

Tate Britain, Tate Gallery, Millbank, City of Westminster; Report on a Historic Building and Archaeological Watching Brief

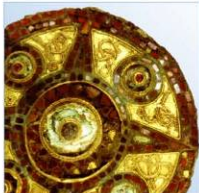
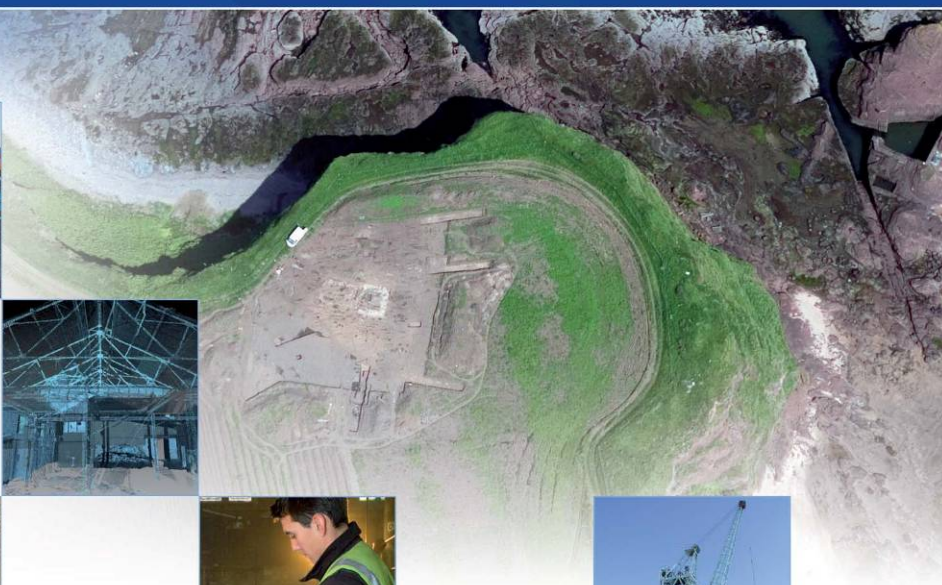
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Tate Britain, Tate Gallery, Millbank;

Report on a Historic Building and Archaeological Watching Brief

On Behalf of: **TATE**
Millbank
London
SW1P 4RG

National Grid Reference (NGR): TL 3010 7860

AOC Project No: 31002

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Summary

A programme of Historic Building Recording at the Tate Gallery, Millbank, was undertaken in advance of refurbishment as part of the project known as 'Transforming Tate Britain'. The improvements include reorganisation of the galleries, reorganisation of the Rotunda above the eastern entrance, remodelling the basement areas to create a new restaurant, and associated services and access points being introduced.

The work comprised three main elements: a record of the structure as it was prior to its transformation, a watching brief carried out during works to the fabric walls and floors, and a watching brief carried out during below-ground excavations.

The works in the rotunda revealed that a mosaic floor with a central marble slab had been the centrepiece on the principal floor, and the entire floor was formed of concrete slabs supported on a lattice of steel joists.

Evidence for the expansion and extension of the original Tate was apparent through blocked doorways and windows, new doorways and windows that allow circulation through the gallery, and removal of structural features such as chimneys as the building altered.

Below ground, fragmentary remains of Millbank Penitentiary, which formerly stood on the site, were exposed. This was constructed over made ground that included industrial waste from pottery manufacture, and general household waste, likely to have been brought to the site as hardcore over the historic marshy foreshore.

There was no archaeological evidence for known land use in the prehistoric or Civil War periods. The earliest dated deposits relate to the construction of the prison.

No further archaeological work is recommended.

1. Introduction

- 1.1 This document presents the results of a programme of historic building recording followed by an archaeological watching brief during refurbishment and reorganisation of Tate Britain, as part of the 'Transforming Tate Britain' project. A record was made of the gallery as extant in 2010, with details recorded during the works throughout 2011 and 2012, when earlier wall finishes and earlier layouts of rooms were revealed.
- 1.2 A watching brief was also carried out during excavations for services and structural reinforcement of the extant foundations.
- 1.3 The site is centred on National Grid Reference (NGR) TQ 3010 7860 and is located on the west side of Millbank (the A3212), within the City of Westminster (Figure 1). Millbank runs approximately north-south in this location, along the northern bank of the Thames, between Vauxhall Bridge and Lambeth Bridge (Figure 2).

2. Development Proposal and Planning Background

- 2.1 The local planning authority is the City of Westminster. Archaeological advice to the City of Westminster is now provided by Sandy Kidd of the Greater London Archaeological Advisory Service (GLAAS), part of English Heritage.
- 2.2 The Tate Gallery is a Grade II* Listed Building of national architectural and historic interest and houses an internationally renowned collection of artworks. Additionally the Tate Gallery is defined in the City of Westminster Unitary Development Plan as being within the Millbank Conservation Area as well as the City of Westminster's Thames Policy Area. The area of external groundworks does not lie inside, adjacent to, or within 250m of any identified designated Areas or Sites of Archaeological Priority / Importance, Scheduled Monuments, Registered Parks and Gardens, Registered Battlefields or World Heritage Sites.
- 2.3 A detailed architectural and historical assessment of the internal built heritage of Tate Britain has been presented in '*Tate Britain Conservation Management Plan*' (Alan Baxter & Associates 2008), '*Transforming Tate Britain: Structural Engineering Report For Planning*' (Alan Baxter & Associates 2010a) and '*Tate Britain: Gazetteer Draft*' (Alan Baxter & Associates 2009a). Further to this, in January 2010 AOC produced a Desk Based Assessment (AOC 2010a) *South-East Quadrant, Tate Britain, City of Westminster: Archaeological Desk Based Assessment*; this in turn helped to inform *Transforming Tate Britain: Heritage Statement* (Alan Baxter & Associates 2010b).
- 2.4 In order to satisfy the required conditions on Planning and Listed Building Consent (10/0351/FULL, 10/02946/LBC, 10/02945/FULL) Tate scheduled a programme of mitigation works for 'Transforming Tate Britain', based on the recommendations made in the AOC assessment and further discussed with John Brown, formerly the GLAAS Archaeological Advisor for the City of Westminster.
- 2.5 The next stage in the planning process was creation of a Written Scheme of Investigation (WSI), detailing the methodology that would be used for the archaeological works, and included some background history of the site (AOC 2010b). The methodology was approved by Rob Whytehead, former GLAAS advisor to the City Of Westminster. It was designed in accordance with current best archaeological practice and local and national standards and guidelines:
 - English Heritage – Management of Archaeological Projects (EH 1991).
 - Institute for Archaeologists – Code of Conduct (IfA 2010).

- English Heritage - Archaeological Guidance Papers 2-4 London Region (EH 1998a-c)
- English Heritage – Understanding Historic Buildings: A Guide to Good Recording Practice (EH 2006).

3. Geology and Topography

- 3.1 The Tate Britain site lies within a low-lying area of ground, overlying an expanse of post-glacial alluvium, located approximately half way between the higher, dryer, gravel deposits of the medieval Thorney Island, c. 700m to the north (approximately modern date Westminster Abbey and Parliament Square), and those along the riverfront at Pimlico, c. 300m to the south. Borehole evidence indicates that the alluvium is underlain by Shepperton Gravels at c. -0.7m to -1.45m OD (Alan Baxter & Associates 2008).
- 3.2 The low-lying nature of this area suggests that prior to post-medieval / modern land build-up, the area of the site is historically likely to have been relative marshy.
- 3.3 One of the Thames main tributaries, the River Tyburn, crossed this area of Westminster, splitting somewhere in the vicinity of modern day Buckingham Palace, with the main southern branch probably flowing along the present line of Tachbrook Street to the south-west of the site; a second branch flowed in an easterly direction, dividing again to create Thorney Island.

4. Archaeological And Historical Background

4.1 Prehistoric (c. 500,000 BC – AD 43)

- 4.1.1 It is likely that any land-based prehistoric activity (particularly dating to the earlier periods), if present, would be overlain by later deposits of alluvial material. Archaeological investigations at the Chelsea School of Art and Design within 100m of Tate Britain have identified prehistoric peat deposits, dating to the Neolithic (c. 4000 BC – c. 2200 BC) and Bronze Ages (c.2200 BC – c. 700 BC). Further archaeological investigations on geotechnical test pits during the Tate's Centenary developments also identified organic clay peat, which C¹⁴ dating suggest was deposited during the Late Neolithic period (Merriman 1987).
- 4.1.2 In addition, three Bronze Age and one Iron Age artefacts have been found in the locality either within the Thames or from its foreshore (some possibly deliberately deposited). These finds may testify to activity within the wider area during these periods, although they may also have been redeposited. Further evidence of prehistoric foreshore activity has been recorded during the London Archaeological Research Facility's (LARF) foreshore survey in 1996, including unidentified timbers and a number of geo-archaeological deposits (MoLAS 2000).
- 4.1.3 Within the site of Tate Britain itself, a Bronze Age leaf-shaped sword was discovered during the excavation of the foundations for Millbank Penitentiary in the early 19th century (MoL 2002).

4.2 Roman (AD 43 – AD 410) and Early Medieval (AD 410 – AD 1066)

- 4.2.1 There is little archaeological evidence of Roman date within 250m of the development site to suggest any significant activity within this area during this period.
- 4.2.2 In the wider landscape, Roman masonry and mosaics were observed at Thorney Island in the 19th century. This is approximately the area now covered by Parliament Square and Westminster Abbey, to the north of the site. More recent discoveries have also been made (Thomas 1993).
- 4.2.3 It is postulated that a possible crossing of the Thames is located between Lambeth and Westminster (Margary 1955), suggested by the alignment of a detour in the line of Watling Street (one of the main

Roman routes), and it has been hypothesised that this could be the site of the first Roman crossing of the Thames. While this is possible, there is currently a lack of conclusive evidence supporting this theory (Perring 1991).

4.3 The Early Medieval (AD 410 – AD 1066) Period

- 4.3.1 Whilst there is a paucity of evidence of significant early medieval activity within the study area, the available documentary, etymological and archaeological evidence does demonstrate human activity and utilisation of the landscape in the wider locality.
- 4.3.2 The focus of early medieval settlement activity in London during the first half of this period is now known to have been located in the Strand / Covent Garden area of modern day London. Documentary sources dating from the 7th to 9th centuries refer to this settlement as ‘*Lundenwic*’ and it is described in the AD 730’s by the Venerable Bede as an *emporium*; a market for many peoples coming by land and sea – suggesting an important North Sea trading port.
- 4.3.3 The most significant example of Anglo-Saxon settlement activity within the vicinity of the Tate Britain site is the monastic settlement at Westminster on Thorney Island, first recorded in c. 785 in a charter of King Offa as ‘*St. Peter and the people of the Lord dwelling in Thornea at...Westminster*’ (MoLAS 1996).
- 4.3.4 Thorney Island (formed by a split in the River Tyburn) was important both religiously and politically. St. Peter’s Abbey (now the site of modern day Westminster Abbey) is thought to have been founded in the 8th century, and became a Benedictine foundation by the 10th century. It was famously enlarged and rebuilt in the 11th century and again in the mid-13th century, with various additions, alterations and modifications in the 14th, 16th and 18th centuries. To the east of the Abbey lay the Palace of Westminster, first recorded as a royal palace built by Edward the Confessor (1042 -1066) and thought to have been a seat of the Royal Court and government from the reign of King Canute (1016 – 1035). It remained as a royal palace until being abandoned by Henry VIII in c. 1540. Both Westminster Abbey and the Palace of Westminster (the present day location of the Houses of Parliament) are World Heritage Sites.
- 4.3.5 The Tate Britain site is thought to have been located to the south of the focus of activity during this period, within what is latterly referred to a ‘Tothill Fields’. This area is likely to have been a relatively marshy, poorly drained, wetland environment (Cowie 1996).

4.4 Medieval (AD 1066 – AD 1536) Period

- 4.4.1 London expanded through the latter half of the early medieval and into the medieval period – with settlement re-founded in the City, within the old Roman town walls, and continuing piecemeal expansion to the west, east, north and along the south bank of the Thames.
- 4.4.2 The precise nature of the area of the Tate Britain site at this time is unknown. The post-medieval mapping evidence gives us some indication of the extent of the medieval expansion southwards from Westminster and suggests that the site remained undeveloped until at least the early 19th century.
- 4.4.3 The Domesday Book of 1086 indicates that the land was held in the Manor of Westminster Abbey. The area of the Tate Britain site would have remained with the lands of Westminster Abbey, until the Dissolution of the Monasteries under Henry VIII in the mid-16th century.
- 4.4.4 The Tothill Fields area to the south and west of Westminster is thought to have comprised market gardens and occasional settlement along parts of the riverside with the remaining area likely to be

waste ground, waterlogged and marshy (Watson 2002). Water meadows might have been in existence in those areas closer to the river.

