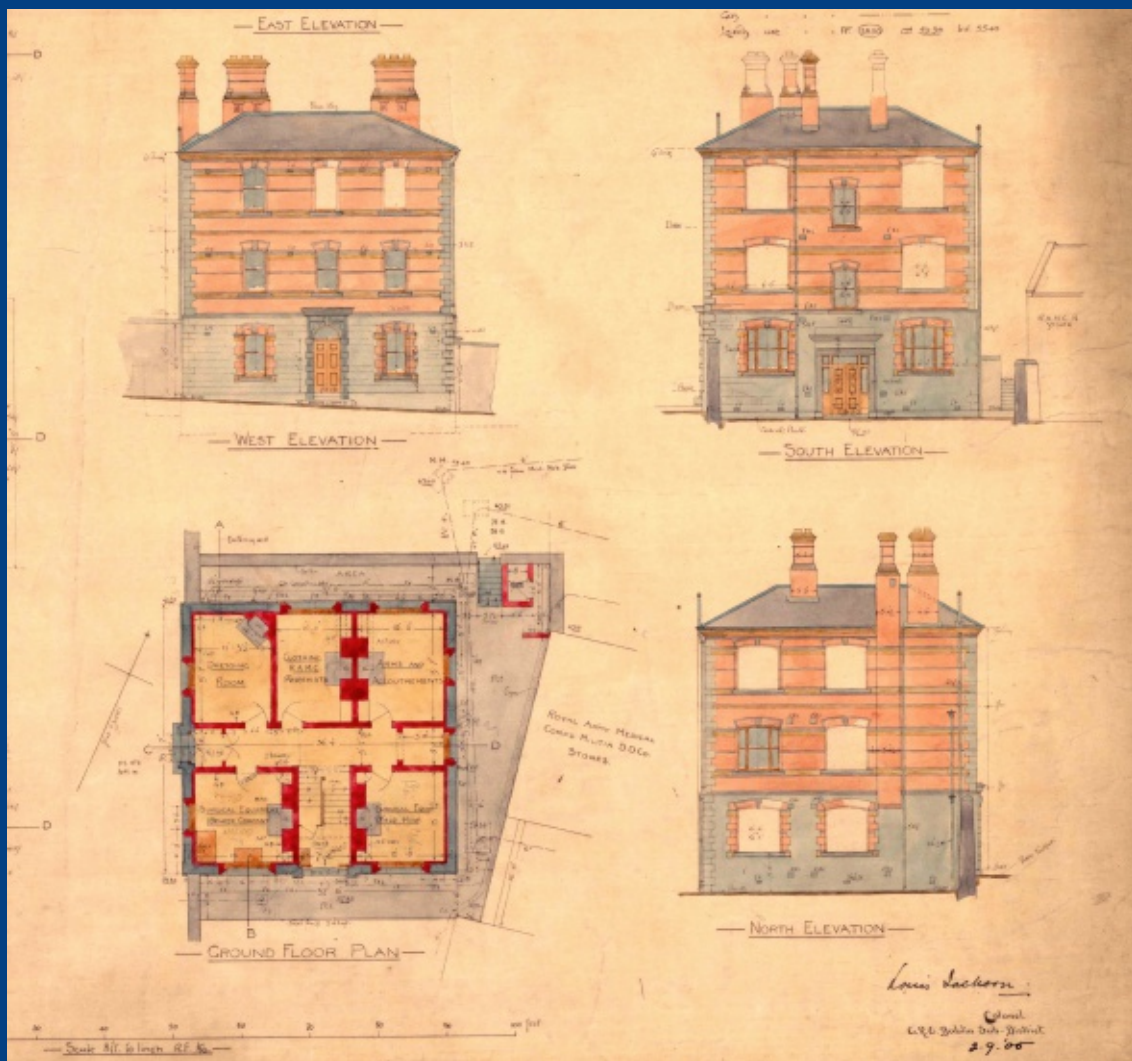


Archaeological Assessment Former Military Stores site, Infirmary Road, Dublin 7



GIACOMETTI

31/05/2019

LICENSE 18E0402

PLANNING N292/894

SITE NAME

The former Military Stores site, former Dept. of Defence, Infirmary Road, Dublin 7

CLIENT

City Architects, Dublin City Council, Civic Offices Wood Quay, Dublin 8

LICENCE

18E0402

PLANNING

DCC Part 8 (Dept of Housing Ref N292/894; Ref H00079)

REPORT AUTHOR

Antoine Giacometti

DATE

31st May 2019

ABBREVIATIONS USED

DAHRRGA	Dept. of Arts, Heritage, Regional, Rural and Gaeltacht Affairs
NMI	National Museum of Ireland
NMS	National Monuments Service
OS	Ordnance Survey
RMP	Record of Monuments and Places
NIAH	National Inventory of Architectural Heritage
LAP	Local Area Plan

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Section 1 Introduction

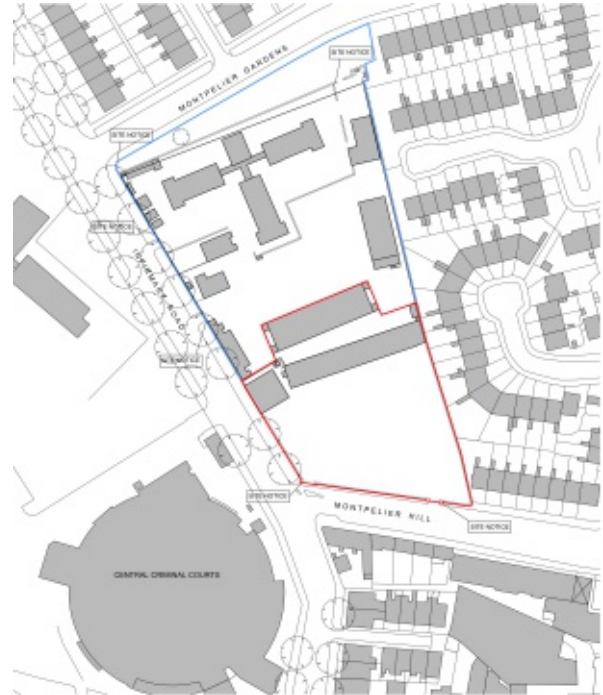
Introduction

This is an archaeological assessment of a former Department of Defence site on Infirmiry Road, Dublin 7. It updates the 2005 Archaeological Assessment (Barber & Giacometti 2005) focusing on the proposed development of the southern portion of the Infirmiry Road site for a social housing scheme.

Site location

The 'Study Area' comprises a former Department of Defence site on Infirmiry Road, Dublin 7. It is situated on the eastern side of Infirmiry Road, north of Montpelier Hill, south of Montpelier Gardens and west of housing off Montpelier Park and Drive (Kings Ward; St Paul's Parish; NGR 31365/23460). The Study Area comprises a complex of disused military buildings enclosed by a masonry wall.

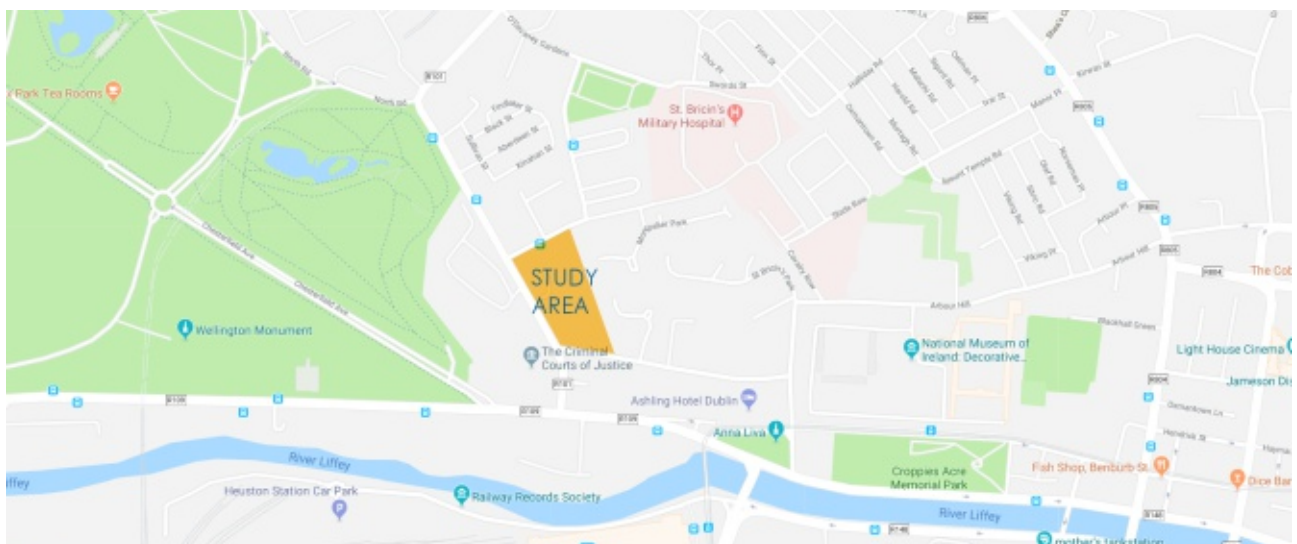
This report focuses on the southern part of the Study Area, the former Military Stores site. This portion of the Study Area is equivalent to Zone



Current layout and location of Study Area, with site in red

1 and the southern part of Zone 2 described in the previous archaeological and architectural assessments (Giacometti & Barber 2005; Paul

Location of Study Area



Arnold 2004).

The Dublin City Development Plan 2016-2022 lists a Protected Structure at the development site. This is the Department of Defence, three storey brick and stone building (otherwise known as the Former Stores and Married Quarters) and stone wall (RPS 3994). The former married quarters is currently on the Buildings at Risk list having become endangered through lack of maintenance (Egan 2004). The stone wall refers to the masonry boundary wall enclosing the Study Area. Two further buildings: the former Medical Mobilisation Store (Old Library); and Isolation Hospital, are listed on the NIAH but are not Protected Structures. Map E of the 2016-2022 Dublin Development Plan marks the Isolation Hospital as a second Protected Structure, however the hospital is not listed on the RPS, which takes precedence, and is therefore not a Protected Structure. There are no Recorded Monuments or National Monuments within the Study Area.

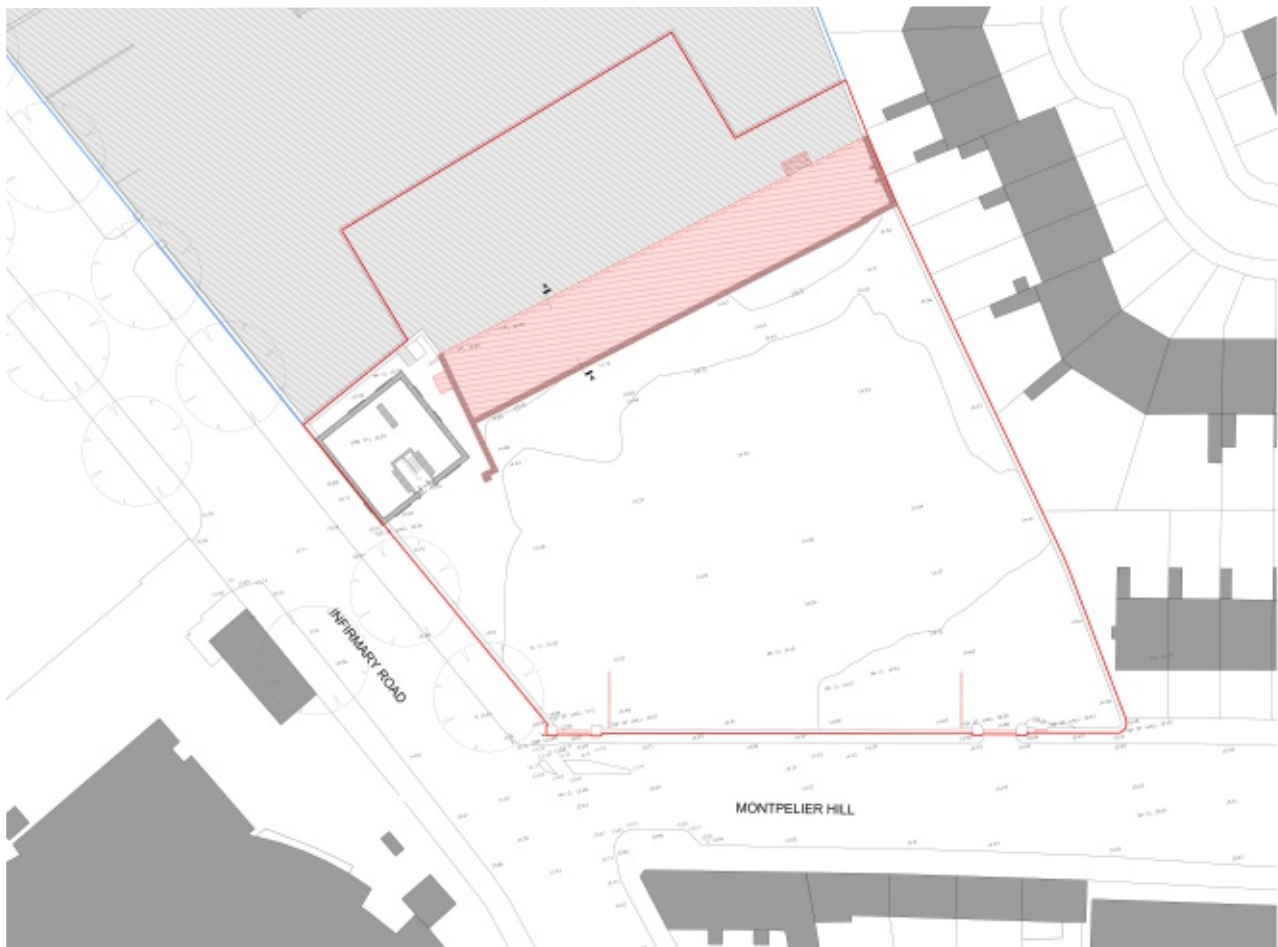
Development proposals

Dublin City Council are proposing to construct a social housing scheme on the southern portion of the Study Area (former military stores). This represents the first phase of a larger re-development plan for the complex, the northern part of which is currently in the ownership of the OPW. 38 social housing units in apartments and duplexes are currently proposed. The scheme received approval from the Department of Housing, Planning, Community and Local Government Reference Number N292/894.

The scheme aims to maintain the enclosure wall (Structure A) and reopen the two existing historic gates on Montpelier Hill. The wall is a Protected Structure and a key part of the historical integrity of the Study Area as a former military complex. Interventions to the upper parts of the wall on Montpelier Hill are proposed, by removing the latest and highest phase.

Plan of the proposed development





Existing layout of proposed development area, with buildings to be demolished in red

The eastern boundary wall will be partially rebuilt to stabilise it. The boundary wall along Infirmary Road will be retained in full and not impacted upon.

The scheme proposes to demolish the former store shed and Militia Barracks building (Structure C in Arnold 2004), and replace it with a building of approximately similar size and location. The existing lower retaining wall, if present below the building, will be demolished. The modern building in the north of the former Military Stores site (Structure D) will be demolished. The existing historic tiered nature of the site will be retained.

The scheme will conserve the former Married Soldier's Quarters (Structure B), a Protected

Structure, and convert it into accommodation if possible. The walls and outhouses surrounding the married quarters will be demolished in the scheme.

The new social housing units are situated with respect to the Protected Structure, and aim to maintain the impressive setting of the building by allowing space around it. The scheme retains the view of the married quarters from the bottom of Infirmary Road, which is an important element of the site.

The scheme will maintain a link between the former Military Stores site and the former hospital site to the north, in the same location as the existing link, which is appropriate given the history of the complex.



Google Maps satellite image of Study Area c, 2018.

Section 2 Archaeological Background

Recorded Monuments

The zone of archaeological potential defining Dublin City (RMP No. DU018-020--) runs approximately east to west across the Study Area and includes all of Site S within its boundary. The zone of archaeological potential comprises a series of individual elements, none of which are situated in the immediate vicinity of the proposed development site. In the vicinity of the Study Area the line of archaeological potential corresponds closely with the historical political boundary of Dublin City (formerly the City Liberty), however it is of possible interest that the boundaries diverge within the Study Area: the City Liberty includes only a small part of Site S, whereas the Zone of Archaeological Potential (as defined in the SMR maps of Dublin c. 1980s) include all of Site S.

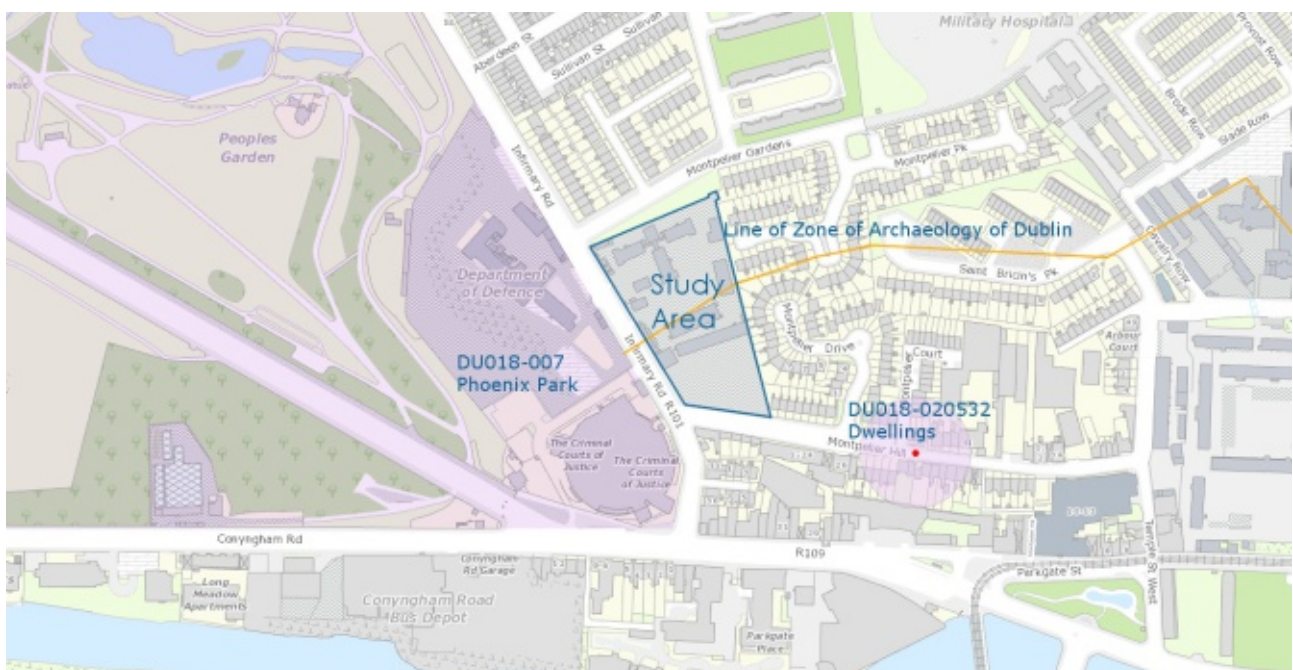
Two specific Recorded Monuments lie within 100m of the proposed development site. These

are the Phoenix Park (RMP DU018-007), the edge of which is situated 15m to the west of the Study Area, and ‘dwellings’ (RMP DU018-020532) situated on Montpelier Hill, 100m to the east of the Study Area.

The entire area of the park as defined by its enclosing walls is recognised as a single archaeological zone (Recorded Monument No. DU018-007) and is given the classification of Archaeological Complex. This zone is composed of a series of disparate monuments. The proposed development would not impact physically or visually on any of these monuments. However, the development will have a visual impact on the Deer Park Wall of the Phoenix Park which runs up the western side of Infirmary Road, directly opposite the Study Area.

The ‘dwellings’ (RMP DU018-020532) are situated on Montpelier Hill, at a terrace of historic structures at 35-52 Montpelier Hill. The earliest

Recorded Monuments near Study Area and line of Zone of Archaeology of Dublin



Recorded Monuments listed under the Phoenix Park

Monument	National Grid	Description
DU018-00701	N/a	Deer Park wall
DU018-00702	31120/23635	Tower House
DU018-00703	31126/23622	Mound
DU018-00704	31010/23610	Dwelling site
DU018-00705	31156/23582	Well, possible
DU018-00707	31085/23527	Enc. possible
DU018-00708	31285/23539	Well
DU018-00709	31294/23510	Megalithic structure
DU018-00710	31137/23425	Road
DU018-00711	31056/23467	Cemetery mound
DU018-00712	31257/23486	Star shaped fort
DU018-00713	31217/23447	Dwelling site
DU018-00714	31105/23550	Dwelling site
DU018-00719	31217/23447	Fort

structures on this terrace at Nos. 37, 39, 48, 50 and 52, date to the late 17th century or beginning of the 18th century and are of ‘Dutch Billy’ type (Craig 1969, 87). The RMP file does not record any specific information concerning the dwellings site, but buildings are depicted at this location on Brooking’s map of 1728. These historic structures will not be impacted upon by the proposed development.

Previous excavations

Six archaeological excavations have taken place within c. 100m of the Study Area. These are listed below in order of proximity to the Study Area.

In 1993, a programme of archaeological test trenching was undertaken within the Study Area, in Site S (93E063; excavations.ie ref. 1993:077, Hayden). Three 1m-wide test-trenches were excavated in a ‘H’ plan. Natural subsoil (yellowish-brown boulder clay) was reached at a depth of between 200mm and 400mm below modern ground level in the west of the site, and at less than 100mm in the east

of the site. The concrete slab in the south of the site rested on hardcore directly over subsoil. A number of modern walls and drains relating to demolished 19th or early 20th century buildings were identified, all containing red brick or bonded with a very hard modern mortar. The drains contained modern pottery, red brick and modern piping. The site appeared to be of no archaeological significance (Hayden 1993, unpublished report lodged with NMS).

Archaeological excavations at the Royal Infirmary and Criminal Courts by Myles (07E0937 & 07E0488) identified the site of a chemical plant called the Research and Production Plant, Parkgate in use from 1942 to 1947. The archaeological work ‘revealed a hidden history of the state’s attempt to achieve self-sufficiency during the Emergency in certain chemicals essential to the munitions industry. The production of phosphorous and potassium chlorate, both highly dangerous and unstable substances, was initially directed to the manufacture of hand grenades; however other explosive substances could have been developed for manufacture on the site’ (Myles 2007, 57). The excavation also identified an undated wall marking the parlia-

Previous Archaeological Investigations within 100m of Study Area

License	Site	Findings	Author
93E0063	Defence Dept., Infirmary Road	N/a	Hayden
07E0937	Royal Infirmary, Infirmary Road	Post-medieval	Myles
07E0488	Criminal Courts, Parkgate Street	Post-medieval	Myles
95E0197	12-24 Montpellier Hill	N/a	Murphy
97E0466	29-41 Montpellier Hill	N/a	McMahon
08E0483	BGE Feeder Mains, Conyngham Road	N/a	Frazer



Location of previous archaeological investigations in and around the Study Area

mentary boundary, the same boundary (minus wall) which runs through Site S of the Study Area.

Excavations at 12-24 Montpelier Hill (95E197; excavations.ie ref 1995:079, Murphy) and 29-31 Montpelier Hill (97E0446, excavations.ie ref 1997:149, McMahon) identified no archaeological features, recording only artefacts dating from 18th century or later. Natural ground was encountered approximately 1.1-1.3m below modern ground level at the latter site. Excavations further along Montpelier hill at Nos. 61-63 similarly found no archaeological deposits (97E0460; excavations.ie ref 1997:150, McMahon). Investigations at 50 Montpelier Hill identified 18th and 19th century structural remains (excavations ref 2004:152, Simpson).

A programme of archaeological monitoring for the laying of a pipe along Parkgate Street (08E043, Frazer) identified no archaeological material near the Study Area. Other investigations further along Parkgate Street (98E0188; excavations.ie ref. 1998:182) also identified no archaeology and noted that natural riverine silts and clays immediately underlie the present surface and post-medieval contexts.

Excavations have also taken place at the Aisling Hotel at Parkgate Street-Montpelier Hill-Temple Street West (96E250, excavations refs. 1996:107 & 1997:157) and identified an early 18th century dump. A cave was found during the clearance which contained a minimum of three horse skeletons. The cave was set back into natural boulder clays and is most likely to be a natural feature enhanced by human activity. Finds from within the cave dated from the 18th century.

Summary

Previous archaeological excavations in the vicinity of the Study Area suggest largely 18th through to 20th century occupation, generally of a militaristic nature. The results of excavations at the adjacent Criminal Court and Royal Infirmary demonstrate the possibility of encountering 20th century ordinance, with safety implications for groundworks within the Study Area. Very little evidence has been recovered to suggest occupation of an earlier date, although prehistoric activity has been noted at Hammond Lane and in the Phoenix Park. The occurrence of riverine deposits south of the line of Montpelier Hill/Benburb Street suggests that the site would have been elevated above the northern extent of the River Liffey flood plain.

