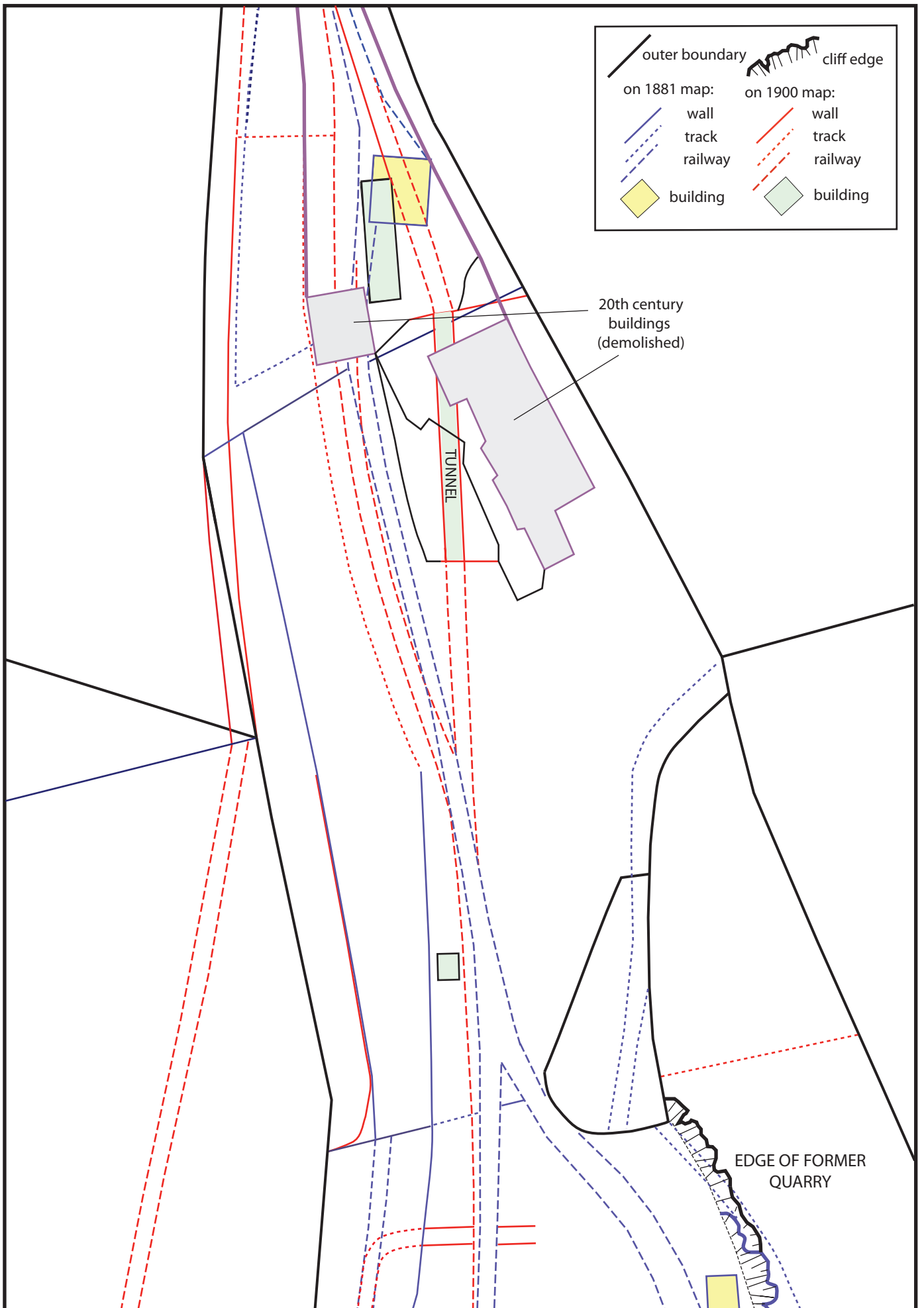


Figure 6: The study area at Loner's Lair, Duffield Bank as shown on the Ordnance Survey maps of 1881 (blue lines and yellow buildings) and 1900 (red lines and green buildings). Scale 1:500.