- 4.4.5 This area likely remained a relatively waterlogged marshy ground, used for a range of fringe activities. Excavations at Nos. 1 and 17 Elverton Street (c. 500m to the north-west) recorded scores of animal burials, largely horse but including a few dogs, dating to the 11-12th centuries (AOC 1997), whilst it is recorded that Tothill was used for various activities including archery and bull racing (Watson 2002).
- 4.4.6 The Tate Britain site is located in the south-east of this Tothill area, to the south of the higher, dryer, gravel beds along the Thames bank. There is no evidence of extensive settlement activity in this area during this period and there are no archaeological sites recorded within 250m of the site.

4.5 Post-Medieval (AD 1536 – c. 1812) Period

- 4.5.1 Following the Dissolution of the Monasteries, the lands belonging to Westminster Abbey were taken and gradually divided between the Crown and various private owners. Henry VIII vacated the Palace of Westminster as a royal residence and moved the court to Whitehall, with the Palace now becoming the seat of government (House of Lords and Commons).
- 4.5.2 Urban expansion continued in the post-medieval period and by the 1640s Westminster had spread westwards and well south of Great Peter Street and Market Street, with the future Horseferry Road marking the approximate southern extent of expansion at this time.
- 4.5.3 There is indication that a defensive work was constructed in the area during the Civil War. Evidence for these works was found to the south of Westminster, with the route of a ditch and bank believed to run between the Tate and Vauxhall Bridge to the south of the site. Furthermore, William Stukeley produced a plan of Civil War defences in 1720 (many of which would still have been visible) and placed a large star-fort, or *tenaille* fort, approximately on the future site of Millbank Penitentiary and Tate Gallery.
- 4.5.4 Apart from this defence, the area of the Tate Britain site is thought to have remained undeveloped and likely still marshy waterlogged ground. Indeed, Tothill Fields is recorded to have been so marshy that it was possible to go duck shooting there as late as the early 1800's (Watson 2002), whilst it was still un-developed enough for various fringe and illicit activities and was popular for duellists in the 18th century.
- 4.5.5 Overall, the site appears to have remained undeveloped until the construction of the Millbank Penitentiary, which began in 1812. This extensive building (which was the largest prison in Europe at that time) was based on the 'Panopticon' model and the ideological concepts of Jeremy Bentham, allowing 1, 100 inmates to be housed under constant observation. In 1842 it became a transit point for prisoners being sent to the colonies, though it had been abandoned by 1890 and was demolished to make way for Henry Tate's National Gallery of Art and the London County Council Housing Estate in 1892 (AOC Archaeology 1997; Alan Baxter & Associates 2008).

4.6 Millbank Penitentiary (1812 – 1896)

- 4.6.1 The original design for the Penitentiary was by William Williams in 1812. It was later adapted by Thomas Hardwick, who began the construction of the prison, but resigned soon after. John Harvey took up the role, but was dismissed in 1815, leaving Robert Smirke to oversee the completion of the project.
- 4.6.2 Whilst there is sufficient information concerning the internal arrangements of the prison building and facilities, there is a lack of documentary sources detailing what lay between the main prison building

and the perimeter wall. Contemporary images of the prison show several buildings and unidentified features between Pentagon No. 1 and the perimeter wall. This area broadly corresponds with the development area.

- 4.6.3 The function of these buildings and features are not currently known. It is thought that they are not part of the Prison's Gatehouse / Lodge, but could be a number of functions ranging from stables, storage buildings to accommodation or offices.

4.7 Summary of the Historical Development of Tate Britain (1897 – Present)

- 4.7.1 The full architectural and historic development of Tate Britain is detailed in '*Tate Britain Conservation Management Plan*' (Alan Baxter & Associates 2008), '*Tate Britain: Gazetteer Draft*' (Alan Baxter & Associates, 2009a) and '*Transforming Tate Britain: Structural Engineering Stage C Scheme Report*' (Alan Baxter & Associates, 2009b) and is not reproduced here.
- 4.7.2 The first phase of construction of the Tate Gallery was completed in 1897 and was called the National Gallery. The second phase of works was completed in 1899; both phases were undertaken by Sidney R. J. Smith, on behalf of the philanthropist Henry Tate.
- 4.7.3 Further development occurred between 1897 and 1899 with the creation of the Portico Entrance, The Rotunda, the Courtyard Areas and the Sculpture Hall. New galleries were constructed on the west side of the site in 1910 (by Romaine Walker) and have different construction trenches to the other front galleries. These are now different, due to alterations during the Centenary Development.
- 4.7.4 The Tate was closed during the Great War and several galleries were refurbished afterwards. There was further extension along the west side in 1926 (by Romaine Walker), but the majority of it was demolished for the Centenary Development. However, there is evidence of parts of the gallery roof and external walls surviving.
- 4.7.5 In 1928, the River Thames rose above the river wall, which caused a part of the embankment to collapse and flood sections of the Tate; repairs were undertaken by the Ministry of Works. Further construction was undertaken in 1937 with the addition of the Duveen Galleries – an adaptation to previous structures – and the Octagon – a completely new structure.
- 4.7.6 During the Second World War, the Tate Britain site suffered a degree of damage from bombing raids. The gallery itself suffered serious damage on the north-eastern side fronting on to Bulinga Street and general blast damage on the south-west side fronting on to Atterbury Street. The Census Office in the east of the Tate Britain site was damaged beyond repair and cleared following the War, whilst parts of the military college and hospital (in the north of the Tate Britain site) sustained serious damage but were repaired.
- 4.7.7 The Ministry of Works constructed a new office accommodation office in 1961 and in 1970, there were three new major additions to the Tate, including a new gallery in the north east quadrant; a new Conservation Tower, situated at the north end of the North Duveen; and, offices constructed over the South Duveen Slip Galleries.
- 4.7.8 Further alterations were then made in the 1980's and 1990's, with the major Tate Gallery Centenary Development (TGCD) completed in 2001, which comprised new galleries in the north-west quadrant of the site, located in an open area created from the demolition of galleries from the 1910 to 1926 phase.
- 4.7.9 The area outside the front of the Tate, including the area of proposed external development works, was originally left undeveloped and un-landscaped (apart from that required during the building's

construction), with minimal changes over the years. During World War II, these areas were used as allotments but returned to their previous state in 1949 (Alan Baxter & Associates 2008).

- 4.7.10 A Grade II Statue of Sir John Millais was formerly situated within this area, on the edge of the development site but was moved to the corner of Atterbury Street and John Islip Street in 2000 (Alan Baxter & Associates 2008). Minor landscaping was undertaken within these areas in the late 1980s and 1990s, and further works in 2001 to create paved areas and paths; however, there is not thought to have been significant ground reductions within the area of external development works (Alan Baxter & Associates 2008).
- 4.7.11 Previous archaeological interventions have been carried out within the Tare, and have revealed the presence of foundations of Millbank Penitentiary (AOC 1998 and 2006)

5. Strategy

5.1 Aims of the Investigation

5.1.1 The aims of the Historic Building Recording were defined as being:

- To carry out a preliminary buildings survey on all areas which will be subject to change, prior to alterations being undertaken. Where significant structural impact is expected, a watching brief to be carried out as works progress, targeted on these specific areas. The level of record corresponds to Level 3 of the guidelines published by English Heritage (EH 2006). The scope of recording was based upon these guidelines. The areas specified for changes were identified from the Alan Baxter Associates document (ABA 2010). A schedule of what was undertaken during the preliminary recording and what will be subject of watching brief was defined in the Written Scheme of Investigation.
- To record the building using electronic survey as appropriate, plus drawings, photographs and written records.

5.1.2 The aims of the watching brief were as follows:

- To establish the presence/absence of archaeological remains within the site.
- To determine the extent, condition, nature, character, quality and date of any archaeological remains encountered.
- To record and sample excavate any archaeological remains encountered.
- To assess the ecofactual and environmental potential of any archaeological features and deposits.
- To determine the extent of previous truncations of the archaeological deposits.
- To enable the archaeology advisor to the City of Westminster to make an informed decision on the status of the condition, and any possible requirement for further work in order to satisfy that condition.
- To make available to interested parties the results of the investigation.

5.1.3 The specific aims of the archaeological watching brief are defined as being:

- Identify and sample any deposits that can inform on the palaeoenvironmental development and chronology of the area between the Mesolithic and medieval periods. In particular the nature of the palaeoenvironment at the confluence of the Tyburn stream with the Thames.

- Assess the potential of the site to inform on the medieval and post-medieval development and chronology of London.
- Identify if any features associated with the Civil War defences and the Star Fort located by Stukeley are present within the development area and if so their state of preservation.
- Identify if any of the features shown on historic mapping to lie within the area between Pentagon 1 and the perimeter wall of the former Millbank Penitentiary are present and if so to qualify their nature, possible use and state of preservation.
- Record any sections of the footings of the Tate Gallery where exposed by groundworks.
- Assess the degree and extent of truncation of earlier deposits by the development of the Millbank Penitentiary and Tate Gallery.

5.1.4 The final aim was to make public the results of the investigation, subject to any confidentiality restrictions.

5.2 Methodology

5.2.1 Site procedures were defined in the Written Scheme of Investigation (AOC 2010b). All work was carried out in accordance with local and national guidelines (IfA 2008a-c, IfA 2000).

5.2.2 The archaeological evaluation conforms with current best archaeological practice and local and national standards and guidelines (see Section 2.7). Areas subject to watching brief were assigned trench numbers as required:

5.2.3 Prior to commencing work, a unique site code (TAG 10) for the project was agreed with consultation with the Museum of London as the site identifier.

5.2.4 The watching brief was carried out between May 2011 and March 2013.

5.2.5 For simplicity of reading, the text assumes that the main entrance to the Tate faces east.

5.2.6 The site work was supervised by Les Capon under the overall management of Alan Ford and Paul Mason. The site was monitored by Rob Whytehead and Diane Abrams on behalf of the City of Westminster.

6. Results

6.1 Historic Building Record

6.1.1 The Tate Gallery comprises a range of galleries, administration areas, and highly ornate architectural set-piece rooms. The principal set pieces are the portico and the Rotunda. The portico lies beyond an impressive main entrance on Millbank, and the Rotunda beyond this. The Rotunda acts as the hub of the building, providing accesses north, south and west to the galleries on the principal floor. These set piece areas contain various classical elements. The galleries are typically rectangular rooms with deflected natural light through a glazed roof above, and are well-proportioned to maximise viewing of paintings and displays, as suitable for this purpose-built gallery. The administration areas are generally located in the lower ground floor, as is the restaurant and toilet facilities. Reorganisation of the spaces, new access routes and new services have required some changes to the Gallery.

6.2 The Entrance, the Rotunda and the Board and Meeting Rooms

The Entrance



Plate 1: Main Entrance to the Tate Gallery

- 6.2.1 The main east entrance to the Tate (Plate 1) provides a magnificent frontage to the oldest parts of the building, and is more impressive than the ramped access to the basement on the south side. Two flights of Portland Stone steps lead up from street level to the principal floor level. Two paired and two single Corinthian columns rise from tall plinths; the pairs are on the outside corners of the entrance. The columns support an architrave and frieze, with dentil course above, all obeying the orders described by Vitruvius (15 BC). The frieze is surmounted by a pediment: a low pitched gable. At the peak of the gable as a stature of Britannia. On the south edge is a lion *sejant*, one paw raised upon a Royal Standard shield. On the north side is a unicorn, also *sejant*, again with the Royal Standard shield.
- 6.2.2 Behind the columns are three doors leading into the portico, each with entablature surmounted by arches. The arches have relief decoration, featuring a lion and unicorn on the outer arches, and two winged muse-type figures, one holding a palette, the other an artists' mannequin.
- 6.2.3 On the upper floor, three windows of the boardroom area each have flush balustraded balconies. The windows are flanked by Ionic columns, with Ionic entablature above.
- 6.2.4 To the sides of the entrance and portico, semi-circular buttresses project, each with plinths for statures behind encircling balustrades.