Borehole report

In addition to the above listed archaeological excavations, sub-soil conditions of the Study Area were investigated by engineers in 1980 (Report No. S. 320, dated April 1980, Irish Soil Laboratories Ltd.) to assess the nature and strength of the sub-soil strata, in advance of the construction of a proposed new headquarters complex for the Department of Defence. The investigation included the digging of ten bore holes and three additional drilled holes.

Engineering bore holes are not a good indication of the presence or absence of archaeological deposits on a site, however they can give an indication of the base of potential archaeological deposits. Since the sample is not retained during rotary wagon drilling, the results of the three drill holes could not be used to give an indication of the depth of archaeological deposits.

The bore holes were located across the site, and the results indicated a consistent pattern. Topsoil and fill or made ground (i.e., potential archaeological deposits) extended to an average depth of 1m below the surface. This material is generally high in rubble content. The deposit measured 0.20m-0.90m in depth in the north of the Study Area and 0.90m-1.50m in depth in the south, following the landscape contours sloping down towards the River Liffey to the south.

The results of the boring programme indicated the presence of a brown glacial till below the made ground, extending to an average depth of 2.80m below the surface. Such material has the potential to be partially composed of archaeological deposits, particularly near the top. Archaeological sites are commonly composed of layers of brown clays laid down directly over natural glacial till, and it can be difficult to differentiate between the two.

The brown glacial till was absent in the southernmost bore hole (No. 10), which instead revealed coarse sands and gravels to a depth of 4m. Such deposits may indicate the presence of a former water-related feature, such as an earlier course of the River Liffey located north of its present course.

The bore hole located to the northwest of the site revealed that the ground was disturbed to a depth of 3m, probably due the insertion of a water tank. This is likely to have removed all possible archaeological deposits in the area.

Black Dublin Boulder Clay was encountered at between 2.10m and 4m in depth. This material is formed by natural glacial and post-glacial processes, and as such indicates the lowest level at which archaeological deposits are likely to be found.

Topographical Files

The files held in the National Museum of Ireland provide information on artefacts, their find spots, and any field monuments which have been notified to the National Museum. No files refer to the Study Area. Files from the wider locality which reflect the archaeological potential of the area and are listed below.

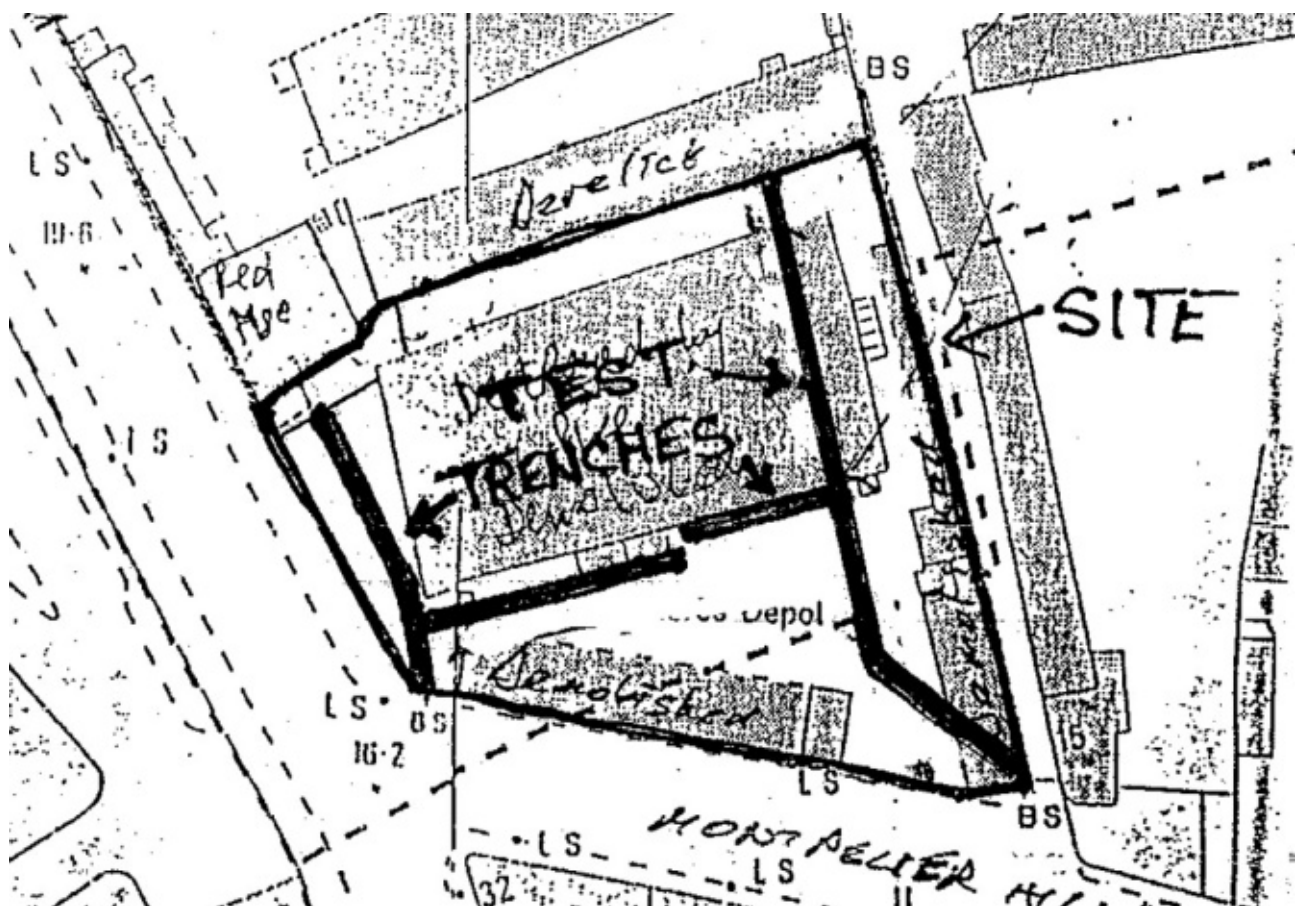
The closest file to the Study Area concerns the discovery of a 17th century iron dagger (Museum Reg. No. 1984:410) during pipe laying at the corner of Collins Barracks and Arbour Hill. It was found below the ground at a depth of 1m.

To the northeast of Infirmary Road on Aughrim Street the museum records the finding of a boar's tusk in garden topsoil (Museum Reg. No. 1955:11). It is recorded that several boar tusks had been found a few years before in the same place, one of which was perforated.

To the west of the Study Area, the museum records that Military artefacts found near the magazine fort in the Phoenix Park were brought to the attention of the National Museum of Ireland by an amateur treasure hunter (Museum Reg. No.: Record only). The finds listed include plated blank buttons dating from between 1800-1830, 18th century musket ball fragments, a button of the Welsh 19th century 41st Regiment, an 18th century Scottish lead token, an undated eyelet type fastener, a horse harness ring, large buckle, bone spoon, animal teeth and other unidentified metal objects. In addition, metal detecting beside a Gaelic football pitch close to

the pavilion in June 1981 uncovered a hoard of 230 silver tokens dating to around 1800. The hoard contained some rare examples in good condition (Museum Reg. No. Record Only).

Location of archaeological trenches excavated in the Study Area in 1993 (93E063; excavations.ie ref. 1993:077, Hayden)



Section 3 History and Cartography

Prehistoric period

The narrow strip of land running along the south of the Phoenix Park between Knockmaroon and Islandbridge has been a setting for human activity from the Neolithic period (c. 5,500 years ago). Prehistoric people may have been drawn to the area by its commanding position over the River Liffey and unrestricted views across the valley to the Dublin Mountains.

Evidence for Neolithic and Bronze Age activity is illustrated by the cemetery mound (RMP No. DU018-00711) located in the south-west of the Phoenix Park, c. 3km to the west of the Study Area. The burial mound known as 'Knockmary' derived its name from *Cnoc-Maraidhe*, meaning the Hill of the Mariners and measured 120ft in diameter by 15ft in height (Anon 1938, 187). The site dates to c. 3500-3000BC. The discovery of a Bronze Age *Fulacht Fiadh* at Hammond Lane, east of the Study Area, provides further evidence for the use of the northern Liffey shore in the prehistoric period (Abi Cryerhall, FMD Conference 2005).

Medieval period

Early Medieval activity in the Phoenix Park west of the Study Area has been tentatively identified from aerial photographs at the 'Fifteen Acres' showing linear and circular earthworks (Leo Swan, photography contained in Dept. of the Environment, Heritage & Local Government files). This may reflect enclosed settlements such as ringforts which were common from 500 to 800 AD. A

pre-Norman ecclesiastical site may have been established at Kilmainham at this time.

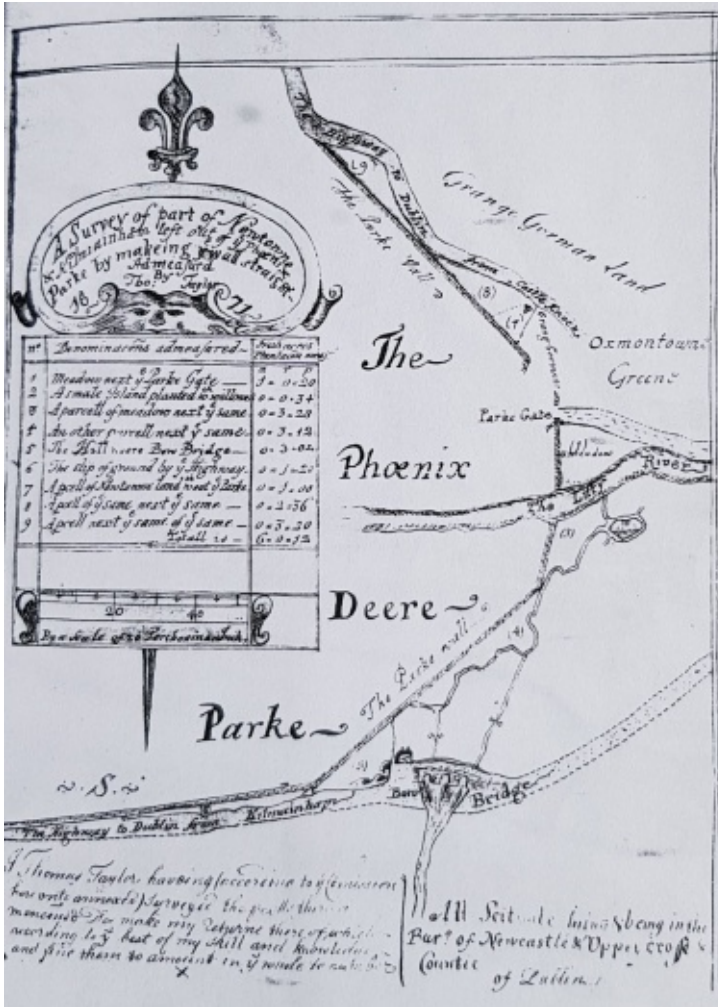
Evidence for Viking activity to the southwest of the Study Area is also notable. Gravel and railway excavations on the south bank of the River Liffey at Kilmainham and Islandbridge in the 1840s and 1850s and again in the 1930s revealed approximately forty Viking graves, representing the largest Viking cemetery outside Scandinavia.

Settlement along the northern shore of the Liffey is much better documented after the arrival of the Anglo-Normans in 1170. The suburb of Oxmantown to the east of Infirmity Road is referred to as *Villa Ostmannorum*, the town of the Ostman, *Ostmantowne*, and later as Oxmantown. The bridge known earlier as Dubhgalls Bridge becomes 'Pons Ostmanorum' (Swan 1994, 2). Unfortunately there is little direct mention of the area to the west of Oxmantown Green to indicate the nature or degree of settlement which had developed around

Bernard de Gomme's Map of Dublin, 1673

De Gomme's Map shows the Study Area to the west of an area of land named as the 'Duke of Ormonds Ground', outside the western extent of the city. This area corresponds with Oxmantown Green and the site of Collins Barracks.





'A survey of part of Newtowne and Kilmainham left of ye Phoenix Parke by making a wall straight' by Thomas Taylor, 1671

This map shows the original line of the Phoenix Park wall, which at this time included the lands of the Knights Hospitaller at Kilmainham. The 'highway to Dublin from Castlknock' is modern Blackhorse Avenue.

The Study Area is situated in the area marked Grange Gorman' just north of the Park Gate, in an area where the park wall is not depicted.



Thomas Campbell's Map of Dublin 1811
 This map is the earliest depiction of the Ordnance Stores, shown as a large rectangular building and labelled as 'Comm. Depot', i.e. military stores.



Phillips map of the City of Dublin and Part of the Harbour, 1685

This map shows the newly constructed Deer Park wall of the Phoenix Park in red. The Study Area is situated between two marked structures, the northern one corresponding perhaps to the site of the future Royal Infirmary and the southern one to a large structure directly south of the Study Area marked on 18th century maps. An east-west road shown to the north of the Study Area is not marked on later maps and difficult to interpret, but may be a military road associated with the 17th century *places d'armes* on Rocque's map.

the Study Area.

In the Anglo-Norman period, the lands to the south of the Study Area formed part of a moiety of the River Liffey (previously belonging to the Tyrrells of Castleknock) owned by the The

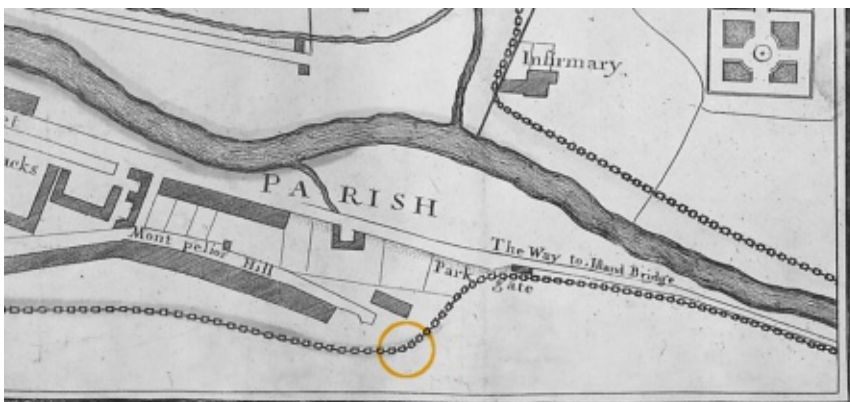
Knights Hospitallers of Saint John of Jerusalem, who founded a priory in c. 1174 at Kilmainham. The White Book of the City of Dublin refers to 'the bridge of Kylmaynan' in 1261, suggesting the knights erected a bridge over the Liffey to connect their lands on the north and south sides of the river. The bridge is mentioned again in the 16th century, and may have given Islandbridge its name. In 1577 it was replaced by a new stone bridge at Islandbridge.

In 1602 the Study Area was considered part of Earborhill (Arbour Hill), an area stretching from the Phoenix Park to Stoneybatter and from the Liffey to the North Circular Road (M'Cready 1892, 3. The name derives from '*Cnoc an Arbhair*' or 'corn hill'. The cathedral chapter of Christchurch is documented to have had tillage land and corn barns in this area (ibid, 3-4; Johnston 2004, 3).

Charles Brookings Map of Dublin, 1728

Brooking's map reflects dramatic changes in the landscape of north Dublin during the late 17th and early 18th centuries. Montpellier Hill road is named and marked, the north side of the road is bound by buildings. Infirmary Road is not marked and it appears that Montpellier Hill terminates east of the later junction with Infirmary Road, presumably at the laneway marked running north it's terminus on Rocque's later map.

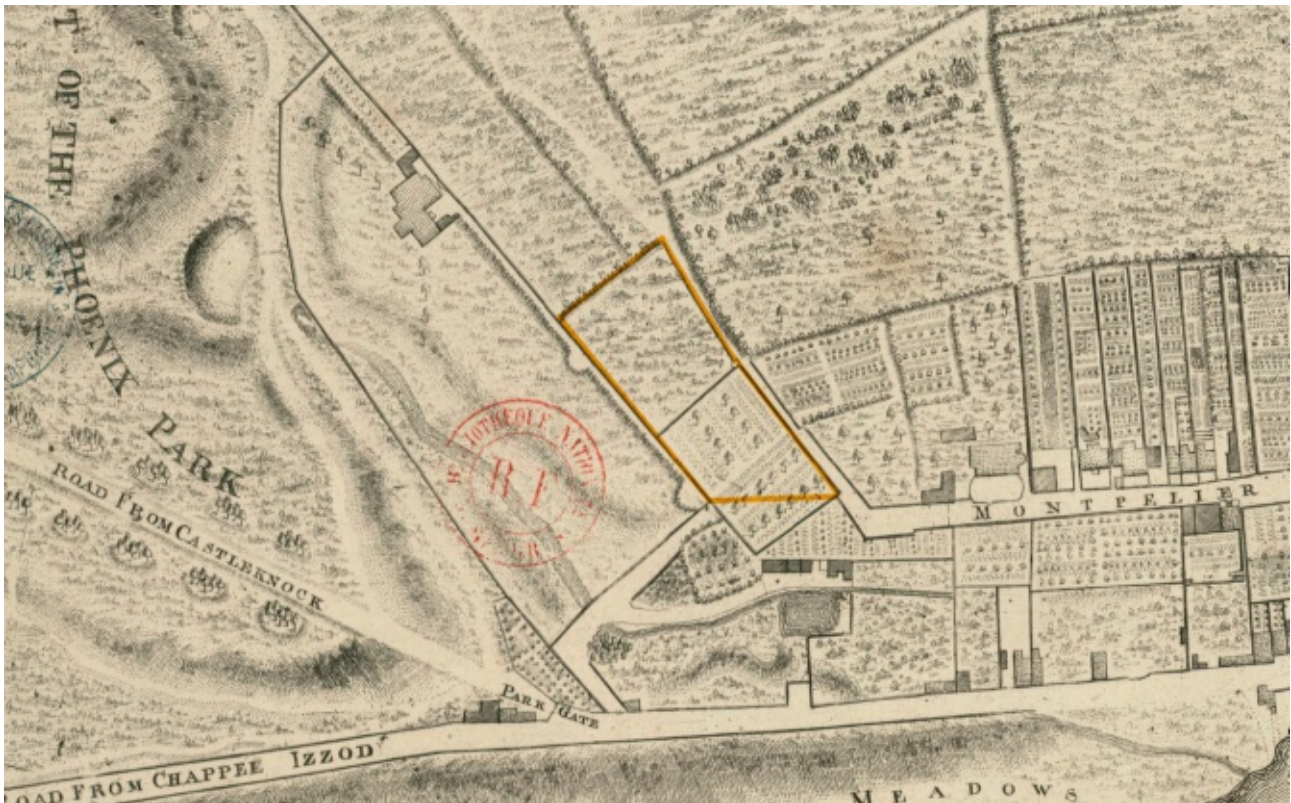
Brooking marks the edge of the City Liberty to the north of Montpellier Hill traversing in a south-westerly direction towards the river at Park Gate. The boundary crosses the southern portion of the Study Area. The boundary takes a dog-leg to the east of the site in order to include the adjacent buildings.



There are references in the Riding of the Franchises in 1192, 1488 and 1602 to a gallows located on Arbour Hill, where gallows were also erected for the execution of the prisoners taken after the uprising in 1798. The gallows are shown on the Down Survey Map of 1656. To the west, Gibbet Slade - the stream that runs through the Phoenix Park - was also named after an execution site (Tobin 1966, 487).

Early modern period

Following the dissolution of the monasteries, the lands around the Study Area



John Rocque's map of Dublin, 1756

The location of the Study Area on Rocque's map can be established by comparison with plots of on Montpelier Hill, the Royal Military Infirmary, and a number of roads. The southern part (Site S) of the Study Area is shown as being in cultivated lands, whereas the northern half (Site N) is shown as uncultivated land or pasture on the western fringes of the city. The site is depicted as enclosed by walls, with an internal wall between the north and south portions.

The Study Area is bounded by lanes to the west and east. The western lane is the future Infirmary Road, and provides access to a substantial structure of the site of the future Military Infirmary. This lane has two semi-circular features directly east of the Study Area which Myles (2007) interprets as military *place d'armes*. The eastern lane is larger and provides access to fields to the north and east of the Study Area, and also to a small structure depicted at a gate within the Study Area. This structure, which is the earliest depicted structure within the Study Area, is located in the northeast corner of Site S. A structure is also marked here, and shaded in yellow, on a Military Archives map dating to 1862-3. That map is named 'Relative sketch shewing position of Straw Store proposed to be converted into Guard Room for 2 [?].C.[?].s & 6 Men', supporting the idea the structures are the same.

passed through various landowners and by 1611 were owned by Sir Edward Fisher (McCullen 1993, 85). Fisher's residence, situated on what is now the Phoenix Park Magazine Fort, was known as *'the Phenix'* from at least 1619 and appears to have given its name to the surrounding park. In 1618 Fisher surrendered his land to King James I and his house became the Irish Viceroy's residence (Joyce 1912, 419). The Phoenix Park was enclosed as a deer park in 1662-3, however the concept of creating a Royal deer park is documented from 1623 (Litton-Falkiner 1901, 471-4; McCullen 1993, 86-7). The line of the Infirmary Road appears to have been established as the eastern boundary of the Phoenix Park in 1671-1680, when a

new straightened wall was constructed, defining its modern extent (Dillon Cosgrove 1909, 19).

Parts of the wall of the Phoenix Park appear to have been replaced since 1680. The author has examined a stretch of the park boundary wall at Chapelizod and concluded it is most likely 18th or 19th century in construction date. Similarly, Myles (2007) has examined the stretch of wall along the west side of Infirmary Road (directly across the road from the Study Area) and notes that *'the masonry has more of an eighteenth- or nineteenth-century War Department appearance and it would seem likely that the work was undertaken under military supervision, if not directly by military engineers.'* The boundary wall is a National

Monument, Protected Structure (RPS No. 6927) and a Recorded Monument as part of the deer-park of the Phoenix Park (RMP No. DU018-00701).

The Study Area is bounded to the south by Montpellier Hill, shown on Brooking's Map of 1728. The name is of French origin; this association may have originated from the settlement of French Huguenots in the area. The Dublin Pictorial Guide and Directory of 1850 lists a Huguenot school at no. 48 (Margaret Gowen and Co. 2002). Montpellier Hill was formally known as Ellen Hore's Meadow and also as Gibbet's Mead (Margaret Gowen and Co. 2002) in reference to the public gallows near Arbour Hill.

18th century militarisation

The Study Area is situated in an urban quarter of dense military activity including Collins Bar-

racks to the east, the George V (now St. Brigid's) Military Hospital (1912) to the north-east, McKee Barracks to the north, and the Royal Military Infirmary (1788) to the west. The North Circular Road (as Infirmary Road was originally known) constructed in the 1760s enabled easy access for the military to the city and wider area.

In the latter part of the 17th century, seven acres of land were presented to the viceroy, the Duke of Ormond for the purpose of building a palace, west of historic Oxmantown Green. The palace was never constructed, and in 1701, the land was sold by the Duke's son, the Duke of Ossory for the sum of £633. 1s. 6d to the Dublin City authorities as a site for a barracks. The barracks known as The Royal Barracks (later Collins Barracks) were opened in 1706 (Johnston 2004, 4; Dunleavy 2002). Indeed the building of the barracks marked the beginning of military development in the area.

Map from 'History of the city of Dublin', Warburton et al. 1818

The 1818 map depicts development to the south of the Study Area. Infirmary Road (labelled 'Turnpike') and Montpellier Hill are in their current configurations. A range structure has been constructed in the south of the Study Area, in the same location as the 'Comm.~ Depot' on the 1811 map (see above).





First Edition of the 6" Ordnance Survey Map, Dublin Sheet 18, 1837

The 1837 Ordnance Survey Map, clearly defines the outline of the Study Area. The southern part of the Study Area is taken up by a long building marked 'Ordnance Stores' orientated approximately east-west. A longer narrower building to the north is unlabelled ('Shed 1') and has a projection to the northeast corresponding with the 'Straw Stores' on the 1862 map and possibly to the unlabelled building on Roque's map. A building is also located at the southeast corner of the site ('Control Offices'). The boundary to the north and east of the Study Area is marked by a row of trees. The laneway to the east remains in existence. The townland, city and parish boundaries (formerly City Liberty) run through the southern part of the Study Area and up the laneway.

Contemporary with the construction of the Collins Barracks, Arbour Hill was laid out in 1703 whilst Montpelier Hill - which forms the southern boundary of the Study Area - was laid out in 1728. Myles (2007) has suggested that the line of Infirmary Road was also established at broadly the same time. Myles points to two semi-circular areas just inside the Infirmary Road park wall depicted on Roque's 1756 map that may represent places d'armes constructed in the 1640s to defend this flank of the city, and also points to its excellent defensive topography. Myles (ibid) suggests that the plots either side of the future Infirmary Road could have been under military ownership from c. 1704.

