

NET2 - Lenton B6 Area 5

Archaeological Excavations at Lenton Priory B6 Area 5,
QMC Leen Gate Car-Park West

TPA Project Code: LPW

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Summary

- Trent & Peak Archaeology was commissioned by VINCI Construction UK to undertake a programme of archaeological recording on the site of the proposed NET2 tram works at Lenton.
- Following the Scheme prepared by SLR Consulting, the Lenton B6 archaeological constraints zone was divided into five smaller areas. Each of these areas will be subject to an individual report following archaeological works, and a final synthesis report will be produced following the completion of trackbed excavations in 2013.
- The design for Area 5 comprised a long 30m trench across much of the QMC Car Park West and spanning the former line of the River Leen. Unfortunately, the presence of services, a buried fuel tank and contaminated ground prevented the cutting of the trench in this location.
- The revised trench was cut just to the west of Trenches 01-03 in B6 Area 4 (LPE).
- Beneath a metre of modern overburden alluvial deposits thickening to the west overlay river terrace deposits similar to those seen in Area 4 (LPE).
- Two ditches were observed running approximately north-south, one sealed by alluvium and presumed to be medieval in date, and one cut into the alluvium and containing post-medieval pottery.
- Collapsing sections, deep deposits and heavy rain and flooding made entering the trench dangerous and cleaning the trench very hazardous.

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1 Project Background

- 1.1.1 **Site name:** Lenton Priory West (LPW) – NET2 Work Package B6 Area 4, QMC Leen Gate Car Park East.
- 1.1.2 **YAT nominal code:** 4249-181
- 1.1.3 **NGR:** 455151,338755
- 1.1.4 **Client:** Vinci Construction UK / Taylor Woodrow Alstom JV
- 1.1.5 **Planning application nos:** n/a
- 1.1.6 **WSI:** NET2 - Lenton B6 Areas 4 & 5 (QMC Leen Gate Car Park) Project Design for Archaeological Excavation Project Codes: LPE / LPW. Trent & Peak Archaeology 2012
- 1.1.7 **Proposed Development:** Extension lines to Nottingham Express Transit tram.
- 1.1.8 **Geology/Soils:** Superficial alluvium and river terrace deposits above Lenton Sandstone Formation sandstone bedrock.
- 1.1.9 **Previous Archaeological Work:** Evaluations by SLR Consulting (2009), evaluations by Wessex Archaeology (1993), excavations by Beilby (1966), excavations by Elliott and Berbank (1952).

2 Introduction

- 2.1.1 Trent & Peak Archaeology (TPA), part of the York Archaeological Trust, were contracted by VINCI Construction UK Ltd to undertake excavations on an area of land currently part of the QMC's Leen Gate Car-Park, ahead of the creation of a new Nottingham Express Transit tram-line running from the Railway Station through Lenton to Toton (NET2 Line B).
- 2.1.2 The excavations were carried out according to a Written Scheme of Investigation prepared for and approved in June 2012 by Gordon Young, the City Archaeologist for Nottingham. The approved WSI was developed in compliance with a scheme of treatment prepared in 2011 by Gavin Kinsley of SLR Consulting (Kinsley 2011). All work undertaken was in line with the current Code of Practice of the institute of Field Archaeologists.
- 2.1.3 Fieldwork in Area 5 was carried out between 2nd July and 18th July 2012. Archaeological works were supervised by Richard Parker and Thomas Linington, and the project was managed by Dr David Strange-Walker.
- 2.1.4 The works conducted in Area 5 and reported here as TPA project LPW are part of a larger scheme of investigative works proposed over 2012-2013 for Lenton Work Package B6, summarised in Figure 2 and as follows:
 - B6 Area 1 – Abbey Bridge. Intermittent watching brief on trackwork, intermittent watching brief on utilities. TPA code **LPA**.
 - B6 Area 2 – Gregory Street, Lenton Lane, Abbey Street. Continuous watching brief on trackwork, intermittent watching brief on utilities. TPA code **LPG**.
 - B6 Area 3 – Abbey St north-west side. Full excavation of archaeology below demolished cottages. TPA code **LPM**.
 - B6 Area 4 – QMC Car-Park East. Archaeological excavation. TPA code **LPE**.

