



Excavation Report Report No. 3847

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The Former Bus Station, Bransty Row, Whitehaven, Cumbria: Archaeological Strip & Map.

Report No. 3847

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#### 1. INTRODUCTION

#### 1.1 General

This report presents the results of an Archaeological Strip and Map carried out by CFA Archaeology Ltd (CFA) in February and March 2019 within the former bus station on Bransty Row, Whitehaven, Cumbria (NGR: NX 9748 1851) (Fig. 1). The work was commissioned by BEC.

A Written Scheme of Investigation (WSI) dated 21 February 2019 covering this work was produced by CFA in consultation with Jeremy Parsons of Cumbria County Council Historic Environment Service (CCCHES) and was designed to fulfil the requirements of CCCHES.

# 1.2 Background

Copeland Borough Council have granted planning consent (Reference 4/18/2292) for the construction of an innovation and business start-up incubator hub at the former bus station on Bransty Row, Whitehaven. The planning permission was initially subject to an archaeological condition requiring a trial trenching evaluation, which was undertaken in November and December 2018 and the results produced under separate cover (Suddaby 2018).

The archaeological evaluation identified various structural remains below the concrete floor surface of the bus station some of which were thought to relate to part of a dye works depicted on the 1874 1<sup>st</sup> Edition and 1899 2<sup>nd</sup> Edition Ordnance Survey maps. On the basis of these findings a programme of mitigation measures consisting of a targeted strip and map was requested by CCCHES.

The site had previously been subject to a Heritage Impact Assessment (Tweedie, 2016). Historic maps show that part of the site may have been developed in the 17th century and that industries were located on the Bransty Row street front from the 18th century. A dye works is thought to have operated from Bransty Row from the 18th century.

Information obtained from 'The Whitehaven News' (https://www.whitehavennews.co.uk/news/17124663.a-hive-of-industry/) indicates that the dye works were originally established by the Washington family in the early 1700s. It was bought by John Brown in 1801 and, following his death in 1829, was taken over by his son William. The aforementioned newspaper article recounts 'vast vats containing solutions of various natural dyes', the water for which would presumably have been supplied by the adjacent Bransty Burn. It remained in the Brown family until it stopped trading during the first part of the 20<sup>th</sup> century.

The dye works is depicted on a photograph (Fig.2) thought to date to the 19<sup>th</sup> century. It was taken looking SW down Bransty Road and depicts the Grand Hotel, with the dye works opposite in the lower left part of the photograph.

## 1.3 Objectives

The aims and objectives of this programme of works are:

- To preserve by record the remains of the dye works within the area highlighted by CCCHES for Strip and Map recording;
- To prepare an assessment report on the results of the work;
- To make recommendations for further post-excavation and publication work, where appropriate.

#### 2. WORKING METHODS

#### 2.1 General

CFA Archaeology Ltd follows the Chartered Institute for Archaeologists' Code of Conduct, Standards and Guidance as appropriate. Recording of all elements followed established CFA methods.

# 2.3 Strip and Map

A trench (Fig.1) measuring c.20m NE to SW by 10m NW to SE was excavated where remains of the former dye works had been identified during the evaluation and were further predicted from the OS mapping (Fig. 3). The trench was slightly irregular to take on-site obstructions into account. These consisted of live/potentially live utility services to the south of the trench, steel supports for the bus station wall, standing buildings along the southern side of the trench and the Bransty Burn culvert, which all had to be avoided.

All modern overburden was removed by a tracked mechanical excavator equipped with a smooth-bladed bucket under constant archaeological supervision. Any further excavation required to fulfil the objectives of the project was carried out by hand.

All excavation and on-site recording was carried out according to standard CFA procedures, principally drawing, photography and by completing standard CFA record forms.

The stratification of all excavated areas was recorded whether or not significant archaeological deposits were identified.

#### 3. ARCHAEOLOGICAL RESULTS

### 3.1 General

The structural remains uncovered all relate to the former dye works and can be directly related to buildings depicted on the 1874 Ordnance Survey maps (Fig. 3). These remains had been overlain with demolition rubble and an area of cobbled surfacing prior to the construction of the concrete floor for the bus station.

Numbers in bold refer to the contexts a full list of which is contained within Appendix 2.

# **3.2 Strip and Map (Figs. 5 - 8)**

The features depicted on the 1874 Ordnance Survey map (Fig. 3) where the trench was located consist of two conjoined building (Buildings 1 and 2) around three sides of a small central courtyard. The fourth side of the courtyard was formed by a third building (Building 3) which lay just out-with the development area and is not discussed further in this report. The surviving remains of Building 1 were divided into two distinct parts so for the purposes of this report it was sub-divided into Building 1A and Building 1B. The 1899 Ordnance Survey Edition indicated a degree of redevelopment, with Building 2 having been extended to the north-west to cover the courtyard area. This later map also suggested that the north-eastern end of Building 1B had been extended, but the uncovered remains appeared to relate to the structure as depicted on the 1874 map.

#### Building 1A

Building 1A formed the south-western part of Building 1 and was pentagonal in plan. Information extrapolated from the 1874 Ordnance Survey map (Fig. 3) suggest that it would have had overall measurements of c.9.5m south-west to north-east by 7m south-east to north-west, of which an area measuring c.6.4m south-west to north-east by 6.4m south-east to north-west was uncovered. The surviving remains of this building were defined by lime mortar bonded sandstone walls **002**, **003** (Fig.13) and **116** (Fig. 5). These walls were upstanding to a maximum height of 0.6m and had widths of 0.45m, 0.4m and 0.5m respectively.