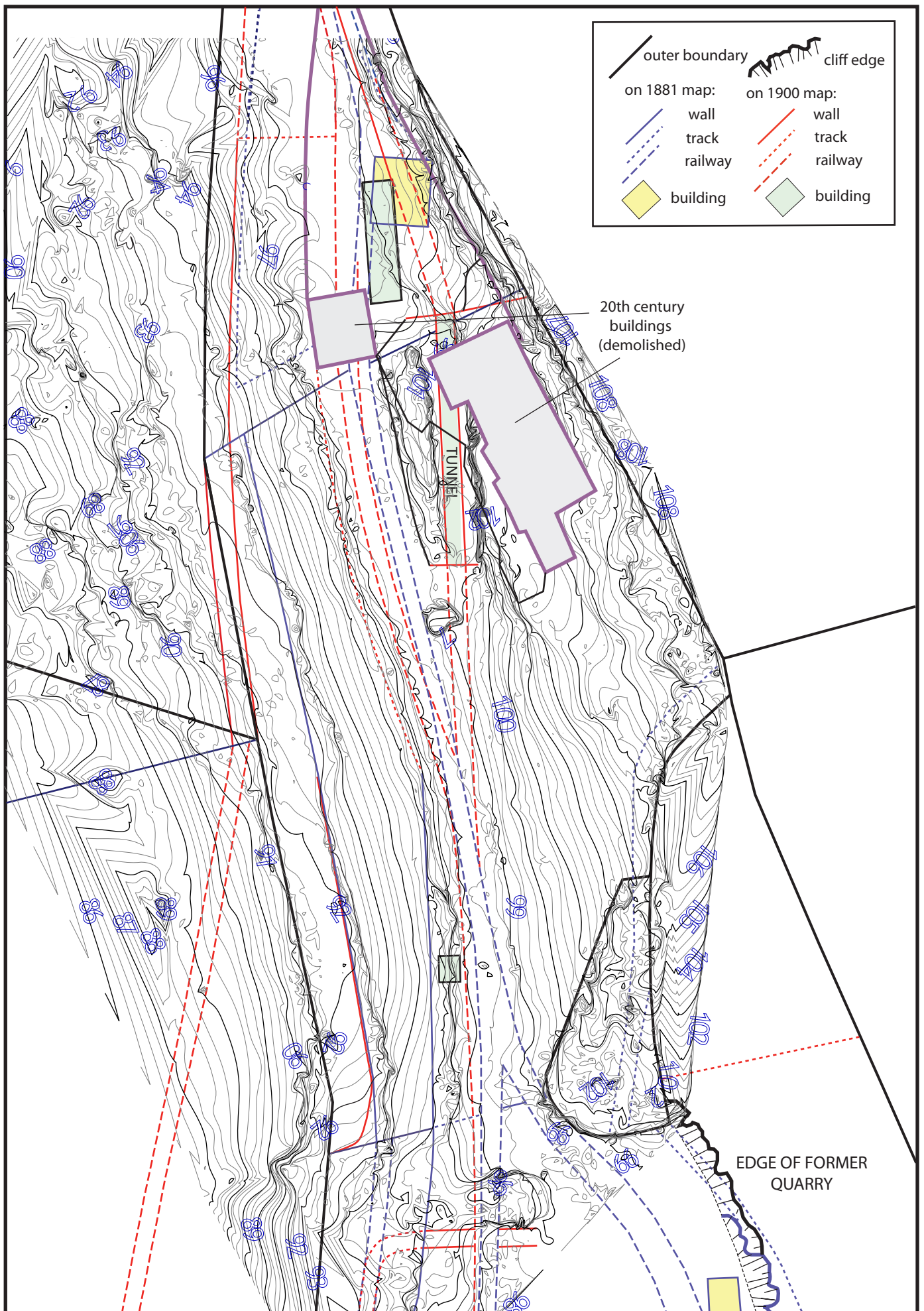


Figure 7: The study area at Loner's Lair, Duffield Bank as shown on the Ordnance Survey maps of 1881 (blue lines and yellow buildings) and 1900 (red lines and green buildings) overlain on a contour survey at 250mm intervals. Scale 1:500.

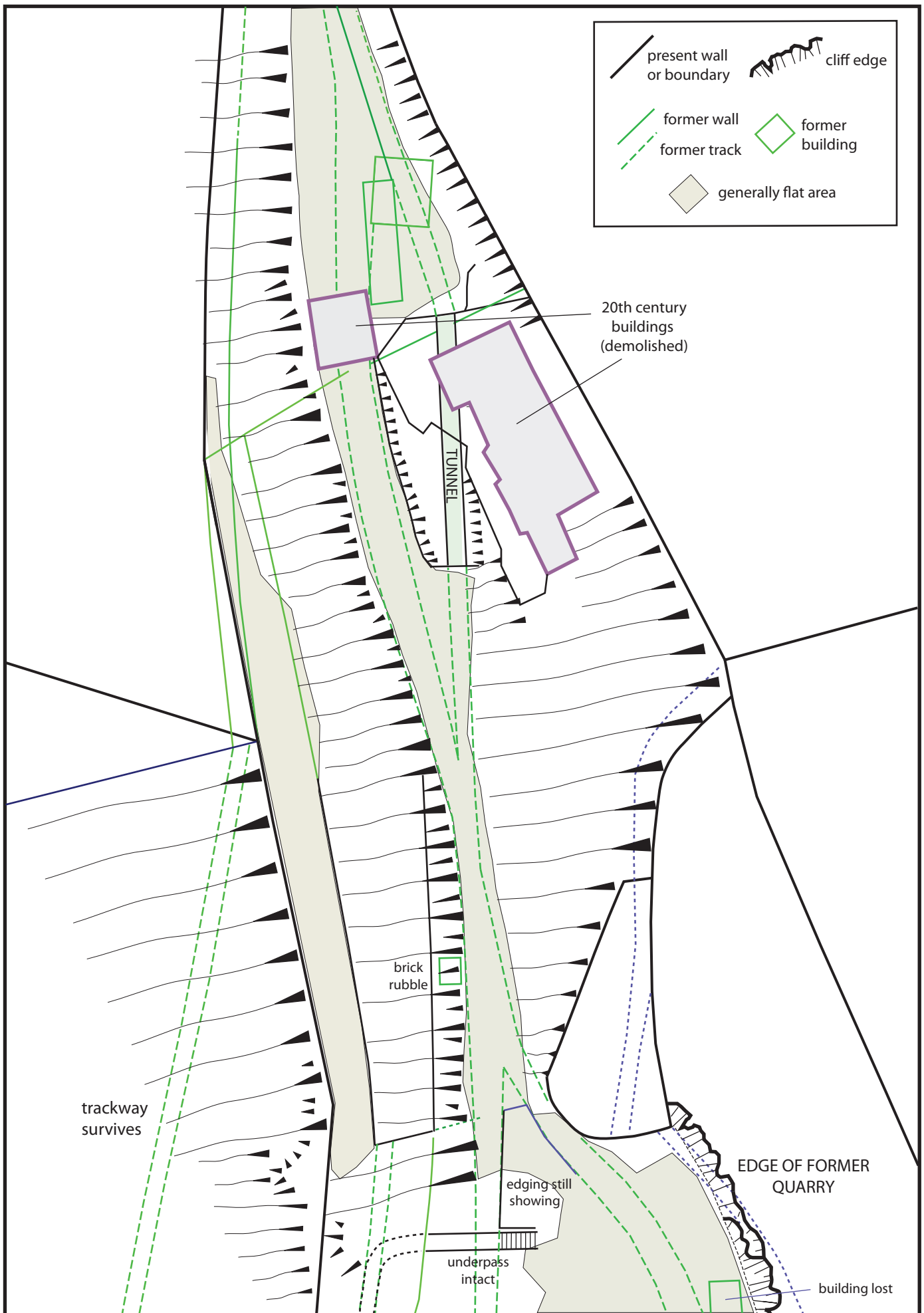


Figure 8: Hachure plan of the study area at Loner's Lair, Duffield showing former railway trackways and structures, former and surviving walls and areas of generally flatter ground. Scale 1:500.

