Cathcart Road, Govanhill, Glasgow: Evaluation Data Structure Report

AOC 21868 30th August 2011





Cathcart Road Evaluation, Govanhill, Glasgow:

Data Structure Report

On Behalf of: Cathcart Developments Ltd.,

151 St. Vincent Street,,

Glasgow G2 5NJ

National Grid Reference (NGR): NS 5901 6340

AOC Project No: 21868

Prepared by: Lindsay Dunbar

Illustration by: Stefan Sagrott

Date of Fieldwork: 11th - 22nd July 2011

Date of Report: 30th August 2011

This document has been prepared in accordance with AOC standard operating procedures.

Author: Lindsay Dunbar Date: 30th August 2011

Approved by: John Gooder Date: 30th August 2011

Final Client Report Stage: Date: 30th August 2011

Enquiries to: AOC Archaeology Group

Edgefield Industrial Estate

Edgefield Road Loanhead EH20 9SY

Tel. 0131 440 3593 Fax. 0131 440 3422

e-mail. admin@aocarchaeology.com



www.aocarchaeology.com

Contents

			Page
		strations	
	•	tes	
Abs	tract		2
1	INTR	ODUCTION	3
	1.1	Background	3
	1.2	Location	_
	1.3	Archaeological and Historical Background	
2	OBJE	ECTIVES	4
3	MET	1OD	5
4	RESU	JLTS	5
	4.1	Introduction	5
	4.2	Overview	5
	4.3	Trenches 1, 2, 37 & 38	6
	4.4	Trenches 15	9
	4.5	Trenches 12	9
	4.6	Trenches 48	10
	4.7	Trenches 49	11
5	DISC	USSION	12
6	CON	CLUSION	12
7	REFE	RENCES	13
App	endix	1: Trench Register	Error! Bookmark not defined.5
App	endix	2: Photographic Register	27
App	endix	3: Context Register	31
App	endix	4: Drawing Register	35
App	endix	5: 'Discovery and Excavation in Scotland' Report	36

List of illustrations

- Figure 1: Location of evaluation trenches at Cathcart Road, Glasgow
- Figure 2: Plan of Trench 38
- Figure 3: Plan of cobbles [1508], in Trench 15
- Figure 4: Plan of sandstone and brick wall [2101] in Trench 12
- Figure 5: Plan of features within Trench 48
- Figure 6: Plan of culvert, [4901] in Trench 49
- Figure 7: Evaluation trenches overlain over 1st Edition OS map

List of plates

- Plate 1: General view of brick channel, surfaces and walls in Trench 48
- Plate 2: View from eastern kerbing [3823] of Naburn Street, Trench 38
- Plate 3: View from south-east along Trench 38
- Plate 4: View of paving [109] and brick wall [108], in Trench 1
- Plate 5: View of structure [1201] from north-west in Trench 12
- Plate 6: View of brick channel [4807] & [4809] and associated brick surfaces in Trench 48
- Plate 7: View of brick walls [4810] & [4815] with floor [4814] in Trench 48

Abstract

This report presents the results of an archaeological field evaluation undertaken by AOC Archaeology Group in ascertaining any potential adverse archaeological impact from a proposed mixed retail and residential development at Cathcart Road, Govanhill, Glasgow.

The evaluation comprised 57 trenches which exposed a total area of 6,980 m². Given the presence of live utility services, bunded material and the inclusion of active roads such as Crown Street and Lawmoor Street the actual area available to evaluate was c. 7.5 ha. The trenching opened thus equated to an evaluation percentage of just over 9.3 %.

The majority of the site was shown to have suffered modern disturbance with extensive madeground deposits across much of the site and especially to the north. Whereas to the south the absence of any remains of the iron works is testament to a thorough salvage and reclamation process undertaken. Remains of the late 19th century Naburn Street were recorded in the north-west corner of the site with the road surface, kerbstones and tenement building remains encountered. Remnants of two deeply set flues, along with the discrete remains of a sandstone building and a limited area of brick-built survival were all that could be attributable to the site's extensive industrial past.

1 INTRODUCTION

1.1 Background

1.1.1 A programme of archaeological works was required prior to the redevelopment of an urban brownfield site across the former area of the Govan Ironworks at Cathcart Road, Govanhill, Glasgow. The work was required by Cathcart Developments Ltd for a proposed mixed use development. The scope and requirements of the archaeological works were agreed with the West of Scotland Archaeology Service (WoSAS), archaeological advisors to Glasgow City Council. The work was in accord with Scottish Planning Policy (Scottish Government 2010) and Planning and Archaeology 2/2011 (Scottish Government 2011) in determining the extent and significance of any archaeological remains which may be present within the development area.

1.2 Location

1.2.1 The development area lies within Govanhill, Glasgow (centred NGR NS 5901 6340). The proposed development area is irregular in shape but is basically bounded to the north by Caledonia Road, to the east by Lawmoor Street, to the west by Cathcart Road and to the south by the new M74 motorway (Figure 1). The development area is currently derelict ground.

1.3 Geology & topography

1.3.1 The site has undergone various programmes of re-modelling over the last two centuries (see section 1.4 below) and in general the site could be described as urban waste ground with a number of bunds of demolition material, areas of hardstanding and invasive scrub vegetation. Given the development area's location within a completely urban environment it was impossible to ascertain the natural topography of the site. The underlying natural drift geology is one of fine grey clays.

1.4 History & archaeological background

- 1.4.1 The Govan Ironworks (NMRS NS56SE 180) was founded in 1839 by William Dixon of Calder and was the last blast furnace plant to operate within the Glasgow city boundary (Hume 1974, 251). The works occupied the proposed development site until their closure in 1958; although elements of the works survived as late as 1966. Cartographically, the Govan Ironworks are first recorded on the 1st Edition Ordnance Survey (OS) in 1854, (Figure 2) and comprise a variety of structures including a rope walk, multiple pumps and furnaces, a single limekiln, rail lines and associated embankments, probable workers houses with the main body of the works to the south of Alexander Row.
- 1.4.2 At the time of the OS 1st Edition (1854) the malleable iron division is known to have occupied the western fragment of this area, adjacent to the Cathcart Road frontage, but the purpose of these structures is far from clear. The large, irregular building that occupied the southern part of the development area is located under the proposed supermarket footprint. The building contains various elements and wings, containing apparent loading bays, of which at least three are accessed by rail lines. Analogy with excavated structures similar in plan at the Commonwealth Games Village excavations (Cook 2011) suggests that these may represent the remnants of boilerhouses. An industrial works as large as the ironworks would have required a considerable amount of energy to power the necessary heavy machine plant. Such structures would have contained a series of parallel machine pits, which would have supported the overlying boilers, while allowing air to freely circulate in the corridor below. The coal would have been transported directly to the boilers along the rail lines. An expected assumption to make would be that the associated engine houses are located within this spread of buildings, and that a huge network of associated red brick flues must have existed across this area. By the publication of the OS 2nd Edition (1896) almost all of the works to the

south of Alexander Row have been removed, with only the rail lines and a chimney surviving from the original works.

- 1.4.3 A row of 15 terraced houses is first recorded on the northern side of Alexander Row on the OS 1st Edition (1854) between blast furnaces to the north and the main works to the south. The location of the houses within the works and analogy with examples excavated within the M74 excavations strongly suggests that they represent housing for employers of the ironworks, most likely in the form of early tenements buildings. By the publication of the OS 2nd Edition (1896), the buildings appear to have been modified, by dividing the tenements in to 26 separate buildings. As the Ironworks expanded, a reservoir was built at the eastern end of, and blocking off, Alexander Street (1896). Further development takes place around the street between the publication of the OS 1913 edition and the OS 1934 map when the street is renamed Gushetfaulds Street. By the publication of the 5th Edition (1954), many of the houses are marked 'ruin' and the street is no longer named on the map. Additionally, Alexander Row may represent the remains of a much earlier road first recorded on Roy's *Military Survey of Scotland* (1747-55). A farmstead, 'Coal Farm' is depicted on Roy's map on the southern side of the junction between the modern Cathcart Road and Alexander Road.
- 1.4.4 By the late 19th century the main focus of the Ironworks (within the proposed development) had moved from the southern to the central fragment of the development area to the north of Alexander Row (2nd Edition OS Map 1896). The most significant of these structures comprised a string of six blast furnaces. Although a series of tanks, buildings and a chimney are also recorded on the 2nd, 3rd and 4th Edition maps (1896, 1913 and 1934 respectively), not all are diagnostic and their functions are currently unknown.
- 1.4.5 The area to the north of the blast furnaces developed from open space in the earlier 19th century, bounded by the furnaces and Urries Row to the north (OS 1st Edition 1854), to a coal depot and associated railway works by the publication of the OS 2nd Edition (1894). The development of the depot led to the destruction of the western part of Urries Row (OS 2nd Edition 1894), with the surviving buildings destroyed by the publication of the OS 4th Edition (1934). Analogy with to Alexander Row, suggests the houses recorded on Urries Row may represent the houses of the Ironworks employees. More generally, the eastern spread of both industry and the associated residential developments of Glasgow in to more open, undeveloped spaces in the east led to the north of the site being subsumed by housing by the publication of the 2nd edition (1894).
- 1.4.6 The Ironworks was closed in 1958 and subsequently demolished in the 1960s, to be replaced by a large carpet factory and subsequent cash and carry.
- 1.4.7 Previous excavations of the Ironworks have took place during trial pitting in 2004 (NMRS NS56SE 2224) New improvements to the M74 to the immediate south of the proposed development led to some archaeological works but nothing of note was uncovered.

2 OBJECTIVES

- 2.1 The objectives of the archaeological evaluation were:
 - *i)* to determine the character, extent, condition, quality, date and significance of any archaeological remains within the defined subject area;

ii) should significant archaeological deposits be discovered, to prepare a mitigation strategy compliant with *Scottish Planning Policy* (Scottish Government 2010) and *Planning And Archaeology 2/2011* (Scottish Government).

3 METHOD

- 3.1 The Written Scheme of Investigation (AOC 2011) outlined the main methodology and works were undertaken according to AOC Archaeology Group's standard operating procedures (WSI Appendix 7, sections 7.1 to 7.29).
- 3.2 Overburden was reduced by 360^o tracked mechanical excavator using a toothless ditching bucket where possible and a toothed bucket where necessary given the presence of hardstanding and compacted brick rubble. All machine excavated ground reduction was supervised by an AOC Archaeology Group field archaeologist. The exposed surface was then hand cleaned where appropriate to identify features.
- 3.3 Given the depth of made ground, in excess of 4.0 m in some trenches it was often necessary to box and batter trenches to allow archaeologists in to hand clean areas and safely record any exposed archaeological remains.

4 RESULTS

4.1 Introduction

- 4.1.1 The evaluation was undertaken between 11th July and 22nd July 2011 in generally fair weather conditions which rendered good archaeological visibility. The various data gathered from the evaluation are presented as a series of appendices,
 - Appendix 1 contains Trench Register;
 - ii) Appendix 2 contains the Photographic Register;
 - iii) Appendix 3 contains the Context Register;
 - iv) Appendix 4 contains the Drawing Register;
 - v) Appendix 5 reproduces the *Discovery and Excavation in Scotland* entry.