Myles' theory is backed up by The Return of All Lands and Tenements Book 1901-05, which records military land in the parishes of Grangegorman and St Pauls, including the Infirmary Road/Montpelier Hill site. Lands within

the parish are listed as including the Regimental Hospital and Provost Prison, purchased from Viscount Palmerston on 12th March 1802 for 821 pounds 60 shillings, and the Military prison, chapel, school and burial ground, which were leased from Viscount Palmerston on 30th November 1847. Two sites for married quarters are also listed: one leased from Viscount Palmerston on the 2nd June 1863 from the 25th March that year, the other bought from Lord Mount Temple on the 24th August 1895 for 500 pounds (Myles 2007).

In the Phoenix Park, the Artillery Fort was constructed over the Phoenix House in 1734, then heavily renovated in c. 1800 (Giacometti 2015). A star-shaped fort was constructed nearby at the site of the playing fields south of Chesterfield Avenue close to Park Gate, but this huge fort known as 'Wharton's Folly' was never completed. The Mountjoy barracks (RMP No.



Five-foot Ordnance Survey City Map, Dublin Sheet 12, 1847

The Ordnance Survey Contour Map of 1847 reflects the same footprint laid out on the 1837 edition with the addition of a square feature towards the southeast corner of the site, and additional detail on the internal layout of the main store, Shed 1, Straw Store, latrines, and Control Offices, including the marking of a pump in the east of the site. The map also shows the land contours at 55, 60, 65 and 70 feet reflecting the declining gradient southwards towards the Liffey. Two gates are depicted in the south wall, and a wall has now been constructed to the east, but not north. The laneway first depicted on Roque to the east of the site remains and reflects the kinks on the 1756 map.

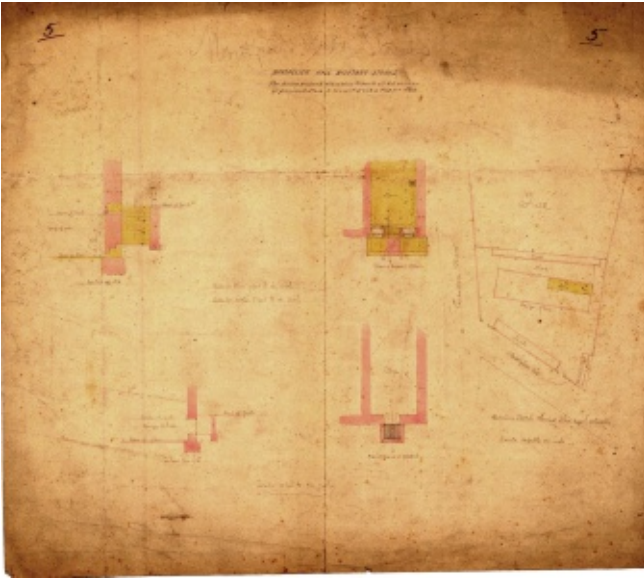
Infirmary Road is named as 'North Circular Road', and Montpelier Hill is also marked. The Royal Military Infirmary building named and visible to the north west of the proposed site. The Parish (St. Paul's) and City boundary 'Municipal' is shown crossing through the southern part of the site.

DU018-00704), west of Ordnance Survey Road and south of Castleknock Gate are now the Ordnance Survey Offices. The site of the barracks was originally a ranger's house, first mentioned in 1728.

In addition to military buildings, the park was also used for other military purposes. For example, the area known as the *Fifteen Acres* accommodated military camps in 1788 and 1797 (D'Alton 1838, 529; Dillon Cosgrove 1909, 26). This possibly corresponds with the 'camp ground' marked on the Ordnance Survey map in 1837 south of the Fifteen. A building for the firing of salutes also stood at the site of the extant Wellington monument (ibid) and the Hibernian Military School, built in 1766 (demol-

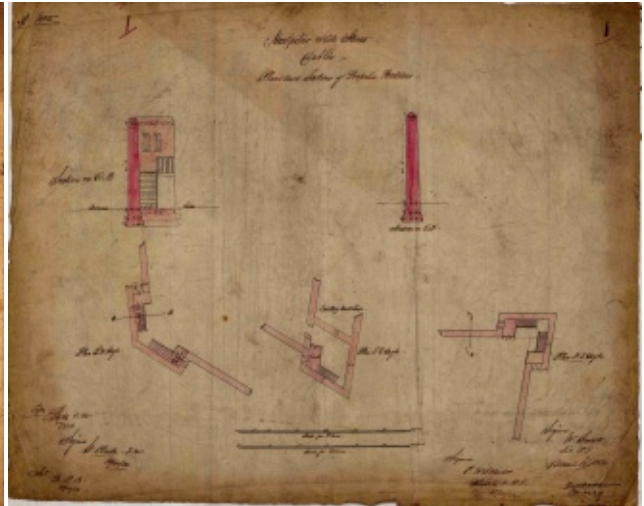
ished 1962), stood at the site of St. Mary's Hospital. This militarisation is also reflected in the frequency of military stray finds found within the park as noted in the Topographical Files of the National Museum of Ireland.

The Royal Military Infirmary was constructed across the road from the Study Area in 1786-1788 by the Duke of Rutland. It functioned as a military hospital until 1913, when it was replaced by the George V hospital at Arbour Hill (St Bricin's Military Hospital). The Royal Military Infirmary was converted to the Headquarters of the Irish Military Command. In 1923 the building became the GHQ of the Irish Army. The building gave its name to the road in c. 1886 (M'Cready 1892, 52).



Plan [of proposed] ... Coopers Store, undated (1840s?)

This 'Plan shewing proposed alterations to vault at NE corner of principle stores to convert it into a coopers store' (IE/MA/MPD/AD119387-001) is undated but similar in style to the 1848 map below, with an earlier reference number (5 instead of 6), suggesting it may date to the 1840s. It depicts proposals to excavate a cellar in the northeastern part of the stores (here labelled 'Military Stores' and 'Large Stores'). The cellar seems to have been constructed and is shown on the 1886 map.

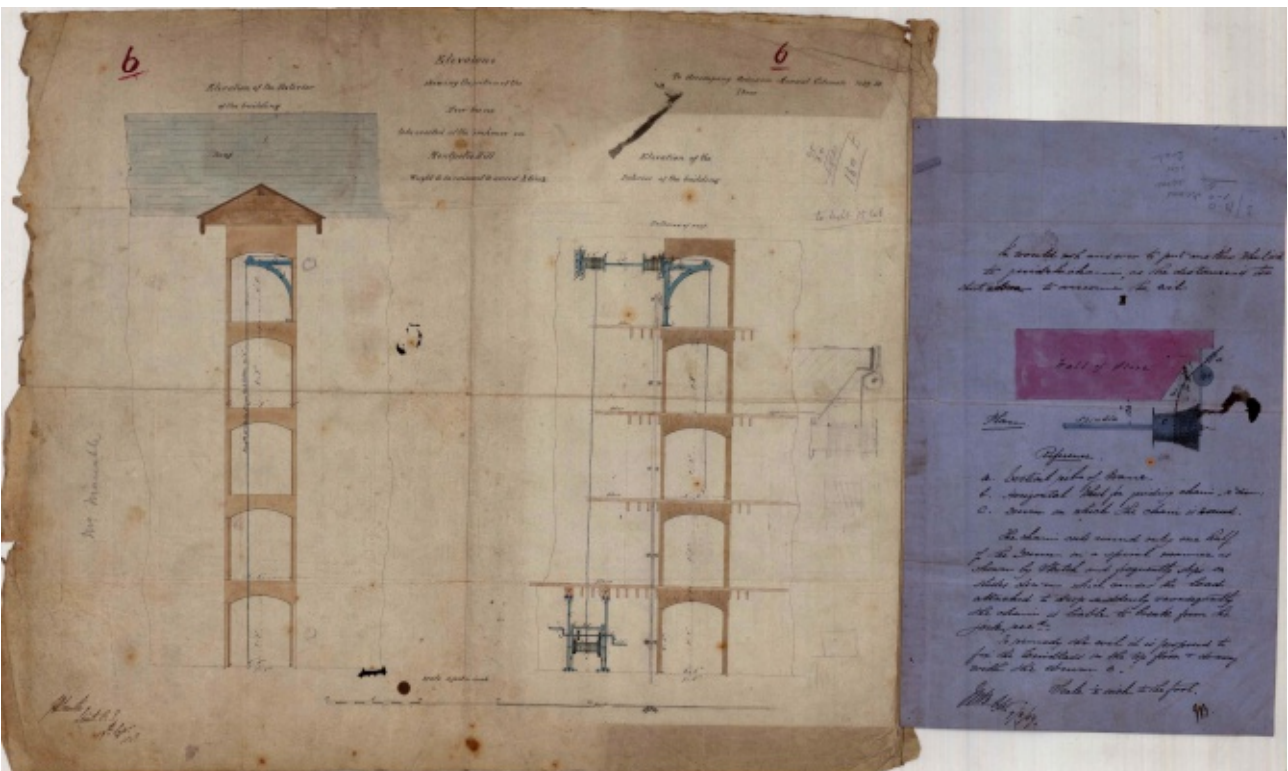


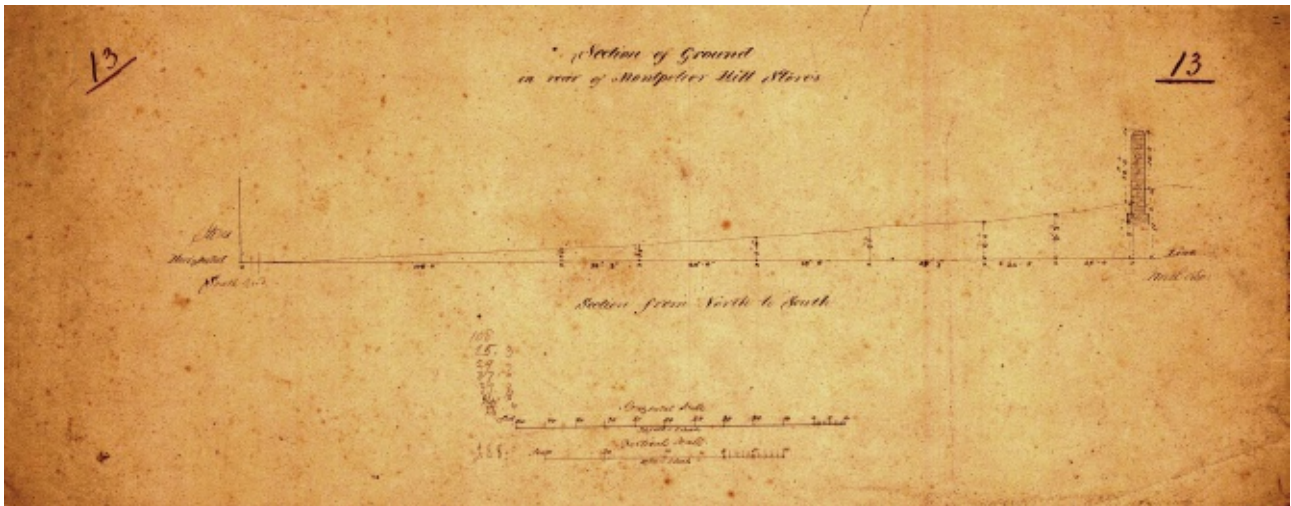
Plans and Sections of Proposed Bastions, 1856

This Military Archives plan (IE/MA/MPD/AD119386-007) depicts proposals for new bastions in the northeast, southeast and southwest corners of the Study Area (but not the northwest for some reason). The northeast bastion was subsequently constructed and is depicted on the 1864 OS map, however the two southern bastions were never constructed. The reason for not building the southern two bastions may be related to the absence of War Department Boundary Stones in the southern part of the site, perhaps reflecting a question over ownership of the south part of the Study Area in the mid-19th century.

Elevations Shewing the Position of the New Crane to be Erected at the Storehouse, 1848

This Military Archives plan (IE/MA/MPD/AD119385-006) depicts proposals for a new crane centrally to the front (south) of the Ordnance Stores. A very crude pencil sketch of the elevation of the stores is also included. An addendum to the map, in the form of a sketch and notes, is dated 1849, and provides additional information on the crane.



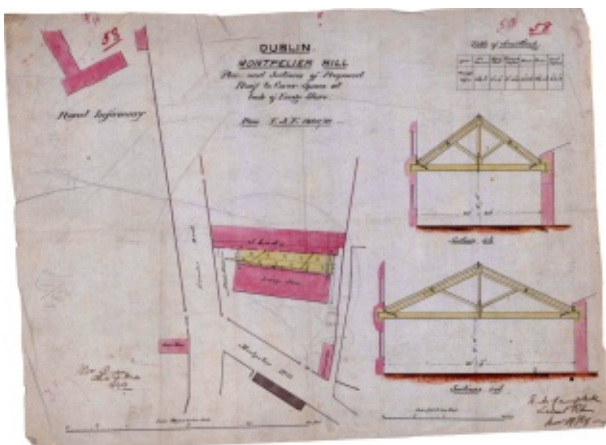
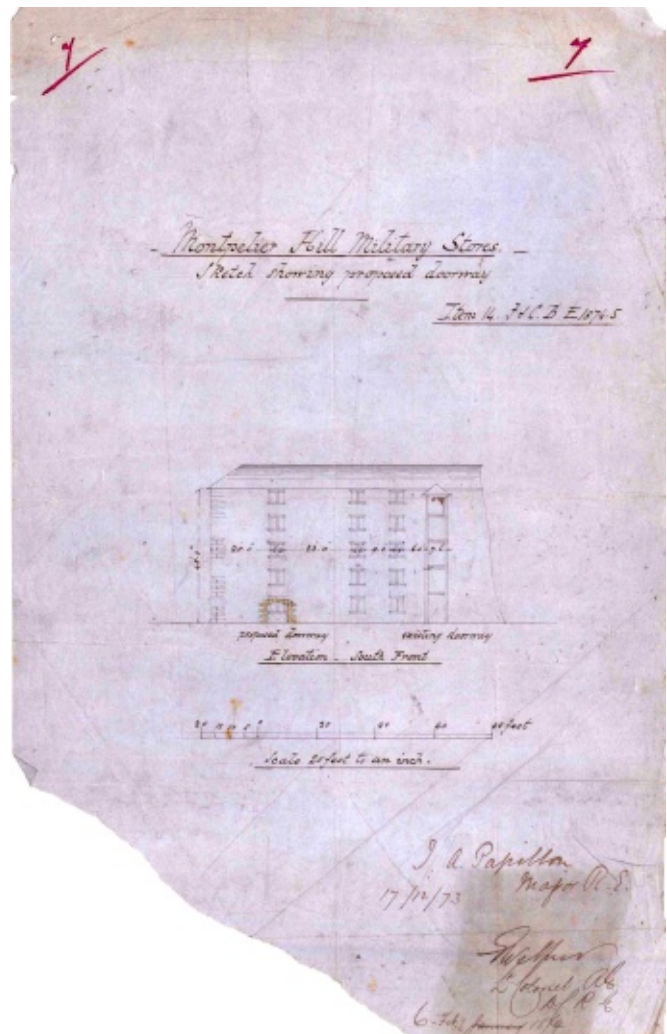


Section of Ground on Rear of Montpelier Hill Stores, Undated (1860-62?)

This Military Archives section (IE/MA/MPD/AD119390-002) shows Site N prior to the construction of the isolation hospital. It probably dates to the early 1860-62 (Plan 14 overleaf is dated 1862). The north wall of the Study Area has been completed, but there is no mention of the future hospital at this date and the ground has not been terraced.

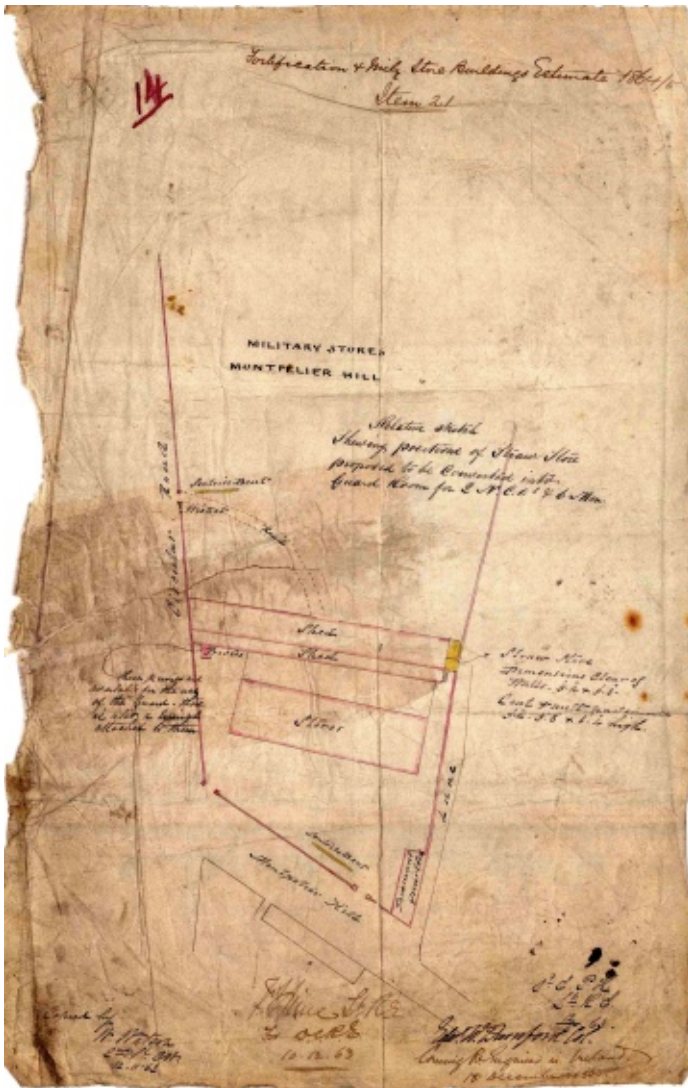
Sketch Shewing Proposed Doorway - front Elevation, 1862

This Military Archives sketch (IE/MA/MPD/AD119385-009) shows plans for a new doorway at the west end of the south façade of the Ordnance Stores. This does not appear on the 1864 OS map but is in place by the time of the 1905 plan, so presumably was constructed. The plan also shows that the crane, proposed in 1848, was constructed and located in the front south of the stores, in the location of the original doorway.



Plan and Section of Proposed Roof to Cover Space at Back of Large Store, 1859

This Military Archives plan (IE/MA/MPD/AD119385-010) shows the roofing of the irregular infill area between the Ordnance Stores and the northern sheds. This roofed structure was later replaced with a permanent masonry building in 1881.

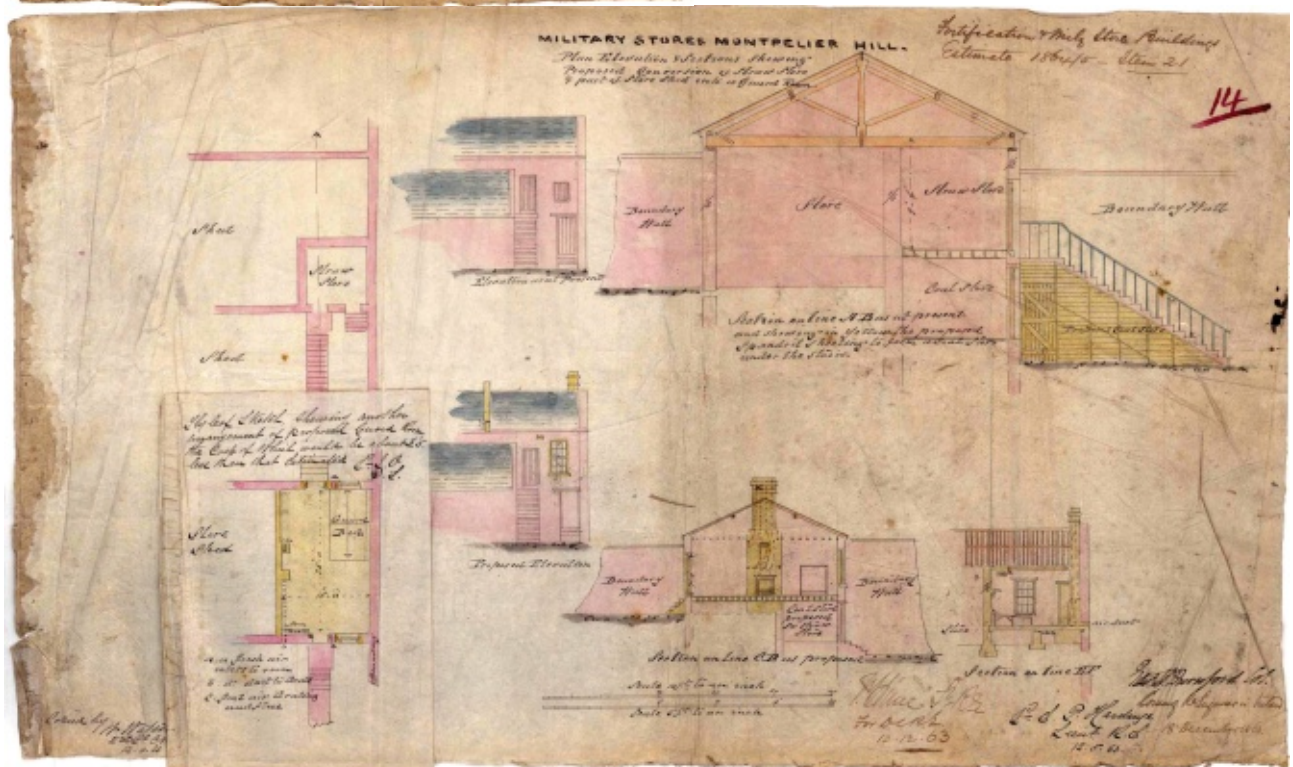


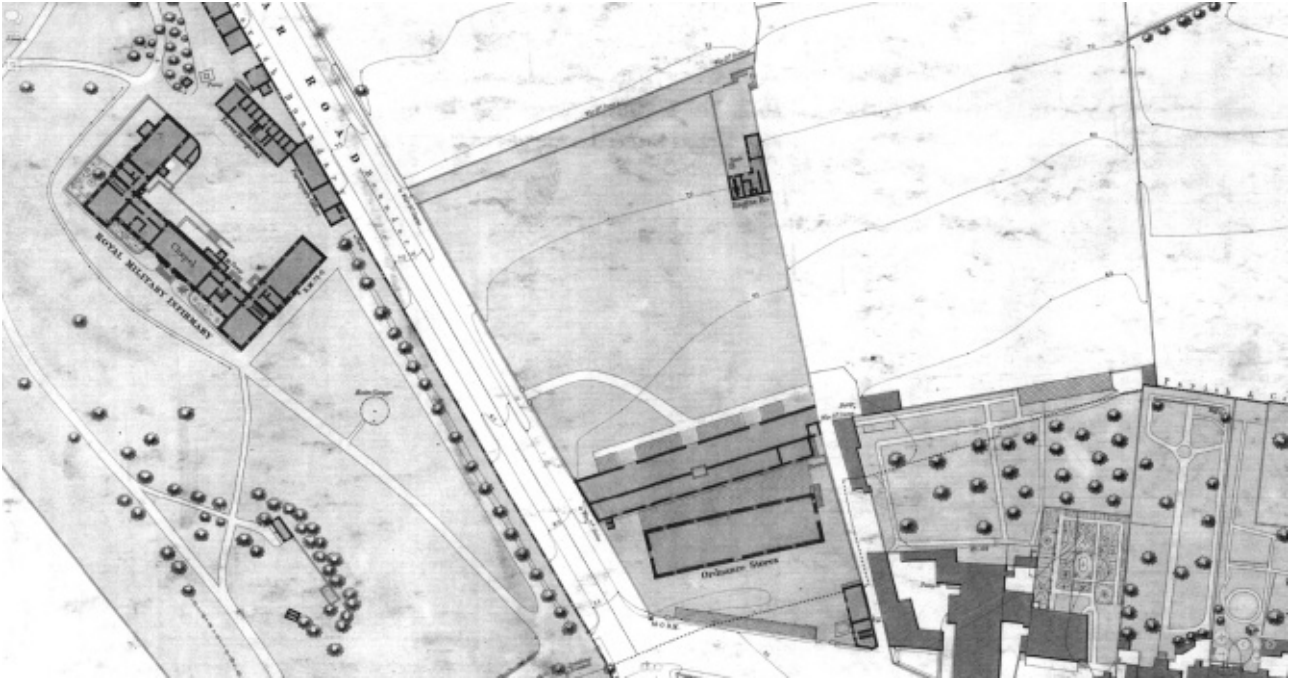
Relative Sketch [of] Straw Store..., 1862-3

This Military Archives plan titled 'Fortification and Main Store Buildings Estimate - Plan View' (IE/MA/MPD/AD119385-008) depicts the southern portion of the Study Area. The Ordnance Stores have been expanded, as shown on the later 1864 map. Two 'Sentries Beat' are shown by two gates. A label on the map reads 'Relative sketch shewing position of Straw Store proposed to be converted into Guard Room for 2 [?].C.[?].s & 6 Men', possibly suggesting that the Straw Store (possibly equating with the building depicted on the 1756 map) was old by the 19th century. The stores are noted to measure 9'4" by 9'3" (c. 2.82m-2.84m) clear of walls, with a basement of the same size in use as a coal cellar.

