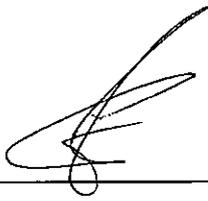


MTR Corporation Limited

West Island Line Project

Archaeological Watching Brief Report (Rev A)

December 2013

Verified by:  _____

Position: Independent Environmental Checker

Date: 11 December 2013

MTR Corporation Limited

West Island Line Project

Archaeological Watching Brief Report (Rev A)

December 2013

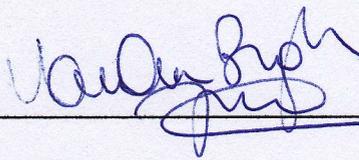
Certified by:  _____
Position: Environmental Team Leader
Date: 9 December 2013

MTR Corporation Limited

West Island Line Project

Archaeological Watching Brief Report (Rev A)

December 2013

Certified by: 
Position: Qualified Archaeologist
Date: 06 December 2013

Content List

Non-technical Summary	4
1. Introduction	5
2. Aims of the Archaeological Watching Brief	5
3. Historical, archaeological, geological and topographical background of the site	6-10
3.1 Historical Background	6-8
3.2 Archaeological Background	8-9
3.3 Geological and topographical Background	9-10
4. Methodology	10-14
4.1 Introduction	10
4.2 Watching Brief Personnel and Licence Requirements	10
4.3 Site Clearance Works	11
4.4 Watching Brief Monitoring Frequencies	11-13
4.5 Monitoring and retrieval methodology	13
4.6 Recording forms for Watching Brief	13
5. Results	14-21
5.1 Works Site C, Forbes Street Kennedy Town	14-15
5.2 Works Site H, The Belcher's	15
5.3 Works Site I, Pok Fu Lam Road	15
5.4 Works Site J, Hill Road	15-16
5.5 Works Site J1	16
5.6 Works Site J2	16-17
5.7 Works Site J3	17
5.8 Works Site M	17 -20
5.9 Works Site M2	21
6. Conclusion	21
7. Recommendation	22
8. Reference and bibliography	22-23
9. Archaeological team	23
10. Copyright and dissemination	23

11. Illustrations	24-60
Appendix 11.A	24-34
Appendix 11.B	35-60
12. Supporting data in appendices	61-125
Appendix 12.A Works Site M	61-79
Appendix 12.B Comments and Responses	80-84

Non-technical Summary

The Final EIA Report (ENSR 2008), prepared for the proposed MTRC West Island Line project under Agreement No. NEX/1023, identified that the MTR rail network would pass through some areas with the potential to produce archaeological remains associated with the 19th- and early 20th-century development of Hong Kong Island or earlier activity along the pre-reclamation coastline. Nine works sites, namely Areas C- Forbes street, Kennedy Town, H- The Belcher's, I- Pok Fu Lam Road (flyover), J- Hill Road (flyover), J1- which was cancelled during design stage and thus removed from the AWB programme, J2- Whitty Street Public Toilet, J3- HKU entrance, M- KGV Memorial Park and M2- western end of Centre Street were identified as having some potential for archaeological deposits.

An Archaeological Watching Brief Programme was conducted during the construction phase of the project and this report presents the results of the AWB programme. MTRC commissioned Archaeological Assessments Ltd. to undertake the Watching Brief. The AWB programme was undertaken between November 19, 2009 and July 4, 2012. It should be noted that the need for excavation works at part of Area J was not finalised until October 2013 upon the design for noise enclosure removal. The AWB for Works Area J was considered complete in October 2013 when it was confirmed that no excavation is required for the remaining part of Area J

The results of the AWB showed that the degree of disturbance had obliterated any potential deposits at Sites C, J and M2; the sterile natural stratigraphy showed no archaeology was present at Sites H, I, J2 and J3; and finally some of the wall foundations of the Maternity Hospital (Site M) built at the end of the 19th century were still present and were recorded as part of the programme.

1. Introduction

The Final EIA Report (ENSR 2008), prepared for the project under Agreement No. NEX/1023, identified that the proposed West Island Line of the MTR rail network would pass through some areas with the potential to produce archaeological remains associated with the 19th- and early 20th-century development of Hong Kong Island or earlier activity along the pre-reclamation coastline. Nine works sites, namely Areas C, H, I, J, J1, J2, J3, M and M2 (see Figure 11.A.1), were thus identified and all will need to be covered by archaeological watching brief during the construction phase of the project. Supporting illustrations for Sections 1, 2 and 3 can be found in Section 11, Appendix A.

2. Aims of the Archaeological Watching Brief

Nine sites were identified to have moderate to very low archaeological potential to provide information on early colonial Hong Kong or are worksareas located on the original seashore or potential undisturbed areas. Desktop research identified the following individual potential for each site:

Moderate archaeological potential

- Area J is located on a lower hill slope around 100-150m south of the original coastline. The site was formerly occupied by Shek Tong Tsui Market, first constructed in 1875 (Cheng 2000), but a market is recorded on the site in maps well into the 20th century;
- Area M lower hill slope position, roughly 100m south of the original coastline. The area includes an area developed in the 19th century by the Government as hospital grounds and for hospital facilities including the former Smallpox Ward (mapped in 1899) and a maternity hospital;

Low archaeological potential

- Area C lies close to the original coastline;
- Area H is situated at an ancient prominent location, around 50m from the sea with wide views along the coast;
- Area J1 is situated on a lower hill slope location, around 100-150m south of the original coastline. Area J1 was deleted from the design at construction stage and thus no Archaeological Watching Brief was conducted in this area;
- Area M2 is located a lower hill slope area some 100m back from the original coastline;

Very low archaeological potential

- Area I is located on a lower hill slope some 150m south of the original coastline;
- Area J2 lies on a lower hill slope location, around 100-150m south of the original coastline;
- Area J3 is located on a quite steep hillside some 300m inland of the original coastline.

The aim of the Watching Brief was to verify the potential and record any possible archaeological information.

3. Historical, archaeological, geological and topographical background of the site

3.1 Historical Background

The project Study Area stretches from Mount Davis in the west, on through Kennedy Town and east as far as Sai Ying Pun, thus including parts of the historic core of the early colony, but also crossing areas of the earlier, pre-reclamation coastal strip with the potential for earlier historic and prehistoric remains .

a. Reclamation

When the British arrived in 1841, the northern shore of Hong Kong Island within the Study Area consisted of a narrow coastal strip hemmed in by mountains. The future development and prosperity of the area was therefore similarly restricted unless more space could be provided through coastal reclamation. As the sections below will explore, the early development of the districts affected by this project was closely linked to a succession of coastal reclamations, which are clearly recorded in the geological map (see Figure 11.A.2). The earliest reclamations date to the 1860s, but the process continued in the area into the mid-20th century (Strange 1986). The use of the term “original coastline” in the following sections refers to the coastal landform that existed before reclamation.

b. Kennedy Town

Kennedy Town was named after Sir Arthur Kennedy, who was Governor of Hong Kong from 1872 to 1877 (Rodwell 1992). The area was originally known as West Bay or Rubbish Bay (from the local inhabitants’ use of the area for rubbish disposal). The growth of Kennedy Town was closely linked to reclamations and the area developed as a Chinese commercial and residential area during the 1870s and 1880s (HK Museum of History 1994). The old main street in Kennedy Town was Belcher Street, which was constructed between 1871 and 1890. Other streets in Kennedy Town also dating to this period include Chater Street (currently Catchick Street), Cadogan Street and Davis Street (Cheng 2000). The photograph in Figure 11.A.3 was taken in 1910 and shows what was then Chater Street with the Kennedy Town abattoir on the left.

c. Shek Tong Tsui

This area was originally a granite quarry used by Hakka stonecutters who, prior to 1841, were based in Kowloon. Development in the area was much slower than in neighbouring Sai Ying Pun, but Queen’s Road West was constructed between 1841 and 1850 and Hill Road between 1871 and 1890 (Cheng 2000). A market was constructed at the junction of Hill Road and South Lane in 1875 (see photograph dating to 1910 in Figure 11.A.4 and map of 1889 in Figure 11.A.5) and the site continued in use as a market until the late 20th century (Empson 1992; Cheng 2000). In the first part of the 20th century, Shek Tong Tsui gained notoriety as a red light district but declined after the prohibition of prostitution in 1935 (HK Museum of History 1994). Shek Tong Tsui Gas Works were located to the north of J2 and J3 areas; the Gas Works exploded in 1934. The explosion killed 41 people but the fire was contained and did not affect surrounding area and remained localized. The victims of the fire were thought to be local residents. The fire did not spread beyond the gasworks according to accounts and thus would not have affected areas J2 and J3 (Nebbs 2010).

d. Sai Ying Pun

Sai Ying Pun was a sparsely settled area at the time of the British arrival, but developed quickly thereafter. A coastal path, which pre-dated the British arrival in 1841, was eventually widened and improved to become Queen's Road (Smith 1995).

The early British occupation of the area comprised a mixture of military and mercantile interests. It is recorded that a three-gun battery was located just west of a stream (now followed by Water Street) at West Point and barracks were constructed all the way up the hillside to what is now Bonham Road (Smith 1995). The government began the division of Sai Ying Pun into lots, with the first land sale reserved for the government, as early as 1842. It is likely that the government wished to be able to call upon the reserved lots for additional Naval Stores, if and when they might be required. In 1879, Government Civil Hospital consisting of four blocks, built on the instructions of Dr Ayers, was opened on the hill to the rear of Queen's Road.

e. KGV Memorial Park

KGV Park was originally planned in 1936, the year of the death of King George V, but it was not officially opened in 1954. A map from 1856 shows the area now containing the park as part of a Chinese Cemetery (Figure 11.A.6). In the latter part of the 19th century the government established a number of medical facilities in the area, including the Lock Hospital, the European Lunatic Asylum, the Chinese Lunatic Asylum and the Government Civil Hospital.

The area now occupied by the King George V Park was formerly used as a recreation ground for the convalescing patients of the hospital as well as for other hospital facilities, including a Superintendent's House, both of which are referred to in the Report of the Colonial Surgeon for 1889 in a request for a new fence as follows; "*The substitution of an iron railing instead of the temporary bamboo fence along the High Street Frontage of the grounds adjoining the Superintendent's house and used as a recreation ground for the convalescent patients*".

The 1889 map also shows the presence of a "Small Pox Ward" within the park boundary (Figure 11.A.7). In November 1887 a small pox epidemic broke out in Hong Kong and the existing facilities were not able to cope with the number of cases. The situation is explained in a report from the Sanitary Board from that year as follows;

"In the early part of December when it became evident to the civil medical staff that the disease was taking an epidemic form and that the permanent hospital with 8 beds at West Point would not suffice for the number of cases that would probably be sent there for treatment, a matshed with provision for 16 patients was erected within the Small pox hospital grounds. In a few days this building was full, and as the ground allotted for small pox wards would not allow the addition of any more wings, a part of the civil hospital recreation ground was enclosed to admit of the erection of two matsheds with appliances for 50 and 25 patients respectively".

The temporary small pox buildings at the civil hospital continued to be in use, but as well, a ship, *The Hygeia*, was converted into a hospital hulk for the treatment of small pox cases and other infectious diseases. This is documented in the Reports of the Colonial Surgeon for the years 1890, 1891 and 1892.

The Colonial Surgeon's Report of 1893 provides some additional information on the background of the small pox buildings at the Civil Hospital and also recommendations for the future as can be seen in the following excerpts;

- *“ A matshed was built on the site of the Garden of the present Hospital and later a wooden hut with two small wards and one large one was built and still remains, but as the building is very old and has partially been destroyed by fire, a permanent building has been sanctioned and will, let us hope, be finished before a year is out as an isolated ward with smaller wards for private patients, is much needed for infectious cases attached to the Government Civil Hospital. At present most cases of small pox are treated on board the Hospital Hulk Hygeia”*
- *“The small pox buildings were considerably injured by the typhoon of last September and also by the ravages caused by white ants. I am of the opinion that the time has now arrived for the removal of these temporary buildings and the erection in their stead of a permanent building which could be utilised as a small pox hospital during that season of the year when it is impractical to use the Hygeia; or as an isolation hospital for the observation and treatment of certain classes of infectious diseases which up to the present have had to be treated in the Government Civil Hospital,”*

In 1894, a Bubonic Plague epidemic broke out in Hong Kong and not surprisingly the vast majority of time and resources of the medical officers in Hong Kong was devoted to dealing with this situation. The reports for the years 1894 through 1896 do not provide details of building construction at the Civil Hospital. However, the Report of the Principal Civil Medical Officer for 1897 states that *“A much needed improvement was effected by the opening of the Maternity Hospital which has been erected on the site of the old temporary small pox buildings”*. Details of the building are also included as follows; *“This building has been erected on the hospital compound on the site formerly occupied by the Temporary Small pox Hospital, and consists of a one storey building, containing two general wards with four beds in each, and two private wards containing two beds each, thus supplying accommodation for twelve lying-in cases. There is also a nurses' room, four bathrooms and the necessary out offices; it is surrounded by a verandah eight feet wide.”*

It is quite likely that this refers to the building shown on the 1930-1945 map (Figure 11.A.8) and referred to as “Lying In Hospital” that was located on the site of the former Small Pox Ward seen on the 1889 map in Figure 11.A.7. The government civil hospital ceased operation in 1937 with the opening of the Queen Mary Hospital.

3.2 Archaeological Background

There are no known sites of archaeological interest and there have been no previous archaeological investigations conducted within the project Study Area. The archaeological interest in the Study Area therefore relates to the possible remains of structures associated with the early development of the British colony and/or any earlier remains connected with prehistoric to Qing Dynasty activity along the original

coastline. The sites of two historical structures fall within proposed development areas, namely: Shek Tong Tsui Market in Site J (see Figure 11.A.5) and structures associated with the Government Civil Hospital in Site M (see Figure 11.A.7 and Figure 11.A.8).

3.3 Geological and topographical Background

The table below should be read in conjunction with the geological map in Figure 11.A.2 and indicates the level of recorded existing impacts to the worksareas (areas shown in Figures 11.A.7-11.A.11).

Works Site	Geology and Topography	Existing Impacts
C	Situated on solid geology in the form of coarse ash crystal tuff and beside an area of Quaternary debris flow deposits. In terms of the pre-reclamation topography of the area, the site is situated close to the original shoreline.	Site is currently occupied by a playground, roads and modern buildings. Although there will have been some disturbance caused by the construction of these latter elements to any buried archaeological resources present, there is no evidence of extensive utility provisions in the area.
H	Located at the eastern end of Belcher's Bay on a former coastal promontory with solid geology comprising a mixture of coarse ash tuff and sandstone. Landform now completely masked by reclamations, but would originally have been a prominent location, around 50m from the sea with wide views along the coast.	Site is currently occupied by an access road leading into The Belcher's residential development and there will have been some impacts to any archaeological resources in the area from the associated construction groundworks. The level of impact from modern utilities in the area is at present unknown.
I	Site runs across a lower hill slope some 150m south of the original coastline, and the underlying geology consists of medium grained granite and Quaternary debris flow deposits.	Site is currently occupied by the junction of an elevated minor road with Pok Fu Lam Road and there will have been some impacts to any buried archaeological remains present from associated construction groundworks as well as utility provision to the area.
J	On Quaternary debris flow deposits in a lower hill slope location, around 100-150m south of the original coastline	The site was formerly occupied by Shek Tong Tsui Market, first constructed in 1875 (Cheng 2000), but a market is recorded on the site in maps well into the 20 th century. The Site was until recently occupied by the Hill Road Rest Garden and part of the carriageway and footpaths of Hill Road. The construction and maintenance of the road and structural elements of the Garden, as well as utility provision to the area, will have caused some disturbance to any buried archaeological resources in the site.
J1	Cancelled from the construction design	
J2	On Quaternary debris flow deposits in a lower hill slope location, around 100-150m south of the original coastline	Site is located between Clarence Road and Queen's Road West and comprises a level open area with a public toilet (to be demolished), which appears to have been terraced into a cut slope. There will have been some disturbance to any archaeological resources present caused by construction groundworks and utility provision.
J3	Site is positioned on a quite steep hillside some 300m inland of the original coastline in an area of medium grained granite and Quaternary debris flow deposits.	Site adjoins Pok Fu Lam Road on its south side and is currently a vehicular access to the University of Hong Kong. There will have been some disturbance to any buried archaeological

		resources present caused by construction groundworks for the road and utility provision to the area.
M	Site is in a lower hill slope position, roughly 100m south of the original coastline, and on medium grained granite and Quaternary debris flow deposits.	The area includes the site of the former Smallpox Ward (mapped in 1899) of the Public Hospital (opened in 1874) or a little later a maternity hospital (1897). Site is more recently located within the bounds of the KGV Memorial Park in an area presently used as a garden and basketball court. There will have been some disturbance to any buried archaeological remains present during construction groundworks for the park and in relation to utility provision to the area.
M2	Site is located in a lower hill slope area some 100m back from the original coastline in an area of Quaternary debris flow deposits which, in the northern half of the site, appear to have been overlain with artificial fill when the area was levelled-up for development.	Site is located on the western side of Centre Street and is presently an open sitting-out area. Any buried archaeological resources in the area would have been impacted upon by past development groundworks in the area, although the level of utility provision to the site is unknown.

4. Methodology

4.1 Introduction

Archaeological Watching Brief is a form of mitigation which is required when engineering works impact on areas that have been assessed as having some degree of archaeological potential and where conventional testing methods are deemed insufficient. The range of archaeological resources that require monitoring includes both historical and prehistoric material and features.

The Watching Brief process entails the observation of the engineering works by qualified archaeologists in order to identify any archaeological material or features revealed during the excavation phase of the works schedule. Upon identification of such material or features the archaeologists will require immediate access to the excavation area for recording of the material/features *in situ*, artefact/ecofacts retrieval and sample collection.

A Watching Brief serves two basic purposes: firstly, that the archaeological resources are adequately recorded and recovered and secondly, that appropriate measures are taken on site to create a minimum of delays to the engineering schedule.

4.2 Watching Brief Personnel and Licence Requirements

Watching Brief was undertaken by qualified archaeologists, Mick Atha and Julie Van Den Bergh who applied for licences under the Antiquities and Monuments Ordinance (Cap. 53) from the Antiquity Authority before the commencement of archaeological fieldwork. Licences no. 292 and 308 obtained on November 19, 2009 and October 4, 2010 were held by Dr. Atha and Licence no.323 granted on October 26, 2011 by Ms. Van Den Bergh.

Each licence is valid for a period of 12 months and, given the multi year duration of this

project, it was necessary to renew the licence. In order to facilitate such licence renewal, the archaeologist provided as part of the licence renewal application an interim report. Two reports summarising the works conducted and findings made were submitted to the AMO.

All staff employed by the archaeologist were suitably qualified and experienced for their roles.

4.3 Site Clearance Works

The process of archaeological watching brief in each area commenced when demolition and clearance of all current surface obstructions had been completed. The engineer/contractor’s representative advised the archaeologist when the latter stage was reached to ensure that the archaeologist can make an initial inspection of the cleared site. The site clearance works were monitored during the initial site visits to each area. Photographs, video and descriptions of these visits and subsequent visits during excavations works form part of the archives.

4.4 Watching Brief Monitoring Frequencies

The monitoring frequency proposed for the nine works sites was based on an assessment of their archaeological potential in terms of topography and geology, known archaeological resources, site history, and likely degree of previous impacts. By assessing these criteria, three levels of archaeological potential were identified:

- Very Low: required only occasional monitoring after the initial site visit – a minimum of one half day monitoring visit per two weeks of groundworks in layers with archaeological potential – equivalent to a 5% monitoring sample
- Low: required regular monitoring after the initial site visit – a minimum of one half day monitoring visit per week of groundworks in layers with archaeological potential – equivalent to a 10% monitoring sample
- Moderate: required frequent monitoring after the initial site visit – a minimum of two half day monitoring visits per week of groundworks in layers with archaeological potential – equivalent to a 20% monitoring sample

The archaeological potential, monitoring frequency/samples, dates sites were monitored are summarised in the following table; the sites are presented ranking very low, low and moderate archaeological potential:

Works Sites monitored	Archaeological Potential	Monitoring Frequency	% Monitoring Sample	Type of Works Monitored	Dates of AWB visits
I	Very Low	1 x 0.5 day visit per 2 weeks	5%	Site preparation; Two shaft excavations	17.05.2010; 02.07.2010; 10.01.2011; 11.01.2011
J2	Very Low	1 x 0.5 day visit per 2 weeks	5%	Utility uncovering; removal of artificial ramp; shaft excavation	21.02.2011; 07.06.2011; 09.03.2012; 12.03.2012;

Works Sites monitored	Archaeological Potential	Monitoring Frequency	% Monitoring Sample	Type of Works Monitored	Dates of AWB visits
					20.03.2012; 28.03.2012; 10.05.2012
J3	Very Low	1 x 0.5 day visit per 2 weeks	5%	Utility uncovering; drain diversion; Shaft excavation	14.07.2010; 14.09.2010; 10.01.2011; 04.03.2011; 24.03.2011; 29.03.2011; 11.04.2011; 12.04.2011; 21.04.2011; 24.04.2011; 01.06.2011; 19. 05.2011; 20. 05.2011; 23. 05.2011; 25. 05.2011; 27. 05.2011
C	Low	1 x 0.5 day visit per week	10%	Site preparation; removal of playground; excavation of the station box	27.10.2010; 02.11.2010; 08.11.2010; 11.11.2010; 15.11.2010; 16.12.2010
H	Low	1 x 0.5 day visit per week	10%	Utility diversion; rockhead drilling; trench excavation (more utility diversion)	14.06.2010; 02.07.2010; 14.09.2010; 02.11.2010; 15.12.2010; 16.12.2010
M2	Low	1 x 0.5 day visit per week	10%	Utility diversion; site formation; excavation for transformer room	12.04.2010; 14.04.2010; 23.04.2010
J1	The area had been deemed to have low archaeological potential; due to design change the worksarea has been cancelled and no work impacts are now expected at this location.				
J	Moderate	2 x 0.5 day visits per week	20%	Site formation; shaft excavation	11.02.2010; 14.04.2010; 22.04.2010; 23.04.2010; 04.05.2010; 02.07.2010
M	Moderate	2 x 0.5 day visits per week	20%	Ground works at the spoil basin; shaft and noise enclosure	11.02.2010; 18.02.2010; 22.02.2010; 23.02.2010; 27.02.2010; 03.03.2010; 08.03.2010; 12.03.2010; 13.02.2010; 17.03.2010; 19.03.2010; 09.04.2010;

Works Sites monitored	Archaeological Potential	Monitoring Frequency	% Monitoring Sample	Type of Works Monitored	Dates of AWB visits
					19.04.2010; 26- 30.04.10; 1- 3.06.2010; 10.06.2010

4.5 Monitoring and retrieval methodology

The AWB used the table shown below as guideline to respond to various categories of archaeological material and features that are most likely to occur in local contexts.

