

NORTHERN ARCHAEOLOGICAL ASSOCIATES LTD

CLIFTON AND ACOMB LEAD RENEWALS, YORK

Archaeological Monitoring Report

Site name: Clifton and Acomb lead renewals, York

Administrative Authority: City of York Council

Development: Lead water pipe replacement

Client: Yorkshire Water Services Ltd

Contractor Morrison Utility Services Ltd

Monitoring archaeologist: Kevin Collins

Project manager: Oliver Cooper

NAA project number: 1258

NAA report number: 18/02

1.0 INTRODUCTION

1.1 This report presents the results of archaeological monitoring undertaken during the replacement of old lead water mains with plastic pipework within the Clifton/Bootham and Acomb districts of York (Figure 1). The work was undertaken by Northern Archaeological Associates Ltd (NAA) for Morrison Utilities Services Ltd on behalf of Yorkshire Water Services Ltd between June 2015 and February 2017.

1.2 The archaeological monitoring was undertaken within the Clifton/Bootham and Acomb districts, respectively to the north-west and west of the historic core of York. The monitored work comprised the excavation of a large number of pits within the pavement to facilitate the replacement of lead piping with plastic pipes, between the water main and domestic premises. Archaeological monitoring was agreed with the City of York Archaeologist, as the work was within areas of known archaeological remains of Roman and later date.

1.3 The A19 through Clifton/Bootham (Figure 2) follows the route of a Roman road, alongside which there have been numerous discoveries of human remains. These were often accompanied by grave goods including metalwork and complete ceramic

vessels, and assemblages of oyster shells within some areas to the south of the A19 have been suggested to relate to burials (J Oxley, pers. comm.).

- 1.4 The area of Acomb investigated (Figure 2) lay within a zone considered to include the route of the Roman road known as Dere Street, as it left the Legionary Fortress of *Eboracum* to head towards the regional centre of *Isurium*, near Boroughbridge.
- 1.5 During the medieval period, the areas of monitoring were partly within the townships of Clifton and Acomb but also included part of the north-western suburbs of York, which had developed outside the Bar Walls. There was therefore the potential for Roman and later remains to be encountered when excavations were undertaken, and the possibility of disturbing human remains, especially around Bootham.
- 1.6 The geology of the York area comprises Sherwood Sandstone, formed approximately 237 to 272 million years ago in the Triassic and Permian Periods (BGs 2017). This is overlain predominantly by glacial gravels, and lacustrine clays derived from the ancient Lake Humber. There are also a series of ridges of glacial boulder clay, one of which is followed by the A19 to the north-west of York.

2.0 RESULTS

- 2.1 Excavations were undertaken by hand, frequently aided by a compressed air lance, with spoil removed by 'Vac-Ex' vacuum system. Most pits were partly within the footway or verge and partly within the roadway. In general, the deposits encountered had been previously disturbed by the installation of the water main and other services (Plate 1), but the presence of unstratified finds suggested that there was the potential for in-situ features or human remains to be encountered. Given their unstratified nature, none of the finds were retained.
- 2.2 A summary of the pits excavated in each area is given in Table 1, and only those streets where there were finds or features are discussed further.



Plate 1. Typical lead replacement pit (Clifton Green) showing two cast iron water mains (one capped with concrete) and small diameter lead pipe. A further service is indicated by the manhole and the paler fill in the rear of the pit

Table 1. Pit summary

Area	Street	No. of pits	Size of pits (max)	Notes
Acomb	Albion Avenue	71	0.6m x 2m x 0.8m	No Features or Finds
Acomb	Almsford Drive	75	0.6m x 1.5m x 0.8m	No Features or Finds
Acomb	Almsford Road	153	0.6m x 1.5m x 0.8m	No Features or Finds
Acomb	Barlow Street	109	0.6m x 1.5m x 1.2m	No Features or Finds
Acomb	Beckfield Lane	60	0.6m x 5m x 1.6m	Nos 194 to 196 (SE56901/52765 to SE56895/52693), there were regular stone blocks within the backfill. Close to possible course of Roman road; no finds

