



2ND OF APRIL
2020

Stage 2 Written Scheme of Investigation for an archaeological Excavation and Watching brief V.9

Middlesex Annex, 44 Cleveland Street

Iceni Projects Limited on behalf of
Middlesex Annex LLP

2nd of April 2020

Iceni Projects

London: Da Vinci House, 44 Saffron Hill, London, EC1N 8FH

Manchester: This is The Space, 68 Quay Street, Manchester, M3 3EJ

Edinburgh: 11 Alva Street, Edinburgh, EH2 4PH

Glasgow: 177 West George Street, Glasgow, G2 2LB

t: 020 3640 8508 | w: iceniprojects.com | e: mail@iceniprojects.com
linkedin: [linkedin.com/company/iceni-projects](https://www.linkedin.com/company/iceni-projects) | twitter: @iceniprojects

ICENI PROJECTS LIMITED
ON BEHALF OF MIDDLESEX
ANNEX LLP

Stage 2 Written Scheme of
Investigation for an archaeological
Excavation and Watching brief V.9

Document Issue #	Date issued	Report by	Notes
1	06/02/20	Claire Cogar Project Director, Archaeology	First issue
2	19/02/20	Claire Cogar Project Director, Archaeology	Updated in response to comments from planning consultant
3	25/02/20	Claire Cogar Project Director, Archaeology	Minor edits
4	28/02/20	Claire Cogar Project Director, Archaeology	Updated to include revised king post methodology and comments from Historic England
5	10/03/20	Claire Cogar Project Director, Archaeology	Updated in response to comments from Morgan Sindell and Modebest. King post wall design updated
6	13/03/20	Updated by: Stephen Mcleod, Senior Archaeologist Approved by: Claire Cogar Project Director, Archaeology	Updated in response to comments from Temple
7	25/03/20	Updated by: Stephen Mcleod, Senior Archaeologist Approved by: Claire Cogar Project Director, Archaeology	Updated in response to further comments from Temple and Laura O Gorman (Archaeological Advisor to Camden Council)
8	26/03/20	Claire Cogar Project Director, Archaeology	Updated in response to minor comments from Laura O Gorman (Archaeological Advisor to Camden Council)
9	31/03/20	Claire Cogar Project Director, Archaeology	Updated in response to further comments from Greater London Archaeological Advisory Service
10	02/04/20	Claire Cogar Project Director, Archaeology	Updated in response to further comments from Greater London Archaeological Advisory Service in relation to COVID19

Report Contents

Non-Technical Summary

1.	<u>Introduction</u>	2
	WSI Scope	2
2.	<u>Archaeological background</u>	4
	Natural Geology	4
	Pre 18th century	4
	18th century onwards	4
	Covent Garden Workhouse Remains and evidence of Workhouse / Parish Burials	5
	Modern disturbance	5
3.	<u>Objectives</u>	6
	General (excavation)	6
	General (watching brief)	6
	Site specific objectives	6
4.	<u>Construction impacts and the archaeological mitigation sequence (Part A excavation)</u>	8
	• Limited ground reduction across the site for instillation of the piling mat (watching brief with provision for excavation)	8
	• Installation of a king post wall to support the southern perimeter excavation and across the site to support the Part B excavation (watching brief with provision for excavation)	8
	• Controlled excavation of the southern perimeter red zone	9
	• Pile probing in the green zone along the southern perimeter of the site	10
	Processing of human remains	10
5.	<u>Methodology (General)</u>	11
	Survey	11
	Artefacts and environmental samples	11
6.	<u>Methodology (site specific)</u>	13
	Excavation of human remains	13
	Disarticulated bone	14
7	<u>Reporting</u>	15
8	<u>Programme and site requirements</u>	16
	Programme	16
9	<u>Health and safety</u>	17
10	<u>Bibliography</u>	18
11	<u>Appendix A</u>	20
12	<u>Appendix B</u>	1

Figures

Fig 1 Site Location

Fig 2 Extent of proposed basement

Fig 3 Section through the proposed basement showing formation levels

Fig 4 Extent of the proposed secant piling and red / green zones

Fig 5 Location of evaluation test trenches

Fig 6 Extent of the piling mat

Fig 7 Proposed king post wall scheme

Fig 8 Section through proposed king post wall scheme

Fig 9 Burial survival plan

Fig 10 Programme

Non-technical Summary

*This the Written Scheme of Investigation (WSI) for the archaeological excavation and watching brief at the Middlesex Hospital Annex site. It is pursuant to **Condition 6** of Planning Application Number **2018/1584/P** which requires archaeological mitigation of the site in advance of the development.*

This WSI provides detailed methodology covering the enabling works and southern perimeter excavation (Part A). An Addendum will be submitted providing the detailed methodology for the main excavation (Part B)

The archaeological potential of the site includes:

- **Late 18th century building remains / foundations** associated with the construction and occupation of Covent Garden Workhouse (later the Strand Union Workhouse)
- **18th / 19th century burials** relating to the Workhouse and St Pauls Covent Garden Parish

The results of the Part A perimeter excavation will be summarised in a high-level interim report on completion of the fieldwork. The full results will be combined with those from the Part B excavation in a Post Excavation Assessment Report on completion of the fieldwork.

1. Introduction

WSI Scope

- 1.1 This Written Scheme of Investigation (WSI) is for the archaeological excavation and watching brief on the site of The Middlesex Hospital Annex, 44 Cleveland Street, London, W1T 4JT (Fig 1). This document has been commissioned from Icen Projects by Middlesex Annex LLP.
- 1.2 The site is currently occupied by buildings relating to the Middlesex Hospital Annex, including the Grade II listed former Workhouse building and the North House and South House. Later buildings relating to the Middlesex Hospital Annex to the rear of the site were demolished after planning consent; the rear of the site is currently open to the east of the buildings fronting onto Cleveland Street. The site is bounded by the Sainsbury Welcome Centre to the NW, buildings fronting onto Charlotte Street to the NE, Middlesex House to the SE and Cleveland Street to the SW.
- 1.3 The centre of the site lies at National Grid reference 529260 181810. Current ground level at the rear of the site lies between 25.8m OD and 27.8m OD
- 1.4 The proposed re-development includes:

Refurbishment of the Workhouse and North/South Houses and redevelopment of the remainder of the site, to provide a mixed-use development comprising 50 residential units and commercial space; namely to increase extent of basement to incorporate MRI scanners with 3 no. external quench pipes, internal modifications to affordable housing layouts, change of mix of market tenure housing to create 3 no. additional units, alterations to South House to incorporate community room and North House to increase floorspace and provide basement level courtyards, alterations to rooftop plant area, fenestration of new build, cycle parking, access and landscaping.

- 1.5 The development was granted consent subject to a Section 106 variation agreement ref 2018/1584/P. Consent included Condition 6 relating to archaeology.
- 1.6 The proposed part 4, part 5, part 8 storey building at the rear will include a basement with varying formation levels between 20.15m OD – 20.68m OD and associated piles. A secant pile wall will also penetrate the ground (Figs 2, 3 + 4). Construction will commence after completion of the Stage 2 Part A and Part B archaeological works.
- 1.7 Laura O Gorman, Archaeological Advisor at GLAAS (Greater London Archaeological Advisory Service) to Camden Council, has been consulted regarding the scope of works and requirements of the condition.
- 1.8 An Addendum to the current document will be produced providing the detailed methodology for the second phase of excavation to mitigate the impact of the remainder of the basement area, as well as the scope of the public engagement strategy further to sections B and C below.
- 1.9 The programme for the post-investigation assessment and analysis will be detailed provisionally in the Addendum and will be updated on the completion of the Post Excavation Assessment Report produced at the end of the Phase 2 excavation.
- 1.10 Condition wording:

No development consisting of works below ground level shall take place other than in accordance with the phase 1 written scheme of investigation (WSI) as approved under application 2018/1789/P (dated 22/05/2018) or other such WSI which has been submitted to and approved by the local planning authority in writing.

For land that is included within the WSI, no works shall take place other than in accordance with the agreed WSI, and the programme and methodology of site evaluation and the nomination of a competent person(s) or organisation to undertake the agreed works.

If heritage assets of archaeological interest are identified by phase 1 then for those parts of the site which have archaeological interest a phase 2 WSI shall be submitted to and approved by the local planning authority in writing. For land that is included within the stage 2 WSI, no demolition / development shall take place other than in accordance with the agreed stage 2 WSI which shall include:

A. The statement of significance and research objectives, the programme and methodology of site investigation and recording, interpretation and/or public engagement strategy and the nomination of a competent person(s) or organisation to undertake the agreed works.

B. The programme for post-investigation assessment and subsequent analysis, publication and dissemination and deposition of resulting material. This part of the condition shall not be discharged until these elements have been fulfilled in accordance with the programme set out in the phase 2 WSI.

Reason: Important archaeological remains may exist on this site. Accordingly, the Council wishes to secure the provision of archaeological investigation and the subsequent recording of the remains prior to development to ensure satisfactory treatment of heritage assets of archaeological interest, in accordance with Policy D2 of the Camden Local Plan 2017.

- 1.11 The site is not located in an Archaeological Priority Area (CA) but is located within two Conservation Areas (CA), Fitzroy Square and Charlotte Street.
- 1.12 All archaeological work detailed in this WSI will be carried out in accordance with the ClfA standards and guidance (ClfA 2014a, b and c) and the Greater London Archaeology Advisory Service (GLAAS) Standards for Archaeological Work (2015).

2. Archaeological background

- 2.1 A detailed resume of the potential archaeology on site is summarised in the archaeological desktop study submitted in support of the planning application (MOLA, 2017). To briefly summarise:

The Site is likely to have been woodland or farmland until construction of the Covent Garden Workhouse in or before 1778. The workhouse complex included an adjacent burial ground for interment of those who died in there. The burial ground was in active use between 1790 and 1853, and also received interments from the Parish of St Paul, Covent Garden. Between 1836 and 1872 the Site was designated as the Strand Union Workhouse.

Between 1873 and 1913 the Site became the Central London Sick Asylum 1873–1913. In 1913 Westminster Council took the location over and it became the Central London Sick Asylum (1873–1913), later the Cleveland Street Infirmary 1913–1924 and finally the Middlesex Hospital Annex 1924–2006.