Categories of Archaeological Materials	Retrieval Procedures
1. Human Burial Skeletal remains Items associated with human burial, i.e. grave goods	Full Recording & Recovery of Human Remains & Associated Artefacts & Ecofacts <ul style="list-style-type: none"> ▪ Complete recording by photography, drawing, written description ▪ Full measurement of burial and surrounding matrix ▪ Retrieval of human remains and associated artefacts & ecofacts ▪ Retrieval of surrounding soil for further analysis
2. Intact Features Structural/architectural remains Undisturbed contexts, e.g. hearth, midden, habitation area, assemblages of artefacts and/or environmental material	Full Recording of Archaeological Features & Recovery of Artefacts/Ecofacts <ul style="list-style-type: none"> ▪ Recording and measurement of salient features by photography, drawing and written description ▪ Retrieval of artefacts & ecofacts ▪ Retrieval of samples from the surrounding matrix
3. Intact Artefacts Complete objects, e.g. pottery, metal objects, stone and bone tools. The objects are complete but isolated and are not part of assemblage of feature	Recovery of Artefacts & Record of Matrix <ul style="list-style-type: none"> ▪ Retrieval of objects ▪ Recording by written description and photography ▪ Sampling of surrounding matrix
4. Isolated & Fragmentary Material Pottery sherds, non-human bone, other artefact fragments (e.g. metal, tile, glass). There are no complete objects, the material is isolated and fragmentary in nature	Recovery of Archaeological Material & Recording as Appropriate <ul style="list-style-type: none"> ▪ Retrieval of fragmentary artefacts & ecofacts ▪ Recording by written description and photography, as appropriate ▪ Sampling of surrounding matrix
5. Deposits with Archaeological Potential -Soil deposits which exhibit characteristics associated with archaeological remains in Hong Kong	Sampling of Deposit -Recording of soils by photography and written description -Collection of soil samples from deposits displaying archaeological potential

The AWB structural remains and isolated pottery fragments findings at Site M fall within category 2 and 4 finds, respectively; in line with the methodology the findings were photographed, drawn and described (see Section 12, Appendix A).

4.6 Recording forms for Watching Brief

Standardised forms as well as additional written, graphic, electronic and photographic records as appropriate were compiled for each AWB visit and any archaeological

material identified during the Watching Brief. These will be part of the archives handed over to AMO at the end of the project.

5. Results

The report includes a summary of the results recorded during the Archaeological Watching Brief programme.

Overall it can be stated that for the majority of the sites the results indicate that there was no longer any potential for archaeology due to major disturbance or that there never had been any archaeological deposits. For Site M however, where colonial structural remains were recorded a summary of the result is presented in this section and further details of the structural remains are presented in Section 12, Appendix 12.A.

The supporting illustrations for this section, such as figures and plates can be found in Section 11, Appendix 11.A and 11.B.

5.1 Works Site C, Forbes Street Kennedy Town

The works area is situated on solid geology in the form of coarse ash crystal tuff and beside an area of Quaternary debris flow deposits. In terms of the pre-reclamation topography of the area, the site is situated close to the original shoreline. Site is currently occupied by a playground, roads and modern buildings.

Although there will have been some disturbance caused by the construction of these latter elements to any buried archaeological resources present, there is no recorded evidence of extensive utility provisions in the area. The site however, was once occupied by the (sheep and pig) yard and near buildings of a slaughterhouse (Figure 11.A.3) (also marked on the 1889, 1936 and 1964 maps; Figure 11.B.1, 11.B.2 and 11.B.3).

Based on the probable degree of disturbance, the site's proximity to the original coastline, and the area's history, the site was deemed to have low archaeological potential.

The findings of the AWB however, show that there is a deep sequence of clean CDG¹ across the site overlain by a relative thin layer of modern concrete pavement and fill (Plates 11.B.1). There was no evidence for structural remains or foundations of the slaughterhouse or any other occupation of the space prior to the playground, which suggests the area was cleared prior to the construction of the Forbes Street temporary playground.

The only structural feature is the retaining wall located to the south of the site and which is partially preserved (Plate 11.B.3) in the Southwest corner of the site. The wall is constructed with cut granite blocks set into a concrete/mortar backing (Plate 11.B.2) and capped off on the top with a carefully bevelled granite cap stone (Plate 11.B.4).

¹ CDG stands for completely decomposed granite

5.2 Works Site H, The Belcher's

The site is located at the eastern end of Belcher's Bay on a former coastal promontory with solid geology comprising a mixture of coarse ash tuff and sandstone. Landform is now completely masked by reclamations, but would originally have been a prominent location, around 50m from the sea with wide views along the coast.

Site is currently occupied by an access road leading into The Belcher's residential development and there will have been some impacts to any archaeological resources in the area from the associated construction groundworks. The level of impact from modern utilities in the area was unknown at desk-based review stage.

Based on the probable degree of disturbance, the site's proximity to the original coastline, and the area's history, the site was considered to have low archaeological potential.

The AWB results indicate that the site was originally part of a rocky shore with boulders, possibly at the back of a beach (Plates 11.B.5). There was no evidence of human occupation or modification to the rocks and surrounding area. The rocks were covered by a thin layer of fill and the modern street and pavement. There was no evidence of any prehistoric or colonial artefactual material or deposit; in fact the modern strata occurred close to the rockhead and boulders (Plate 11.B.6).

5.3 Works Site I, Pok Fu Lam Road

Site I runs across a lower hill slope some 150m south of the original coastline, and the underlying geology consists of medium grained granite and Quaternary debris flow deposits. Site is currently occupied by the junction of an elevated minor road with Pok Fu Lam Road and there will have been some impacts to any buried archaeological remains present from associated construction groundworks as well as utility provision to the area.

Based on the probable degree of disturbance, the site's location on a steep hillside, and the area's history, the site was considered to have very low archaeological potential.

The site initial inspection hinted the underlying stratum consisted of CDG. A series of small test holes had also been excavated across the site and the only example that was accessible and not full of water confirmed the presence of at least 2.5m of CGD fill/colluvium beneath the modern concrete surfacing.

Shaft excavations both at the eastern (Plates 11.B.7-11.B.8) and western end (Plates 11.B.9) of the site confirmed that a thin layer of artificial fill overlays CDG colluviums under the modern surface. No archaeological materials were noted. Within the eastern shaft more construction debris was noted than in the western shaft this is due to the residential back which occupied the eastern part of the site prior to the construction of the fly-over.

5.4 Works Site J, Hill Road

The works area is situated on Quaternary debris flow deposits in a lower hill slope location, around 100-150m south of the original coastline. Site was occupied by the Hill

Road Rest Garden and part of the carriageway and footpaths of Hill Road. The construction and maintenance of the modern road and structural elements of the Garden, as well as utility provision to the area, will have caused some disturbance to any buried archaeological resources in the site.

The site was formerly occupied by Shek Tong Tsui Market, first constructed in 1875 (Cheng 2000), but a market is recorded on the site in maps well into the 20th century (Figure 11.A.4).

Based on the probable degree of disturbance, the site's proximity to the original coastline and the area's known historical usage, the site was deemed to have moderate archaeological potential.

The initial site inspection showed colluvium/CDG fill and localised areas of modern rebar foundations on the surface (modern surface level at 8.5 to 11m PD) (Plate 11.B.10). Extensive and deep disturbance from modern rebar foundations was observed in the eastern half of the Phase 1 Works Area across the current works footprint and such foundations clearly continued below 7m PD (Plate 11.B.11). A large *in situ* boulder was noted in the Northwest part of site, which had been encased in rebar concrete foundations (Plate 11.B.12). Below the fill deposit, CDG colluvium was noted across the works area. No evidence, either structural or artefactual, could be found that might relate to the first Shek Tong Tsui Market buildings or indeed anything else of a pre-modern date.

The archaeological team assisted by MTR Environmental Team/Construction Team had to maintain close liaison with the contractor's site supervision team in order to achieve the effective implementation of the AWB specification, the evidence on site nevertheless suggests that little or nothing of the original Shek Tong Tsui Market survived later 20th-century redevelopment of the site. Extensive and deep disturbance from modern rebar foundations was observed across the current works footprint and such foundations would have made a significant impact on historical deposits. However, no historical materials or deposits were noted.

The extent of the area monitored at Site J is marked on Figure 11.B.4. The remainder of the site was deemed to have no archaeological potential following the results of the western half. It should be noted that the need for excavation works at part of Area J was not finalised until October 2013 upon the design for noise enclosure removal. The AWB for Works Area J was considered complete in October 2013 when it was confirmed that no excavation is required for the remaining part of Area J.

5.5 Works Site J1

Cancelled from the design.

5.6 Works Site J2, Whitty Street Public Toilet

The Site is located on Quaternary debris flow deposits in a lower hill slope location, around 100-150m south of the original coastline. Site is situated between Clarence Road and Queen's Road West and comprises a level open area with a public toilet (to be demolished), which appears to have been terraced into a cut slope. There will have been

some disturbance to any archaeological resources present caused by construction groundworks and utility provision. Based on the probable degree of disturbance, the site's location on a hillside, and the area's history, the site is considered to have very low archaeological potential.

The initial site inspection showed that an artificial ramp was being constructed following the slope of the existing hill to enable piling. A few shallow test pit excavations had been conducted along the west of the site to locate existing utilities (Plate 11.B.13). Despite the fact that these were excavated in the dry season the pits showed water seepage, suggesting the drainage of the area must have significantly changed. The stratigraphy showed red and blue brick fragments along some ceramic pipe fragments: modern mixed with the old, but no material of archaeological interest was noted (Plate 11.B.14).

The main excavation area turned out to be rather discrete and was localized on the foot slope and a small area of the flat. The stratigraphy showed a thick packet of recent fill deposited as part of the ramp which covered a thin fill/topsoil layer and decomposed debris flow with cobbles and rocks (Plate 11.B.15). Within the flat area, an additional layer of artificial fill was noted which consisted of construction fill. No archaeological material or deposits were noted.

5.7 Works Site J3, HKU entrance

Site J3 is positioned on a quite steep hillside some 300m inland of the original coastline in an area of medium grained granite and Quaternary debris flow deposits. Site adjoins Pok Fu Lam Road on its south side and is currently a vehicular access to the University of Hong Kong. There will have been some disturbance to any buried archaeological resources present caused by construction groundworks for the road and utility provision to the area. Based on the probable degree of disturbance, the site's location on a steep hillside, and the area's history, the site is considered to have very low archaeological potential.

The initial site visit showed about half of the site's surface had been removed and excavation was ongoing to uncover the existing utilities (Plate 11.B.16). Initial view of the stratigraphy suggested natural debris flow deposits with disturbance around utilities (semi-angular stones) (Plate 11.B.17).

Further archaeological monitoring showed the initial assessment was correct; the stratigraphy consisted of sterile, well weathered with semi-rounded boulders (Plates 11.B.18-11.B.19). No archaeological materials or deposits were recorded.

5.8 Works Site M, KGV Memorial Park

Site M is in a lower hill slope position, roughly 100m south of the original coastline, and on medium grained granite and Quaternary debris flow deposits. The site is located within the bounds of the KGV Memorial Park in an area used as a garden and basketball court. Some disturbance to buried archaeological remains caused by the construction of the park and by utility provision to the area was expected. The area includes the site of the former Smallpox Ward (mapped in 1899) which was later replaced by a public

maternity hospital (in 1897). Despite the probable degree of disturbance, a combination of the site's proximity to the original coastline and the presence of known historical structures are considered to give the site moderate archaeological potential.

The initial site inspection was conducted during site formation and the surface showed colluvium/CDG fill and modern surfacing. The AWB works and findings, narrated below, are divided along three main work locations (Figure 11.B.5):

- A. Noise enclosure : near TB4, TB6, MTB1, CAP 3, CAP 5, CAP 8, TB7, and CAP 7 (W TB8 and MTB3);
- B. Shaft ring-beam; and
- C. Spoil basin ring-beam.

While very few artefacts were found, stone foundations and some brick walls related to the maternity ward of the Public Hospital were recorded. Below is a brief description of the finds and features recorded; the context numbers assigned to the various recorded features and deposits appear in bold. **Appendix B** contains details of each of the contexts recorded, stratigraphical relationships of contexts, drawings and sketches illustrating the features and deposits recorded. Figure 11.B.5 shows the location of the features described below.

A. Noise enclosure

In the **Northeast corner** of the noise enclosure monitoring indicated below modern surface and a sequence of CDG (coarse decomposing granite) fill, a wall foundation of granite blocks [**WF103**] (Plate 11.B.20a and b). The foundation trench for the wall [**104**] cut into pre-existing CDG fill [**105**] and had an east-west orientation. Apart from three undiagnostic red tile fragments (probably 20th-century in date) (Plate 11.B.21) within the foundation cut no other dateable material was noticed. The continuation of wall foundation [**WF103**] was noted in the Northwest corner of Site M (703) and it extended for some 11m west of where it was first discovered. During removal of hardcore layer [**102**], which sealed the wall foundation [**WF103**], a base sherd dated late 19th-century to 20th-century provincial porcelain (Plate 11.B.22) was recovered.

In the northern end of the trench for **TB4**, the presence of deep rebar foundations was noted (Plate 11.B.23). The latter foundations were associated with the basketball court fencing and perimeter drains and extended south along the western side of the site and were still present in the base of excavation at formation level. The depth of disturbance evidenced in TB4 suggested that there would be little chance of archaeological remains surviving along the western edge of the site in TB4 and TB6.

In **MTB1** a substantial and well-made wall foundation (**WF106**) was noted under the west facing section of the trench. **WF106** extended some 6.5m N-S and was 0.65m high at the limit of excavation by 0.63m thick (Plates 11.B.24 and 11.B.25) , like all granite wall foundations at Site M, WF106 was only partially exposed in plan and almost certainly did not survive to its original height. Neither finished ends nor abutments with other wall foundations were visible in the contractor's foundation cuts - so WF106 can be considered to be a substantial fragment of a longer and taller wall/foundation. Moreover, only the mortar/gravel bedding trench and two courses of granite blocks

survived in vertical section and, as shown by the uneven and unfinished upper surface of similar wall foundation **WF103**, which was exposed nearby, one or more courses must have been removed when the site was levelled-up for later development.

In **CAP 3** the wall foundation had been cut by a substantial E-W orientated modern drain, but the remains of a further length of wall were visible in the north facing section of the trench (**WF108**).

Another N-S orientated wall foundation (**WF110**, Plate 11.B.26) was observed near **CAP 5** in association with a brick foundation (**BF111**, Plate 11.B.27), which appeared to be in alignment with **WF106/108** (Figure 11.B.5). Under the stone and brick foundations a mortar gravel bedding foundation was recorded (**MG115**). It is assumed that wall fragments 106, 108 and 110 and its mortar/gravel bedding 115 are parts of the same wall.

Remains of a brick structure (**BS117**) were identified in the south-east corner of the site near the junction of **CAP 8 and TB7** (Plate 11.B.28). On top of the bricks a couple a granite blocks were recorded (**118**); the purpose of these two blocks or their relationship to the brick structure is unknown (Plates 11.B.28 and 11.B.29). The remains are interpreted as a brick manhole; it is not clear however, if the structure is contemporary with the other wall and brick foundations found at the site.

The groundworks for **CAP 7**, the western half of **TB8 and MTB3**, as well as the completed foundation trench for **TB6** evidenced **significant modern disturbance**: from drainage pipes in the case of **TB8 and CAP 7** (Plate 11.B.30), and from rebar foundations in the case of **TB6 and MTB3** (Plate 11.B.31).

B. Shaft - Ring beam

Eastern side of shaft ring-beam groundworks in the site, three sets of structural remains were noted: two E-W orientated brick foundations, one red (**BF123**, Plate 11.B.32) and one grey brick (**BF124**, Plate 11.B.33), and an N-S orientated granite wall foundation (**WF125**, Plate 11.B.34). **WF125** has a mortar/gravel bed (**130**) underneath the granite blocks.

A further fragmentary wall foundation (**WF134**, Plates 11.B.35 and 11.B.36) was identified in the Northeast quadrant of the shaft footprint. **WF134** was constructed in a manner similar to previous granite foundations on site, having a mortar/gravel hardcore bed upon which the granite block foundation had then been built. The remains of **WF134** had an upper surface level of 37.98m PD – approximately 0.15m below the modern basketball court surface, whilst the base level of the foundation trench cut was at 37.30m PD.

Some patches of possible mortar/gravel hardcore were noted in section at around 0.5m below the modern surface, but no granite or brick foundations were observed.

The lower 1.5m or so of noted deposits (**128** and **139**) (Plate 11.B.37) consisted of sterile decomposed granite of no archaeological interest. Above that level, the almost total absence of artefactual remains associated with the heavily truncated wall foundations suggests that, prior to the construction of KGV Memorial Park; the site had been very thoroughly cleared of previous building remains and associated rubbish.

The construction methods of the structural remains noted within the shaft/ring-beam are consistent with what was noted for the features within the noise enclosure; they are thus considered contemporary and belonging to the hospital.

C. Spoil basin - ring-beam

The remains of a granite wall foundation and a more recent brick manhole [**WF141** and **MH142**, Plates 11.B.38 and 11.B.39] were first unearthed in the Northwest corner of the spoil basin area. Two further lengths of granite wall foundation [**WF141**, Plate 11.B.40] were uncovered – one E-W orientated foundation at the western edge of the spoil basin and another 5m-long E-W orientated example, which appeared to be the continuation of the one found the previous day. Attached to its north face were the remnants of a brick foundation (**BF143**, Plate 11.B.40), consisting of a single course of four red bricks.

Also found was a small red brick foundation [**BF145**], which was located in the Southwest corner of the spoil basin area (Plate 11.B.41).

An E-W orientated granite wall foundation [**WF150**] and part of the upper granite ashlar courses [**WF151**] (Plate 11.B.42) were recorded to the southwest of **WF141**. The wall had a corner to the south on its eastern extremity. The wall fragment here too had a mortar/gravel bed [**MG153**], consistent with the other wall of the hospital.

During the first AWB visit, only the north facing elevation of the 5m-long wall foundation [**WF141**] was visible in the southern edge of the ring-beam trench, but it had not yet been fully exposed.

During the next AWB visit, an examination of the spoil basin area revealed that granite wall foundation **WF141** had been largely removed without recording, despite clear instructions to the contrary and in the full knowledge that the AMO had arranged a site visit specifically to view the remains during the afternoon.

On further excavation, it was clear that all granite blocks of the wall foundations had been removed by the contractor and all that survived was the mortar/gravel levelling foundations. The mortar/gravel-filled bedding trenches of four lengths of wall foundation were thus identified: E-W orientated [**MG148** – under **WF141**], E-W orientated [**MG159**] – parallel with and south of [**MG148**], and N-S orientated cross-walls [**MG155** and **MG157**] – both of which were added later than the E-W pair [**MG148** & **MG159**]. [**MG155**] also had on top the fragmentary remains of a red brick foundation [**BF154**].

D. Interpretation and conclusion

In summary it can be stated that the structural remains (with exception of **MH142**) encountered and described above are related to the Maternity Hospital. The granite and brick foundations all present the same orientation namely east-west or north-south. The findings showed that the floor level of the ward had been removed along with the upper structure. With the exception of the upper granite courses of context **151**, no evidence of upper structure was recorded within the worksareas.