Clifton and Acomb Lead Renewals, York

Area	Street	No. of pits	Size of pits (max)	Notes
Acomb	Carr Lane	78	0.8m x 4m x 1.2m	No Features or Finds
Acomb	Cranbrook Road	126	0.6m x 1.5m x 0.8m	No Features or Finds
Acomb	Dane Avenue	35	0.6m x 2m x 1m	No Features or Finds
Acomb	Danebury Drive	72	0.6m x 1.5m x 1m	No Features or Finds
Acomb	Dodgson Terrace	24	0.6m x 1.5m x 1.2m	No Features or Finds
Acomb	Fawkes Drive	10	1.5m x 1m x 1m	No Features or Finds
Acomb	Garbut Grove	24	0.6m x 1m x 0.8m	No Features or Finds
Acomb	Glebe Avenue	14	0.6m x 1.5m x 0.8m	No Features or Finds
Acomb	Grayshon Drive	35	0.6m x 1.5m x 0.8m	No Features or Finds
Acomb	Inman Terrace	9	0.6m x 1.5m x 0.8m	No Features or Finds
Acomb	Jute Road	118	0.6m x 2m x 1m	No Features or Finds
Acomb	Lidgett Grove	30	0.6m x 1.5m x 1m	No Features or Finds
Acomb	Malvern Avenue	98	0.6m x 1.5m x 0.9m	No Features or Finds
Acomb	Manor Drive	9	0.6m x 1.5m x 0.8m	No Features or Finds
Acomb	Melwood Grove	61	0.6m x 1.5m x 0.8m	No Features or Finds
Acomb	Mowbray Drive	16	0.6m x 1.5m x 1m	No Features or Finds
Acomb	Norman Drive	22	0.6m x 1.5m x 0.8m	No Features or Finds
Acomb	Ostman Road	50	0.6m x 1.5m x 1m	No Features or Finds
Acomb	Ouseburn Avenue	112	0.6m x 1.5m x 0.8m	No Features or Finds
Acomb	Severus Avenue	62	0.6m x 1.5m x 1m	No Features or Finds
Acomb	Sherwood Grove	29	0.8m x 2m x 0.7m	No Features or Finds
Acomb	Shirley Avenue	51	0.6m x 1.5m x 1.2m	No Features or Finds
Acomb	Sitwell Grove	36	0.6m x 0.8m x 0.7m	No Features or Finds
Acomb	Tostig Avenue	44	1.5m x 1.5m x 1.2m	No Features or Finds
Acomb	Viking Road	58	0.7m x 2m x 1.2m	No Features or Finds
Acomb	Wheatlands Grove	43	0.6m x 1.5m x 1m	No Features or Finds
Acomb	Woodlea Grove	18	0.6m x 1.5m x 1m	No Features or Finds
Bootham	Almery Terrace	10	0.7m x 0.8m x 0.7m	No Features or Finds
Bootham	Avenue Terrace	82	0.8m x 1.5m x 1m	No Features or Finds
Bootham	Baker Street	24	0.6m x 1.5m x 1m	No Features or Finds
Bootham	Bootham Crescent	46	0.6m x 1.5m x 0.8m	One piece of medieval green glaze pottery, one piece of Roman greyware and early 20th-century blue and white pottery
Bootham	Bootham/Clifton Road	60	1.5m x 2m x 1m	Possible Roman road surface; post-medieval musket ball and horse-shoe fragment; one medieval potsherd; 19th to 20th-century pottery, clay pipe, animal bone
Bootham	Bootham Terrace	19	0.8m x 2m x 0.8m	No Features or Finds
Bootham	Burton Stone Lane	46	1m x 2m x 0.8m	17th- to 19th-century German stoneware bottle fragment
Bootham	Filey Terrace	16	2m x 1.5m x 1m	19th-century pottery and ornamental brick fragments
Bootham	Greencliffe Drive	46	0.6m x 1.5m x 1m	No Features or Finds

Area	Street	No. of pits	Size of pits (max)	Notes
Bootham	Marygate	20	0.8m x 1.5m x 1.48m	Footings to an end terraced cottage were uncovered west of Abbey Gatehouse.
Bootham	Newborough Street	72	1m x 2m x 1.2m	No Features or Finds
Bootham	North Parade	49	0.6m x 1.5m x 1.2m	Early hand-made brick, one small animal vertebra,
Bootham	Petersway	8	0.6m x 1.3m x 1m	No Features or Finds
Bootham	Queen Anne's Road	58	0.8m x 1.5m x 1m	19th-century bottle glass
Bootham	Saint Olaves Road	67	1.5m x 1.2m x 1m	No Features or Finds
Bootham	Scarborough Terrace	30	1.5m x 1m x 1m	Two sherds of Roman greyware pottery
Bootham	St Mary's	20	1.2m x 1.2m x 0.8m	19th-century pottery, one piece of Roman greyware, one piece of post-medieval slipware
Bootham	Sycamore Terrace	20	0.6m x 1.5m x 0.9m	No Features or Finds
Bootham	Upper Newborough Street	110	0.6m x 1m x 1m	No Features or Finds
Bootham	Westminster Road	61	0.6m x 1.5m x 1m	No Features or Finds
Clifton	Clifton Green	8	1m x 1m x 1m	No Features or Finds
Clifton	Water End	12	0.6m x 3m x 0.8m	No Features or Finds
	Total	2636		