- B6 Area 5 – QMC Car-Park West. Machine excavation with archaeological monitoring and potential for hand excavation. TPA code **LPW**.
- 2.1.5 These discrete sites will be reported individually but with an overarching summary report submitted at the completion of works in the Lenton B6 area.

3 Archaeological Background and Previous Works

(From SLR Report 241592/150/REP/008, 'Scheme to deal with any archaeological remains at Lenton').

A Domesday Book record implies the existence of a so-far unlocated late Anglo-Saxon settlement at Lenton, which may be crossed by the route.

Lenton Priory, founded 1106-7, and abandoned by the monks in 1538, was one of the greatest monastic houses in England. The Chapel of St Anthony is now the only standing building). The priory was founded in 1106 or 1107 by the Cluniac order, and became one of the wealthiest houses of an order noted for the size and magnificence of its churches. At its foundation, the priory had 25 monks and by 1405 there were 32 monks. A seven-day fair held in the outer court of the priory was one of the leading fairs in England in the Middle Ages, attracting merchants throughout the country. The infrastructure was substantial and included houses called booths with penthouses behind them, in which stall holders could lodge with their goods. In 1297-98 roofing was done on sixty fair booths, and some of the fair booths were converted into cottages which were mentioned in a survey and rental of 1651-2. Despite its importance, relatively little is known of the physical form of the priory site from archaeological excavations and discoveries.

The most informative guide is that produced by Barnes 1987, based chiefly on historical sources. Following Barnes, the NET route, seen from east to west, would pass along Wilford Street through the northern and western parts of the priory precinct: after crossing the original course of the river Leen; then the priory workshops (the former Glasshouse Close), any surviving parts of the precinct wall and the postulated site of the Outer Gate of the priory; then along Abbey Street past or through the site of the priory Fair, the line of two walls recorded by Young possibly to be identified as the western outer precinct wall and an adjacent building, and near to the site of a mill constructed at the Priory's foundation on the west side of Abbey Street.

At this latter location archaeological field evaluation in 1993 by Wessex Archaeology (WA1993) revealed an overburden of 0.8-1.0m thickness over a series of ditches roughly parallel and perpendicular to Abbey Street cut through a buried soil. The dateable features were medieval. At the west end of evaluation trench 2 the buried ground level dropped (presumably the now-buried 19th century and earlier course of the river Leen) and timber structures were preserved. The structures may well be related to the Priory's mill. The land between the former and existing courses of the Leen has been identified as the site of the mill pond.

Direct observations have therefore shown that structural remains of the Priory may be expected to survive very close to the surface even beneath the modern roads. Crossings of the former Leen may encounter infilled river channels and possible river-bank structures. The presence of the buried soil and the timber structures shows that the area west of Abbey Street has an exceptionally high archaeological potential. The area south of Abbey Street and Gregory Street is scheduled monument no. 29987. Overburden depths recorded in boreholes and window samples drilled on behalf of NET in the vicinity of the route are shown in drawings 025 and 026 in Appendix 1. West of SLR trench AT1 WS41 and WS42 found alluvial thicknesses of 1.5-1.0.95m beneath 1.3 and 1.7m overburden respectively. Between AT1 and AT2, BH3205 recorded 1.4m of made ground over river terrace deposits while the directly-adjacent BH3105 and WS43 to the east recorded 1.8m of made ground over river terrace-deposits. East of SLR trench AT2 WS3305 recorded 1.5m of made ground over a 0.7m thickness of alluvium. Adjacent to SLR trench AT3, WS44 recorded 1.89m of made ground: this is surprisingly deep in the garden of a small 19th century terrace, and may be a localised intrusion.

In addition, geotechnical test-pits have been recorded during archaeological site investigations by Wessex Archaeology (WA1993, Pits 1 and 2; located on and to the east of SLR trench AT1). They recorded overburden of about 1.0m thickness; in the case of WA pit 1 it directly overlay the natural gravels while in WA pit 2 it overlay a 0.5m-thick layer of 'sand subsoil' and then the gravels. Pit 1 was on the line of proposed trench 1, and pit 2 was between proposed trenches 1 and 2. The only substantial open excavations in the vicinity have been 20m south-east of AT1 and beyond (described below). Of these, the nearest point to the SLR trench AT1-AT2 axis (15m to the south) contained only 0.8m of overburden overlying archaeological features.

