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Project No: 22131

Project: Roughbirchworth Lodge
Roughbirchworth Lane
Oxspring
Barnsley
S36 8YZ

Subject: Road Condition Report

Date: 24th October 2023 (Issue 02)

1.0 GENERAL

This road condition report has been prepared to support the planning application. The location of the proposed development site can be seen in the image below.

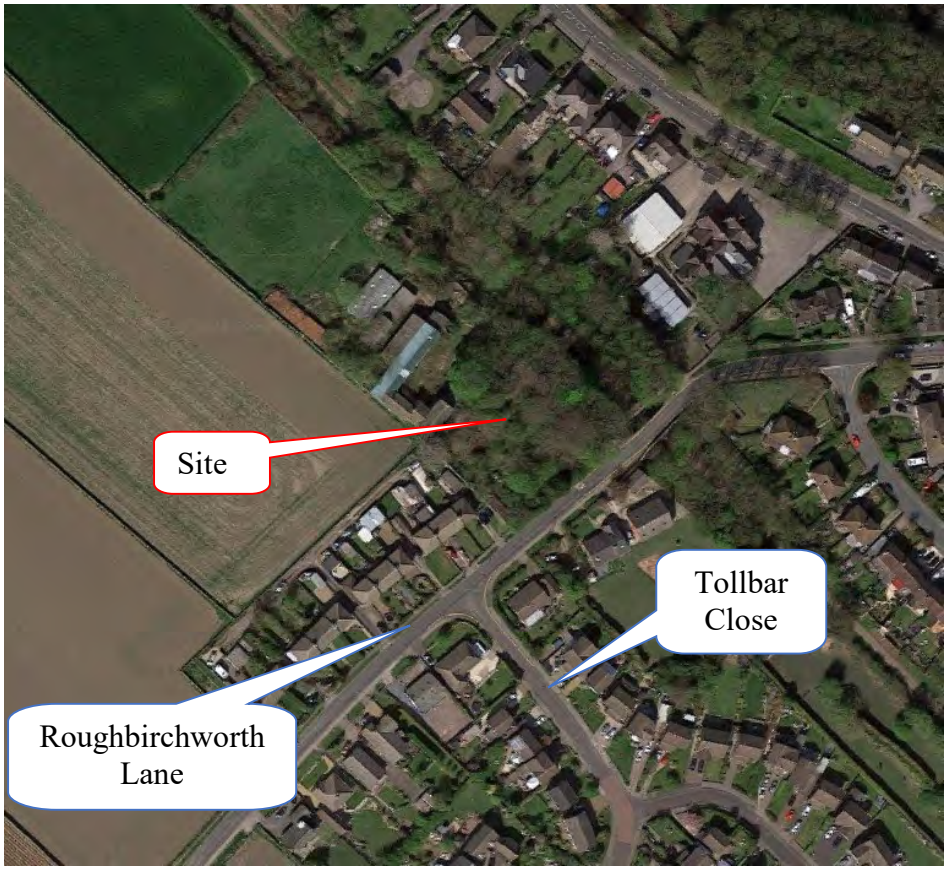


Figure 1.0 – Location of Development

The site is currently occupied by several outbuildings, hardstandings and an open expanse of land including trees and shrubs.

2.0 ROAD CONDITION ASSESSMENT

2.1 Introduction

2.1.1 Project Brief

The road condition has been assessed for 240m along Roughbirchworth Lane. This is 50m southwest and 192m northeast of the main access for the proposed development. The location of the photographs can be seen partly below and in Appendix B.

Figure 2 – Photograph Location Plan

2.1.2 Existing Road Condition

Site photgraphs, taken on the 2nd December 2022 during a site reconaissense, have been included in this report and the location can be found in Appendix B. The drawing includes a chainage from the centre of the proposed junction; northerly from Ch.0m to 192m and southerly from Ch.0m to -50m.

The condition of the road is described in detail below for each photograph.