Internally, one room/compartment with maximum measurements of 4.8m by 2.5m survived to floor level. The extent of this room was defined by external walls 116, 002 and 003 and internally by brick wall footings 043 and 121, which were separated by sandstone slabs 118 (Figs. 5, 21). The floor surface consisted of sandstone slabs (084, 115), which had two repairs in brick (085, 114), and a small area of cobbles (113). Several of the slabs had metal fixings (099) attached to them, presumably acting as tie downs for machinery. Against wall 002, a brick lined pit (032) had been cut through the floor (Fig. 22). This feature was 1.2m by 0.4m and was 1.4m deep. A ceramic pipe (035) was recorded at each end of the base (Fig. 23) presumably indicating that water or something similar flowed through here.

The features (Figs. 5, 8 and 21) to the SW of internal walls **043/118/120** consisted of a number of further wall footings (**039**, **042** and **069**) and parts of a network of ceramic

drains (**044** and **064**). Although in very poor condition, wall footings **039** (Figs. 5, 8, 21) appeared to form a defined structure measuring around 1m square by 0.2m high, which was constructed from red brick (with occasional sandstone blocks inserted into the brickwork). Within it, a deposit of compact sand (**040**) was recorded overlying natural sandy gravel subsoil (**041**). A band of yellow clay (**038**) identified on the upslope (NE) side abutting this wall may have been a sealing deposit to make the bricks watertight suggesting that **039** may have been a water storage tank.

Wall footings **042** (Fig. 21) were formed from edge-set red bricks which were keyed into wall footings **043**. This wall extended for a distance of 1.2m before turning through 90° in a south-easterly direction where it had been cut by drain **064**. Abutting wall **042** was a line of sandstone wall footings (**069**), which overlay drain **064**, and continued south-westward out of the excavation area. A sondage excavated at the junction between walls **042** and **043** exposed a sand surface (**075**) similar to **040** within structure **039**.

Ceramic drains **044** and **064** (Fig. 21) were part of a complex of drains identified within these buildings. Drain **064** probably tied in with drain covers **030** and **108** which were located within the courtyard area immediately to the east. Information from the 1874 Ordnance Survey map suggests that this courtyard contained a large water tank. A reliable water source would have been an essential component to the dye works for preparing and washing the dyed cloth.

## Building 1B

Building 1B (Fig. 8) formed the northern part of Building 1 and was broadly trapezoidal in plan (with a slight step along its south-western wall). Information extrapolated from the 1874 Ordnance Survey map (Fig. 3) suggests that it had a south-west to north-east width of c.8.5m, with a long south-east to north-west side of c.14.5m and a short side on the same alignment of c.9m. The excavated trench uncovered a maximum 9.6m south-east to north-west length of this building together with the full extent of its south-west to north-east width. The surviving remains of this building were defined by lime mortar bonded walls **024**, **119**, **116** (to north of **002**), **002** and **056**. These walls were upstanding to a maximum height of 0.6m and had widths of between 0.45 and 0.5m. Wall **119** partially overlay **116** (Fig. 12) and Wall **024** and was probably a later repair or alteration.

This building was divided into at least three compartments by internal wall **091**, which was of lime bonded sandstone construction and had a width of 0.5m. To the north-west of Wall **091** the building had been surfaced with dressed red sandstone slabs (**015**) (Figs. 6-8 and 14). A number of shallow slots (**098**) for seating internal equipment / machinery were cut into the slabs and a number of rusty protruding metal fittings (**099**) (Fig. 14) would have had a similar function.

At the SW end of floor **015**, against wall **002**, a deep pit (**007**) was recorded (Fig.15). At floor level, this had a length of 2.2m, a width of 1.4m, and a depth of 1.2m. A very substantial setting of lime bonded dressed sandstone masonry (**008**) was recorded in the base (Figs. 5, 15) and wall **002** had been partly refaced with bricks (**012**) at this point. Otherwise, the feature was filled with rubble (**004**). To the SE of **007**, a slightly raised sandstone slab was located against wall **056** it had a shallow gully (**101**) around

the perimeter which continued into the structure of wall **056**. Two firebrick plinths (**102, 103**) were set on the surface of the slab. This was presumably a stand for something with a drainage track around its' base.

To the immediate NE the feature described above, two curving grooves (100) were cut in to the floor. Deeper cut slots were present at intervals along the line of each grove. These were presumably where some form of structure was seated in to the floor and was presumably associated with r the slab and brick plinths (102, 103).

Another feature within surface **015** consisted of a small area of brick flooring (**028**) measuring 0.96m by 0.7m which extended into a recess in Wall **024**.

The removal of brick surface **028** and an area of floor slabs **015** adjacent to walls **024** and **119** (Figs. 16-18) revealed that surface **028** overlay and earlier surface of dressed sandstone slabs (**068**) which were associated with a surface of worn sandstone slabs (**072**), well laid red bricks (**073**) and cobbles (**074**). These surfaces did not however directly underlie **015**, they were separated by around 0.1m of sandy ash (**070**) and crushed lime mortar (**071**). Large numbers of pins were recovered from **070**. Notably, the slabs forming surface **072** were aligned with the Bransty Burn and wall **024/116**, rather than wall **091** to the east. To the SW, the surfaces were not present and a deposit of stones, occasional bricks and a gritty mortar-rich matrix (**082**) was recorded. To the NE, natural subsoil **041** was recorded under **015** (Fig. 17). This floor level is considered to represent part of an earlier floor surface for the building.

To the east of flagstone floor **015**, internal wall **091** was abutted by a brick surface (**092**) and a broken flagstone surface (**093**) (Fig.8). These surfaces together with a north-west to south-east extension of Wall **091** had been cut by a later ceramic drain (**095**).