Excavations for investigations of utilities on behalf of NET were monitored by SLR in December 2008 (SLR 2008). On the north side of Gregory Street adjacent to the White Hart Inn, small pockets of preservation of archaeological deposits pre-dating 20th/21st century service installations were found despite the narrowness of the pavements. These contained probable medieval deposits at a depth of 1.0m below ground level, and the highest pre-20th century deposits were as little as 0.4m below ground level. On the north side of Wilford Road results suggest that there will have been significant damage to any pre-20th century archaeological deposits which might survive beneath the road. On the south side of Wilford Road, modern disturbance has been even more extensive despite the greater width of combined pavement and verge.

Four evaluation trenches (AT1-AT4) were excavated by SLR Consulting in 2009. Of these trenches AT1 and AT2 lie within Area 4.

East of the western arm of the existing river Leen, boreholes and window samples suggest extensive alluvium of 1-1.6m thickness near the line of the 19th century and earlier river Leen, on the site of the postulated mill pond (Appendix 1). These samples contained no significant organic components.

Trench AT1 contained a 0.5m thickness of undated featureless made ground over the terrace-deposits, possibly with an overlying buried soil, and recent deposits above that. The lack of features and timber suggest that the possible mill structures found in 1993 do not extend as far as the NET route, but the possibility of significant environmental deposits and / or structural remains existing on the NET route cannot be ruled out.

AT2 contained extensive disturbance from later post-medieval activity, and apparent impressions of large timbers, later removed, overlying earlier dumped material containing medieval floor tile but possibly of post-medieval date.

AT3 and AT4, located within the probable site of the medieval Fair, produced significant sequences of medieval and early post-medieval deposits and features, 0.4 and 0.7m thick respectively, with cut features in the underlying terrace-deposits. Adjacent areas are largely occupied by small 19th century buildings. Masonry courses in the lower parts of the existing boundary wall adjacent to AT4 were noted; as this wall is believed to lie on the priory's outer precinct boundary, they might be medieval.

4 Methodology

As proposed in the WSI, one trench was machine excavated, stepped and battered to an estimated depth of c.2.5m, providing an area measuring 22 x 4m at base. This was positioned along the projected line of track bed/zone of maximum potential impact on archaeological deposits.

The final trench location is shown in Figure 3. The trench was positioned so as:

- (a) to fit within the tram corridor;
- (b) to approximate to the line of the trackbed – the area of maximum impact on the archaeological resource
- (c) to increase understanding of the buried archaeology relative to the results of the 2009 evaluation trenches;
- (d) to determine the course of the old river Leen

5 Results

5.1 Trench 05

Trench 05 was located at the eastern limit of Area 5, almost abutting Trench 03 of Area 4. As noted in the Written Scheme of Investigation for Area 5, the trench was originally programmed to be cut as a long and narrow 30m slot spanning both sides of the old course of the Leen. The presence of several live services running perpendicular to the trench and a fuel storage tank made it impractical to excavate the trench in the area originally planned, so it was moved somewhat to the east. Removal of the tarmac revealed a large area of redeposited fill contaminated with black diesel oil however, necessitating the trench to be reduced in size once more. The original methodology of one deep machine-cut slot was also rejected by the client in favour of a stepped-and-battered trench similar to those cut in Area 4.

At ground surface Trench 05 eventually measured 21m east-west x 8m north-south, with a deeper box measuring 17m x 4m cut in the centre of this trench.

Removal of the hardcore **(5001)** and demolition rubble **(5002)** revealed a concrete on brick surface **(5003)**. Underlying this three layers of soil were uncovered, **(5004)** a dark brown-grey sandy-silt containing 5% charcoal flecks, **(5005)** a light yellow-brown sand containing 1% charcoal flecks and **(5006)** a light grey-brown sandy-silt containing 5% charcoal flecks and 1% rounded pebbles. These six contexts made up the modern overburden, which was up to 1.2 m deep.