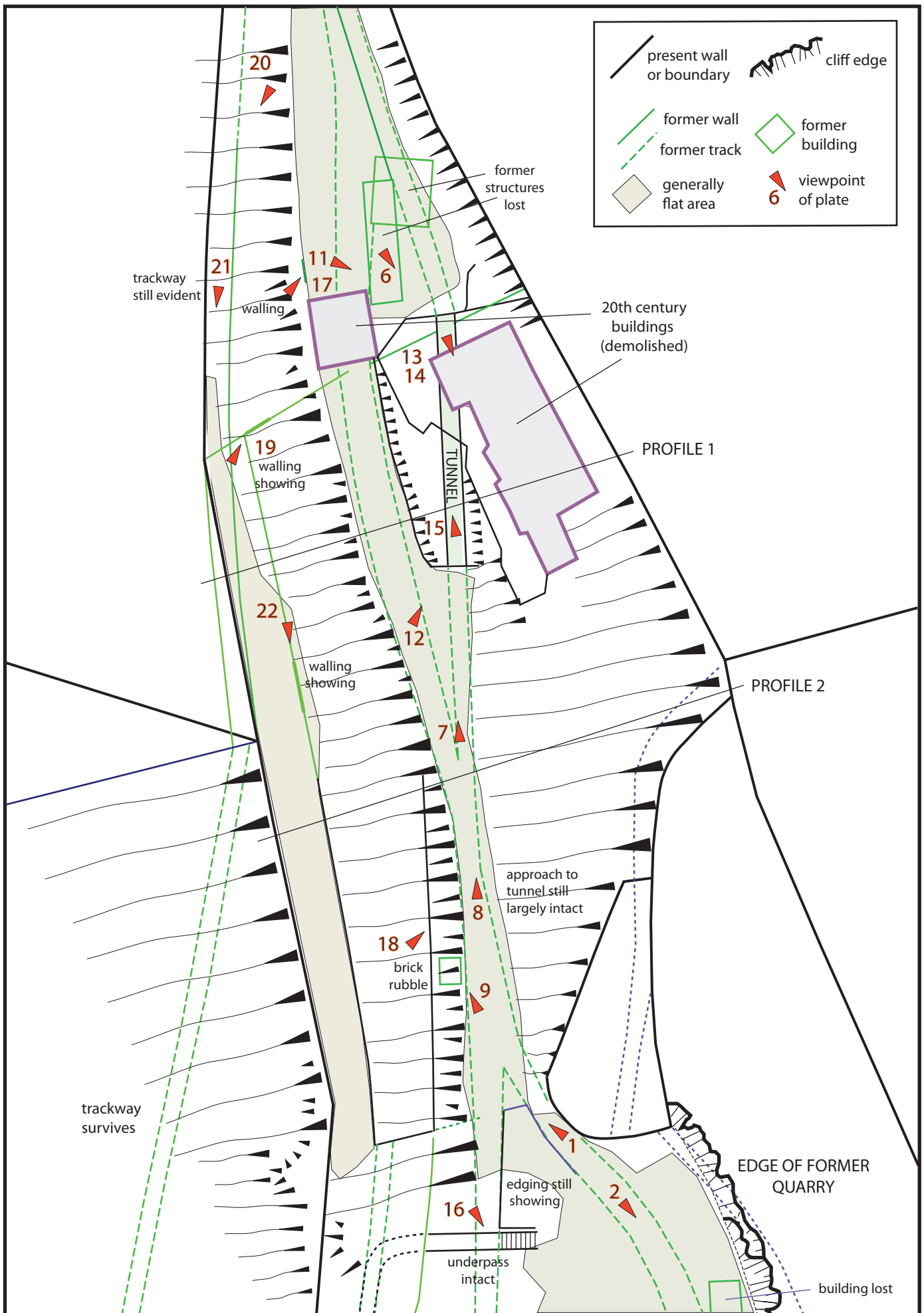


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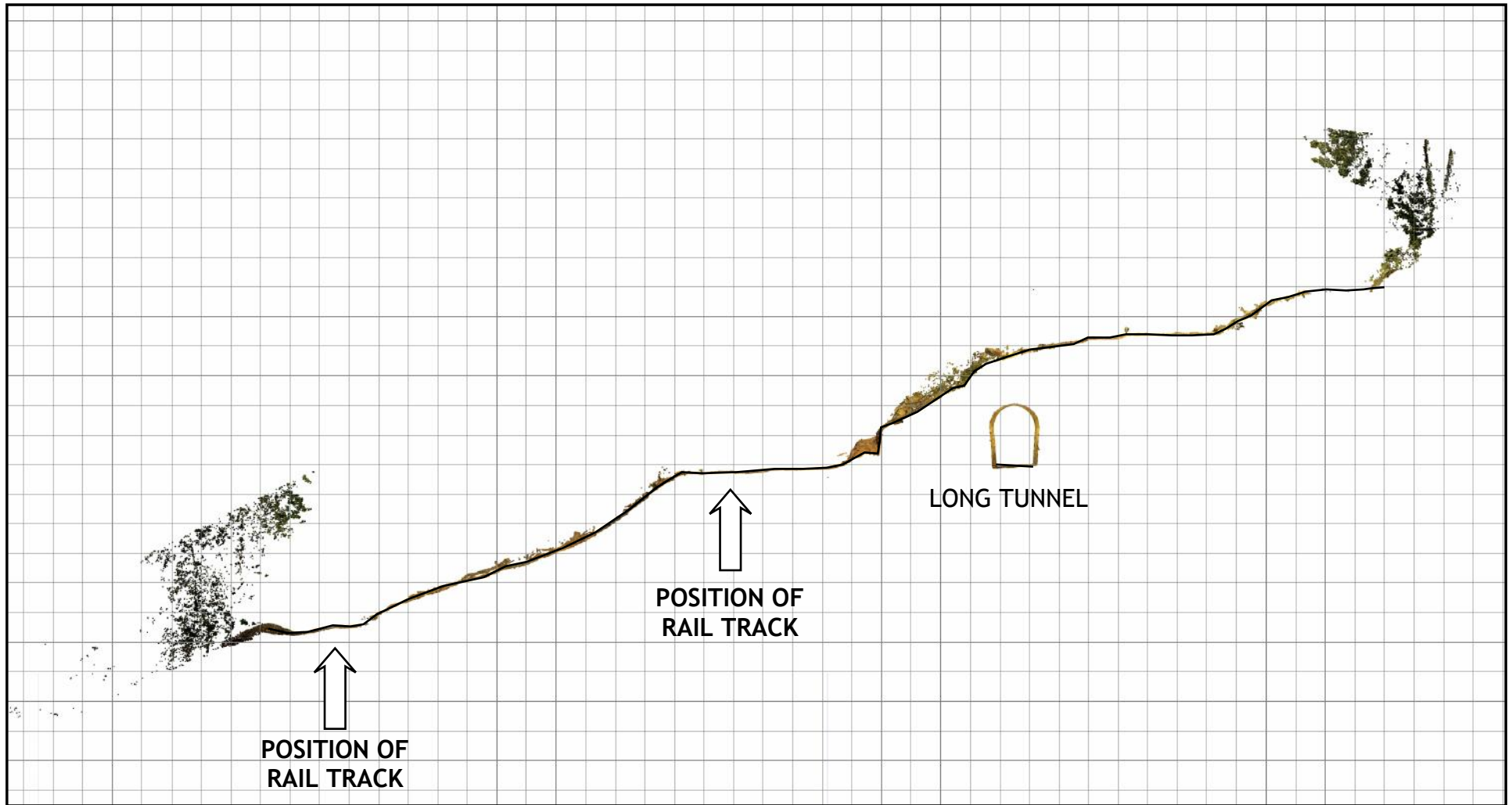


Figure 13: West-east profile across the cleared area and through the Long Tunnel at Loner's Lair, Duffield Bank, Derbyshire showing the flatter areas where the upper and lower track beds of the Railway were laid. Scale 1:200.