4.2 Overview

- 4.2.1 The evaluation saw the opening of fifty-seven trenches which exposed a total area of 6,980 m². Due to live services, bunded material and the inclusion of active roads such as Crown Street and Lawmoor Street within the development area the actual area available to evaluate was c. 7.5 ha. The trenching opened thus equated to an evaluation percentage of just over 9.3%.
- 4.2.2 The majority of the trenches opened revealed no in situ archaeological material and evidenced a general north to south divide across the site. In the north there was considerably more madeground, consisting of crushed sandstone, brick, concrete, hardcore, coal/ash material, slag deposits and redeposited natural clay. These varied madeground deposits were upwards of 4.0 m deep in places

and averaging at least 2.0 m, whereas to the south of the site the madeground was a more consistent brick and concrete rubble averaging closer to 1.0 m deep. In a few trenches some structural remains were unearthed which appear to relate to the 19th century or later; or at least predate the late 20th century concrete and brick foundations found in various trenches.



Plate 1: General view of brick channel, surfaces and walls in Trench 48

4.2.3 Firstly, in the north-east corner of the development area remains associated with the late 19th century Naburn Street were unearthed; these included the street itself and related tenement foundations. To the south of these features lay a discrete though damaged area of cobbling covering a few metres at the northern end of Trench 15. Closer to the centre of the site, Trench 12, contained a small section of dressed sandstone foundations and a buried brick 'flue'. Due south of these remains was uncovered the largest extent of industrial survival encountered during the evaluation. In Trench 48 another brick flue was noted alongside a long section of brick channel, some walls and brick floor surfaces. Lastly to the south-west lay a deep set brick culvert in Trench 49.

4.3 Trenches 1, 2, 37 & 38 (Plates 2 & 3, Figure 2)

4.3.1 These four trenches were all excavated within close proximity to each other in the north-east corner of the proposed development area (Figure 2). Located in all these trenches were archaeological features which appear to relate to the southern end of Naburn Street and its tenements which first appear on the OS 2nd Edition Ordnance Survey (1896).



Plate 2: View from eastern kerbing, [3823], of Naburn Street, Trench 38

4.3.2 Trenches 37 and 38 both revealed the remains of Naburn Street itself covered by between 1.3 m and 2.0 m of mixed madeground deposits. In Trench 37, extending the entire length of the trench, was found the western kerbing of Naburn Street whilst in Trench 38 a complete section across Naburn Street was revealed with both the western and eastern kerbings exposed. The kerbing consisted of large, almost 1.0 m long setts (See Plate 2).



Plate 3: View from south-east along Trench 38

4.3.3 The kerbing edged a road surface some 14 m wide which had a distinct camber resulting in a concave profile orientated east to west. The road surface was a rough tarmac but it is possible that cobble setts may have survived below this upper surface.

- 4.3.4 On the eastern side of Trench 38 lay a variety of features relating to the tenements which faced onto Naburn Street. Pavement [3816] appeared to be about 2.2 m wide and abutted an unfrogged brick wall [3819]. This wall was a single course wide and with walls [3817] and [3818] formed an entranceway just under 1.0 m wide and extending away from the street for 0.63 m ending with two sandstone bases, [3814] and [3815]. These bases, one of which had a check, marked a doorway into a cobbled yard [3812]. The small yard covered approximately extended up to 4.0 m up to a second brick wall and entranceway.
- 4.3.5 The unfrogged brick walls [3810] and [3808] formed the northern side of a passageway [3807] with identical brick walls, [3809] and [3806] forming the southern side. The passageway measured just under 1.0 m wide and was paved with unfrogged bricks. A final unfrogged brick wall, [3805] was aligned perpendicular to [3806].
- 4.3.6 Trench 1 revealed a small selection of brick wall lines [104], [105], [106] and [107] underlying approximately 2.0 m of mixed madeground at its northern end. The wall lines were a single unfrogged brick wide, 0.24 m, and aligned north-east to south-west and north-west to south-east. The southern end of Trench 1 revealed a further unfrogged brick wall line [108] aligned north-west to south-east which edged a small remnant of stone paving, [109].



Plate 4: View of paving [109] and brick wall [108], in Trench 1

4.3.7 Trench 2 revealed further building remains at a similar depth, under approximately 2.0 m of madeground, however in this case most were sandstone walls and associated floors. The features extended over the entire 31.0 m length of the trench. The sandstone walls were all of similar construction and aligned in the same north-east to south-west orientation with perpendicular walls north-west to south-east. Walls [204], [207] and [208] appeared to form a building at least 10.20 m

long with two internal rooms separated by brick wall [206] and associated with floors [206] and [209]. Another sandstone wall [212] along with brick wall [210] and floor [211] may represent another structure. Lastly a large sandstone wall [213] outlined a building at least 9.0 m long and associated with floor [214].

4.4 Trench 15 (Figure 3)

- 4.4.1 Trench 15 contained extensive madeground deposits reaching upwards of 3.4 m deep in places. However unlike much of the madeground across the northern half of the site some of the deposits appeared to be potentially related to the use of the site as a foundry or at least from the earlier part of the 20th century. Evidence included a very dark coal dust/soot layer, [1501] at a depth of c.2.5 m to 3.2 m. This deposit was present along much of Trench 15 and was sealed by a thick layer of redeposited orange coloured clay [1502] up to 2.4 m thick. At the northern end of Trench 15, layer [1501] was seen to overlie an earlier deposit of vitrified, slag like material [1506]. Re-deposited clay [1502] was seen to be cut by later more modern crush material and foundations relating to later 20th century structures.
- 4.4.2 At the extreme north of Trench 15 was found a much disturbed layer of large granite setts. The cobbling [1508] lay approximately 1.2 m below the present ground surface under modern madeground [1509]. The setts appeared to overlie an earthy deposit rich in soot and coal dust [1507], which elsewhere in the Trench was seen to overlie re-deposited natural subsoil [1502]. The cobbled surface covered an area approximately 3.8 m north to south and extended across the 2.5 m wide trench.



Plate 5: View of structure [1201] from north-west in Trench 12

4.5 Trench 12 (Figure 4)

4.5.1 At the western end of Trench 12 lay a large predominantly sandstone wall [1201] which had been augmented or repaired by the addition of unfrogged bricks. The wall survived in height to a maximum of five courses, some 0.65 m high. The foundation was cut into the natural clay [1203] and underlay c.1.6 m of made ground [1204]. The foundation consisted of a western end wall measuring c.5.4 m with a width of c.0.81 m and had considerable brickwork at the northern end. Extending east from

this wall were two other segments of sandstone wall. The northernmost section measured c.3.1 m long by c.1.2 m wide. The southernmost was longer at c.4.45 m and narrower c.0.72 m wide. Excavation within the structure revealed the possible remains of a mortar floor [1202]. Internally the structure would have measured 3.75 m wide by a minimum of at least c.4.45 m long. There was an indication that the western end of the structure extended north beyond the junction with the northernmost wall and there was a hint that the southernmost wall extended beyond the western end wall to the west. Together this suggests that the remaining walls record were not an isolated stand alone structure but rather part of a much larger more complex suite of rooms.

4.5.2 At south-east end of Trench 12 there was a brick built flue [1205] lying within re-deposited clay [1204] and cut into natural subsoil [1203] at a depth of 3.2 m from present ground surface. The flue was not fully exposed and measured approximately 0.8 wide as visible within trench base. It was aligned north-west to south-east and was constructed of unfrogged bricks.

4.6 Trench 48 (Figure 5)

4.6.1 Trench 48 contained a number of brick-built elements that can be seen to relate to industrial usage. Firstly, running almost parallel to the trench was a large fire-brick built channel [4807] and [4809] which extended for c.25 m. The walls were two bricks wide and created a channel 0.90 m in width. The walls stood to a height of 0.35 m and the channel was floored with large flat cobbles [4808]. The channel was filled with crushed brick material [4816]. A large brick foundation [4806] abutted wall [4807].



Plate 6: View of brick channel [4807] & [4809] and associated brick surfaces in Trench 48

4.6.2 Wall [4811] was aligned east to west and paralleled the channel c.0.70 m to the south of [4809]. Between these two parallel walls was a hard compacted layer of vitrified, slag like material [4817]. Overlying [4817] was brick surface [4818] which abutted the channel and was in turn built over by a large wall base [4810]. Wall [4810] extended for c.2.7 m north to south and most likely up to wall [4809]. At its southern end wall [4810] turned west and continued in that direction beyond the limit of

the evaluation trench. Brick floor [4812] was probably a continuation of surface [4818] and also underlay later wall [1810]. Another brick surface [4813], directly overlying [4812] and wall [4810], contained a small drain or channel [1816].



Plate 7: View of brick walls [4810] & [4815], with floor [4814] in Trench 48

- 4.6.3 Floor [4813] was contemporary with the well formed floor surface [4814] which comprises part of a larger east to west passageway. This surface has a distinct camber and with wall [4810] a drainage channel was formed along its northern edge. The passage is nearly 1.20 m wide and was defined to the south by a large wall, [4815].
- 4.6.4 The bricks appeared to be mostly unfrogged though a number in wall [4810] were marked 'GOVAN'.
 Where possible to determine the foundations were cut into natural subsoil and were covered by in excess of 1.4 m of modern madeground.
- 4.6.5 At the far western end of Trench 48 lay a fire brick flue [4801] constructed of a double skinned mortar bonded tunnel some 1.1 m wide. Across the top of the flue, lying perpendicular on a northwest to south-east alignment, was a fire brick wall [4802]. It stood four or five courses high and abutted another fire brick wall [4803] which was aligned parallel to the flue on a north-east to southwest alignment. As with the brick foundations in Trench 48 these features were cut into natural subsoil and were covered by in excess of 1.0 m of modern madeground.

4.7 Trench 49 (Figure 6)

4.7.1 The western end of Trench 49 revealed a brick-built culvert [4901] cut into the natural clay subsoil, [4903]. The culvert was constructed of unmortared unfrogged bricks [4902] three courses high, over which was lain large sandstone lintel stones [4904] capping and sealing the drain. The drain, aligned north-west to south-east, was within a cut c.1.12 m wide, resulting in a drain a little over 0.40 m wide internally. The base of the drain was formed by the clay natural subsoil. No great build up of sediment was evident barring a thin skim of silty material.

5 DISCUSSION

5.1 The remains uncovered at Cathcart Road are somewhat limited and discrete in nature with the overwhelming majority of trenches revealing no *in situ* features. The remains in the north-west corner of the site are most readily explained as they correspond to the 2nd Edition OS map of 1895 and can be seen as the remains of Naburn Street. The other remains are interpreted as belonging to the various iron works and industrial remains known to have existed on site. Unfortunately the most interesting remains, those in Trench 12 and Trench 48 do not match with any of the cartographic material and in fact both suites of features appear to lie under sidings or close to sidings. It is therefore postulated that these remains may either predate 1st Edition OS mapping or were constructed and demolished within the four decades between the 1st Edition OS map and the 2nd Edition OS map. In any case the remains in Trench 48 definitely appear to relate to industrial activity and processes.

6 CONCLUSION

- 6.1 The evaluation of the site was complicated by a number of factors. Firstly there were areas to the north-west which were still active roads such as Crown Street which could not be included. Within the area that could be feasibly trenched there were a number of live services including gas, telecoms and electricity. Lastly there were some bunded areas and along the southern boundary of the site the recent insertion of the M74 had led to heavy landscaping and obvious recent disturbance. However a thorough and comprehensive evaluation of the development area has been achieved and the spread of trenches across the site has been able to provide near complete coverage.
- 6.2 The majority of the evaluation trenches contained no *in situ* remains of any archaeological significance with modern 20th century foundations, services and crushed demolition material prominent across the site. Remains potentially associated with the Iron Works were found in three trenches forming two discrete areas of survival both close to the centre of the development area. Elsewhere across the site, excluding the survival of post OS 1st Edition tenement remains of Naburn Street in the northeast of the site, modern disturbance has left nothing of the development area's pre mid 19th century landuse. In fact the very lack of remains and limited depth of madeground across the southern half of the site would seem to indicate a very determined reuse and salvage operation must have been in place to dismantle the iron works and reclaim almost all materials, for example dressed stonework and iron rail tracks.
- 6.3 Given the paucity of survival indicated by the evaluation it is recommended that no further works are required across the site with the exception of the areas around Trench 12 and Trenches 48/49. In both instances further recording of the remains could be achieved through a limited watching brief on any ground breaking works in their vicinity. Such recommendations would require approval by WoSAS.