Beckfield Lane, Acomb

2.3 A total of 60 pits, averaging 0.6m x 5m x 1.6m, were excavated on the east side of Beckfield Lane. Within most of the pits, the excavations encountered only redeposited sand, however between numbers 194 to 196 (coordinates SE 56901 52765 to SE 56895 52693; Fig. 2), regular shaped sandstone blocks (Plate 2) were present within the redeposited fill. It was considered that these may represent the disturbed remnants of the Roman road, Dere Street, which passed through the area in this approximate location. Unfortunately, the anticipated route of the road was somewhat further to the south, and there were no finds or other archaeological features, so the interpretation remains speculative.



Plate 2. Beckfield Lane, Acomb: stones possibly derived from Roman road in otherwise sterile backfill

Bootham Crescent

- 2.4 Although there were no features of archaeological interest, a small assemblage of pottery was noted. While this was mainly of late 19th to early 20th-century wares, there was also one sherd of Roman greyware and one piece of medieval green-glazed pottery.

Bootham/ Clifton Road, Bootham

- 2.5 A total of 60 pits were excavated, ranging in size from 0.6m x 0.6m x 0.7m to 1.5m x 2m x 1m, with the larger pits excavated onto the 1880 cast iron water main within the road. Each pit contained similar redeposited materials consisting of silty sandy clay containing fragments of brick/tile; most excavations revealed evidence of recent disturbance for service upgrades and installation of fibre optic cables. Outside numbers 75 to 69 Bootham, excavation onto the cast iron water main suggested that there had been no disturbance since the installation of the main in 1880. Here was possible evidence for the Roman road at a depth of 0.8m, comprising a small area

0.5m x 0.6m of well sorted small stones of a uniform size (c. 3mm) laid upon the natural clay. Other than its depth, there was no dating evidence for this material, and it was removed by the contractors before it could be photographed. Outside number 69 Bootham the excavation uncovered unstratified animal bone, 19th to 20th-century blue and white porcelain, one sherd of medieval pottery, a musket ball and a section of post-medieval horse shoe.

Burton Stone Lane

- 2.6 There were no features of archaeological interest, but a fragment of stoneware bottle stamped 'Selters Nassau' was identified. This came from a German mineral water bottle, imported during the 17th to 19th centuries.

Filey Terrace

- 2.7 Like most of the streets investigated, the pits on Filey Terrace demonstrated that the ground had been substantially disturbed by the installation of the original water main and other services. There were no features of archaeological interest, although a well-compacted layer of backfill contained small amounts of 19th-century pottery and fragments of decorative brick.

Marygate

- 2.8 Marygate was the only street where there were definite archaeological remains. In a pit close to the Abbey Gatehouse, the footings of the front wall of a terrace of cottages were uncovered (Plate 3), comprising up to five courses of early brick with lime mortar upon a stone footing. The interior of the brickwork still retained its lime plaster (Plate 4). Cut into the stone footing was a channel containing a lead water pipe, probably originally serving the demolished dwelling but still in use today. The terrace of houses was situated to the west of the Abbey Gatehouse with the rear of the house abutting the Abbey wall (as per existing buildings on Bootham road). The York Archive holds two images of the terrace, an engraving from 1860 and a photograph from 1880. Historic mapping indicates that the cottages were demolished in the late 19th or early 20th century.
- 2.9 Although the interior was backfilled with a dark, ashy soil with building debris, there were no artefacts either accompanying the wall footing or elsewhere along Marygate.