A single pottery sherd found on top of **WF103** provides a late 19th- 20th century date (Plate 11.B.22). No other dateable or hospital identifying attributes however were established. Despite this, the construction method of the wall foundations, namely U-shaped mortar and gravel layers under granite cut blocks or bricks were uniform in all recorded walls; this suggests that they were built in a single phase or close in time. The

brick structures ranged from grey to red brick.

5.9 Works Site M2, Western End of Centre Street

The site is situated on a lower hill slope area some 100m back from the original coastline in an area of Quaternary debris flow deposits which, in the northern half of the site, appear to have been overlain with artificial fill when the area was levelled-up for development. The Site is located on western side of Centre Street and is presently an open sitting-out area. Any buried archaeological resources in the area would have been impacted upon by past development groundworks in the area, although the level of utility provision to the site is unknown. Given the probably degree of disturbance, the site's proximity to the original coastline and the area's history it is considered to have low archaeological potential.

The initial inspection was conducted to assess the site condition prior to commencement of the main phase of development groundworks. A series of small utilities diversion test holes had been excavated around the periphery of the site and these confirmed that the site contained a deep sequence of rubble fill under the modern concrete surfacing (Plate 11.B.43). The presence of a rubble levelling deposit was also confirmed in the northern half of the site, where the concrete had been broken and removed under the footprint of the planned transformer room.

The subsequent AWB works showed that the groundworks for the present development did not extend deeper than the area previously disturbed by the construction of the sitting out area (Plate 11.B.44). The site at formation level thus comprised the remains of the sitting out area's concrete foundations with rubble backfill in-between. No archaeological findings were therefore made.

6. Conclusion

In general the AWB works have progressed in line with the approved specification and no major archaeological features or deposits were identified. The only archaeological materials and deposits encountered occurred at Site M, where remnants of old building foundations, most likely belonging to the Maternity Hospital built at the end of the 19th century were recorded.

The results of the AWB show that the degree of stratigraphy disturbance recorded at Sites C, J and M2 had obliterated any potential archaeological deposits, while the sterile natural stratigraphy recorded at Sites H, I, J2 and J3 indicated lack of archaeological presence in these areas. The AWB also showed that despite the built-up heavily developed nature of Hong Kong Island's northern coast traces of early colonial structures remain.

Overall the AWB findings contribute to our understanding of Hong Kong's past and potential for archaeological findings on Hong Kong Island.

7. Recommendation

As the project consisted of a Watching Brief programme the potential for further archaeological deposits and remains in the areas is nil. The programme however, did indicate that archaeological features and material may remain within densely developed urban areas such as north of Hong Kong Island.

No further archaeological works will be required within the worksareas as defined in this report.

8. Reference and bibliography

Cheng P H (Ed.) 2000 *A Century of Hong Kong Roads and Streets*, Joint Publishing (H.K.) Ltd, Hong Kong.

Empson H. 1992 *Mapping Hong Kong: A Historical Atlas*, Government Information Services, Government Printer, Hong Kong

Hong Kong Museum of History 1994, *City of Victoria: A Selection of the Museum's Historical Photographs*, Urban Council of Hong Kong: Hong Kong

Nebbs A. 2010. *The Great Fire of Hong Kong*. Bonham Books.

Rodwell S. 1992 *A Visitor's Guide to Historic Hong Kong*, The Guidebook Company Limited/ Hong Kong Tourist Association: Hong Kong

Smith C. 1995 *A Sense of History: Studies in the Social and Urban History of Hong Kong*, Hong Kong Educational Publishing Company: Hong Kong.

Stanford's Geological Establishment 1889 *Plan of the City of Victoria Hong Kong*, 1:1,920 scale map, Stanford's Geological Establishment: London.

Strange P. 1986 *Hong Kong and Kowloon Sheet 11 Solid and Superficial Geology Series HGM20 Edition I – 1986*, Geotechnical Control Office, Civil Engineering Services Department: Hong Kong

Government Reports:

Government Notification No. 33 *“Extracts from the Minutes of the Proceedings of the Sanitary Board at a meeting held in the Board Room on Tuesday 24th of January 1888”*. The Hong Kong Government Gazette, 28th of January 1888.

Government Notification No. 364 *“The Report of the Colonial Surgeon for the year 1889”* The Hong Kong Government Gazette 30th August 1890.

Government Notification No. 310 *“The Report of the Colonial Surgeon for the year 1890”*The Hong Kong Government Gazette 18th July 1891

Government Notification No. 471 *“The Report of the Colonial Surgeon for the year 1891”*The Hong Kong Government Gazette 19th November 1892

Government Notification No. 238 *“The Report of the Colonial Surgeon for the year 1892”*The Hong Kong Government Gazette 24th June 1893

Government Notification No. 455 "*The Report of the Colonial Surgeon for the year 1893*" The Hong Kong Government Gazette 1st December 1894
Government Notification No. 354 "*The Report of the Colonial Surgeon for the year 1894*"
The Hong Kong Government Gazette 17th August 1895
Government Notification No. 420 "*Report of the Principal Civil Medical Officer for 1897*".
The Hong Kong Government Gazette, 24th September 1898.

9. Archaeological team

Dr Mick Atha Licence holder (No. 292 and 308) 2009-2011
Julie Van Den Bergh Licence holder (No. 323) 2011-2012
Ellen Cameron
Kennis Yip

10. Copyright and dissemination

[Form separate]

11. Supporting illustrations

Appendix 11.A Figures for Sections 1, 2 and 3

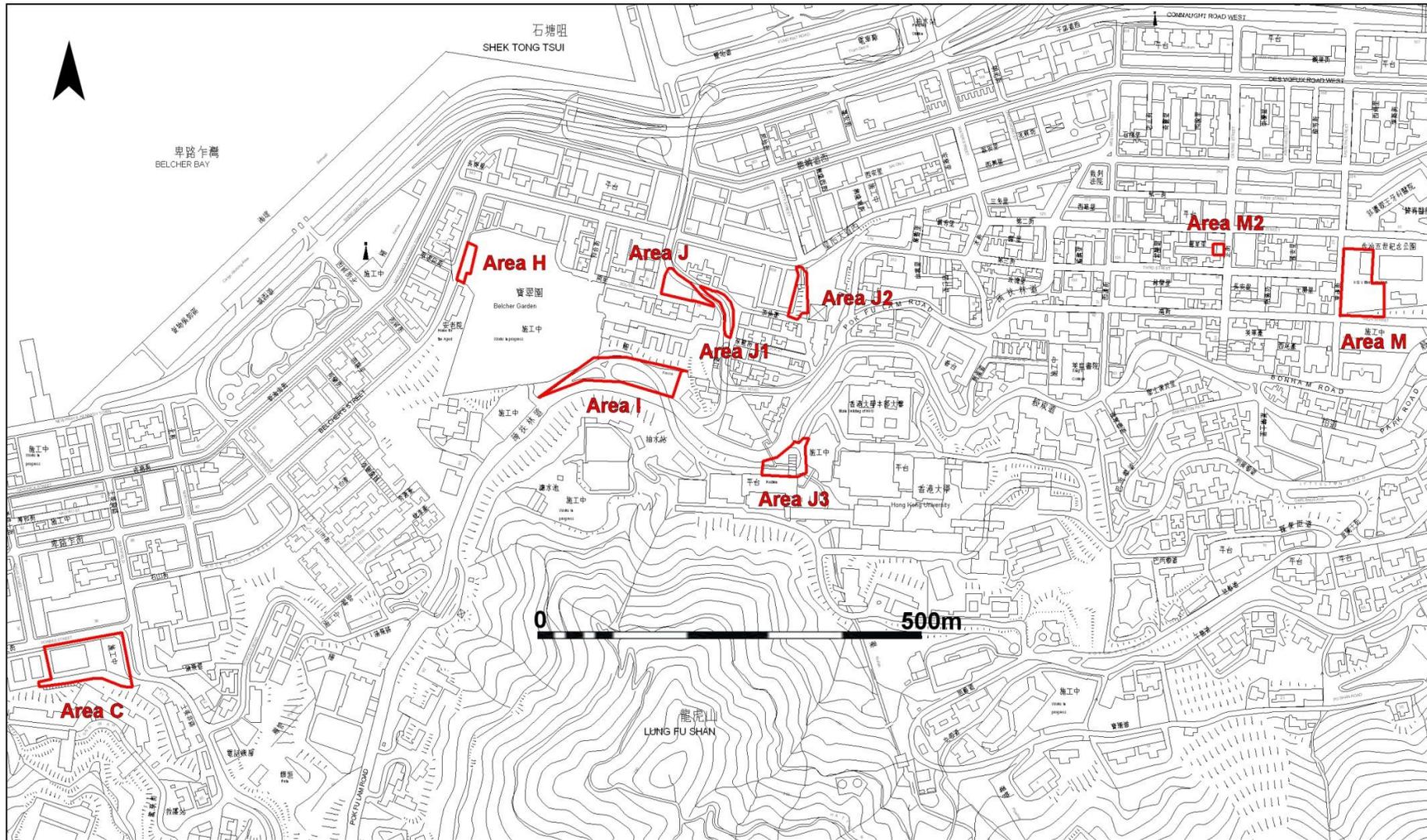


Figure 11.A.1: Nine works sites requiring watching brief

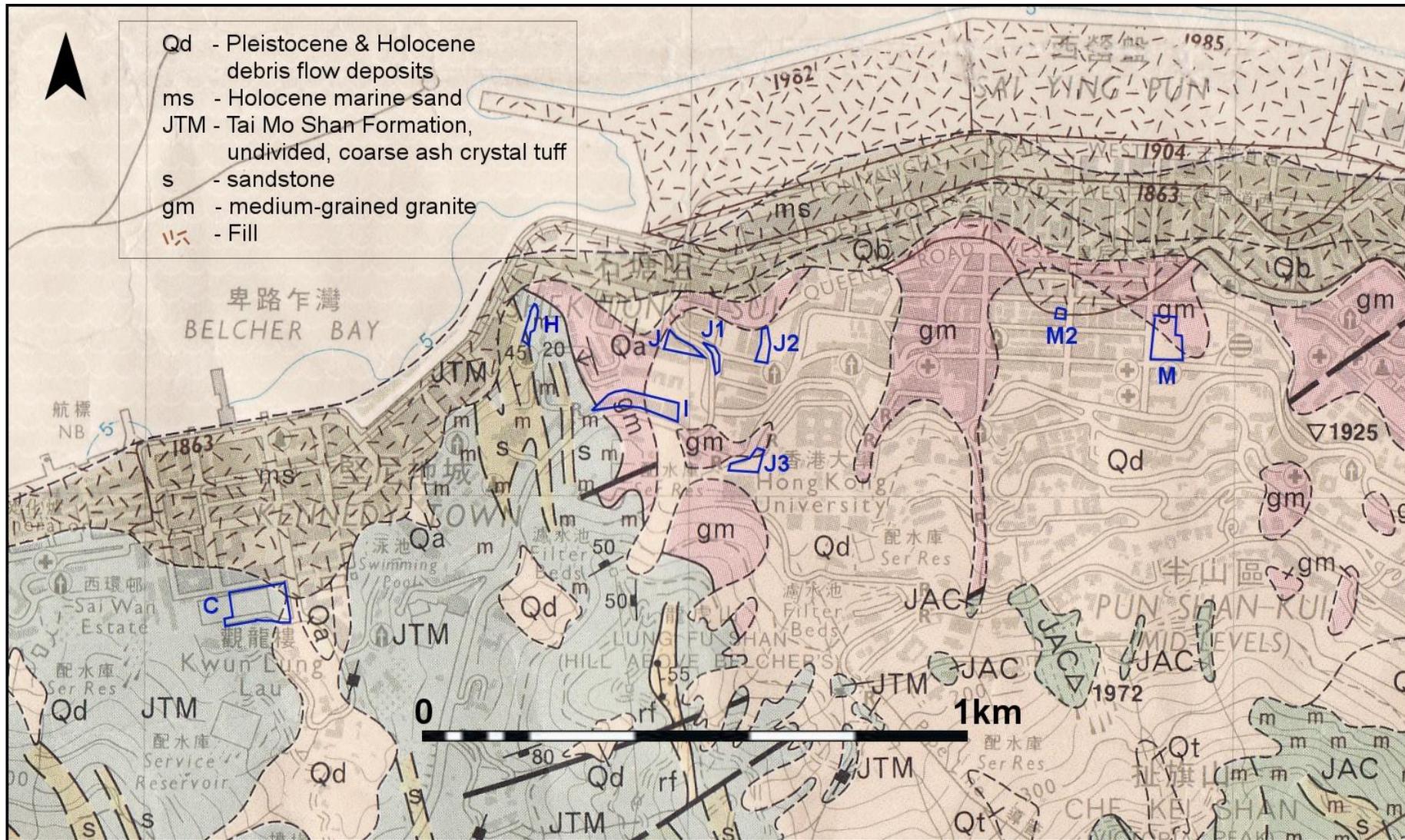


Figure 11.A.2: Study Area geology with nine watching brief sites highlighted

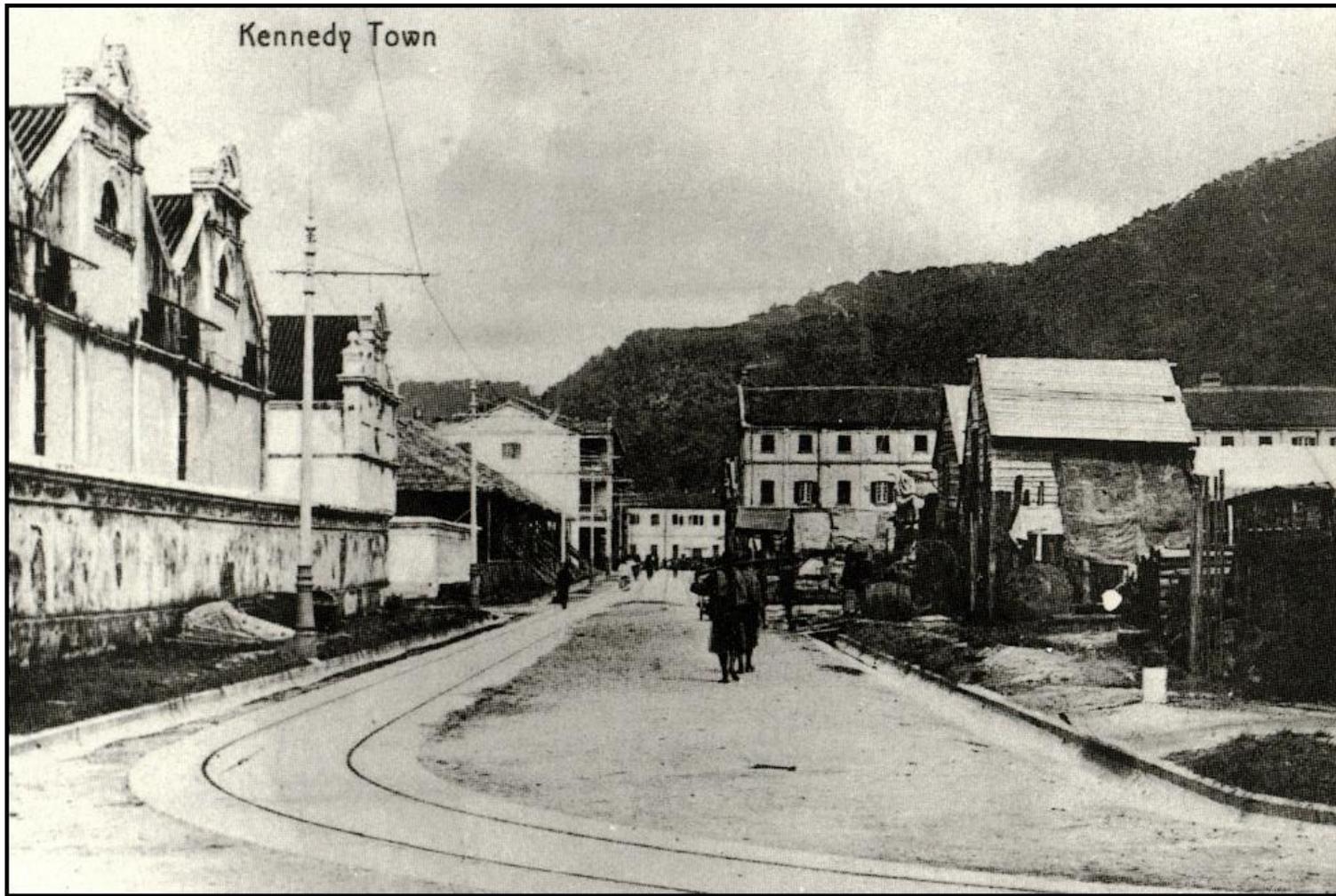


Figure 11.A.3: View along Chater Street (now Catchick Street) taken in 1910 – with Kennedy Town abattoir on left (Hong Kong Museum of History 1994)



Figure 11.A.4: View along Hill Road c.1910 with Shek Tong Tsui Market to the left and the Leun Shing Hotel in the centre background (Cheng 2000)

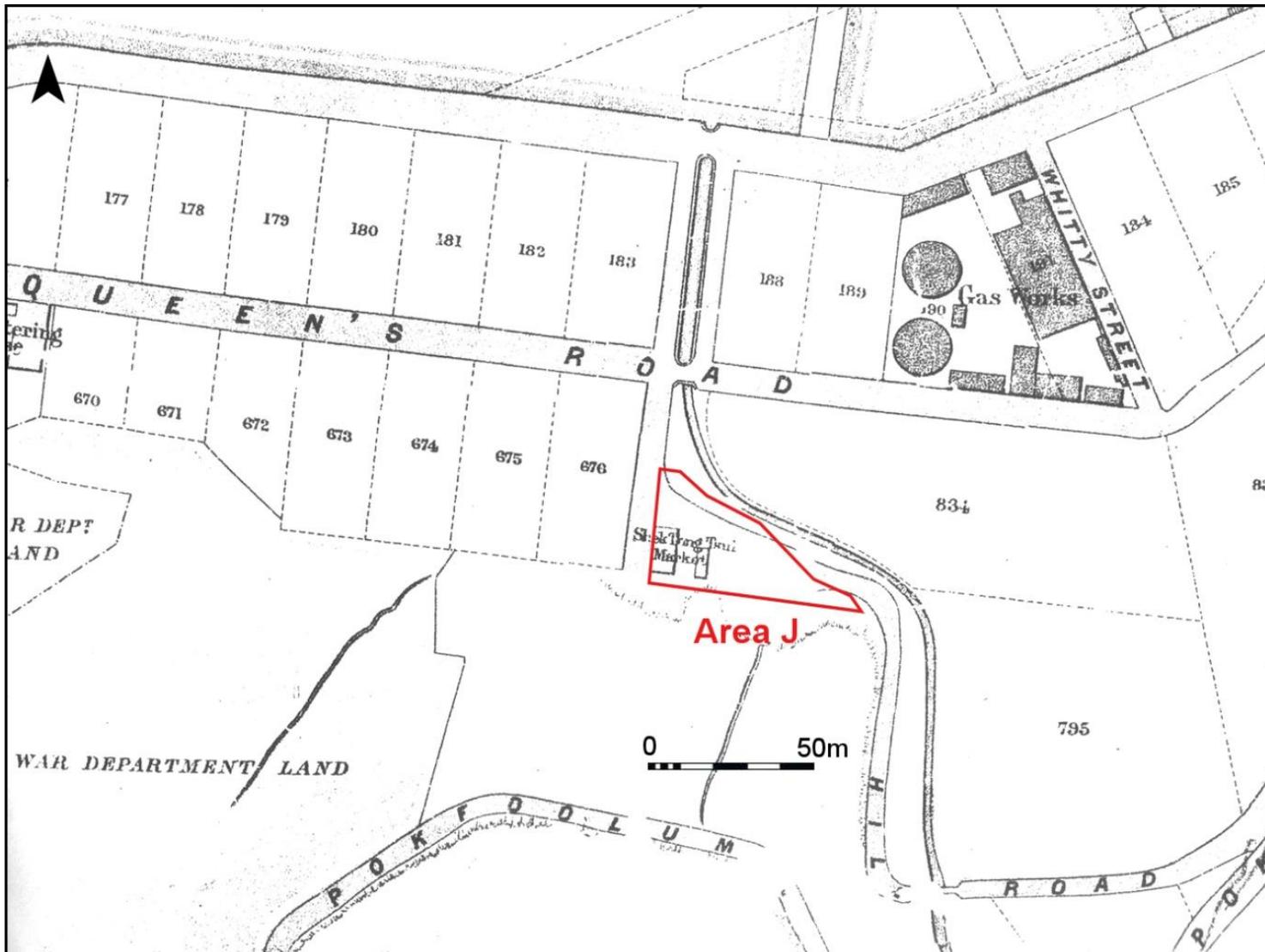


Figure 11.A.5: 1889 map showing the original Shek Tong Tsui Market buildings in the south-west corner of Works Area J (Stanford's Geological Establishment 1889).