7 REFERENCES

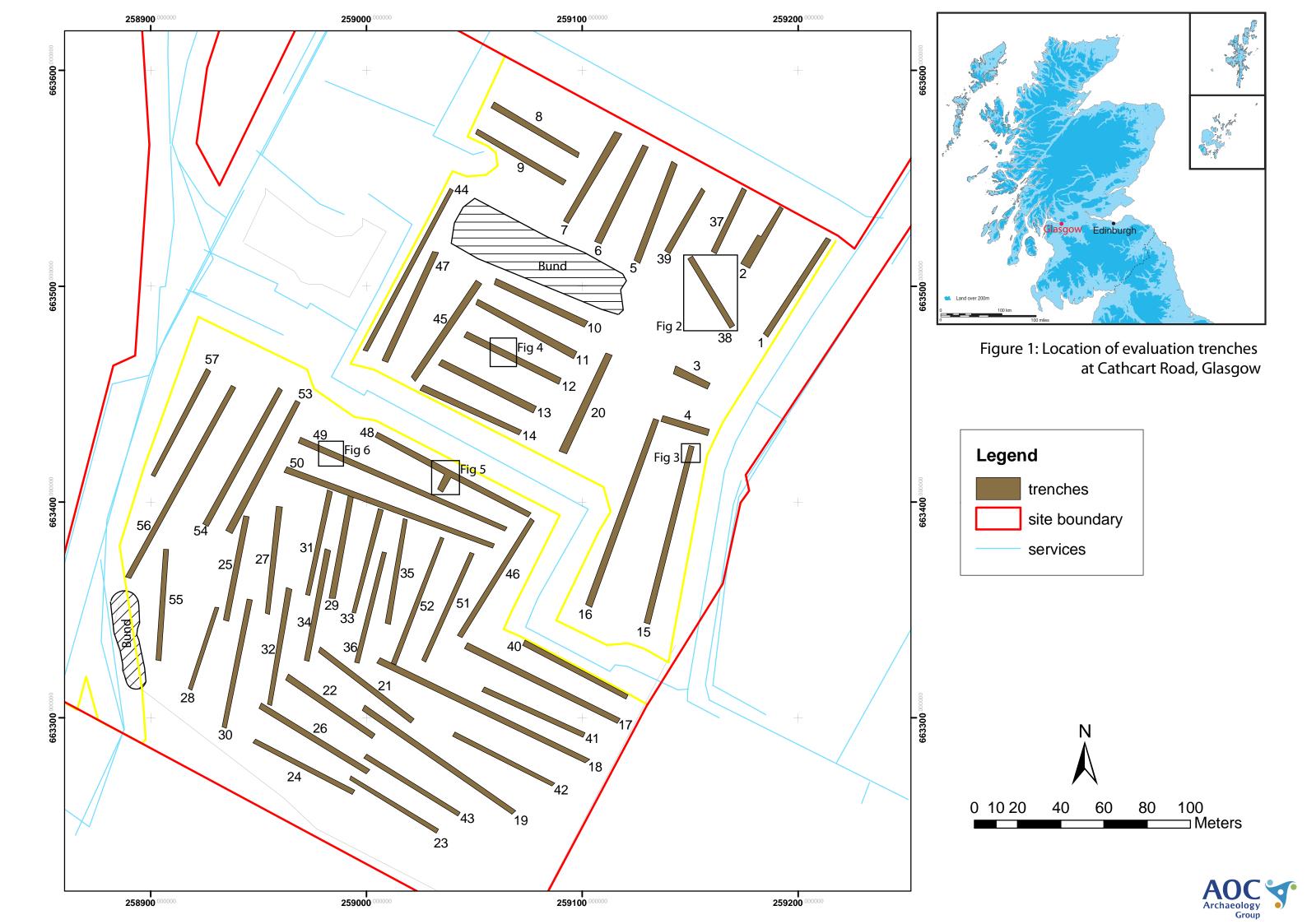
AOC 2011 Cathcart Road Evaluation, Govanhill, Glasgow Written Scheme of Investigation. Unpubl AOC Archaeology Project Design.

Hume, J 1974, Industrial Archaeology of Glasgow, Blackie.

Roy, W 1745-55 The Military Survey of Scotland.

Scottish Government 2010 Scottish Planning Policy.

Scottish Government 2011 Planning And Archaeology 2/2011.