Proposed Conversion of Straw Store , 1863

This Military Archives plan titled 'Plan Elevation and Sections Shewing Proposed Conversion of Straw Store and Part of Store Shed Into a Guard Room' (IE/MA/MPD/AD119385-00) depicts additional information regarding the conversion of the Straw Store. The coal basement is shown as being at ground level with the straw store above. The building has been fully incorporated into the range shed building to the north (Shed 2), and both share a roof, however the internal walls and floor levels of the straw store have the appearance of an earlier building.





Five-foot Ordnance Survey City Map, Dublin Sheet 12, 1864

This revision of the 1847 map shows an increase in the number of buildings on the Study Area. The Ordnance Stores in the south of the Study Area were expanded at this time. The existing structures have been retained, a new shed constructed to the north (Shed 2), and the space between stores and sheds has been roofed (in c. 1859). A new long narrow structure without walls (also a lean-to) has been built along the Montpellier Hill Street front. A third gate is marked on Infirmary Road. For the first time a building is marked on the northern part of the site. The building, marked as 'Engine Ho[ouse]' and associated yard and tank is shown in the northeast corner. In addition, a defensive bastion with oblique walls is depicted in the northeast corner of the Study Area.

Five War Department Boundary Stones are depicted on the map: two at the two northern corners of the site, and two half-way down both sides. These are common on 19th century barracks in England and Ireland, though they are recorded in England from the late 18th century. The absence of boundary stones marking the southern corners is surprising, and may reflect a question over ownership of the land.

The lane at the north of the site is clearly defined for the first time, and is shown shaded as part of the military complex.

Modern history of Study Area

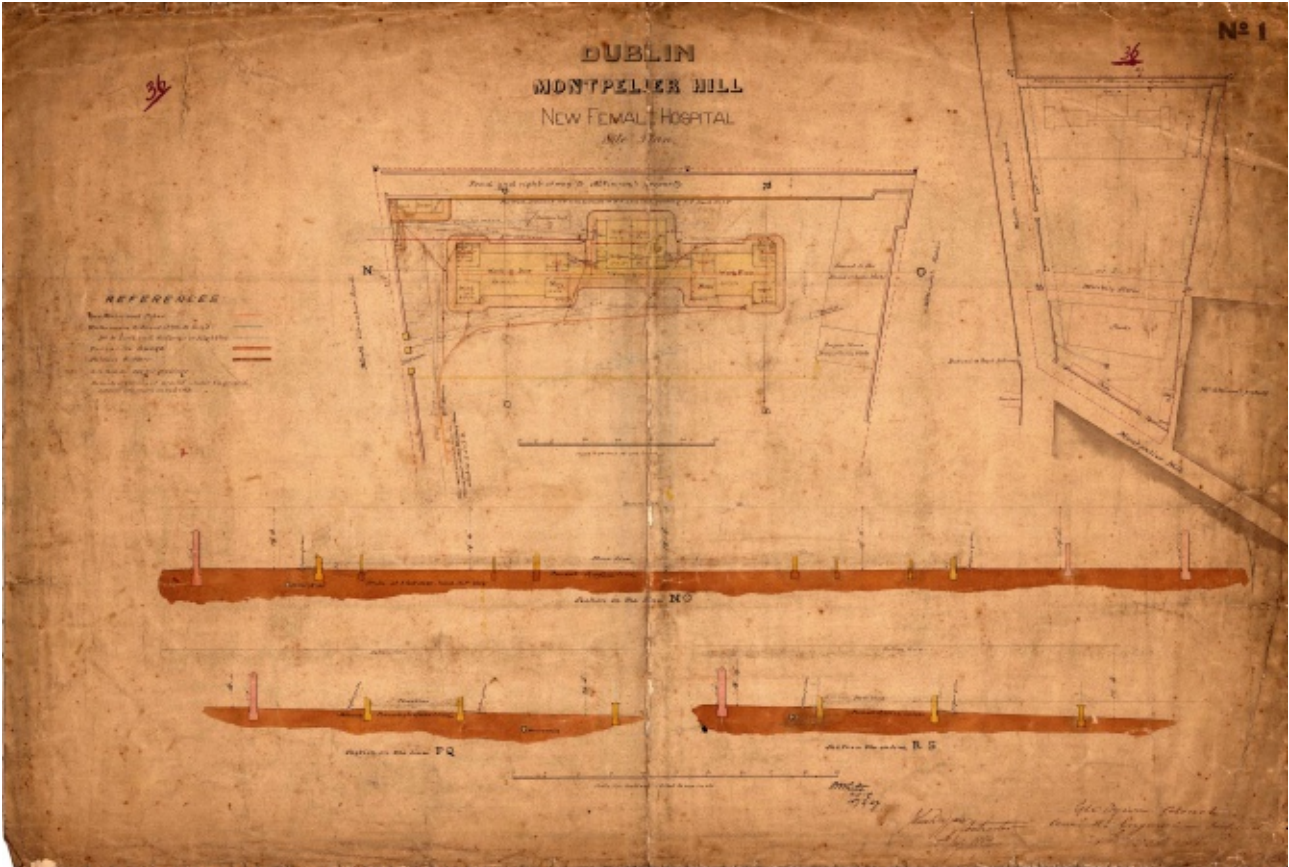
Ordnance Stores

The Ordnance Stores were constructed at Montpellier Hill by at least 1811, when it is marked on a map by Thomas Campbell and labelled as '*Comm.~ Depot*', i.e., military stores. The original building appears to have been an imposing four stories over ground floor five-bay masonry store with pitched slate roof, and entrance to south. The stores were much modified: a cellar was added in the 1840s; new crane in 1848; a new door in 1862; a hydraulic lift in 1880; a new staircase in 1882; and new stoves in 1883. Extensions were also constructed to the north in 1837 (Shed 1), 1859 (Shed 2 and roofed infill) and 1881 ('Additional Accommodation' replaced roofed infill). This evolution

is traced in the Military Archives plan and maps in this section.

William Shea is referred to as the Superintendent of Stores in the Treble Almanacks of 1825 and 1833 (Stewart *ibid*). The facility was used to store weapons by the British Army, and an 1883 Military Archive document shows the uppermost two floors were taken up entirely with storage of saddles and harnesses for horsemen. The original store offices were in the southeast of the study Area (Control Offices) but in 1883 it was moved to new Ordnance Store Offices (the Married Quarters).

The Parish boundary of Saint Pauls and the former City Liberty boundary ran through the southern part of the Ordnance Stores. This boundary separated Dublin City from the



New Female Hospital - Site Plan, 1867

This Military Archives plan (IE/MA/MPD/AD119388-005) shows detail of the drainage surrounding the Isolation Hospital in the north of the Study Area. It also describes plan for the lowering of the north wall and the erection of a railing. The northeastern structure labelled 'Engine House' is labelled as 'leased to the Board of Public Works'. The three northern War Department Boundary Stones are depicted again.

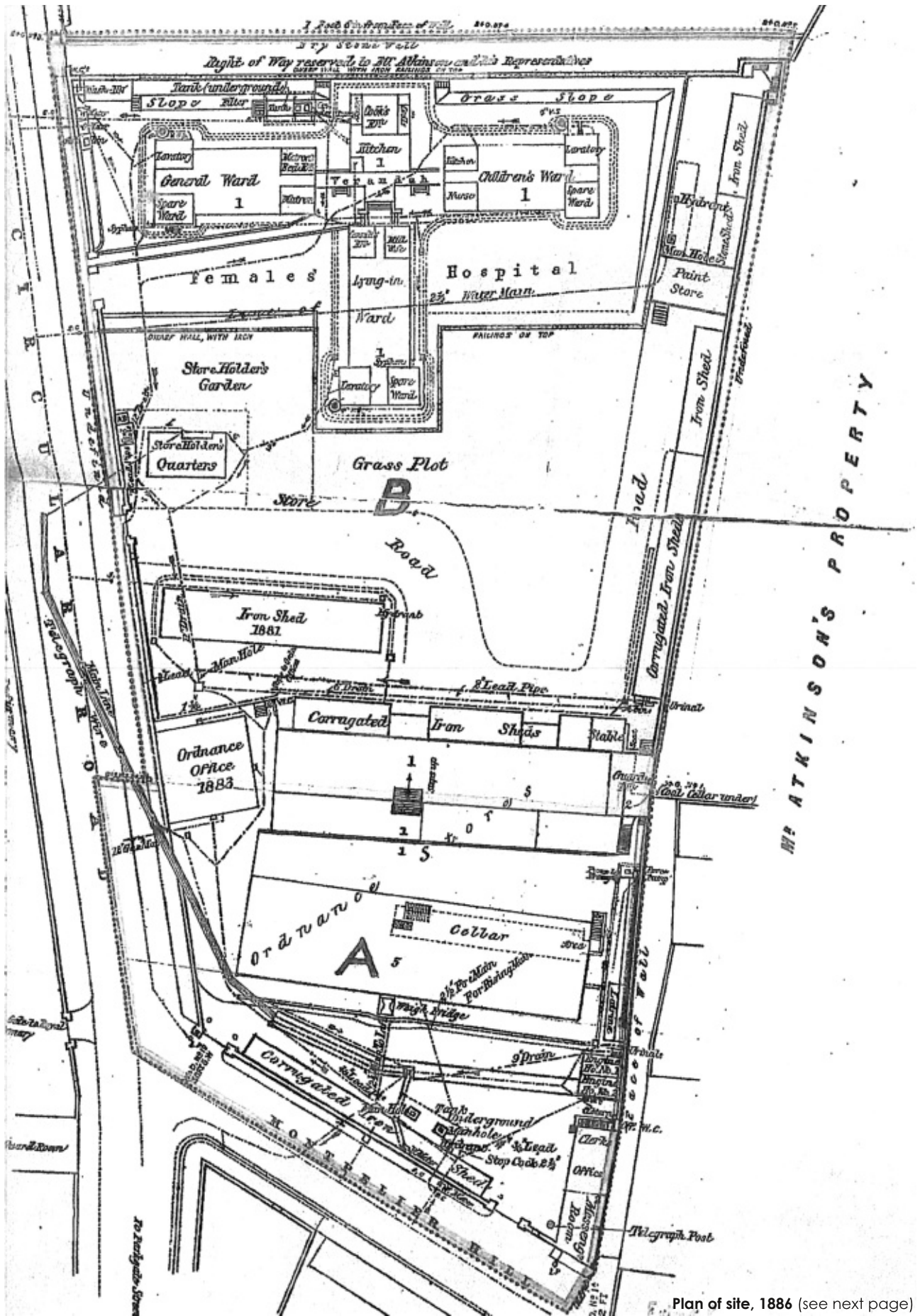
The lane to the north of the Study Area is labelled as 'Road and Right of Way to Atkinson's Property'. Mr. Atkinson's Property is marked to the east of the southern portion of the site, on Montpellier Hill, and Mr Atkinson's Fields' are marked to the east of the northern portion of the site. An inset of the map shows the entire Study Area, and labels the former Ordnance Stores as 'sheds' and the former sheds north of the stores as 'Military Stores'. It also defines the boundaries of the War Department site using the five boundary stones (numbered 1-5) but not depicting stones at the southern two corners. An unusual kink in the boundary is notable half-way along Infirmary Road. The reason for this is unclear.

Two additional Military Archive maps dating from 1867 have been examined but are not reproduced here as they depict only the Isolation Hospital in Site N.



6" Ordnance Survey Map, Dublin Sheet 18, 1875

The Second Edition of the 6" Ordnance Survey Map dating from 1875 (with red lines from Griffith's Valuation) shows the cruciform 'Military Hospital (Female)' and the 'Ordnance Stores'. Structures are also shown bounding the southern and eastern boundary walls. A structure is also shown at the northwest corner of the site.



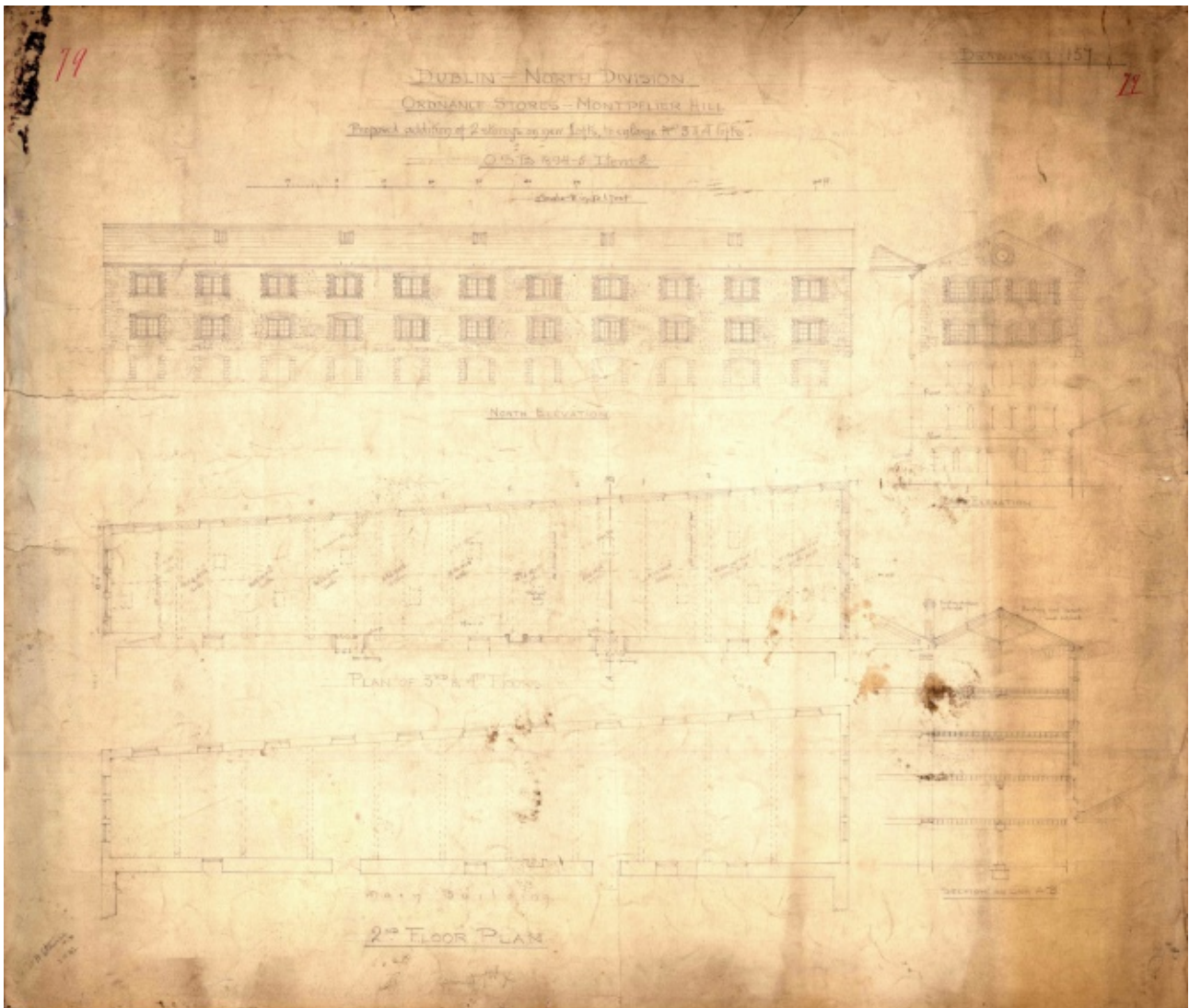
Plan of site, 1886 (see next page)

Plan of site, 1886 (on previous page; image from DCC Engineering Report 2004)

This plan of the Study Area dating from 1886 is very detailed and shows the interior plans of the structures as well as services such as water mains and telegraph lines. The plan also gives dates for certain buildings, presumably referring to the year of their construction. The large cruciform 'Females' Hospital' is shown at the northern part of the site. A number of smaller structures are also shown to the north of the site: a 'Store Holder's Quarters' and associated garden, and a number of 'Iron Sheds', one of which is dated 1881. The structure to the north-east of the site marked in the 1864-6 Ordnance Survey map is still visible, now used for storing paint, stone and iron.

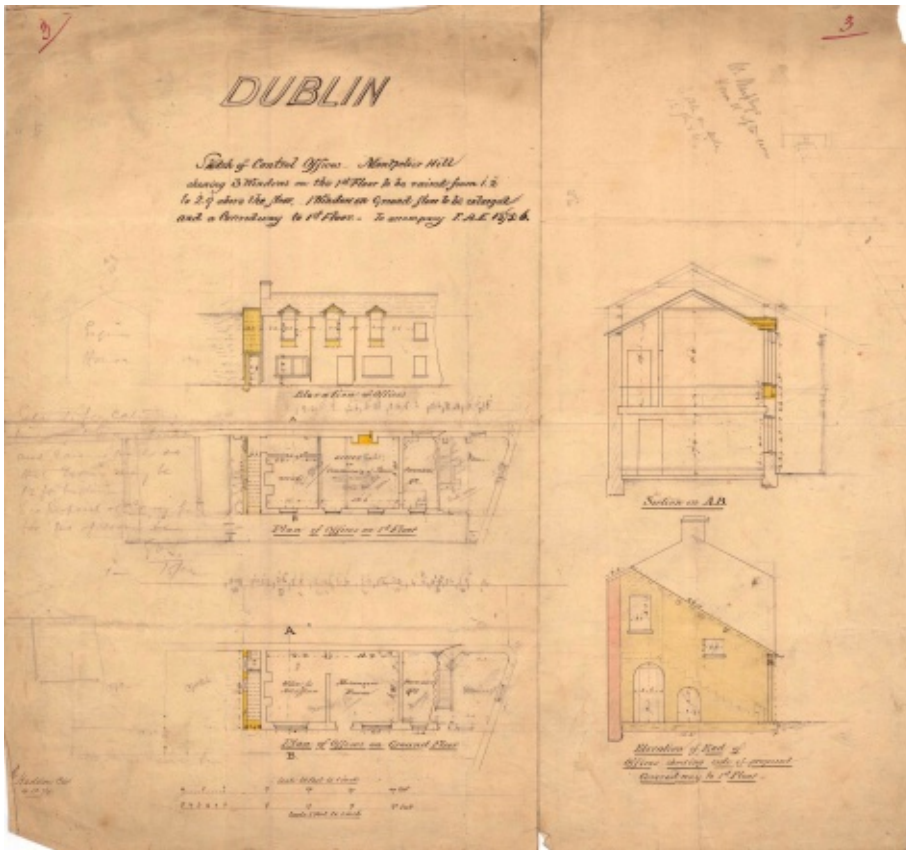
The Ordnance Stores to the south are also changed. It is shown with a cellar (perhaps constructed as a cooperage in the 1840s). The nature of the infill extension directly north of the original stores is unclear: no western wall is marked and this may still be a lean-to, despite plans for its reconstruction as a permanent stores extension dating to 1881: perhaps it is still in construction? A new square structure set at an odd angle to the west of the site is marked as 'Ordnance Office' and dated 1883. This is a protected structure known as 'the married quarters'. The other structures of the Ordnance Stores resemble those marked on previous maps. The long narrow structure on Montpellier Hill marked in the 1864-6 Ordnance Survey map is still visible and is named as 'Corrugated Iron Shed'. The small structure to the south-east of the site marked on the 1847 Ordnance Survey map is named 'Clerk Offices' and 'Messengr. Room', the latter probably referring to a function associated with the telegraph pole located just outside.

A number of entrances to the site are marked on the plan. Two entrances are situated on Montpellier Hill, to the east and west of the site. Two entrances are situated on Infirmary Road, one in the centre of the site frontage shown in the 1866 Ordnance Survey map, and a second leading into the cruciform 'Females Hospital' to the north. For the first time, War Department Boundary Stones are depicted in the two southern corners of the site, and are labelled 1A and 1B. 1A still survives in situ, and part of 1B may still survive in the southwest gatepost.

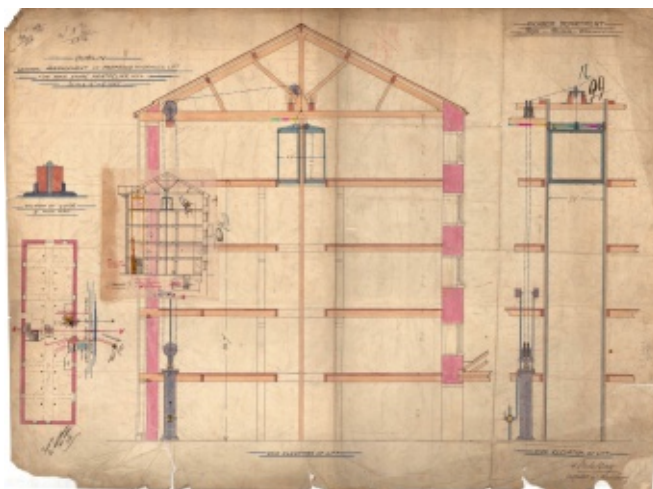


Proposed Addition of 2 Storeys on New Lofts, to Enlarge No. 3 and 4 Lofts, 1893

This Military Archives plan (IE/MA/MPD/AD119384-006) depicts proposals to add two stories onto the two-story over ground floor 'Additional Accomodation' 1881 northern extension of the Ordnance Stores. The original Ordnance Stores building is identified as the 'Main Building' and is shown as being four stories in height over ground floor. These works were never carried out, based on the 1905-16 plan.

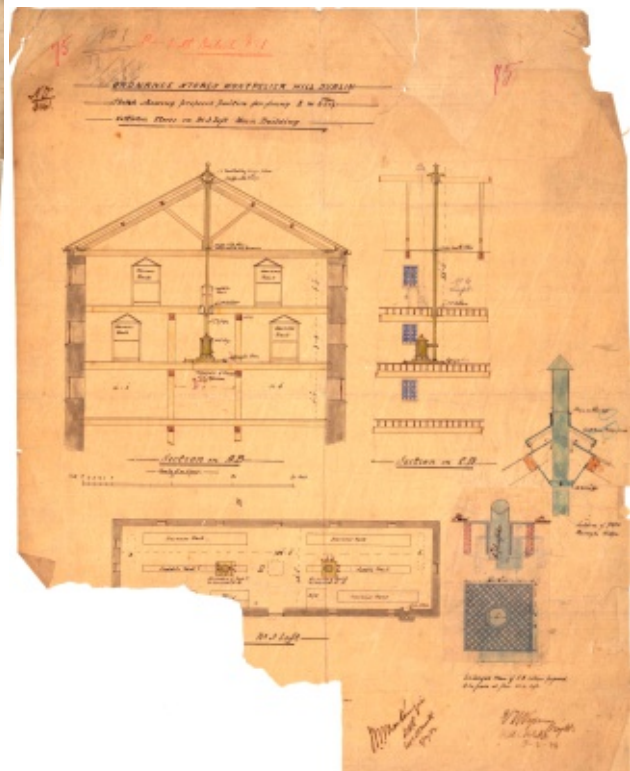


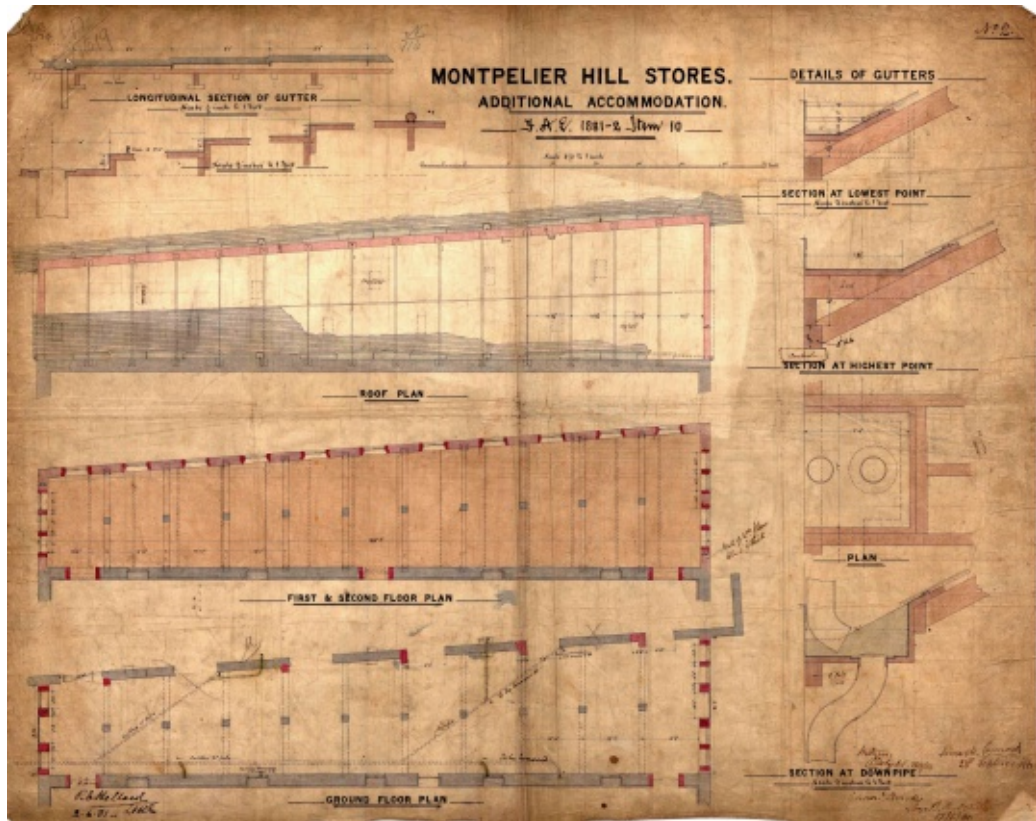
Sketch of Control Offices... , 1874
 This Military Archives plan (IE/MA/MPD/AD119389-002) shows proposals to alter the southwest structure in the Study Area. The structure, named as the 'Control Offices' is divided into an office, messenger's room, and foreman's quarters. Details of the fireplaces (both corner and centre-wall fireplaces are depicted in pencil and pen, respectively) correspond to features presently visible in the southwest enclosure wall of the Study Area.