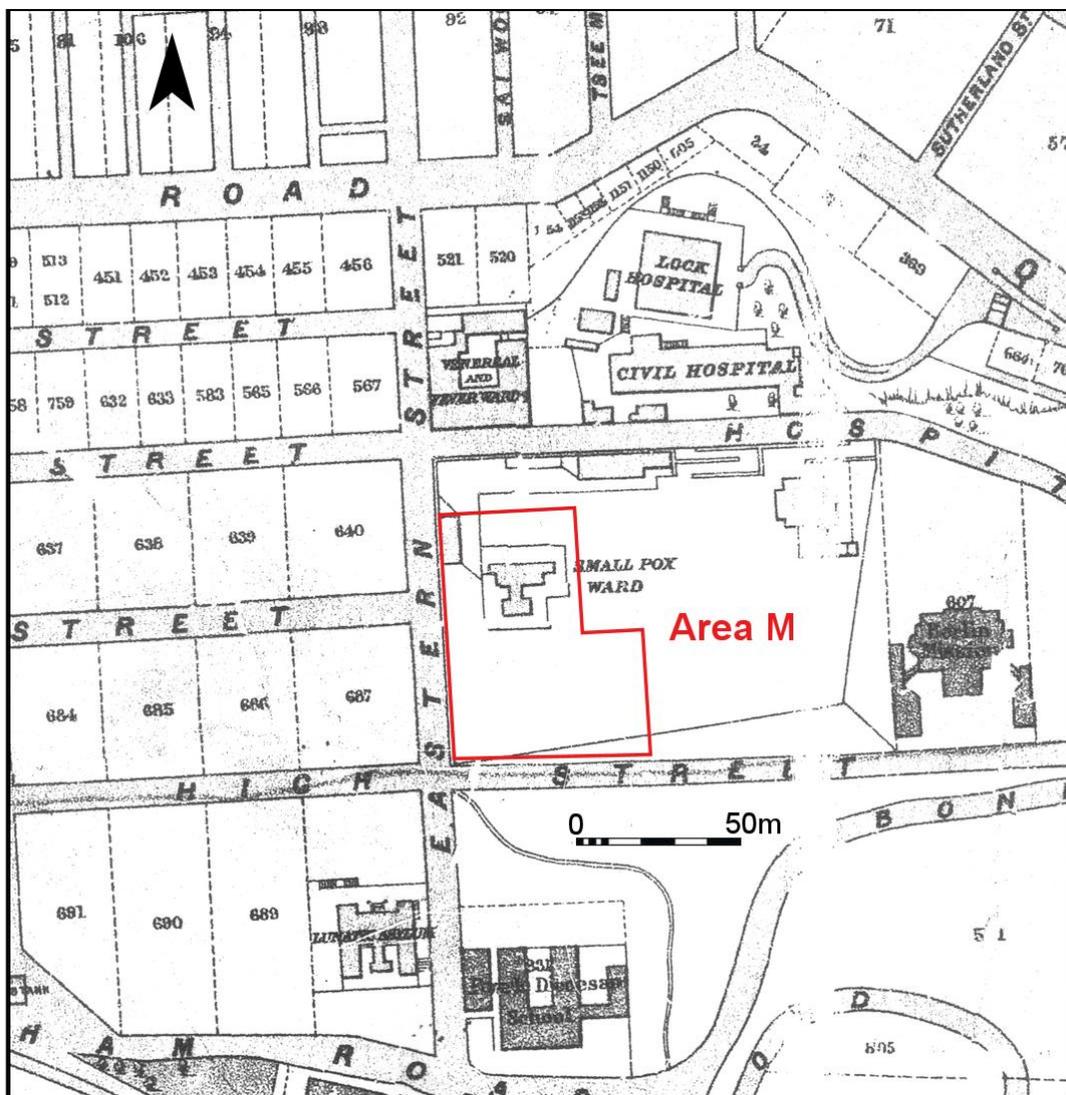


Figure 11.A.7: 1889 map showing the Smallpox Ward of the Government Civil Hospital in Works Area M (Empson 1992).

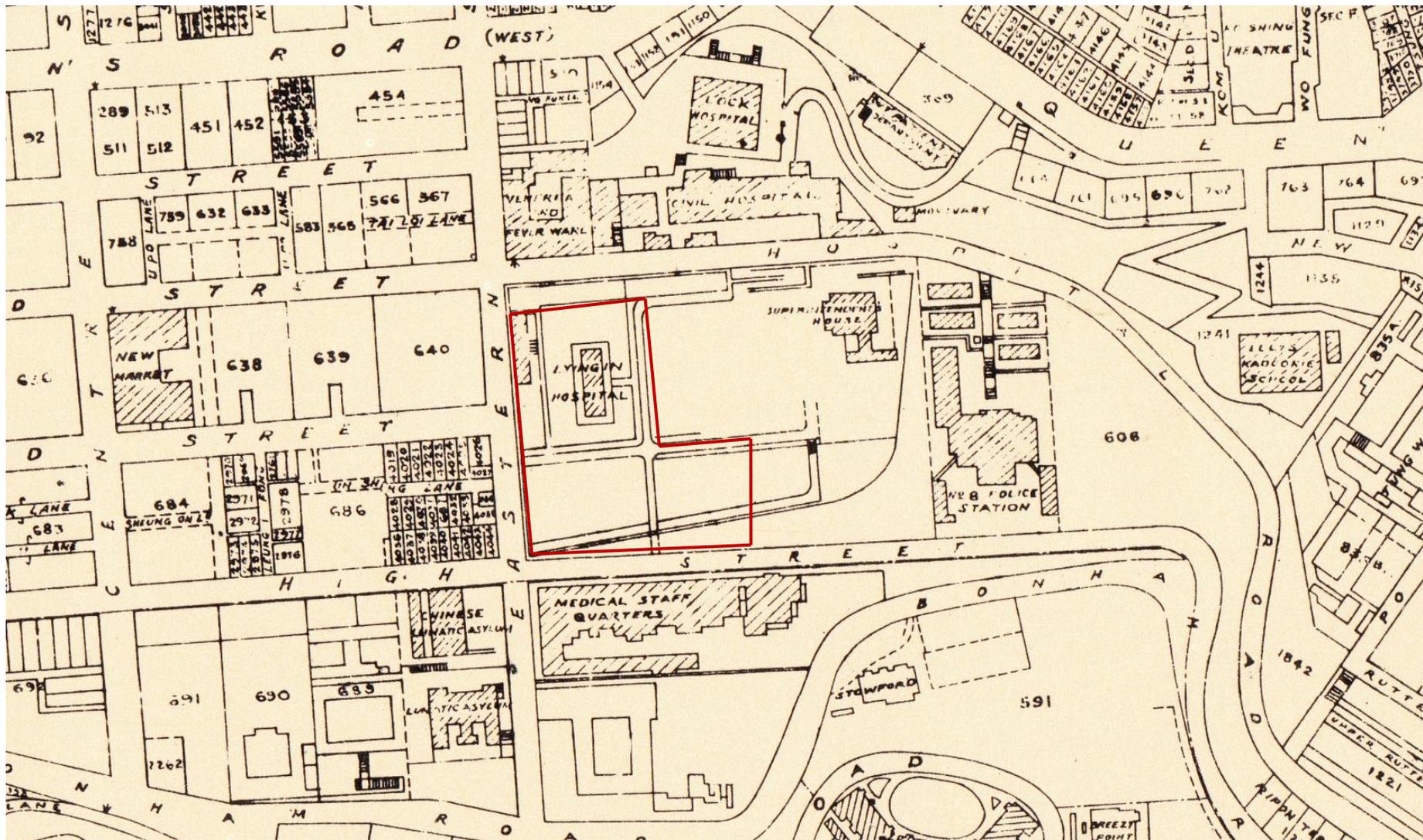


Figure 11.A.8 1930-1945 Map showing the 'Lying-In' Hospital at Site M (Empson 1992)

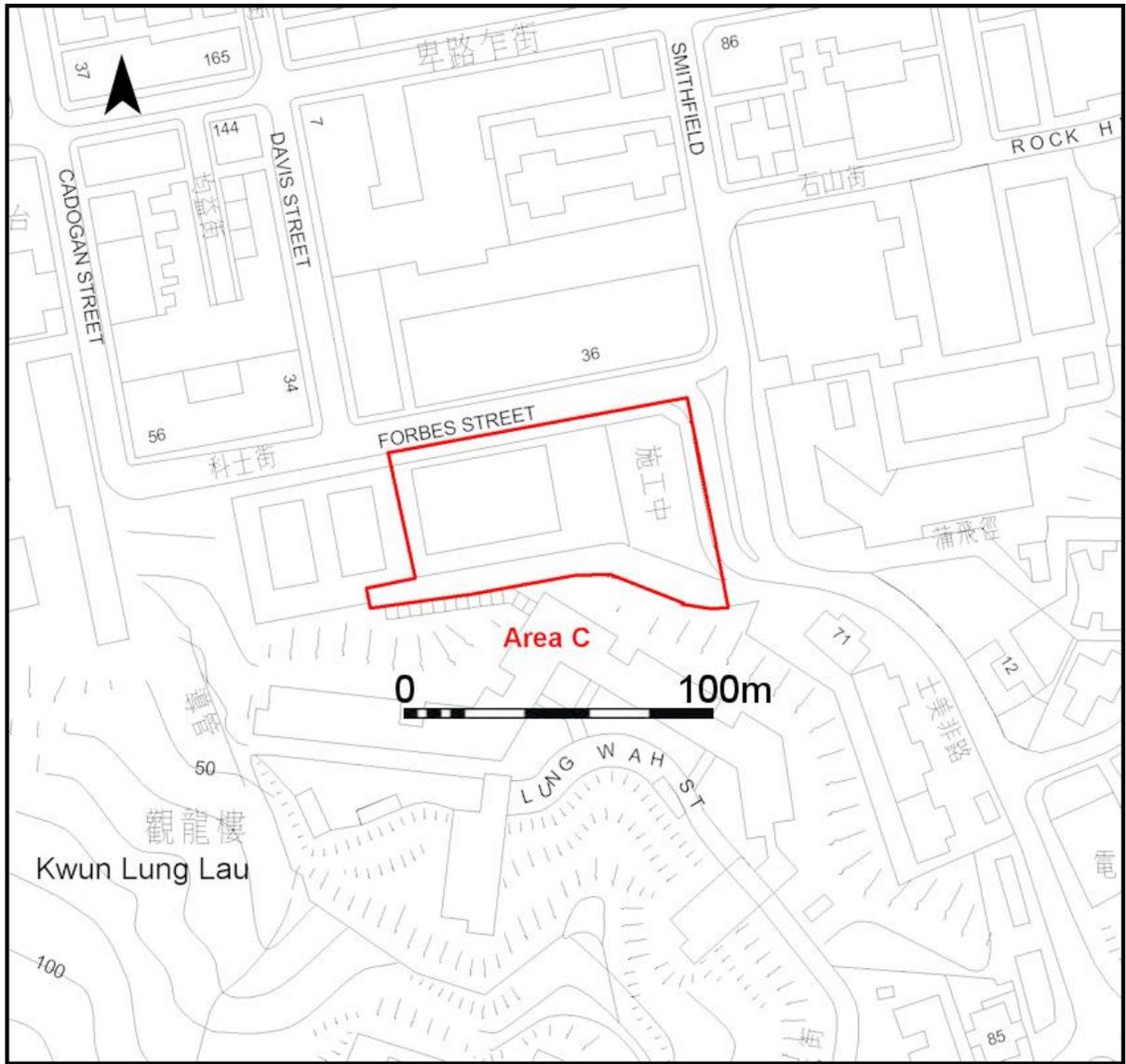


Figure 11.A.9: Works Area C – site boundary

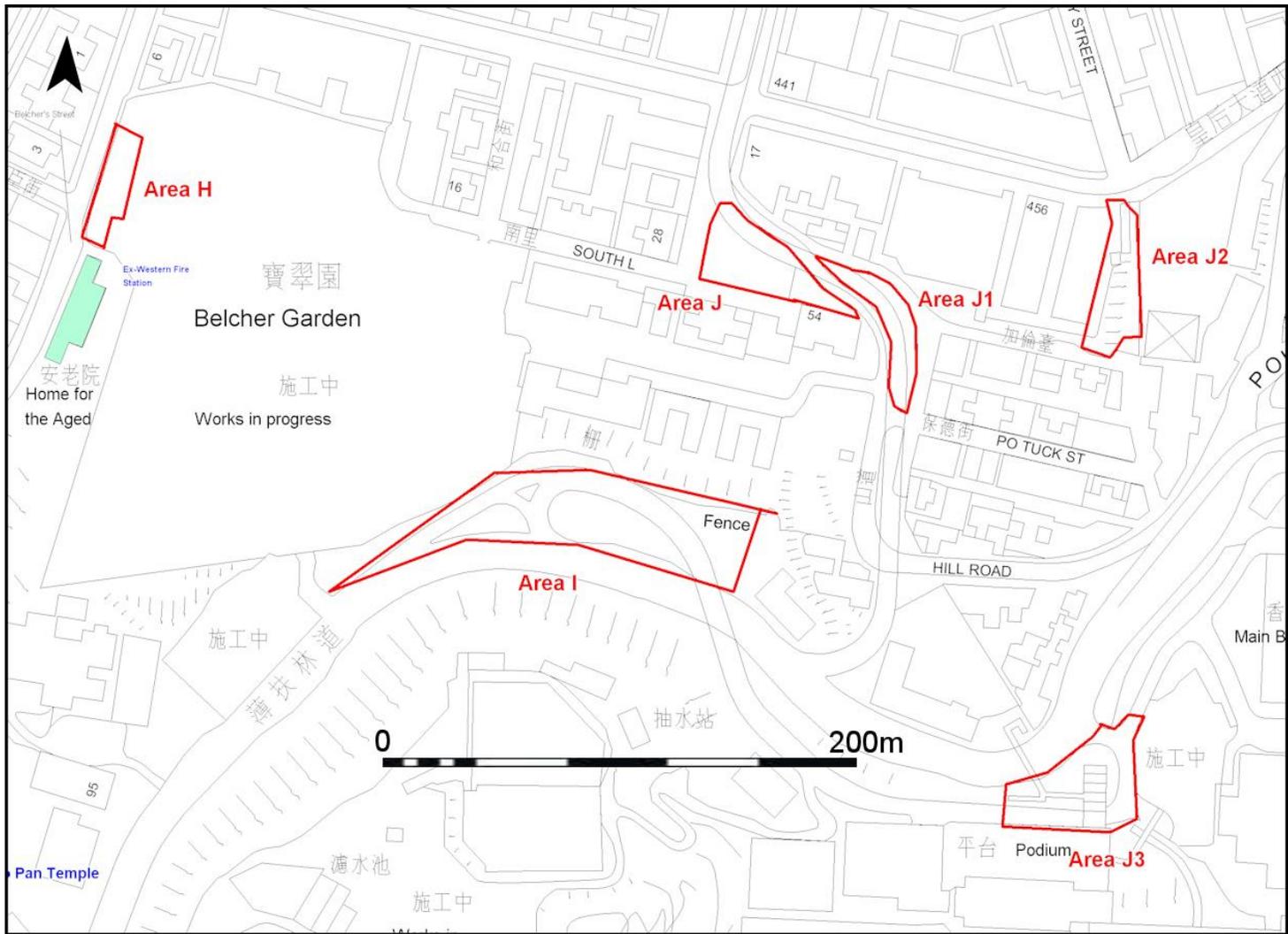


Figure 11.A.10: Works Areas H, I, J, J1, J2 and J3 – site boundaries

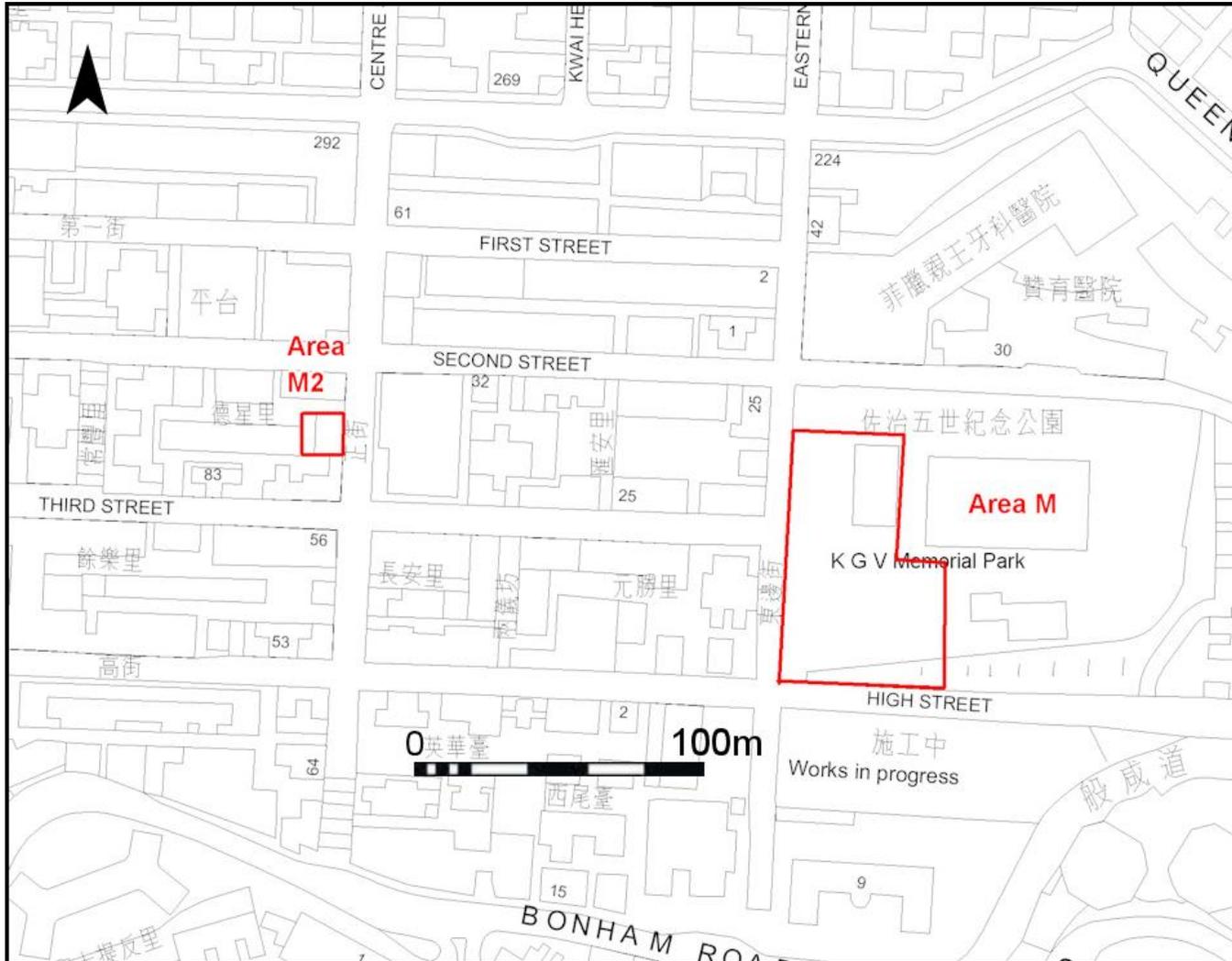


Figure 11.A.11: Works Areas M and M2 – site boundaries

Appendix 11.B

WORKS SITE C, FORBES STREET KENNEDY TOWN

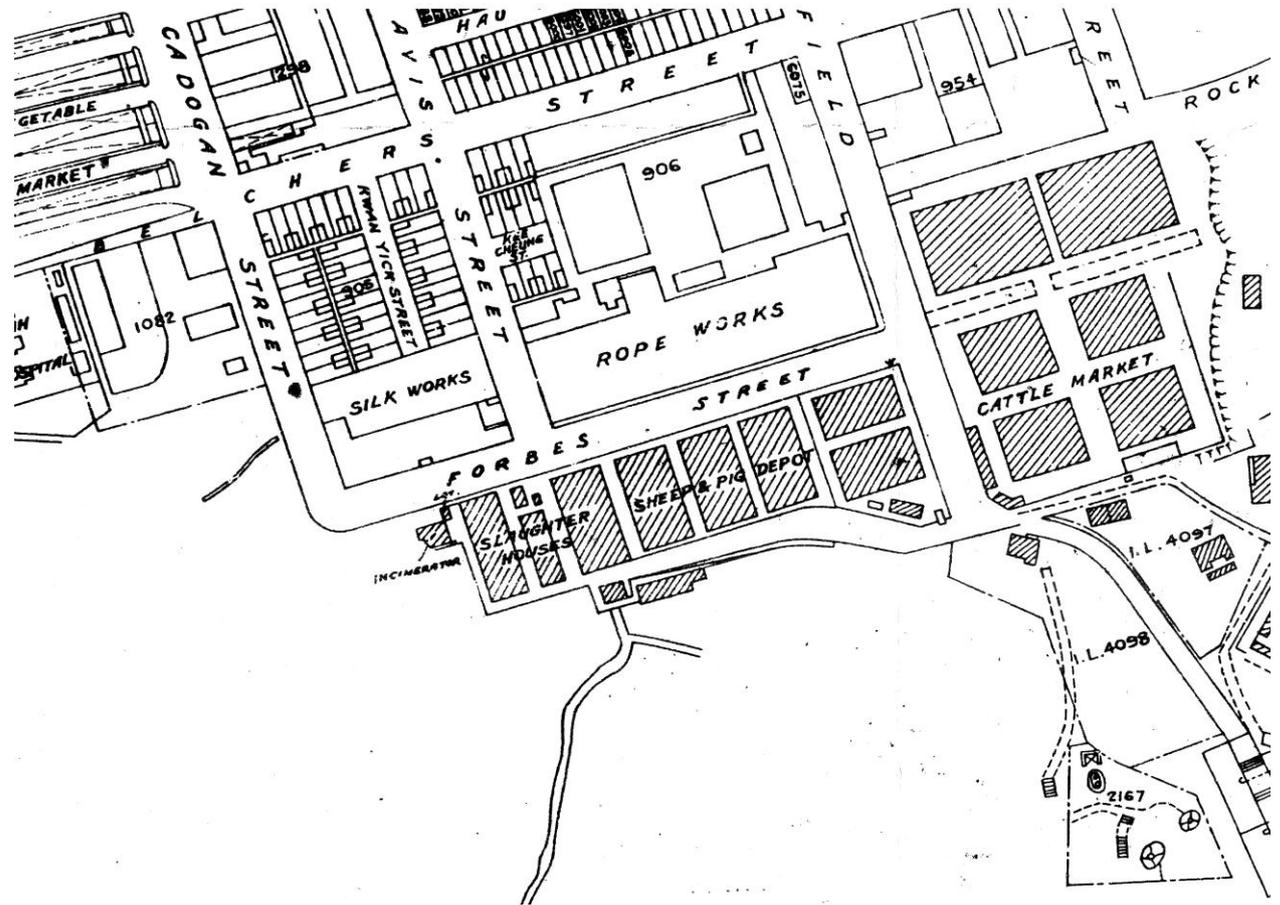


Figure 11.B.1 Map showing the worksarea in 1889(Empson 1992)