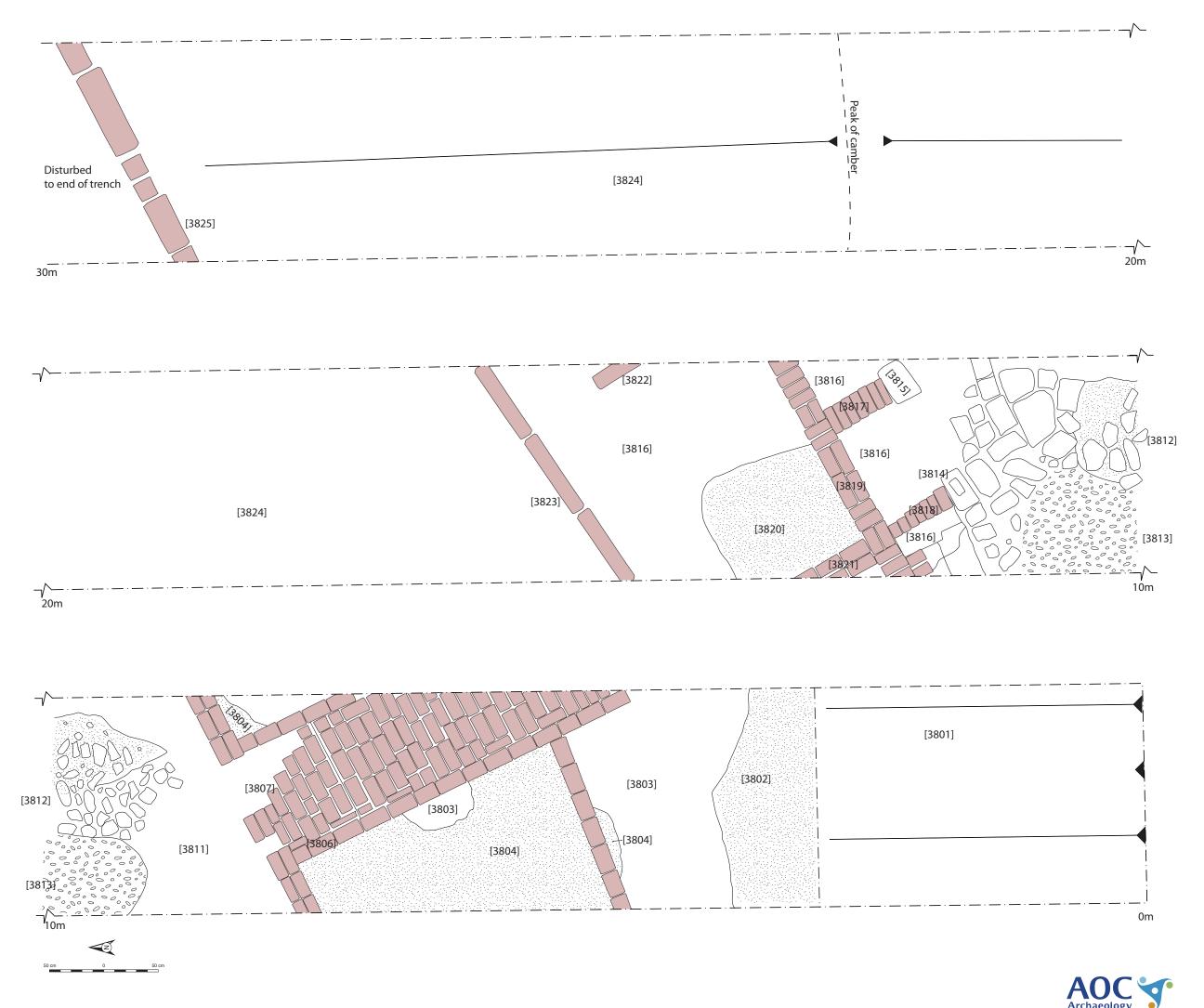


Figure 2: Plan of Trench 38





Figure 3: Plan of cobbles [1508] in Trench 15

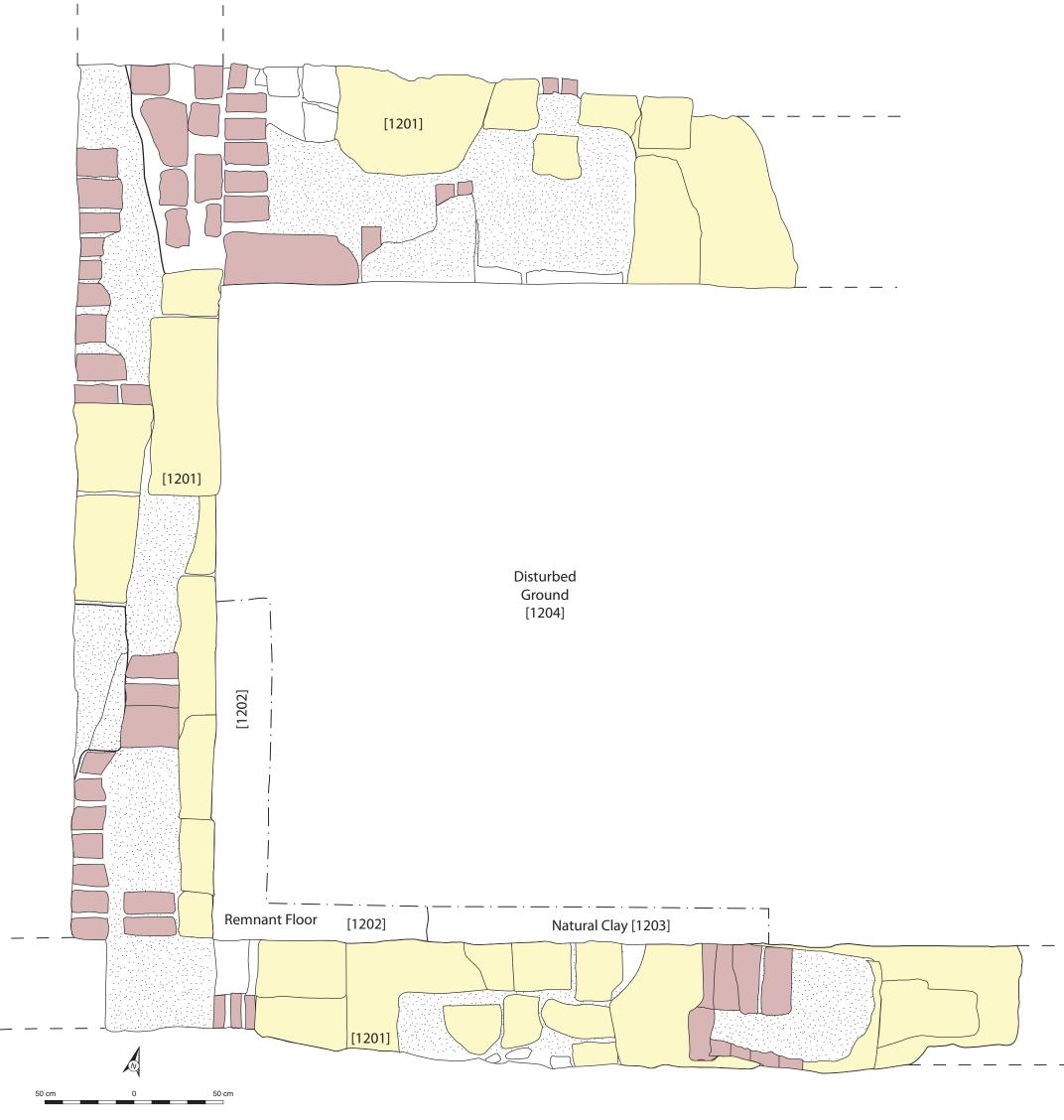


Figure 4: Sandstone and brick wall [1201], Trench 12





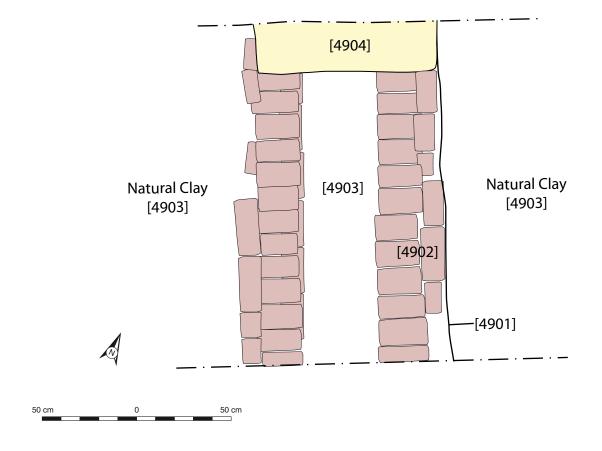
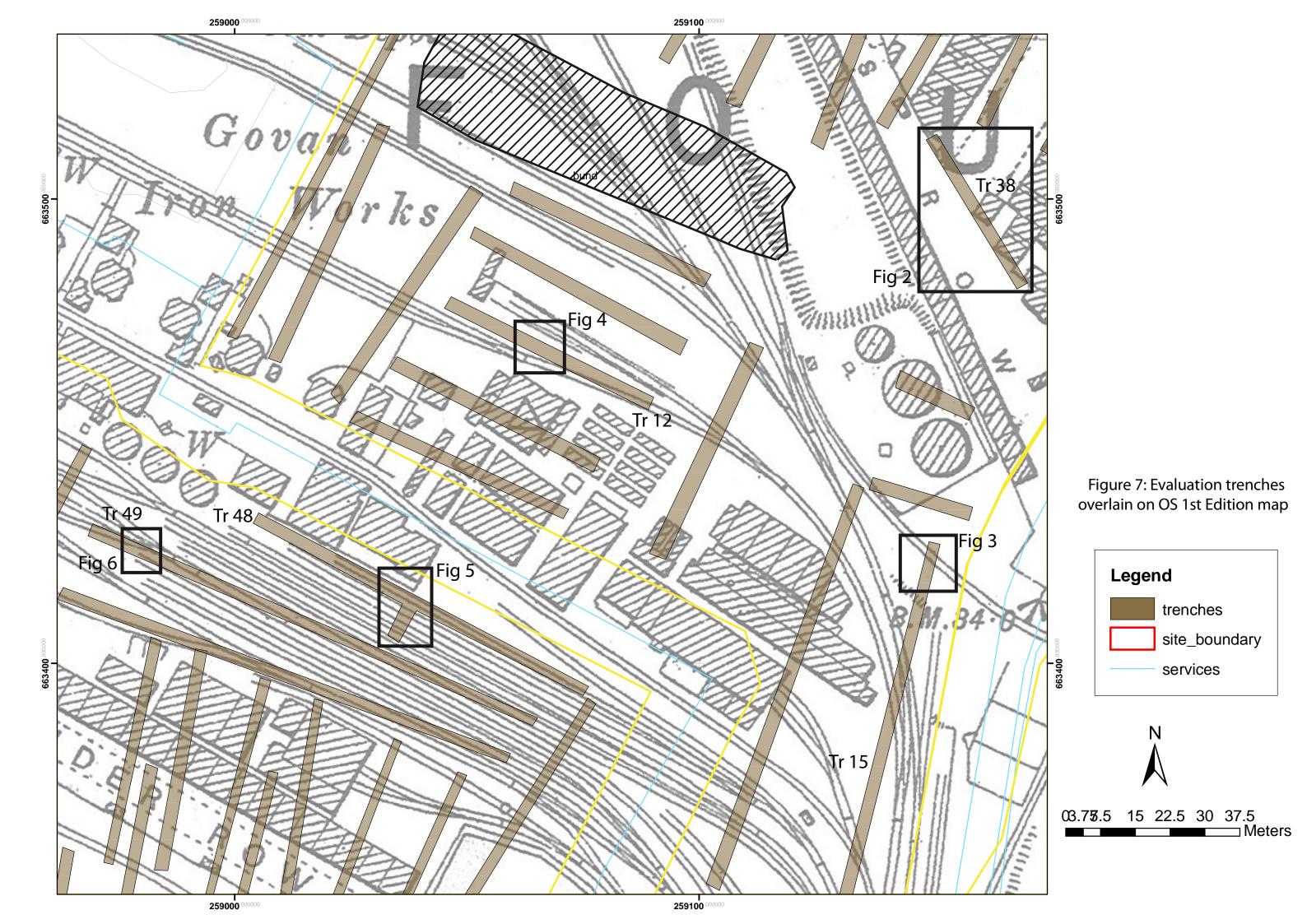


Figure 6: Plan of culvert [4901] in Trench 49





Appendices

APPENDIX 1: Trench Descriptions

Trench 1

Dimensions55 m by 2 mTotal Area110 m²OrientationNE-SW

Depth of Excavation Madeground up to 2.4 m

Significant Features A selection of brick wall lines [104], [105], [106] and [107] at northern end of Trench 1 and at

the southern end, brick wall line [108] and a small remnant of stone paving, [109].

Other Features Two distinct phases of madeground visible creating up to 2.4 m of material over subsoil.

Subsoil Mid yellow/light brown/grey clay

Finds 19th / 20th Century debris note but not retained

Trench 2

Dimensions 31 m by up to 6.0 m

Total Area 137 m²
Orientation NE-SW

Depth of Excavation Madeground up to 2.4 m

Significant Features Along extent of Trench 1 were sandstone walls [204], [207] and [208] with two internal rooms

separated by brick wall [206] and associated with floors [206] and [209]. This was followed by another sandstone wall [212] along with brick wall [210] and floor [211] which may represent another structure. Lastly a large sandstone wall [213] outlined a building at least 9.0 m long

and associated with floor [214].

Other Features Two distinct phases of madeground visible creating up to 2.4 m of material over subsoil.

Subsoil Mid yellow/light brown/grey clay

Finds 19th / 20th Century debris note but not retained

Trench 3

Dimensions 22 m by 2.5 m

Total Area 55 m²
Orientation NW-SE

Depth of Excavation Madeground up to 3.4 m - not bottomed

Significant Features None

Other Features Modern concrete slab present and madeground contained lots of dark/sooty, coal rich

material with occasional slag material

Subsoil Not seen

Finds 19th / 20th Century debris note but not retained

Trench 4

Dimensions 24 m by 2.5 m

Total Area 60 m²
Orientation NW-SE

Depth of Excavation Madeground over 3.8 m. Not bottomed

Significant Features None

Other Features Madeground contained lots of dark/sooty, coal rich material with occasional slag material

Subsoil Not seen

Finds 19th / 20th Century debris note but not retained

Trench 5

Dimensions50 m by 2 mTotal Area100 m²OrientationNE-SW

Depth of Excavation Madeground 1.2 m

Significant Features None

Other Features Modern frogged brick and concrete foundations under contaminated made ground

Subsoil

19th / 20th Century debris note but not retained Finds

Trench 6

Dimensions 50 m by 2 m Total Area 100 m² NE-SW Orientation

Depth of Excavation Madeground up to 1.8 m

Significant Features None

Other Features Modern frogged brick and concrete foundations under contaminated made ground

Subsoil Dark clay

19th / 20th Century debris note but not retained **Finds**

Trench 7

Dimensions 50 m by 2 m Total Area 100 m² Orientation NE-SW

Depth of Excavation Up to 3.0 m - not bottomed

Significant Features

Other Features Modern frogged brick and concrete foundations under contaminated made ground

Subsoil Not seen

Finds 19th / 20th Century debris note but not retained

Trench 8

Dimensions 50 m by 2 m Total Area 100 m² NW-SE Orientation

Depth of Excavation Made round up to 3.0 m - not bottomed

Significant Features

Other Features Modern frogged brick and concrete foundations under made ground

Subsoil Not seen

19th / 20th Century debris note but not retained Finds

Trench 9

Dimensions 50 m by 2 m 100 m² Total Area Orientation NW-SE

Depth of Excavation Madeground up to 2.7 m - not bottomed

Significant Features

Other Features Modern frogged brick and concrete foundations under made ground

Subsoil Not seen

19th / 20th Century debris note but not retained Finds

Trench 10

Dimensions 50 m by 2 m Total Area 100 m² Orientation NW-SE

Depth of Excavation Madeground 2.3 m - 3.0 m

Significant Features None

Other Features Some in situ concrete slabbing. Thick c.1.2 m to 1.5 m layer of re-deposited clay underlying

modern madeground. Slag material noted within madeground deposits up to 2.0 m thick at

NW end of trench.

Subsoil Grey clay

Finds 19th / 20th Century debris note but not retained.

Trench 11

 Dimensions
 50 m by 2 m

 Total Area
 100 m²

 Orientation
 NW–SE

Depth of Excavation Madeground 2.8 m - 3.0 m

Significant Features None

Other Features Mixed madeground of crushed material, brick and ash over a thick layer of redeposited clay.

Large slag filled pit cut through redeposited clay near middle of trench - more than 5 m long

Subsoil Grey clay

Finds 19th / 20th Century debris note but not retained.

Trench 12

Dimensions 50 m by 2 m plus c.10 m by 10 m extension

Total Area 200 m²
Orientation NW–SE

Depth of Excavation Madeground 2.8 m – 3.2 m

Significant Features Sandstone and unfrogged brick wall [1201] cut into natural clay [1203] with possible remnants

of an internal floor surface [1202]. Covered by c.1.6 m of madeground [1204]. At SE end of trench lay a brick-built flue [1205], aligned NW-SE, within the re-deposited clay [1204] and cut

into natural subsoil[1203].

Other Features Mixed madeground of crushed material, brick and ash over a thick layer of re-deposited clay

[1204].

Subsoil Grey clay

Finds 19th / 20th Century debris note but not retained.

Trench 13

Dimensions50 m by 2 mTotal Area100 m²OrientationNW-SE

Depth of Excavation Madeground 2.4 m - 3.0 m

Significant Features None

Other Features Mixed madeground of crushed material, brick and ash over a thick layer of re-deposited clay.

A number of large concrete bases at c.0.8 m depth were encountered.

Subsoil Grey clay

Finds 19th / 20th Century debris note but not retained.