General Arrangement of Proposed Hydraulic Lift..., 1880
 This Military Archives plan (IE/MA/MPD/AD119386-003) for a new hydraulic lift to be positioned within the store, presumably replacing the 1848 exterior crane, provides the clearest depiction of the profile and roof structure of the Ordnance Stores. The arrangement of flagstones on the ground floor, and therefore the arrangement of storage shelving, is also depicted.

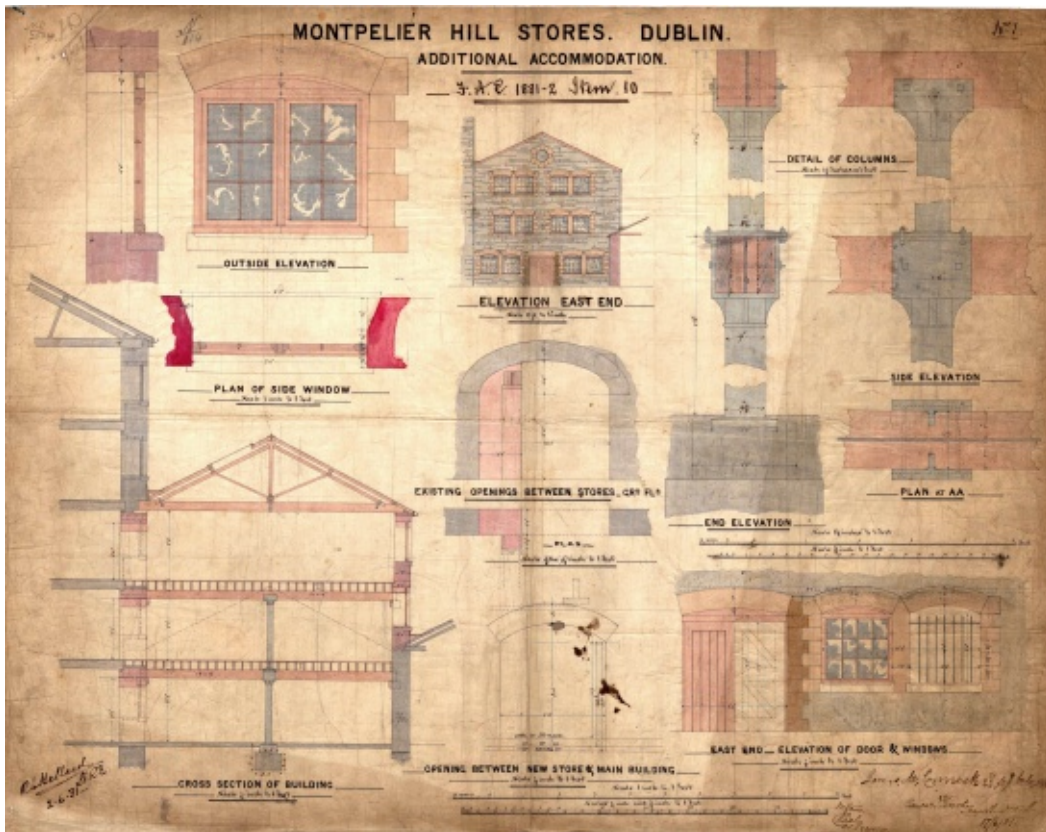
Sketch Showing Proposed Position for Fixing 2 No. 6 Nettleton Stoves in No. 3 Loft - Main Building, 1883
 This Military Archives sketch (IE/MA/MPD/AD119386-004) shows details of the Ordnance Stores fenestration and layout on the upper stores. It is the only 19th century document encountered in this study that describes the contents of the stores - in this case harness and saddle racks make up all of the storage facilities in the uppermost two floors of the stores, demonstrating the significance of the mounted forces to the British Army.

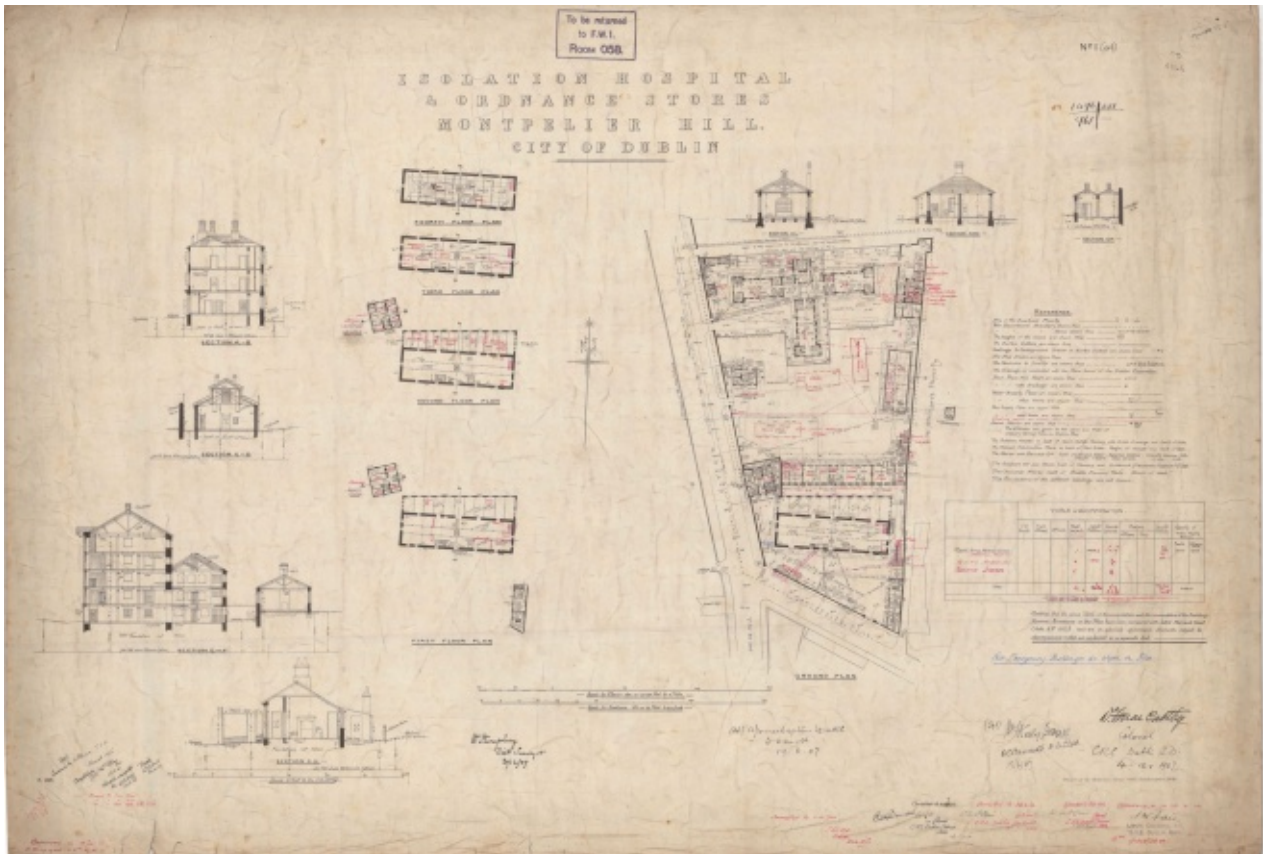




Additional Accommodation, 1881

These Military Archives plans (IE/MA/MPD/AD119385-003) and elevations (IE/MA/MPD/AD119385-001) depict the replacement of the roofed space behind the Ordnance Stores with a permanent two-story and slate roofed masonry structure. These drawings are significant because they depict the adjacent stores as masonry, and they provide detail on fenestration and materials that are likely to have mimicked the earlier Ordnance Stores.





Overhead View , 1905-1907, revised in red 1909-1916 (& refer extracts overleaf)

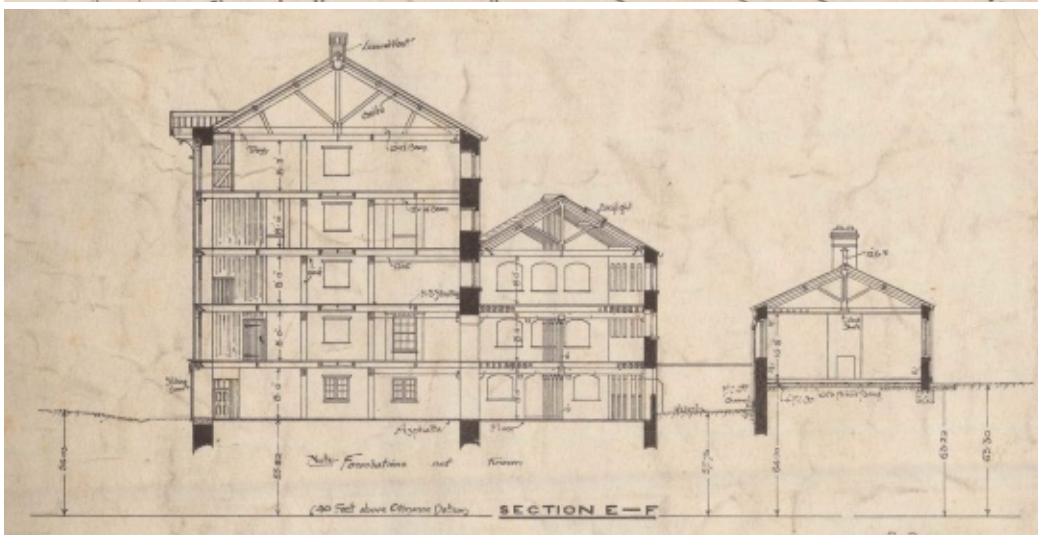
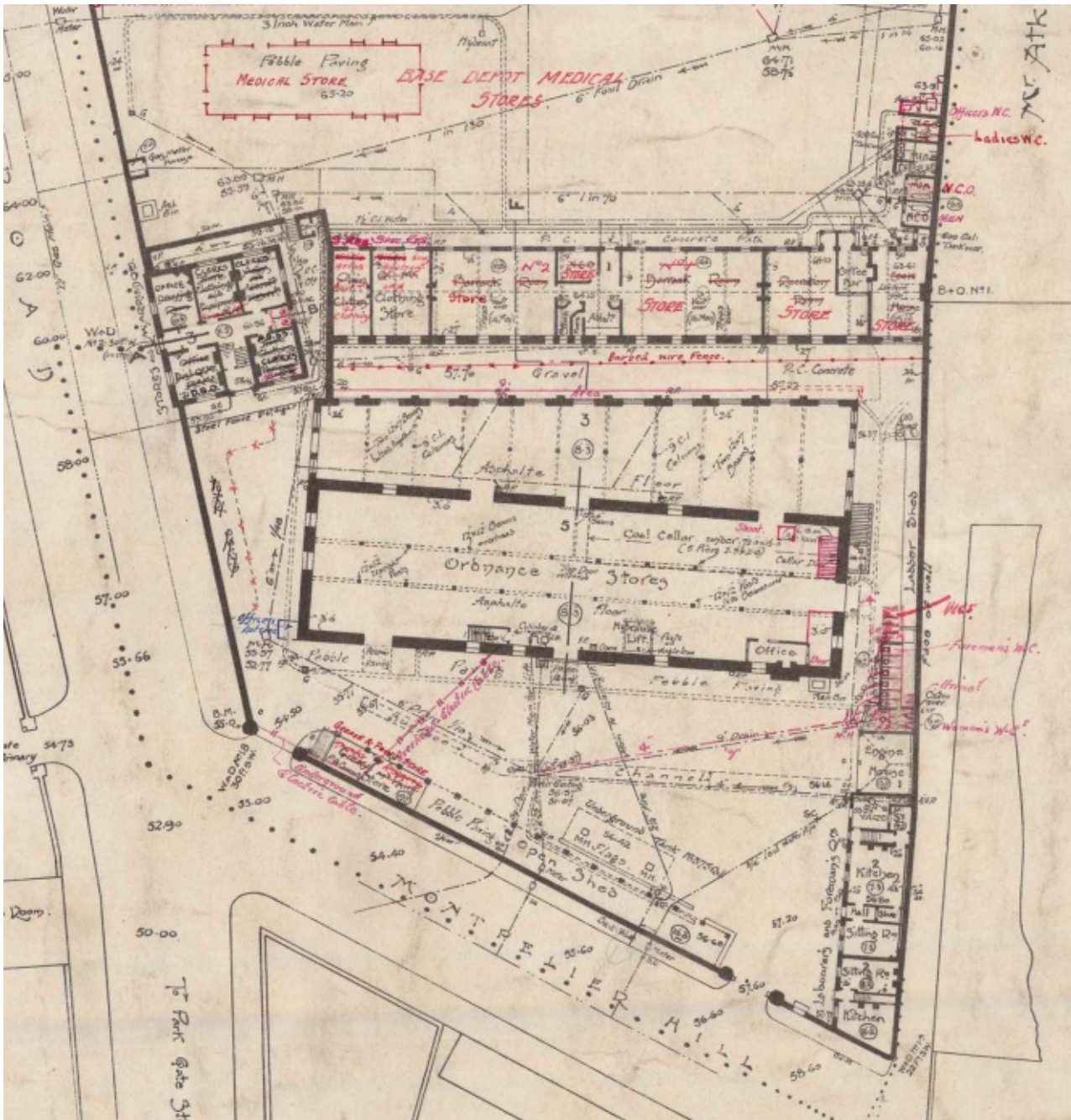
This Military Archives early 20th century plan (IE/MA/MPD/AD119384-007) of the Study Area is the most detailed plan of the complex, and illustrates the interior layout of the buildings and associated services. The map also provides sections of all the key buildings in the complex, including the hulking Ordnance Stores. A new building has been erected to the east of the site behind the cruciform hospital and is named as 'Medical Mobilisation Store'. The hospital is now named the 'Isolation Hospital'. A northern entrance from modern Montpelier Gardens is depicted for the first time, and is labelled as 'Back Entrance' in the later 1921/28 plan.

townlands (in this case Grangegorman West) to the north. It is extremely rare that such a significant boundary traverses through a site in this manner, and it is likely to reflect a topographic and land-ownership situation predating the walling of the Phoenix Park in the 1680s and the completion of Montpelier Hill at the beginning of the 19th century. The presence of the city and parish boundary dividing the Ordnance Stores site may have created difficulties in establishing legal ownership, as suggested by the unusual arrangement of War Department Boundary Stones, as discussed at the end of this section.

The facility played a role after the 1916 rising, when the confiscated weapons of the rebels were brought to the Ordnance Stores (Mathews 2017). A few months later Prince Alexander

Mountbatten of Battenberg asked the Ordnance Stores if he could have 'one of the Mauser Rifles and a specimen of an Old Irish pike, which have been surrendered and handed in to the Ordnance Stores' as a souvenir (National Archives London, WO 35/69). It was converted to a Post Office in the 1930s until it was destroyed by fire in 1983 (Arnold 2004, 4). Today the only surviving part of the buildings from this complex is the northeast corner of the Inner Stores (1881) located just southwest of the Married Quarters.

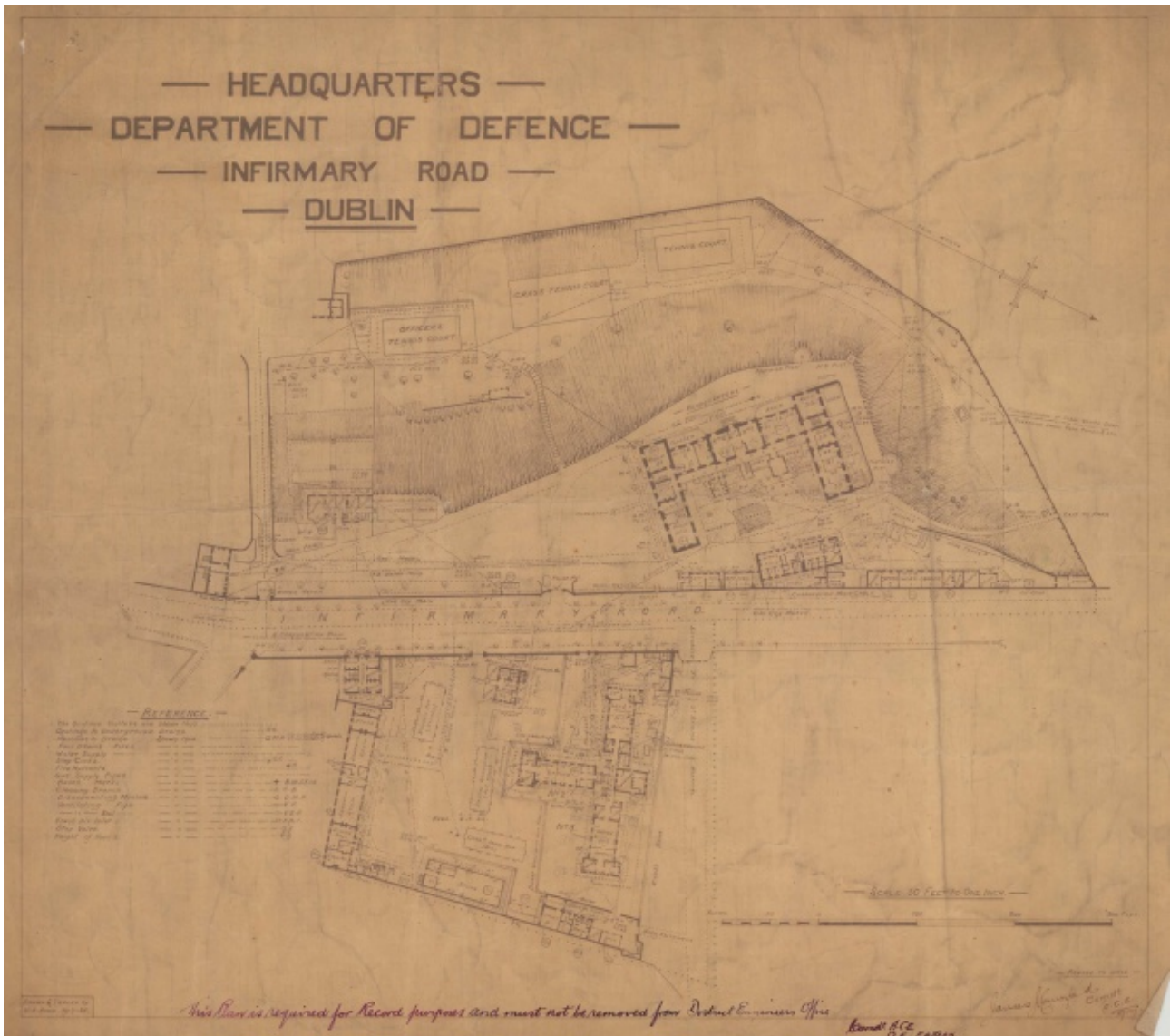
An Ordnance Survey benchmark at 55 feet is located at the base of the gate pier at the corner of Montpelier Hill and Infirmary Road. This is an interesting feature and reflects the 19th century view of the complex as a sturdy, permanent institution that was unlikely to move or be altered.



Extracts from Plan of site, 1905-1907, revised in red 1909-1916

Above is an extract of the southern half of the Study Area.

Below is a section showing (left to right): Ordnance Stores (c. 1818); 'additional accommodation' (c. 1882) and militia barracks (converted out of 1859 Shed 2 in 1902; aka 'Str. C').



Plan of site 1921/1928

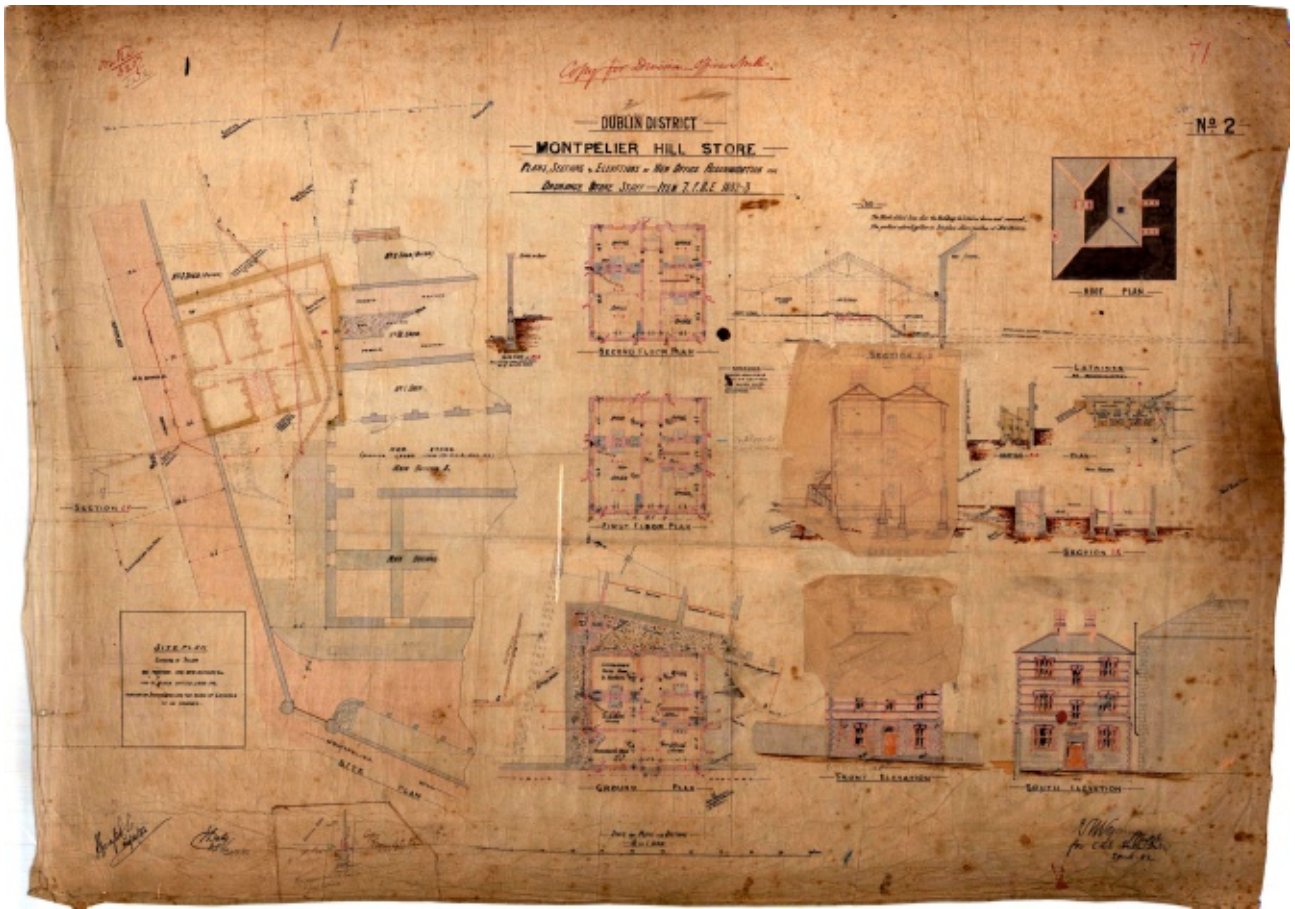
This Military Archive plan is interesting because it includes only the northern portion of the site, supporting the idea set out above that the military ownership of the northern portion of the Study Area was slightly different to that of the southern portion, based on the construction of corner bastions and locations of boundary stones. The map depicts the headquarters of the Department of Defence on Infirmary Road, and also includes the Royal Infirmary. It also labels the 'marriage quarters' building as 'Red House', which was the 20th century name given to the Ordnance Stores headquarters.

The former lane directly north of the site is no longer depicted, and has been replaced by a 'Grass Bank. The road currently called Montpellier Gardens is depicted for the first time, named here as 'Entrance to St. Bricin's Hospital', and on a second Military Archives plan from 1921 (not reproduced here) as 'War Department Road to George V Hospital'. The alignment of the new road is at a right-angle to Infirmary Road, in contrast to the earlier lane, and a gate has been constructed at the western end of the road.