### Building 2

Building 2 was also broadly trapezoidal in plan, but was slightly stepped along its south-western edge. Information extrapolated from the 1874 Ordnance Survey map (Fig. 3) suggested that it had a maximum south-west to north-east width of c.8.8m, with a long south-east to north-west side of c.13m and a short side on the same alignment of c.10.5m. Only a very small area of this building measuring c.4m by 2.7m was uncovered (Fig. 8). This was defined by brick wall **047**. An expected continuation of lime bonded mortar wall **056** extending further to the south-east was not identified suggesting that there was probably and internal doorway between Building 1B and Building 2. A dotted line on the 1874 Ordnance Survey map where this building abutted the courtyard (along the line of Wall **047**) indicated that it may have been open fronted. Internally, the floor consisted of an extension of flagstones **015**. Information from the 1899 Ordnance Survey Edition indicated that this building was later extended to cover the courtyard area.

## Courtyard and External Areas

The Ordnance Survey map of 1874 (Fig.3) depicted an L-shaped courtyard located between Buildings 1, 2, and 3. Information extrapolated from this map indicated that it measured 10m from south-west to north-east by 4.8m north-west to south-east, with

both legs of it having a width of c.2.4m. A small structure depicted at the northeastern end of the courtyard was blue in colour, possibly indicating that it was a water storage tank.

The surviving remains within the courtyard area consisted of a brick-surface (104) measuring 2.6m long by 1.5m wide. This brick surface corresponded exactly with the location of the possible water tank depicted on the 1874 Ordnance Survey map. It was edged with red brick (105 and 106) and had a small brick-built pit (058) (Fig.19) measuring 0.7m by 0.4m in the north-western corner. This brick edging would probably have supported a large metal tank. A metal drain cover in the south-western corner of surface 104 would probably have tied the tank in to drain 064. A continuation of flagstone surface 015 partially overlying edging bricks 105 would have provided a working surface along the edge of the tank.

To the south-west of surface **104** there was a square yellow brick feature (**017**) measuring 0.8m across. It was filled with red sandy gravel (**029**) and had a vertical pipe (**030**) in the corner. A large stone slab (**107**) located to the north-east may have been a threshold stone. Running to the south-west of structure **017** parallel with Wall **003** (Building 1A), an unbonded brick wall (**016**) overlay a brick gully and metal grid (**018**), (Fig. 24). This also fed into drain **064**.

To the south-east of surface **104**, a brick lined tank (**050**, Fig. 20) was cut into natural gravels (**041**). This measured 1.2m by 0.35m and was over 0.7m deep. A broken glazed ceramic pipe (**051**) in the base led towards drain cover **030** and is probably the same system as drain **064** to the west.

At the north-western corner of Building 1B, a dry-stone wall (025) with a maximum height of around 0.4m and visible length of 2.5m was recorded (Figs. 10-11). It appeared to have been cut by the lime bonded wall of the dye works (024) although a recent drain (066, 089) had badly damaged the intersection between these walls (Fig. 11). This wall was depicted on the 1874 Ordnance Survey map (Fig. 3) extending round to enclose a narrow strip of land to the north-east and east of Building 1B. The later Ordnance Survey map indicates that the part of this enclosed area immediately to the north-east of Building 1B was roofed by 1899. Within this enclosed area two small pits (077, 079) were recorded (Fig. 9), cut into natural subsoil (041). Cut 077 was square in plan with a width of 0.2m and a depth of 0.1m, Cut 079 was irregular and slightly larger in plan but of similar depth. The fills (078, 080) were very similar and contained no finds. They may have been supports for the roofed area depicted on the 1899 Ordnance Survey map.

# **3.3 Finds** by Christina Hills

A small number of finds were retrieved on site, the artefacts are summarised here and detailed in appendix 5.

## **Ceramics**

Stoneware pottery was found in the rubble deposit **004**; it is the base of a jar from 'W. P. HARTLEY' and would have contained jam or pickle. Ten sherds of mixed white earthenware were recovered within sand **070**. All the pottery is modern in date.

Four clay pipe stems were found in sand **070** and are post medieval. Two possible ceramic kiln stilts were also identified within sand **070** and are although their date is uncertain, they are probably modern.

Two bricks were retrieved from on site, both of which are modern. One brick from deposit or surface **082** was stamped 'DEES \_ITEHAVE\_', presumably from the nearby Whitehaven Firebrick Co. started in the 1850's by James Dees. The second brick was part of the fire brick plinth **102** and stamped with '\_IRKBY', probably Birkby.

#### Metal

A copper alloy modern button was unstratified, it was very corroded but probably had 4 central holes and was decorated at the edge.

Eighty three pins were from sand **070** and were a mix of sizes and some were corroded and broken. Several had decorative, spiral bound, heads and were possibly dress accessories. However it is most likely that the pins all relate to textile working due to the previous dyeworks on the site.

A piece of lead tube and lead wire were from brick wall surface **016** and were both modern.

Three pieces of iron were all from sand **070** and were very corroded, one piece is a possible handle and the other two items were probably large nails.

#### Other

One piece of clear window glass was found in sand **070** and was recent in date.

A circular piece of bone with a central hole was from sand **070** and is a possible toggle or token.

### 4. CONCLUSIONS

The trench within the former bus station on Bransty Row, Whitehaven revealed the relatively well preserved footings of a portion of the former dye works. Structures within the trench included upstanding walls, intact floors, sumps, drains and tanks/pits. These features accurately reflect the structures depicted on the 1874 Ordnance Survey map and relate to the mid 19<sup>th</sup> century redevelopment of the dye works. Evidence of an earlier floor surface within indicates that the buildings underwent a degree of redevelopment over their lifetime. Cartographic evidence suggests a programme of redevelopment between 1874 and 1899, when the buildings were extended and a number of additional buildings out-with the strip and map area were constructed.

The majority of the finds came from the backfill of the buildings presumably post demolition so are not related to the use of the buildings. However, the finds from the sandy deposit (070) that separated the earlier and later floor surfaces may be related to the activities undertaken in the buildings.