Sealed by these deposits a steep sided ditch with concave base **(5009)** was recorded. It had two distinct fills, **(5007)** a dark-grey-brown sandy silt containing 50% charcoal flecks and **(5008)** a grey silty-clay-loam. This ditch ran north-west south-east through the trench and cut into the alluvial build up of the river Leen **(5010)**. A smaller ditch **(5012)** with gradual sloping sides and a concave base running north-south through the trench was also recorded, this feature was sealed by alluvium **(5010)** and cut into the natural terrace deposits **(5013)**.

Finds were recovered by context. Contexts **(5007)** and **(5008)** produced one large red earthenware pancheon rim sherd each, of a probable 19th-century date. Context **(5010)** produced one fragment of roof tile of a potentially late medieval date.

The excavations in this trench were cut short due to severe flooding after heavy rainfall, resulting in the abandonment of the trench and inability to record any sections, as it became unsafe to enter the trench even after it had been completely emptied of water.

6 Discussion

A number of archaeological features were observed, investigated and recorded during these groundworks. The north-west south-east ditch **(5009)** appears to be later post-medieval due to finds recovered from it. As no finds were recovered from the north south ditch **(5012)** the only dating evidence is the one piece of possibly medieval tile recovered from sealing alluvium **(5010)**. These findings match with the findings from Trenches 02 and 03 from Area 4, where there is good evidence for limited activity during the medieval period and this trend continuing into the post-medieval and modern periods.

Poor weather conditions, deep excavations through potentially unstable deposits and understandably stringent health-and-safety standards made successful archaeological investigation in Area 5 extremely challenging.

7 Plates



Plate 1: Excavation of Trench 05, looking east.



*Plate 2: Western end of Trench 05 during excavation. The post-medieval ditch **5009** is marked in the south-facing section.*



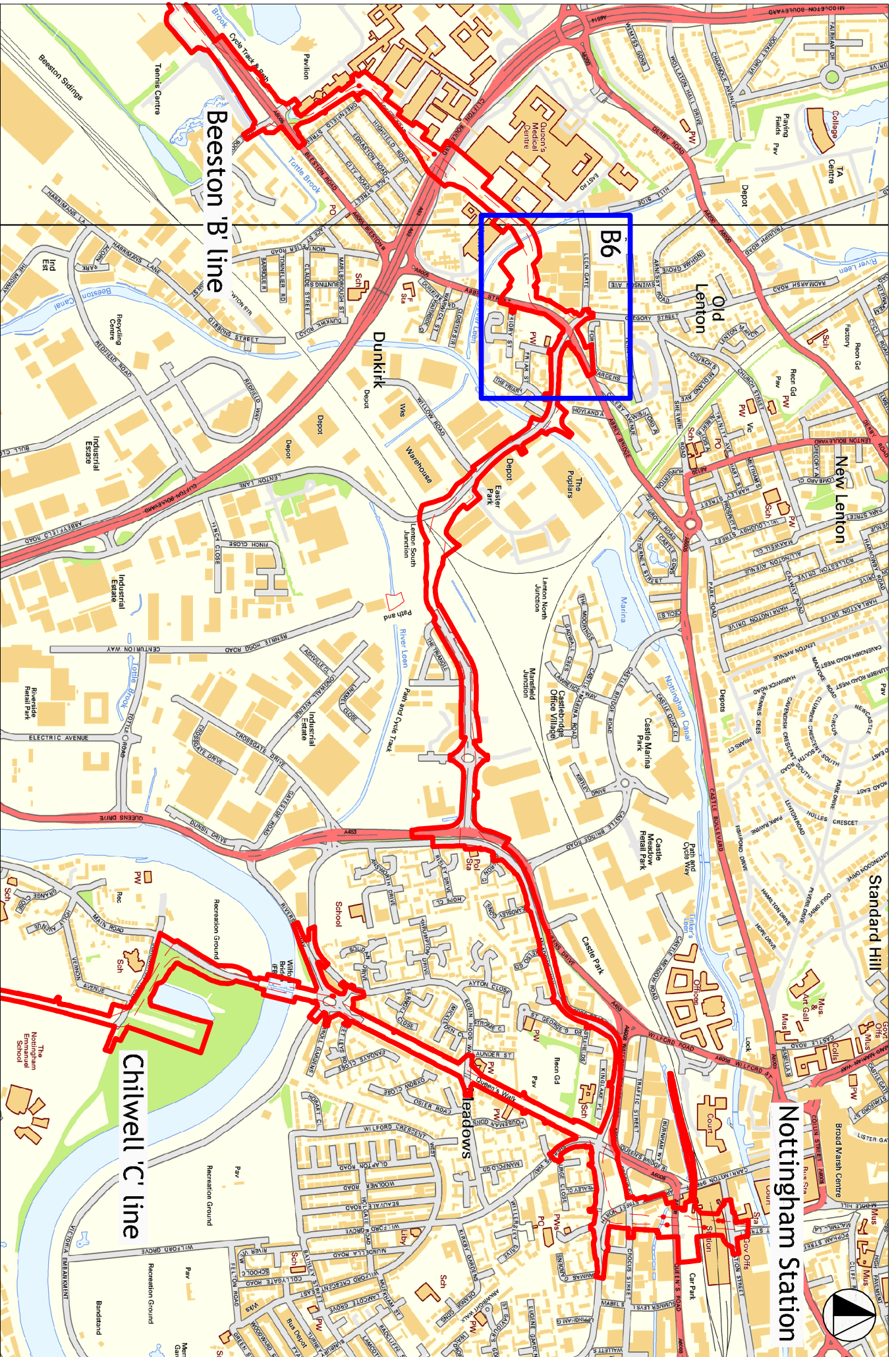
Plate 3: North-facing section through Trench 05 showing approximate line of ditch 5010, cutting through alluvial deposits.