Isolation Hospital

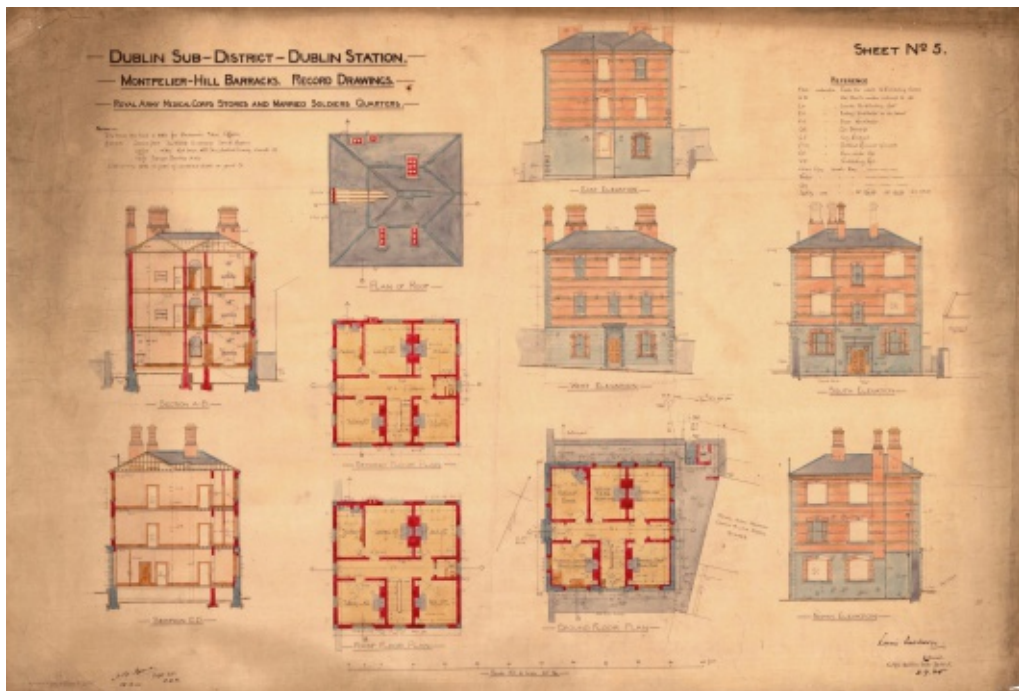
In 1851 the northern part of the Study Area was acquired by the British War Department from Atkinson's estate, and a single storey T-shaped fever hospital was built in an area named as the Isolation Yard (Tobin 1968, 18) in c. 1865-6, as an extension of the Royal Infirmary across the road. An elevation plan of the hos-

pital dating from 1864 names it as the 'New Female Hospital' (Military Archives), and it later became known as the Isolation Hospital. The rise in demand for medical care may have been in response to a series of epidemics recorded in the Royal Barracks, prison and asylum at Grangegorman in 1887. Another factor may have been a 'sickness' documented following an



Ordnance Stores Office and Married Quarters, 1882 and 1905

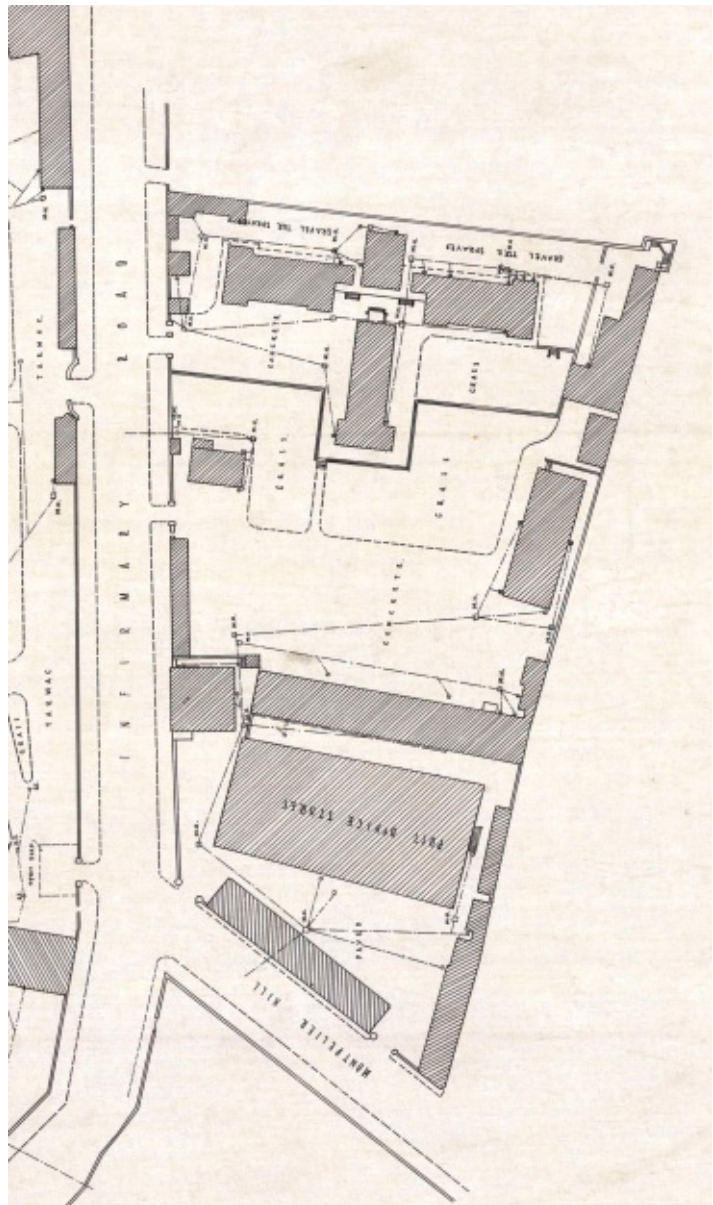
These two Military Archives drawings show proposals for the 'Red House' in 1882 (*Plans, Section and Elevations of New Office Accommodation for Ordnance Stores Staff, 1882*, IE/MA/MPD/AD119388-010) and its conversion in 1905 (*Royal Army Medical Corps Stores and Married Soldiers Quarts 1905*, IE/MA/MPD/AD119387-009). These significant documents show several items of interest, including the rearrangement of the northern sheds to accommodate the new married quarters (they were truncated rather than rebuilt in 1882, but heavily converted in c. 1902). The map also shows the exact line of the unusual kink in the War Department boundary on Infirmary Road. The profile of the pre-1902 sheds show their roof arrangement and the terracing of the site located between the sheds (ie directly south of Arnold's (2004) Structure C).



exchange of militia between England and Ireland at this time, during which it was necessary to erect tents on the lawns of the Royal Infirmary in order to accommodate patients (Tobin 1968, 18). The design of the isolation hospital was laid out to combat the spread of disease and infection, allowing for good circulation of air. The hospital was also set apart from the Royal Infirmary to which it was affiliated, enabling the patients to be quarantined.

The 1904 edition of the Barrack Book records the Isolation Hospital as having 35 available beds and accommodation for three unmarried men. The Headquarters of the Dublin Co. Royal Army Medical Corps is mentioned at Montpelier Hill. *Here accommodation is available for 31 unmarried and 2 married men* (Barrack Book 1904, 40-41). Plans for a Medical Store for the Army Corps were outlined in 1902 (Courtesy of Military archive). It was built to store drugs and other medical equipment and is currently known as the former library. The building is historically important as it is the only significant building of early 20th century date at the site and represents the last phase of construction under British military control. The building was also central to the function of the site as the distribution headquarters for the Dublin barracks.

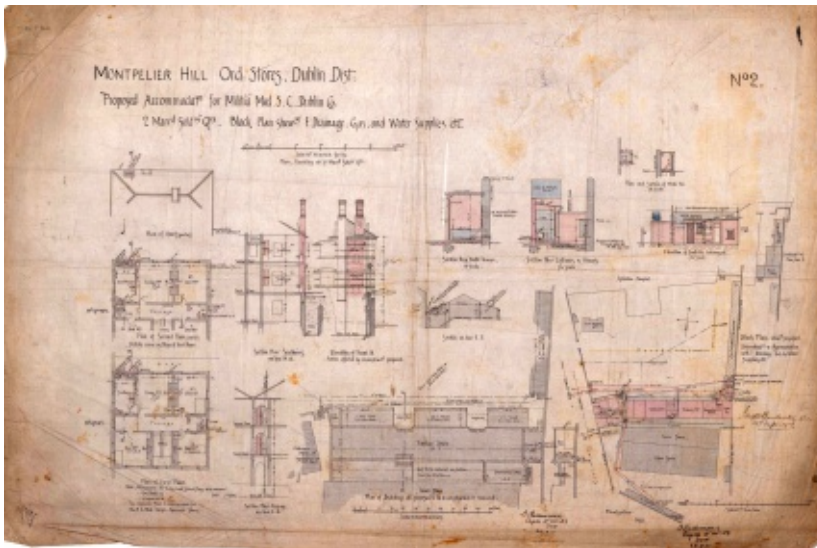
By the early 20th century, the Royal Infirmary and Isolation hospital were no longer adequate and a new hospital was built at the old Arbour Hill military site. The building was completed in 1912 and in 1913 all the patients were transferred from the Royal Infirmary (Tobin 1968, 18). The army medical stores at the site are however known to have still been in use albeit by the free state in 1923 when they are described as *functioning adequately and demands from the commands are made up and sent out directly on receipt* (An Cosantóir 1923, 6). In 1925 the Irish Department of Defence was centralised to the former Royal Infirmary on the west side of Infirmary Road, causing problems with the



Plan of site 1941

By 1941 the northern part of the site had been taken over by the Irish Department of Defence. The Ordnance Stores have been converted to Post Office Stores. There are other minor changes to buildings around the north of the site.

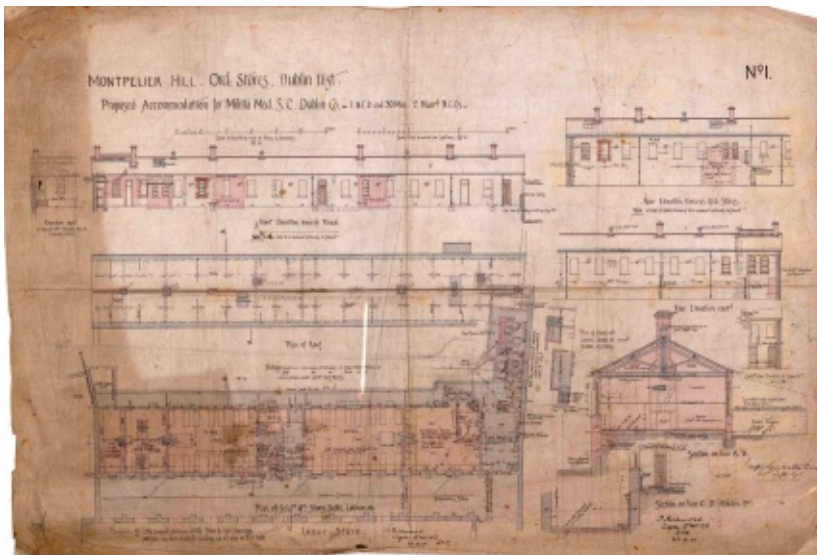
accommodation of certain departments. During the early 20th century, the Civil Service expanded and the Plans and Operations Section. In response, Army Finance was moved from the former Isolation Hospital to Colaiste Caoimhin in Glasnevin making the hospital available for the Records Section who were deeply dissatisfied with their accommodation in the old medical stores. The transfer took place in 1939 (Tobin 1968, 22).



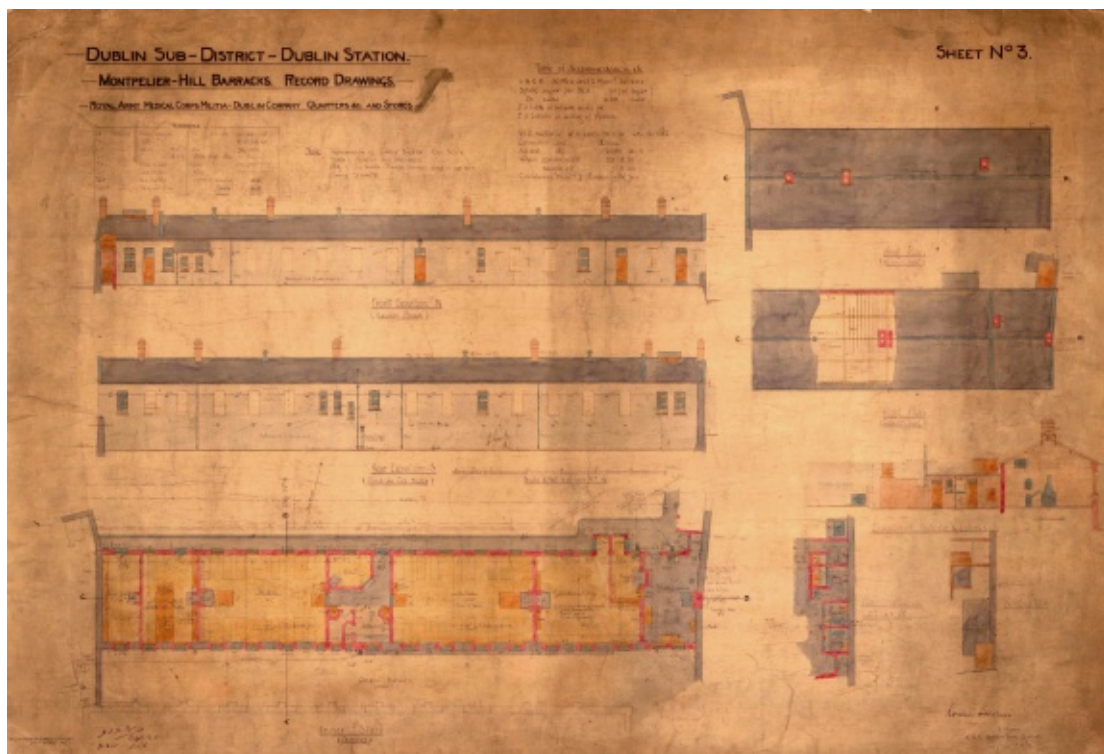
Royal Army Medical Corps Militia ... , 1901, 1902 and 1905

These three Military Archives drawings show plans of the conversion of Shed 2 ('Timber Store') into accommodation for the Royal Army Medieval Corps Militia (*Proposed Accommodation for Militia Med. S. C. Dublin Company...*, 1901

IE/MA/MPD/AD119389-006 and *Proposed Accommodation for Militia Med. S.C. Dublin Company*, 1902 IE/MA/MPD/AD119389-004), and a record of what the building looked like in 1905 (*Record Drawings - Royal Army Medical Corps Militia - Dublin Company - Quarters and Stores* E/MA/MPD/AD119387-002/010).



The 'Married Quarters' are noted in 1901. This plan also shows a 'Contractor's Boundary' in yellow at the rear of the Ordnance Stores building, which may define the understood limits of the Ordnance Stores at that time. The extent to which the new militia barracks was a renovation of the earlier shed, or a complete rebuild on the same footprint, is unclear. The similarity in roofs of the two structures (compare with 1882 plan for the 'Red House') suggests the former, as do plans to modify the stairs into Shed 2. If the latter is true, however, then Structure C is entirely 20th century in date.



Discussion

Thus, the northern and southern halves of the Study Area historically fulfilled two separate functions: Ordnance Stores in the south, and medical facility to the north. The boundaries of the two zones appear to have been established in c. 1851, and defined by the erection of five War Department Boundary Stones marking the northern medical zone only (first depicted on the 1864 Military Archives map), and also including the laneway to the north. Two additional stones were added in the south of the Study Area in c. 1886, bringing the Ordnance Stores into the War Department boundary. However, the incorporation was never complete, and the 1921-28 Military Archives map completely excludes the Ordnance Stores from the Department of Defence Headquarters.

It is possible that the ownership of the southern part of the Study Area was never completely formalised, perhaps in part because it straddled a historical boundary (the former City Liberty) and had been developed from a much earlier date (c. 1811) following the laying

out of the western end of Montpelier Hill. This situation may have created problems with fortifying the southern half of the Study Area, as suggested by incomplete plans to build corner bastions in the Study Area, of which only the northeast was built (Military Archives 1856). The exact boundary between these two zones may never have been completely clear on the ground, and the Married Quarters appears to have belonged to the northern War Department part of the study Area, along with the northernmost of the Ordnance Stores sheds (Shed 2), initially constructed in c. 1859 and converted into a Militia Barracks in 1902. The boundary appears to have shifted numerous times, however, and a barbed wire fence is depicted in red pen bisecting the Study Area into two, to the south of the expected boundary, on a 1909-16 revision of a 1905-7 Military Archives plan. Tobin (1968, 18) further notes that the Montpelier Hill gate of the Stores was used for funerary processions of deceased patients, suggesting some level of integration between the two complexes.



Dates and names of key structures in 'Site S'

Section 4 Assessment of Structures

Introduction

Inspections of the Study Area were carried out on 25/04/2015, 8/5/2018, 12/6/18 and 19/6/2018. The Study Area is currently vacant, and is now longer occupied by the Department of Defence. It is arranged over three terraces, partially defined by retaining walls, which rise to the north. The southern half of the Study Area is called the former Military Stores site, and is the site of the proposed development. No development is proposed in the northern half of the Study Area.

For the purposes of the site inspection and assessment of structures, the Study Area has been divided into a number of different areas. These areas are:

1. Boundary walls and gates
2. Open area to south
3. Married Quarters
4. Militia Barracks
5. The northern half of the site

Boundary walls and gates

The tall calp limestone boundary wall enclosing the Study Area is a Protected Structure (RPS 3994; NIAH 50070130). It has been architecturally assessed by Paul Arnoldin 2004 (structure A).

The stretch of wall bounding the southern part of the site was surveyed in detail and is presented below at the end of this section. It exhibits several phases of construction and repair. The remains of the former corrugated iron lean-to shed (c. 1964), later converted to Post Office stores (c. 1940), are visible in the interior of the southern boundary wall. The first clear cartographic depiction of the southern part of the wall dates from 1847, however it was



Southern boundary wall exterior



Ordnance datum (55 feet) in southwest corner



War Department boundary stone 1A in southeast corner



West boundary wall exterior



East boundary wall interior



Northwest corner with gate pier and bollard



Northeast corner with grass on former lane and railing

probably in place by 1818 based on the development of the southern part of the site on a map of that date.

The western boundary wall running along Infirmary Road is the most impressive in construction and also the most visible. It is in good condition and is architecturally coherent and simple, unlike the southern wall, and mostly dates to the c. 1860s. The limestone foundation includes rare handmade brick, and is outset 50-100mm and 350-400mm in depth, and the top of the outset is 300-350mm below the ground in Site S.

The eastern boundary wall is in good condition and has numerous features relating to various military and store structures, as well as the potential for 18th century features currently concealed or obscured. The limestone foundation is outset 50-100mm and 600-700mm in depth, and the top of the outset is 200-315mm above the ground in Site S, probably indicating ground reduction after the construction of the wall. The wall thus predates the scarping of the site in c. 1860, and appears on cartographic sources from 1837 (southern half) to 1847 (northern half). The southern section of the wall appears to have ended at the northern façade of the Militia Barracks, and was extended from there, and its incorporation of a slightly different angle at this point reflects its 18th century course. The northern portion of the wall was raised significantly in 1902 (Military Archives).

The northern boundary wall was lowered and replaced by a fence in 1867. The northern interior of the site steps down approximately 1.5m from the present ground level at Montpellier Gardens. From the interior of the site, looking north, the boundary wall is visible along the length of the site to a height of approximately 1.5m (that being the exterior ground level) and therefore acts as a retaining wall. The bastion in the northeast wall corner was not inspected. The north wall protrudes slightly to the north of the Study Area, a feature depicted in 1867 and retained as part of a new gate in 1921. A granite bollard is set into the pavement in the northwest corner.

Five gates were identified along the wall: two to the west, two to the south and one to the north. The northernmost gate in the west wall gives access to the hospital and was constructed in 1866. The southernmost gate in the west wall is earlier, constructed in the mid-19th century, and also opens onto Infirmary Road. The gates in the south wall open onto Montpelier Hill and are likely to be contemporary with each other (based on similarities in their style) and although only represented cartographically from 1859, these may be contemporary with the original construction of the stores in the early 19th century. The gate in the northeast part of the boundary wall (opens onto Montpelier Gardens. The later gate piers on Infirmary Road are of granite, whilst the two early gates on Montpelier Hill are of limestone.

Of the five recorded War Department boundary stones, only one was identified. This is stone '1A' and is situated in the southwest corner of the boundary wall exterior face, partially obscured by modern concrete render. It dates to c. 1886. It reads **'W↑D No 1A 22 FT. S.W.'** A mid-19th century Ordnance Survey benchmark at 55 feet is located at the base of the exterior of the west gate pier at the corner of Montpelier Hill and Infirmary Road.

Open area to south

The large southern third of the Study Area forms a distinct zone (formerly referred to as Zone 1). It is the lowest-lying part of the Study Area, and is enclosed by the boundary walls to east-west and south and by the Married Quarters and barracks to the north. The buildings in this zone have all been demolished, and the ground is covered by patchy broken concrete surfaces, vegetation growth, standing water, and backfilled trenches. Two blocked gates formerly provided access from Montpelier Hill. Two cement walls run southwards from each of the two gates.

A fireplace and other features associated with the demolished building to the southeast of the site are visible in the eastern boundary wall. These belonged to the Control Offices build in c. 1837. The fireplaces are depicted in detail in a



Southern gate on western boundary wall



Western gate on southern boundary



Open area to south, facing south



Remains of Control Office fireplaces in east boundary



Hooks from Engine House on east boundary



Granite paved floor of Engine House



Retaining wall adjacent to Married Quarters



Granite steps adjacent to Married Quarters

Military Archive plan to renovate them dating to 1874.

A well-preserved granite paved surface is located in the centre-east of this zone, abutting the boundary wall which is lime-washed and studded with iron hooks directly above the surface. These features probably belong to a demolished Engine House dating to the late 19th century.

In the centre of the zone the concrete, stone and brick foundations of the Ordnance Stores and associated extensions are clearly visible. Partial arches and openings in the wall compare well with the maps of the buildings. The maps show the original Ordnance Stores structure from c. 1818, with an extension to the north dating to the late 19th century. A cellar associated with the Ordnance Stores, and marked on the 1886 plan, was noted by Edward Lenihan of the Department of Defence (Pers. Comm. 2015).

There were also traces of the linear structure to the far south of the site. This building was labelled as a ‘Corrugated Iron Shed’ on the 1886 Plan of the site, and was constructed in the mid-19th century.

Married Quarters (Structure B)

The former Married Soldier’s Quarters is located in the east of the Study Area. It is a Protected Structure (RPS 3994; NIAH 50070131) and was assessed architecturally by Paul Arnold in 2004 (Structure B; see also DCC Engineering Report 2004). The western boundary wall forms the western wall of the Married Quarters at ground level. The exterior of the red-brick and cut stone three-storey, three bay over basement structure appears well maintained. The structure has a natural slate roof, four decorative red brick chimneys and bands of black and yellow brick running through the red brick. The interior however is in poor condition and proved difficult to access, but does retain various examples of period fixtures and fittings. The structure was constructed in 1883 (date stone) as Ordnance Store Offices, was converted to accommodation

for married soldiers in c. 1902. It was known as the Red House in the 20th century.

The Married Quarters is surrounded to the north and east by a rusticated masonry wall showing extensive root damage with rounded granite cap retaining the higher level of ground to the north, in the central portion of the site. Granite steps with a metal rail lead up to the upper level. A later brick outhouse (Engine Room) has been constructed abutting the Married Quarters to the northwest, and a similar outhouse (Store) in good condition abuts the granite steps, and may be earlier. A third modern outhouse building is situated to the east of the Married Quarters, abutting the wall of the Militia Barracks.

A mostly-demolished modern concrete wall marks a garden wall to the south of the structure. A rusticated masonry wall extends south from the façade of the Militia Barracks to the pier and forms the western boundary of the Married Quarters setting. This was originally constructed as the western wall of Shed 1, and was lowered in 1902 during the construction of the Militia Barracks, at which point the semi-circular concrete coping was added. A masonry and brick pier with multiple phases of construction and alteration stands in the southwest, but is heavily overgrown at time of writing. This is in fact the only surviving part of the Ordnance Stores: the northeast corner of the inner stores, constructed in masonry in 1881. Part of a brick arch running eastwards can be made out (which formerly provided access between the Inner Stores and Shed 1), as well as the truncated eastern wall of the stores.



Stores adjacent to Married Quarters



Masonry corner of stores adjacent to Married Quarters



Militia Barracks, north-facing facade

Militia Barracks (Structure C)

The 15 bay single storey linear barracks building is located to the east of the Married Quarters. It was assessed architecturally by Paul Arnold in 2004 (Structure C). It is dilapidated within. The building is located on the edge of the terrace adjacent to the southern open area, though there is no access to the south and all doorways lead northwards to the higher level. The building is no longer basemented (the former coal cellar in the east is infilled), and the lower



Militia Barracks, interior of main block



Militia Barracks, earlier eastern section



Militia Barracks, interior of earlier eastern section



Militia Barracks, roof detail of earlier eastern section



Militia Barracks, scar of former wall and early brick

part of the east-facing wall functions primarily as a retaining wall.