- 2.2 Archaeological method statements and reports on archaeological site work undertaken to date include:
- WSI Addendum for a Watching Brief (Iceni, 2019)
 - Test Trench Evaluation Report (MOLA, 2019)
 - WSI for a Test Trench Evaluation and Watching Brief (MOLA, 2018)
 - Archaeological Desktop Study (MOLA, 2017)
 - Watching Brief Report (PCA, 2014)
 - WSI for a Watching Brief (PCA, 2014)
- 2.3 Fig 5 shows the location of the archaeological test trenches and site investigation trenches undertaken in 2019.
- 2.4 The results of the prior investigations, in particular the test trench evaluation in 2019, give an indication on the density, preservation and nature of burials present at the Middlesex Annex site. All other archaeological interventions to date have been fairly limited in scope, though the results utilised to supplement the results of the test trench evaluation.
- 2.5 The results from test trench evaluation in relation to the potential archaeology on site predicated during the upcoming excavation are summarised below:

Natural Geology

- 2.6 At the rear of the site, in the area of the proposed basement, the natural geology comprising of sand and gravel was recorded at between 25.89m OD and 21.01m OD.
- 2.7 At the front of the site natural was seen at 26.04m OD in Trench 7.

Pre 18th century

- 2.8 No evidence of activity prior to the 18th century was recorded on site. The area surrounding the site was largely rural until the 18th century and only very limited residual medieval finds have been recorded within the vicinity of the site.

18th century onwards

- 2.9 During the test trench evaluation, the earliest deposits recorded were a series of large 18th century quarry pits within the cemetery boundary (rear of the site). At the front of the site, 18th century wheel ruts leading to the Workhouse building appear to have been made

during the construction of the building between 1775 and 1778.

Covent Garden Workhouse Remains and evidence of Workhouse / Parish Burials

- 2.10 Fifty-five articulated burials were excavated during the evaluation relating to the Workhouse Cemetery, which was operational during 1780 and 1853. Very little disarticulated bone was recorded during the evaluation. No intercutting burials were recorded, though grave density and occupation was notably high in the east of the site as seen in Trench 3.
- 2.11 To date, no burials with surviving soft tissue have been recorded on site. However, the presence of high-level pockets of water in Trench 3 and the soft cassy deposits recorded in Trench 1 indicate that remains with soft tissue could survive on site.
- 2.12 The articulated remains recovered related to both adults and sub-adults and presented a range of pathologies, most notably dental disease and joint disease/ osteoarthritis (adults only). Evidence of traumatic injury was also present in 12 adults.
- 2.13 Evidence of social zoning of the burials was evident in the differing approaches to inhumation seen in the east of the site, as opposed to the south. In the east of the site (Trench 3) graves were found in very close proximity to one another, cut into made ground. Multiple burials appear to have been placed in each grave cut at the same time, their organisation 'top to toe' of one another. This appears to indicate lower status individuals from the Workhouse.
- 2.14 Grave cuts in Trenches 5 and 6 were found to be ordered and evenly spaced, cut into the natural sand and gravel, which appears to suggest higher status burials which may relate to the Covent Garden Parish.
- 2.15 Unusually for a 19th-century urban burial ground there were no intercutting burial stacks in comparison to other city cemeteries of this date.
- 2.16 In summary, the test trench evaluation indicates that:
- Burial and grave density is greatest in the east
 - Preservation of the majority of the burials on site is good
 - Preservation of coffins and furniture was poor across the site
 - There appear to be two distinct social zones of burial – Workhouse burials in the east and Covent Garden Parish burials in the south
 - The deposit sequence through which the burials were cut was inconsistent
- 2.17 Figure 9 details the areas where burials are known to survive across site.
- 2.18 Although the desk base assessment (MOLA, 2017) estimated 9,000 – 10,000 burials, based on the results of the test trench evaluation, up to 3,000 skeletons are anticipated from both phases of excavation.

Modern disturbance

- 2.17 Modern disturbance was noted to have affected the archaeological survival on site. Large pits and concrete foundations in Trenches 2 and 4 were present to a depth of 5.50m bgl and 4m bgl respectively.
- 2.18 The majority of modern construction encountered during the evaluation was noted to be fairly shallow, impacting the ground to a depth of 1.20m from modern ground level and, therefore, not impacting the burials.

3. Objectives

- 3.1 Icenis are appointed archaeological consultant for the project, with LP archaeology archaeological contractor.

General (excavation)

- 3.2 An archaeological excavation is a programme of fieldwork designed to mitigate the impact of a development on significant archaeological deposits. It is often the final stage of archaeological fieldwork on a site. Controlled Excavation will fully remove human remains, associated archaeology and other features prior to the piling in the 'red zone' along the southern perimeter.
- 3.3 The Chartered Institute for Archaeologists (CIFA, 2014) define excavation as:

'a programme of controlled, intrusive fieldwork with defined research objectives which examines, records and interprets archaeological deposits, features and structures and, as appropriate, retrieves artefacts, ecofacts and other remains within a specified area or site on land, inter-tidal zone or underwater. The records made and objects gathered during fieldwork are studied and the results of that study published in detail appropriate to the project design' (CIFA 2014).

- 3.4 The archaeological fieldwork and reporting will be undertaken with consideration to the wider archaeological research priorities for London reference in the Museum of London's 'A research framework for Greater London' (MOL 2002).
- 3.5 All excavation on site will be undertaken by suitably qualified professional archaeologists, supported by suitably qualified professional osteologists.

General (watching brief)

- 3.6 The ground reduction for the piling mat, installation of the king post wall and pile probing / obstruction removal in the green zones will be monitored by watching brief.
- 3.7 The Chartered Institute for Archaeologists (CIFA, 2014) define a watching brief as:

'a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons'

- 3.8 During the course of the watching brief if articulated burials are identified, these will warrant 'controlled excavation', as outlined above. If any key post-medieval wall alignments or horizons are encountered, these will also warrant provision for excavation.
- 3.9 All watching brief work on site will be undertaken by suitably qualified professional archaeologists, supported by suitably qualified professional osteologists. Osteological support will be full time during the excavation of skeletons in line with the guidance detailed in *The Role of the Human Osteologist in an Archaeological Fieldwork Project* (Historic England, 2018).

Site specific objectives

- 3.10 Considering the archaeological and historical background of the site and the wider context, the following objectives are set for the excavation:

- What is the highest level of surviving natural sand and gravel? Has this natural been truncated by later construction activity?

- Is there any evidence of activity on the site prior to the 18th century?
- What is the density and grave occupancy along the southern perimeter?
- What is the demographic profile of the burials in this location?
- What pathologies and instances of trauma are present on the burials? What does this indicate about the health of the Workhouse / Covent Garden Parish?
- Is there any evidence of post-mortem investigation or medical dissection present on the remains?
- Is there any evidence of intercutting remains and/ or disinterment of earlier burials to make way for later phases?
- Are there any burial monuments, cists or tombs present?
- Is there further evidence of social zoning of the burials present on site?
- Do any coffin plates survive and is it possible to identify named individuals on site?
- What structural evidence survives relating to the 18th and 19th century buildings associated with the workhouse?
- With consideration to the condition of the remains, what potential does the assemblage have for biometric study?
- What comparisons can be drawn with other workhouse burial grounds of the same period?
- What evidence is there relating to the cemetery layout and boundary?
- Are there any named burials on site (i.e. with coffin plates or grave markers)?
- What is the extent of the modern truncation?

4. Construction impacts and the archaeological mitigation sequence (Part A excavation)

- 4.1 This section provides a detailed breakdown of the methodology for the enabling works and the southern perimeter excavation (Part A). The detailed methodology for the main excavation (Part B) will be outlined in an addendum to this document.
- Limited ground reduction across the site for instillation of the piling mat (watching brief with provision for excavation)
- 4.2 To facilitate the king post wall and secant pile wall, a piling matt will be installed to allow the rig to safely manoeuvre across the site (see Fig 6).
- 4.3 The impact of the secant piles and guide wall, where required, has been limited by design to 2m away from the existing perimeter walls (Morgan Sindell, 2019) see Fig 4.
- 4.4 The current ground level behind the Workhouse lies at between 25.5 m OD (north of the site) and 27.00m OD (south of the site). The maximum extent of the levelling excavation required to facilitate the piling matt is 26.42m OD. In areas where the ground level is currently below this depth in the north, material will be brought in to raise the level.
- 4.5 The top of the highest burial recorded during the evaluation was 24.9m in the centre/ north of the site (Trench 3) and 25.3m OD in the south of the site (Trench 5). With consideration to the proposed formation level of the piling mat, a buffer of between c.1 -1.5 m of made ground will be maintained between the top of the burial horizon and the underside of the piling mat.
- 4.6 The ground reduction will progress under the control of the Principal Contractor, using a mechanical excavator (JCB or slew tracked type) with toothless ditching bucket under archaeological supervision.
- 4.7 Due to the limited nature of this activity, the work will be monitored by watching brief, with provision for controlled hand excavation if any articulated outlier burials are encountered. Provision for excavation will also be made for any key post-medieval wall alignments or horizons.
- 4.8 If articulated human remains are encountered during this activity, a localised tent will be erected by the Attendance Contractor to screen the excavation of these remains from public view, as per the terms of the burial licence.
- Installation of a king post wall to support the southern perimeter excavation and across the site to support the Part B excavation (watching brief with provision for excavation)
- 4.9 The existing southern perimeter boundary wall (which is also part of the southern extent of the red zone) is unstable and is constructed on top of the original cemetery wall. To safely support the archaeological excavation in this location, temporary works are required to support the excavation in this area, in the form of a king post wall (see Fig 7, ref Coyle Kennedy P001 Nov 2019 and Fig 8, ref Coyle Kennedy P100 Nov 2019).
- 4.10 The king post wall will comprise of 58 King posts, augered at 1.8m intervals, a maximum of 600mm in diameter which form the north edge of the red zone excavation area along the southern perimeter and across the site to support the depth of excavation required in the Part B excavation (full details to be submitted in the Stage 2 Part B WSI). The site will be split into three sections during the Part B excavation, the north section will be excavated first, then the centre with the south last. The king posts have been targeted in the location of areas of known truncation seen during the test trench evaluation.
- 4.11 As per the Modebest method statement (rev 00 27/01/20) a piling rig will be used to auger out the holes to the depth required. The king posts will be lowered into the open pile bore and then concreted in.
- 4.12 If significant obstructions are encountered during the augering of the 300mm clearance of the pile locations which cannot be cored through, the Principal Contractor will further excavate the area to grub out the obstruction using a machine with a flat bladed bucket.