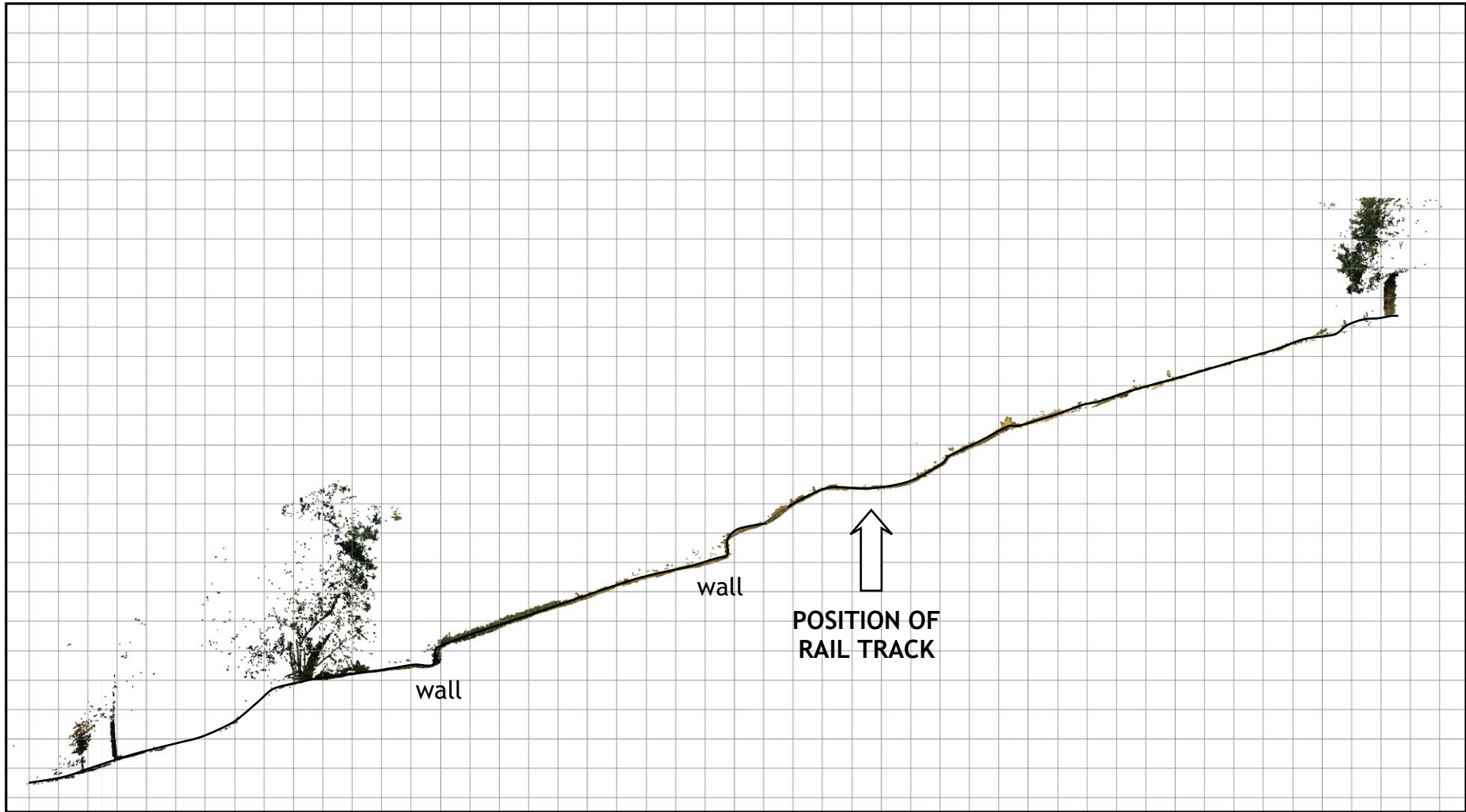


Figure 14: West-east profile across the cleared area at Loner's Lair, Duffield Bank, Derbyshire showing positions of walls and the track -bed of the former railway, at a position about 30m south of the Long Tunnel. Scale 1:200.