Although the structure appears on maps as an Ordnance Store shed from the 19th century, the current structure is likely to be mostly of early 20th century date. This is based on: the early 20th century fireplaces being fully integrated into the roof (which must therefore be mostly 20th century in date); the absence of openings to the south to the rest of the stores; and the lack of evidence for earlier phases within the current structure. It is therefore assumed that all of the former 19th century store shed ("Shed 2, built c. 1859) was demolished in c. 1902 for the construction of the Militia Barracks. It is, however, possible that the lower part of the structure to the south, which acts as a retaining wall, is earlier in date, and the 1901-2 drawing do appear to show much the intention to retain as much 19th century structure as possible during the conversion process.

The easternmost section of the structure is notably different from the rest. This is a two story, formerly over basement, section in bad repair. Walls are of red brick except the east wall (also the boundary wall) which is masonry. The upper story (mezzanine) is inaccessible, with wooden roof-beams in a state of collapse. The ground floor retains wooden furniture, radiators, light fittings, etc. Access is from the north via a plain wooden door with square 8-pane window above, with brick surround. Three windows provide light, one to the north and two to the south, and are six-over-six pane sash windows with an upper 3-pane light above, with plain brick surround. An additional window of the same style is present in the eastern end of the adjacent barracks building, but the remaining early 20th century windows in the Militia Barracks are of a different style, despite the proposed plans dating to 1901-2, suggesting the survival of earlier fabric. The roof is slated with a raised louvre and is noticeably higher (by c. 150mm) than the rest of the roof of the barracks. Two rectangular chimneys pierce the roof at either end of the structure, with the eastern chimney used for the existing fireplace, and the western chimney incorporated into the barracks.

This part of the structure (the ‘Cook House’) is probably of 19th century date and is drawn on a Military Archive plan of 1864. It may also incorporate an 18th century field or gate structure appearing on Rocque’s map of 1756. The east gable wall (which is also the masonry Study Area boundary wall) has features including a gable, partially obscured behind render, a brick chimney/fireplace and wooden cupboards, which may include 18th century elements dating from the early structure, and should be examined in more detail during a future demolition/clearance phase. The retaining wall to the south is also different in this area, further reinforcing the potential for earlier fabric. This is also the only section of the barracks structure to have a basement (a ‘coal store’ is depicted on a Military Archives plan from 1863), explaining the difference in the fabric of the retaining wall, which contains brick unlike the rest of the wall. A construction line or scar between the easternmost section and the main barracks building, in the south-facing façade 2.2m west of the east boundary wall, derives from the east wall of Shed 1 and corner fireplace, which was demolished in c. 1902. The southern wall of the eastern section is also noticeably thinner than the southern wall of the barracks structure. Finally, a brick-lined stone-capped drain identified below the retaining wall outside the southeast corner of the building may relate to the 18th century phase (it appears to predate the boundary wall) and should be further investigated (refer monitoring notes below).

An unglazed plain ceramic ridge tile from a roof was identified on the ground to the north of the structure stamped ‘**C. DAVISON & CO. MANUF’s HAWARDEN, FLINTSHIRE**’. This tile was manufacture sin North Wales by a company established in 1844, according to their advertisements.

A red brick structure abutted the eastern end of the barracks, and is an early 20th century WC. This structure is now demolished, possibly accidentally, an event which occurred after the site inspection in c. August 2018.

Northern half of site (‘Site N’)



Militia Barracks, yellow brick blocking former coal cellar



Militia Barracks, drain possibly predating barracks



Militia Barracks, roof tile ex situ



Privies adjacent to Militia Barracks (now collapsed)

Site N is situated in the northern half of the Study Area. No development is currently proposed in this area, and site inspection and assessment of this part of the site was less extensive than the previous sections.

In the south of Site N lies a linear structure (Structure D) constructed in the early part of the 20th century (refer Plate 10). An additional small red-brick structure (Structure E) located to the east of this abutting the boundary wall of the site was also constructed at this time.

The former medical mobilisation store, library and archive, known as the 'old library' (Structure E) is a red brick structure located to the east of the Study Area. It was constructed in the early 20th century and comprises one large space, open to a double-pitched roof supported by metal trusses with an entrance extension to the south. A flight of steps at the front of the building gives access to a basement. The building survives in extremely bad condition (but was in good condition as recently as 2004) and has a number of interesting architectural features including two large windows with iron glazing bars at first floor level at the gable ends, a parquet wooden floor inset with fretwork metal grills running the length of the structure north-south. It also retains elements of early 20th century decorative design including simple twin brick pilasters extending downwards from the eaves towards the centre of the interior south wall either side of the doorway. Two parallel lines of clerestory windows run the length of the building at the square peak of the roof. The structure is architecturally interesting and of significance in terms its military association and function. It was listed as a Category 2 Structure in the now obsolete 1999 City Development Plan, reflecting a significant degree of architectural, technical or historic merit. The building is not currently protected under the RPS.

A small structure is located just north of the gate to the north-west of the Study Area. This building was labelled as a 'Store Holder's Quarters on the 1886 Plan of the site. It survives in good condition.

The masonry cruciform isolation hospital

constructed in 1866 (Structure G) is situated in the north of the Study Area. This unique structure is built from coursed calp-stone and arranged in Latin-cross formation, linked by covered walkways supported on cast iron columns (Reynolds undated, 3). The hospital is in good condition and is of historical significance in terms of military and medical heritage. The various original fixtures and fittings within the hospital (sinks etc.) survive in good condition. A Dublin City Council report concerning the current proposal states that the complex is unique and should be given status 'by including it in the Record of Protected Structures' (Reynolds undated, 3). The low stone retaining wall around the base of the hospital divides site N into a northern upper tier and a lower/central tier.

In the northeast corner of the Study Area is a dilapidated and overgrown red-brick structure (Structure F) associated with a set of granite steps that lead up from the north-east corner of the site onto Montpelier Gardens. The building and steps are marked 'Engine Ho[use]' on the 1866 map of the site.

The bastion in the northeast corner of the Study Area was not inspected due to vegetation growth impeding access.

A grassy strip of land to the north of the enclosed site is located along the south side of Montpelier Gardens and is included in the Study Area. This historically formed part of the War Department boundary, and was utilised as a laneway leading to 'Atkinson's fields'. It is raised approximately 1.5m above the interior of the site. The boundary wall, a protected structure, separates the northern strip from the rest of the site. There is no trace of the former lane or War Department boundary stones.



Scaled and rectified photographic elevation of southern boundary wall (internal), overlaid with 1m orange grid. Refer overleaf for closeup.

Detailed survey of south boundary

General

This wall 61.68m in length east-west internally, from the interior of the curve in the east, to the edge of the gatepost in the west. It forms the boundary between Montpelier Hill and the Study Area. The wall appears on cartographic sources from 1818, where it forms the boundary of the Ordnance Stores.

The wall measures between 5m high in the southwest corner to 3m high in the northwest corner, averaging just under 4m in height across much of its central area. It measures 500mm in width, which is narrower than the standard 600mm width evident in the other boundary walls of the Study Area to the east, north and west.

The wall is pierced by two large gates (to the east and west) and a pedestrian gate next to the western gate. It is capped to a point. The exterior of the wall, facing south onto Montpelier Hill, is mostly rendered with pebbledash, with patches missing exposing masonry. A War Department boundary stone is incorporated into the external southeast corner, and an Ordnance Datum level is marked on the southwest corner, at the base of a gatepost. These are described in the previous section

The foundations of the wall were examined in one location, just east of the western gate, on the interior side. Unlike the other boundary walls, the foundation is not outset, and instead the wall continues straight down 550mm below the existing ground level to rest on natural subsoil, and comprises rubble limestone in contrast to the other wall foundations on the site.

Gates

Both gates to Montpelier Hill are identical,

comprising a pair of square-profile cut calp limestone piers with chamfered edges and conical cap, each 3.6m in height, and set 3.6m apart. The western gate is blocked with concrete, but the likely-original wood and iron gate survives behind. The eastern gate has been replaced by modern metal doors. The opening of the western gate is situated 11m from the western end of the wall, the opening of the eastern gate is situated at the eastern end of the wall, and the distance between the two gate openings is 43m. A pedestrian gate is situated 0.85m east of the eastern gate pier, and comprises plain dressed limestone jambs and arch 1.2m wide and 2.25m tall, with a concrete threshold.

Phases

Five phases of the wall have been identified, excluding later repair which is evident throughout the wall. These are:

1 Lower part of wall up to 1.2m high in west, to 2.2m high in east. This phase is characterised by highly variable construction of undressed limestone blocks with lime mortar, occasional use of red hand-made brick. The uppermost course is frequently composed of slightly larger stones. The height of this wall follows the slope of Montpelier Hill.

2 Middle tier of wall, sitting on lower part of wall between the two gates but not identified east of the eastern gate. This consistently measures 500mm high, and sits directly on top of the phase 1 wall. This phase is characterised by the use of smaller and rougher stones, no dressed masonry or large blocks, and the use of relatively little stone and more lime mortar. The bottom of this phase is characterised by the use of very thin stones, creating a visible seam between phases 1 and 2, and it is topped by a line or handmade bricks in the west. The height of this wall follows the slope of Montpelier



Hill, as with phase 1.

3 Upper tier of wall, sitting on the middle tier and raising the wall by 1.7m (to 4m internally) in the east, and tapering to almost nothing at the eastern gate (where the wall was originally c. 4m internally following ground reduction). This phase was not identified east of the eastern gate. This phase is characterised by the use of well-shaped undressed limestone blocks and a hard lime mortar. The stone is also significantly darker in colour to the phase 1 and 2 walls, and has no render (on the interior). The slope of this wall does not follow the line of Montpelier Hill, but it does respect the levelled land on the interior of the Study Area. This phase also clearly post-dates the two gates, whose piers are significantly lower than the wall.

4 Control Offices wall, sitting on possible phase 1 wall to east of eastern gate. This is the highest part of the southern boundary wall, reaching 5m in height, and formed the southern wall of the Control Offices structure, first built in c. 1837 but extensively modified over the course of the 19th century.

5 Post office stores lean-to abutting the interior of the wall, between the gates. This measures 38.45m in length internally and is defined to east and west by two concrete block walls (c. 1940) abutting the southern boundary wall, c. 4m high and 230mm in thickness, and a concrete slab. A line of timber attached to the wall at a height of c. 3m above the slab represents the former roofline.

Discussion of phasing

Phase 1 and 2 may represent a single phase of construction using a levelling course, however phases 3 and 4 are clearly later alterations to the wall. Phase 1, the original wall, is likely to date to c. 1816, with phase 2 either dating from the same time or slightly later. Phases 1 and 2 were constructed at a time when the interior of the site sloped gently from the east down to the west, similarly to Montpelier Hill. This early slope was also identified by the raised foundation of the western boundary wall, which must also have been constructed prior to the levelling of the site, and is visible in the different levels of the two southern gates. The

levelling of the interior southern part of the Study Area likely took place in or around 1860.

The gates are either original or added at some point before 1859 (when they are first depicted on plans), but a date in the first half of the 19th century is likely. Phase 3 of the wall dates to after the gates were added, and may be contemporary with the levelling and (re-) walling of the west boundary in the c. 1860s, and certainly predates the Post Office stores concrete side walls (which abut it) dating to c. 1940. The Control Offices were renovated in 1874 including raising and providing access to an upper floor, which may date Phase 4. Phase 5 dates to c. 1940 and represents the rebuilding of the earlier 'corrugated iron shed' lean-to.

Other features

Eleven individual features, most comprising 20th century repair, were identified on the interior façade of the southern boundary, described east-west below and labelled on the accompanying elevation.

F1 Rectangular section of brick repair 500mm wide and 200mm high, associated with a line of handmade red brick 1.2m long directly above.

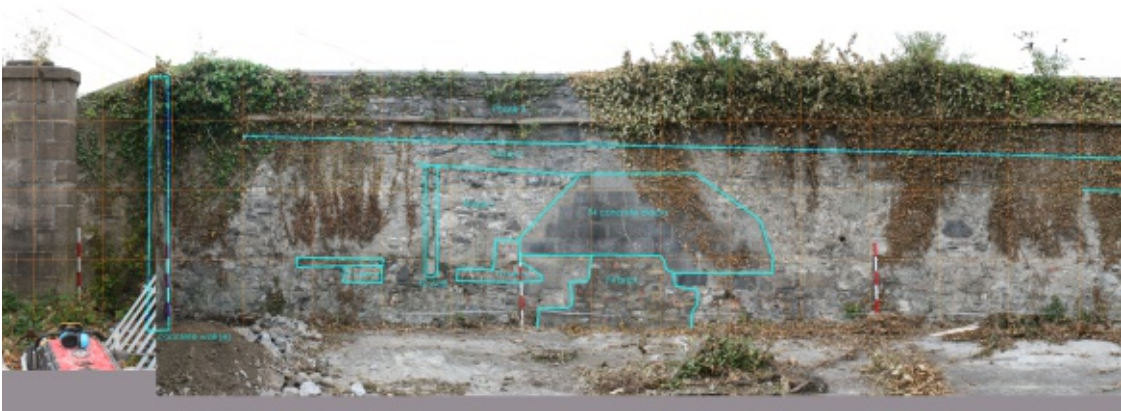
F2 Wall scar of later concrete wall tied in to southern boundary, within 1940s Post Office shed.

F3 Rectangular section of brick repair 200mm wide and 500mm high, associated with a line of handmade red brick 1.2m long directly below. Obviously related to F1.

F4 Large arched opening in wall infilled with 20th century brick at base and concrete breeze blocks above, measuring 2.2m high and 3.5m wide. Possibly representing a bad repair after a collapse in brick followed by a repair of the repair in concrete. Coincides with area where a service is shown running through the wall on the 1886 and 1905 plans.

F5 9.5m wide section of much rougher construction of phase 1 wall visible along base to a height of 1m in central section of southern boundary. This section has a much higher content of handmade brick than elsewhere, where brick is rarely used in the wall construction. The limestone here is undressed and particularly variable and rubbly. A course of particularly large limestone blocks directly above this section further defines it. This may represent the oldest portion of the wall c. 1800 prior to the construction of the Ordnance Stores, but also corresponds to area where two water services are shown running through the wall on the 1886, 1905 and 1941 plans.

F6 An iron nail and timber inset into the wall with cement just above the line between the phase 1 and 2 walls. These may relate to the c.1864 corrugate iron shed



(the cement is later).

F7 Section of concrete repair using modern blocks and cement 1m wide and 600mm high in exact centre of southern boundary wall, probably relating to Post Office shed, with graffiti of no heritage interest (e.g. 'DM IS COOL').

F8 Square section of concrete block repair 650mm across near base of wall. Phase 1 wall construction on either side of this section is noticeably distinct from elsewhere due to the use of larger than usual rectangular limestone blocks. Possible former opening.

F9 Vertical line of concrete representing former wall of Post Office shed, but also coinciding with line of 'Grease and Paint Store' on 1905-7 plan.

F10 Modern red brick repair at top of boundary wall at eastern end.

F11 hole in wall at east end showing internal rubble construction.

Archaeological Monitoring

Six engineering trial pits (TP1-6) to investigate wall foundations, and three engineering trial holes (TH1-3) to investigate ground conditions, were archaeological monitored on 19/06/18. Natural subsoil was identified immediately below modern surfaces, confirming the results of the 1993 testing by Alan Hayden. Foundation depths from the existing ground level to the base of the foundation were recorded in all of the test pits. All wall foundations were of masonry except for two modern walls. All foundations were outset except modern concrete walls, the eastern section of the retaining wall (which was constructed directly over a drain), and the western wall of Shed 1.

The key point of interest from this programme

was the observation that the ground across the east end of the Study Area has been reduced by c. 300mm after the construction of the eastern boundary wall, probably in the mid-19th century.

Two features of archaeological interest were identified in Test Pit 1. The first was a curving northeast-southwest running drain with two courses of brick along the sides, flat limestone capping, and a clay base. It was cut into natural subsoil directly below the retaining wall, which had been constructed over it, and below the Militia Barracks structure. The drain is not marked on the 1886 or 1902 plans showing drainage on the site, and does not appear to relate to the existing structures. It seems to run below the eastern boundary wall, running from the lane which previously existing behind it. Although it is of 19th century appearance and the eastern boundary wall shows possible brick repair in the foundation directly above the drain, a step in the wall's outset foundation in line with the drain could suggest the drain predates the boundary wall, and thus relates to the 18th century structure shown here on Rocque's 1756 map. An identical drain was identified in Trial Hole 3 nearby, and appeared to be truncated by the 1881 Inner Stores.

The second feature of interest was a yellow-brick section of the retaining wall abutting the eastern boundary wall. This probably represents the former opening into the coal cellar blocked up in 1902.

A second programme of monitoring carried out on 09/10/2018 which identified the cellar of the Ordnance Stores is described in the Appendix to this report.

Results of archaeological monitoring programme June 2018

Pit	wall	depth*	foundation	notes
TP1	East boundary wall	315mm	outset	
TP1	Retaining wall (east)	270mm	N/a	built over drain
TP2	Retaining wall (west)	600mm	outset	
TP2	West wall Shed 1	700mm	N/a	
TP3	Concrete garden wall	250mm	outset	modern concrete
TP3	West boundary wall	700mm	outset	
TP4	West boundary wall	700mm	outset	
TP5	South boundary wall	550mm	N/a	
TP5	Post office concrete wall	N/a	N/a	modern concrete
TP6	East boundary wall	500mm	outset	heavily repaired

Section 5 Heritage Impact Assessment

Archaeological Potential

This section assesses the archaeological and cultural heritage features of value in Site S (‘the site’: the southern portion of the Study Area) only, but considers these features within the overall context of the Study Area.

Cultural landscape

The significance of the Study Area reflects its evolving military use from the early 19th century to the early 20th century (c. 1811-1940) including military stores and military hospital, the location of the site in relation to the surrounding military landscape of northwest Dublin and Infirmary Road streetscape, the integrity of the military complex as a whole, and the individual historical significance of the surviving buildings. These four elements form the basis of the archaeological, historical and cultural heritage assessment of the cultural landscape.

The Infirmary Road streetscape provides an important and excellent setting for the site, and creates relationships between urban institutions both historic - such as the Phoenix Park and Royal Infirmary - and new, in the case of the new Criminal Courts building. The western boundary wall of the site, the Married Quarters western, northern and southern façade and the views to it along Infirmary Road, and the two gates on Infirmary Road, all successfully address, and form core aspects of, the existing rich cultural streetscape.

The historical slope of the site, as reflected by the three existing terraces, has influenced the design and spatial relationship of all structures across the site. This cultural landscape is integral to the site’s historical evolution, and should be retained in any scheme. Views of, and spatial relationships between, the existing 19th and early 20th century buildings and features on the site

should be maintained where possible.

Recorded Monuments and early archaeology

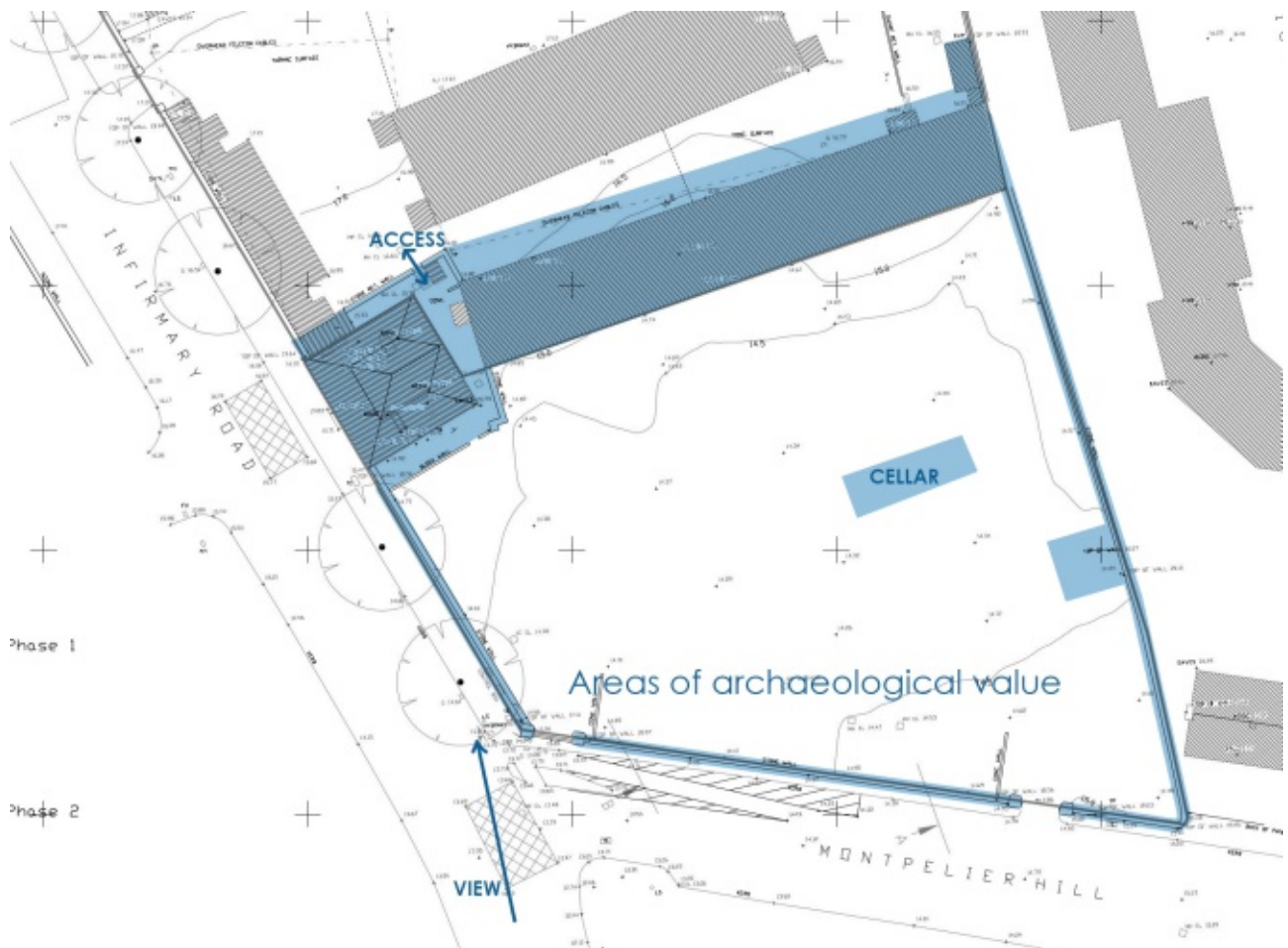
The proposed development will not impact on any previously Recorded Monument. The southern portion of the site lies within the Zone of Archaeological Potential for Dublin City (RMP No. DU018-020).

Previous archaeological investigations on the site identified natural subsoil directly below the modern surface, indicating that the lower portion of the site has been heavily scarped, presumably in the early 19th century for the construction of the Ordnance Stores. Testing in 1993 identified no earlier archaeological features cut into the subsoil, and the potential for pre-18th century archaeological material surviving within the site is very low, with the exception of directly below the Militia Barracks, where buried topsoil may survive.

Boundary wall (Str. A)

The boundary wall and gates are a Protected Structure, and form an integral cultural heritage aspect of the site. They display numerous phases of construction, repair and modification over the course of the 19th century. Features present on the interior of the eastern boundary wall relate to mid-19th to early 20th century structures abutting the boundaries, including a former Engine House represented by a grid of iron hooks set into the centre-east wall, and the former Control Offices represented by chimneys and fireplaces set into the southeast corner. Additional features are present in the eastern boundary wall within the Militia Barracks. Features on the exterior of the wall include an Ordnance Survey datum point in a gate pier in the southwest, and a Department boundary stone in the southeast corner.

The boundary wall has archaeological, historical and cultural heritage value in terms of defining



Features and structures of archaeological and cultural heritage value or interest

and presenting an urban military complex. The multiple fabrics and phases of the wall, and the surviving insertions and modifications, testify to the evolution of the site from the early 19th century to the mid-20th century, and the reworking of a united space across a period of considerable changes for the military in Ireland.

The height of the wall and its forbidding, unbroken character is a core part of its identity as a structure designed to defend the military complex, block views into it, and control access. Its similarity and location in relation to the Phoenix Park and Royal Infirmary walls across Infirmary Road, evoke the military nature of the streetscape.

In order to be consistent with overall conservation and heritage objectives of the DCC Development Plan, the proposed development should seek to minimise any breaches or demolition to the historic boundary

wall. The retention of large parts of the wall - here and elsewhere - is important to the overall historic landscape setting of the Study Area, and any individual part of the boundary wall should not be viewed in isolation from the rest of the wall, or wider landscape.