- 4.13 Once the king post piles are installed, horizontal waler beams will be connected to the posts. Tie beams will also be used, which will require levelling to within 10mm at the underside of the proposed waler location. Timber sleepers will be used as king post infill panels.
- 4.14 Horizontal props at 2m centres will be fitted to each of the bays.
- 4.15 Due to the limited nature of this activity, the work will be monitored by watching brief, with provision for controlled hand excavation by a qualified archaeologist for any outlier burials at an unexpected high level are encountered. Provision for excavation will also be made for any key post-medieval wall alignments or horizons.
- 4.16 If articulated human remains are encountered during this process, a localised tent will be erected by the Attendance Contractor to screen the excavation of these remains from public view, as per the terms of the burial licence.
- 4.17 Once the installation of the King Post wall is complete, the made ground within the red zone will be reduced by a machine with a flat bladed bucket down to the burial horizon under archaeological supervisor. The point at which the machine no longer has sufficient reach to do this, the made ground will be reduced by attendance labour.

- **Controlled excavation of the southern perimeter red zone**

- 4.18 After the installation of the king post piles Modebest will remove the modern fill overlying the top of archaeological horizon under the guidance of the archaeological watching brief. At approx. 500mm bgl, the diagonal props and horizontal bracing will be installed at ground level as per the design. This will artificially separate the area into fourteen 4m X 1.8m bays/ working zones.
- 4.19 As the attendance contractor, Modebest, will remove the remainder of the modern fill overlying the top of the archaeological horizon (c.300mm) either by machine using a flat bladed bucket or by hand (or a combination of the two) under archaeological supervision.
- 4.20 If any obstructions are present in the line of the Kingpost wall, they will be broken out and removed by the Modebest. If the obstruction is in close proximity to any burials and/or sensitive archaeology, this will be carried out in tandem with the archaeologists, the integrity of the temporary works structure is the most important thing to preserve life. Depending on the depth of any obstructions, they will either be broken down (if required) as the archaeological excavation progresses or grubbed out entirely.
- 4.21 If any obstructions are found within the working zones they will be removed once the archaeological work is completed, unless they pose a threat to the operatives in the area. This shall be assessed by all parties if and when relevant.
- 4.22 Controlled excavation will commence once the LP Archaeology and Morgan Sindall team agree that the break out and clearance of modern material is complete and the Temporary Works Coordinator has declared the area safe to enter (30th of March as per MS programme version 3 dated 20_02_20 line 186)
- 4.23 The archaeological team will enter the working zone with access to all “divided zones” to hand clean the entirety of the area, defining the top of grave cuts. The location of these features will be located using a robotic total station. Access and egress to bays will be by means of adjustable stairs. The stairs will be moved around the excavation area to suit entry and exit requirements. The specification of the stairs is compatible with stretcher rescue of any injured persons.
- 4.24 Prior to the excavation of skeletons, a cover will be applied over the excavation area to screen the excavation of human remains from public view.
- 4.25 In the first instance, seven bays will be selected (every other 4m X 1.8m box) for spoiling into (‘inactive bays’). The burial horizon will be protected by a buffer of terram and ply boards in these locations. Spoil will be excavated from the ‘active’ bays by the archaeological team, with the attendance team providing support to shift the material from the active bays to the spoiling bays. Modebest will fill bucket hoists located in the inactive bays, removing spoil and relocating to the screener stockpile. One-ton boat skips will be winched out of the trench by machine under the supervision of a banksman.

- 4.26 Excavation of grave cuts and skeletons in the active bays will progress to a safe depth of approx. 500-700mm. When this has been reached, with any remaining archaeology being protected by plywood, the active and inactive bays will then rotate. Controlled excavation by the archaeological team will commence in the active bays, with spoil removed as per para 1.1.7 & 1.1.8 above.
- 4.27 Throughout the archaeological excavation, in any given working zone, at approx. every 300mm (possibly more or less if the ground conditions will allow) the archaeological team will exit the area and the Modebest will take control of the working zone and knock the king post shutters down.
- 4.28 Any low-grade archaeological deposits and / or natural ground that the graves are cut through will be reduced by the attendance contractor either utilising the machine with a flat bladed bucket, hand excavation or a combination of the two. The area will be reduced under archaeological supervision to a depth of 0.5m -0.75m. A safe working exclusion zone will be agreed with MS to allow machining to proceed whilst archaeologists are working in the adjacent way. If an adequate exclusion zone between people and plant cannot be achieved archaeologists will exit the adjacent bay until machining is complete.
- 4.29 Modebest will assist with ground reduction in instances where graves are cut into natural ground or low-grade archaeological deposits. Where there are intercutting graves and/or grave shafts cut into sensitive archaeological deposits the area will be reduced by archaeologists.
- 4.30 The hit and miss excavation (i.e. excavation of an active bay to a depth of 0.50m-0.75m bgl and then switching to the adjacent bay, which then becomes active) will continue until all 14 bays have been fully excavated to clean natural geology/ the base of archaeology is reached or the maximum depth of excavation the temporary works can support is reached, which is 4m bgl.
- 4.31 Once a general/"global" depth of 2m bgl is reached, Modebest will enter the bay to install the additional cross bracing. Archaeological excavation will stop until these works are complete. At this stage additional cross bracing will be fixed at 1.5m below the top horizontal bracing. The temporary works coordinator will review and sign off the additional structural supports, allowing archaeological excavation to recommence.

- **Pile probing in the green zone along the southern perimeter of the site**

- 4.32 Pile probing for the secant pile wall will proceed in the green zone along the southern perimeter (see Fig 4). During the site investigation trench in this location, burials and grave cuts were determined not to survive in this area, hence a watching brief will monitor the construction impacts in this area and any disarticulated bone or significant artefacts collected.

Processing of human remains

- 4.33 Processing of human remains excavated during the Part A excavation will proceed off-site.
- 4.34 Any block lifted neonatal or infant remains will be processed using a floatation tank or with a 1mm mesh to ensure recovery of small bone. All other inhumed remains will be washed over a 2 mm mesh.
- 4.35 Once dry, inhumations will be bagged and boxed with the arms, legs, hands, Feet separated into right and left sides, and the torso and skull will be placed in separate bags each containing two labels. Human remains will be stored in boxes with protective foam.

5. Methodology (General)

- 5.1 It is anticipated that the Part A excavation will be undertaken during the COVID 19 restrictions. All archaeological work on site will be undertaken following government guidance in relation to COVID19 and in accordance of ClfA's Code of Conduct Principal 5 and 5.2, COVID19 risk assessments, the Site Operating Procedures (Morgan Sindell, March 2020).
- 5.2 The COVID19 government restrictions presently state that social distancing is required- therefore, all staff on site will remain at least 2m apart, both on site and within the site welfare. The staffing rate for the project has been reduced to 35% of the original number proposed for the duration of the COVID19 restrictions in order to ensure social distancing is achievable on site (a maximum of 7 staff in the southern trench at any one time to achieve adequate social distancing in the area).
- 5.3 All work will be carried out pursuant to CIFA standards, including those detailed in the 'Updated Guidelines to the Standards for Recording Human Remains'(2014) and following Historic England standards including 'Guidance for best practice for the treatment of human remains from Christian burial grounds in England'(2017).
- 5.4 Excavation of human remains will be undertaken pursuant to burial licence (ref 20-0023) obtained from the Ministry of Justice (see Fig 10).
- 5.5 A unique site code will be obtained from the Museum of London Archaeological Archive (LAA).
- 5.6 The recording system used during the excavation, including written and drawn records, will be the 'London system' based on the Museum of London Archaeology Service site Manual (MoLAS 1994) and will be fully compatible with LAA's requirements.
- 5.7 This will include, where appropriate:
- Written records on pro forma context sheets
 - Hand drawn plans on drafting film at a scale of 1:20
 - Hand drawn sections on drafting film at a scale of 1:10 or 1:20
 - Harris stratigraphic matrix
 - Digital photographs
 - Context, photographic and sample registers

Survey

- 5.8 All setting out and recording will be via differential GNSS / GPS and optical Total Station systems. Site control will be tied into the Ordnance Survey National Grid and Ordnance Datum.
- 5.9 In addition to archaeological features, key horizons, area and trench set out, the OD height data for each excavation area will be recorded prior to commencement, along with the levels of the top of the superficial deposits and the top of the geological horizon.

Artefacts and environmental samples

- 5.10 Finds will be recovered from stratigraphic archaeological deposits.
- 5.11 Sampling approaches will be applied as appropriate e.g. bulk samples, column samples or monolith samples. The sampling strategy should be developed in consultation with GLAAS during the works. Sampling will be utilised to assist scientific dating
- 5.12 Finds and samples will be processed and assessed off site by appropriate specialists.
- 5.13 Marking, bagging and boxing of finds will follow the receiving body, LAA's guidelines.

- 5.14 Should gold, silver or other finds definable as treasure be made, they will be reported to the Coroner as stipulated in the Treasure Act of 1996, amended 2003.
- 5.15 Permission will be sought from the landowner, by LP Archaeology, to deposit all finds with the archive receiving body, in this case LAA. This will be secured via a signed Deed of Transfer.
- 5.17 A conservator may be brought in to lift large, delicate or fragile objects.
- 5.18 Any wooden artefacts will be kept wet to prevent collapse.
- 5.19 The sampling strategy applied to animal bone collection will be dependent on the significance of the archaeology under investigation.