Trench 14

Dimensions50 m by 2 mTotal Area100 m²OrientationNW-SE

Depth of Excavation Madeground 2.2 m – 2.5 m

Significant Features None

Other Features Mixed madeground of crushed material, brick and ash over a thick layer of re-deposited clay.

A number of large concrete bases and modern brick walls at c.0.9 m depth were encountered.

Subsoil Grey clay

Finds 19th / 20th Century debris note but not retained

Trench 15

Dimensions88 m by 2.5 mTotal Area220 m²OrientationNE - SW

Depth of Excavation Madeground 3.2 m - 3.5 m

Significant Features Cobbled surface [1508] at N end of trench was much disturbed.

Other Features This trench showed clear stratigraphy within madeground. Natural grey clay [1505] was

covered by between 0.8 m and 1.0 m of soot/ash/slag material [1501] which in turn was buried by between 0.3 m and 0.6 m of redeposited natural clay (orange in colour) and sand, [1502]. Over this lay 1.0 m to 1.4 m of large rubble material concrete and brick, [1503], which was buried by 1.0 m to 1.2 m of modern gravel sized crush material, [1504]. The rubble contexts [1503] and [1504] appeared to lie within a large cut, [1510] excavated through the redeposited clay [1502]. At the north of the trench another large cut appeared to remove most of the re-deposited natural material, though in places another deposit of slag and vitrified material [1506] underlay [1502] with a 1.0 m deposit of soot and ash [1507] directly overlying

[1502] also visible.

Subsoil Grey clay

Finds 19th / 20th Century debris note but not retained

Trench 16

 Dimensions
 90 m by 2.5 m

 Total Area
 225 m²

 Orientation
 NE – SW

Depth of Excavation Madeground 3.2 m – 3.5 m

Significant Features None

Other Features Concrete and brick built structures

Subsoil Grey clay

Finds 19th / 20th Century debris note but not retained

Trench 17

 Dimensions
 80 m by 2.5 m

 Total Area
 200 m²

 Orientation
 NW – SE

Depth of Excavation Madeground 2.4 m

Significant Features None

Other Features Concrete built features

Subsoil Grey clay

Finds 19th / 20th Century debris note but not retained

Trench 18

Dimensions108 m by 2 mTotal Area216 m²OrientationNW – SE

Depth of Excavation Madeground 3.0 m

Significant Features None

Other Features Concrete foundations

Subsoil Grey clay

Finds 19th / 20th Century debris note but not retained

Trench 19

Dimensions 50 m by 2 m
Total Area 100 m²

Orientation NW - SE

Depth of Excavation Madeground 0.5 m - 0.8 m

Significant Features None

Other Features Concrete foundations

Subsoil Grey clay

19th / 20th Century debris note but not retained **Finds**

Trench 20

Dimensions 50 m by 2 m Total Area 100 m² Orientation N-S

Depth of Excavation Madeground 2.6 m

Significant Features None

Other Features Concrete foundations

Subsoil Grey clay

19th / 20th Century debris note but not retained Finds

Trench 21

Dimensions 50 m by 2 m Total Area 100 m² Orientation NW -SE

Depth of Excavation Madeground 0.6 m - 0.8 m

Significant Features None

Other Features Concrete foundations

Subsoil Grey clay

19th / 20th Century debris note but not retained **Finds**

Trench 22

Dimensions 50 m by 2.0 m Total Area 100 m² Orientation NW -SE

Depth of Excavation Madeground 0.6 m - 0.8 m

Significant Features None

Other Features Brick and concrete built features

Subsoil Grey clay

Finds 19th / 20th Century debris note but not retained

Trench 23

Dimensions 50 m by 2 m Total Area 100 m² Orientation NW - SE

Depth of Excavation Madeground 0.6 m - 1.4 m

Significant Features None Subsoil Grey clay

19th / 20th Century debris note but not retained Finds

Finds None

Trench 24

Dimensions 50 m by 2 m Total Area 100 m² NW - SE Orientation

Depth of Excavation Madeground 0.6 m - 1.3 m

Significant Features None

Other Features Concrete and modern brick foundation

Subsoil Grey clay

Finds 19th / 20th Century debris note but not retained

Trench 25

Dimensions *5*0 m by 2 m Total Area 100 m² N-SOrientation

Depth of Excavation Madeground 1.0 m

Significant Features None

Other Features Brick and concrete built features

Subsoil Grey clay

19th / 20th Century debris note but not retained **Finds**

Trench 26

Dimensions 57 m by 2 m 114 m² Total Area NW - SE Orientation

Depth of Excavation Madeground 0.6 m - 1.0 m

Significant Features None Other Features None Subsoil Grey clay

19th / 20th Century debris note but not retained **Finds**

Trench 27

Dimensions 50 m by 2 m 100 m² Total Area N-SOrientation

Depth of Excavation Madeground 0.6 m

Significant Features None

Other Features Concrete and brick built structures

Subsoil Grey clay

19th / 20th Century debris note but not retained **Finds**

Trench 28

Dimensions 40 m by 2 m Total Area 80 m² Orientation N-S

Depth of Excavation Madeground 0.8 m

Significant Features None Other Features None Subsoil Grey clay

Finds 19th / 20th Century debris note but not retained

Trench 29

Dimensions 50 m by 2 m 100 m² Total Area Orientation N - S

Madeground 0.7 m - 1.3 m Depth of Excavation

Significant Features None

Other Features Brick and concrete built features

Subsoil Grey clay

Finds 19th / 20th Century debris note but not retained

Trench 30

Dimensions56 m by 2 mTotal Area 112 m^2 OrientationN-S

Depth of Excavation Madeground 1.6 m

Significant Features None

Other Features Brick and concrete built structures

Subsoil Grey clay

Finds 19th / 20th Century debris note but not retained

Trench 31

Dimensions50 m by 2 mTotal Area 100 m^2 OrientationN-S

Depth of Excavation Madeground 1.6 m

Significant Features None

Other Features Brick and concrete built structures

Subsoil Grey clay

Finds 19th / 20th Century debris note but not retained

Trench 32

Dimensions53 m by 2 mTotal Area 106 m^2 OrientationN-S

Depth of Excavation Madeground 0.8 m -1.2 m

Significant Features None

Other Features Concrete built structures

Subsoil Grey clay

Finds 19th / 20th Century debris note but not retained

Trench 33

Dimensions50 m by 2 mTotal Area100 m²OrientationN - S

Depth of Excavation Madeground 0.7 m - 1.4 m

Significant Features None

Other Features Concrete built features

Subsoil Grey clay

Finds 19th / 20th Century debris note but not retained

Trench 34

Dimensions 50.5 m by 2 m

Total Area 101 m²

Orientation N - S

Depth of Excavation Madeground 0.7 m

Significant Features None

Other Features Concrete built structures

Subsoil Grey clay

Finds 19th / 20th Century debris note but not retained

Trench 35

Dimensions50 m by 2 mTotal Area 100 m^2 OrientationN-S

Depth of Topsoil Madeground 0.4 m

Depth of Excavation 0.4 m Significant Features None

Other Features Brick and concrete built structures

Subsoil Grey clay

Finds 19th / 20th Century debris note but not retained

Trench 36

Dimensions52 m by 2 mTotal Area 104 m^2 OrientationN-S

Depth of Topsoil Madeground 0.4 m

Depth of Excavation 0.9 m Significant Features None

Other Features Concrete built structures

Subsoil Grey clay

Finds 19th / 20th Century debris note but not retained

Trench 37

 Dimensions
 32 m by 5 m

 Total Area
 160 m²

 Orientation
 NE – SW

Depth of Excavation Madeground up to 2.4 m

Significant Features Naburn Street eastern kerb line and edge of road surface

Other Features Sandstone foundations

Subsoil Grey clay

Finds 19th / 20th Century debris note but not retained

Trench 38

Dimensions42 m by 2 mTotal Area84 m²OrientationNW – SE

Depth of Excavation Madeground up to 1.8 m

Significant Features A section across Naburn Street was uncovered showing kerbstones and road surface along

with buildings along eastern side of street. Numerous walls and surfaces uncovered

Other Features Concrete built structures

Subsoil Grey clay

Finds 19th / 20th Century debris note but not retained

Trench 39

Dimensions33 m by 2 mTotal Area66 m²OrientationNE – SW

Depth of Excavation Madeground 2.9 m to 3.1 m

Significant Features None

Other Features Concrete and modern brick built structures

Subsoil Grey clay

Finds 19th / 20th Century debris note but not retained

Trench 40

Dimensions 52 m by 2 m Total Area 104 m² Orientation NW-SE

Depth of Excavation Madeground up to 1.9 m

Significant Features None

Other Features Concrete and modern brick built structures

Subsoil Grey clay

19th / 20th Century debris note but not retained **Finds**

Trench 41

Dimensions 52 m by 2 m Total Area 104 m² Orientation NW - SE

Depth of Excavation Madeground up to 1.2 m

Significant Features None

Other Features Concrete and modern brick built structures

Subsoil Grey clay

19th / 20th Century debris note but not retained **Finds**

Trench 42

Dimensions 50 m by 2 m Total Area 100 m² NW - SE Orientation

Depth of Excavation Madeground up to 1.1 m

Significant Features None

Modern brick structures Other Features

Subsoil Grey clay

Finds 19th / 20th Century debris note but not retained

Trench 43

Dimensions 50 m by 2 m Total Area 100 m² Orientation NW - SE

Depth of Excavation Madeground up to 0.9 m

Significant Features None Other Features None Subsoil Grey clay

19th / 20th Century debris note but not retained Finds

Trench 44

Dimensions 87 m by 2 m Total Area 174 m² Orientation NE - SW

Depth of Excavation Madeground minimum of 1.8 m, at points up to 3.8 m - not bottomed

Significant Features None

Numerous concrete and modern brick built structures Other Features

Subsoil

19th / 20th Century debris note but not retained Finds

Trench 45

Dimensions 51 m by 2 m Total Area 102 m² Orientation NE - SW

Depth of Excavation Madeground minimum of 1.2 m, at points up to 4.0 m - not bottomed

Significant Features None

Other Features Numerous concrete built structures

Subsoil Grey clay

Finds 19th / 20th Century debris note but not retained

Trench 46

Dimensions66 m by 2 mTotal Area132 m²OrientationNE – SW

Depth of Excavation Madeground minimum of 1.2 m, at points up to 2.4 m

Significant Features None

Other Features Brick foundations
Subsoil Grey clay

Finds 19th / 20th Century debris note but not retained

Trench 47

Dimensions51 m by 2 mTotal Area102 m²OrientationNE – SW

Depth of Excavation Madeground minimum of 0.8 m, at points up to 2.2 m

Significant Features None

Other Features Concrete and brick built structures

Subsoil Grey clay

Finds 19th / 20th Century debris note but not retained

Trench 48

Dimensions70 m by 2 mTotal Area140 m²OrientationNW – SE

Depth of Excavation Madeground minimum of 0.9 m, at points up to 2.6 m

Significant Features Numerous brick structures, associated with a fire brick channel [4807] & [4809] including walls

[4806], [4810], [4811] & [4815] and floors [4812], [4813], [4814] & [4818]. Also brick flue

[4801].