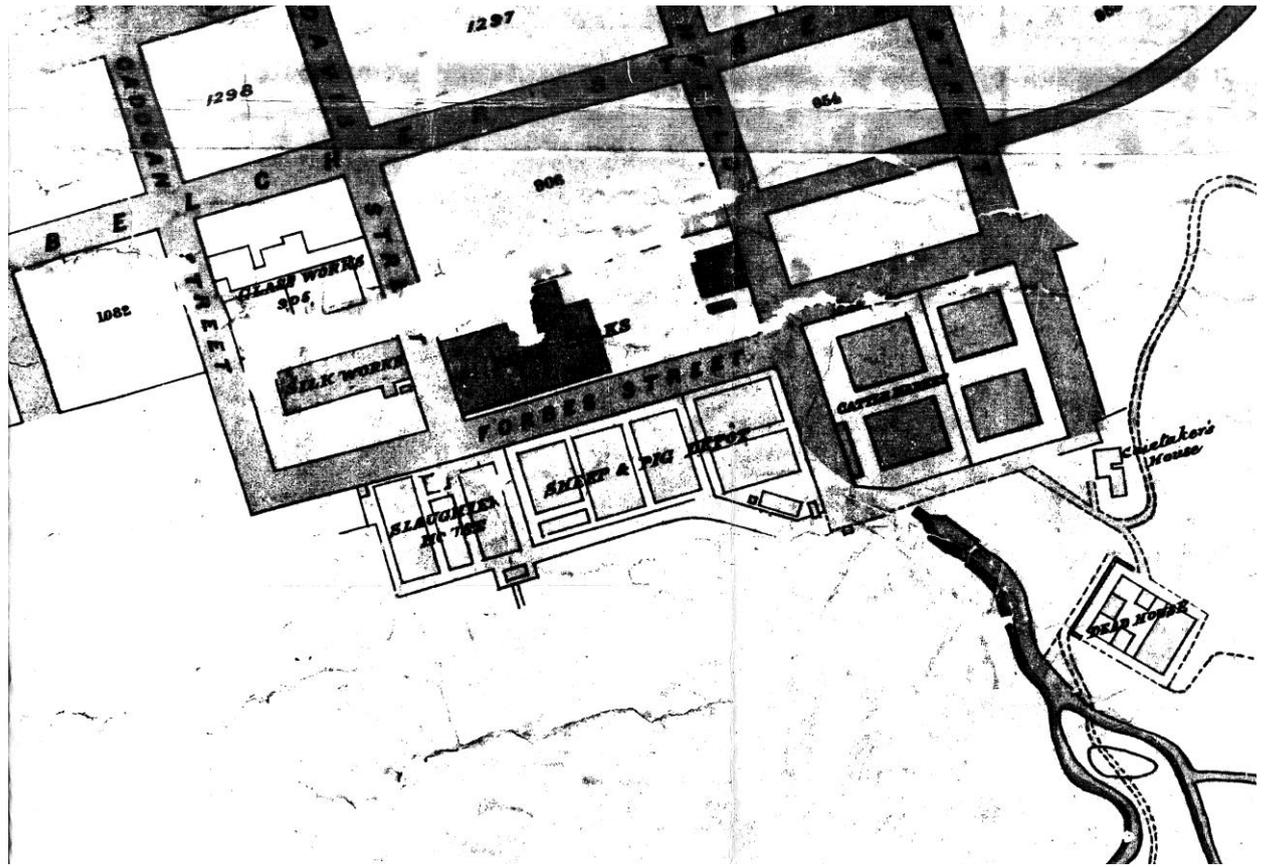


Figure 11.B.2 Map showing the worksarea in 1936(Empson 1992)



Figure 11.B.3 Map showing the works area in 1964(Empson 1992)

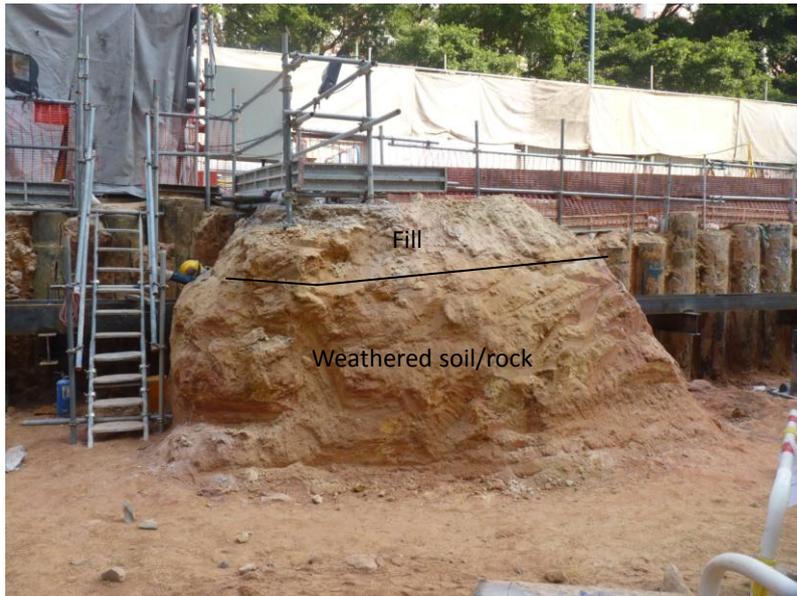


Plate 11.B.1 Photograph taken of the south/centre part of the site, showing the stratigraphy of the site, i.e. shallow artificial fill over weathered soils and rock.

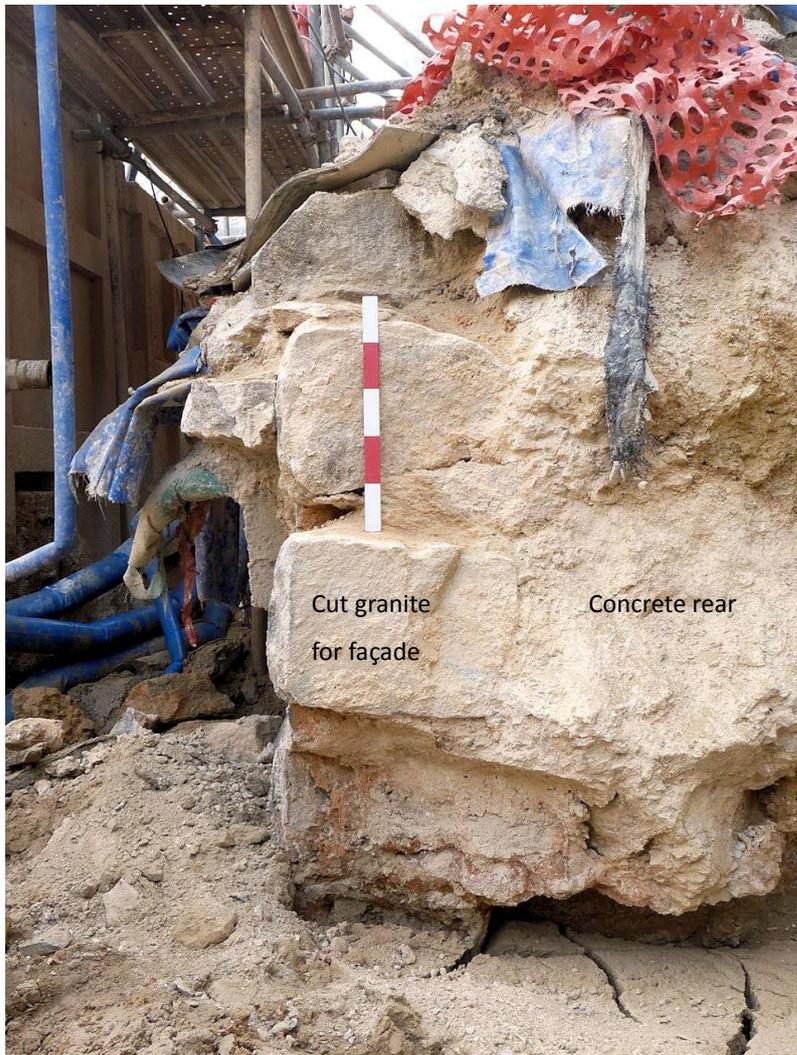


Plate 11.B.2 Photograph showing the section of the southern retaining wall, which shows the concrete backing and cut granite front wall.



Plate 11.B.3 Photograph showing the retaining wall in the Southwest corner of the works area. The portion will be preserved.



Plate 11.B.4 Photograph showing the top of the retaining wall; notice the beveled granite cap stone.

WORKS SITE H, THE BELCHER'S



Plate 11.B. 5 Photograph showing large boulders and rockhead at shallow depths; notice the rock in the front right corner and the drilling of rockhead in the centre; the street level is visible in the back of the photo



Plate 11.B.6 Photograph showing the proximity of the current surface and rockhead and boulders; notice the cut rock beneath the surface in the centre of the photo. The rock was cut to place the I-beam which carries the working deck

WORKS SITE I, POK FU LAM ROAD



Plate 11.B.7 Photograph showing the eastern shaft excavations in progress; note all the boulders on the left of the photo and the large rock being uncovered.



Plate 11.B.8 Rock debris within the eastern shaft at a depth of approx. 2m below the surface.



Plate 11.B.9 Photo showing ongoing excavations at the western shaft; note the large rocks appearing to the centre right of the photo at shallow depths

WORKS SITE J, HILL ROAD



Plate 11.B.10 Photograph showing the site at site inspection stage; photo overlooking the western portion of the site and looking to the north



Plate 11.B.11 Photograph showing the western portion of the site looking to the south; notice the deep disturbance by the rebar centre-left of the photo

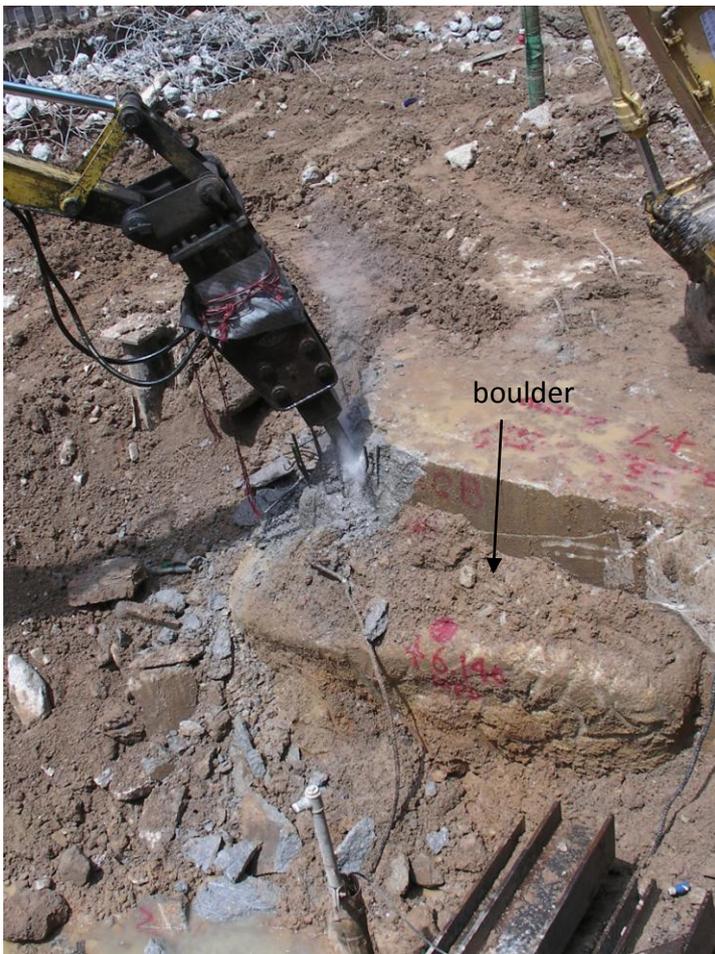


Plate 11.B.12 Photograph which shows the large boulder in the northwest of the works site

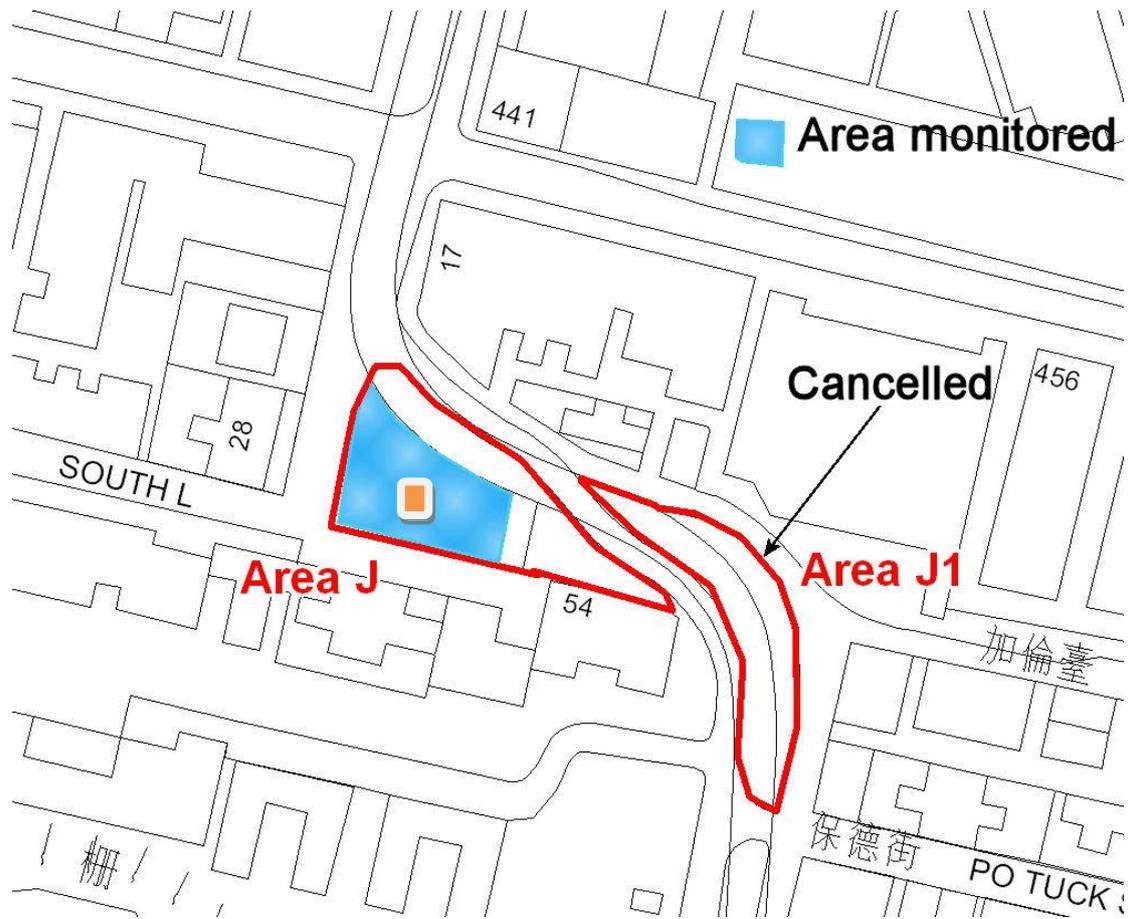


Figure 11.B.4 Map showing the extent monitored at Site J, Hill Road in blue and the cancelled area J1;  Marks the location of modern deep rebar foundation

WORKS SITE J2, WHITTY STREET PUBLIC TOILET



Plate 11.B.13 Photograph showing one of the pits excavated to locate the utilities and a general view north-northeast of the site with the demolition of the public toilets and creation of the artificial ramp needed for piling works



Plate 11.B.14 Photograph showing a view of the utility pit with some red brick visible in the western section and water seepage



Plate 11.B.15 Photograph showing the area excavated and the deeply weathered red hill slope soils

WORKS SITE J3, HKU ENTRANCE



Plate 11.B.16 Photograph showing the works area at site inspection stage; view of the northern part of the site looking east.



Plate 11.B.17 Small utility test pit excavation viewed at site inspection stage suggesting sterile soils at shallow depths.



Plate 11.B.18 Photograph showing the drilling of a debris flow boulder to the southwest of the shaft



Plate 11.B.19 Photograph showing boulders appearing around 1m below surface set in sterile soils



Plate 11.B.20a Granite block wall foundation 103; view looking west



Plate 11.B.20b Photograph showing the granite wall west facing section



Plate 11.B.21 Photograph showing 3 tile fragments, undiagnostic in date, found within the foundation cut (104) for wall foundation 103.



Plate 11.B.22 Photograph showing a provincial porcelain base sherd dated late 19th-century to 20th-century



Plate 11.B.23 Photograph showing a view of TB4 trench looking north; note the rebar foundations

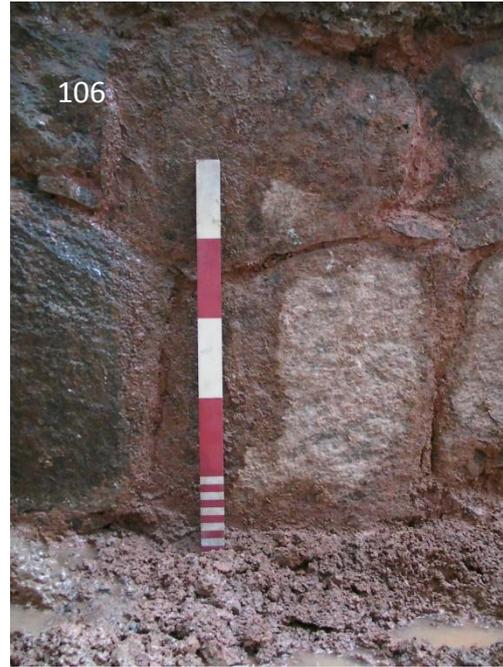


Plate 11.B.24 Photograph showing west facing elevation of granite wall foundation 106



Plate 11.B.25 Photograph showing a view of granite wall foundation 106 looking to the northeast



Plate 11.B.26 Photograph showing the wall foundation 110; view looking north

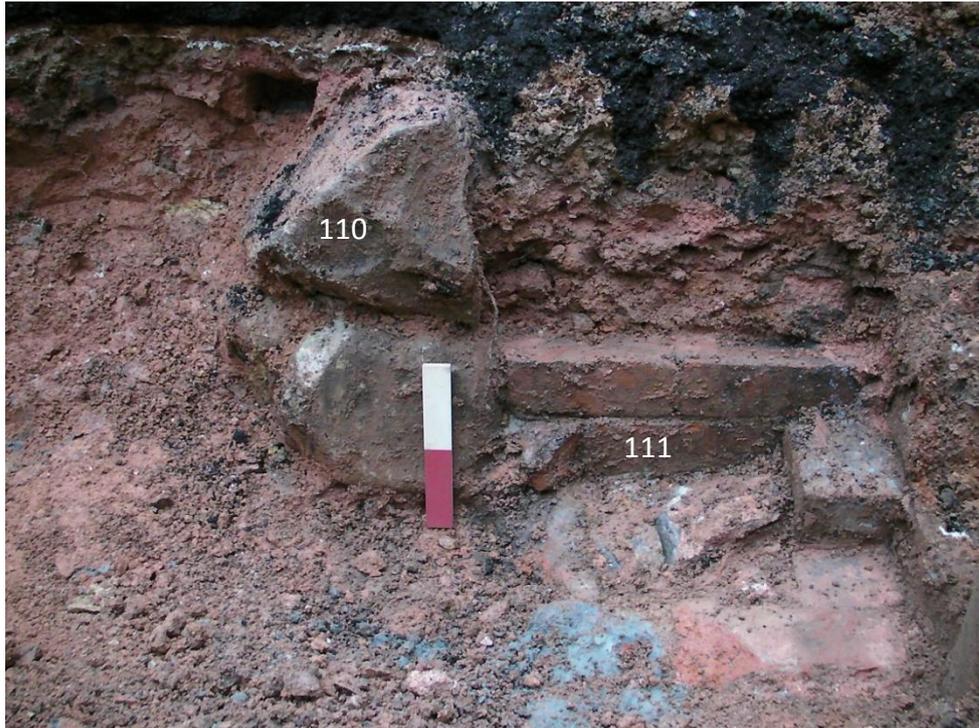


Plate 11.B.27 Photograph showing brick foundation 111 and wall foundation 110; view looking south