No intrusive investigtion was carried out for this report.

Ch.-50m to Ch.-28m (Images 01 to 07)

This location includes the junction bewteen Roughbirchworth Lane and Tollbar Close. Image 01 shows crazing in the footpath surface layer and in addition, kerbs and road markings are in poor condition.

Image 01 – Chainage -50m

Image 02 – Chainage 45m

Image 03 also shows potholes forming along the junction tie-in construction joint and that pothole repair attempts have been carried out previously.

Image 03 – Chainage 40m

Image 04 shows serveral service trench infills with a variety of asphalt mixes and aggregate sizes.

Image 04 – Chainage 47m

Image 05 shows concrete gully surround failure including fretting and crazing of the surface layer.

Image 05 – Chainage 36m

Images 06 and 07 appear to show polishing of the surface course, possibly caused by excessive amounts of binder in the ashpaly mix.

Image 06 – Chainage 35m

Image 07 – Chainage -28m

Ch. 23m (Image 08)

Image 08 reveals failing trench infill forming along the construction joint of the trench. The failure is likely due to non-application of sealant.

Image 08 – Chainage 23m

Ch. 38m (Image 09)

Image 09 reveals several patch repairs that are poorly constructed with potholes forming. The use of varrying aggregates and no sealant has caused weakness in the surface layer. Road markings are in poor condition.

Image 09 – Chainage 38m

Ch. 38m (Image 10)

Image 10 reveals cracks forming in the joint tie-in and the use of different aggregates is causing weakness in the surface layer. Road marking are in reasonable condtion.

Image 10 – Chainage 38m

Ch. 40m (Image 11)

Image 11 reveals fretting (aggregate loss from the surface layer) along the crown line of the carriageway.

Image 11 – Chainage 40m

Ch. 57m (Image 12)

Image 12 reveals the failure of manhole surround, which is usually the sympton of partial or total failure of the road surface layer. In addition, road markings are in poor condtion.

Image 12 – Chainage 50m

Ch. 62m (Image 13)

Image 13 reveals settlement of a patch repair. Generally road markings are in reasonable condition and kerbs are in poor condition.

Image 13 – Chainage 62m

Ch. 82m (Image 14)

Image 14 reveals fretting of the surface course, which is usually casused by the loss of aggreagate in the road surface. Due to water ingress this will eventually cause potholes.