Other Features Concrete and modern brick-built structures

Subsoil Grey clay

Finds 19th / 20th Century debris note but not retained

Trench 49

Dimensions104 m by 2 mTotal Area208 m²OrientationNW – SE

Depth of Excavation

Significant Features

Other Features

Madeground between 0.9 m and 2.1 m

Brick and sandstone culvert [4901]

Concrete and modern brick-built structures

Subsoil Grey clay

Finds 19th / 20th Century debris note but not retained

Trench 50

Dimensions104 m by 2 mTotal Area208 m²OrientationNW – SE

Depth of Excavation Madeground between 0.7 m and 1.6 m

Significant Features None

Other Features Concrete and modern brick built structures

Subsoil Grey clay

Finds 19th / 20th Century debris note but not retained

Trench 51

Dimensions 51 m by 2 m Total Area 102 m² Orientation NE - SW

Depth of Excavation Madeground between 0.9 m and 1.7 m

Significant Features None

Other Features Modern brick built structures

Subsoil Grey clay

19th / 20th Century debris note but not retained Finds

Trench 52

Dimensions 56 m by 2 m 112 m² Total Area N - SOrientation

Depth of Excavation Madeground between 0.6 m and 1.2 m

Significant Features None

Other Features Concrete and modern brick built structures

Subsoil Grey clay

19th / 20th Century debris note but not retained **Finds**

Trench 53

Dimensions 60 m by 2 m 120 m² Total Area Orientation NE-SW

Depth of Excavation Madeground between 0.4 m and 0.8 m

Significant Features None

Other Features Concrete and modern brick built structures

Subsoil Grey clay

19th / 20th Century debris note but not retained **Finds**

Trench 54

Dimensions 60 m by 2 m Total Area 120 m² Orientation NE - SW

Depth of Excavation Madeground between 0.4 m and 0.8 m

Significant Features None

Other Features Concrete and modern brick built structures

Subsoil Grey clay

Finds 19th / 20th Century debris note but not retained

Trench 55

Dimensions 50 m by 2 m 100 m² Total Area Orientation N-S

Depth of Excavation Madeground between 0.5 m and 0.9 m

Significant Features

Other Features Concrete and modern brick built structures

Subsoil Grey clay

Finds 19th / 20th Century debris note but not retained

Trench 56

Dimensions 100 m by 2 m Total Area 200 m² Orientation NE - SW

Depth of Excavation Madeground between 0.6 m and 0.9 m

Significant Features

Other Features Concrete built structures

Subsoil Dark grey clay

Finds 19th / 20th Century debris note but not retained

Trench 57

Dimensions *5*3 m by 2 m Total Area 106 m² Orientation NE - SW

Depth of Excavation Madeground between 0.6 m and 0.7 m

Significant Features None

Other Features Concrete built structures

Subsoil Dark grey clay

Finds 19th / 20th Century debris note but not retained

Appendix 2 Photographic Register

Black and white Film 1

Frame	Trench	Feature	Description	From
1	-	-	Registration	
2	-	-	Registration	
3	5	-	General view	S
4	6	-	General view	S
5	7	-	General view	S
6	1	[101]	Wall structure	N
7	1	[101]	Wall structure	W
8	1	[102]	Wall in east facing section	Е
9	1	[103]	Surface	N
10	1	[103]	Surface	S
11	1	-	General view	S
12	3	-	General view	NE
13	3	-	General view	NW
14	4	-	General view	NW
15	8	-	General view	Е
16	8	-	South facing section	SE
17	9	-	General view	Е
18	15	-	General view	S
19	15	-	General view	N
20	15	-	North-east facing section	SE
21	15	-	North-east facing section facing section	SE
22	10	-	General view	
23	10	-	South-facing section showing concrete rail	SE
24	11	-	General view	Е
25	11	-	North-facing section	N
26	12	[1201]	Brick wall	Е
27	12	[1202]	Brick flue	N
28	12	[1202]	Brick flue	N
29	16	-	View of south-east end of trench showing modern brick building cut into red clay	S
30	16	_	Typical section	SE
31	16	_	Shot of deep pits showing trip lines	N
32	16	_	Shot of deep pits showing trip lines	N
33	12	[1203]	Sandstone foundations	N
34	15	[1508]	Cobbled surface	N
35	15	[1508]	Cobbled surface	S
36	12	[1201]	Brick wall	E
37	13	[1301/2]	Concrete bases	E
38	13	[1303]	Brick wall corner	E
39	18	-	Typical section	NE
		1	. 75.00. 300.00.	

Black and white Film 2

Frame	Trench	Feature	Description	From
1	-	-	Registration	-
2	-	-	Registration	-
3	17	-	General view	SE
4	18	-	General view	SE
5	19	-	General view	SE
6	24	-	General view	SE
7	22	-	General view	SE
8	21	-	General view	SE
9	14	-	General view	Е
10	14	-	Sandstone/brick foundations in north facing section	NE
11	20	-	General view	S
12	22	-	South-facing section showing depth of clay	NW
13	23	-	View of trial pit to depth of 4.3 m into natural clays	NW
14	23	-	View of trial pit to depth of 4.3 m into natural clays	NW
15	23	-	View of trial pit to depth of 4.3 m into natural clays	NW
16	26	-	General view	SE
17	40	-	General view	Е
18	40	-	General view	W
19	41	-	General view	W
20	42	-	General view	W
21	43	-	General view	Е
22	44	-	View of dumped clay material in SE section	N
23	45	-	General view	S
24	47	-	General view	S
25	46	-	South-east facing section	SE
26	48	-	North-east facing section	NE
27	49	-	General view	Е
28	38	-	General view	S
29	38	[3805-10]	General view of structural features	W
30	38	[3812-19]	General view of structural features	W
31	38	[3823/4]	Kerbstones and road	W
32	38	[3825/4]	Kerb and road	W
33	50	-	General view	Е
34	51	-	General view	N
35	52	-	General view	N

Black and white Film 3

Frame	Trench	Feature	Description	From
1	-	-	Registration	
2	-	-	Registration	
3	53	-	General view	N
4	54	-	General view	N
5	55	-	General view	S
6	56	-	General view	N

Frame	Trench	Feature	Description	From
7	57	-	General view	S
8	49	-	General view	S
9	12	[1201]	General view	Е
10	12	[1201]	General view	Е
11	12	[1201]	General view	N
12	12	[1201]	General view	N
13	12	[1201]	Internal elevation north-facing	N
14	12	[1201]	Internal elevation north-facing	N
15	12	[1201]	Internal elevation east-facing	Е
16	12	[1201]	Internal elevation east-facing	Е
17	12	[1201]	Internal elevation south-facing	S
18	12	[1201]	Internal elevation south-facing	S
19	12	[1201]	North end of south-facing wall showing loose nature of brick work	E
20	12	[1201]	North end of south-facing wall showing loose nature of brick work	E
21	48	[4801/2]	Brick flue west end of trench	N
22	48	[4801/2]	Brick flue west end of trench	N
23	48	[4803]	General view	W
24	48	[4803]	General view	W
25	48	[4803]	North-facing section of trench showing extent of [4803]	N
26	48	[4803]	North-facing section of trench showing extent of [4803]	N
27	49	-	General view of brick surface	Е
28	49	-	General view of extension	S
29	49	-	General view of brick surface	Е
30	49	-	General view of brick surface	Е
31	49	-	Area of broken surface	W
32	49	-	Floor surface of fire brick channel	W
33	49	-	Fire brick wall abutting floor surface	N
34	49		Fire brick channel	W

Black and white Film 4

Frame	Trench	Feature	Description	From
1	-	-	Registration	
2	-	-	Registration	
3	49	-	General view of extended area	N
4	49	-	General view of extended area	W
5	49	-	Walls	Е
6	49	-	Brick	
7	49	-	Brick	