6. Methodology (site specific)

Excavation of human remains

- 6.1 All articulated burials present on site will be excavated by hand by a qualified, professional archaeologist. The following exclusions apply, as these remains present a biohazard:
- Lead coffins (sealed or breached)
 - Any burials with soft tissue
- 6.2 Lead coffins and remains with soft tissue will be removed by a specialist exhumation contractor, Randall's Contracting (see Appendix A for methodology).
- 6.3 All spoil excavated on site during the watching brief (contractor led) or excavation (archaeologist led) will be graded for human bone by the Attendance Contractor. The Labourers from the attendance contractor will be trained by staff from the exhumation company. The Attendance Contractor will scan and collect the graded spoil for human bone which will be collected and stored on site. This process will be assured and supported by the archaeological team
- 6.4 All articulated burials which fall into the Red Zone along the perimeter will be recorded, hand excavated and lifted by the Archaeological Contractor (Fig 4).
- 6.5 All work will be in accordance with the Morgan Sindell safe system of work (Appendix 2) designed to manage the Coronavirus risk. If, at any time, these conditions cannot be met, archaeological work will be suspended.
- 6.6 It is anticipated that many of the grave cuts / burials will straddle two bays within the red zone. When safe and reasonably practicable to do so, any parts of a burial extending into the adjacent bay will be lifted at the same time the remains in the current bay are excavated. This will be most applicable to localised sections of a skeleton (i.e. the feet).
- 6.7 Where it is not safe or practical to do so, any sections of a burial extending into the adjacent bay will be protected using ply boards and the remainder of the burial will be excavated when the archaeological team are relocated to work in the adjacent bay.
- 6.8 Protective ply boards will be used where necessary to protect grave cuts/ human remains when the archaeological team exit the bay to allow the Attendance Contractor to enter the area and knock down the King Post shutters.
- 6.9 Pursuant to the burial licence, all human remains encountered will be treated with due care, dignity and respect. All human remains (including disarticulated bone) will be collected. Burials will be excavated and recorded according to the standards detailed in the Updated Guidelines to the standards for recording human remains, Chartered Institute for Archaeologists.
- 6.10 An osteologist will provide oversight and assurance of the excavation of articulated human remains on site.
- 6.11 No burials will be left exposed overnight.
- 6.12 Digital record photographs will be taken of all burials and significant charnel deposits.
- 6.13 Infant and neonatal burials will be block lifted to ensure all the bone is recovered. Any fragmentary burials / remains with bone in very poor condition will also be block lifted.
- 6.14 If foetal remains are found in utero, they will be retained with the remains of the mother.
- 6.15 Any suspected cremation deposits will be 100% sampled and the basal fills of any empty graves will be 100% sampled.
- 6.16 The majority of burials were found to be densely stacked on site. Any discrete burials, where

a clear definition of fill is present will be sampled for small bones, calcified fragments (for example, arterial plaques, bladder stones etc) and small artefacts. This will be undertaken by taking basal grave soil in three sub-samples, corresponding to the head, torso and leg /foot area, helps preserve information as to the approximate location in the grave of recovered material.

- 6.17 All remains will be carefully excavated by the Archaeological Contractor and stored by the Principal Contractor on site, until such a time when the remains are taken off-site for processing. during storage and onward transport.

Disarticulated bone

- 6.18 Disarticulated bone encountered during the watching brief and excavation will be collected, bagged and stored though it will not be formally recorded by an osteologist. A quick scan of disarticulated bone for unusual pathologies or post-mortem modification.
- 6.18 Any instances where disarticulated human bone is encountered as a discrete charnel assemblage, these remains will be recorded by an osteologist along with the assemblage of articulated burials.

7 Reporting

- 7.1 On completion of the Part A watching brief excavation and watching brief, a short interim high-level summary will be produced summarising the results.
- 7.2 When the Phase 2 (detail forthcoming) works are completed, a Post Excavation Assessment Report (PXA) and Updated Project Design will be produced by the Archaeological Contractor.
- 7.3 The PXA will be produced within 6 months of the completion of the Phase 2 field work and will be made available to the client and Historic England. Submission of the report to the Local Planning Authority will be carried out by the client or their planning consultant.
- 7.4 Skeletal remains excavated will be processed and assessed within the PXA. Analysis of the remains will be undertaken if required as per agreed UPD. It is intended that the full assemblage of remains will be reburied in consecrated ground (location to be defined). The PXA will highlight any proposals for retention of special cases to form part of the Museum of London's teaching collection.
- 7.5 The PXA shall include:
- Non-technical summary
 - Introduction
 - Archaeological, historical and topographic background
 - Methodology
 - Summary of site sequence / stratigraphy
 - Finds Reports
 - Answering and updating of original research aims.
 - Discussion of potential / significance of the archaeology
 - UPD
 - Location figures and figures detailing archaeological findings
 - Bibliography
 - OASIS form
- 7.6 Along with the finds archive, the physical and digital project archive will be deposited at LAA. The archive will be prepared in accordance to the LAA guidelines Museum of London, General Standards for the preparation of archaeological archives deposited with the Museum of London, (2009) and standards set out in Society of Museum Archaeologists: Towards an Accessible Archive. The Transfer of Archaeological Archives to Museums: Guidelines for Use in England, Northern Ireland, Scotland and Wales (1995). The minimum standard for a site archive is set out in Management of Recording Projects in the Historic Environment (2015).
- 7.7 GIS shape files will be provided to the Greater London Historic Environment Record on completion of the project.
- 7.8 Brief summaries of the results will be included in the relevant academic journals.

8 Programme and site requirements

Programme

- 8.1 The current programme is detailed in Fig 10 of this WSI, with an allowance for 11 weeks to excavate the southern area. Two weeks have been allowed for by the Principal Contractor to backfill the red zone on completion of the excavation.
- 8.2 Laura O' Gorman, GLAAS Adviser to Camden County Council, will be given 5 days' notice of the work starting on site, and will be kept updated as the work progresses, and a programme of monitoring visits will be agreed during the excavation. Due to the current ongoing restrictions relating to COVID 19 GLAAS are not undertaking site visits. To enable GLAAS to monitor the works the following measures will be implemented for the duration of the restrictions:
- Regular site photos and summary reports
 - Virtual progress meetings
 - Video site walkover

9 Health and safety

9.1 The Archaeological Contractor will produce a site-specific Risk Assessment Method Statement (RAMS). These should be read in conjunction with this document.

10 Bibliography

- APABE, Guidance for Best Practice for the Treatment of Human Remains Excavated from Christian Burial Grounds in England,
- BGS 2017, Geology of Britain Viewer,
<http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html>
- ClfA, Updated Guidelines to the standards for recording human remains, Chartered Institute for Archaeologists
- ClfA, 2014a Standard and Guidance for the collection, documentation, conservation and research of archaeological materials
- ClfA, 2014b Standard and Guidance for archaeological field excavation Chartered Institute for Archaeologists
- ClfA, 2014c Code of Conduct, Chartered Institute for Archaeologists
- DCLG (Department of Communities and Local Government), March 2012 National Planning Policy Framework
- English Heritage 2011. Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (Second Edition).
- English Heritage 2008. Management of Research Projects in the Historic Environment. PPN 3: Archaeological Excavation. English Heritage.
- GLA (Greater London Authority), July 2015 The London Plan. Spatial Development Strategy for Greater London,
- Historic England, 2018, The Role of the Human Osteologist in an Archaeological Fieldwork Project
- Historic England, 2008 Management of Research Projects in the Historic Environment
- Historic England, 1991 Management of Archaeological Projects 2
- London Borough of Camden, 2018 Local Plan
- Morgan Sindell, 2020, Site Operating Procedures
- Museum of London 2002, A Research Framework for London Archaeology.
- Museum of London 2009, General Standards for the preparation of archaeological archives deposited with the Museum of London
- Museum of London Archaeology Service, 1994 Archaeological Site Manual
- PCA, Watching Brief Report (2014)
- PCA, WSI for a Watching Brief (2014)
- Society of Museum Archaeologists 1995 Towards an Accessible Archive. The Transfer of Archaeological Archives to Museums: Guidelines for Use in England, Northern Ireland, Scotland and Wales
- The Human Tissue Act, 2004
- Treasure Act 1996 Code of Practice (2nd Revision) , DCM

11 Appendix A

- 11.2 Any burials with soft tissue present or remains contained within lead coffins will be removed by Randall's, a specialist exhumation contractor.
- 11.3 If hazardous remains are encountered, an exclusion zone of 5m around the remains will be defined and will be wrapped using specialist materials and removed by hand by the exhumation contractor where possible.
- 11.4 In some instances, the remains may need to be winched out of the trench using the machine as a hoist. Any burials removed using this method will be wrapped by the exhumation contractor, secured to ply boards and carefully hoisted out of the trench by the attendance contractor.
- 11.5 Remains will be placed into bags and then into opaque containers. Lead coffins will remain wrapped.
- 11.6 LP Archaeology will main a record of the location of the bay and grave stack where hazardous remains were encountered, though the archaeological team will not enter the exclusion zone until it has been declared safe to do so by the exhumation contractor and principal contractor.

Site Operating Procedures – Protecting Your Workforce

Contents

Introduction	1
Self-Isolation.....	1
Procedure if Someone Falls Ill	1
Travel to Site.....	2
Site Access Points	2
Hand Washing	2
Toilet Facilities	2
Canteens and Eating Arrangements	3
Changing Facilities, Showers and Drying Rooms	3
Avoiding Close Working	3
Cleaning.....	4

Introduction

Construction sites operating during the Coronavirus Covid-19 pandemic need to ensure they are protecting their workforce and minimising the risk of spread of infection.

This guidance is intended to introduce consistent measures on sites of all sizes in line with the Government's recommendations on [social distancing](#).

These are exceptional circumstances and the industry must comply with the latest Government advice on Coronavirus at all times.

The health and safety requirements of any construction activity must also not be compromised at this time. If an activity cannot be undertaken safely due to a lack of suitably qualified personnel being available or social distancing being implemented, it should not take place.

We are aware that emergency services are also under great pressure and may not be in a position to respond as quickly as usual.

Sites should remind the workforce at every opportunity of the Site Operating Procedures which are aimed at protecting them, their colleagues, their families and the UK population.

If a site is not consistently implementing the measures set out below, it may be required to shut down.