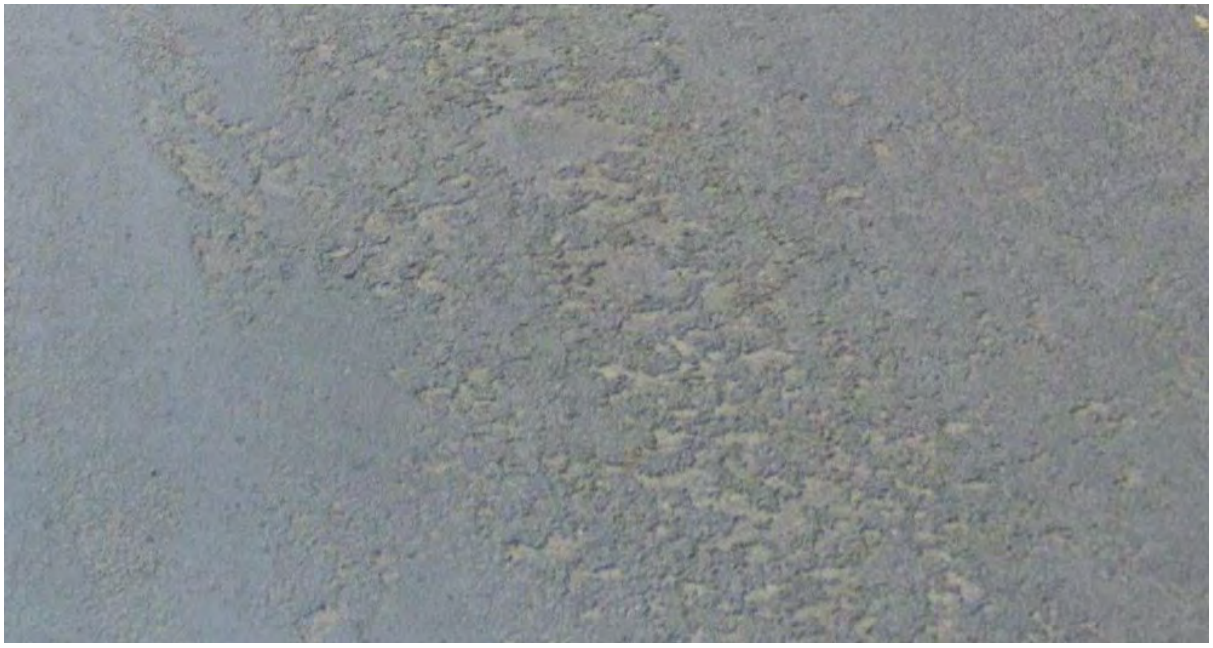


Image 14 – Chainage 82m

Ch. 104m (Image 15)

Image 15 reveals the failure of the gully surround and patch repair. This failure does not require immediate repair, however, it may be likely that these two patch repairs will form potholes. In addition, road markings are in poor condtion.

Image 15 – Chainage 104m

Ch. 107m (Image 16)

Image 16 reveals the failure of the gully surround and patch repair. This failure does not require immediate repair, however, it is considered that these two patch repairs will form potholes.

Image 16 – Chainage 107m

Ch. 125m (Image 17)

Image 17 reveals crazing of the surface course, which is usually the sympton of partial or total failure of the road surface layer.

In addition, potholes are forming along the joint. Not all potholes that form on roads require immediate repair and most reported to us generally receive a lower category of priority for repair depending on their depth, position in the road and the volume of traffic using the route. In addition, road markings are in poor condtion.

Image 17 – Chainage 125m

Ch. 172m (Image 18)

Image 18 reveals a pothole, cracking and crazing forming around the ironwork. Road markings and kerbs generally in poor condition.

Image 18 – Chainage 172m

Ch. 176m (Image 19)

Image 19 reveals the failure of several patch repairs. This failure does not require immediate repair, however, it is considered that these patch repairs are likely to form potholes. In addition, road markings are in poor condtion.

Image 19 – Chainage 176m

Ch. 192m (Image 20)

Image 20 reveals reveals the failure of several patch repairs surrounding ironwork. This failure does not require immediate repair, however, it is considered that these patch repairs are likely to form potholes. In addition, road markings are in poor condtion.

Image 20 – Chainage 192m

Ch. 192m (Image 21)

Image 21 reveals the failure of several patch repairs forming cracking, crazing and potholes. This failure does not require an immediate repair, however, it is considered that these road surface failures will be exacerbated by water ingress and freeze thaw effects. In addition, road markings are in poor condtion.

Image 21 – Chainage 192m

Ch. 192m (Image 22)

Image 22 reveals the failure of several patch repairs forming cracking and crazing. This failure does not require immediate repair, however, it is considered that these road surface failures will be exacerbated by water ingress and freeze thaw effects. In addition, road markings are in poor condtion.

Image 22 – Chainage 192m

Ch. 192m (Image 23)

Image 23 reveals the current condition of traffic bollards that are in resonable condition. However road markings are in poor condition and kerbs are in reasonalble condition.

Image 23 – Chainage 192m

Ch. 192m (Image 24)

Image 24 reveals the failure of several patch repair forming cracking, crazing and potholes. This failure does not require immediate repair, however, it is considered that these road surface failures will be exacerbated by water ingress and freeze thaw effects. In addition, road markings are in poor condtion.