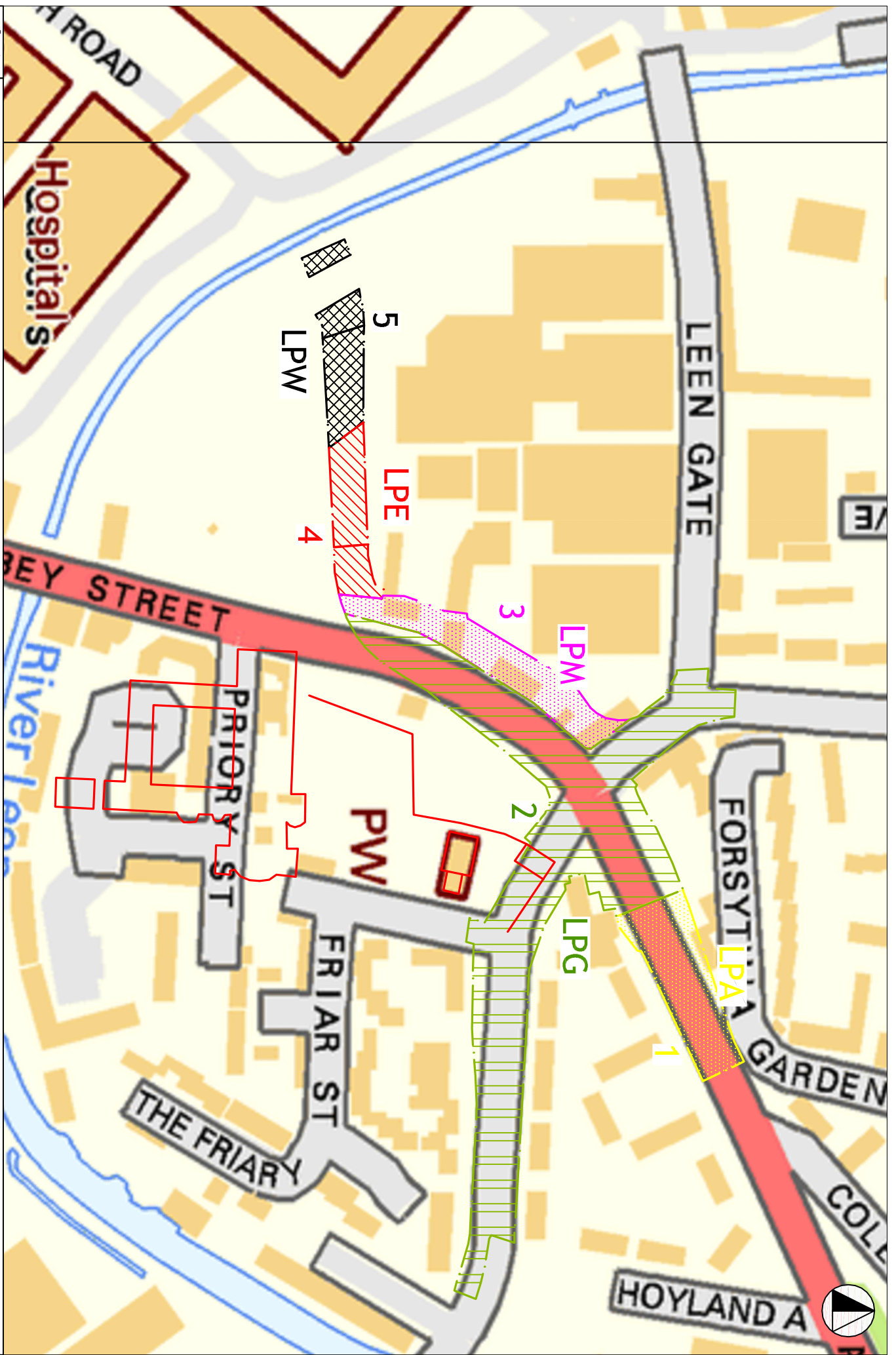
Plate 4: Trench 05 fully excavated, looking west. At this point alluvial river deposits presumably from the Leen begin to overlie the gravelly terrace deposits seen in the Area 4 trenches.