Principal Level Portico (Figure 3)

- 6.2.5 The portico (**Room T1P.33**) was recorded through photography, and is a well lit space with three doorways in the east and a window in the north and south walls (Plate 2). The ceiling is a barrel vault, intersected by arched doorways on the east and west. The whole structure is supported internally with unfluted Ionic columns, each topped by a volute. The columns are paired, and stand proud of flat pilaster stonework. Atop the columns, the Ionic entablature supports arches above each doorway, and springs inwards, supporting the edges of the vault. This strong structure supports the meeting rooms on the upper floor.
- 6.2.6 The floor is inset with a geometric mosaic of black and white tiles. This is retained, unaltered.

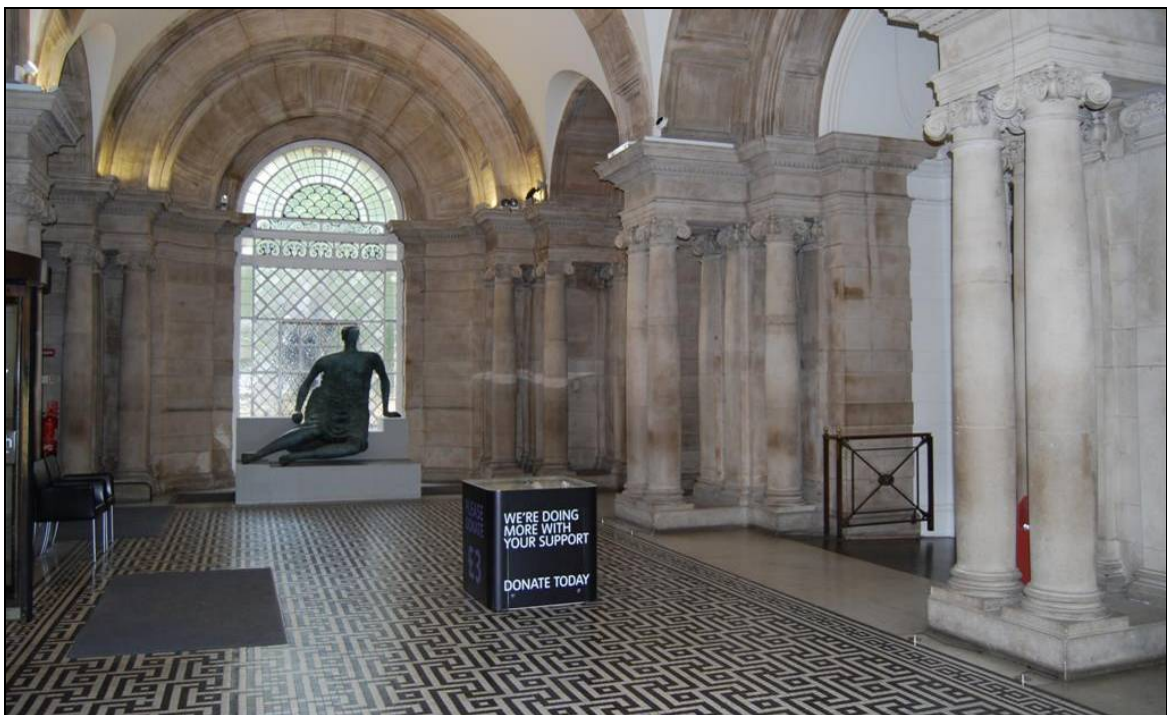


Plate 2: Geometric Mosaic and Portico, Looking North

6.2.7 The north window is an arched window, with a radiating fanlight in the upper register. The windows have rectangular glass forming a border, with square panes of opaque textured glass set at 45°. Between these and the arched fan are two friezes. The lower has a row of carnations, the upper a series of waves. The inner light of the fan is a semi-circle of scales, also evoking sea imagery. The south window is much plainer, and is a simple square frame with radiating spokes in the arch. The difference between the two may be the result of a repair, perhaps following blast damage in the Second World War.

Rotunda: Room T1P.32 (Figure 3)

6.2.8 The central block of the Rotunda is essentially an octagonal room built within a square structure, which is open to a dome above. Arched openings in each side provide passage through the building; arched openings in the corners lead to alcoves. Each corner of the internal octagon has the same form.

6.2.9 Each pillar has a plinth, with its own base and cornice. This is square in profile, and supports a round Roman Doric column rising from a round base atop the plinth. The columns support part of the upper level above, all linked by an architrave. Triglyphs project forward in line with the body of each column, and six shallow-relief triglyphs are present along the frieze, between each column. The metopes are plain. Short brackets project above the triglyphs, supporting the projecting cornice. This cornice projects further above each column, in line with the plinth beneath.

6.2.10 The floor of the rotunda as present in 2010 is formed of highly polished concrete terrazzo with thin strips of brass inlay giving the impression of polished marble. When this was removed as part of the reconfiguring works, this was seen to rest upon a floor of much different character. The floor was supported on a pair of principal steel girders running east-west, 4m apart, with eight subsidiary north-south girders at regular intervals between. This frame held a secondary layer of nine girders, also oriented north-south. Above this, a central circular slab of polished white marble of 1.84m diameter was laid, with a central, small drilled hole. Around this was a course of smooth Portland stone blocks that stood 0.12m higher. Beyond the blocks, a poured concrete floor sealed the girders, and was presumably shuttered during construction. The concrete was topped with a decorative mosaic floor (Plate 3). The inner pattern is a sequence of black and white concentric circles, with rows of small semi-circular patterns beyond, becoming larger towards the edge. The outer border is formed of blocks Portland stone, which skirt the room at the radius of the Roman Doric columns. The whole floor suggests that the central marble slab may have held a fountain or statuary with a shallow pool, and would have been a focus for the room, after entering through the portico. The modern floor was laid over hollow ceramic bricks, with the sunken marble centre filled with concrete. This was all broken out and discarded during the works.

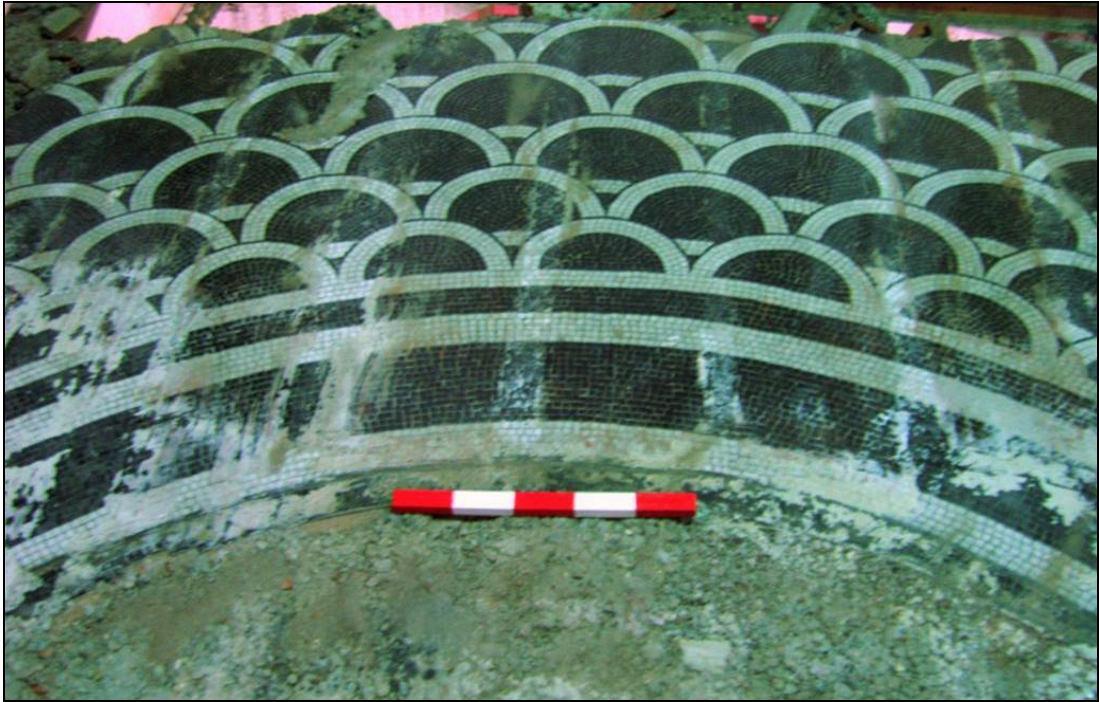


Plate 3: Mosaic Floor of the Rotunda

Rotunda: Room and Doors T1P.30 (Figures 3-5)

- 6.2.11 The central pillars of the rotunda enclose the octagonal space (T1P.32). A passage around the central piers gives access to the Galleries. This room (T1P.30) runs around the south, west and sides of the Rotunda structure. The north side was most recently no more than an anteroom to the shop; the western side gives access to Gallery 33, a small antechamber (T1P30.3), the large South Duveen Gallery (T2P.29) and the members Room (T1P.30.1). To the south are doors to Gallery 1 and Gallery 3.
- 6.2.12 Four of the doors are of identical form (Type A), set in identical porticoes of Composite order (Plates 4 and 5). On the north side, the doorways lead into Rooms T8P.30 and T8P.33 (the shop and Gallery 33). On the south side of the Rotunda, these lead to Rooms T4P.1 and T4P.3 (Galleries 1 and 3). All these doorways are located in the first phase of the building from 1897, which includes the construction of the Rotunda.



Plate 4: Doorway Type A, Gallery 1 Looking North

6.2.13 The Composite pilasters of the porticoes comprise all the expected architectural elements: a plinth, base, shaft, capital and entablature. The plinth is 0.38m high, with the moulded base 0.24m wide above it. The shaft is square, plain and bulges slightly as it rises to 3.12m above floor level. The shaft is topped by a capital with volute and abacus, the architrave spans the doorway which is 2.20m wide, inset with a wooden frame from which a pair of double action doors hang. The architrave, frieze, dentil and cornice continue around the room. Above the entablature is a tall arch, reflecting the style of the rotunda.



Plate 5: Door Type A to Gallery 1, Looking South

6.2.14 A winding staircase leads down to the lower level and up to the upper level of the Rotunda. Access to the staircase is from the north end of a passage between the Rotunda and the Portico (T1P.33). This door is at the end of a series of moulded Composite pilaster recesses, giving an illusion of distance (Plate 6). The composite pilasters are in the same style as the main doorways to the galleries. The door itself is a single door (Type B), opening northwards, hung on the western frame. The door has wooden stiles and a bottom and top rail. There is no lock rail, rather the door is panelled with three columns of seven square glass panes with wooden muntins between. Above the door, an inset arc has a keystone.



Plate 6: Door Type B to Spiral Staircase.

Stairs, T1ST.1

- 6.2.15 The staircase winds anti-clockwise to the upper floor. The stairs are polished stone, and the stair has a wide central newel (Plate 7). Light to the stair is given by one window half-way up, in the north face of the structure, and a second at the top (T1ST.1). The lower window is 1.08m wide and 2.60m high, with an arched top. It is inset in a straight-sided reveal, with a bead-mould surround rising from end-stops. The window uses textured glass to achieve opacity. The window has a series of small rectangular panels around the perimeter, with incised grooves set either horizontally, vertically, or on the diagonal. The central panel has diagonal set panels in lead-cames, with two hinged casements in the centre. The top panel within the arch is clear, and may represent a repair (Plate 8) (Figure 6).
- 6.2.16 The window at the top of the stair is of similar form, but lacks the textured glass and is slightly larger (Plate 9). This may indicate that the glass was fully replaced, and may even represent blast damage from sustained during the Second World War. The top of the newel post is a notably large block of masonry. It has the form of a stunted column, with plinth and moulding near the top. Abutting it to the east is a short banister with stone blusters. To the west is a stone panel of neoclassical form: a plinth has a moulded base above, with two incised panels flanking a central baluster. The inner edges of the panels have scroll moulding.