Self-Isolation

Anyone who meets one of the following criteria should not come to site:

- Has a high temperature or a new persistent cough - [follow the guidance on self-isolation](#)
- Is a [vulnerable person](#) (by virtue of their age, underlying health condition, clinical condition or are pregnant)
- Is living with someone in [self-isolation](#) or a [vulnerable person](#).

Procedure if Someone Falls Ill

If a worker develops a high temperature or a persistent cough while at work, they should:

- Return home immediately
- Avoid touching anything
- Cough or sneeze into a tissue and put it in a bin, or if they do not have tissues, cough and sneeze into the crook of their elbow.

They must then follow the guidance on self-isolation and not return to work until their period of self-isolation has been completed.

Travel to Site

- Wherever possible workers should travel to site alone using their own transport and sites need to consider:
 - Parking arrangements for additional cars and bicycles
 - Other means of transport to avoid public transport e.g. cycling
 - Providing hand cleaning facilities at entrances and exits. This should be soap and water wherever possible or hand sanitiser if water is not available
 - How someone taken ill would get home.

Site Access Points

- Stop all non-essential visitors
- Introduce staggered start and finish times to reduce congestion and contact at all times
- Monitor site access points to enable social distancing – you may need to change the number of access points, either increase to reduce congestion or decrease to enable monitoring
- Remove or disable entry systems that require skin contact e.g. fingerprint scanners
- Require all workers to wash or clean their hands before entering or leaving the site
- Allow plenty of space (two metres) between people waiting to enter site
- Regularly clean common contact surfaces in reception, office, access control and delivery areas e.g. scanners, turnstiles, screens, telephone handsets, desks, particularly during peak flow times
- Reduce the number of people in attendance at site inductions and consider holding them outdoors wherever possible
- Drivers should remain in their vehicles if the load will allow it and must wash or clean their hands before unloading goods and materials.

Hand Washing

- Provide additional hand washing facilities to the usual welfare facilities if a large spread out site or significant numbers of personnel on site
- Ensure soap and fresh water is readily available and kept topped up at all times
- Provide hand sanitiser where hand washing facilities are unavailable
- Regularly clean the hand washing facilities and check soap and sanitiser levels
- Provide suitable and sufficient rubbish bins for hand towels with regular removal and disposal.

Sites will need extra supplies of soap, hand sanitiser and paper towels and these should be securely stored.

Toilet Facilities

- Restrict the number of people using toilet facilities at any one time e.g. use a welfare attendant
- Wash hands before and after using the facilities
- Enhance the cleaning regimes for toilet facilities particularly door handles, locks and the toilet flush
- Portable toilets should be avoided wherever possible, but where in use these should be cleaned and emptied more frequently
- Provide suitable and sufficient rubbish bins for hand towels with regular removal and disposal.

Canteens and Eating Arrangements

With cafés and restaurants having been closed across the UK, canteens cannot operate as normal.

Whilst there is a requirement for construction sites to provide a means of heating food and making hot drinks, these are exceptional circumstances and where it is not possible to introduce a means of keeping equipment clean between use, kettles, microwaves etc. must be removed from use.

The workforce should also be required to stay on site once they have entered it and not use local shops.

- Dedicated eating areas should be identified on site to reduce food waste and contamination
- Break times should be staggered to reduce congestion and contact at all times
- Hand cleaning facilities or hand sanitiser should be available at the entrance of any room where people eat and should be used by workers when entering and leaving the area
- The workforce should be asked to bring pre-prepared meals and refillable drinking bottles from home
- Workers should sit 2 metres apart from each other whilst eating and avoid all contact
- Where catering is provided on site, it should provide pre-prepared and wrapped food only
 - Payments should be taken by contactless card wherever possible
 - Crockery, eating utensils, cups etc. should not be used
- Drinking water should be provided with enhanced cleaning measures of the tap mechanism introduced
- Tables should be cleaned between each use
- All rubbish should be put straight in the bin and not left for someone else to clear up
- All areas used for eating must be thoroughly cleaned at the end of each break and shift, including chairs, door handles, vending machines and payment devices.

Changing Facilities, Showers and Drying Rooms

- Introduce staggered start and finish times to reduce congestion and contact at all times
- Introduce enhanced cleaning of all facilities throughout the day and at the end of each day
- Consider increasing the number or size of facilities available on site if possible
- Based on the size of each facility, determine how many people can use it at any one time to maintain a distance of two metres
- Provide suitable and sufficient rubbish bins in these areas with regular removal and disposal.

Avoiding Close Working

There will be situations where it is not possible or safe for workers to distance themselves from each other by 2 metres.

General Principles

- Non-essential physical work that requires close contact between workers should not be carried out
- Work requiring skin to skin contact should not be carried out
- Plan all other work to minimise contact between workers
- Re-usable PPE should be thoroughly cleaned after use and not shared between workers
- Single use PPE should be disposed of so that it cannot be reused
- Stairs should be used in preference to lifts or hoists
- Where lifts or hoists must be used:
 - Lower their capacity to reduce congestion and contact at all times



Fig 1 Site Location

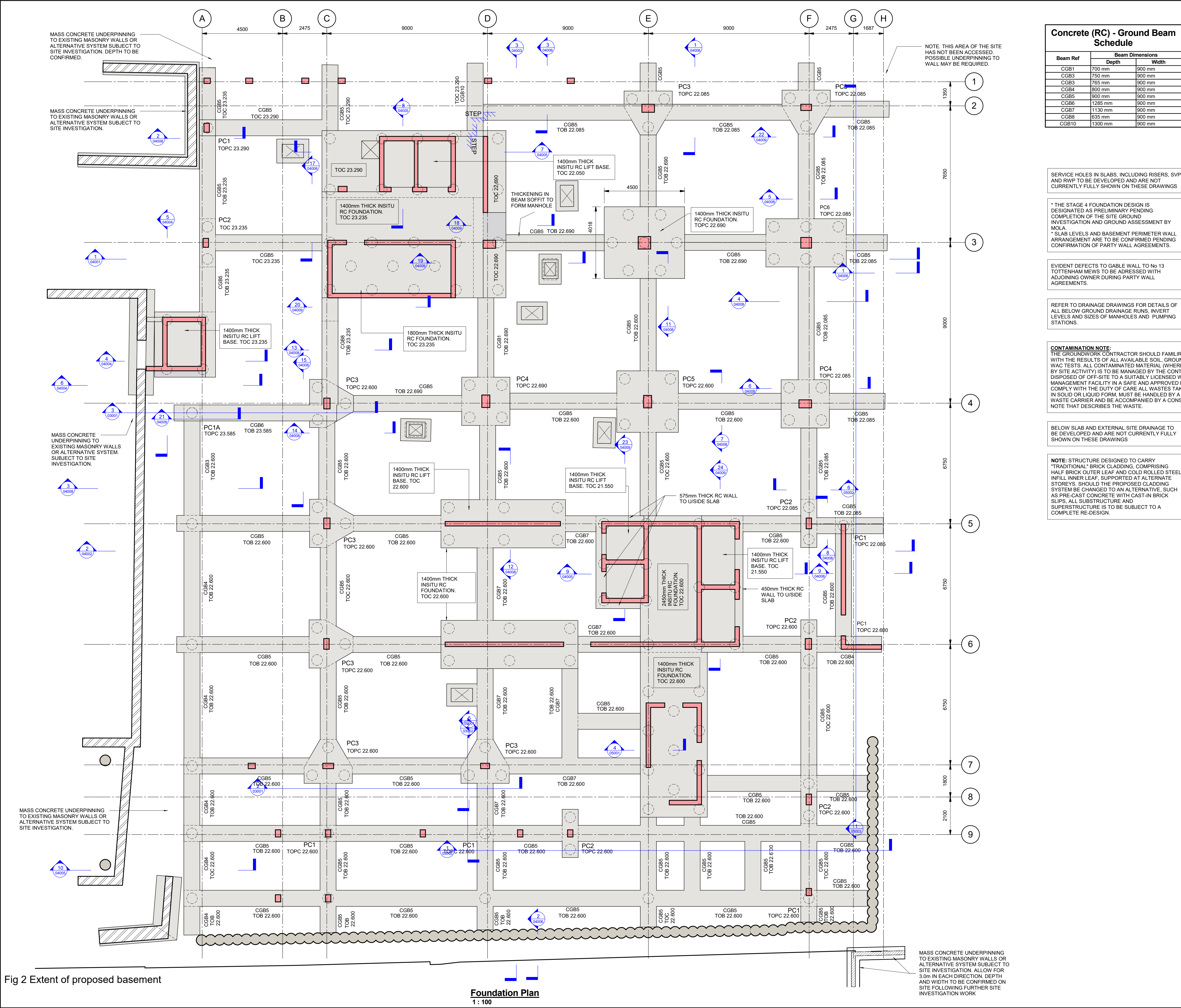


Fig 2 Extent of proposed basement

Foundation Plan
1:100

Concrete (RC) - Ground Beam Schedule		
Beam Ref	Beam Dimensions	
	Depth	Width
CGB1	700 mm	900 mm
CGB3	750 mm	900 mm
CGB3	765 mm	900 mm
CGB4	800 mm	900 mm
CGB5	900 mm	900 mm
CGB6	1235 mm	900 mm
CGB7	1130 mm	900 mm
CGB8	635 mm	900 mm
CGB10	1300 mm	900 mm

SERVICE HOLES IN SLABS, INCLUDING RISERS, SVP AND RWP TO BE DEVELOPED AND ARE NOT CURRENTLY FULLY SHOWN ON THESE DRAWINGS

* THE STAGE 4 FOUNDATION DESIGN IS DESIGNATED AS PRELIMINARY PENDING COMPLETION OF THE SITE GROUND INVESTIGATION AND GROUND ASSESSMENT BY MOLA.
* SLAB LEVELS AND BASEMENT PERIMETER WALL ARRANGEMENT ARE TO BE CONFIRMED PENDING CONFIRMATION OF PARTY WALL AGREEMENTS.

REFER TO DRAINAGE DRAWINGS FOR DETAILS OF ALL BELOW GROUND DRAINAGE RUNS, INVERT LEVELS AND SIZES OF MANHOLES AND PUMPING STATIONS.