Plate 3. Marygate: footings of 19th-century terraced cottage showing gateway to abbey in background and inserted lead pipe



Plate 4. Marygate: interior face of wall footing showing lime plaster still in situ

North Parade

- 2.10 North Parade comprises terraced housing dating from c. 1905. A total of 49 pits were excavated within the roadway; the renewal also necessitated the removal of two paving slabs outside the entrance to each house, from the kerbside to the ownership boundary/gateway. Removal of the tarmac/ hardcore layer (up to 0.3m in depth) revealed a sandstone foundation layer (up to 0.5m in depth; Plate 5) which changed to a brick and rubble foundation in the last fifteen metres at the eastern end of the road. Initially it was thought that the stone was an earlier road surface, but once a larger area had been exposed, the pitched stones were clearly unsuitable for traffic, and it was probable that the road was thought to require a more sturdy foundation, possibly due to soft ground. In most of the road this foundation deposit had not been disturbed since the road was constructed, apart from areas where repairs had been carried out on services.



Plate 5. North Parade: pitched sandstone blocks used as road foundation

- 2.11 Below the road foundation was a well compacted silty-sand fill to the bottom of the excavation. No archaeological features were observed, although a piece of animal bone was noted from the excavation outside number 7 North Parade, and a few hand-made bricks were seen in the disturbed ground outside number 5 North Parade.

Queen Anne Street

- 2.12 There were no features of archaeological interest identified along this street, although a few 19th-century glass bottle fragments were observed within the backfill of the original pipetrench.

Scarborough Terrace

- 2.13 Although there were no associated features, the excavation of a pit outside number 14 Scarborough Terrace exposed two small sherds of Roman greyware pottery.