The decision regarding any further mitigation measures lies with Cumbria County Council as advised by CCCHES.

A copy of the report will be deposited with CCCHES. The project archive, comprising all CFA record sheets, maps and reports, will be deposited as appropriate. An online OASIS entry will also be submitted.

### 5. REFERENCES

# **Bibliographic**

Tweedie, H 2016, Whitehaven Bus Station and Depot Redevelopment, Whitehaven, Cumbria, Heritage Impact Statement. CFA Technical Report No 3399

Suddaby, I 2018, The Former Bus Station, Brantsy Row, Whitehaven, Cumbria. Archaeological Evaluation. CFA Technical Report No 3818

# Cartographic

Howard, J. (1799) A Plan of the Town and Harbour of Whitehaven in the County of Cumberland from an actual survey.

Ordnance Survey (1874) First Edition, Cumberland Sheet LXVII.2. 25" to 1 mile

Ordnance Survey (1899) Second Edition. Cumberland Sheet LXVII.2. 25" to 1 mile

# **APPENDIX 1: Photographic Register**

Shot	Summary description of subject	Facing
1	Trench marked out pre-excavation	SSW
2-3	Working shots	Various
4-6	Working shots showing the upper deposits 002-005	NNE
7-8	The area between walls 002 and 003, showing deposits 001-005	NNE
9	Concrete 097 at the eastern corner of the site	NNE
10-12	Deposits 004-005 prior to removal	NE
13-18	Working shots, overburden almost removed	Various
19-22	Site cleaned	SE
23-24	Site cleaned	NNE
25-27	Site cleaned	N & NNW
28-30	Site cleaned	WNW
31	Site cleaned	SSW
32-34	Paved area 015 cleaned including the cut slots 098 and metal mounts 099 in	Various
	the stones highlighted	
35	Pit 007 emptied with stone structure 008 in the base	SSW
36	Pit 007 emptied with stone structure 008 in the base	WNW
37	Brick lined pit 036 in sandstone floor 084 emptied	WNW
38	Brick lined pit 036 in sandstone floor 084 emptied	ESE
39-40	Brick lined pit 059 in brick floor 106 emptied	NNE
41	Brick lined pit 062 with bricks 050 emptied	SSW
42	Post-holes 077, 079 pre-excavation	ESE
43	Brick alignment 016	WNW
44-45	Brick alignment 016 over drain 018	S
46	Wall 003 and the adjacent contexts 016, 018 and drain outlet	Е
47-48	Drain 018 and outlet after bricks 016 removed	WNW
49	Drain 018 and outlet after bricks 016 removed	NNE
50-51	Pit 007, elevation of wall 002 and brick infill 012	SSW
52	Mixed bricks in 016	
53	Drain 018 and outlet after bricks 016 removed with wall 017 and pipe 030 beyond	NNE
54	Drain 018 and outlet after bricks 016 removed with wall 017 and pipe 030 beyond	WNW
55-59	SE facing trench section over sandstone paving 015. Drawing 4	NW
60	Oblique view of the above section	WSW
61	Unbonded brick wall 047. Same mix of bricks as 016	SSW
62	047 overlying the end of stone wall 056	WNW
63	047 removed revealing the channel 101 and square slot in wall 056	WNW
64	047 removed revealing the channel 101 and square slot in wall 056	SSW
65	Brick surface 028 on the same level as floor 015	NW
66	General view of brick lining 048 and concrete capping 049	Е
67	Brick surface 028 mostly removed and sandstone slabs 068 exposed	NW
68	Brick surface 028 mostly removed and sandstone slabs 068 exposed	SW
69	Drain 066 cutting through the junction of walls 024, 025	N
70	Drain 066 cutting through the junction of walls 024, 025	NNE
71	Drain 066 cutting through the junction of walls 024, 025	WNW
72	General view of brick lining 048 and concrete capping 049	N
73-74	Close up of brick lining 048 with concrete capping 049 with drain 065 below	ESE
75	Drain 064 in cut 065	NNE
76	General view of the SW part of the trench	NNE
77	Drain 095 and lead pipe 096 within cut 094 at the SE side of the site	NE
78	* *	NE NE
79	015 and the underlying layers 070, 071 removed onto sandstone paving 072	
	015 and the underlying layers 070, 071 removed onto sandstone paving 072	NW
80	015 removed next to pit 007 with the underlying 070, 071 on the right and 082 on the left	WNW