CONTAMINATION NOTE:
THE GROUNDWORK CONTRACTOR SHOULD FAMILIARISE HIMSELF WITH THE RESULTS OF ALL AVAILABLE SOIL, GROUND WATER AND WAC TESTS. ALL CONTAMINATED MATERIAL (WHERE AFFECTED BY SITE ACTIVITY) IS TO BE MANAGED BY THE CONTRACTOR AND DISPOSED OF OFF-SITE TO A SUITABLY LICENSED WASTE MANAGEMENT FACILITY IN A SAFE AND APPROVED MANNER. TO COMPLY WITH THE DUTY OF CARE ALL WASTES TAKEN OFF SITE, IN SOLID OR LIQUID FORM, MUST BE HANDLED BY A REGISTERED WASTE CARRIER AND BE ACCOMPANIED BY A CONSIGNED NOTE THAT DESCRIBES THE WASTE.

BELOW SLAB AND EXTERNAL SITE DRAINAGE TO BE DEVELOPED AND ARE NOT CURRENTLY FULLY SHOWN ON THESE DRAWINGS

NOTE: STRUCTURE DESIGNED TO CARRY "TRADITIONAL" BRICK CLADDING, COMPRISING HALF BRICK OUTER LEAF AND COLD ROLLED STEEL INFILL INNER LEAF, SUPPORTED AT ALTERNATE STOREYS. SHOULD THE PROPOSED CLADDING SYSTEM BE CHANGED TO AN ALTERNATIVE, SUCH AS PRE-CAST CONCRETE WITH CAST-IN BRICK SLIPS, ALL SUBSTRUCTURE AND SUPERSTRUCTURE IS TO BE SUBJECT TO A COMPLETE RE-DESIGN.

- Notes
- Do not scale from this drawing. Work to figured dimensions only.
 - This drawing is to be read in conjunction with:
 - General notes drawing MHA-ACM-00-ZZ-DR-SE-00001
 - Design reports
 - Survey and Interpretative Reports
 - Project Specifications and Performance Specifications
 - Health and Safety Hazard Register
 - Relevant drawings and documentation issued by the architect, engineers and specialists.
 - Building Information Model (BIM)
 - Outline Construction Methodology
 - Movements and Tolerances Report
 - All dimensions are in mm except levels which are in metres and relate to (ordnance datum).
 - Any discrepancies shall be referred to the Designer before work commences.

Work In Progress

Issue/Revision		
T4	26.10.18	TENDER - STAGE 1
T3	19.06.18	STAGE 4 TENDER (2)
T2	01.05.18	STAGE 4 TENDER
T1	29.03.18	STAGE 4 TENDER (DRAFT)
A	23.01.18	STAGE 3 ISSUE, WIP
Rev	Date	Description

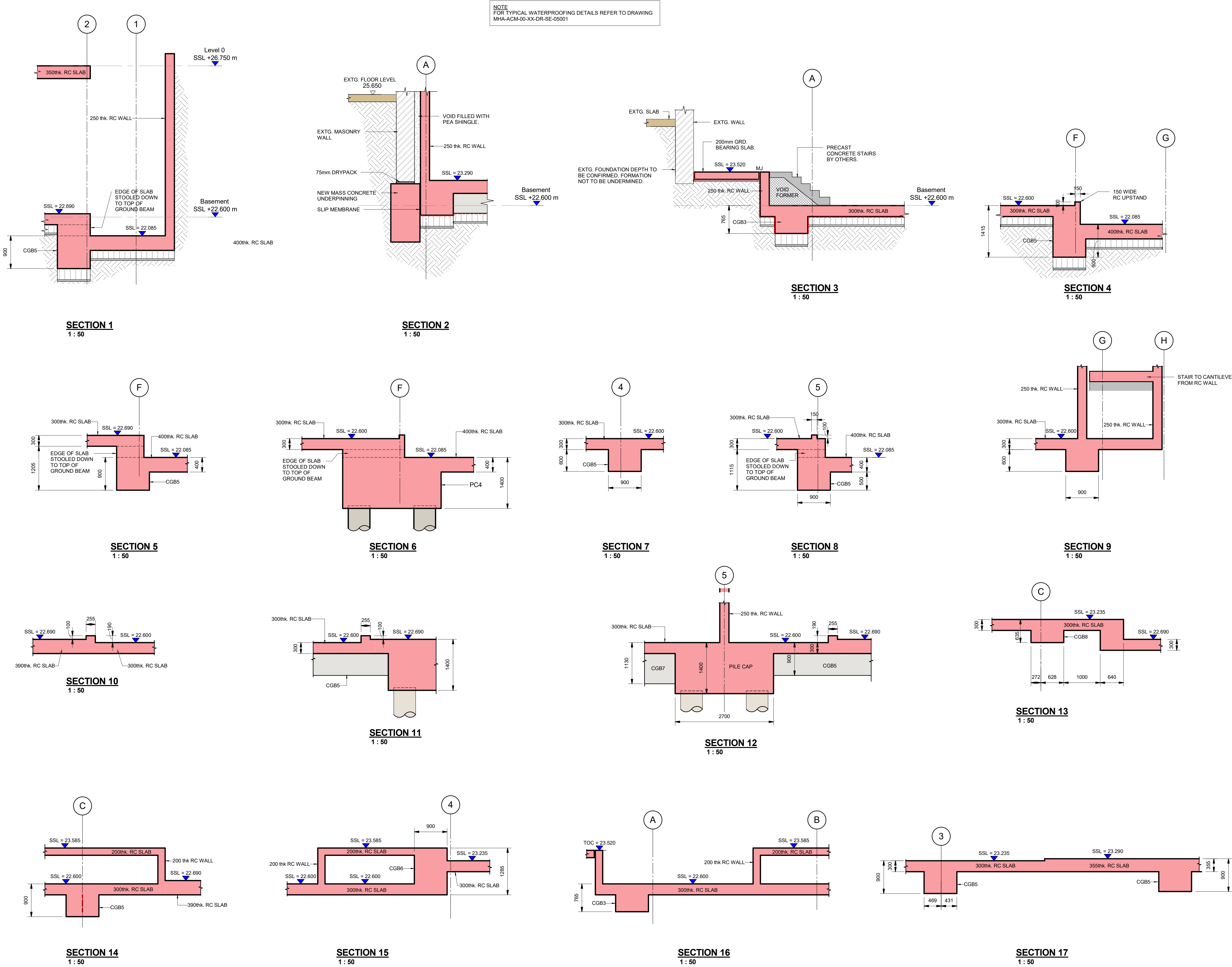


Fig 3 Section through the proposed basement showing formation levels

- Do not scale from this drawing. Work to figured dimensions only.
- This drawing is to be read in conjunction with:
 - General notes drawing MHA-ACM-00-ZZ-DR-SE-00001
 - Design reports
 - Survey and Interpretative Reports
 - Project Specifications and Performance Specifications
 - Health and Safety Hazard Register
 - Relevant drawings and documentation issued by the architect, engineers and specialists
 - Building Information Model (BIM)
 - Outline Construction Methodology
 - Movements and Tolerances Report
- All dimensions are in mm except levels which are in metres and relate to [ordnance datum].
- Any discrepancies shall be referred to the Designer before work commences.

Work In Progress

T4	26.10.18	TENDER - STAGE 1
T3	19.06.18	STAGE 4 TENDER (2)
T2	01.05.18	STAGE 4 TENDER
T1	29.03.18	STAGE 4 TENDER (DRAFT)
A	21.12.17	STAGE 3 ISSUE, WIP
Rev	Date	Description

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document.