St Mary's

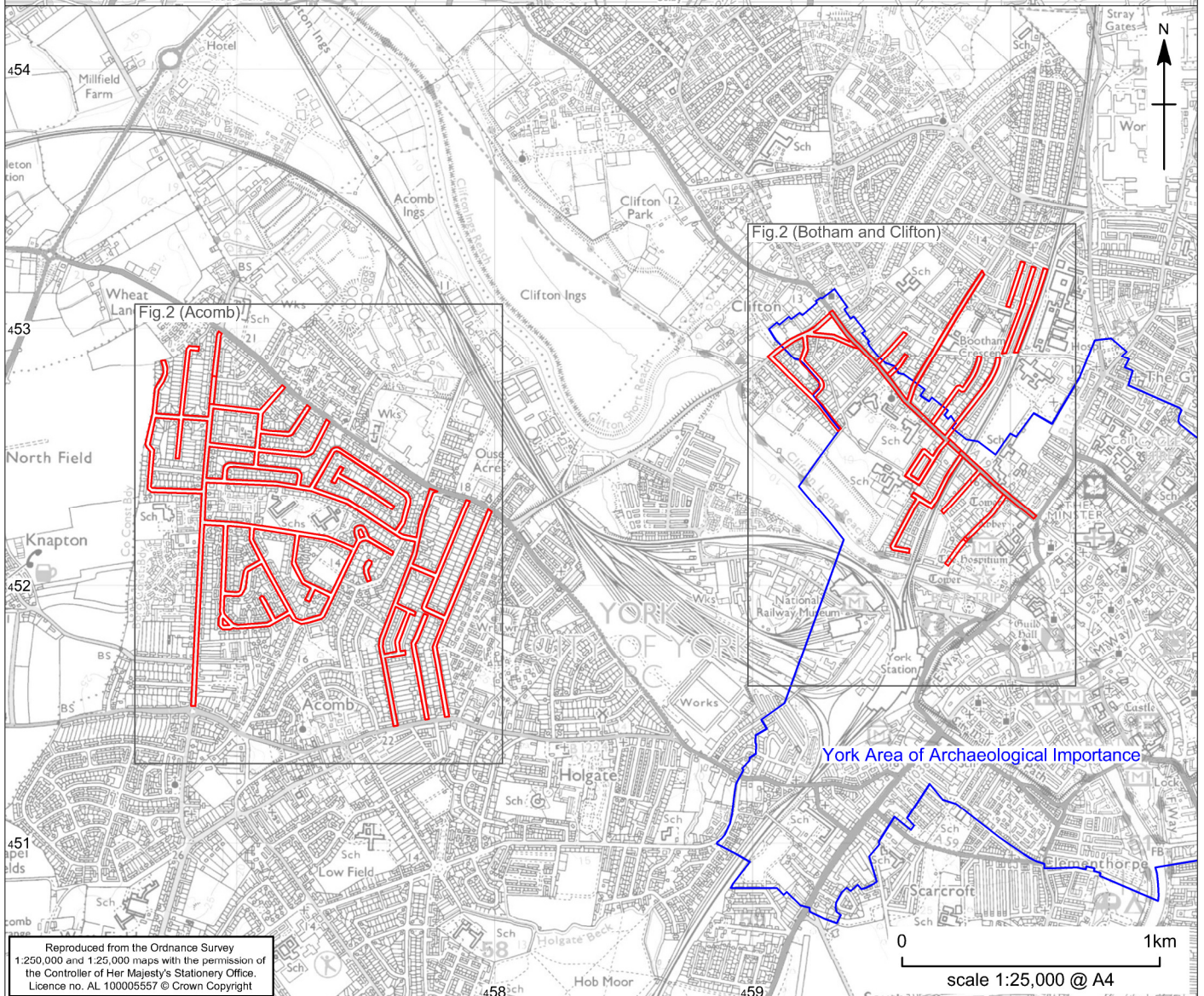
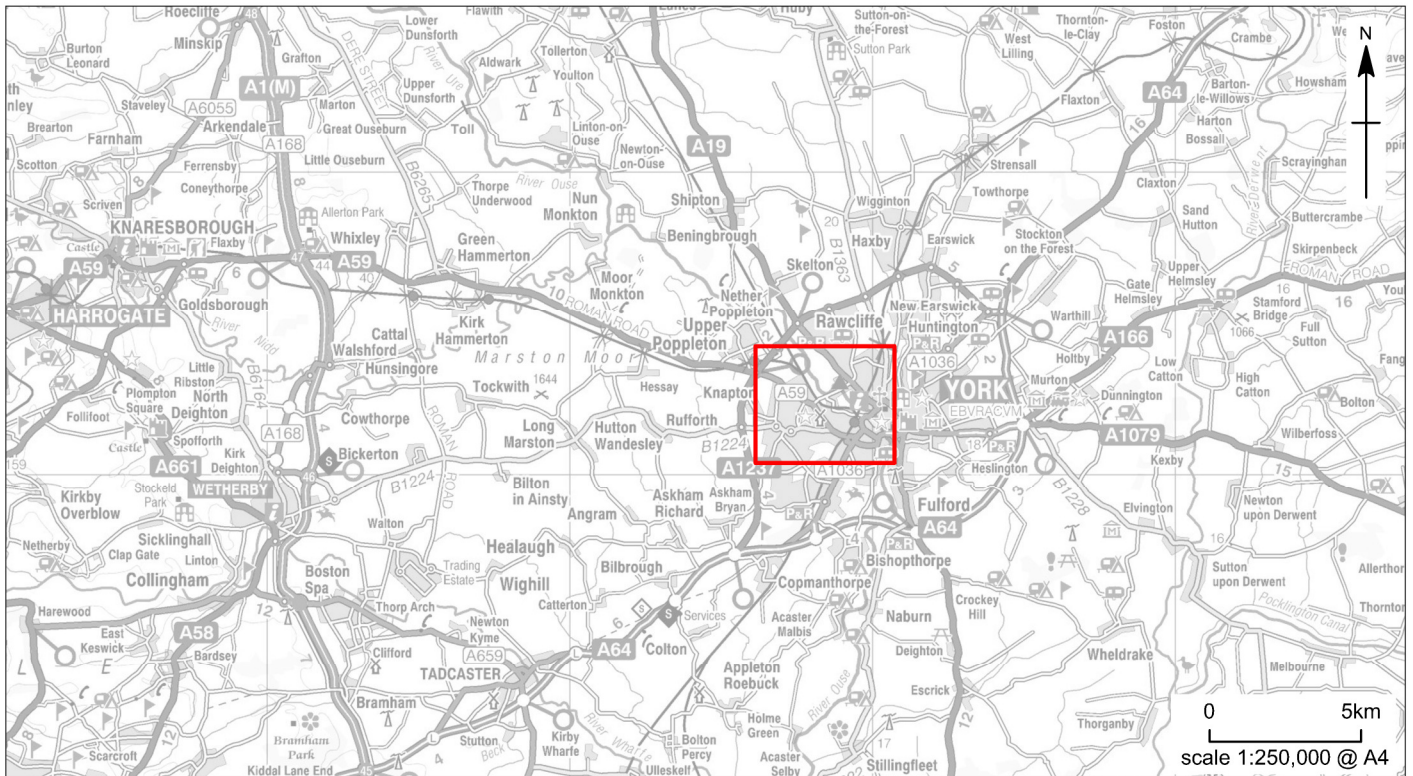
- 2.14 A small assemblage of pottery was observed including a small fragment of a Roman greyware bowl and a piece of 18th-century slipware.