# ILLUSTRATIONS

## PLATES

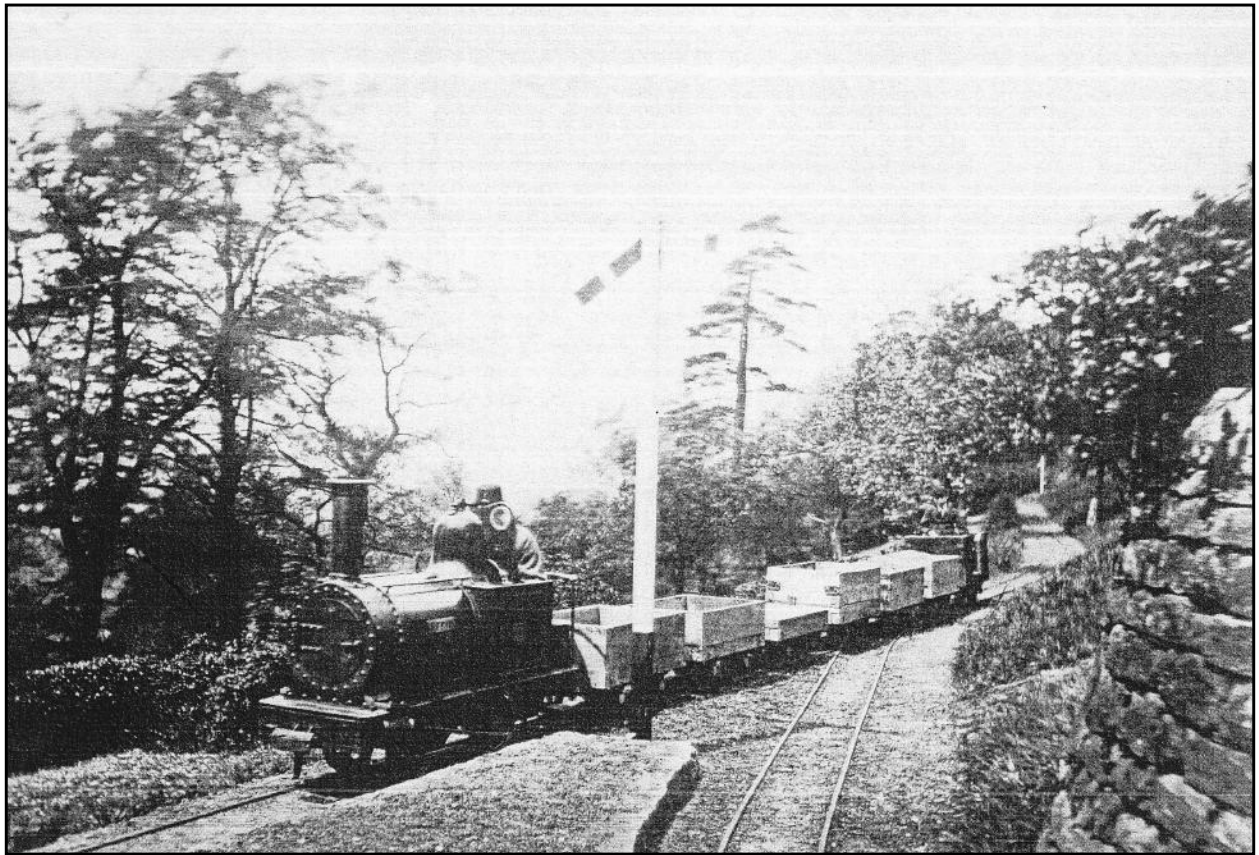


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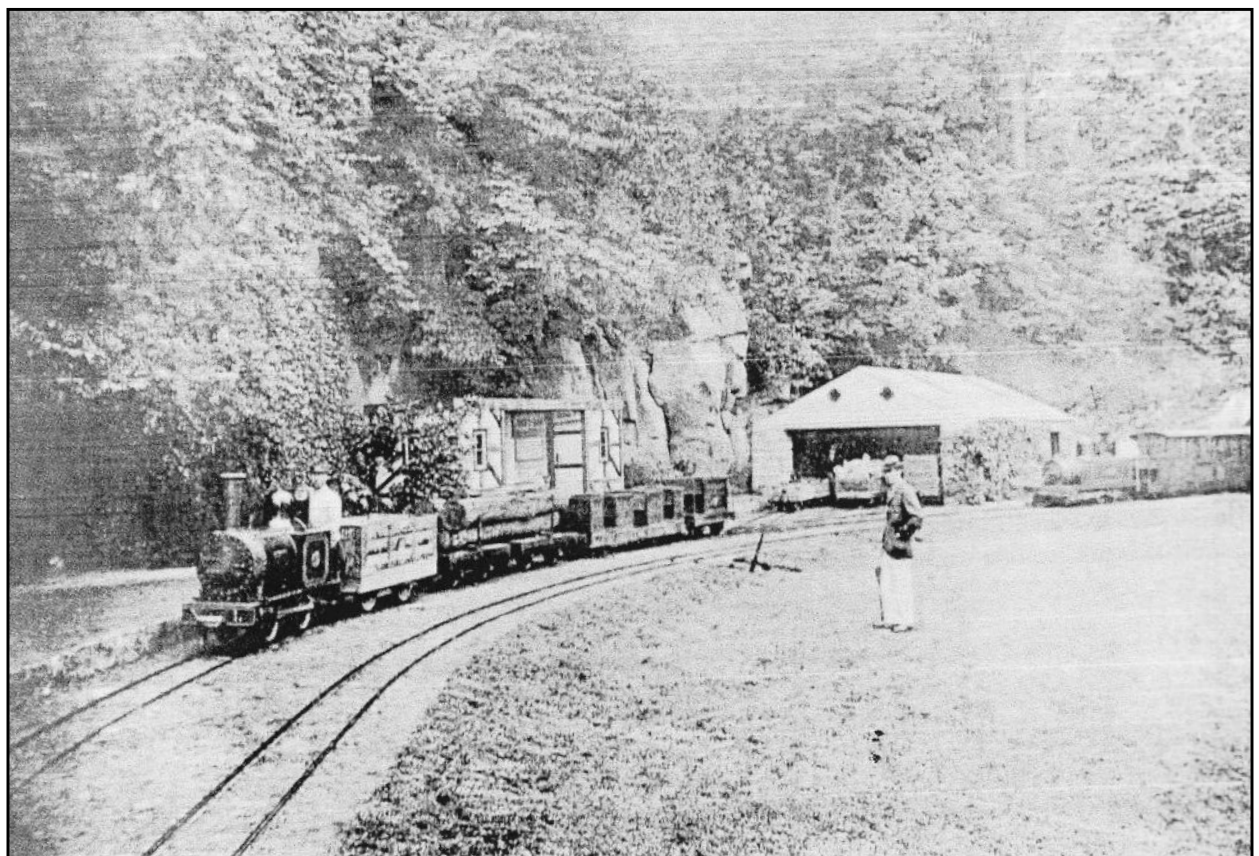
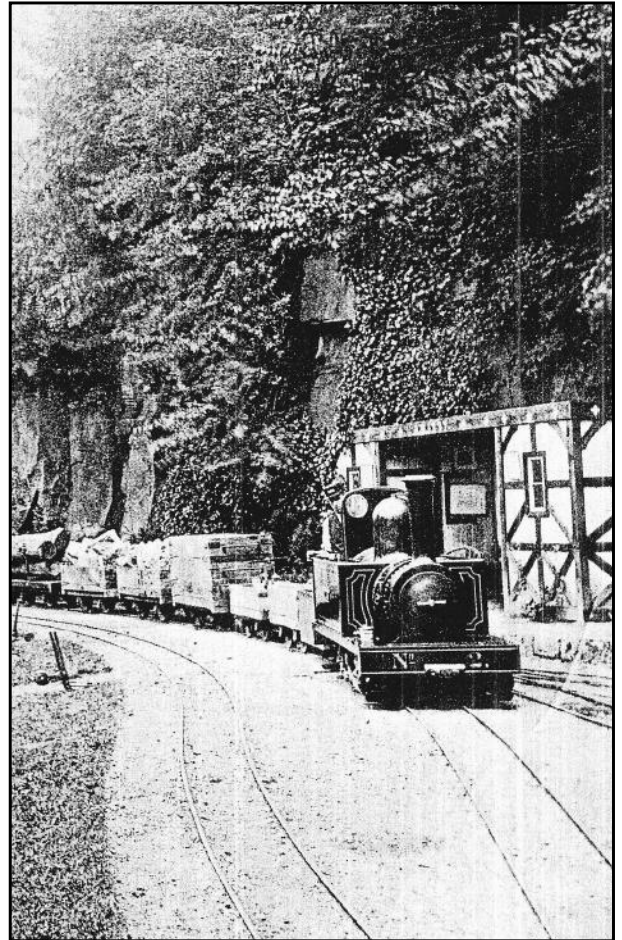
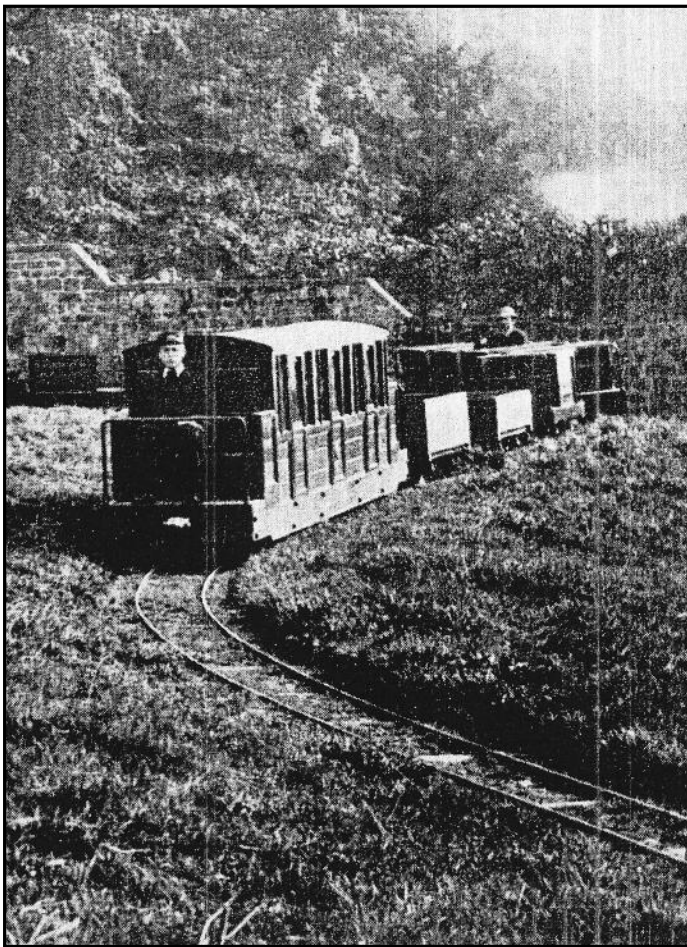