Plate 7: Newel Post and Masonry at top of Spiral Stair



Plate 8: Lower window, Spiral Stairway

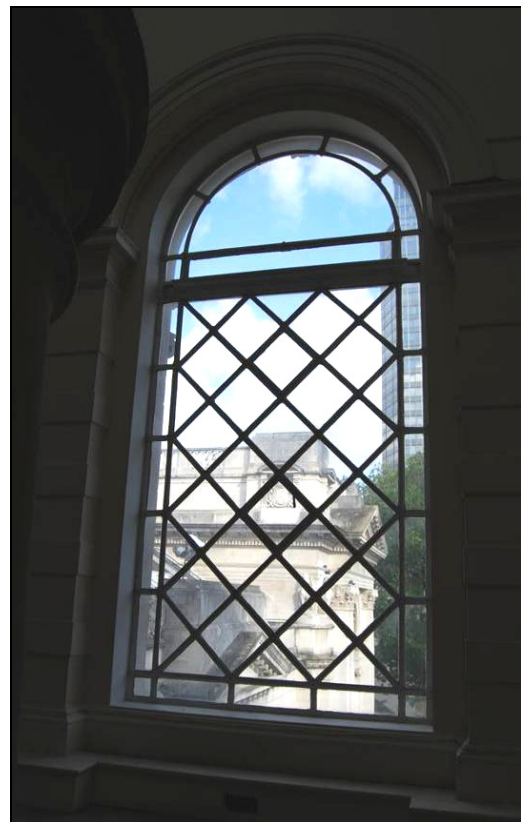


Plate 9: Upper Window, Spiral Stairway

6.2.17 Opposite the door to the spiral staircase, in the south side of the room, is a half-turn stair with landings. The stair has a metal railing with balusters, and at the top of the stairwell, a wrought iron panel with a central fleur-de lys is lit by a decorative stained glass window. The window was designed and made by Ervin Bossanyi, the colours inspired by a visit to Chartres, and is entitled '*The Angel Blesses the Women Washing Clothes*'. The glass is set in a structure of 21 panes, the window having an arched top. It was worked on during 1937-42, and finally installed in 1947-8. The image shows an angel resting her hand on one of three women washing clothes (Tate Gallery 2012). Light to the window is occluded by mature trees to the southeast (Plate 10) (Figure 6).



Plate 10: Ervin Bossanyi Stained Glass Window

- 6.2.18 The stairs were removed as part of the new transformation works. These were removed, and the basement floor level reduced. The stairs were pre-formed concrete step units with metal-edged treads and a grey laminate surface. They appeared to be original to the building, with no evidence of intrusive tying-in rods in the brickwork behind (Plate 11).



Plate 11: Stairs Removed below Ervin Bossanyi Stained Glass Window

- 6.2.19 Three other doorways on the principal level were recorded, all to the west of the Rotunda (Figure 3). One was a door which leads to a cupboard for gallery stools (T1P.30.2), within part of the 1899 extension. This door is a simple wooden panelled door: five rows of two square panels (Type E). The door is highly polished. The doorframe has slight moulding.
- 6.2.20 West of here, a small antechamber leads south to a Friends Room (Room T5P.1) and west to Room T1P.30.1 Each door is different and therefore probably of different date. That leading south is identified as Members Room, and comprises a pair of doors hung on double action hinges. Each door has two columns of eight square glazing panels with wooden muntins. The frame is plain and unmoulded (Type D).
- 6.2.21 The western door is also rather plain (Type C). Both the doors have a column of four opaque glass panels, and the frame is plain with no moulding. This door and its wall probably represents a relatively modern partition to form Room T1P.30 from a room originally laid out in the manner of T1P.34 (Gallery 34), to the north of the South Duveen Gallery (Figure 3).

Upper Level Rotunda

- 6.2.22 The spiral staircase leads anticlockwise to a gallery floor around the rotunda. The cornice at the top of the principal level columns forms the edge of the upper level, which has a low balustrade around it. The eight bays of the octagon are spanned by twin arches rising from three Ionic columns (Plate 12). The arches have a central keystone with a floral pattern. At each corner, square pilasters rise to the base of the dome, with Corinthian capitals. The cornice includes a dentil course, with a balustrade above, before the dome springs curving to its semicircular vault.
- 6.2.23 The dome is formed of eight principal ribs, rising from the corners of the inner octagon, with four common ribs between and regular horizontal glazing bars. The centre of the dome is panelled, with a small lantern above (Plate 13).



Plate 12: Rotunda



Plate 13: Dome Above Rotunda

6.2.24 The upper floor of the Rotunda features further classical styled building elements. These include doorways built with smooth rusticated jambs and large arches above with cornice surrounds. One of these, leading west from bay T1A.05, has a clearly visible crack across the arch, which may be a

signifier of structural movement (Figure 7). The rest of the Rotunda is in fine condition. There are three bays each side, plus corner bays of this square area. The northeast bay holds the spiral stairs from the principal level, the southeast corner has a meeting room, the other two corner bays have access routes westwards. Each bay is defined by square pilasters with smooth rustication and cornice above, the pilasters against the outer walls and the back of the central void. The floors are polished terrazzo with circular inlays and borders in each bay (Plates 14-16).



Plate 14: Rotunda Upper level looking North along the West side



Plate 15: Rotunda Upper Level looking West along the South side

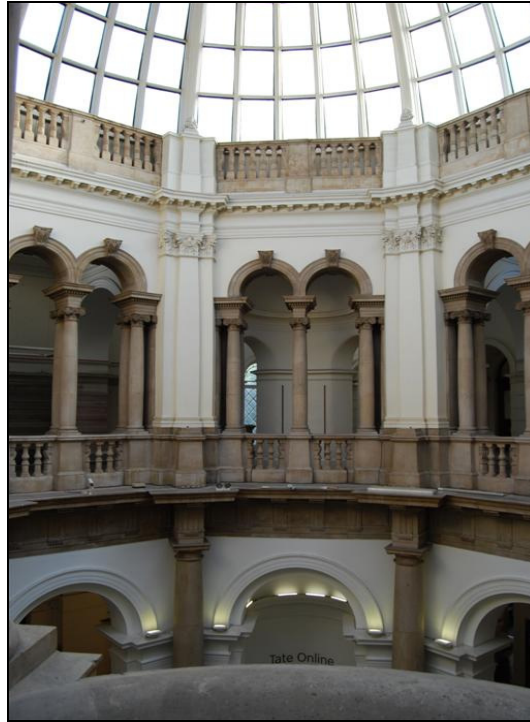


Plate 16: Rotunda Upper Level Looking Northwest across the Void

Upper Level Board and Meeting Rooms (Figure 7)

6.2.25 A suite of rooms above the portico on the upper level were used as the board and meeting rooms and had an associated store, kitchenette and lavatory. This was formerly a single space with two small rooms in the northwest and southwest corners, rather than the group of rooms present prior to transforming the Tate, each formed by board and studwork partitions. The original room had three large walk-in windows facing east, and one large window in the north and south walls (Plate 17). Two smaller windows with splayed reveals are likely to have always been partitioned off. These splayed windows lit a toilet (**Room T1D.09**) and a washroom (**Room T1D.03**). All partitions were removed during refurbishment works, leaving a rectangular room. The main room (**T1D.05**) was in the centre of the suite: this was the Director's room, lit by one of the windows in the east wall, looking towards the Thames. The glazing of the window includes a surround of textured glass; small panes with incised lines horizontally, vertically, or diagonally, which is the same form of glazing present in the stairwell of the spiral stairway to the north. In this window, however, the main glazing is set in vertical units.



Plate 17: Meeting Room Window, looking East

6.2.26 To the north and south were two meeting rooms (Rooms **T1D.04** and **T1D.10**), with accesses along short corridors from the upper level of the Rotunda (Rooms **T1D.01** and **T1D.09**). Each of the meeting rooms and Director's room had a ceiling with a curved junction to the ceiling, supported by struts (Plate 18). Light panels in the ceiling allow light from a glazed roof above. The struts and ceiling joists are all steel beams.



Plate 18: Director's Meeting Room, Pre-works

6.2.27 The doors between the rooms were of two different forms: to the Director's room, Meeting room, Visitors room, toilet and washroom, the doors were solid six-panelled doors with a wide lock rail and narrower frieze rail. The middle and bottom panels are of equal size, the top panels smaller. Each

door hangs on three hinges. The doors from the upper rotunda were semi-glazed, with a bevelled glass top panel. These doors were mounted on brass plates in the floor (Plate 19). The plates were stamped with their makers' name: Colledge and Bridgen Wolverhampton, with the phrase 'Perfect Patent' beneath. Brass door furniture with piercing and scrollwork is likely to have been manufactured by the same company. The company was set up by Charles Colledge in 1870, Harvey Bridgen joined in 1876, and by 1914, Whitakers Red Book describes them as lock manufacturers (Graces Guide 2013).



Plate 19: Door Plate to Rooms above Portico

- 6.2.28 The kitchenette faced onto the east side of the upper rotunda with a sliding door and low quality fittings. This has also been removed (Room **T1D.06**).
- 6.2.29 Removal of the partitions and modern surfaces showed hidden details that had been obscured (Plates 20-22). The details included incised carving on the curved ceiling supports and floral mouldings in the four corners of the single space. The curving walls rise inwards to an inner frame holding a flat ceiling. A secondary raised section is supported by girder trusses with curved struts to a higher level, its inner frame decorated with architrave and a dentil course. Each junction of the principal structural members is furnished (where surviving) with a turned finial. None of this was visible in 2011, when the initial survey was carried out. A door in the west wall, beyond the ceiling, gives access to and from the roof beyond.



Plate 20: Partitions Removed, Meeting Rooms



Plate 21 : Floral Moulding in Corner of Ceiling



Plate 22: Turned Finials on ceiling structure. Upper floor.

6.3 Principal Floor Galleries

6.3.1 The suite of galleries on the principal floor (Figures 8-9) have been refurbished. A record of the galleries was made prior to their refurbishment and reorganisation, and additional records were made during a watching brief carried out while work progressed. The nomenclature on the client's plans has been retained. The rooms recorded comprise the former rectangular shop (**Room T8P.30**) and the octagonal part of the shop to the north (**Room T8P.31**), in the east of the gallery. Along the north side of the original build, the rectangular Gallery 35 (**Room T9P.35**) and its two flanking square rooms, Gallery 32 (**Room T8P.32**) and Gallery 39 (**Room T9P.39**) were recorded. South of here are three other galleries of identical shape and form, Gallery 38 (**Room T9P.38**), Gallery 36 (**Room T9P.36**), Gallery 33 (**Room T9P.33**) and the Plant Room (**Room T9P.40**). South of here, a pair of apsidal-ended rooms were also recorded, Gallery 34 (**Room T9P.34**) and Gallery 37 (**Room T9P.37**) (Figure 8).

Room T8P30: Gallery 30 (Shop)

6.3.2 This room is part of the first phase of the building located at the east side of the block, and is a rectangular space oriented north-south. The room is 18m long and 9.75m wide, and was most recently a shop for visitors to the gallery. Its walls were obscured by furnishings holding the shop's stock, limiting recording to some degree. The room has two doorways: one to the south and one to the north. Both doorways have neoclassical features.

6.3.3 A strip of the plaster from the walls revealed a 2.15m wide blocked doorway in the west wall, south of the centre. This would have led to Gallery 33. Two blocked windows were also identified in this wall, both 1.08m wide. The opening showed the base of the sills to have been 1.18m from the floor, and the windows 2.37m high, with wooden lintels spanning the opening. The profile of the gallery and the room beneath is shown on Figure 9.

Room T8P31

6.3.4 This room was located in the northeast corner of the north group of rooms, and was not specified for recording in the brief. This room most recently was part of the Tate's shop, holding children's books and gifts. Externally square, this room is octagonal in plan, with brick walls forming the angles, behind which run ducts and, in the southwest corner of the room, a spiral staircase to a flat roof above. The walls of the room behind the plasterwork are buff brick in English Bond, and the large arched recesses apparent on the exterior are formed of large intersecting stone blocks 0.56m wide (Plate 23).



Plate 23: Stone Blocks Form the Rear of the Arched Recesses, Room T8P.31

6.3.5 The skirting had a stepped-in ogee mould atop a flat board, and was removed as part of the plaster strip. This was identical to Room 39, giving a feeling of symmetry of construction. The plaster on the room walls was removed, showing it to have been laid over studs across the walls.