Image 24 – Chainage 192m

Ch. 192m (Image 25)

Image 25 reveals the failure of several patch repair forming cracking, crazing and potholes. This failure does not require immediate repair, however, it is considered that these road surface failures will be exacerbated by water ingress and freeze thaw effects. In addition, road markings are in poor condtion.

Image 25 – Chainage 192m

3.0 Conclusion

The road is in generally poor condition and defects have formed on the road surface including shallow potholes, surface deterioration, edge failure, cracking and crazing. In addtion, kerbs and road markings are in poor condtion.

A further report will be submitted following the completion of the proposed residential development shown on the site plan contained in Appendix A.

4.0 Appendices

- Appendix A – Proposed Site Plan
- Appendix B – BDi Drawing Number 22131.006A – Photograph Location Plan.
- Appendix C – Topographical Survey
- Appendix D – Road Survey Extents

APPENDIX A

PROPOSED LAYOUT AT 1:250

ROUGHBIRCHWORTH LODGE, ROUGHBIRCHWORTH LANE, OXSPRING

north

The Trans Pennine Trail

Tree Canopy Line

This group of trees within the site curtilage are to be retained and root protection areas are shown in brown. Trees designated T1,T3,T47,T46,T43,T37,T36,T35 and T33

If plot 14 extends marginally into the root protection area, this may require none-intrusive foundations, for example mini-pile type.

T43 T46 T47 T37 T36 T35 T33 T3 T1 T28

rpa

remove existing gates and build up access

Proposed habitat zone within this general area.

proposed access road

turning head

1.5 m protected zone

5.0 m road

0.7 m margin

15.6 m

18.5 m

6m easement for existing culvert, hatched in blue

Extend existing boundary walls into site thus:

proposed access road

2.4 m

Visibility spay to the north is 2.4 x 68 m to the centreline of the carriageway. A visibility splay to the south of 2.4 x 75 m is achievable.

Existing footpaths on Roughbirchworth Lane to maintain their width and continue around radius curves into site. Include a 2m long ramp to provide transition from conventional design to the 'shared surface' proposal. (Include for 2m long 'lead - in' extending from top of ramp to ensure a smooth transition)

existing footpath

existing grass verge

Roughbirchworth Lane

Road Sign

steps

LP

BT

adjacent dwellings

1	2
3	4
5	6	7
8	
9	10	11
12	
13	14
15	
16	
17	
18	
19	
20	
21	
22	

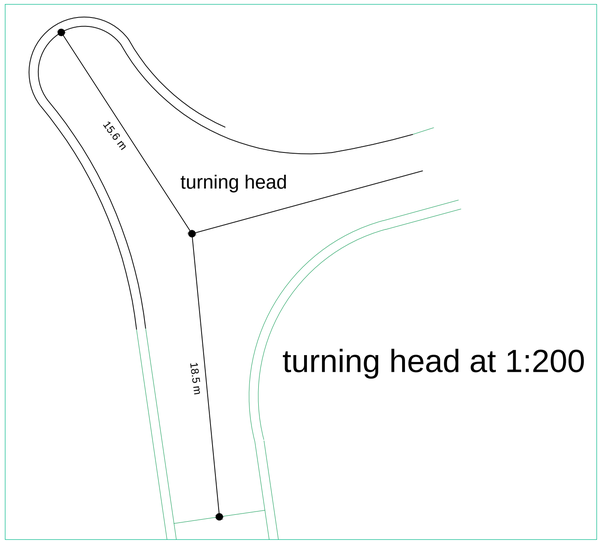
A total of 22 dwellings proposed as listed below.