Shot	Summary description of subject	Facing
81	015 removed next to pit 007 with the underlying 070, 071 on the right and	NW
	082 on the left	
82	015 removed next to pit 007 with the underlying deposits 070, 071	SSW
83-85	Deposit 046 removed and brick wall with sandy deposit on the face 043 exposed	NNE
86-88	Brick lined pit 062, SSW facing elevation showing the wall cut by 054/094 and 052	NNE
89	Ceramic pipe cut 076 in natural gravels 041	NNE
90	Slabs 015 removed in the corner of the building. There is no continuation of the cobbles 074	NW
91	Slabs 015 removed in the corner of the building. There is no continuation of the cobbles 074	NNE
92-94	General views of the areas where slabs 015 were removed and the underlying deposits 072, 073, 074	SE
95	Deposit 082 partially removed	SE
96	Deposit 082 partially removed with 072, 073, 074 beyond	NE
97	General view of the area where slabs 015 were removed and the underlying deposits 072, 073, 074	NW
98	General view of the area where slabs 015 were removed and the underlying deposits 072, 073, 074	SE
99	Square post-hole 077 pre-excavation	SE
100-101	Square post-hole 077 section	SE
102-103	Square post-hole 079 section	SE
104-106	Drain 066 cutting through the junction of walls 024, 025 with the underlying foundations on each side exposed	NW
107	Drain 066 cutting through the junction of walls 024, 025 with the underlying foundations on each side exposed	SW
108	Drain 066 cutting through the junction of walls 024, 025 with the underlying foundations on each side exposed	NW
109-110	Lime wash on wall 003 at the ?entrance by wall 002	SE & E
111	Deposit 082 mostly removed	NW
112	Deposit 082 mostly removed	SW
113	Wall 002 abutting wall 116	NW
114	Stone 093 and brick 092 surfaces	NNE
115-118	Cement lined pit 120 with wall 116 behind it	Various
119-120	Deposit 082 removed showing the extent of pit 007 with the foundations of wall 116 and the overlying wall 119	WNW
121-122	Deposit 082 removed showing the extent of pit 007 with the foundations of wall 116 and the overlying wall 119	SW
123	Wall 043 and its intersection with wall 042. Probably the same structure	S
124	Wall 116 running behind concrete 120 and under the bus station concrete	SW
	021	
125-126	Site cleaned	SE
127	Site cleaned	NE
128	Site cleaned	NNE
129	Site cleaned	NW
130	Site cleaned	SW
131	The cut slots and iron fittings in floor 015 painted	E
132	Pit 007 emptied of 004	SSW
133	Post-holes 077, 079 pre-excavation	ESE

# **APPENDIX 2: Context Register**

Context	Fill of	Description
000	1 111 01	Cleaning uncontexted finds.
001		Cobbled floor surface.
002		Lime bonded sandstone wall.
003		Lime bonded sandstone wall.
004		Compacted rubble deposit.
005		Metalled stone surface.
006		Flagstones in base of [007].
007		Cut for pit.
008		Sandstone block structure in [007].
009		Natural subsoil.
010		Levelling material under 011, 012.
011		Lime bonded stone wall.
012		Brick structure + lime bond filling of gap in 011.
013		Dressed sandstone block.
014		Stone part of wall alignment.
015		Red sandstone flagstone floor.
016		Brick wall/surface: informal.
017		Brick structure. Yellow bricks and cement bond including rectangular pit with
		cut 059.
018		Brick drain structure under 016.
019		Ash under 018.
020		Probable brick floor within square structure at S end of 017
021		Concrete floor of bus station.
022		Tarred levelling deposit.
023		Gravel levelling deposit.
024		Stone wall of building, lime bonded sandstone
025		Stone wall (extending the alignment of 024) unbonded sandstone, cut by 025
		and drain 066.
026		Light brown silty sand with gravel and lime mortar lenses
027		Concrete floor or cap for the Bransty Burn culvert
028		Brick floor.
029		Red gravel within square structure at S end of 017.
030		Pipe within square structure at S end of 017
031		Mixed levelling.
032		Brick wall of silt trap.
033		Brick face under 034.
034		Slabs between 002+033.
035		Ceramic drain through.
036		Sandstone slabs, base of 032.
037		Cut for 032.
038		Creamy yellow clay damp proofing deposit.
039		Brick and stone structure inside 038.
040		Compact sand floor within 039.
041		Natural subsoil. Sandy gravel in the south of the site, sandy silt in the north
042		Brick wall cut by drain 065 and rebuilt in stone (069).
043	076	Brick wall at edge of 084.  Ceramic pipe, runs into 065.
044	076	Cobbles in SW corner.
045		
046		Extensive deposit of ash, coal ash, lime mortar, stone chips.  Prior well everlaving slobe of 015 and probably well.
047		Brick wall overlaying slabs of 015 and probably wall.  Brick alignment under 049.
048		
050		Brick structure with concrete capping.  Brick drain access pit
		Brick drain access pit.
051		Ceramic drain pipe.

Context	Fill of	Description
052		Concrete foundation.
053		Brick wall foundations.
054		Cut of drain.
055		Wall made of possible fire bricks.
056		Stone wall.
057		Ledge of pit/silt trap.
058		Brick lined walls of pit/silt trap.
059		Construction cut of pit/silt trap.
060		Red brick wall.
061		Rubble levelling layer.
062		Cut of brick lined drain access.
063		Sandstone blocks under 028+015.
064	065	Salt glazed drain in 048 and 049 - pipe could lead from pit 050.
065		Cut for large drain pipe 064.
066		Cut for 'modern' drain. Same as 089
067	066	Fill of 066 (inc. Drain). Same as 090
068		Machine base stones under 028.
069	065?	Stone continuation of 042 over 065.
070		Black/grey silty sand under 015. Levelling deposit
071		White mortar sand layer under (070 and 015) directly over (072). Levelling
		deposit
072		Surface under 071. Slabs.
073		Surface under 071. Bricks.
074		Surface under 071. Cobbles.
075		Same as 040 cut by 065.
076		Cut for pipe, joins 065 in SW corner.
077		Cut for square post hole.
078	077	Grey sandy silt
079		Cut for post hole.
080	079	Grey sandy silt.
081	00=0	Bedding layer for 082
082	007?	Cobbles and brick with a grey gritty matrix. Under 015. Could be a surface
002		and/or upper fill of 007
083		Made ground under 084. Mortar, sand, stone chips.  Sandstone floor cut by pit 037.
084 085		Brick repair within 084.
		Revetting wall along edge of pit 007 retaining 070 - overlain by 015.
086 087		Cut for wall (024) foundation.
088		Fill of (087) clay pipe, pot, bone + glass.
089		Cut for ceramic drain. Cuts walls 024-025. Same as 066
090	089	Ceramic pipe and fill. Same as 067.
090	007	Lime bonded wall. May=024.
091		Brick paving abutting 091.
092		Broken flagstones abutting 091.
094		Cut for surface water drain.
095	094	Glazed pipes K10 and backfill.
096	094?	Lead water pipe.
097		Concrete surface at SE side of the trench.
098		Cut rectangular slots for seating internal furniture.
099		Iron mounts for internal furniture.
100		Semi-circular scores in floor <b>015</b>
101		Drain channel around stone plinth.
102		Fire brick plinth
103		Fire brick plinth
104		Red brick floor
105		Red brick wall on the E side of floor 104
106		Red brick wall on the W side of floor 104 under 017.
	1	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