1 - 100

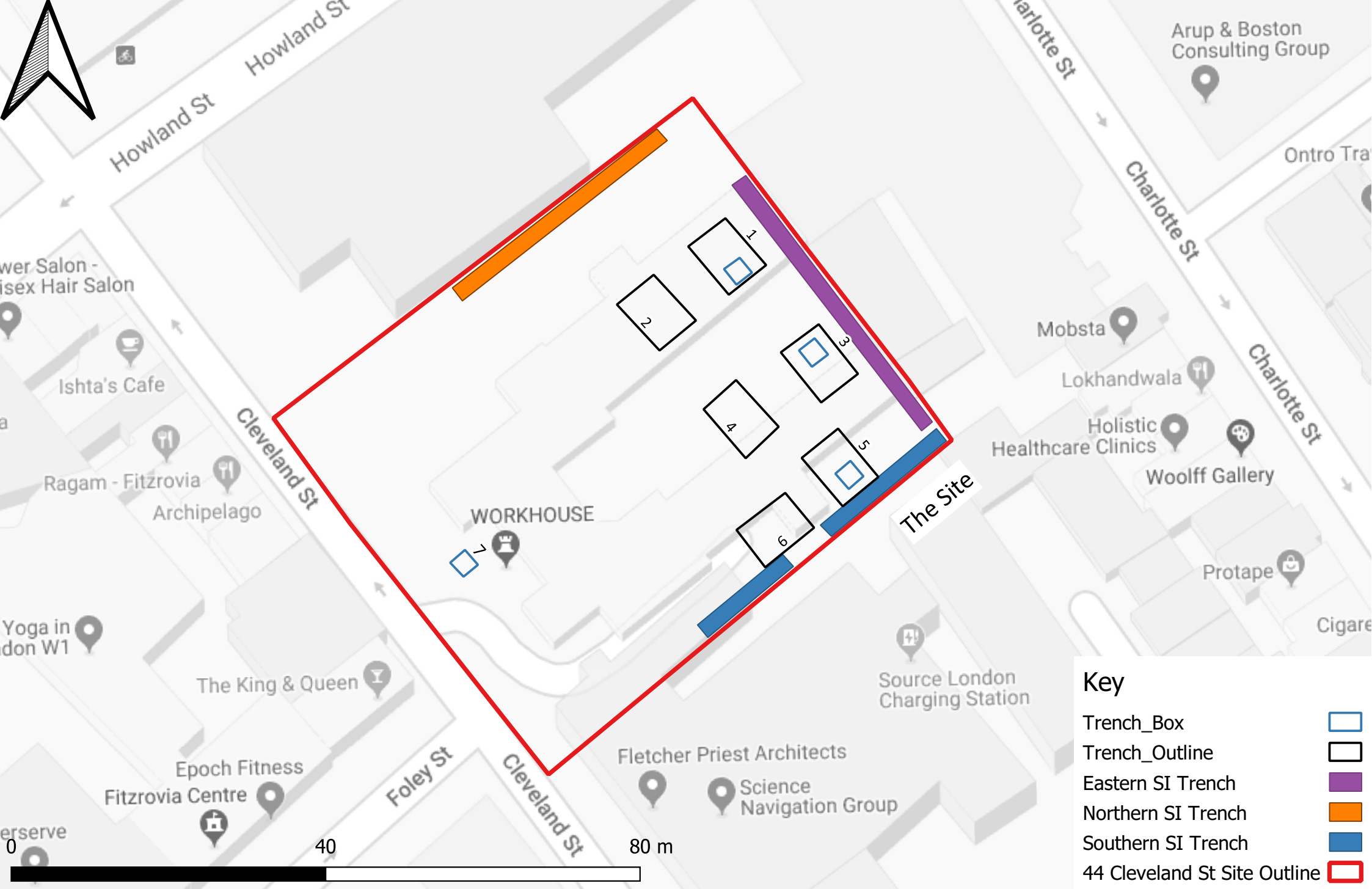


Fig 5 Location of evaluation test trenches



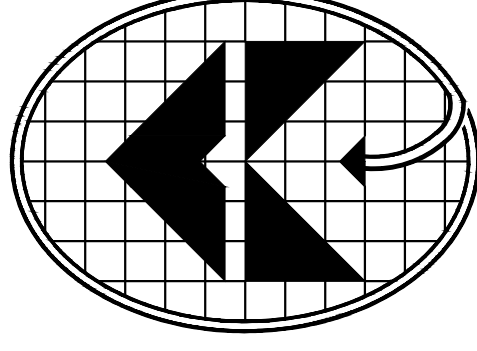
NOTES			
<p>NOTE: ALL STEEL GRADE 355</p> <p>LEANMIX IN HOLES TO BE GRADE C12/15</p> <p>TIMBER INFILL BETWEEN UC SECTIONS TO BE C24 TIMBERS min. 100mm WIDE ALL OTHER TIMBERS TO BE GRADE C16</p> <p>TIMBERS FIXED TO STEELS WITH min. 2no. 125mm LONG x 6mm DIA. SELF DRILLING SELF TAPPING TEK SCREWS</p>			
F _a -61/0			
D	DETAIL X ADDED TO SECTION A-A	03/03/2020	
C	SECTION A-A, LEVELS ADDED, NOTES REVISED	18/02/2020	
B	SECTION A-A, KINGPOST SIZE REVISED, WALKERS & PROPS REMOVED	05/02/2020	
A	KINGPOST INFILL OPTIONS ADDED	16/01/2020	
Rev.	Revision	Date	
DRAWING STATUS			
P	PRELIMINARY	A	APPROVAL
T		T	TENDER
C	CONSTRUCTION	R	RECORD
I		I	INFORMATION
 <p style="font-size: 24px; font-weight: bold; margin: 10px 0;">COYLE KENNEDY</p> <p style="font-size: 20px; font-weight: bold; margin: 0 0 10px 0;">Consulting Engineers</p> <p style="font-size: 12px; margin: 0 0 10px 0;">Third Floor, GW Business Centre, Great West House, Great West Road, Brentford TW8 9DF, England</p> <div style="display: flex; justify-content: space-between; font-size: 10px;"> Tel: +44(0)203 393 1174 Fax: +44(0)203 004 1234 Website: www.coylekenedy.com email: mail@coylekenedy.com </div>			
PROJECT			
BEDFORD PASSAGE			
CLIENT			
MODEBEST			
TITLE			
TEMPORARY WORKS SECTIONS			
PROJECT No.		STATUS - DRAWING No.	
19-146		P-100	
DATE		DRAWING REV.	
NOVEMBER 2019		D	
SCALE 1:50, 1:10 © A1 1:100, 1:20 © A3	BY AC	CHECKED TK	

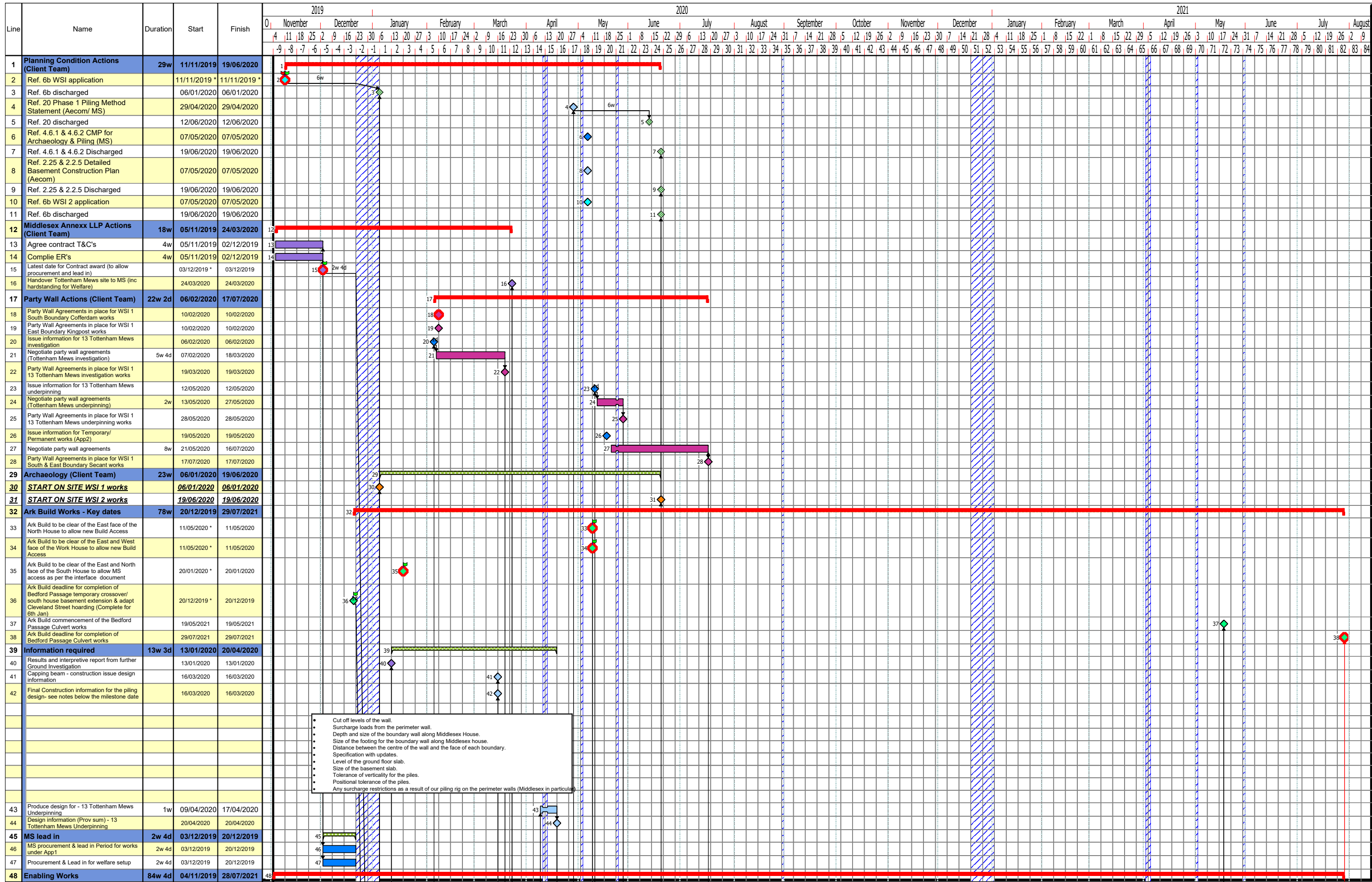


Fig 9 Risk plan (blue area/ hashed area refer to architectural elements n/a to archaeology)

Middlesex Annex LLP - Bedford Passage Development

Enabling Works - Contract Programme

Chart revision date:
04/02/2020



Drawn by: James Kidgell

Dwg No. BPD-EW-001

Revision No. 02

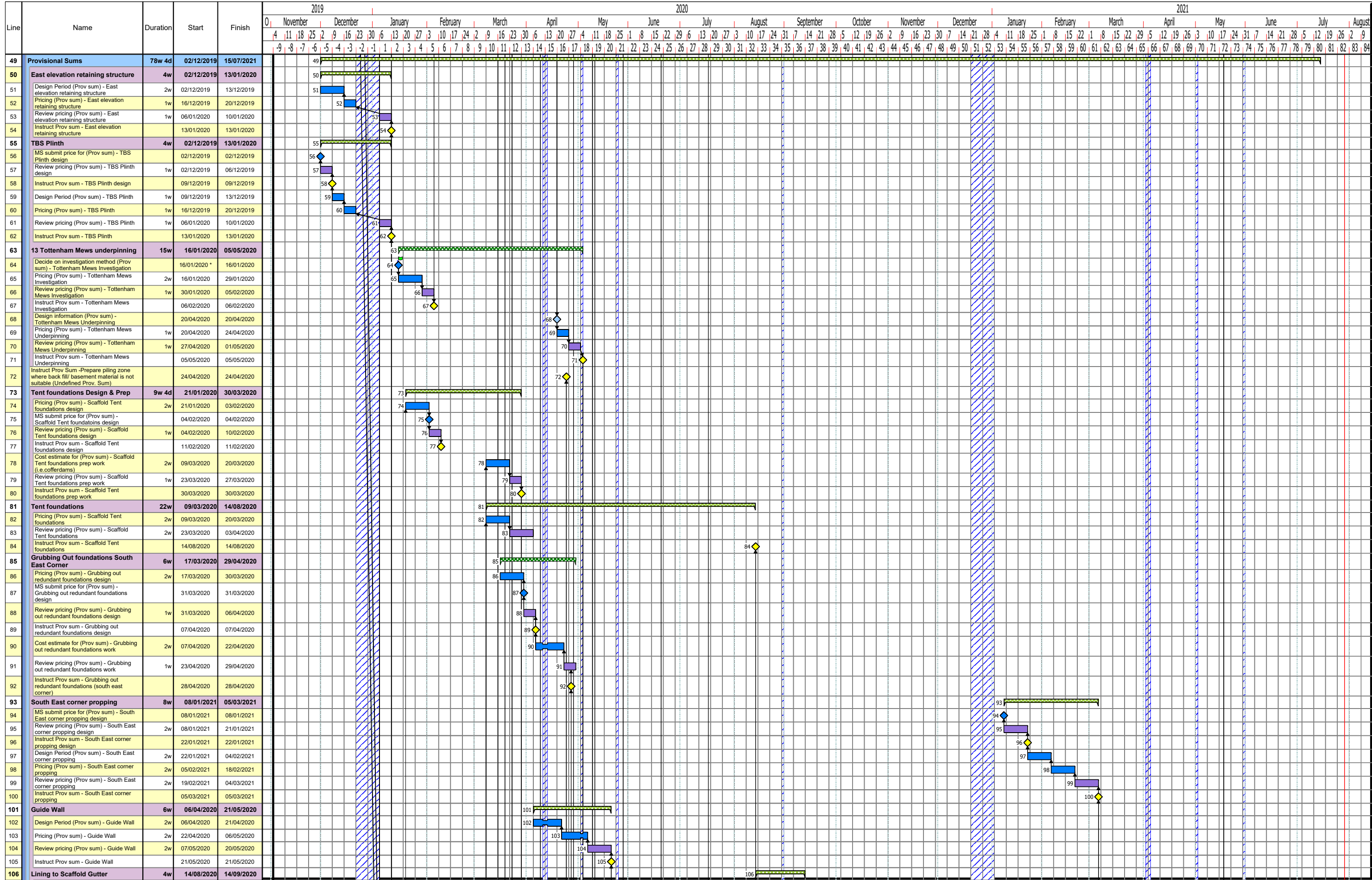
Notes: Revision includes changes for; EW AI01 sirte wide piling mat