- phase 1 affordable dwellings 7no. (A mix of 3 and 2 bed)
- phase 1 dwellings 7no. (Generally 4 bed)
- phase 2 dwellings 7no. (Generally 4 bed)
- 'signature plot' 1no. (Min 4 bed)

NB:

All dwellings comply with minimum rear garden space as set out in the SYRDG ie a min 50 sq m for 2 bed houses and 60 sq m for 3 bed and over

Indicative new tree planting thus :



REVISIONS

'B' Layout amended to include final highway requirements

'A' Layout amended in accordance with planning request

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CLIENT	Mr P Faxon
PROJECT	Proposed residential development
LOCATION	Site off Roughbirchworth Lane, Oxspring, (South of Trans Pennine Trail)
DRAWING	Proposed site layout
SCALES 1:250	DATE Oct '18
DRWG No. 2017/28/03 REV. B	DRAWN BY PD

APPENDIX B

Image 02 (Chainage -45m)

Image 06 (Chainage -35m)

Image 01 (Chainage -50m)

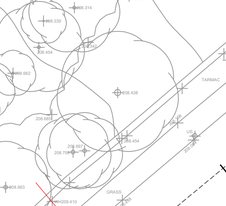

Image 08 (Chainage 23m)

Image 10 (Chainage 38m)

Image 12 (Chainage 57m)

Image 11 (Chainage 40m)

Image 09 (Chainage 38m)

Image 07 (Chainage -28m)

Image 03 (Chainage -40m)

Image 04 (Chainage -47m)

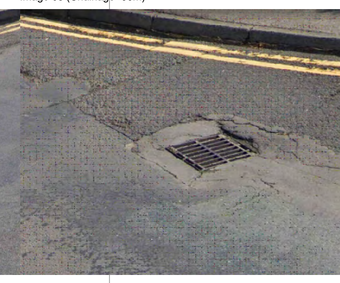

Image 05 (Chainage -36m)

Image 13 (Chainage 62m)

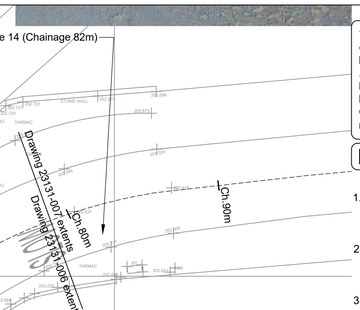

Image 14 (Chainage 82m)

Ch.-50m
Ch.-40m
Ch.-30m
Ch.-20m
Ch.-10m
Ch.0m
Ch.10m
Ch.20m
Ch.30m
Ch.40m
Ch.50m
Ch.60m
Ch.70m
Ch.80m
Ch.90m

Drawing 2313-007 extents

Drawing 2313-008 extents

This drawing is to be read in conjunction with all other relevant documentation.
Do not Scale
All setting out by contractor. Report all discrepancies to bdi Structural Solutions.
Drawing Copyright of BDI Structural Solutions ©
Client required to comply with requirements of Party Wall Act as required by nature of work.

NOTES

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3. LAYOUT TO BE USED FOR ROAD CONDITION PHOTOGRAPH LOCATIONS ONLY.

LEGEND

PLANNING

Rev	Date		Drawn	Ch'kd	Rev'd
A	23.10.23	GENERAL AMENDMENTS	AJ	JJ	JJ
0	02.12.22	FIRST ISSUE, FOR APPROVAL	AJ	JJ	JJ

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Client
Mr P Faxon

Project
Proposed Residential Development
Roughbirchworth Lane, Oxspring
(South of Trans Pennine Trail)

Drawing Title
Road Condition Report
Photograph Locations - Sheet 1 of 2

Scale 1:200 at A1

Drg No. 22131-006

Drawn AJ | **Checked** JJ | **Reviewed** JJ

Originated Date 02.12.2022

Status/Rev A

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LEGEND

Oxspring Primary School

402100.000N


Image 25 (Chainage 192m)


Image 23 (Chainage 188m)


Image 21 (Chainage 192m)


Image 22 (Chainage 192m)

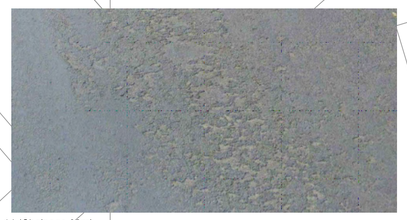
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Image 16 (Chainage 107m)