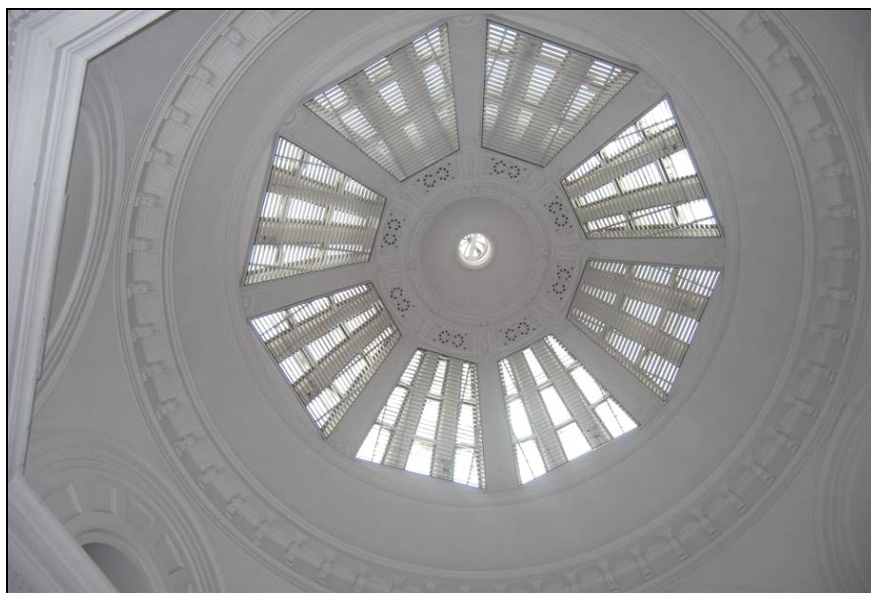


Plate 24: Underside of Domed Roof Above Room T8P.31

- 6.3.6 The architrave has been retained, which steps out in a series of ogee moulds to the grand decorative ceiling, rising in stages to an eight-sided glazed dome. This continues the stylistic theme of the roof of the rotunda (Plate 24).
- 6.3.7 The spiral staircase in the southwest corner of the room was formed of a series of triangular pierced cast iron treads with composite newel blocks. Pierced risers and side panels are separate units. The treads are pierced with a series intersecting concentric circles, whereas the pattern of the risers is foliate (Plate 25) (Figure 10).



Plate 25: Spiral Stair.

- 6.3.8 Additional support to the treads is given by horseshoe brackets tied into the brickwork of the stairwell.

Room T8P.32: Gallery 32

- 6.3.9 This square room is 9.75m from side to side, and has four doorways, accessed therefore from all directions. Like the other rooms of the Phase 1 build, this has brick walls, and a concrete slab floor on an I-beam frame. Three of the doorways had decorative neoclassical pilasters with flat pediments, of identical form. The doorways are flanked by squared Composite pilasters. These have relatively high plinths, a double-roll moulded base, and rise to a section of plain capital with volute above. The architrave between the pilasters has a moulded fascia and a plain frieze, and is topped by a cornice with a dentil course at the base. This stands forwards of a frame with the same architectural details (Plate 26).
- 6.3.10 The fourth doorway, in the northern wall, is a modern addition added when the gallery was extended in the 1980s. This has a concrete lintel inserted into the regular English bond yellow-brick construction.



Plate 26: Western doorway detail of Room T8P.32

- 6.3.11 Apart from the neo-classical doorways, the most decorative part of the room is the roof assembly, which allows diffuse light into the gallery. The roof assembly comprises four crossing trusses that spring from wall plates, forming a pavilion roof. The trusses are formed of a series of iron girders, boxed in with decorative plaster panels. The trusses rise from the corners and from the middle of the sides. A simple moulded cornice is at the top of the walls, and each of the eight panels formed by the trusses has rectangular plaster panels rising to a purlin, above which is the glazing. The trusses widen towards the centre of the room, and meet at a central circular hub. The underside of each truss is decorated with a series of roundels and rectangular panels. The sides of the trusses are alternately decorated with two different relief-moulded patterns. The trusses that span the corners have panels with winged lions, whereas the trusses from the sides are decorated with floral decoration (Plates 27 and 28).



Plate 27: Overview of Roof Assembly, Room T8P.32



Plate 28: Detail of Moulded Decoration, Roof Trusses, Room T8P.32

6.3.12 The skirting of the room was recorded prior to removal: the board has a stepped concave mould with a roll above it. The whole board is quite wide, with a total height of 0.42m above the boarded floor. The walls of the room were painted white and undecorated, allowing the paintings and artworks to dominate.

Room T8P.33: Gallery 33

6.3.13 Room T8P.33, known as Gallery 33, measures 18.4m north-south and 9.5m east-west, oriented parallel to the front of the building and adjacent to Room T8P.30. In common with the other galleries, the room has a wooden floor, moulded skirting, a cornice, and decorative trusses form the roof, which is hipped and glazed.

- 6.3.14 The moulded skirting is not like that in any of the other rooms. It comprises a board 0.32m wide, topped by an inset concave mould, stepping in at the top with a wide roll. The doorways of the room have composite neoclassical form, as in Room T8P.32.
- 6.3.15 The base of each of the trusses has an elliptical profile across the room. The lower register of the roof has a series of rectangular panels between each truss, and each truss is decorated with a floral spray within a triangular panel on the sides. The underside of each truss has a series of round cornered rectangular panels with a roundel in between (Plate 29).



Plate 29: Roof assembly, Room T8P.33

- 6.3.16 The strip of the wall finishes revealed the opposite sides of the blocked doorway and blocked windows apparent in Room T8P.30.

Room T8P.34

- 6.3.17 This room is a small, rectangular space, with no architectural details of note. The room lacks skirting or cornice, and the walls are plain. The floor is formed of polished tiles, and the whole room appears to be formed as a by-product of building extensions.

Room T9P.35: Gallery 35

- 6.3.18 Room T8P.35, identified as Gallery 35, is located along the northern edge of the second phase part of the gallery, oriented east-west. It measures 20m by 9.7m. It has doorways through to Gallery 32 to the east, Gallery 39 to the west and Gallery 36 to the south. The east and west doorways have neoclassical composite porticoes, whereas the opening to Gallery 38 is plain and unadorned. There are no external windows in the walls, but the roof is almost fully glazed, the light diffused by blinds.
- 6.3.19 A total of seven roof trusses support the pitched roof, each a composite girder construction with an elliptical underside and a pitched upper edge (Plate 30). There is one truss at each end of the room; five span the rest of the space equally. The trusses are generally plain, with undecorated panels on the sides. This contrasts with the high level of decoration in Rooms T8P.30 to 33. The underside of the trusses are decorated with rectangular panels with rounded corners; roundels separate each panel. The trusses carry a ventilation duct along the centre of the ceiling. There are two square

grilles between each truss for airflow (Plate 31). The lower register of the elliptical roof is spanned by curved rectangular panels above a relatively plain cornice.



Plate 30; Roof structure of Gallery 35



Plate 31: Detail of Ceiling Grills

- 6.3.20 The skirting board of the room also differs from that in the eastern galleries, being shaped with a wide roll mould at the base, rising with a board to 0.31m, with a square bead above, and rolling concavely to the wall (Plate 32).



Plate 32: Gallery 35 Looking Northwest

- 6.3.21 The strip of the wall surfaces revealed a slightly different layout to the room. The principal change is the location of a doorway to Room T9P.36, a wider doorway that is located centrally from that room's perspective. The current doorway is narrow, and to one side. Also visible was a blocked window which would have provided natural light from the open area that became the plant room (T9P.40). The window would have been 1.25m wide.

Room T9P.36: Gallery 36

- 6.3.22 South of Gallery 35, Room T8P.36 is known as Gallery 36. The room is oriented north-south, measuring 19.4m by 9.6m. The room is constructed in the same way as Gallery 35 with the same fittings of skirting, shaped with a wide roll mould at the base, rising with a board to 0.31m, with a square bead above, and rolling concavely to the wall (Plate 33).
- 6.3.23 The room contains a neoclassical doorway to the south, whereas the northern entrance is a narrow opening with no moulding. This is an alteration to an original layout, with a central doorway now blocked with red brick. A scar in the brickwork shows it to have had a pedimented lintel and a relieving arch built into the brickwork above. The roof construction is also identical to Gallery 35, comprising a series of girder assemblies with a pitched top and elliptical underside. The panels in the sides of each truss are plain, and the underside decorated with round-ended relief panelling and roundels, and an identical roof construction and décor. The plainly decorated trusses and panels are all present (Plates 33 to 35).
- 6.3.24 Two blocked windows would have overlooked the area of the Plant Room. These are 1.22m wide and 2.37m high, their sills 1.18m above the floor. All openings are blocked with red brick, which makes them stand out against the yellow bricks of the main build. All historic Ordnance Survey Maps that depict the Tate Gallery until 1985 show the area of the Plant to be open, and the London Plan of 1910 shows a chimneystack rising in its southeast corner (**Room T9P.40**). Since this was open to the sky, natural light would have filtered through the windows.

6.3.25 A smaller blocked window lies just 0.2m south of the northwest corner of the room, and is 0.66m wide. It has a wooden lintel.



Plate 33: Wall of Gallery 36.

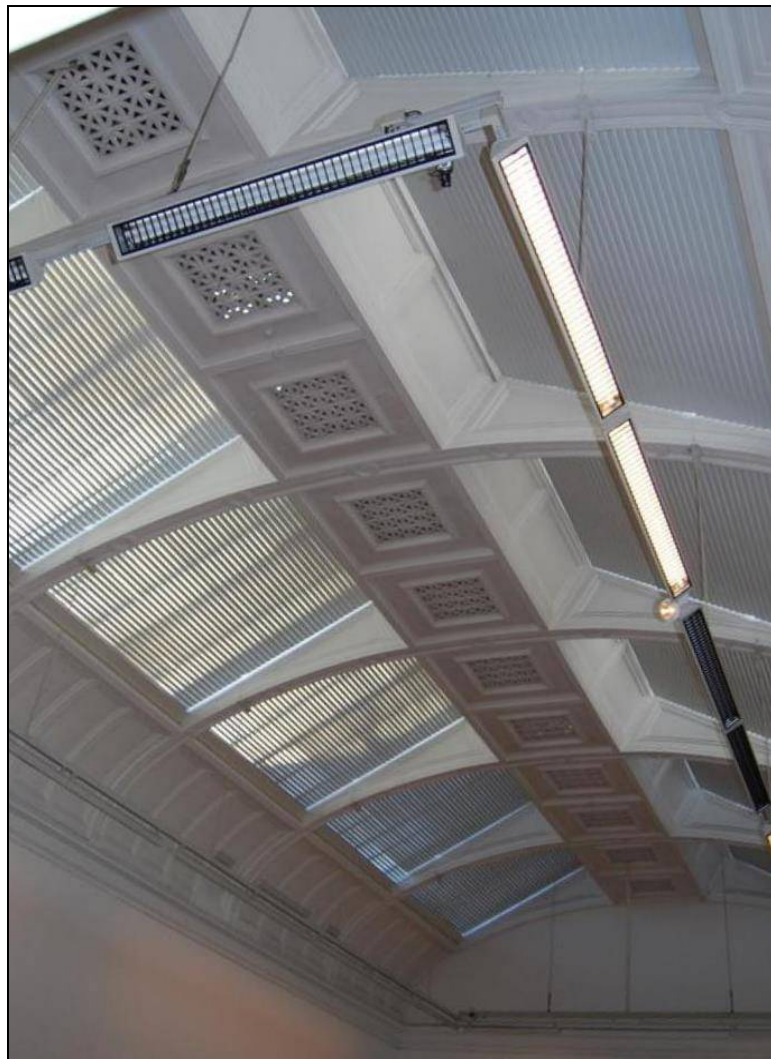


Plate 34: Gallery 36, Roof trusses and Panels



Plate 35: Original Doorway , North Wall of Gallery 36

Room T9P.37

- 6.3.26 Room T8P.37 lies south of Galleries 36 and 38, and has apsidal ends formed from a lightweight, single-brick thickness wall inset within the room's basic structure (Figure 8) (Plate 36). The skirting is simply painted on the wall sides, and is not raised in any relief. The walls are plain, and rise to a flat ceiling with a decorative cornice. The cornice is has elements of neoclassical entablature: at the base is a moulded architrave, with a plain fascia above. Above this is a square dentil course, topped by a four-section rounded cornice.
- 6.3.27 Light to the room is artificial, the lights behind opaque ceiling panels suspended beneath a concrete panel floor above. The light panels are supported on a lightweight frame (Plate 37).