Aspects of the walls which could (or should) be altered without affecting the cultural heritage value include: strengthening the wall to the south and east where c. 1900 scarping has exposed the foundations; re-opening the two blocked southern gates, demolishing the two early 20th century concrete walls of the Post Office Stores abutting the interior of the southern gates; and carefully removing the modern concrete render part-covering the surviving War Department boundary stones in the southeast exterior corner.

Married Quarters (Str. B)

This building is a Protected Structure, and has

been assessed by Paul Arnold in 2004 (Structure B). It forms a critical part of the historic site and should be retained and repaired where necessary to ensure its long-term survival. The setting of the structure includes the lower 'area' to the north, the retaining wall to the north and northeast, the granite steps and railing to the northeast, the small red-brick store to the northeast (due to be demolished in this scheme), the wall to the west, the masonry pier to the southwest (also due to be demolished), the view of the structure from the south of Infirmary Road, and its relationship to the western boundary wall along Infirmary Road. All of these elements should be retained if possible as part of the curtilage of the Protected Structure.

A small boiler room extension to the north of the structure, and a similar structure abutting the barracks directly east of the structure, are both mid- to late 20th century in date and can be removed without impacting on the integrity of the Married Quarters.

Militia Barracks (Str. C)

This building is not a Protected Structure, and has been assessed by Paul Arnold in 2004 (Structure C). The majority of this building is most likely of early 20th century date, with the exception of the eastern end which appears to be 19th century in date, and may incorporate early 19th and possibly late 18th century fabric. The eastern part of the building may incorporate the earliest structure on the site (a field or gate structure depicted on Rocque's map of 1756, possibly the same as the 'Straw Store' in 1837), and if so this should be archaeologically investigated. The 19th century cellar below the eastern part of the structure, and the possibility of identifying the earliest phase of the retaining wall, are also of historical and archaeological interest. Following archaeological investigation, some element of the retaining wall at the eastern end of the Militia Barracks should be incorporated into any new scheme.

Ordnance Stores

The foundations of the original c. 1811 Ordnance Stores and its northern extension survive within the site at ground level. These should be recorded prior to any groundworks.

The mid-19th century cooper's cellar in the east of the former stores should be further investigated archaeologically (refer Appendix). No part of the 1811 Ordnance Stores survives today, but the northwest corner of the Inner Stores or 'new accommodation' northern extension to the Ordnance Stores constructed in 1881 does survive, described above in the setting of the Married Quarters.

Former structures

Elements of demolished structures survive along the south and west boundaries of the site. These include: the concrete side walls and roof mark of the early 20th century Post Office stores shed against the southern site boundary; fireplaces and chimneys of the late 19th century Control Offices in the southwest corner; and paved granite surface, wall render and hooks of a late 19th century Engine House in the east.

The remains of the Post Office stores shed reflect the demilitarisation of the complex in the mid-20th century. The features should be recorded but do not warrant retention. The remains of the 19th century engine house and Control Offices are more significant in terms of the overall integrity of the military complex, and should be recorded and retained or reused if possible.

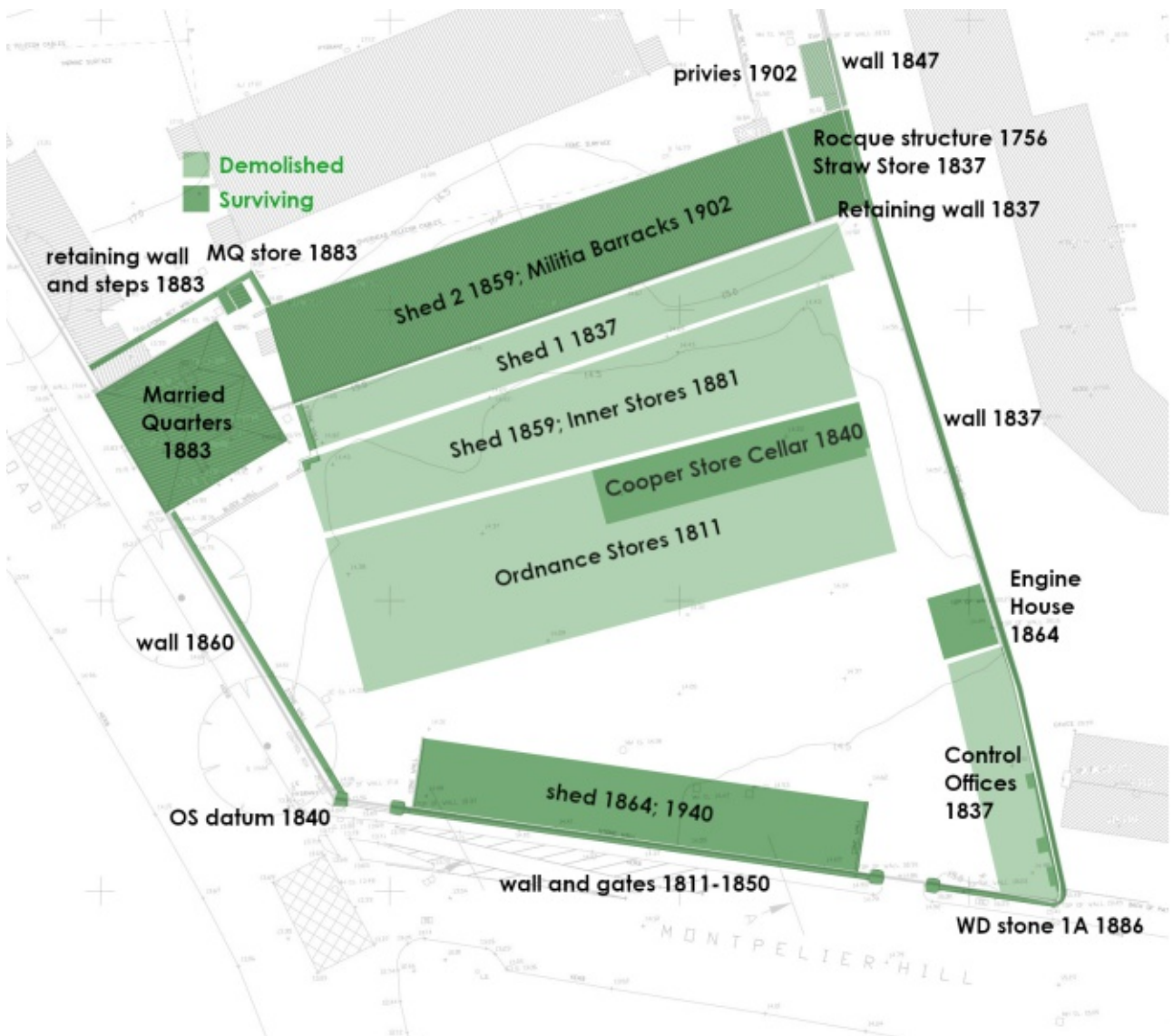
Steps between terraces

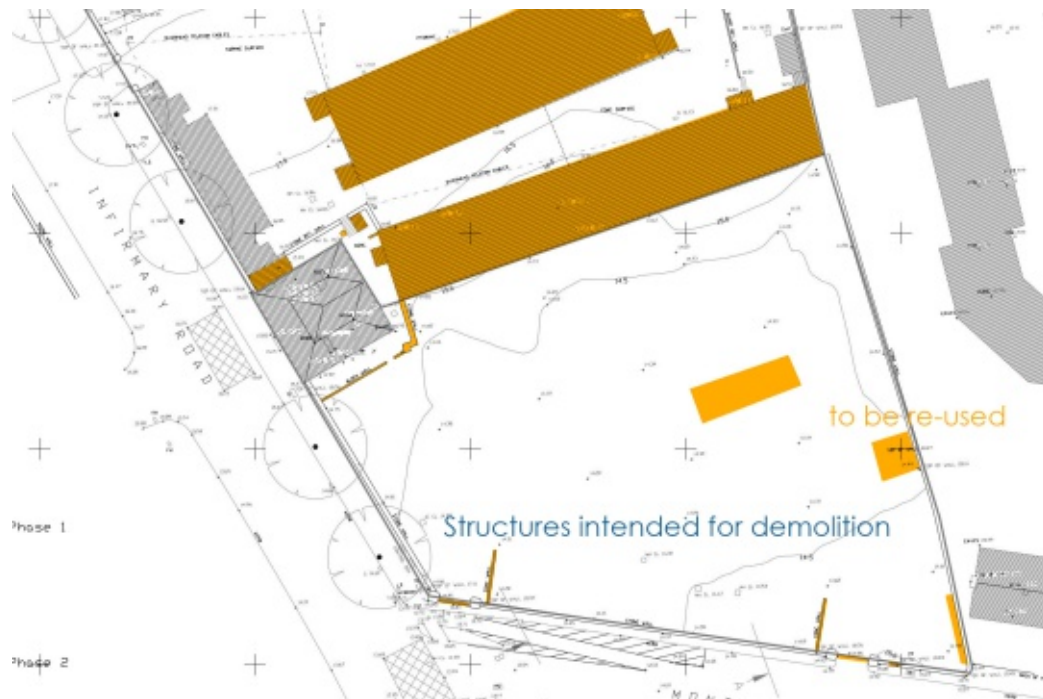
The existing granite steps to the northeast of the Married Quarters link the lower tier to the upper tier. As well as forming part of the curtilage and setting of the Protected Structure, these steps connect two historically separate elements of the complex: the southern Ordnance Stores developed from c. 1811, and the northern Isolation Hospital developed from c. 1850. In the future this access will link the southern social housing scheme with a future scheme in the north of the complex. The steps relate directly to - and help to articulate - the historic sloping terraced landscape that has influenced the evolution of the overall site.

The link between the different levels should be retained at this point, ideally by retaining as much fabric as possible from the existing steps, whilst prioritising access between the two terrace levels and retaining the setting of the Married Quarters.

List of buildings recorded in Site S

Boundary walls/gates (Structure A)	1811-1864	Surviving
Rocque building	1756	Demolished
Straw Store	1837	Part surviving in Militia Barracks; possible drain
Terrace retaining wall/steps	1837	Surviving, including earlier version to east
Ordnance Stores (main)	1811	Demolished, but cooper's cellar survives
Ordnance Stores (inner stores)	1859-1881	Demolished, but northwest corner of later 1881 phase survives
Shed 1	1837	Demolished
Shed 2	1859	Demolished, but part survives in Militia Barracks
Militia Barracks (Structure C)	1902	Surviving
Married Quarters (Structure B)	1883	Surviving
Married Quarters store	1883	Surviving
Control Offices	1837	Demolished, but some features survive in east boundary
Corrugated iron shed (south)	1864	Demolished
Post Office stores (south)	1940	Demolished, but some features survive in south boundary
Engine House (west)	1864	Demolished, but floor and hooks survive in east boundary
Privies (east)	1902	Demolished
Privies (northeast)	1902	Demolished (in 2019)
Administrative Block (Structure D)	1940s	Surviving





Current DCC proposals for demolition, before mitigation

Development proposals

Dublin City Council are proposing to construct a social housing scheme on the southern portion of the Study Area (Site S). This represents the first phase of a larger redevelopment plan for the complex, the northern part of which is currently in the ownership of the OPW. 38 social housing units in apartments and duplexes are currently proposed. The scheme received approval from the Department of Housing, Planning, Community and Local Government Reference Number N292/894.

The scheme aims to maintain the enclosure wall and reopen the two existing historic gates on Montpelier Hill. The wall is a Protected Structure and a key part of the historical integrity of the Study Area as a former military complex. Interventions to the upper parts of the wall on Montpelier Hill are proposed and sections cut out of the top of the wall. The boundary wall along Infirmary Road will be retained in full and not impacted upon. The boundary walls to the east and south will be reinforced or underpinned where necessary.

The scheme proposes to demolish the former

stores and barracks building (Structure C in Arnold 2004), and replace it with a building of approximately similar size and location. The modern building to the north (Structure D) will also be demolished. The existing lower retaining wall, if present below the building, will be demolished except in one small area. The existing historic tiered nature of the site will be retained.

The former Married Quarters/Ordnance Survey Offices, a Protected Structure, will be conserved and retained within the new scheme. The walls and outhouses surrounding the Married Quarters will be demolished in the scheme. The new social housing units are situated with respect to the Protected Structure, and aim to maintain the impressive setting of the building by allowing space around it. The scheme retains the view of the Married Quarters from the bottom of Infirmary Road, which is an important element of the site.

The scheme will maintain a link between Site S and Site N, which is appropriate given the history of the complex. The existing granite steps to the northeast of the Married Quarters will be demolished and replaced by new steps in approximately the same condition.



Impacts

The development proposals will retain the two Protected Structures (boundary walls and gates (A); and Married Quarters(B)) and demolish all other structures and features within the footprint. The original terracing of the site will be altered, and a small part of the retaining wall may be preserved in the northwest of the development. The steps to the upper tier will be preserved, but the small associated historic store northeast of the Married Quarters will be demolished.

All sub-surface features and remains will be removed across the development footprint. The southern boundary will be reduced in height to its original level, and the eastern boundary wall will be reinforced and partially rebuilt. The setting of the Married Quarters will be impacted upon to the southeast and east by the removal of walls and a historic store. The visual link to the Married Quarters along Infirmary Road will be maintained.

The key impacts, in terms of the archaeological and cultural heritage baseline set out above, are presented in bullet points below.

Unavoidable impacts of new scheme

- Militia Barracks (Structure C) removed
- West wall of Shed 1 removed
- Archaeological material removed in 'Straw Stores'
- Archaeological material removed in 'Cooper's Cellar'
- Boundary wall to south reduced to original level
- Terracing and retaining wall mostly removed
- Archaeological material under Militia Barracks removed
- Last part of former Ordnance Stores removed
- Features surviving from Control Offices removed

Avoidable potential impacts of new scheme

- Setting of Married Quarters altered negatively
- Features surviving from Engine House removed from site
- Historic link between terraces removed
- Accidental damage to historic walls

Positive impacts of new scheme

- Conservation and potential re-use of Married Quarters
- Opening up of historic southern gates
- Consolidation of precarious S and E boundary walls
- Use of abandoned cultural landscape

Mitigation

The mitigation measures set out in the coloured bar on the right will mitigate against unavoidable impacts as well as avoidable impacts can be completely mitigated against. These measures also include mitigations that will enhance the existing cultural heritage. All of these measures are compatible with the overall development scheme.

Of particular importance is the preservation of the historic boundary wall of the site (Structure A), which is a Protected Structure. The cultural heritage value of the wall is articulated on pages 46-47. This assessment has identified a phase of scarping (reducing the ground level) in the eastern half of the site in c. 1860, which has undermined the structural integrity of the south and east boundary walls. If this development proceeds without first strengthening these walls, through butressing, underpinning, and other methods, there is a chance that the wall will collapse. This will be an extremely negative impact, as a modern reconstruction of the wall will not have the same heritage value as the original multi-phase wall. For this reason, the strengthening of these walls should be carried out at an early point in the scheme, and certainly before excavation groundworks.

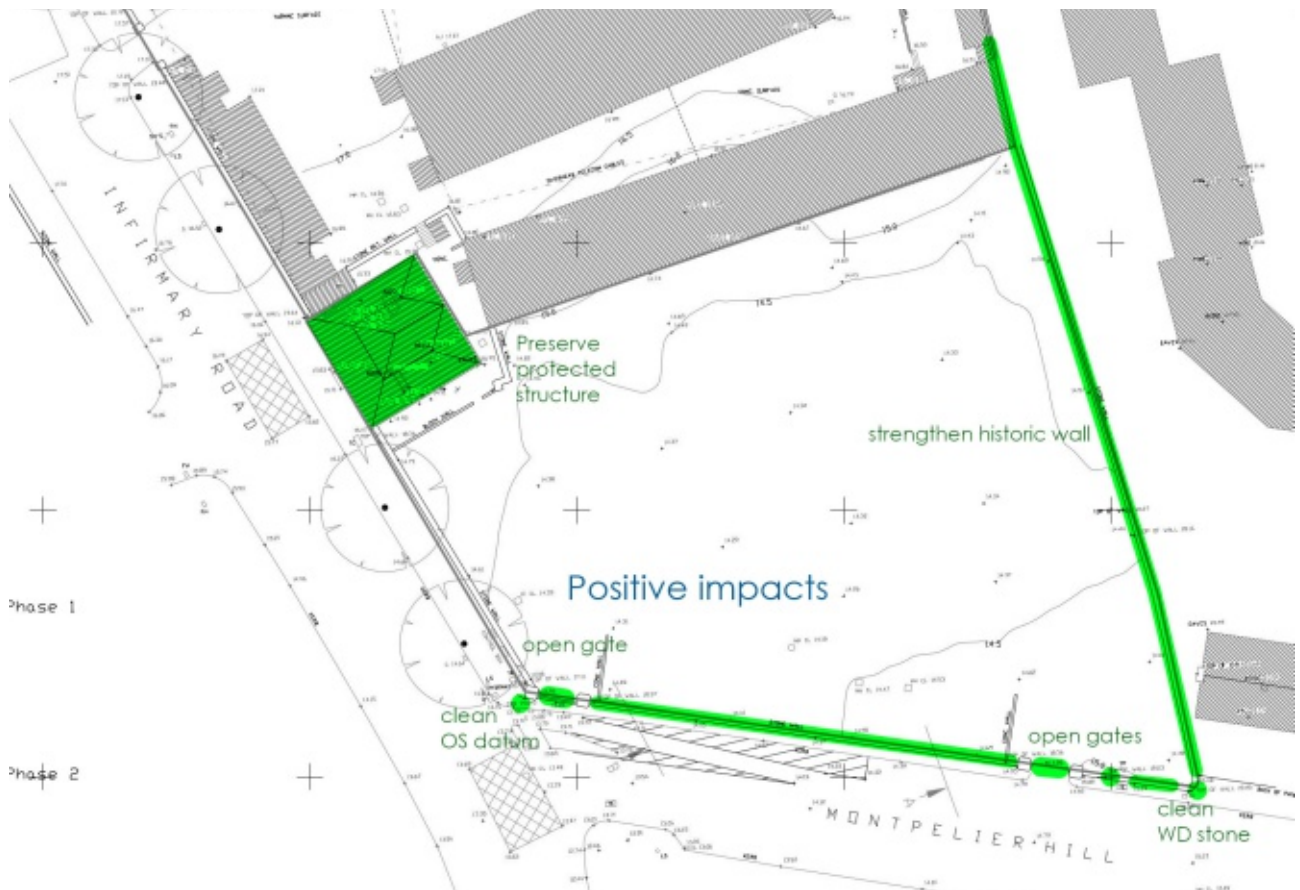
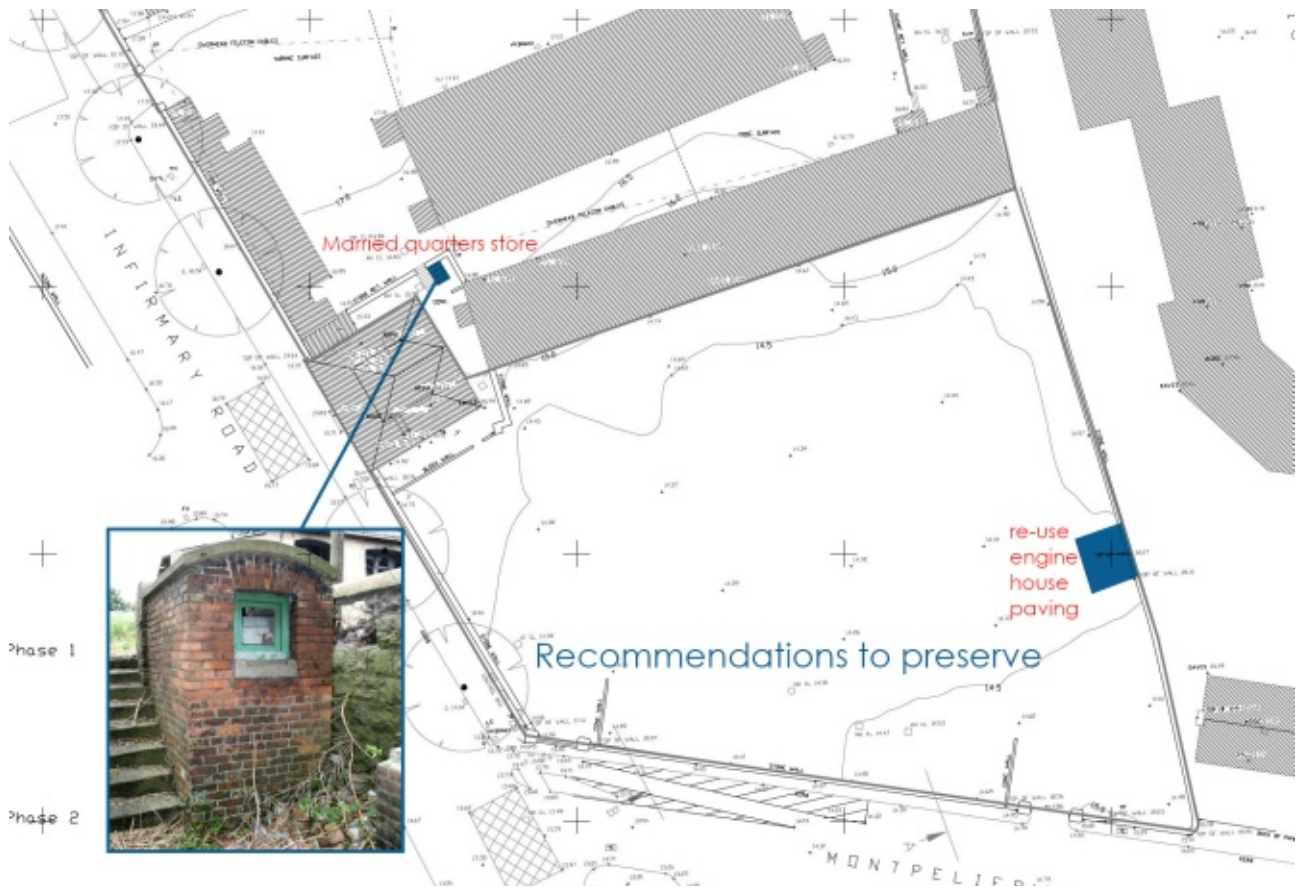
Another important issue is the current stepped access northeast of the Married Quarters (Structure B). Although not suitable for modern public use at present, these steps should be retained and reused in new access constructed at the same location. Strong consideration should be given to retaining the small historic store adjacent to these steps, as these provide part of the setting of the Married Quarters Protected Structure.

Finally, although it would be desirable to retain the last remaining part of the Ordnance Stores, a pillar-like fragment of masonry to the southeast of the Married Quarters, retaining this would interfere with safety due to fire engine turnign circles, and thus it should be recorded and removed.

Mitigation measures

- Archaeological investigation and recording of 'Straw Stores' area during and after demolition of Militia Barracks (Structure C)
- Archaeological investigation and recording of 'Coopers Cellar' below Ordnance Stores during groundworks
- Archaeological investigation of retaining wall and fill behind following demolition of Militia Barracks
- Full drawn, written and photographic record of both faces of boundary walls, including all features on the interior face of the eastern wall, following vegetation clearance
- Full drawn, written and photographic record of Militia Barracks
- Full drawn, written and photograph record of immediate setting of Married Quarters and Shed 2 wall
- Consideration given to west façade of new building to immediate west of Married Quarters
- Programme of general archaeological monitoring of all groundworks
- Serious consideration given to retain small historic store structure to northeast of Married Quarters. If not possible, careful removal so as not to damage adjacent steps.
- Retention and reuse of terrace wall and steps northeast of Married Quarters and improvement of stepped access for public use
- Structural assessment of south and east boundary walls, and where necessary underpinning, butressing and strengthening to ensure these do not fall down during or following groundworks.
- Reuse of paved floor of Engine House. This latter feature should be archaeologically recorded, removed for safe keeping, then replaced during final landscaping works in an appropriate location.
- Removal of modern concrete part-coving War Department boundary stone in southwest external corner and enhance setting
- Clean up Ordnance Datum in southeast external corner
- Dismantling of all historic structures to use methods that allow for re-use of elements and materials, and identification of strategies for the re-use of building elements with on-site use priorities.

* Drawn, written and architectural records of the Militia Barracks, boundary walls, and any other features, should be lodged with the Military Archives, Irish Defence Forces and Department of Defence (Cathal Brugha Barracks, Rathmines, Dublin 6; militaryarchives@defenceforces.ie); the Irish Architectural Archive (45 Merrion Sq. Dublin 2; info@iarc.ie), and the Dublin City Archives (138-144 Pearse Street, Dublin 2; cityarchives@dublincity.ie), for future reference.



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Added, Biographical Notices of Eminent Men, and Copious Appendices of Its Population, Revenue, Commerce, and Literature, Vol 2.

Archival Sources

[letter from Lieutenant Colonel E.E. Markwick, Assistant Director of Ordnance Stores, Irish Command dated 5th May 1916, Report, General W. Fry Major-General i/c Administration, Irish Command. (WO) (National Archives London, WO 35/69)