Image 13 (Chainage 62m)

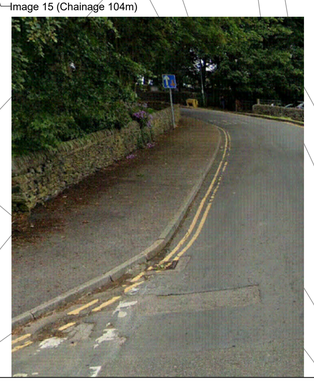
Image 15 (Chainage 104m)


Image 17 (Chainage 125m)

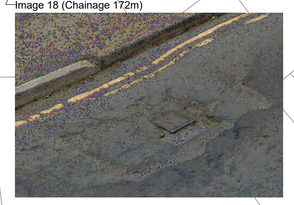
Image 18 (Chainage 172m)


Image 19 (Chainage 176m)

Drawing 23131-007 extents

Drawing 23131-006 extents

Drawing 23131-008 extents

Ch:70m
Ch:80m
Ch:90m
Ch:100m
Ch:110m
Ch:120m
Ch:130m
Ch:140m
Ch:150m
Ch:160m
Ch:170m
Ch:180m
Ch:190m
Ch:192m

PLANNING

Rev	Date		Drawn	Ch'kd	Rev'd
0	23.10.23	FIRST ISSUE, FOR APPROVAL	AJ	JJ	JJ

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Client
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Project
Proposed Residential Development
Roughbirchworth Lane, Oxspring
(South of Trans Pennine Trail)

Drawing Title
Road Condition Report
Photograph Locations - Sheet 2 of 2

Scale 1:200 at A1

Drg No. 22131-007

Drawn	Checked	Reviewed
AJ	JJ	JJ

Originated Date 02.12.2022

Status/Rev 0

Image 25 (Chainage 192m)

Image 23 (Chainage 188m)

Image 21 (Chainage 192m)

Image 20 (Chainage 192m)

Image 16 (Chainage 107m)

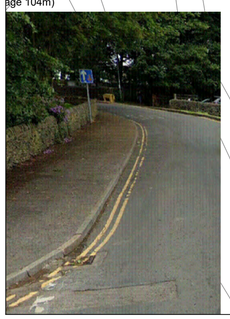
Image 22 (Chainage 192m)

Image 24 (Chainage 192m)

Image 19 (Chainage 176m)

Image 18 (Chainage 172m)

Image 17 (Chainage 125m)



age 104m)

402100.000N

Ch. 120m
Ch. 130m
Ch. 140m
Ch. 150m
Ch. 160m
Ch. 170m
Ch. 180m
Ch. 190m
Ch. 192m

Drawing 23131-008 extents
Drawing 23131-007 extents

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LEGEND

PLANNING

Rev	Date		Drawn	Ch'kd	Rev'd
0	23.10.23	FIRST ISSUE, FOR APPROVAL	AJ	JJ	JJ

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Client
Mr P Faxon

Project
Proposed Residential Development
Roughbirchworth Lane, Oxspring
(South of Trans Pennine Trail)