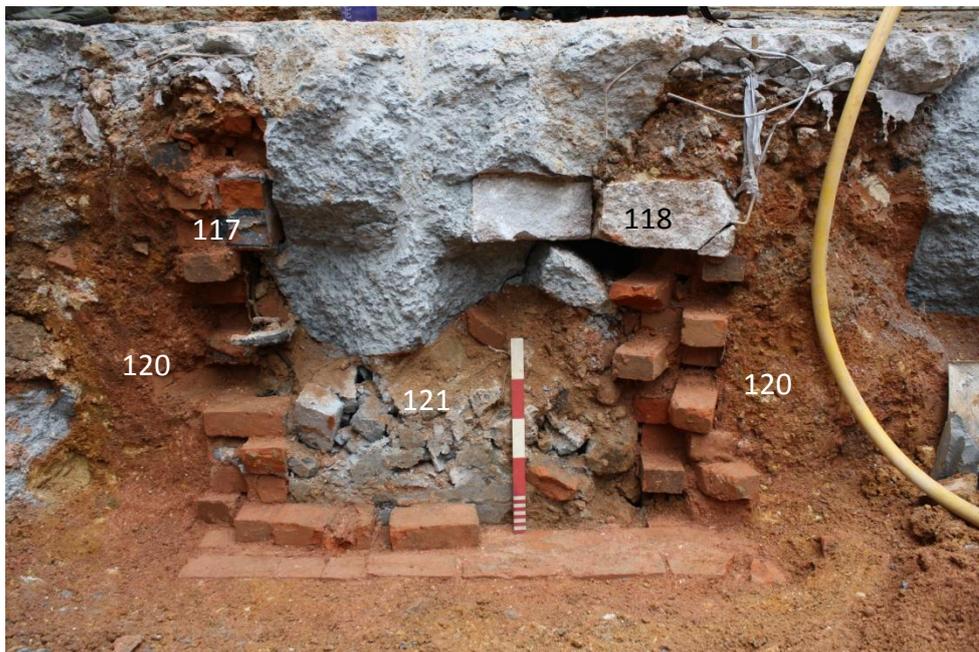


Plate 11. B.28 Photograph showing brick structure 117; view of north facing section. Note also the two granite blocks on top of the structure (118)

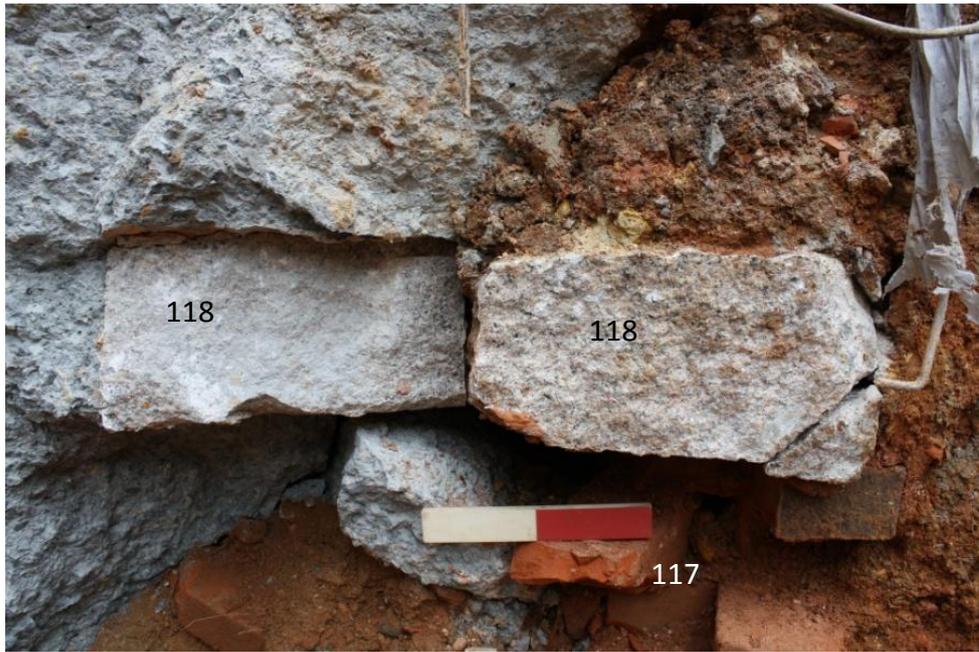


Plate 11.B.29 Photograph showing the 118 granite blocks lying above the brick structure (117).



Plate 11.B.30 Photograph showing modern pipe disturbance at CAP 7, noise enclosure; view looking east.



Plate 11.B.31 Photograph showing rebar foundations at TB6 and MTB3; view looking north.



Plate 11.B.32 Photograph showing BF123; view of west facing section



Plate 11.B.33 Photograph showing BF124; view of east facing section



Plate 11.B.34 Photograph showing WF125; view of west facing elevation



Plate 11.B.35 Photograph of WF 141; view looking east



Plate 11.B.36 Photograph of WF 134 in detail; view of plan looking south



Plate 11.B.37 Photograph of the stratigraphy within the shaft as it is being excavated; view looking west



Plate 11.B.38 Photograph of Manhole 142; view looking west; note the iron ladder rungs



Plate 11.B.39 Photograph of the manhole cover of MH142

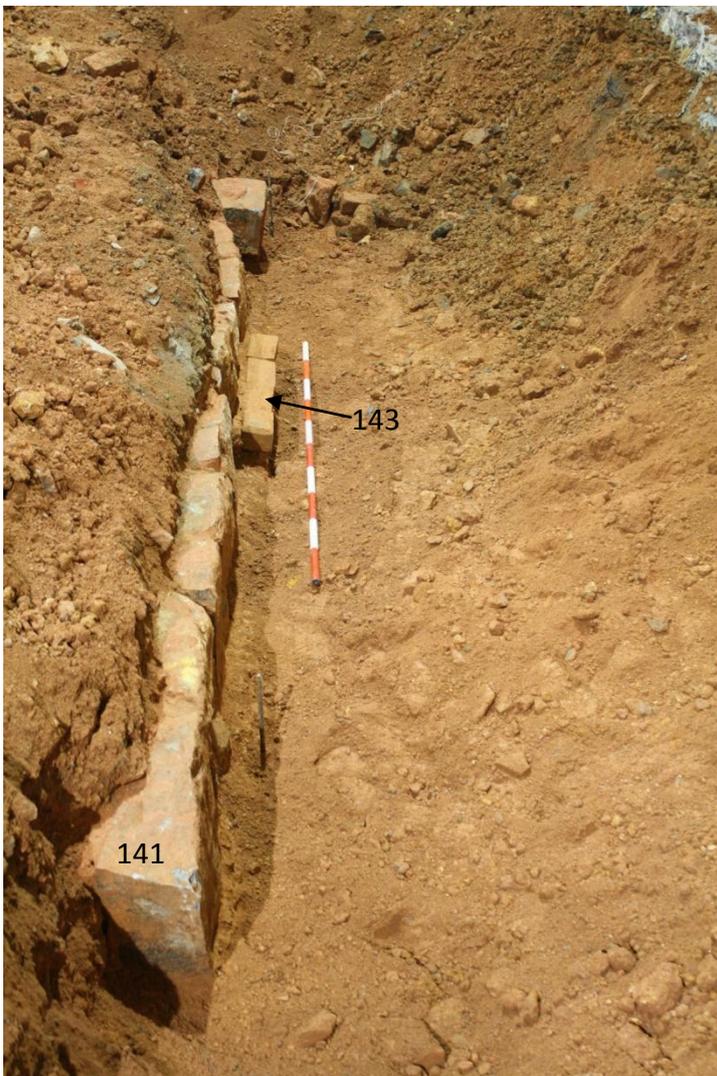


Plate 11.B.40 Photograph of granite wall foundation 141 and the brick foundation 143 along side; view to the west



Plate 11.B.41 Photograph of brick foundation 145

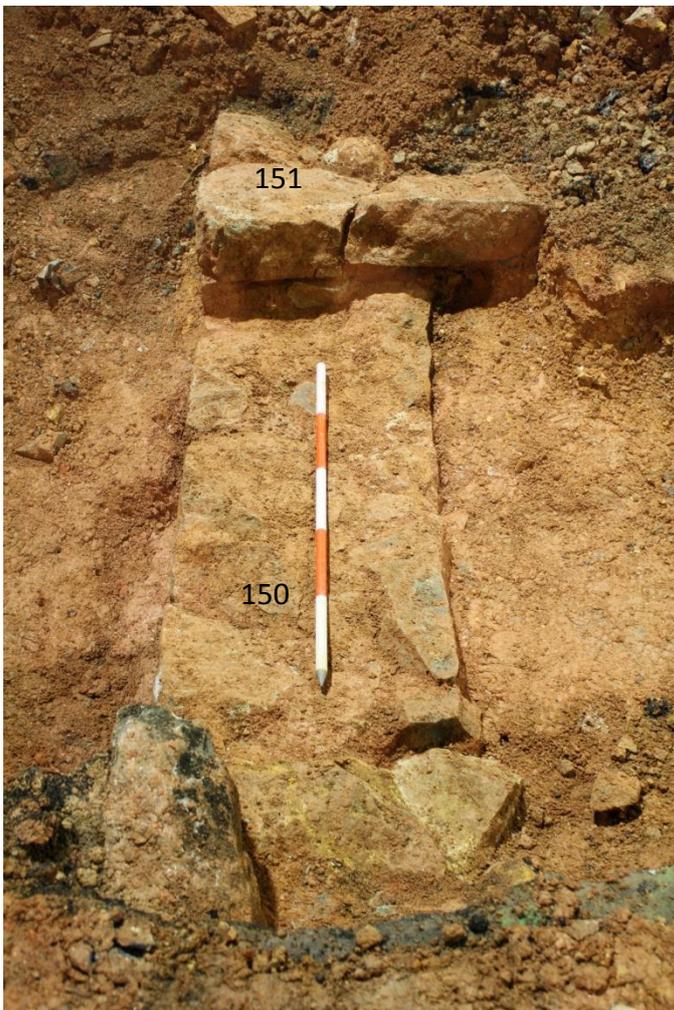


Plate 11.B.42 Photograph shows granite foundation 150 and the upper courses 151

SITE M2, WESTERN END OF CENTRE STREET



Plate 11.B.43 Photograph of Site M2 showing a deep sequence of rubble fill; view looking south



Plate 11.B.44 Photograph showing the deep sequence of disturbance at Site M2; view looking east

12. Supporting data in appendices

Appendix 12.A Site M, KGV Memorial Park

The appendix includes the following drawings and plate:

A. Noise enclosure

- Drawing 1 East facing section of wall foundation 103 and its associated cut 104
- Drawing 2 Groundplan of wall foundation 103
- Drawing 3 Drawing shows 3 metres section of 106 and which continued for approximately another 3m metres
- Drawing 4 Drawing showing north facing section of WF106
- Drawing 5 Drawing shows north facing section of WF108
- Drawing 6 Drawing showing south facing section of wall foundation 110
- Drawing 7 Drawing showing north facing section of brick foundation 111, its associated contexts and its relationship to WF110
- Drawing 8 Drawing showing the manhole 117 and it associated contexts

B. Shaft - Ring beam

- Drawing 9 Drawing showing west facing section of feature BF123 and associated contexts
- Drawing 10 Drawing showing east facing section of feature BF124 and its associated contexts
- Drawing 11 Drawing showing west facing section of WF125 and its proximity to BF123
- Drawing 12 Drawing showing WF134 and its foundation bed 136, both set in cut 135

C. Spoil basin - ring-beam

- Plate 12.A.1 Photograph showing the finds from context 140
- Drawing 13 Drawing showing east facing section of WF141 and manhole 142 and their respective associated contexts
- Drawing 14 Drawing showing north facing elevation of WF141 with BF143 attached to its north
- Plate 12.A.2 Photograph shows BF145
- Drawing 15 Drawing shows west facing elevation and north facing elevation of

WF150 and 151

- Drawing 16 Drawing shows east facing elevation of WF150/151 and its mortar/gravel foundation bed 153
- Drawing 17 Drawing of west facing elevation showing BF154 and gravel/mortar foundation beds 155 and 148
- Drawing 18 Plan showing the relationship between MG148, 159, 155 and 157

The details of the AWB findings are divided along three main work locations (Figure 11.B.5):

- D. Noise enclosure : near TB4, TB6, MTB1, CAP 3, CAP 5, CAP 8, TB7, and CAP 7 (W TB8 and MTB3);
- E. Shaft ring-beam; and
- F. Spoil basin ring-beam.

Overall on the site 60 contexts, both modern and historical (101-160), were distinguished. The details are as follows:

A. Noise enclosure

Context No.	Description	ID	Drawing
101	Concrete/asphalt	Deposit	1, 4, 5, 6, 7, 8
102	Hardcore. Under 101; over 103	Deposit	1, 4, 5, 6, 7, 8
103	Wall foundation. Under 102; over 104	Feature	1, 2
104	Cut for 103. Under 101; over 105	Feature	1
105	CDG fill. Under 104	Deposit	1, 2, 4
106	Wall foundation, N-S orientation (NW corner of worksite). Under 102; over 107	Feature	4
107	Cut for 106. Under 106, over 105	Feature	4
108	Wall foundation, same orientation and in line with 106	Feature	5
109	Cut for 108	Feature	--
110	Wall foundation: N-S orientation and in line with 106 and 108. Under 112, over 115	Feature	6, 7
111	Brick foundation; abuts granite wall foundation 110. Under 112, over 112	Feature	7
112	CDG fill. Under 102, over 110 + 111	Deposit	7
113	Cut for WF 110/BF 111. Under 115, over 114	Feature	6, 7

Context No.	Description	ID	Drawing
114	Mixed CDG fill. Under 113	Deposit	6, 7
115	Mortar foundation/gravel. Under 110/111, over 113	Feature	7
116	CGD fill. Under 102, over 110	Deposit	6
117	Brick structure. Under 118, over 119	Feature	8
118	Granite slabs. Under 102, over 117	Feature	8
119	Cut for 117	Feature	8
120	CDG fill same as 105?; over 119, under 117	Deposit	8
121	Concrete/rubble backfill. Under 101, over 118	Deposit	8
122	CDG rubble mix	Deposit	8

The identification and interpretation of the features within the noise enclosure are as follows:

Context No.	Identification	Interpretation
103	Wall foundation constructed with cut granite blocks	Length of wall foundation delineating the northern edge of the structure within the noise enclosure
106	Wall foundation constructed with cut granite blocks	All three wall fragments are believed to belong to the same wall; construction materials, methods and orientation are the same.
108	Wall foundation constructed with cut granite blocks	
110	Wall foundation constructed with cut granite blocks	
111	Brick foundation in line with 106/108 wall foundation	Brick foundation contemporary with wall fragment 110.
115	Mortar/gravel foundation under 110 and 111	Foundation bed for brick and stone wall; contemporary with hospital
117	Isolated red brick structure	This isolated brick structure is interpreted as a manhole; it is unclear whether this structure dates to the same period as the hospital. The manhole had been abandoned and filled with rubble and soil and capped with concrete.
118	Granite blocks above the brick structure 117	The granite blocks are almost certainly part of the hospital, however their location suggest that they were reused to cap the manhole before concrete was used to seal the hole

B. shaft ring-beam

Context No.	Description	ID	Drawing
101	Concrete/asphalt	Deposit	9, 10, 11
102	Hardcore. Under 101; over 103	Deposit	9, 10, 11, 12
123	Red bricks under 102, over 131	Feature	9, 11
124	Blue bricks under 102, over 132	Feature	10
125	Granite wall foundation under 102, over 128	Feature	11
126	Cut for WF 125, under 130, over 128	Feature	11
127	Red mortar/CDG associated with walls 127a (123), 127b (124), 127C (125)	Deposit	10, 11
128 (=114)	CDG fill under cuts 126, 131, 132 over 139	Deposit	9, 10, 12
129	Redeposited mix of 127/128, over 124, under 102	Deposit	10
130	Gravel/mortar foundation under 125 over 126	Feature	11
131	Cut for BF123, under 133, under 123	Feature	9
132	Cut for BF124, under 124	Feature	10
133 (=129?)	CDG/rubble mix under 102	Deposit	Equivalent 10
134	Wall foundation, under 138, over 136 contemporary with 'mortar' 137	Feature	12
135	Cut for WF 134, under 136, over 128	Feature	12
136	Hardcore, under 134/137	Deposit	12
137	Red 'mortar' CDG, under 138, over 136, contemporary with 134	Deposit	12
138	CDG/rubble backfill, mix 127 and 128; under 102, over 134/137 with blue and red bricks	Deposit	12
139	CDG colluvium under 128; slightly sandy/silty, gravelly CLAY	Deposit	12

Context No.	Description	Interpretation
123	Red brick foundation	Two small concentrations of brick foundation; purpose and associations unknown, but interpreted as part of the hospital
124	Blue brick foundation	
125	Granite wall foundation	Two granite wall foundation and one mortar/gravel foundation bed in similar orientation as WF106,108 and 110; interpreted as part of the hospital
130	Gravel/mortar foundation of granite wall foundation	
134	Granite wall foundation	

C. spoil basin ring-beam

Context No.	Description	ID	Drawing
101	Concrete/asphalt	Deposit	13
102	Hardcore. Under 101; over 103	Deposit	13
140	CDG fill under 102, over 141	Deposit	13, 15
141	WF141 under 156, over 148	Feature	13, 14, 16
142	MH142 under 102, over 149; red bricks with grey mortar	Feature	13
143	BF143, contemporary with 141, over 148; red bricks with red mortar 1 course	Feature	14
144	Cut for 141	Feature	13
145	BF145 under 140 over 146; 2 courses red bricks	Feature	Plate 12.A.1
146	yellow CDG under WF/BF	Deposit	13, 17
147	Cut 145, under 145, over 146	Feature	Plate 12.A.2
148	Mortar/gravel foundation under 141, over 144	Feature	13, 16, 17
149	Cut for MH142 under 142, over 140	Feature	13
150	WF150 (E-W) under 151, over 153	Feature	15, 16
151	WF151 (N-S) under 140, over 150	Feature	15, 16
152	Cut for WF150	Feature	16
153	Mortar/gravel foundation under 150, over 152	Feature	15, 16
154	BF154, west of WF141, under 140, over 155, 2 courses of bricks	Feature	17, 18
155	Mortar/gravel foundation under 154, over 156 west of 157	Feature	17, 18
156	Cut for 155	Feature	17
157	Mortar/gravel foundation over 158 east of 155	Feature	18
158	Cut for 157	Feature	--
159	Mortar/gravel foundation under 158, over 160	Feature	18
160	Cut for 159	Feature	--

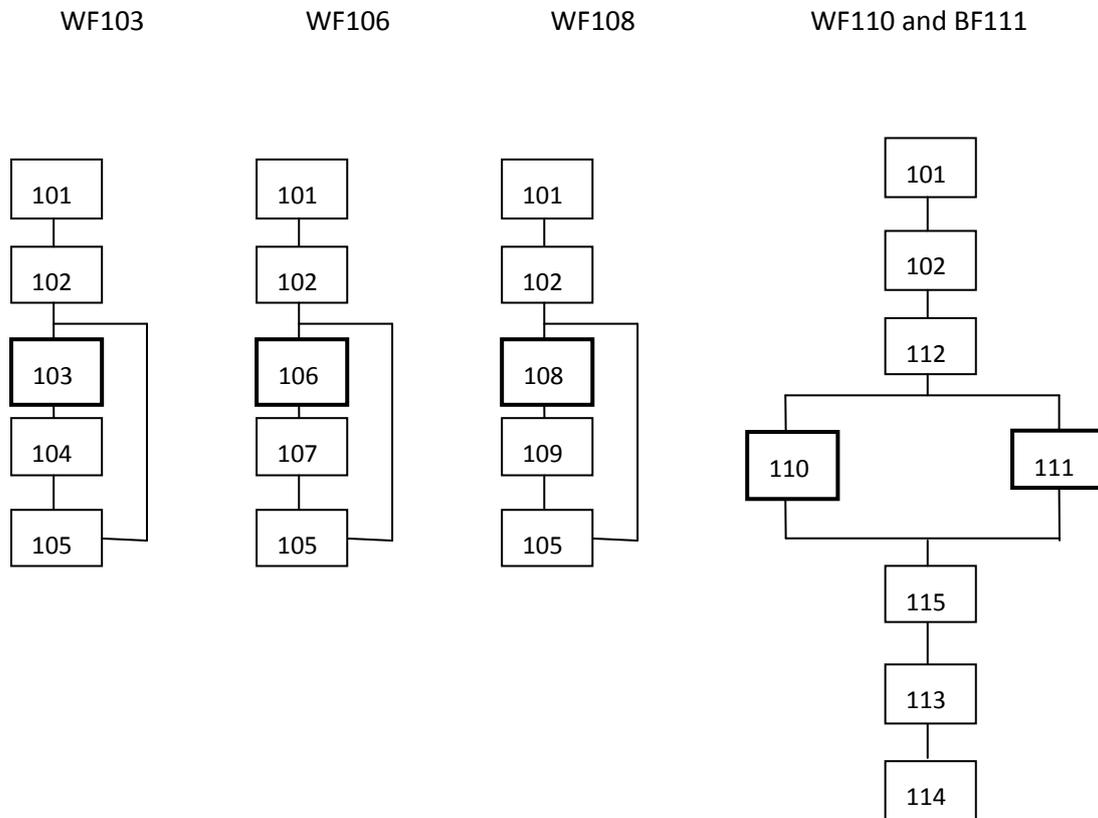
Context No.	Description	Interpretation
141/148	Granite wall foundation and its mortar/gravel foundation	Several lengths of granite wall, bricks and mortar and gravel foundations parallel to each other. Construction method suggests they all belong to the hospital
150/151/153	Granite wall foundation and upper courses and its mortar/gravel foundation bed	
159	Mortar/gravel foundation	
143	Red bricks	
154	Red brick foundation on top of the gravel/mortar 155	
155	Mortar/gravel foundation	Pair of (brick) wall foundations with similar construction methods as other wall foundations noted but stratigraphy show that they were constructed later than granite wall foundations 141/148 and 159.
157	Mortar/gravel foundation	
142	Red brick manhole	
145	Small red brick foundation	Free standing manhole, again no relationship was determined with the surrounding stratigraphy; most likely post hospital phase
		Isolated small brick foundation; too small to interpret