Digital images

Frame	Trench	Feature	Description	From
1	-	-	Registration	
2	38	-	General view	S

38 [3805-10] General view of structural features W	Frame	Trench	Feature	Description	From
5 38 [3823/4] Kerbstones and road W 6 38 [3825/4] Kerb and road W 7 50 - General view N 8 51 - General view N 9 52 - General view W 10 - General view W 11 - General view E 12 [1201] General view E 13 12 [1201] General view N 14 12 [1201] General view N 15 12 [1201] General view N 16 12 [1201] Internal elevation view N 17 12 [1201] Internal elevation north-facing N 18 12 [1201] Internal elevation east-facing E 19 12 [1201] Internal elevation south-facing S 20 12 [1201] Internal elevation south-facing S	3	38	[3805-10]	General view of structural features	W
6 38	4	38	[3812-19]	General view of structural features	W
7 50 - General view N 8 51 - General view N 9 52 - General view N 10 - - General view W 11 - - General view S 12 12 [1201] General view E 13 12 [1201] General view N 14 12 [1201] General view N 15 12 [1201] Internal elevation wiew N 16 12 [1201] Internal elevation north-facing N 17 12 [1201] Internal elevation east-facing E 19 12 [1201] Internal elevation south-facing S 20 12 [1201] Internal elevation south-facing S 21 12 [1201] Internal elevation south-facing S 22 12 [1201] Internal elevation south-facing	5	38	[3823/4]	Kerbstones and road	W
S	6	38	[3825/4]	Kerb and road	W
9 52	7	50	-	General view	Е
10	8	51	-	General view	N
11	9	52	-	General view	N
12	10	-	-	General view	W
13	11	-	-	General view	S
14 12 [1201] General view N 15 12 [1201] General view N 16 12 [1201] Internal elevation north-facing N 17 12 [1201] Internal elevation north-facing N 18 12 [1201] Internal elevation east-facing E 19 12 [1201] Internal elevation south-facing S 20 12 [1201] Internal elevation south-facing S 21 12 [1201] Internal elevation south-facing S 21 12 [1201] Internal elevation south-facing S 21 12 [1201] North end of south facing wall showing loose nature of brick work E 23 12 [1201] North end of south facing wall showing loose nature of brick work E 24 48 [4801] Internal view of south facing wall showing loose nature of brick work E 24 48 [4801] Internal elevation south-facing wall showing loose nature of brick full south fa	12	12	[1201]	General view	Е
15	13	12	[1201]	General view	Е
16	14	12	[1201]	General view	N
17 12 [1201] Internal elevation north-facing N 18 12 [1201] Internal elevation east-facing E 19 12 [1201] Internal elevation east-facing E 20 12 [1201] Internal elevation south-facing S 21 12 1201] Internal elevation south-facing S 22 12 [1201] North end of south facing wall showing loose nature of brick work E 23 12 [1201] North end of south facing wall showing loose nature of brick work E 24 48 [4801] Internal view of flu N 25 48 [4801/2] Brick flue west end of trench N 26 48 [4801/2] Brick flue west end of trench N 27 48 [4803] General view W 28 48 [4803] General view W 29 48 [4803] North facing section of trench showing extent of [4803] N 30	15	12	[1201]	General view	N
18	16	12	[1201]	Internal elevation north-facing	N
19	17	12	[1201]	Internal elevation north-facing	N
12	18	12	[1201]	Internal elevation east-facing	Е
21 12 1201] Internal elevation south-facing S 22 12 [1201] North end of south facing wall showing loose nature of brick work E 23 12 [1201] North end of south facing wall showing loose nature of brick work E 24 48 [4801] Internal view of flu N 25 48 [4801/2] Brick flue west end of trench N 26 48 [4801/2] Brick flue west end of trench N 27 48 [4803] General view W 28 48 [4803] General view W 29 48 [4803] North facing section of trench showing extent of [4803] N 30 48 [4803] North facing section of trench showing extent of [4803] N 31 49 - General view of brick surface E 32 49 - General view of brick surface E 34 49 - General view of brick surface E 35	19	12	[1201]	Internal elevation east-facing	Е
12	20	12	[1201]	Internal elevation south-facing	S
12	21	12	1201]	Internal elevation south-facing	S
12	22	12	[1201]		Е
25 48 [4801/2] Brick flue west end of trench N 26 48 [4801/2] Brick flue west end of trench N 27 48 [4803] General view W 28 48 [4803] General view W 29 48 [4803] North facing section of trench showing extent of [4803] N 30 48 [4803] North facing section of trench showing extent of [4803] N 31 49 - General view of brick surface E 32 49 - General view of extension S 33 49 - General view of brick surface E 34 49 - General view of brick surface E 35 49 - Area of broken surface W 36 49 - Floor surface of fire brick channel W 37 49 - Fire brick wall abutting floor surface N 38 49 - General view of extended area	23	12	[1201]		E
26 48 [4801/2] Brick flue west end of trench N 27 48 [4803] General view W 28 48 [4803] General view W 29 48 [4803] North facing section of trench showing extent of [4803] N 30 48 [4803] North facing section of trench showing extent of [4803] N 31 49 - General view of brick surface E 32 49 - General view of brick surface E 34 49 - General view of brick surface E 34 49 - General view of brick surface E 35 49 - Area of broken surface W 36 49 - Floor surface of fire brick channel W 37 49 - Fire brick wall abutting floor surface N 38 49 - Fire brick channel W 39 49 - General view of extended area N </td <td>24</td> <td>48</td> <td>[4801]</td> <td>Internal view of flu</td> <td>N</td>	24	48	[4801]	Internal view of flu	N
27 48 [4803] General view W 28 48 [4803] General view W 29 48 [4803] North facing section of trench showing extent of [4803] N 30 48 [4803] North facing section of trench showing extent of [4803] N 31 49 - General view of brick surface E 32 49 - General view of brick surface E 34 49 - General view of brick surface E 34 49 - General view of brick surface E 35 49 - Area of broken surface W 36 49 - Floor surface of fire brick channel W 37 49 - Fire brick wall abutting floor surface N 38 49 - Fire brick channel W 39 49 - General view of extended area N 40 49 - General view of extended area W	25	48	[4801/2]	Brick flue west end of trench	N
28 48 [4803] General view W 29 48 [4803] North facing section of trench showing extent of [4803] N 30 48 [4803] North facing section of trench showing extent of [4803] N 31 49 - General view of brick surface E 32 49 - General view of extension S 33 49 - General view of brick surface E 34 49 - General view of brick surface E 35 49 - Area of broken surface W 36 49 - Floor surface of fire brick channel W 37 49 - Fire brick wall abutting floor surface N 38 49 - Fire brick channel W 39 49 - General view of extended area N 40 49 - General view of extended area W 41 49 - Brick	26	48	[4801/2]	Brick flue west end of trench	N
29 48 [4803] North facing section of trench showing extent of [4803] N 30 48 [4803] North facing section of trench showing extent of [4803] N 31 49 - General view of brick surface E 32 49 - General view of extension S 33 49 - General view of brick surface E 34 49 - General view of brick surface E 35 49 - Area of broken surface W 36 49 - Floor surface of fire brick channel W 37 49 - Fire brick wall abutting floor surface N 38 49 - Fire brick channel W 39 49 - General view of extended area N 40 49 - General view of extended area W 41 49 - Brick	27	48	[4803]	General view	W
30 48 [4803] North facing section of trench showing extent of [4803] N 31 49 - General view of brick surface E 32 49 - General view of brick surface E 33 49 - General view of brick surface E 34 49 - General view of brick surface E 35 49 - Area of broken surface W 36 49 - Floor surface of fire brick channel W 37 49 - Fire brick wall abutting floor surface N 38 49 - Fire brick channel W 39 49 - General view of extended area N 40 49 - General view of extended area W 41 49 - Walls E 42 49 - Brick	28	48	[4803]	General view	W
31 49 - General view of brick surface E 32 49 - General view of extension S 33 49 - General view of brick surface E 34 49 - General view of brick surface E 35 49 - Area of broken surface W 36 49 - Floor surface of fire brick channel W 37 49 - Fire brick wall abutting floor surface N 38 49 - Fire brick channel W 39 49 - General view of extended area N 40 49 - General view of extended area W 41 49 - Walls E 42 49 - Brick	29	48	[4803]	North facing section of trench showing extent of [4803]	N
32 49 - General view of extension S 33 49 - General view of brick surface E 34 49 - General view of brick surface E 35 49 - Area of broken surface W 36 49 - Floor surface of fire brick channel W 37 49 - Fire brick wall abutting floor surface N 38 49 - Fire brick channel W 39 49 - General view of extended area N 40 49 - General view of extended area W 41 49 - Walls E 42 49 - Brick	30	48	[4803]	North facing section of trench showing extent of [4803]	N
33 49 - General view of brick surface E 34 49 - General view of brick surface E 35 49 - Area of broken surface W 36 49 - Floor surface of fire brick channel W 37 49 - Fire brick wall abutting floor surface N 38 49 - Fire brick channel W 39 49 - General view of extended area N 40 49 - General view of extended area W 41 49 - Walls E 42 49 - Brick	31	49	-	General view of brick surface	Е
34 49 - General view of brick surface E 35 49 - Area of broken surface W 36 49 - Floor surface of fire brick channel W 37 49 - Fire brick wall abutting floor surface N 38 49 - Fire brick channel W 39 49 - General view of extended area N 40 49 - General view of extended area W 41 49 - Walls E 42 49 - Brick	32	49	-	General view of extension	S
35 49 - Area of broken surface W 36 49 - Floor surface of fire brick channel W 37 49 - Fire brick wall abutting floor surface N 38 49 - Fire brick channel W 39 49 - General view of extended area N 40 49 - General view of extended area W 41 49 - Walls E 42 49 - Brick	33	49	-	General view of brick surface	Е
36 49 - Floor surface of fire brick channel W 37 49 - Fire brick wall abutting floor surface N 38 49 - Fire brick channel W 39 49 - General view of extended area N 40 49 - General view of extended area W 41 49 - Walls E 42 49 - Brick	34	49	-	General view of brick surface	Е
37 49 - Fire brick wall abutting floor surface N 38 49 - Fire brick channel W 39 49 - General view of extended area N 40 49 - General view of extended area W 41 49 - Walls E 42 49 - Brick	35	49	-	Area of broken surface	W
38 49 - Fire brick channel W 39 49 - General view of extended area N 40 49 - General view of extended area W 41 49 - Walls E 42 49 - Brick	36	49	-	Floor surface of fire brick channel	W
39 49 - General view of extended area N 40 49 - General view of extended area W 41 49 - Walls E 42 49 - Brick	37	49	-	Fire brick wall abutting floor surface	N
40 49 - General view of extended area W 41 49 - Walls E 42 49 - Brick	38	49	-	Fire brick channel	W
41 49 - Walls E 42 49 - Brick	39	49	-	General view of extended area	N
42 49 - Brick	40	49	-	General view of extended area	W
	41	49	-	Walls	Е
43 49 - Brick	42	49	-	Brick	
	43	49	-	Brick	

Appendix 3 Context Register

Context Number	Trench	Description
		Mixed modern made ground with metal, brick, concrete, occasional sandstone
[101]	Tr.1	rubble within a clay rich matrix. Between of 1.0 m to 1.4 m thick. Lies over an
		older made ground [102]
[102]	Tr.1	Older made ground built up of layers of dumped material including ash, coal
[102]		debris, cinder, slag. Up to 1.0 m thick. Lies over natural [103].
[103]	Tr.1	Natural subsoil consisting a mid yellow/light brown/grey clay at c.2.0 m and below.
[104]	Tr.1	A NE to SW aligned unfrogged brick work wall, cut into natural [103], 4.3 m in length by one brick wide (0.24 m). Joins brick wall [105] from northern side.
[105]	Tr.1	A NW to SE aligned unfrogged brick work wall, cut into natural [103], crosses trench, at least 2.0 m in length by one brick wide (0.24 m). Joins brick wall [104] and abuts brick wall [106]
[106]	Tr.1	A NE to SW aligned unfrogged brick work wall, cut into natural [103], 0.60 m in length by one brick wide (0.24 m). Joins brick wall [105] on southern side.
[107]	Tr.1	A small section of unfrogged brick work extending into the trench from the western section of Tr.1. Measures c.1.0 NE-SW by 0.332 m NW-SE.
		A NW to SE aligned unfrogged brick work wall, cut into natural [103], crosses
[108]	Tr.1	trench, at least 2.0 m in length by up to two bricks wide (0.48 m). Abuts stone slabbing [109].
[109]	Tr.1	Stone slabbing crosses the trench measures at least 2.0 m NW-SE by up to 1.05 m NE-SW.
[201]	Tr.2	Mixed modern made ground with metal, brick, concrete, occasional sandstone rubble within a clay rich matrix. Between of 1.0 m to 1.6 m thick. Lies over an older made ground [202]
[202]	Tr.2	Older made ground built up of layers of dumped material including ash, coal debris, cinder, slag. Up to 1.0 m thick. Lies over natural [203].
[203]	Tr.2	Natural subsoil consisting a mid yellow/light brown/grey clay at c.2.0 m and below.
[204]	Tr.2	Remains of sandstone block wall up to 0.60 m wide. Extends for up nearly 3.0 m aligned north-east to south-west. Associated with floor surface [205].
[205]	Tr.2	Remnant mortar floor surface associated with wall [204].
[200]	11.2	
[206]	Tr.2	Northwest to southeast aligned brick wall, three bricks wide and associated with wall [207] and probably [204].
[207]	Tr.2	Remains of sandstone block wall up to 0.46 m wide. Extends for up 2.90 m aligned north-east to south-west with a right angle return aligned northwest to southeast. Associated with floor surface [209] and brick walls [206] and [208]
[208]	Tr.2	Northwest to southeast aligned brick wall, one bricks wide and associated with wall [207].
[209]	Tr.2	Remnant mortar floor surface associated with wall [207] & [208].
[210]	Tr.2	Northwest to southeast aligned brick wall, three bricks wide and associated with wall [212].
[211]	Tr.2	Remnant mortar floor surface associated with wall [212].
[]		Remains of sandstone building. Extends for up 5.8 m aligned north-east to south-
[212]	Tr.2	west by 2.0 m north-west to south-east. Two sides are single width wide, c.0.46 m with western wall double width at c.1.0 m. Associated with floor surface [211] and brick walls [210].
[213]	Tr.2	Remains of sandstone building. Extends for up 8.25 m aligned north-east to south-west by 2.0 m north-west to south-east. Two sides are single width wide,