Plate 36: Gallery 37 looking west



Plate 37: Gallery 37 Ceiling Detail

Room T9P.38

6.3.28 Gallery 38 is the same size as Gallery 36, and located immediately west of it (Plate 38). Doorways in the north and south ends of the rooms are furnished with the neoclassical porticos typical of this

entire part of the gallery. The room measures 19.4m by 9.6m. The room is constructed in the same way as Room 35m with the same fittings of skirting shaped with a wide roll mould at the base, rising with a board to 0.31m, with a square bead above, and rolling concavely to the wall.

- 6.3.29 The roof construction is also identical to Galleries 35 and 38, comprising a series of girder assemblies with a pitched top and elliptical underside. The panels in the sides of each truss are plain, and the underside decorated with round-ended relief panelling and roundels. The trusses and panels that form the roof structures are all of the same plainly decorated form as the adjacent galleries.
- 6.3.30 A strip of the wall's plaster showed that a doorway had been cut in the western wall, which would once have allowed access westwards into the 1980s section of the building. This was later blocked. The doorway's more recent date is shown by the presence of a concrete lintel. There were also two blocked windows in the wall, both 1.24m wide. This wall is the exterior wall as depicted on Ordnance Survey Plans until 1985. After this date, the temporary Exhibition Galleries were added.



Plate 38: Gallery 38, Looking South

Room T9P.39

- 6.3.31 The northwestern of the suite of rooms is Room T8P.39, known as Gallery 39, and the end room of the north side of the gallery before it was extended westwards. Two of the three doors in this room have neoclassical porticoes: those in the east and south walls. The third doorway, leading west, is a plain opening with no architectural elements.
- 6.3.32 The room is skirted with a board different to all the other rooms of this northern side of the gallery: it is 0.3m high, with an incised ogee mould above. Its presence may indicate that this room had been redecorated, possibly when the new doorway westwards was added (Plate 39).



Plate 39: Gallery 39, Detail of Skirting and Doorframe Plinths

- 6.3.33 Apart from the neo-classical doorways, the most decorative part of the room is the roof assembly, which allows diffuse light into the gallery. The roof assembly comprises four crossing trusses that spring from wall plates, forming a pavilion roof. The trusses are formed of a series of iron girders, boxed in with plaster panels. The trusses rise from the corners and from the middle of the sides. A simple moulded cornice is at the top of the walls, and each of the eight panels formed by the trusses has rectangular plaster panels rising to a purlin, above which is the glazing. The trusses widen towards the centre of the room, and meet at a central circular hub. The underside of each truss is decorated with a series of roundels and rectangular panels. The sides of the trusses are plain, consistent with Rooms T9P.35, 36 and 38 (Plate 40).



Plate 40: Gallery 39, Roof Detail

6.3 Lower Level and East Front Façade (Figures 11-13)

6.3.1 The largest of the rooms on the ground floor prior to the transformation of the Tate is the Café, located on and around the base of the Rotunda (Plates 41-43). This space featured food preparation areas, food serving counters, and seating within the central structure of the Rotunda. The main structural brick piers, when used as a café, were plastered with low arches spanning the main structural parts. These have been removed, and it became apparent that the arches were insubstantial in comparison to the main supports. The central Rotunda area is crossed by two axial passageways, with alcoves in the corners. These alcoves had steel girders spanning the angles.



Plate 41: Room T1G.5, Outer Part of Rotunda Area



Plate 42: Room T1G.5, Inner Part of Rotunda Area



Plate 43: Alcove stripped during Excavations

- 6.3.2 To the east of the Rotunda base, under the portico, until 2011, were toilet facilities for visitors (Figure 11), both occupying rooms of roughly 54 sqm (Rooms **T1G.8** and **T1G.16**). With modern surfaces and fittings, these were of low historical and architectural interest. A photographic record was made. Both rooms had storage areas beyond, lying beneath and behind semi-circular stone clad bays (Rooms **T1G.8.1** and **T1G16.1**). These two small rooms were both lit by iron-framed arched windows that typify the fenestration of this lowest level.
- 6.3.3 Beneath the entrance steps was a further group of rooms used as storage areas, also accessed from the east edge of the Rotunda (Plate 44). This area was unplastered, with bare brickwork visible, and generally packed with stores and equipment. No significant architectural remains were observed (Rooms **T1G.9-15**).



Plate 44: Storage Area with Stores.

- 6.3.4 Other work was carried out in six partitioned rooms beneath Galleries 30-35. The northwest room (Room **T8G.8.5**) is an octagonal space within a square block, with cupboard space behind three of the angles in the corners (Plate 45). The fourth corner, in the southwest, contains a metal stair that winds anticlockwise to the top of the gallery. This has since been removed. The room was recently used as part of the education department of the gallery. No new information was observed during a strip of the surfaces.



Plate 45: Room T8G.8.5, looking North

- 6.3.5 Adjacent to this room, to the south, was a rectangular room divided with lightweight partitions into five spaces (Rooms **T8G.8.1-4**, **T1G.5.1**). Most recently part of the education department comprising offices, this room had two high-level windows in the west wall which had been blocked with brick. Although deep within the heart of the building, this would have afforded some natural light.
- 6.3.6 West of this, a room beneath Gallery 33 (Room **T8G.8.11**) revealed one blocked doorway with a flat lintel, and three blocked windows with wide eastern reveals in the west wall, The bricks used in the blocking were of general 20th century date, and cannot be further dated. In the room north of this, formerly a second suite of toilets (Rooms **T8G.8.6-8.10**), three further windows with splayed reveals were recorded in the western wall (Plate 46). This is part of the initial, 1897 construction of the gallery. In the north wall are three blocked arched windows, of dimensions consistent with the windows on the east front at this level. These were blocked, presumably, when the gallery was extended northwards in 1987.



Plate 46: Blocked window in room T8G.9

6.3.7 Further works were carried out in Rooms **T9G.3-3.2**. No historic fabric was revealed. It was noted that there was no evidence for sills on the party wall where the windows had been blocked. The only sill present was an angled stone sill in the area of Room T9G.3.2, with a large window behind.

6.3.8 The floors of all these rooms were concrete, lying level across the ground level at 2.88mOD

North Eastern front Exterior

6.3.9 Part of the transformation works involved reducing the ground outside the north part of the east front, altering windows to become doors to provide plant access during the works. The ground reduction enables ramp access into the lower level. The external detail of the ground floor windows and their setting was surveyed, photographed and drawn (Figure 12). The materials and style of the elevation is consistent around the steps, the sides of the portico, and along the east face of the Tate, and is all part of the first phase of 1897 (Plates 47-48).

6.3.10 The lower parts of the wall are brick, with facing blocks of Portland stone above ground level (Plates 49-52). At ground level, a wide plinth is the lowest course, surmounted by four courses of cyclopean rusticated blockwork. These are probably not rough hewn, but skilfully cut to appear so. The windows on the ground level have their sills flush with the ground surface outside; the internal floor was 1.06m lower than the sill in 2010. The floor has since been lowered.

6.3.11 Each window setting has the same form: rusticated voussoirs and a keystone form stilted arches in which the window is set. The edges of the voussoirs are moulded with ogee and roll moulding, with a resultant saw-tooth effect around the arch. Each window has an outer glazed border with metal glazing bars, and inner triangular and square panes fill the arch. Windows have various casements set in them, missing glazing bars. Each junction of glazing bars is decorated with a cast rose stud 42mm across



Plate 47: Northern Part of Eastern Elevation and Portico



Plate 48: Northern Part of Eastern Elevation



Plate 49: Window Detail to Room T1G.16.1 Type D



Plate 50: Removal of window to Room T1G.16.1



Plate 51: Window Detail to Room T8G.8.1 Type A



Plate 52: Window Detail to Room T8G.8.5 Type C

6.4 Watching Brief on Below-ground Excavations

Trenches 1 – 6 (Figures 14 and 15)

- 6.4.1 A series of trenches were excavated through the basement floor to provide underpinning for standing walls, and to enable new service runs to be installed. Six pits (Trenches 1-6) were numbered as a group, and were located around the edges of room T9G.3.1. The lowest deposit observed across Trenches 1-6 was a layer of dark blackish brown silty clay with high organic content (9). This was seen at the base of the deepest shoring pits, and lay at a height of -0.3mOD in Trench 4, dropping southwards to -0.65mOD in Trench 1. It was not seen elsewhere during the groundworks. In the north of the area was a lens of pale bluish grey clayey silt (12) which resembled an alluvial deposit. This was only seen in a small area 1m by 0.8m in plan. This was sealed by a widespread deposit of mottled greyish brown silty clay (8), up to 0.75m deep. It lay at 0.45mOD in the north of the area, dropping to 0.05mOD in the south. To the east, in Trench 6, was a layer of yellowish brown sandy silt (21), overlying the mottled clay, its surface at 0.21mOD. This was not seen elsewhere, so was difficult to characterise. Sealing these was a layer of very dark brown silty clay with inclusions of gravel and brick fragments (7), its surface lying at 1.00mOD in the north, dropping to 0.80m in the south. These inclusions indicate a degree of reworking of the horizon, and the surface was notably more level than the underlying layers. This very dark brown layer resembled a marshland deposit, or a particularly organic topsoil.
- 6.4.2 The next layer in the sequence was a widespread dump of mid brown gravel-rich sandy silt with occasional inclusions of brick (22), thought to represent made ground. This was up to 0.70m deep, raising the ground level to 1.7mOD. Above this was a layer of brick and stone rubble, with no whole pieces, that may represent a demolition horizon (23). It was virtually indistinguishable from a layer of hardcore above, until seen in section.
- 6.4.3 The rubble layer was cut by a construction trench [3] for the walls of this part of the Tate. The sides of the cut were steep, at c. 75° to a depth of 3.5m (-0.65mOD), and the walls built within them have a stepped foundation course before the body of the walls rise to the ground floor and beyond. The north and east walls of this room are constructed of yellow bricks measuring 230mm by 110mm by 70mm, bonded with cement mortar and laid in English Bond. The walls are 0.80m thick up to floor level. The structure is given reduced weight and additional strength by the use of segmental brick relieving arches (Plate 53). The eastern wall [2] has six relieving arches [10, 11, 13, 15, 16 and 24]

and the north wall [5] has one (14). The construction trench and voids beneath the arches were filled with mixed mottled greyish brown clayey silt containing lenses of bluish grey silty clay and blocks of rubble (4). The backfilled construction cut was sealed by a layer of rubble up to 0.45m thick (6), which was effectively no more than a layer of hardcore for a concrete slab that formed the floor of the room (1). This slab lay at 3.04mOD.



Plate 53: Excavation of Trench 4

6.4.4 The floor slab had been cut by works for a new partition wall, dividing the room into 'Room T9G.3' and 'Room T9G.3.1'. The base of the cut [19] lay deeper than the limit of the current ground works, and held a concrete foundation for the brick wall forming the partition [18]. The intrusion was backfilled with loose rubble (20), and the concrete slab reinstated (17).

Trench 7

6.4.5 Trench 7 was located across rooms T1G.18, T1G.19 and T9G.1. It was excavated to approximately 2.00m depth below the floor level (Figure 15). The lowest deposit was pale greyish brown sand with high gravel content (721), lying at 0.88mOD in the east, dropping gently westwards, and is probably a naturally-lain deposit. This was sealed by a thin layer of vary dark brownish grey silty clay (720), which had high organic content. This also dropped away gently westwards. A third layer above this was another deposit of pale greyish brown sand with high gravel content (719), similar to the gravel seen at the base of the trench. This lay at a maximum height of 1.10mOD, and followed the underlying topography. All deposits above this were clearly of anthropogenic origin.

6.4.6 The first deposit dumped over these layers was a widespread layer of mid brown sandy clayey silt with occasional inclusions of building material and rounded stones (709). It was up to 0.60m deep in the centre of the trench, at 1.40mOD, and lensed out eastwards against the gravel. The layer was characterised by a high quantity of kiln waste from a pottery manufactory, and, given the known history of the site, is assumed to have been brought to the site in advance of development, probably for construction of the penitentiary, to judge from the date of the finds. A thicker dump overlay this, of dark brown sandy clay with rubble and some other building materials (718). This was the main dump of made ground, raising the level to 1.90mOD. Various truncations have affected this layer.