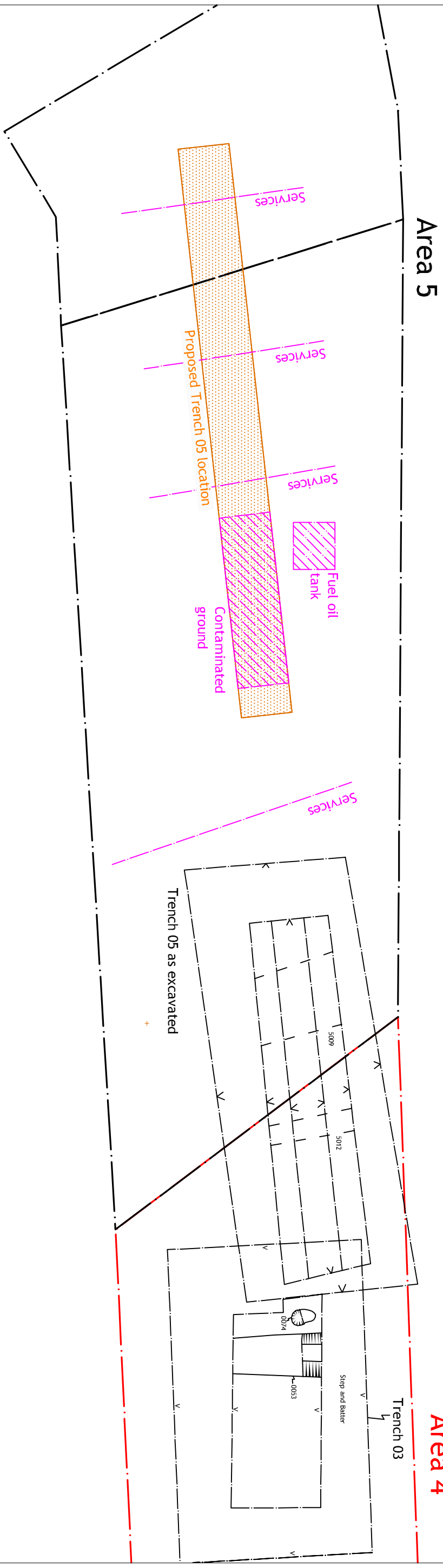


Plate 5: Trench 05 fully excavated post-flooding, looking west. The previously-inspected areas of diesel contamination and live services can be seen beyond the standing figure.