		c.0.46 m with western wall wider at c.0.76 m. Associated with floor surface [214].
[214]	Tr.2	Remnant mortar floor surface associated with wall [213].
[1201]	Tr.12	Sandstone and unfrogged brick wall [1201] cut into natural clay [1203] with possible remnants of an internal floor surface [1202].
[1202]	Tr.12	Possible internal floor surface, compacted mortar floor within sandstone walls [1201].
[1203]	Tr.12	Natural boulder clay, dark grey/grey in colour.
[1204]	Tr.12	Redeposited clay c.1.0 to 1.2 m in depth under modern made ground [1206]. Lies over natural [1202].
[1205]	Tr.12	At SE end of trench there was a brick built flue within the redeposited clay [1204] and cut into natural [1203]. Measures c. 10.0 m long in base of trench by c.1.0m wide with curved roof.
[1501]	Tr.15	Old ash/soot/coal dust deposit up to 1.0 m thick lying directly over natural [1505] and under [1502].
[1502]	Tr.15	Thick layer of clean redeposited orange boulder clay. Lies over [1501], [1505] and [1506]. Lies under [1503] and [1507].
[1503]	Tr.15	Deposit of between 1.0 m to 1.4 m of large rubble material concrete and brick. Lies over [1502] and under [1504]
[1504]	Tr.15	Large deposits, 1.0 m to 1.2 m of modern demolition crush material
[1505]	Tr.15	Natural boulder clay, dark grey/grey in colour.
[1506]	Tr.15	Large deposit of vitrified and slag material lying directly over natural [1505] and under [1502].
[1507]	Tr.15	A thick layer of soot and ash up to 1.0 m thick which lies over [1502] and [1506] and under [1509]
[1508]	Tr.15	Small surviving patch of granite setts covering approximately 4.0 m by 2.5 m but disturbed by modern damage. Appear to lie over [1507] and under [1509].
[1509]	Tr.15	Modern madeground consisting mostly of demolition crush material. Lies over [1507] and [1508].
[1510]	Tr.15	Large modern cut filled with [1503] and [1504]. Cut through [1502]
[3801]	Tr.38	Mixed modern made ground with metal, brick, concrete, occasional sandstone rubble within a clay rich matrix. Between of 1.0 m to 1.4 m thick. Lies over an older made ground [3802]
[3802]	Tr.38	Older madeground built up of layers of dumped material including ash, coal debris, cinder, slag. Up to 1.0 m thick
[3803]	Tr.38	Natural subsoil consisting a mid yellow/light brown/grey clay at c.2.0 m and below.
[3804]	Tr.38	Compact light grey mortar spread associated with various unfrogged brick walls [3805], [3806], [3808], [3809] & [3810]. Shallow depth of c0.03 m. Remnant mortar floor surface.
[3805]	Tr.38	Unfrogged brick wall, one brick in width. Abuts brick wall [3806]. Internal wall division of building associated with mortar floor [3804] and brick walls [3806] & [3809].
[3806]	Tr.38	Unfrogged brick wall, one brick in width. Brick wall on south-west side of brick path [3807] and associated with mortar floor [3804] and brick walls [3805] & [3809].
[3807]	Tr.38	Brick walkway between walls [3808] and [3810] to south-east and [3809] and [3806] to north-west. Measures just under 1.0 m wide and extends for at least 3.6 m.
[3808]	Tr.38	Unfrogged brick wall, one brick in width. Brick wall on south-east side of brick path [3807] and associated with mortar floor [3804] and brick wall [3810].

Double width unfrogged brick wall fronting	
[3809] Tr.38 mortar floor [3804] and brick wall [3806]. N	
[3810] Tr.38 Double width unfrogged brick wall fronting mortar floor [3804] and brick wall [3808].	
[3811] Tr.38 Compact deposit of dark grey/black silt an [3813].	nd cinders mix underlying [3812] and
[3812] Tr.38 Very rough cobbled/flagged surface lying	over [3811].
[3813] Tr.38 Possible repair to surface [3812]. Very rou	ugh layer of stones over [3811].
[3814] Stone setting for a door post mirrored by [m by 0.25 m by 0.10 m. Associated with w passageway.	vall [3818] as southern part of
[3815] Stone setting for a door post mirrored by [m by 0.25 m by 0.10 m. Associated with w passageway.	
[3816] Tr.38 Dirty dark grey/black mix of silty sand. Und	der [3820].
[3817] Tr.38 Single brick wide wall joining wall [3819] w	with stone door setting [3815]
[3818] Tr.38 Single brick wide wall joining wall [3819] w	with stone door setting [3814]
[3819] Tr.38 Single brick wall and threshold. Abuts wal	lls [3817] and [3818]
[3820] Tr.38 Remnant floor abutting wall [3819]	
[3821] Tr.38 Floor surface, brick abutting wall [3819]	
[3822] Tr.38 Single piece of sandstone	
[3823] Tr.38 Eastern kerb of Naburn Street	
[3824] Tr.38 Road surface of Naburn Street, rough tarr surface	mac possibly covering earlier cobble
[3825] Tr.38 Western kerb of Naburn Street	
[4801] Yellow fire bricks, marked 'CALDER'. Forr tunnel/flue at least 1.1 m wide. Aligned no modern madeground material [4819]. Ass Lies within cut [4804].	orth-east to south-west. Lies under
[4802] Tr.48 Fire brick wall, appears to be aligned north to the flue [4801]. Associated with wall [4801]	
[4803] Tr.48 Fire brick wall, appears to be aligned para west and joins directly to the flue [4801]. A	
[4804] Tr.48 Cut for flue. Cut into natural clay [4820] ar	
[4805] Tr.48 Backfilled material alongside edge of flue brick fragments, possibly scorched by hea	
[4806] Tr.48 Large brick foundation, red brick and fire b	brick abutting wall [4807]
[4807] Tr.48 Fire brick wall of channel, northern side.	
[4808] Tr.48 Large flat setts, cobble floor of channel	
[4809] Tr.48 Fire brick wall of channel, southern side.	
[4810] Tr.48 Large redbrick wall base. Lies over [4813]] and [4818]
[4811] Tr.48 East to west red brick wall. Lies over [481.	2]
[4812] Tr.48 Brick surface. Underlies wall [4811] & [481]	10] and floor [4813]
[4813] Tr.48 Brick floor. Lies over [4812]. Lies under wa	rall [4810] and contains drain [4816].
[4044] T. 40 O L. (
[4814] Tr.48 Cambered floor surface.	

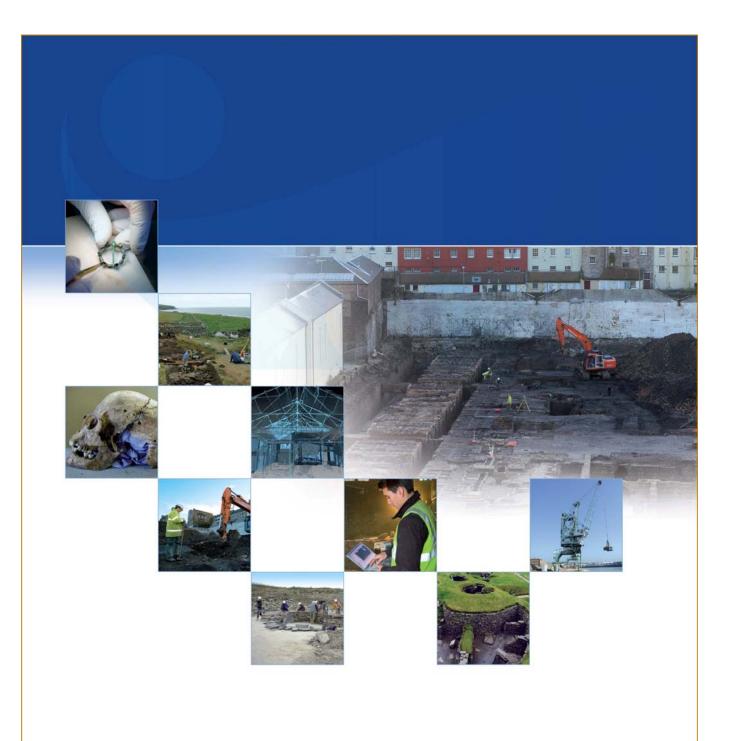
[4816]	Tr.48	Modern brick backfill material within channel. Lies over floor [4808]
[4817]	Tr.48	Vitrified slag material lying between walls [4809] & [4811]. Lies under floor [4818]
[4818]	Tr.48	Brick floor lying under wall [4810] and over [4817]
[4819]	Tr.48	Modern madeground consisting of predominantly of brick and concrete crushed material.
[4820]	Tr.48	Grey/dark grey natural subsoil clay
[4901]	Tr.49	Cut of a brick-built culvert, [4901], cut into the natural clay subsoil, [4903]. Filled by [4902] and [4904].
[4902]	Tr.49	Unfrogged and unmortared bricks forming side wall of brick culvert. Three courses high, covered by sandstone lintels [1904].
[4903]	Tr.49	Grey/dark grey natural subsoil clay
[4904]	Tr.49	Large sandstone lintel stones capping and sealing the drain, lying directly over brick side walls [4902]

Appendix 4 Drawing Register

Drawing Number	Trench	Feature	Description	Scale
1	Tr.1	[108] & [109]	Plan of brick wall [108] and stone slabs [109]	1:20
2	Tr.12	[1201]	East-facing elevation of sandstone and brick wall [1201]	1:20
3	Tr.38	Various	Plan of Trench 38	1:20
4	Tr.12	[1201]	Plan of extension of Trench 12 around wall [1201]	1:20
5	Tr.49	[4901]	North-facing section through culvert [4901]	1:20
6	Tr.49	[4901]	Plan of culvert [4901]	1:20
7	Tr.15	[1508]	Plan of cobbled surface [1508]	1:20
8	Tr.48	Various	Plan of extension to Trench 48	1:20
9	Tr.48	[4801]	North-facing section of flue [4801]	1:20

Appendix 5: 'Discovery and Excavation in Scotland' Report

LOCAL AUTHORITY:	Highland Council				
PROJECT TITLE/SITE NAME:	Cathcart Road Evaluation, Glasgow				
PROJECT CODE:	AOC 21868				
PARISH:	Glasgow (City of Glasgow)				
NAME OF CONTRIBUTOR:	Lindsay Dunbar				
NAME OF ORGANISATION:	AOC Archaeology Group				
TYPE(S) OF PROJECT:	Archaeological Evaluation				
, ,	<u> </u>				
NMRS NO(S):	NS56SE 180				
SITE/MONUMENT TYPE(S):	Industrial; iron works				
SIGNIFICANT FINDS:	None				
NGR (2 letters, 6 figures)	NS 5901 6340				
START DATE (this season)	11 th July 2011				
END DATE (this season)	22 nd July 2011				
PREVIOUS WORK (incl. DES ref.)	None				
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	An evaluation was undertaken in ascertaining any potential adverse archaeological impact from a proposed mixed retail and residential development at Cathcart Road, Govanhill, Glasgow. The development site encompassed part of the former area of Govan Ironworks founded in 1839. The evaluation comprised 57 trenches which exposed a total area of 6,980 m². Given the presence of live utility services, bunded material and the inclusion of active roads such as Crown Street and Lawmoor Street the actual area available to evaluate was c. 7.5 ha. The trenching opened thus equated to an evaluation percentage of just over 9.3 %. The majority of the site was shown to have suffered modern disturbance with extensive madeground deposits across much of the site, especially to the north. In the south the absence of any remains of the iron works is testament to a thorough salvage and reclamation process undertaken. Remains of the late 19 th century Naburn Street were recorded in the north-west corner of the development site with the road surface, kerbstones and tenement building remains encountered. Remains of two deeply set flues, along with the discrete remains of a sandstone building and area of brick-built survival were all that could be attributable to the sites extensive industrial past.				
PROPOSED FUTURE WORK:	Possible watching brief				
CAPTION(S) FOR ILLUSTRS:	n/a				
SPONSOR OR FUNDING BODY:	Cathcart Developments Ltd.				
ADDRESS OF MAIN CONTRIBUTOR:	C/o AOC Archaeology Group				
EMAIL ADDRESS:	Lindsay.Dunbar@aocarchaeology.com				
<u> </u>					





AOC Archaeology Group, Edgefield Industrial Estate, Edgefield Road, Loanhead EH20 9SY tel: 0131 440 3593 | fax: 0131 440 3422 | e-mail: admin@aocarchaeology.com