- 6.4.7 An irregular hollow up to 0.63m deep in the top of the dumped sandy clay [724] had two distinct fills. The lower fill was greyish brown sandy clay with up to 40% red brick and mortar pieces (717). It was unclear whether this was a demolition layer or a layer of rubble used to help compact the made ground. The second fill was very dark greyish brown sandy clay, with only occasional red brick fragments (716).
- 6.4.8 The first proven building event apparent in Trench 7 represents construction of the Tate Gallery. In the west end of the trench was a cut [708] running north-south, with the end wall of Room T9G.1 built within it, with a relieving arch. The cut was backfilled with dark brown sandy clay (707). The fill was cut on the south side by a separate construction cut for the south wall for the room [723], filled with a series of thin layers of gravel-rich brownish yellow clayey sand (706), brown sand and gravel (722), and yellowish brown sandy gravel (726). This fill was in turn cut again in the west [701], probably to continue building the end wall. The cut was filled with a thin layer of mortar-rich rubble (725) and a layer of dark brown sandy clay (705). Several clay pipes within the fill span a date range of over 100 years, suggesting that made ground continued to be imported during construction of the Tate (Figure 15).
- 6.4.9 The walls of Rooms T1G.18 and T1G.19 [710] both lie in steep sided cuts into the made ground [713 and 715]. The base of the cuts were not seen. The construction cuts were both filled with dark brown sandy clay (712 and 714), with inclusions of brick rubble, and notably, slate. If the slate is local to the site, it may represent part of the roofing materials for the former penitentiary.
- 6.4.10 The whole sequence was sealed by rubble hardcore (711) with concrete over the top (700), up to 0.25m thick, which formed the floor surface, lying at 3.04mOD.
- 6.4.11 Within Room T9G.1, a modern insertion of a supporting column with a concrete base [703] had been inserted through the backfill of the construction trench for the south wall. The cut was much larger than that required for a small footing 1m square in plan [704] and had been backfilled with concrete (702). The floor surface was repaired with concrete.

Trench 8

- 6.4.12 Trench 8 was a small extension to the south of Trench 7, just 1.65m by 1.5m in plan, and required the breaking out of part of the footing of the south wall of Room T1G.19. The south wall of the room was 0.60m thick, and the cut [802=715] filled with loosely compacted rubble including slate (801). This construction cut through a sequence of layers which were mostly dumped.
- 6.4.13 The lowest deposit was dark brown sandy clay with no apparent inclusions (811), and may be a remnant of the pre-development horizon. This lay at 1.25mOD. Above this was a layer of dark brown sandy clay with occasional brick inclusions (810), with a layer of brown sand and gravel above it (809), in turn sealed by a layer of loose yellow sand and gravel (808). These three layers made up the ground to 1.87mOD and may be upcast natural deposits.
- 6.4.14 The layers above here were typified by inclusions of small fragments of varied building materials, predominantly brick and mortar. The comprised dark brown sandy clay 0.14m thick (807), a lens with a higher proportion of rubble (806), and lens of brownish yellow sand (805) at 2.12m OD. Above this was a layer of building material, quite loose, in a soil matrix of dark brown silty clay, which may be a demolition deposit.
- 6.4.15 The fill of the construction cut for the Tate Gallery wall was sealed by concrete which formed the floor (800), lying at 3.04mOD, level with the adjacent room.

Trench 9

- 6.4.16 Trench 9 was excavated in room T9G.3, after a dividing wall was removed (Figures 14 & 15). This enabled a wider overview of the deposits to be made, but they were not immediately comparable with those seen in the underpinning pits (Trenches 1-6).
- 6.4.17 The lowest deposit in Trench 9 was a layer of greyish brown silty clay (919), lying generally level at 1.10mOD. This was not a naturally lain deposit, since it included occasional CBM and gravel within its composition. This may be a similar deposit to (7) in the west of the room. This layer was over 0.54m deep. Sealing this was a layer of mid brown sand and gravel that was 0.24m deep (918), and had small and medium rounded gravel inclusions. This was generally firm, but not compacted, so was thought unlikely to represent a surface. Above the gravelly layer was a thick deposit of dark brown silty sandy clay (917) with inclusions of CBM and oyster as well, suggesting it was a spread of general waste, probably made ground, brought to the site prior to any construction events. This was up to 0.72m deep, lying at 1.95mOD. A final layer of made ground above this was dark greyish brown sandy clay (910), which was generally clean, with no cultural inclusions.
- 6.4.18 One of the more significant features encountered during this phase of works was a degraded concrete footing [912], running roughly southwest-northeast, and cut at either ends by later construction phases of the Tate Gallery (Figure 15). This footing was 0.80m deep and survived for a length of 3.5m. The concrete lay within a steep-sided flat based cut 1.2m wide [913] cut into the underlying dark greyish brown sandy clay (910). By overlaying this feature on historic plans of the site, it can be seen that this poorly preserved section of concrete is in the approximate location of a wall of Millbank Penitentiary. There was no brickwork bonded to the footing, nor associated surface, showing that in this area at least, significant groundworks were undertaken when the Tate Gallery was constructed. If this truly represents part of the prison, then it had been very heavily truncated at this location.
- 6.4.19 The soil horizon (910) and concrete footing (912) were cut by a foundation trench for the east wall of Room T9G.3 [915] and an associated chimney base [920]. The base of the cut lay deeper than the extent of the groundworks, and was not seen. The edge of the cut lies up to 1.00m west of the wall; like the walls of the room, this wall was in yellow bricks, measuring 230mm by 110mm by 70mm, laid in English bond and bonded with cement mortar [914]. The construction trench was filled with uncompacted mixed brown silt and clay, with occasional brick inclusions (916). In the southeast corner of the room was a polygonal brick structure extending 2.4m from the wall and bonded to it, thus indicating contemporaneity. This was the base of a chimney [902], and had a flue continuing eastwards for 2.7m before terminating in brick blocking (Plates 54 and 55). The base of the structure measured 2.4m by 2.6m, and it stepped in at 1.58mOD to measure 2.40m by 2.00m. The sides of this sub-octagonal chimney base then rose vertically to a flat truncation at 2.42mOD, which is the surviving height of the brickwork. It was constructed of red and cream-coloured bricks measuring 220mm by 110mm by 60mm, bonded in English bond with a grey sandy mortar. After construction, the cut was backfilled with, firstly, a fill of dark grey sandy clay silt (905) and then a fill of greyish brown clayey silt above (904). The walls surround a flue that leads in from the east; the flue is 1.10m wide, the walls of the base up to 0.80m thick around it. As the flue runs under the wall, it has a vaulted brick ceiling, the arch formed of two courses of brick. The flue is 1.5m high, and the floor is brick. An additional skin of bricks [911], weakly cemented, lines the flue. There were two deposits within the flue. The lowest fill was soot (906), and was 0.4m deep, proving this had been a chimney. The secondary fill was mixed brown sandy clay with brick rubble inclusions (903), a general post-demolition backfilling event.



Plate 54: Base of Chimney



Plate 55: Blocked Flue

- 6.4.20 The demolished part of the chimney was sealed by a layer of hardcore that was indistinguishable from a similar layer that spread across the whole of Trench 9 (901), a supporting layer for the concrete slab that formed the floor of the room (900), lying at 3.04mOD.
- 6.4.21 The made ground, the floor of the Tate, and the remnant of the concrete footing were cut by a modern addition to the Tate, a wall to partition room T9G.3. The cut was deep, and its base was not seen [909]. The partition wall runs north-south [907], and the cut was backfilled with rubble (908). Within the rubble were five blocks of shaped fine-grained limestone. Three were identical, with two chamfered corners, and a third corner had a projection for keying into an adjoining block. The other two blocks were similar, but with a polygonal profile suggesting they were stone dressings for a significant structural element, perhaps quoin stones or part of a jamb. Given the proximity of the base of the chimney, it is tempting to ascribe these pieces to the chimney itself, but they could equally have derived from the penitentiary. No other blocks like this were seen during the works.

Trench 10

- 6.4.22 Trench 10 marks excavations in Room T8G.8.2, following the removal of partitions, and also following the replacement of the floor above. It comprised a narrow north-south trench with four wider sections running west. The lowest deposit was brown sandy clay with occasional inclusions of gravel and fragments of brick (1011); the top of this lay at 1.84mOD, in the west of the area, sloping down gently eastwards to 1.70mOD near the eastern wall of the room. This was sealed by 0.2m depth of yellowish brown silty clay (1010), characterised by inclusions of small pieces of chalk and brick rubble. Above this was a layer of brown sandy clay and gravel (1009) up to 0.22m deep with a layer of dark greyish brown silty sandy clay (1008) above it, its highest point at 2.17mOD, above which it was truncated.
- 6.4.23 Two linear features were cut into this layer, both filled with dense sandy mortar, perhaps representing the truncated footings of Millbank Penitentiary. Both were oriented north-south. The western cut [1006] was 0.85m wide and had near-vertical edges and a roughly flat base. The dense gravelly sandy mortar fill (1005) had been spread slightly eastwards at demolition (1015) (Plate 56). The eastern cut [1013] was less regular in profile, was 0.96m wide, and survived to 0.30m depth. The gravelly mortar fill of this cut (1012) had also been spread eastwards upon demolition of the associated building (1014).



Plate 56: Truncated foundation (1005) in Room T8G.

- 6.4.24 There were no horizons that could be proved to be surfaces associated with the penitentiary, nor brickwork that could be part of the foundations. The truncated mortar footings and made ground (1008) were sealed by a layer of loosely compacted brick and mortar rubble (1007) that was up to 0.35m deep, and probably derives from the superstructure of the penitentiary. This demolition horizon was cut by the construction trench for the Tate Gallery [1002], that was backfilled with loose mixed greyish brown sandy silt and rubble (1001). An additional cut in the centre of the room [1004], held a concrete strip foundation (1003) which supported iron columns that supported the floor above. The sequence was sealed by concrete (1000) that formed the floor of the Tate. This was 0.54m thick.

Trench 11

- 6.4.25 Part of the ground within the footprint of the Rotunda (Room T1G.5) was monitored as it was removed for new services to be installed. Directly beneath the concrete floor (1100) was loose rubble

backfill (1101), to over 1.6m, indicating that the Rotunda was constructed in a large pit with than trench-built, as seen with the foundations of the rooms to the north. The concrete lay at 2.88mOD

Trench 12

- 6.4.26 Trench 12 was located across rooms T1G.14 and T1G.16. This revealed the truncated remains of a flue, constructed of buff-coloured bricks, running east-west through the building. The bricks measured 225mm by 106mm by 70mm, consistent with a very late 19th century date, and are assumed part of the fabric of the initial build of the Tate. The two side walls of the flue (1209 and 1210) were constructed in English bond, and stood for more than eight courses, continuing below the level of the new services. Between the walls was the flue itself, 0.85m wide, with a vaulted brick roof with only a shallow curve, more of a segmental arch [1208]. This lay at 2.60mOD, and was sealed by rubble. The cement bonding at the east end of the flue was pointed, and formed a finished surface. No opposite wall or return of the flue was observed. The west end was truncated [1211], leaving only a length of 3.4m of brickwork. The truncation was filled with greyish brown sandy silt and brick rubble (1212).
- 6.4.27 East of the flue, made ground was present. This comprised a layer of greyish brown sandy clay (1207) with high gravel content lying at 11.88mOD. This was sealed by a dump of mid brown clay (1206), 0.3m thick, with a rubble rich layer of mixed, mottled yellowish brown silty clay above it (1205). The concrete floor surface of the room (1204) lay at 2.88mOD.

Trench 13

- 6.4.28 Trench 13 was located outside the north walls of the curved elements of the steps to the main entrance. It marks a series of pits and trenches excavated for drainage, as well as ground reduction for providing a step-free access to the lower levels of the Tate.
- 6.4.29 The earliest archaeological feature seen in this area was a brick wall or footing 0.70m wide [1302] (Plate 57), constructed of fine-grained red and yellow bricks measuring 230mm by 110mm by 65mm, and built in English bond with a sandy cement mortar. Its surface was at 2.18mOD, and was seen for a depth of 1.16m, and is still preserved beneath the impact of the new layout, except were cut by services trenches to 1.02mOD. This is a substantial foundation, and the orientation and mid-19th century size of the bricks indicate that this is not part of the Tate, and is therefore an element of the penitentiary. The top of the wall had been robbed, with a patch of loose rubble remaining (1301). The bricks did not lie in a visible cut, rather the ground that was seen in the trenches made up after the wall was built.