Drawing Title
Road Condition Report
Photograph Locations - Sheet 2 of 2

Scale 1:200 at A1

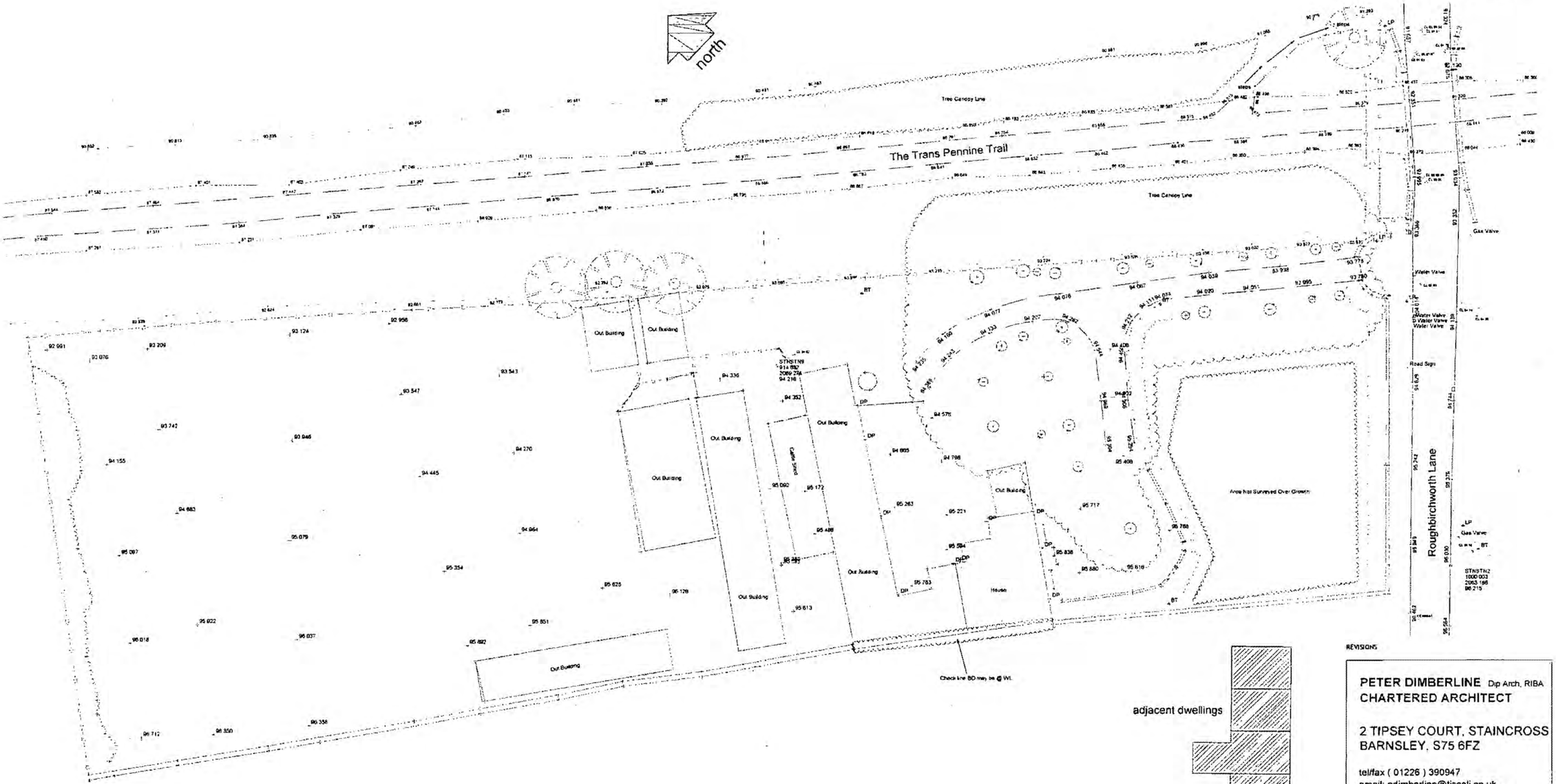
Drg No. 22131-008

Drawn AJ | **Checked** JJ | **Reviewed** JJ

Originated Date 02.12.2022

Status/Rev 0

APPENDIX C



adjacent dwellings

Existing topographical site plan at 1:250

REVISIONS

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CLIENT
Mr P Faxon

PROJECT
Proposed residential development

LOCATION
Site off Roughbirchworth Lane,
Oxspring, (South of Trans Pennine Trail)

DRAWING
Existing topographical site layout

SCALES 1:250 DATE Oct '18

DRWG No. 2017/28/01 DRAWN BY PD

REV.

APPENDIX D

Limits of Condition Survey