Context	Fill of	Description
107		Flagstones abutting 104=214.
108		Metal drain cover in 104.
109		Modern brick feature. Drain?
110	111	Ceramic drain from pit 036.
111		Cut for drain. Cuts wall 043 and runs into drain 064.
112		Vertical channel within 017.
113		Cobbles.
114		Brick surface (repair?) in 084.
115		Flagstones mortar bonded onto 114.
116		Lime bonded sandstone wall. Same structure as 024?
117		Brick wall repairing or refacing stone wall 116.
118		Sandstone slabs continuing the line of brick revetment 043
119		Lime bonded sandstone wall and plinth. Overlies 024/116
120		Cement feature abutting wall 116 in trench edge under bus station entrance.

# **APPENDIX 3: Drawings Register**

Dwg No.	Sheet No.	Scale	Plan / Section	Description/contexts
1	1	01:10	Section Section across doorway(?) with upper me	
				surface 005 above cobbled floor 001.
2	2	01:20	Section	Drawing of wall 011, including 006-015.
3	2	01:20	Section	Elevation drawing of south facing side of 011.
4	1	01:20	Section	SE facing trench section 'internal' wall 024,
				025 + concrete floor 021 elevation.
5	3,4,9,10	01:20	Plan	Site plan.
6	1	01:20	Plan	Underlay of site plan showing drain 018.
7	5	01:10	Section	Elevation drawing of brick drain access 050.
8	6	01:10	Section	Elevation drawing of pit/silt trap.
9	7	01:10	Section	Profile of (016) and (018).
10	7	01:10	Section	Post hole 077 NW facing section.
11	7	01:10	Section	Post hole 079 NE facing section.
12	8	01:20	Section	Profile of south end of site.
13	7	01:20	Section	SE facing section (015), (070)+(071)+(072)
14	11	01:20	Plan	Site plan overlay, west corner.
15	12	01:20	Plan	Site plan overlay, cobbles under flagstones.