Fig 9 Programme

Middlesex Annex LLP - Bedford Passage Development

Enabling Works - Contract Programme

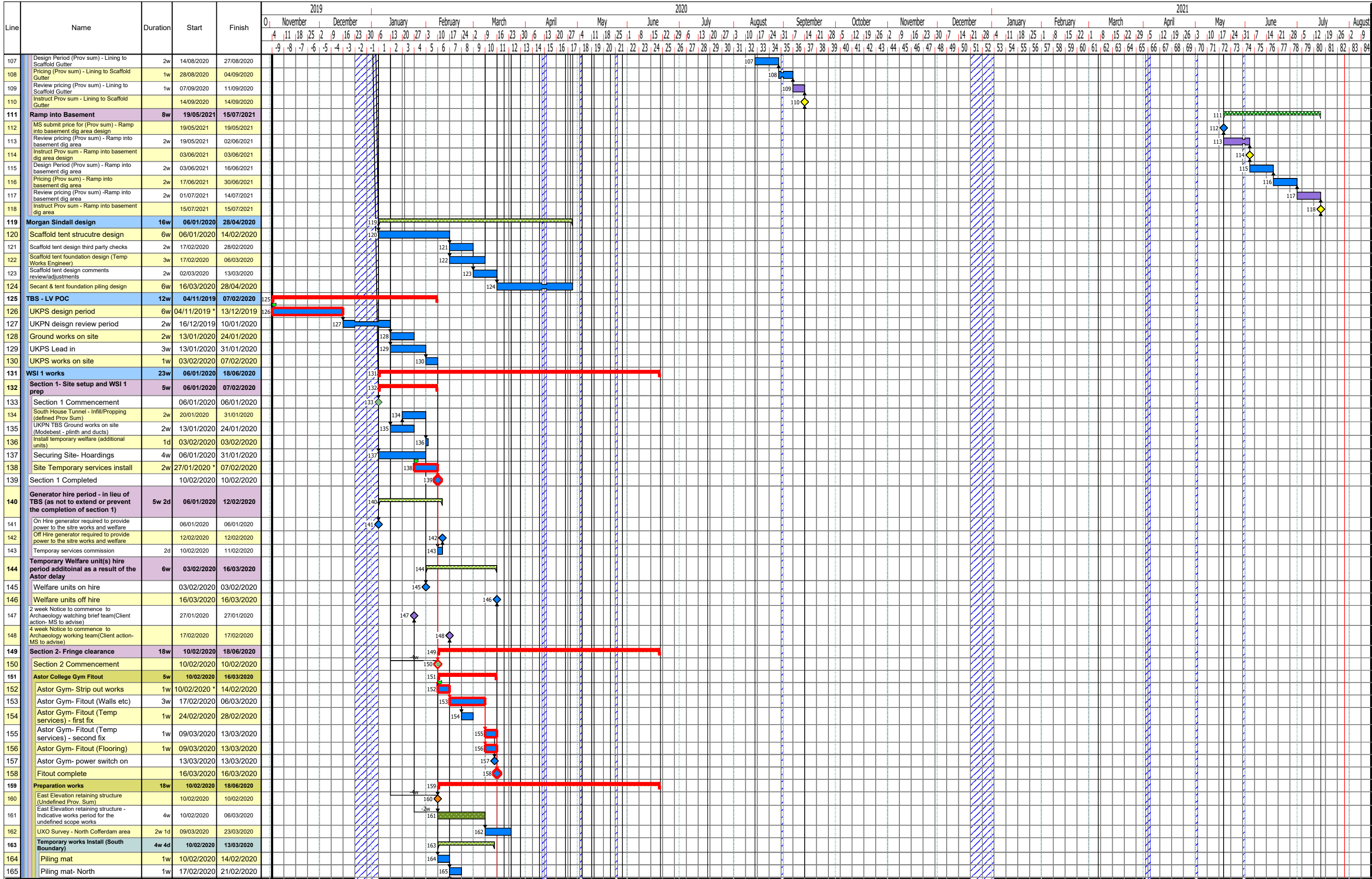
Chart revision date:
04/02/2020



Middlesex Annex LLP - Bedford Passage Development

Enabling Works - Contract Programme

Chart revision date:
04/02/2020

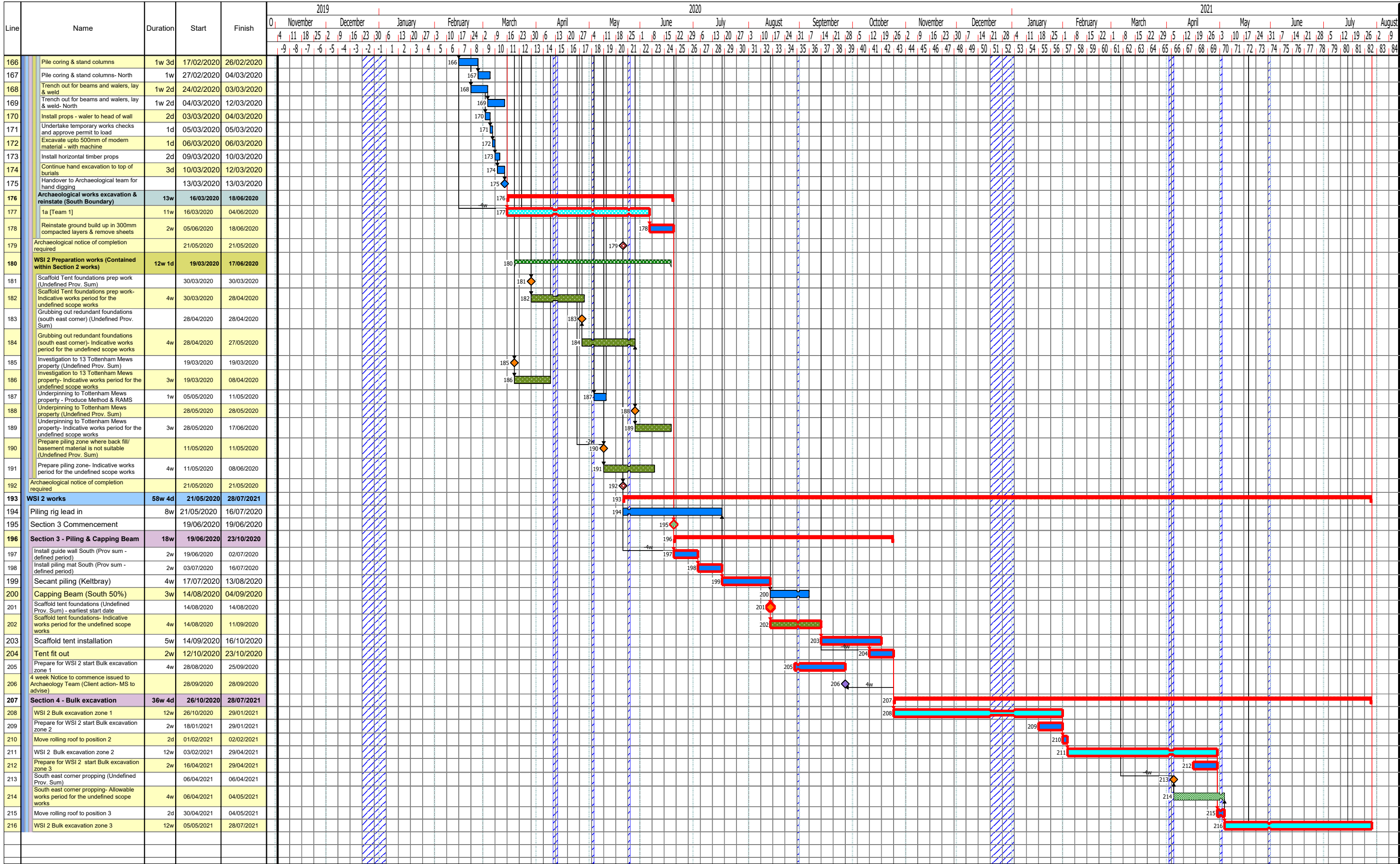


Middlesex Annex LLP - Bedford Passage Development

Enabling Works - Contract Programme

**MORGAN
SINDALL**
CONSTRUCTION

Chart revision date:
04/02/2020



Drawn by: James Kidgell

Dwg No. BPD-EW-001

Revision No. 02

Notes: Revision includes changes for; EW AI01 sirte wide piling mat