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Plates 4 and 5: Two views of the Duffield Bank Railway showing the track bed, one with sleepers clearly evident (4), the other without (5) - (from Heywood 1898).



Plate 6: The Bungalow at Loner's Lair, Duffield Bank, with nearby railway tunnel (indicated by arrow), and garage to far right.



Plate 7: The south end of the long railway tunnel at Loner's Lair, (indicated by arrow), hidden by thick vegetation in late 2009.



Plate 8: View looking northwards towards the south end of the Long Tunnel at Loner's Lair, Duffield Bank after the clearance of vegetation and the demolition of The Bungalow (top right) in October 2010. Original edging still shows where the ranging rod is standing.



Plate 9: View looking northwards towards the Long Tunnel, showing brick rubble of a former signal box in the foreground and the edge of the slope behind.

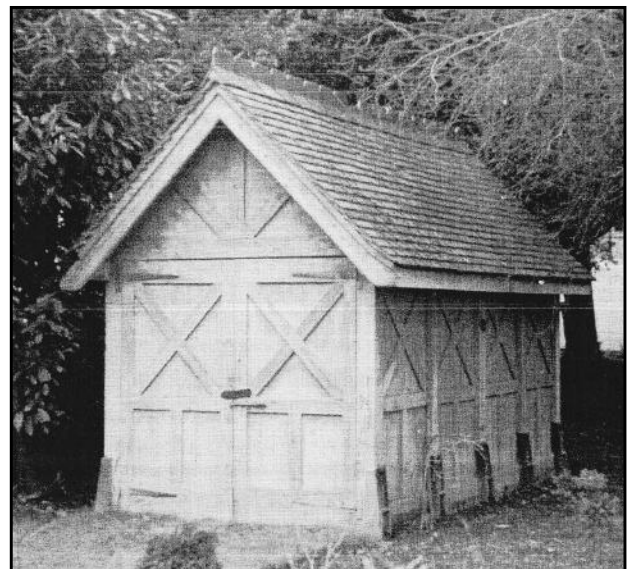


Plate 10: A locomotive shed, the style of which probably resembled the signal boxes at Duffield Bank (from Smithers 1995).





Plate 11: The north end of the Long Tunnel at Loner's Lair, Duffield Bank in October 2010.



Plate 12: The south end of the Long Tunnel at Loner's Lair, Duffield Bank in October 2010.



Plate 13: Laser scanner being operated within the Long Tunnel at Duffield Bank.



Plate 14: View looking south within the Long Tunnel at Duffield Bank.