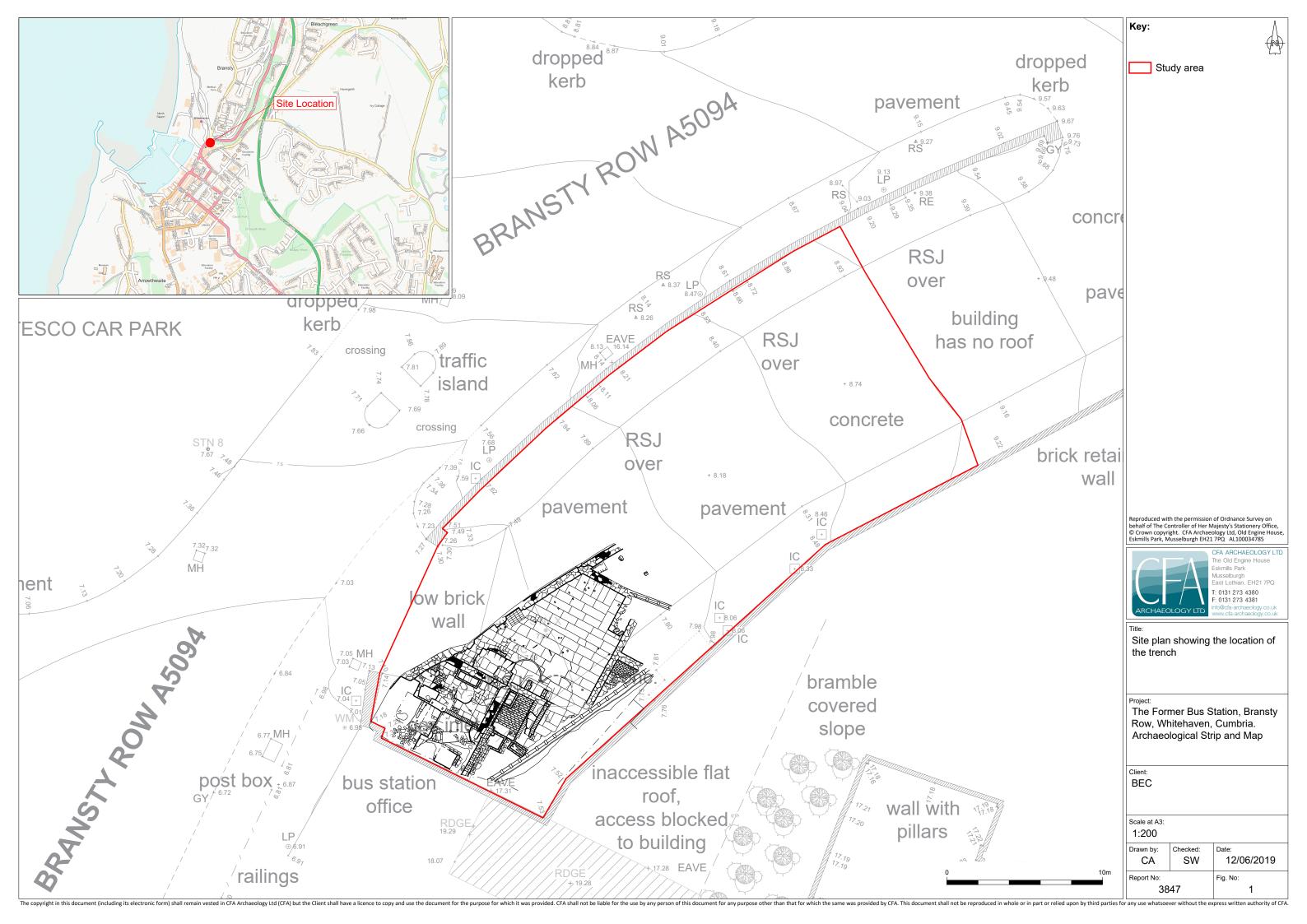
# **APPENDIX 4: Samples Register**

Sample No.	Context	Fill of	Sample type	Volume
1	070		BULK	20L
2	071		BULK	20L

# **APPENDIX 5: Finds Quantification**

Context	Find type	No.	Wt (g)	Notes	Spotdate
000	Copper alloy	1	2	Button. Very corroded. 4 holes	Modern
004	Pottery	1	101	Stoneware base. 'W. P. HARTLEY	Modern
				AINTREE'	
016	Lead	1	128	Tube	Modern
016	Lead	1	11	Wire	Modern
070	Pottery	10	64	White earthenware	Modern
070	Ceramic	2	7	Kiln stilts?	Modern
070	Clay pipe	4	9	Stems	Post medieval

070	Glass	1	4	Window glass	Modern
070	Bone	1	1	Toggle?	
070	Copper alloy	83	6	Pins	
070	Iron	1	1040	Handle. Very corroded	Modern
070	Iron	2	285	Nails. Very corroded	Modern
082	CBM	1	2044	Brick. 'DEESITEHAVE'	Modern
102	CBM	1	3582	Brick. Cream. '_IRKBY	Modern



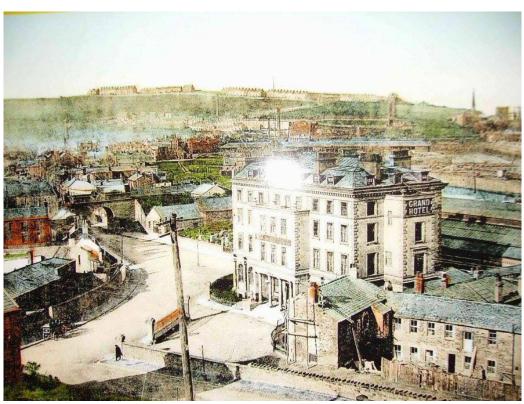


Fig. 2 - Nineteenth century photograph of the Grand Hotel depicting dye works (Photo supplied by Tony Calvin)

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Fig. 4 - Pre-excavation shot of trench from the NE



Fig. 5 - Exposed remains of dye works from the SW



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Fig. 6 - Exposed remains of dye works from the NW



Fig. 7 - Exposed remains of dye works at southern end of trench from the east



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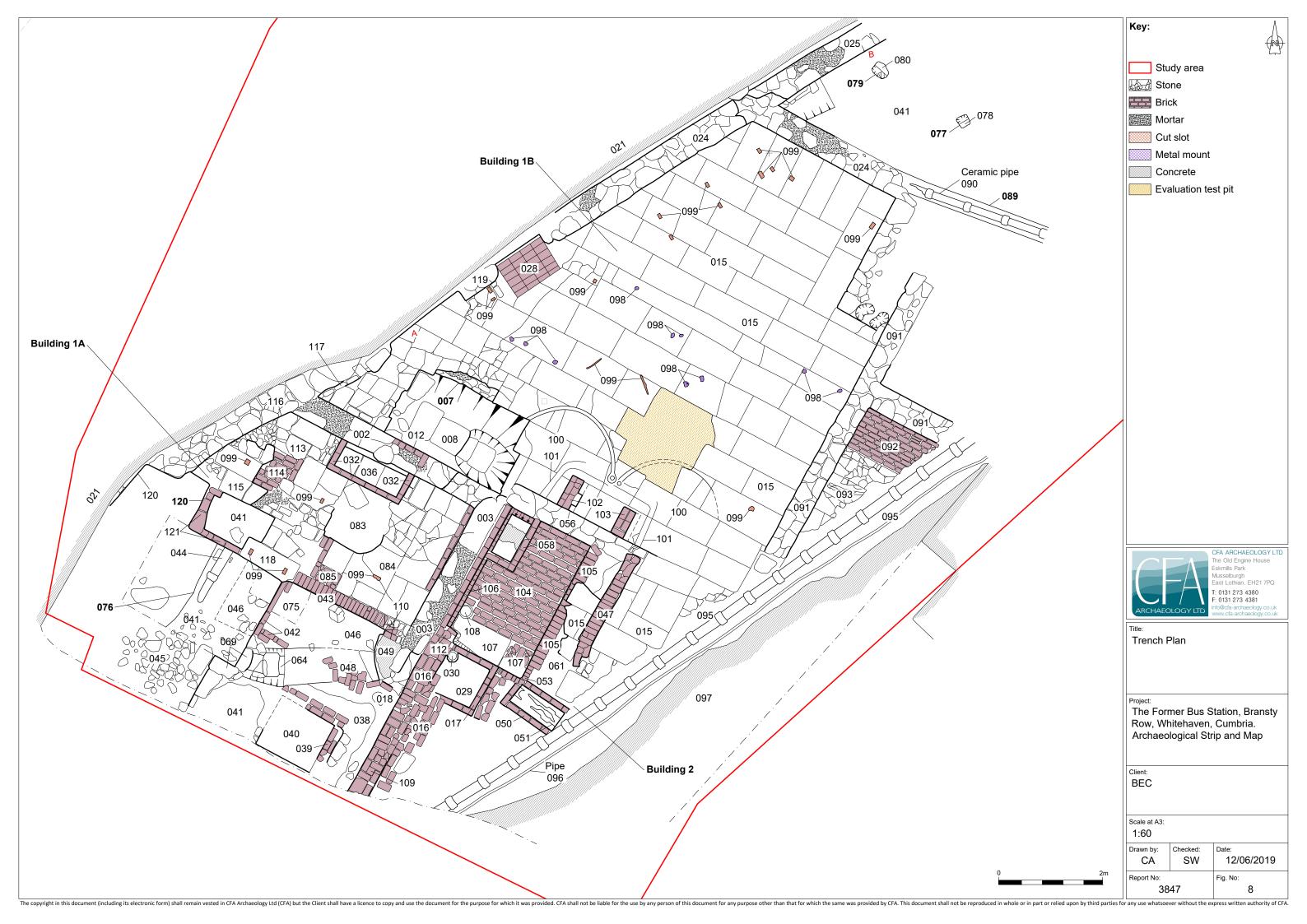