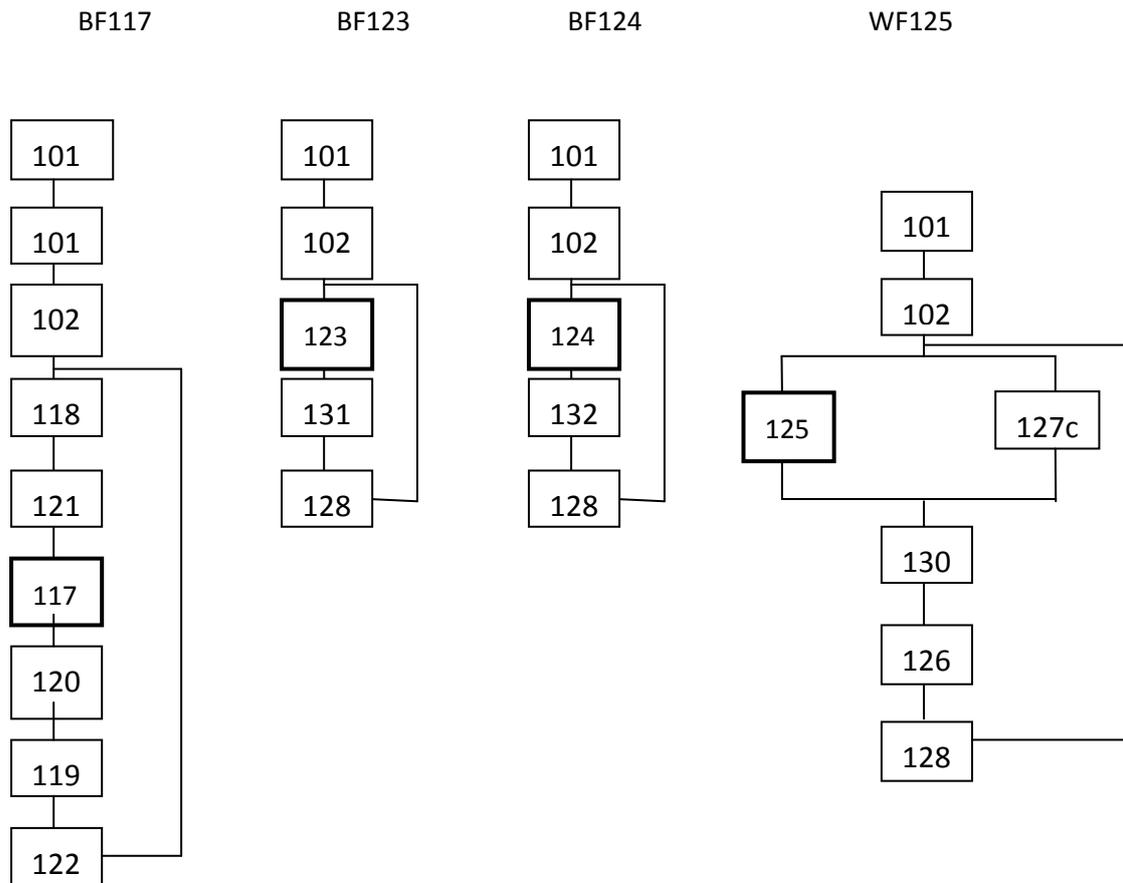
The stone foundations and brick walls listed above and described below all relate to the former Maternity Hospital. The features context identifications are WF: wall foundation; BF: brick foundation; BS: brick structure; MH: manhole and MG: mortal/gravel foundation and they were recorded as follows:

In noise enclosure: In shaft-ring beam: Spoil basin-ring beam:

WF103	BF123	WF141
WF106	BF124	MH142
WF108	WF125	BF143
WF110	WF134	BF145
BF111	MG130	MG148
MG115		MG150
BS117		MG151
118		MG153
		BF154
		MG155
		MG157
		MG 159

The stratigraphical relationship of the features is can be understood as following Harris Matrix:

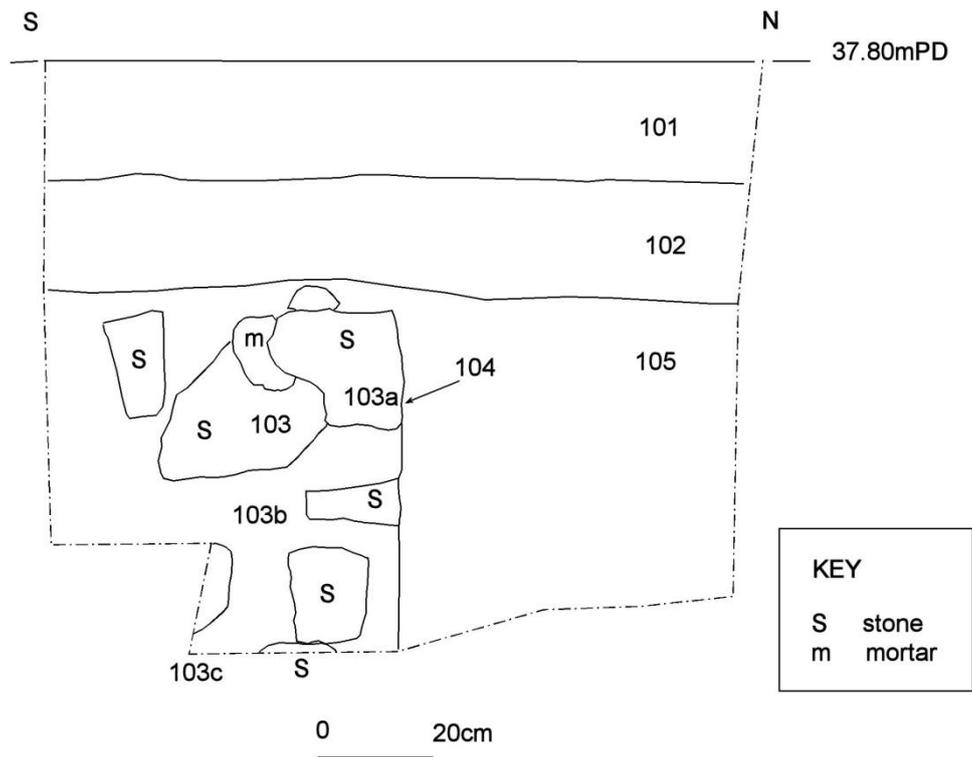




The descriptions below contain details of each of the recorded contexts, stratigraphical relationships of contexts relating to features and drawings and sketches illustrating the features and surrounding deposits recorded.

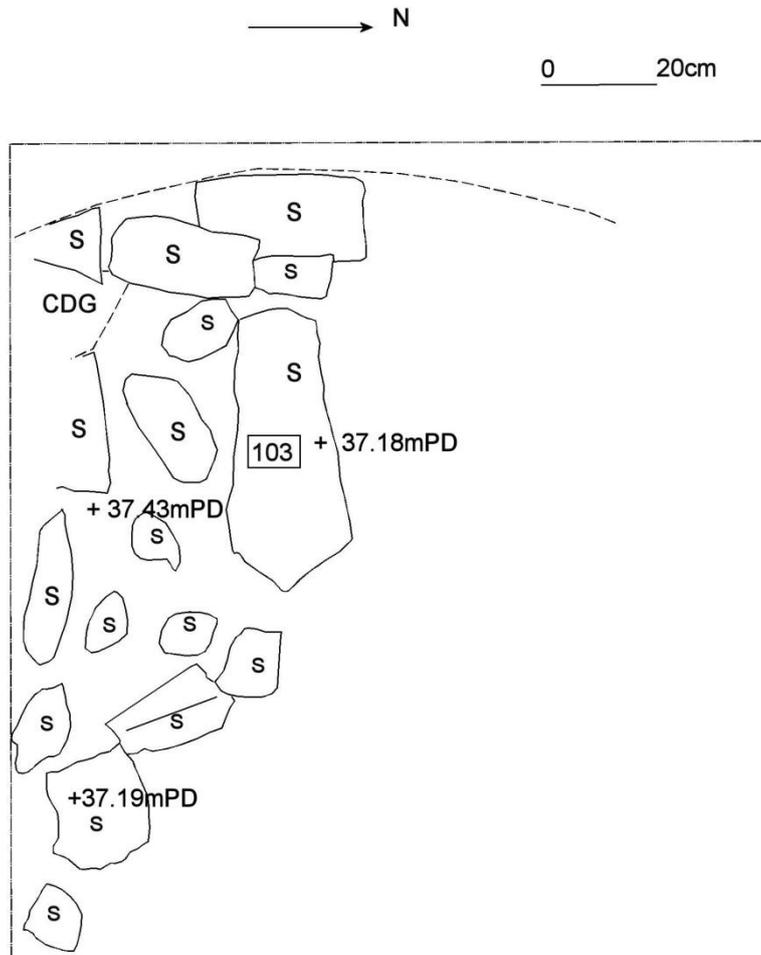
E. Noise enclosure

In the ***Northeast corner*** of the noise enclosure monitoring indicated below modern surface and a sequence of CDG fill, a wall foundation [WF103] constructed with granite blocks (Drawing 1 and 2). The red bricks measured ca. 0.18 by 0.23 by 0.27m and 0.08 by 0.10 by 0.10m in size. White mortar was noticed in patches but there was no evidence that the foundation had been fully mortared.



Drawing 1 East facing section of wall foundation 103 and its associated cut 104

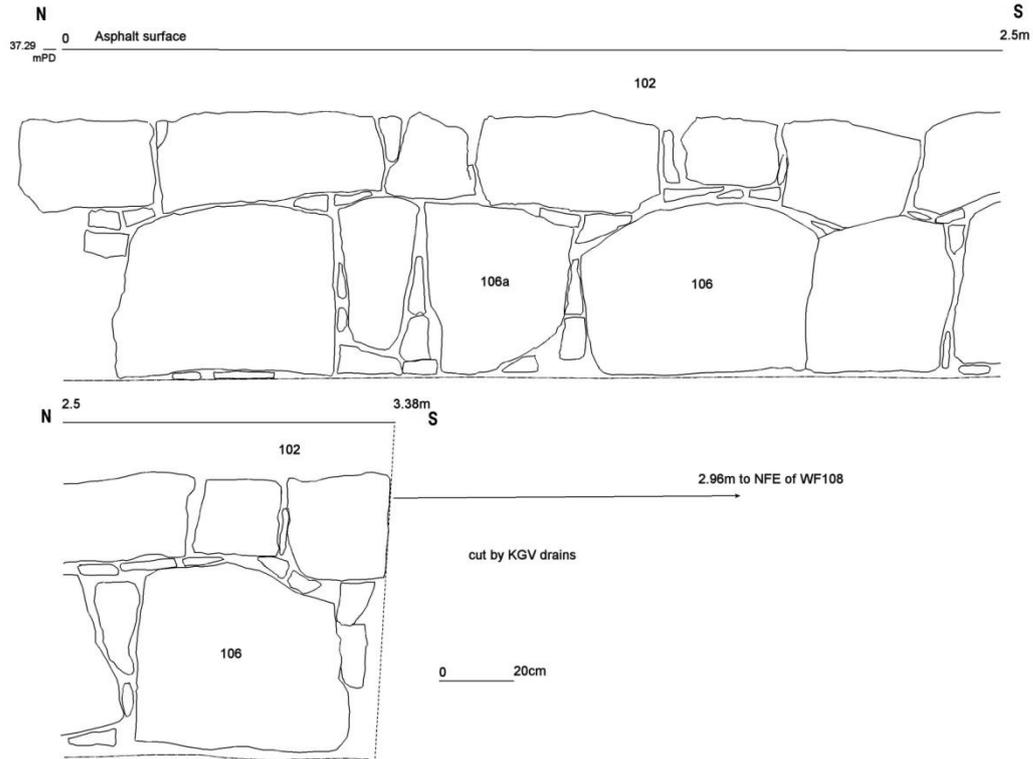
The foundation trench for the wall [104] cut into pre-existing CDG fill [105] and had an east-west orientation. Apart from three undiagnostic red tile fragments (probably 20th-century in date) (Plate 11.B.21) within the foundation cut no other dateable material was noticed.



Drawing 2 Groundplan of wall foundation 103; CDG marked is context 105

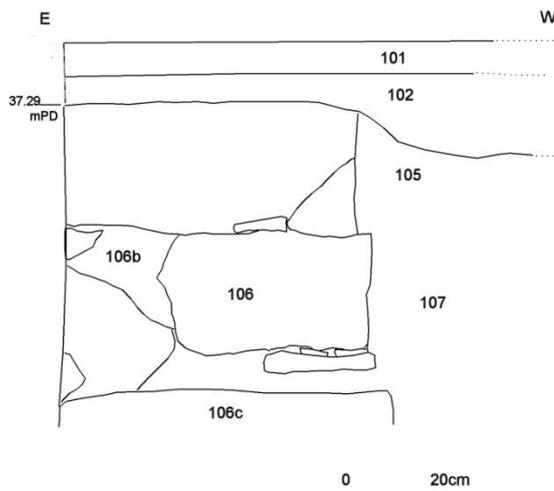
The continuation of wall foundation **[WF103]** was noted in the Northwest corner of Site M (703) and it extended for some 11m west of where it was first discovered. During removal of hardcore layer **[102]**, which sealed the wall foundation **[WF103]**, a base sherd of late 19th-century to 20th-century provincial porcelain (Plate 11.B.22) was recovered.

In ***MTB1*** a substantial and well-made wall foundation (**WF106**) was noted under the west facing section of the trench.

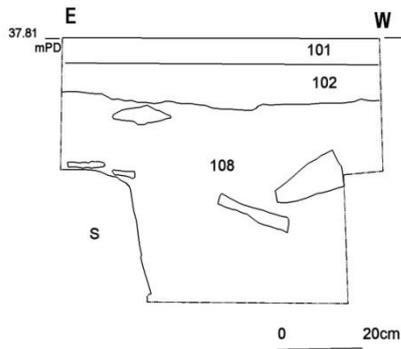


Drawing 3 Drawing shows 3 metres section of granite wall foundation 106 and which continued for approximately another 3m metres

WF106 extended some 6.5m N-S and was 0.65m high at the limit of excavation by 0.63m thick. In **CAP 3** the wall foundation had been cut by a substantial E-W orientated modern drain, but the remains of a further length of wall were visible 2.96m south of **WF106**, in the north facing section of the trench (**WF108**).

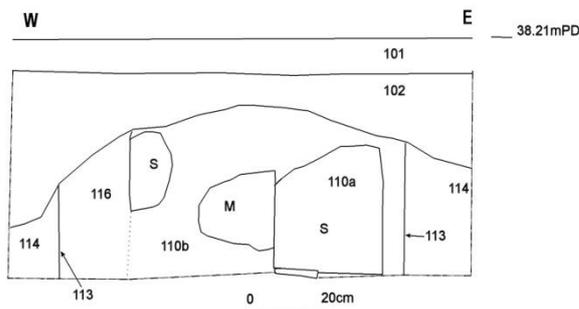


Drawing 4 Drawing showing north facing section of WF106

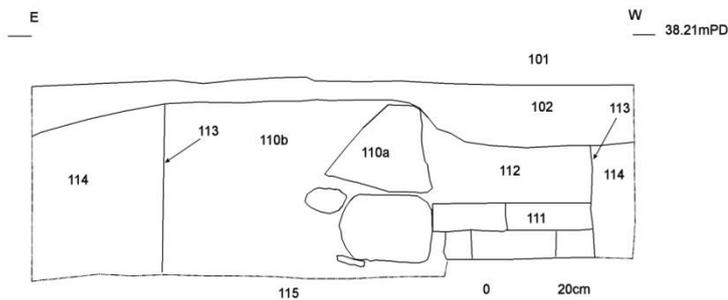


Drawing 5 Drawing shows north facing section of WF108

The full length of **TB4** contained substantial rebar foundations extending down beyond formation level. More significantly, another N-S orientated wall foundation (**WF110**) was observed near **CAP 5** in association with a brick foundation (**BF111**), which appeared to be in alignment with **WF106/108**.



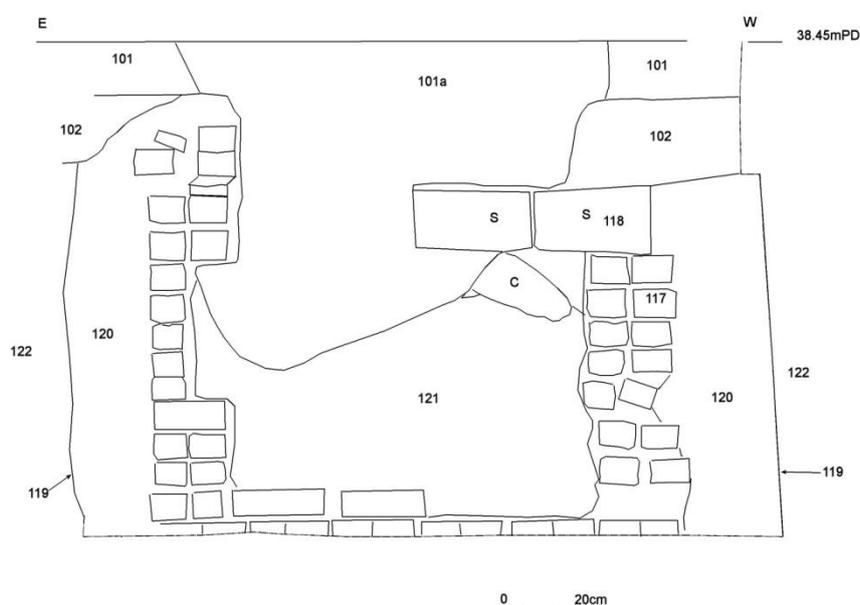
Drawing 6 Drawing showing south facing section of wall foundation 110



Drawing 7 Drawing showing north facing section of brick foundation 111, its associated contexts and its relationship to WF110

The **103/106/108/110 stone wall foundations** had a width of 0.63m and consisted of a minimum of (noted in 106) two courses of large rough hewn blocks leveled-up using small flat stones to a high of 0.65m. The closely fitted blocks with small packing stones, but no mortar in-between, were very-well made. The ashlars varied in size between 0.23 to 0.40 in width and 0.50 to 0.54m in height and 0.20 x 0.27m for smaller blocks.

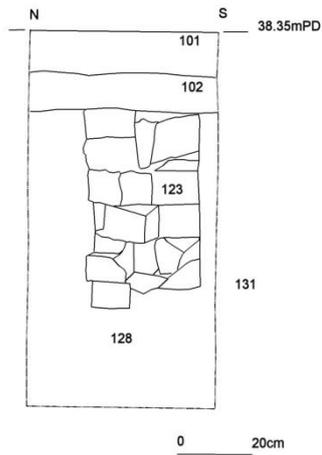
Remains of a brick structure [**BS117**] were identified in the south-east corner of the site near the junction of **CAP 8 and TB7**. The brick structure appears isolated and is a manhole. The chamber measured: 1.42m (E-W) by 0.27m (N-S) and at the end of excavation has a height of 1.04m on its east side and 0.88m on its west side. The red bricks measured 21 to 22cm in length, 10cm wide and 7cm thick. The structure had been back filled with rubble and capped with concrete.