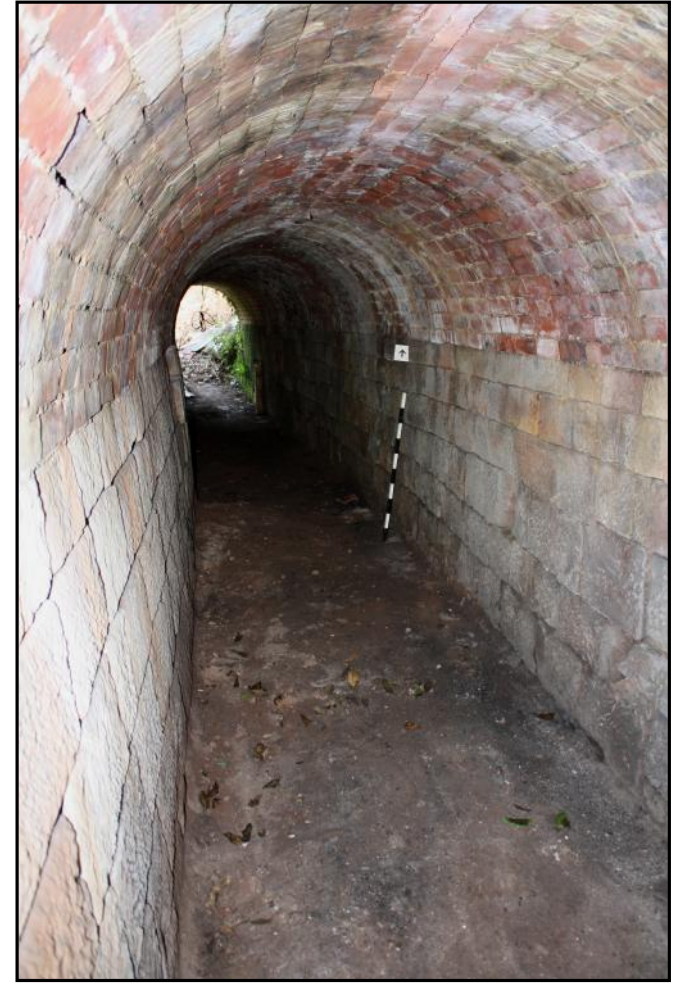


Plate 15: View looking north within the Long Tunnel at Duffield Bank.



Plate 16: Bridging point taking the railway over a pedestrian underpath just south of the study area at Loner's Lair, Duffield Bank.



Plate 17: Surviving stonework of a former wall marking the junction of the flat trackbed area and the slope down to the west, visible just north of the demolished garage at Loner's Lair.



Plate 18: Surviving terrace walling west of and below the former railway track in the study area at Loner's Lair, Duffield Bank.



Plate 19: Possible east-west running boundary wall close to the lower course of the former railway at Loner's Lair, Duffield Bank.



Plate 20: View looking south at Loner's Lair, Duffield Bank showing, to left, the north end of the Long Tunnel and remains of the Bungalow, and to right the still surviving line of the lower level track bed.



Plate 21: Surviving base stones of a former wall on the east side of the lower rail track, close to where it has been lost.



Plate 22: Surviving base stones showing that the wall showing here in the background once continued along the lower slope.

# APPENDIX 1

## **Brief for topographic and photographic survey**

**Site Name:** Loner's Lair, Duffield Bank, Duffield, Belper

**NGR:** (centred) SK 3533 4306

**Brief issued to:** Richard Sheppard, Trent & Peak Archaeology

**Brief issued by:** Steve Baker – Development Control Archaeologist, Amber Valley Borough Council

**Date:** 15<sup>th</sup> December 2009

### **1 Introduction**

1.1 Planning consent AVA/2008/1061 has been granted by Amber Valley Borough Council for the replacement of an existing dwelling and garage with a new dwelling and garage at Loner's Lair, Duffield Bank.

1.2 Because of the archaeological interest in the site, relating to the former Duffield Bank Private Railway, an archaeological condition has been placed upon the planning consent as follows:

“No development shall take place within the site until the developer has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation (WSI) submitted by the applicant and approved in writing by the Local Planning Authority. This scheme shall include on-site work, and off-site work such as the analysis, publication, and archiving of the results. All works shall be carried out and completed as approved, unless otherwise agreed in writing by the Local Planning Authority.”

1.2 The archaeological scheme of work will involve a topographic and photographic survey of the remains of the Duffield Bank Private Railway within the area to be impacted by the proposed development and associated landscaping and access.

1.3 This document forms a brief for the archaeological scheme, and should be used by archaeological contractors to develop a more detailed method statement (WSI) for the archaeological survey. The WSI should be submitted for approval to the Development Control Archaeologist no less than two weeks before the proposed start of work on site.

1.4 Discharge of the archaeological condition will be on completion of site reports and deposition of archive, not on approval of the WSI.

### **2 Background**

2.1 The proposed development lies within the footprint of Duffield Bank Private Railway (Derbyshire Historic Environment Record number 19412). This was a 15" gauge railway built and run by Sir Arthur Percival Heywood between 1874 and 1916 in the grounds of his mansion on Duffield Bank. Much of the trackbed and tunnels are still intact, but the associated buildings and a wooden viaduct were largely sold off or dismantled during the First World War.

2.2 One of the tunnels associated with the railway now survives below 'Loner's Lair'. The proposed new development incorporates the tunnel *in situ*, with the house moved to the south of the existing plot. The southern end of the tunnel will however now run into the basement of the existing house, and this will presumably impact or obscure aspects of the tunnel fabric towards this southern end.

2.3 Moving the house to the south of the existing plot also means that trackbeds and other landscaping in this area, associated with the Duffield Bank Railway, will be impacted during the construction of the replacement dwelling and its associated landscaping.

2.4 The extent of landscaping associated with the proposed development is not fully clear from the application documents. It will be necessary at a preliminary stage to identify the full

footprint of landscaping on the ground, and the extent to which this will impact on remains of the railway.

### **3 Aims and rationale**

3.1 The topographic/photographic survey should aim to:

- Fully identify the footprint of the development, including landscaping, and the extent to which this will impact on remains of the railway;
- Identify all remains of the Duffield Bank Private Railway within the footprint of the development;
- Achieve 'preservation by record' (*sensu* PPG16) of the remains of the railway to be impacted or obscured by the development.

### **4 Outline methodology**

4.1 It is intended only to give a brief overview here. The appointed contractor should develop a full method statement in their submitted WSI.

4.2 An initial walkover survey of the footprint of the development should take place, to identify all surviving remains of the railway. The contractors should also familiarise themselves with the broader context of the surviving railway remains outside the proposal area. Sufficient background documentary research should take place to allow the contractor to identify and interpret railway features in context.

4.3 Topographic survey of the surviving railway remains should then take place, using EDM/Total Station to fix the survey accurately with relation to the National Grid and Ordnance Datum. This should result in a single site survey plan, at an appropriate scale, with earthwork features shown using hachures. Drawing conventions should follow the MoLAS *Archaeological Site Manual* (2004).

4.4 Photographic survey of the surviving remains, including the parts of the tunnel to be impacted or obscured in the development, should also take place. Photographic locations and orientations should be clearly shown on a single site plan. The primary photographic archive should be compiled using a 35mm SLR camera with black-and-white print film. This should be supplemented with either 35mm colour slide film (SLR camera), or high resolution colour digital photography (digital SLR camera of at least 7 megapixel resolution). All photographs should be recorded on an appropriate pro forma sheet. All photographs should contain an appropriate photographic scale.