Fig. 9 - Post-holes 077 and 079



Fig. 10 - Wall 025 abutting dye works wall 024 from the NE

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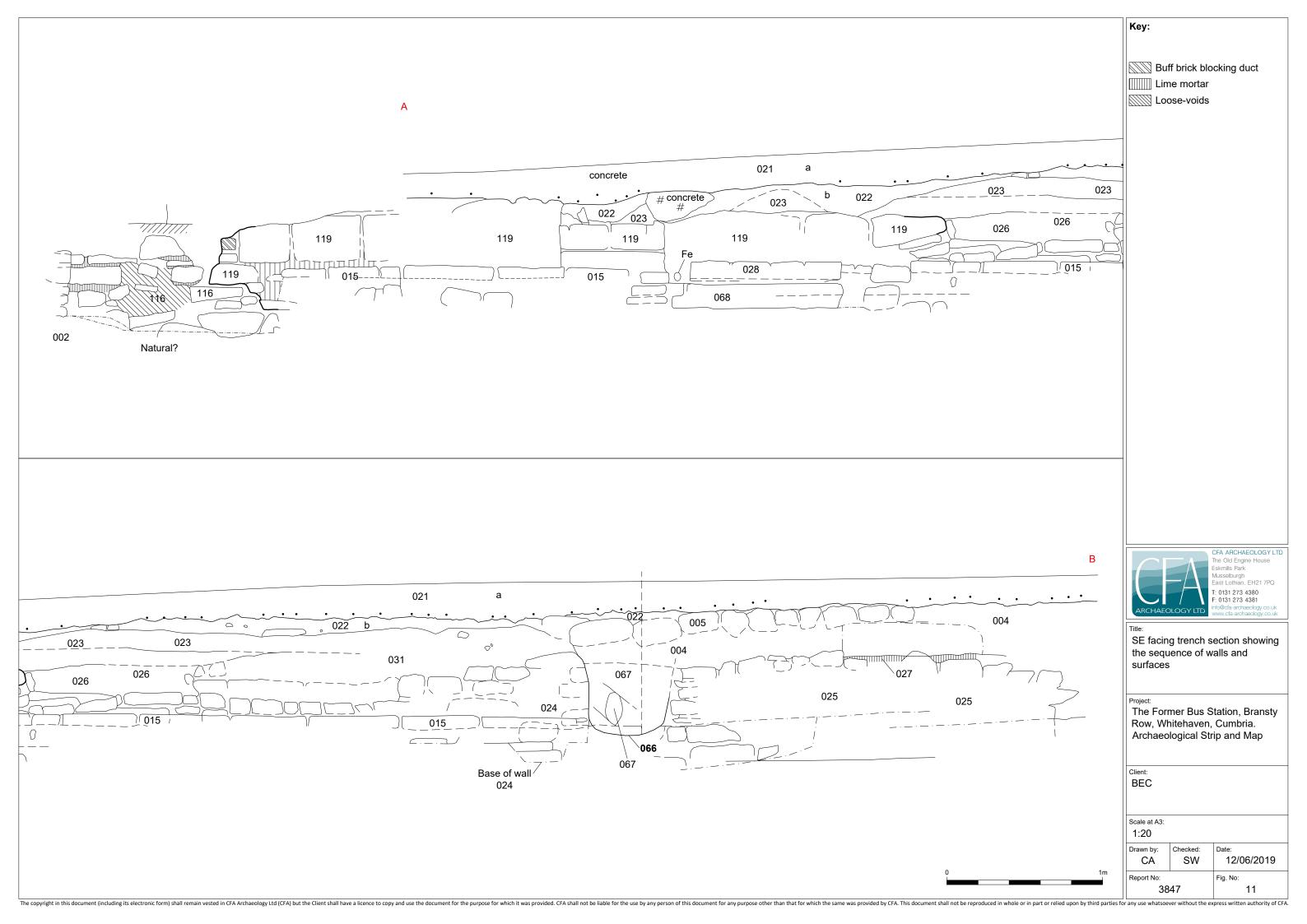




Fig. 12 - Wall 119 partially overlying Wall 116



Fig. 13 - Junction between Walls 002 and 003



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Fig. 14 - Cut slots 098 and metal mounts 099 in floor 015 from the West



Fig. 15 - Pit 007 with stone foundation 008



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Fig. 16 - Slabs 068 under bricks 028



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Fig. 18 - Earlier floor surfaces underlying 015



Fig. 19 - Brick lined feature 058 within brick floor 104 from the SSW



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Fig. 20 - Brick-lined pit 050 over drain 051



Fig. 21 - Features and surfaces in the SW end of the strip and map area



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Fig. 22 - Brick-lined feature 032 within sandstone floor 084 from the ESE



Fig. 23 - Pipe 035 in the base of feature 032 from the WNW

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Fig. 24 - Brick gully drain 018 from the SSW

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