 NET2 LPW: Lenton Priority West - Work Package Lenton B6
 Figure 1: Location of Work Package Lenton B6 relative to NET2 Beaton and Chilwell lines
 Scale 1:12500 at A4 DSW 01/08/2012
 Ordnance Survey map reproduced with the permission of Her Majesty's Stationery Office © Crown Copyright Licence No. AL 1000206181.





Area 5

Area 4

Proposed Trench 05 location

Fuel oil tank

Contaminated ground

Services

Services

Services

Services

Trench 05 as excavated

Trench 03

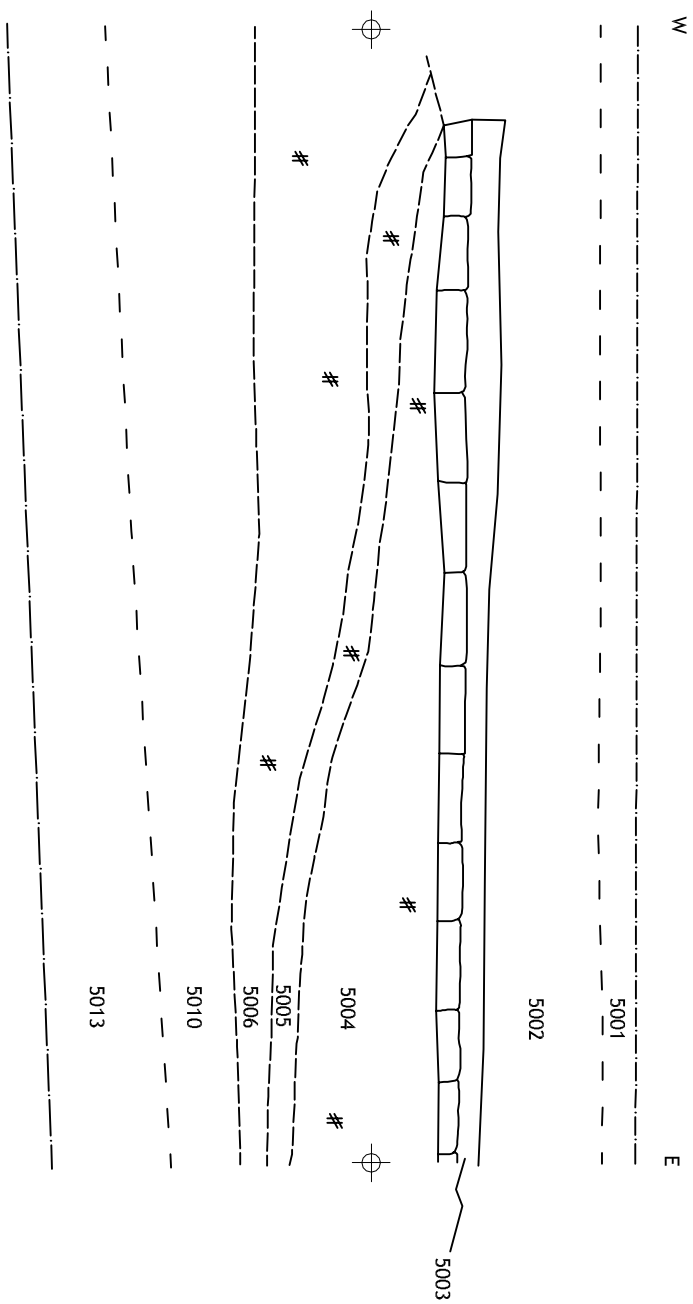
Step and Batter

0074

0053

5009

5012



- 5001 Light grey hardcore
- 5002 Brick rubble in a matrix of loose light grey-brown clinkery sand
- 5003 Concrete and brick surface
- 5004 Friable dark brown-grey sandy silt, <5% charcoal
- 5005 Friable light yellow-brown sand, <1% charcoal
- 5006 Friable light grey-brown sandy silt, <5% charcoal, <1% rounded pebbles
- 5010 Soft mid-brown sandy silt loam, presumed alluvium
- 5013 Gravel-rich river terrace deposits