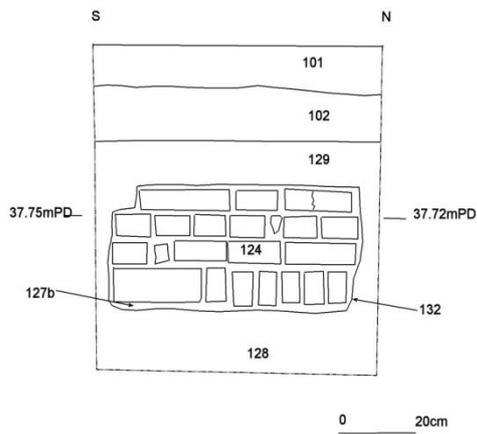
Drawing 8 Drawing showing the manhole 117 and it associated contexts, showing north facing section

F. Shaft - Ring beam

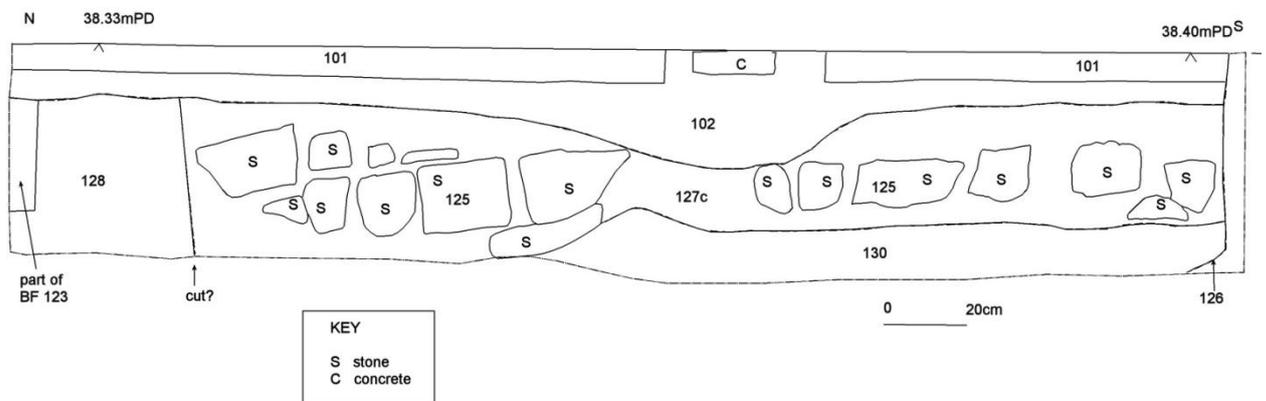
Eastern side of shaft ring-beam groundworks, three sets of structural remains were noted: an E-W orientated red brick foundation (**BF123**), an E-W orientated grey brick foundation (**BF124**), and an N-S orientated granite wall foundation (**WF125**). **BF123** consisted of a patch of red bricks. **BF124** consisted of 4 courses of grey bricks, of which the first one was laid on edge and 3 following ones laid flat. **WF125** had a gravel/mortar layer below the granite blocks (**130**), but within the same cut (**126**).



Drawing 9 Drawing showing west facing section of feature BF123 and associated contexts

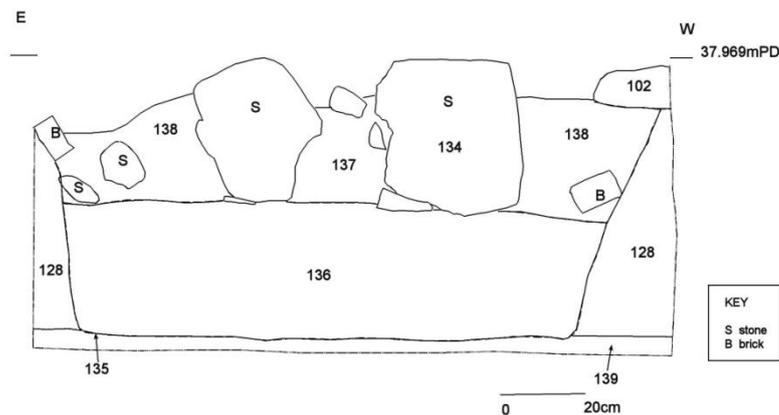


Drawing 10 Drawing showing east facing section of feature BF124 and its associated contexts



Drawing 11 Drawing showing west facing section of WF125 and its proximity to BF123

A further fragmentary wall foundation (**WF134**) was identified in the NE quadrant of the shaft footprint. The remains of **WF134** had an upper surface level of 37.98m PD – approximately 0.15m below the modern basketball court (BBC) surface, whilst the base level of the foundation trench cut was at 37.30m PD. **WF134** was constructed in a manner similar to previous granite foundations on site, having a mortar/gravel hardcore bed upon which the granite block foundation had then been built. The blocks ranged between 43 by 45 by 18cm and 29 by 30 by 18cm filled in between with smaller stones.



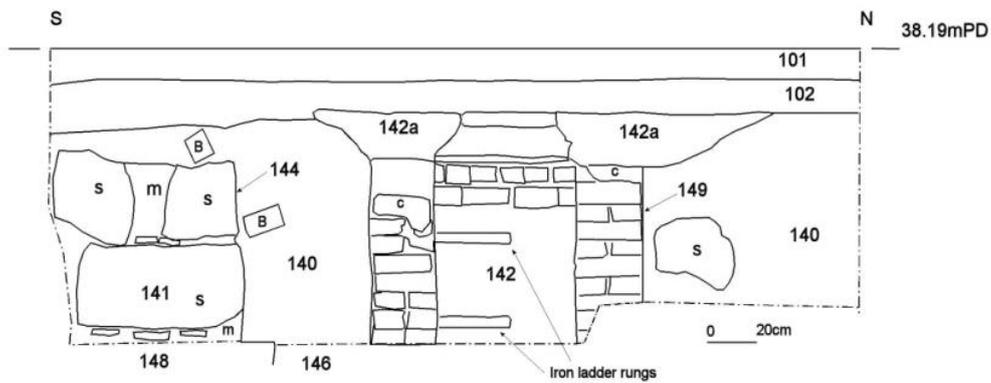
Drawing 12 Drawing showing WF134 and its foundation bed 136, both set in cut 135

G. Spoil basin - ring-beam

The remains of a granite wall foundation and brick manhole [**WF141** and **MH142**] were first unearthed in the *Northwest corner* of the spoil basin area. The two lengths of granite wall foundation [**WF141**] were uncovered – one E-W orientated foundation at the western edge of the spoil basin and another 5m-long E-W orientated example, appeared to be the continuation of the one found the previous day. Few artefacts were found in the CDG fill (**140**) surrounding the structures (Plate 12.A.1); the finds consist of Qing to early modern materials. **MH142** is a more recent manhole structure.

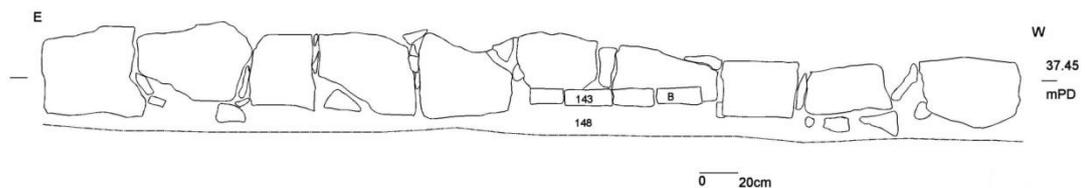


Plate 12.A.1
Photograph showing the finds from context 140



Drawing 13 Drawing showing east facing section of WF141 and more recent manhole MH142 and their respective associated contexts

BF143, which consisted of a single course of four red bricks, was attached to the north face of **WF141** and has the same mortar/gravel bedding (**148**) as commonly found under wall foundations and brick foundations belonging to the hospital.



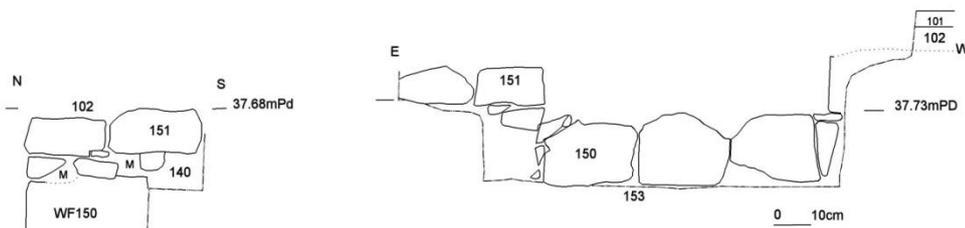
Drawing 14 Drawing showing north facing elevation of WF141 with BF143 attached to its north

Also found was a small red brick foundation [BF145], which was located in the Southwest corner of the spoil basin area. The brick foundation consisted of 2 courses of red brick set in red mortar (Plate 12.A.2); two disturbed granite blocks (not pictured below) were found nearby and it is possible that they were associated but were robbed out of the wall. The red bricks measured 10.5cm in width by 22cm long and 7cm in thickness.

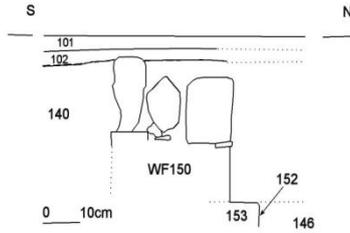


Plate 12.A.2 Photograph shows BF145

An E-W oriented granite wall foundation [WF150] and part of the upper granite ashlar courses [WF151] were recorded to the southwest of WF 141. The wall had a corner to the south on its eastern extremity. The wall fragment here too had a mortar/gravel bed [MG153], consistent with the other wall of the hospital.



Drawing 15 Drawing shows west facing elevation and north facing elevation of WF150 and 151

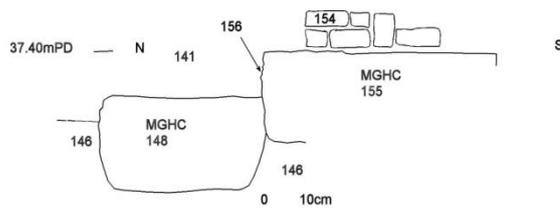


Drawing 16 Drawing shows east facing elevation of WF150/151 and its mortar/gravel foundation bed 153

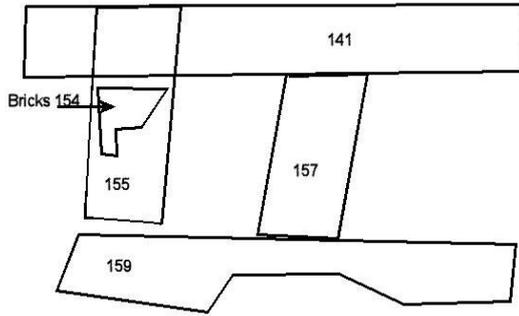
Only the north facing elevation of the 5m-long wall foundation [WF141] was visible in the southern edge of the ring-beam trench, but had not yet been fully exposed.

During the next AWB visit, an examination of the spoil basin area revealed that granite wall foundation WF141 had been largely removed without recording, despite clear instructions to the contrary and in the full knowledge that the AMO had arranged a site visit specifically to view the remains during the afternoon.

On further excavation, it was clear that all granite blocks of the wall foundations had been removed by the contractor and all that survived was the mortar/gravel levelling foundations. The mortar/gravel-filled bedding trenches of four lengths of wall foundation were thus identified: E-W orientated MG148 (under WF141), E-W orientated MG159, both parallel with and south of MG148, and N-S orientated cross-walls MG155 and MG157. The latter two were added later than the E-W oriented walls MG148 and MG159. MG155 had some fragmentary remains of a red brick foundation BF154.



Drawing 17 Drawing of west facing elevation showing BF154 and gravel/mortar foundation beds 155 and 148



Drawing 18 Plan showing the relationship between MG148, 159, 155 and 157

Appendix 12.B Comments and Responses

Comments by AMO on Draft AWB report	Reponses
Received by email 22 March 2013	
It is interpreted that the archaeological features discovered in Site M related to the Smallpox Ward (mapped in 1899) of the Civil Hospital. However, you may wish to note that the Smallpox Ward was replaced by other buildings such as the "LYNGIN Hospital" with reference to the map of 1930s-40s. Please check and clarify your interpretation of the dating of the unearthed archaeological features.	Noted. LY[I]NGIN Hospital most likely refers to 'lying in Hospital' which refers to a women/children's hospital. This building is the last one to appear on maps and as only one building phase was recorded during the AWB programme it is possible but not definite that the finds represent this last phase. Interpretation will be checked and revised.
The explosion of Gas Works in Shek Tong Tsui happened in 1934 and the following redevelopment of the Shek Tong Tsui may affect the archaeological potential of the area. Please check and supplement necessary information in the report accordingly.	Noted, information will be supplemented. Shek Tong Tsui Gas Works explosion affected an area to the north of J2 and J3. The explosion killed 41 people but the fire was contained and did not affect surrounding area and remained localized. The victims of the fire were thought to be local residents, but the fire did not spread beyond the gasworks according to accounts.
Non-technical Summary (both English and Chinese versions) on page 4, please check whether J2 should be Whitty Street Public Toilet and J3 should be HKU Entrance.	Thank you, you are correct J2 is Whitty Street Public Toilet and J3 is HKU Entrance.
Non-technical Summary (English versions) on page 4 and Introduction on page 5, "West Island Line Extension" should read "West Island Line".	Noted. Text will be amended.
First paragraph of page 5, please check whether "Annex A" should read as "Appendix A".	Noted, Annex will be replaced by Appendix
Section 3.3 on page 7, please check whether Figure 1.A.2 should read "11.A.2".	Noted, typo will be amended.
Table on page 10, last date of AWB visit to Work Site J3 is not clear.	A number of brief visits were undertaken in May 2011 to verify if further excavation would be undertaken. For clarity, dates will be added.
Area I or Work Site I is identified as low archaeological potential in Section 2 on page 5 and Section 5.3 on page 13. However, it is also ranked as very low archaeological potential in the table on page 10. Please	Work Site I should be considered as <u>very low</u> archaeological potential due to the distance from original coastline, its elevation and additional impacts from development and road construction.

clarify.	
Page 14, paragraph 3 of Section 5.4, please indicate the "eastern half of the Phase 1 Works Area" in Figure 11.B.4 for easy identification.	Noted, location of modern rebar foundations will be indicated in the Figure 11.B.4.
Page 15, please check whether the heading of Section 5.6 should be "Works Site J2, Whitty Street Public Toilet".	Noted, heading will be amended.
Page 15, please check whether the heading of Section 5.7 should be "Works Site J3, HKU Entrance".	Noted, heading will be amended.
Page 16, please check whether the heading of Section 5.8 should be "Works Site M, KGV Memorial Park".	Noted, heading will be amended.
Page 17, Figure 11.B.6 mentioned in the fourth paragraph cannot be found. Please check and revise.	Noted. Figure reference should be Figure 11.B.5. Reference will be changed.
Page 17, please clarify whether the well-made wall foundation (WF106) discovered in MTB1 is completed or fragmentary.	Noted, text will be added to clarify.
Page 19, please supplement the photo of the pottery sherd found on top of WF103 as mentioned in the second paragraph.	Noted. Photo of find was supplied in report (Plate 11.B.22); reference will be added on page 19.
Page 19, please check whether the heading of Section 5.9 should be "Works Site M2, Western End of Centre Street".	Noted, heading will be amended.
Page 19, paragraph 1 of Section 6, please clarify whether the foundation remains is merely a remnant of old buildings.	Noted, text will be added to clarify that the foundation remains are indeed merely remnant of old buildings.
Page 22, please check whether the heading should read as "Appendix 11.A Figures for Sections 1, 2 and 3".	Noted, text will be changed to read: Appendix 11.A Figures for Sections 1, 2 and 3".
Page 42, please consider supplementing a subheading "WORKS SITE J2, WHITTY STREET PUBLIC TOILET".	Noted, heading will be amended.
Page 43, please consider supplementing a subheading "WORKS SITE J3, HKU ENTRANCE" on top of Plate 11.B.16.	Noted, heading will be amended.
Please indicate brick foundation BF143 and 154, granite blocks 118, granite ashlar courses WF151 in Figure 11.B.5 on page 46.	Noted, BF143 and 154, granite blocks 118, and WF151 will be added to Figure 11.B.5.
Page 47, please check whether the caption "view looking north" of Plate 11.B.20a is correct.	Noted, caption will be checked and revised.
Page 56, please check whether Plate 11.B.41 is the photo of brick foundation 143 or 145.	Plate 11.B.41 should read brick foundation 145.
Page 57, please consider supplementing a subheading "WORKS SITE M2, WESTERN END	Noted, heading will be amended.

OF CENTRE STREET" on top of Plates 11.B.43 and 11.B.44.	
Page 64, please make the table tidy and put the feature contexts under the relevant columns.	Noted, format changed when turned in to Pdf.
Page 64, please check whether context 130 should be listed under the column of shaft-ring beam.	Noted, MG 130 will be added.
Page 64. please check whether context 143, 150, 151 and 153 should be listed under the column of Spoil basin-ring beam	Noted, contexts BF143 and MG 150/151/153 will be added.
The last paragraph on page 18 states that structural remains with exception of MH142 encountered are related to the Smallpox Ward. However, text on page 64 states that MH142 is also related to the former Smallpox Ward. Please clarify.	I am sorry I can not see on page 64 where it states this, but text will be checked to make sure MH142 is interpreted as separate from other findings.
Please check whether the drawing no. of Appendix 12A is in sequence as Drawing 3 cannot be found.	Noted, a number was accidentally skipped, numbering has been rectified.
Last paragraph on page 66 mentions that WF106 was found under the west facing section of the trench MTB1, please check whether the direction on the top of Drawing 4 on page 67 should be N – S instead of S – N.	Noted, direction will be checked and revised.
Page 68, please check whether Drawing 5 should be the north facing section of WF106.	Noted drawing will be checked.
Page 68, please check whether the direction on the top of Drawing 6 should be E – W instead of W – E	Noted, direction will be checked and revised.
Page 68, please check whether the direction on the top of Drawing 7 should be W – E instead of E – W.	Noted, direction will be checked and revised.
Page 69, please check whether the direction on the top of Drawing 8 should be E – W instead of W – E.	Noted, direction will be checked and revised.
Last paragraph on page 69, please clarify the measurement of the red bricks.	Noted, text will be added to clarify measurements.
Page 70, please check whether the direction on the top of Drawing 9 should be E – W instead of W – E	Noted, direction will be checked and revised if necessary.
Page 70, please check whether the direction on the top of Drawing 10 should be N – S instead S – N.	Noted, direction will be checked and revised.
Page 71, please check whether the direction on the top of Drawing 11 should be S – N instead of N – S.	Noted, direction will be checked and revised.
Page 71, please check whether Drawing 12 should be the west facing section of WF125.	Noted, drawing will be checked.

Last paragraph on page 72, please check whether WF142 should read as MH142.	Noted, MH will be added to avoid confusion.
Pages 72 and 73, please check whether Drawing 14 should be the east facing section of WF141 and MH142. Please supplement the direction on the top of the drawing.	Noted, drawing was checked and is east facing; direction will be added.
Page 73, please check whether the direction on the top of Drawing 15 should be E – W instead of W – E.	Noted, direction will be checked and revised.
Page 74, please check whether the direction on the top of Drawing 16 (the right one) should be E – W instead of W – E.	Noted, direction will be checked and revised.
Page 74, please check whether the direction on the top of Drawing 17 should be S – N instead of N – S.	Noted, direction will be checked and revised.
Page 75, please check whether the direction on the top of Drawing 18 should be N – S instead of S – N.	Noted, direction will be checked and revised.
Page 75, Drawing 19 is too blurred to read. Please provide a clearer drawing for replacement.	Noted, drawing will be replaced.
Please move the plate caption from the right hand side of each photo to the bottom of each photo so as to make it more readable.	Noted, caption will be moved.
Please indicate the features and details (for example by an arrow sign) in the plates for easy identification.	Noted.
Some page numbers of the report are duplicated. Please check and revise.	Noted.

Second set of comments:

AMO comments received on 4 September 2013	Responses
Non-technical summary (Chinese), paragraph 3 on page 4, please revise "十九世紀末期" as "十九世紀末期".	Noted, text will be revised.
Section 3.1, paragraph c on page 7, the reference material namely, Nebbs 1992 is found missing in the Reference list in Section 8. Please check and supplement.	Noted, reference will be added.
According to the Comments and Responses in Appendix 12.C, a number of brief visits were carried out in May 2012 to verify if further excavation would be undertaken in Site J3. However, the Table on page 12-13 under Section 4.4 stated that the visits to	Noted, responses to comments will be rectified.

<p>Site J3 were undertaken in May 2011. Please clarify and ensure the information is coherent.</p>	
<p>Figure 11.B.5 on page 52, please check whether "188" marked at the bottom right should read "118".</p>	<p>Noted, figure will be corrected.</p>
<p>Plate 11.B.22 on page 53, please check whether the caption should read "...late 19th-century to 20th-century" instead of "...late 19th-century to early 20th-century" to tally with the description in paragraph 1 under "A. Noise enclosure" on page 19 and paragraph 2 under "D. Interpretation and conclusion" on page 21.</p>	<p>Noted, text will be changed.</p>
<p>The last paragraph on page 72, please check whether the 4th sentence should read "The red bricks measured 21 to 22cm and were 10cm wide and 7cm thick".</p>	<p>Noted, text will be amended.</p>
<p>Please ensure that the report is free of editorial errors after all tracked changes are accepted.</p>	<p>Noted.</p>