4.5 All archaeological fieldwork, recording of archaeological features and deposits and post-excavation analysis should be carried out to acceptable archaeological standards. The contractor will be expected to abide by the Code of Practice of the Institute of Field Archaeologists, and to follow the guidance provided in *Archaeological Science at PPG16 Interventions* (English Heritage 2003).

4.6 The appointed archaeological contractor should undertake a site risk assessment and operate at all times with due regard to health and safety regulations.

### **5 WSI and monitoring**

5.1 A written scheme of investigation (WSI) should be formulated by potential contractors and submitted to the Development Control Archaeologist for approval. This document forms an agreed scope of works.

The proposal should include:

- A full description of the proposed survey methods to be used.
- A projected timetable for work on site
- Details of the arrangements made for deposition of the site archive

5.2 The work will be carried out by appropriately qualified and experienced staff. Details of staff numbers and their relevant experience should be included in the WSI, plus their responsibilities in carrying out the work. Staff CVs should be included, unless already submitted to the Development Control Archaeologist in previous project specifications.



### **5.3 Any changes to the agreed WSI will be discussed with, and agreed with, the Development Control Archaeologist before implementation**

5.4 The WSI must be submitted for approval to the Development Control Archaeologist at least two weeks before commencement of work on site.

5.5 The Development Control Archaeologist must be given at least one week's notice of the start of work on site, including the name and contact number of the responsible archaeologist. Monitoring visits may be carried out at any time during site work.

5.6 Should site work be intermittent, the Development Control Archaeologist should be given reasonable notice of each separate attendance on site.

5.7 The Development Control Archaeologist should be informed in writing (email is acceptable) once site work is complete.

5.8 The Development Control Archaeologist should be informed in writing (email is acceptable) once archive deposition is complete.

## **6 Report**

6.1 The preparation of the report should follow the guidelines published by the Institute for Archaeologists.

6.2 Upon completion of the fieldwork a report will be produced and copies submitted to the Local Planning Authority, the Development Control Archaeologist and the Derbyshire HER.

6.3 The report should include as a minimum,

- Non-technical summary
- Introductory statement
- Aims and purpose of the project
- Methodology
- An objective summary statement of results
- Conclusion
- Supporting illustrations at appropriate scales. Drawings should follow the conventions developed in the MoLAS *Archaeological Site Manual* (1994)
- Illustrative site photography
- Details of archive location
- References
- A copy of the OASIS form
- A copy of this brief

6.5 A short summary report (see notes attached) should be supplied as hard copy and a pdf to the Development Control Archaeologist along with the full report. The appointed archaeological contractor should also provide the Development Control Archaeologist with a written statement on how the project is to be published. *Where no further publication is envisaged then the short report will be published in an annual round-up on developer-funded archaeology in Derbyshire Archaeological Journal.*

## **7 Archive deposition**

7.1 Arrangements should be made from the outset of the project for the full and final archive to be deposited at Derby Museum and Art Gallery in accordance with the deposition and archiving standards outlined in *Procedures for the Transfer of Archaeological Archives* (Museums in Derbyshire, 2003). The Museum should be contacted before fieldwork to discuss potential costs for archiving, and these must be built into agreed project costs. Before fieldwork commences an accession number should be drawn and permission obtained from the landowner for deposition of the archive. Your contact will be:

Your contact will be:

## **Derby Museum and Art Gallery**

The Strand

Derby

DE1 1BS

☎ 01332 641901

[museum@derby.gov.uk](mailto:museum@derby.gov.uk)

7.2 At the start of work (immediately before fieldwork commences) an OASIS online record <http://ads.ahds.ac.uk/project/oasis/> must be initiated and key fields completed on Details, Location and Creators forms. All parts of the OASIS online form must be completed for submission to the HER. This should include an uploaded .pdf version of the entire report (a paper copy should also be included with the archive).

7.3 Written confirmation of the archive transfer arrangements, including a date (confirmed or projected) for the transfer, must be included as part of the final report. . The Development Control Archaeologist must be informed in writing when final transfer of archives has taken place.

## **8 Publication**

8.1 Contingency publication costs must be built into agreed project budgets from the outset. Where no further publication is envisaged then a summary of the project, with selected drawings, illustrations and photographs, should be submitted within 2 years of the completion of the project to Derbyshire Archaeological Journal for publication. A sheet of instructions for contributors is attached.

# APPENDIX 2

# OASIS DATA COLLECTION FORM: England

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**OASIS ID: trentpea1-84771**

## Project details

Project name	Loner's Lair, Duffield
Short description of the project	A photographic and topographic survey of an area at Duffield Bank that was the site of a 19th century private narrow gauge railway and is now affected by the replacement of an existing bungalow by a larger new house and landscaping around it.
Project dates	Start: 19-08-2010 End: 31-12-2010
Previous/future work	No / Not known
Any associated project reference codes	LLD - Sitecode
Type of project	Recording project
Site status	None
Current Land use	Other 5 - Garden
Current Land use	Other 2 - In use as a building
Monument type	MINIATURE RAILWAY Post Medieval
Significant Finds	WALL Post Medieval
Investigation type	'Full survey'
Prompt	Planning condition

## Project location

Country	England
Site location	DERBYSHIRE AMBER VALLEY DUFFIELD Loner's Lair, Duffield
Study area	3000.00 Square metres
Site coordinates	SK 3533 4306 52.9834048133 -1.473702837690 52 59 00 N 001 28 25 W Point
Lat/Long Datum	Unknown
Height OD / Depth	Min: 95.00m Max: 110.00m

## Project creators

Name of Organisation	Trent and Peak Archaeology
Project brief originator	Local Planning Archaeologist

Project design originator	Richard Sheppard
Project director/manager	Richard Sheppard
Project supervisor	Dr David Walker
Type of sponsor/funding body	Developer
<b>Project archives</b>	
Physical Archive Exists?	No
Digital Archive recipient	Derby Museum
Digital Archive ID	DBYMU 2010-46
Digital Contents	'Survey'
Digital Media available	'GIS','Images raster / digital photography','Survey','Virtual reality'
Paper Archive recipient	Derby Museum
Paper Archive ID	DBYMU 2010-46
Paper Contents	'Survey'
Paper Media available	'Map','Notebook - Excavation',' Research',' General Notes','Photograph','Survey'
Entered by	Richard Sheppard (Richard.Sheppard@nottingham.ac.uk)
Entered on	19 October 2010

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