3.0 DISCUSSION

- 3.1 The monitoring of excavations for the replacement of old lead water pipes within these areas of York can best be described as a 'Pyrrhic victory'. In over 2,600 pits there were almost no archaeological features identified, and the few artefacts seen were within backfill of previous services and therefore unstratified.
- 3.2 It was considered that there was the potential for encountering human remains and archaeological features. However, the previous disturbance, both from the original trenching for the water main and from subsequent repairs and other service installations, had removed almost all of the earlier stratigraphy, and presumably most artefactual evidence too.
- 3.3 In light of this, it is considered that any future lead replacement work should not be under archaeological monitoring, subject to the agreement of the City of York Archaeologist.

REFERENCE

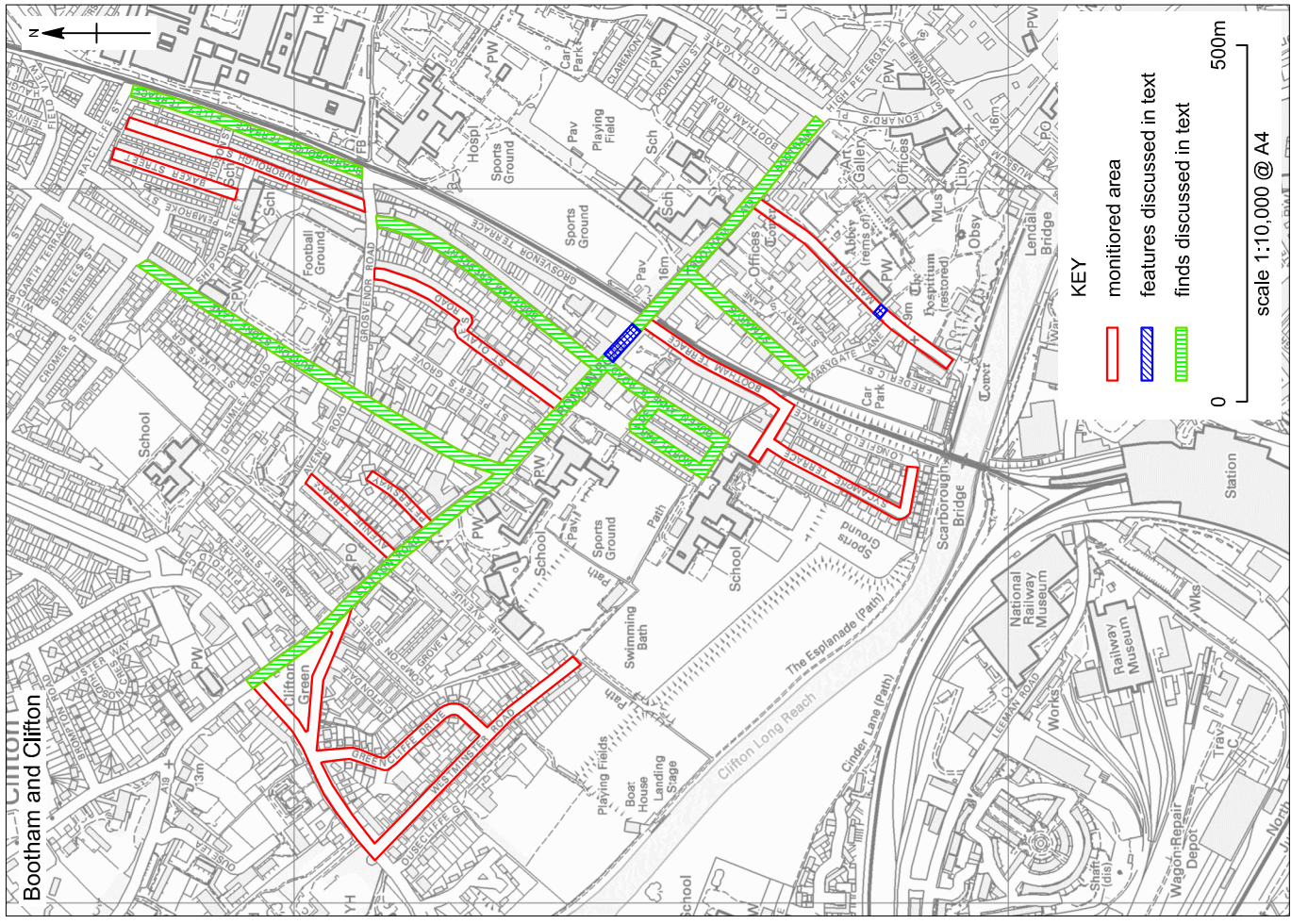
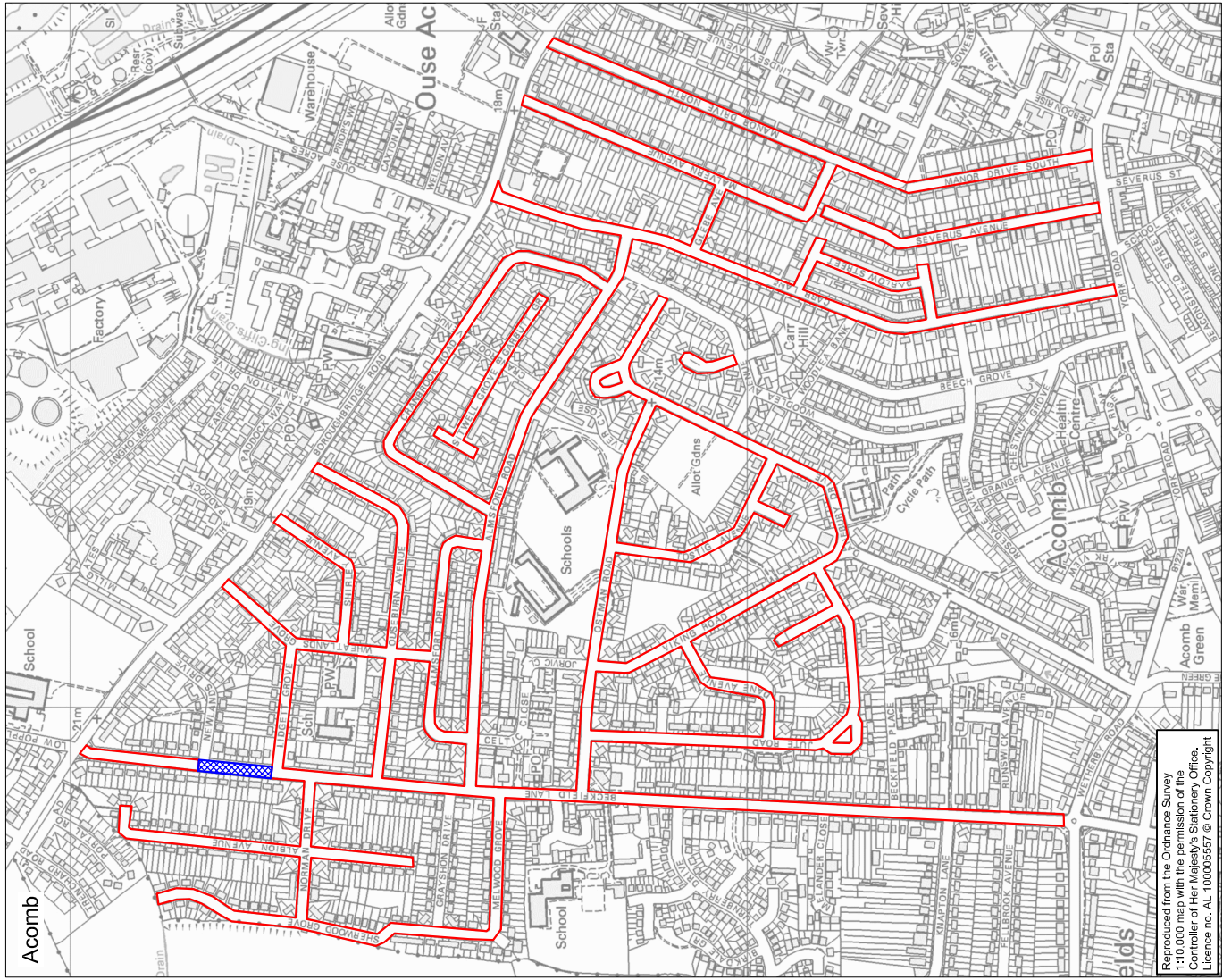
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Clifton and Acomb: site location

Figure 1



Clifton and Acomb: location of works

Figure 2