Plate 57: Wall Footing (1302)

- 6.4.30 The lowest layer of made ground was firm dark greyish brown silt which appeared to have had a high organic content (1304). This lay at 2.08mOD in the west of the area, falling to 1.60m OD next to the wall. This was overlain by up to 0.75m depth of compact mid grey sandy clay with high rubble content (1303) which lensed out east of the wall. Patches of brown sand (1305) were also seen at the same stratigraphic level. Further made ground was added to the east, including a layer of grey sandy silt with brick and mortar fragments (1309), and a layer of compact sandy gravel (1308). This was 0.60m deep, and appeared to be a dumped deposit rather than a surface. Further made ground was added, a layer of dark grey silty clay was deeper to the east than the west (1300), and represents a more level deposit over an underlying slope.
- 6.4.31 Three further layers of made ground were identified: a layer of dark brown silty clay with occasional patches of brick rubble (1307), up to 0.75m deep and a 0.40m depth of dark brown sandy clay silt (1306), which was topped by turf, forming the garden plat of the Tate in 2010. The grass lay at 3.94mOD.
- 6.4.32 At no point in the exterior groundworks were any deposits seen that could be associated with with the occupation of Millbank Penitentiary.
- 6.4.33 Additional watching brief works were carried out in the hard standing northwest of the gallery spaces. These were excavated to 0.5m depth below current ground level, and encountered no archaeological horizons.

6.5 Finds

- 6.5.1 A small assemblage of pottery, glass clay tobacco pipe and metal was collected during the watching brief. All are of post-medieval date, dating to after 1600, and most derive from made ground brought to site, either to raise ground level in advance of construction of the prison or the Tate. None of the finds have great significance, beyond proving that no prehistoric deposits were encountered. The finds are quantified in Appendix B.

7 Conclusions and Interpretation

- 7.1 The building recording at Tate Britain was carried out in all rooms subject to change during the Transforming Tate Britain Project. The majority of the changes were carried out in the earliest parts of the Gallery, dating from 1897, and the earliest extensions, from 1899. This document presents the

results, but not the full photographic archive. This is a black and white film record, with digital images, and shall be submitted with the full archive.

- 7.2 The recording identified commonality of decorative finishes to the architectural details in the galleries, as well as a mixture of classical elements in the grander spaces such as the portico and Rotunda, which may be considered set-piece artistic statements and displays of the rich architectural heritage at the end of the 19th century. The style of these main spaces, with their use of Ionic, Corinthian and Composite Order appears unaffected by the mid 19th century 'Arts and Crafts' Movement and its evolution into Art Nouveau. This reflects the desire for the expression of a sense of tradition and authority suitable for a national gallery, and presents a frontage reminiscent of a temple or palace.
- 7.3 Much of the fabric in the gallery spaces was of identical form, indicating a commonality of build for classical doorways, and architectural details such as mouldings of skirting boards, cornices and detailed relief work on roof trusses. Galleries 30, 31, 32 and 33 are all part of the first phase, but the doorways in Galleries 35, 36, 38, 39 and 40 have the same form where not modified. This does not imply that the earlier galleries were changed, simply that the newer ones, also designed by Sidney R.J. Smith, continued the style and themes of the initial build.
- 7.4 Of interest is the decorative mosaic in the floor of the Rotunda on the Principal Level. This decorative item, with its centrepiece of polished marble may have held a water feature or statue. It was removed during the transforming works, but originally would have added to the impact of this set-piece.
- 7.4 The specific aims of the archaeological watching brief are addressed as follows:

Are there any deposits that can inform on the palaeoenvironmental development and chronology of the area between the Mesolithic and medieval periods? In particular the nature of the palaeoenvironment at the confluence of the Tyburn stream with the Thames will be examined.

- 6.3.1 At no point in the watching brief were any deposits revealed that were proven to pre-date made ground deposits associated with either the construction of the Millbank Penitentiary or the Tate Gallery. The deepest excavations were located next to foundations of the Tate Gallery (Trenches 1-6), and these had deposits of very dark brown silty clay at the base, which appeared to have high organic content. The top of this deposit marked the limit of excavation, at a height of -0.3mOD to -0.65mOD. The organic character of the deposit, as well as its silty clay character, may indicate that this layer represents the medieval Tothill Fields area to the south and west of Westminster that is thought to have comprised market gardens and occasional settlement among the marshy ground near the riverside with the remaining area likely to be waste ground (Watson 2002). The area was still low lying and marshy in the early 19th century, as there is documentary evidence for duck shooting being carried out (Watson 2002).

To assess the potential of the site to inform on the medieval and post-medieval development and chronology of London.

- 7.4.2 Made ground of post-medieval date was seen to lie directly above the organic, marshy layer, and this comprised layers of sand, gravel and industrial waste from kilns. This is up to 2m deep in some places, and it may all relate to attempts to consolidate the marshy ground in advance of the construction of the penitentiary. There is the possibility that some of the dumps may be earlier dumps on the marshy ground, the marsh being a convenient location for dumping waste materials from surrounding industries in the 17th and 18th centuries. The top of the highest dumped deposits were seen at between +1.70-+1.90mOD.

To identify if any features associated with the Civil War defences and the Star Fort located by Stukeley are present within the development area and if so their state of preservation.

- 7.4.3 At no point were any deposits or cut features identified that may relate to the Civil war defences and the Star Fort. The datable deposits are late 17th century or later. The problems with construction of the penitentiary included remedial underpinning of insubstantial foundations (Alan Baxter & Associates 2010a), whereafter many of the main foundations were based on deep excavations into the gravel. This may have removed much evidence of previous activity on the site, if the fort and defences were truly located here.

To identify if any of the features shown on historic mapping to lie within the area between Pentagon 1 and the perimeter wall of the former Millbank Penitentiary are present and if so to qualify their nature, possible use and state of preservation.

- 7.4.4 Any structural features relating to the Millbank Penitentiary were heavily truncated upon demolition before the Tate was built. They were represented in the archaeological record by two forms of foundation. One form was strip foundations of poured cement, found within Room T8.G.8, cutting through the made ground. The other form was seen in the reduced-ground excavation to the east of the gallery where the new café access is located. This was a substantial red-brick footing 0.90m wide, and partially preserved in situ beneath the new levels. None of the foundations seen in this phase of works were cut as deep as the gravel, so it may be assumed that these were subsidiary to the main walls. Layers of rubble were present in most of the trenches excavated around the lower levels of the Tate, and these were cut by the foundations. There is the high possibility that the building materials, characterised by brick and occasional pieces of stone, represent the demolished remains of the penitentiary structure.
- 7.4.5 The upper levels of made ground beneath the scatter of rubble were assessed to determine whether they could represent finished yard surfaces, but the dumps of sand and gravel encountered did not appear to be sufficiently compact, so may represent upcast gravel from the principal wall footing trenches.

To Record any sections of the footings of the Tate Gallery where exposed by groundworks.

- 7.4.6 Where exposed, sections of the Tate Gallery footings have been recorded. These were seen in most detail during underpinning works and service trenches, and were seen to continue beneath the level of ground works, over 3.2m below the 2010 basement slab. The footings were brick for this whole depth. Regular segmental arches were used in the construction, with openings 2.7m high and 1.7m wide. These would always have been underground, and do not represent infilled passages, rather these represent an economic use of materials to produce a strong and comparatively lightweight wall.

Assess the degree and extent of truncation of earlier deposits by the development of the Millbank Penitentiary and Tate Gallery.

- 7.4.7 Only three foundations were seen that appear to relate to the penitentiary, and these were confined to narrow trenches, with the foundations built tight to them, so on the basis of this limited evidence truncation of pre-existing deposits would be localised to the depicted structural footprint..
- 7.4.8 The Tate Gallery, however, has deep foundations. The bases of none were seen, but the construction trenches had near-vertical edges and extended 0.4m wider than the walls. This shows that for every wall of 0.7m thickness, the typical width of the internal and external walls, the full impact is a trench of 1.50m width. The foundations are well pointed up, so it may be assumed that the established width of the construction trenches extends to their base.

7.4.9 The footings of the Rotunda are more massive, and no undisturbed stratigraphy appears to survive within its footprint: nothing but redeposited layers of soil and rubble were identified within: the whole structure lies in a single construction pit. It may even have a raft of concrete at its base.

What physical evidence of changes to the Tate Gallery survives within the building?

7.4.10 During the transformation works, evidence for former openings in the galleries, and thus people-flow and phasing was collected. The phasing of the Tate Gallery as defined by Alan Baxter Associates (2008) is completely accurate, with no new evidence forthcoming to contradict their conclusions (Figure 16). The principal alterations to Galleries 30-39 was seen to be blocking of windows, blocking of doorways and opening of old windows as new doors into later extensions. It may be noted that the proposals for reconfiguring the galleries have returned them much more to their original character: all galleries once had central doors in each end wall, and later changes had reduced the sized of doorways or moved them to one side of the centre line of the rooms.

7.4.11 The blocking of windows that occurred around the centre of the gallery spaces probably dates to the enclosure of the plant room. The early plans of the gallery suggest that there was an open courtyard where two chimneystacks rose, both of which have been removed. The base of one of the stacks was revealed during the works to the Lower Level. Flues associated with the chimneys also appear to have been generally struck when the chimneys went.

7.4.12 Blocked lower level windows were also noted, to the west of the old education rooms, and this is likely to have occurred soon after, or at the time of the gallery's first principal extension westwards in 1899. Given the standardisation of brick sizes during the 20th century, it is difficult to ascribe a precise date of relatively modern changes to a relatively modern building.

8 Further Work and Publication

8.1 No further work on repairs or additions to the Tate Gallery as part of the 'Transforming Tate Britain' scheme is recommended, beyond the requirements laid out in the brief and the Written Scheme of Investigation (AOC 2010b).

8.2 At a minimum, a short summary of the results will be submitted to the London Archaeological Round-up.

8.3 This report will be added to the grey literature available on the online ADS OASIS project (Appendix C).

9 Archive Deposition

9.1 On completion of the project, the developer/landowner will discuss arrangements for the archive to be deposited with the Museum of London. Following completion of the full extent of the fieldwork, the site archive will be prepared in the format agreed with the receiving museum. The excavation archive will be security copied and a copy deposited with the National Archaeological Record (NAR) before post-excavation analysis begins or as soon after as can be arranged.

9.2 The full photographic record will be deposited with the archive.

9.3 The site archive will comprise all environmental samples and written and drawn records. It is to be consolidated after completion of the whole project, with records and finds collated and ordered as a permanent record. The archive will be prepared in accordance with guidelines for the preparation of excavation archives for long-term storage (UKIC 1990) and (Brown & AAF 2007).

10. Glossary

Britannia	Symbolic representation of Great Britain
Composite	Late Roman combination of Ionic and Corinthian order
Corinthian	Athenian style of the 5 th century BC
Cyclopean	In pre-classical Greece, large irregular blocks of stone. Stylised in the neo-classical movement
Entablature	The upper part of an <i>Order</i> , comprising architrave, frieze and cornice
Ionic	Anatolian style of the 6 th century BC
Mosaic	Wall or floor decoration using small tiles or polished stone
Ogee Mould	A paired concave and convex curved mould
Order	In classical architecture, a column and its elements proportioned to one of the accepted modes, such as Tuscan, Ionic, Corinthian or Composite
Pediment	A low pitched gable above an entrance
Plat	A small garden square, taken from French usage.
Portico	A roofed space forming the entrance to a temple, house or church
Rotunda	A building or room with a circular plan, often surrounded by a colonnade and usually domed.
Sejant	Heraldic term for a seated animal
Vousoir	A wedge-shaped stone forming an arch

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Site Location Within London

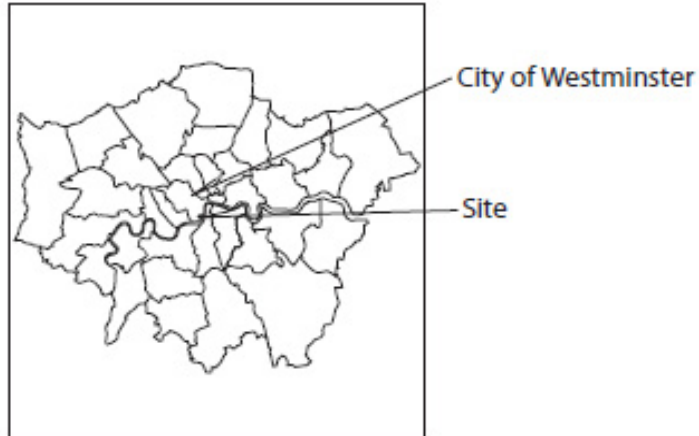


Figure 1: Site Location

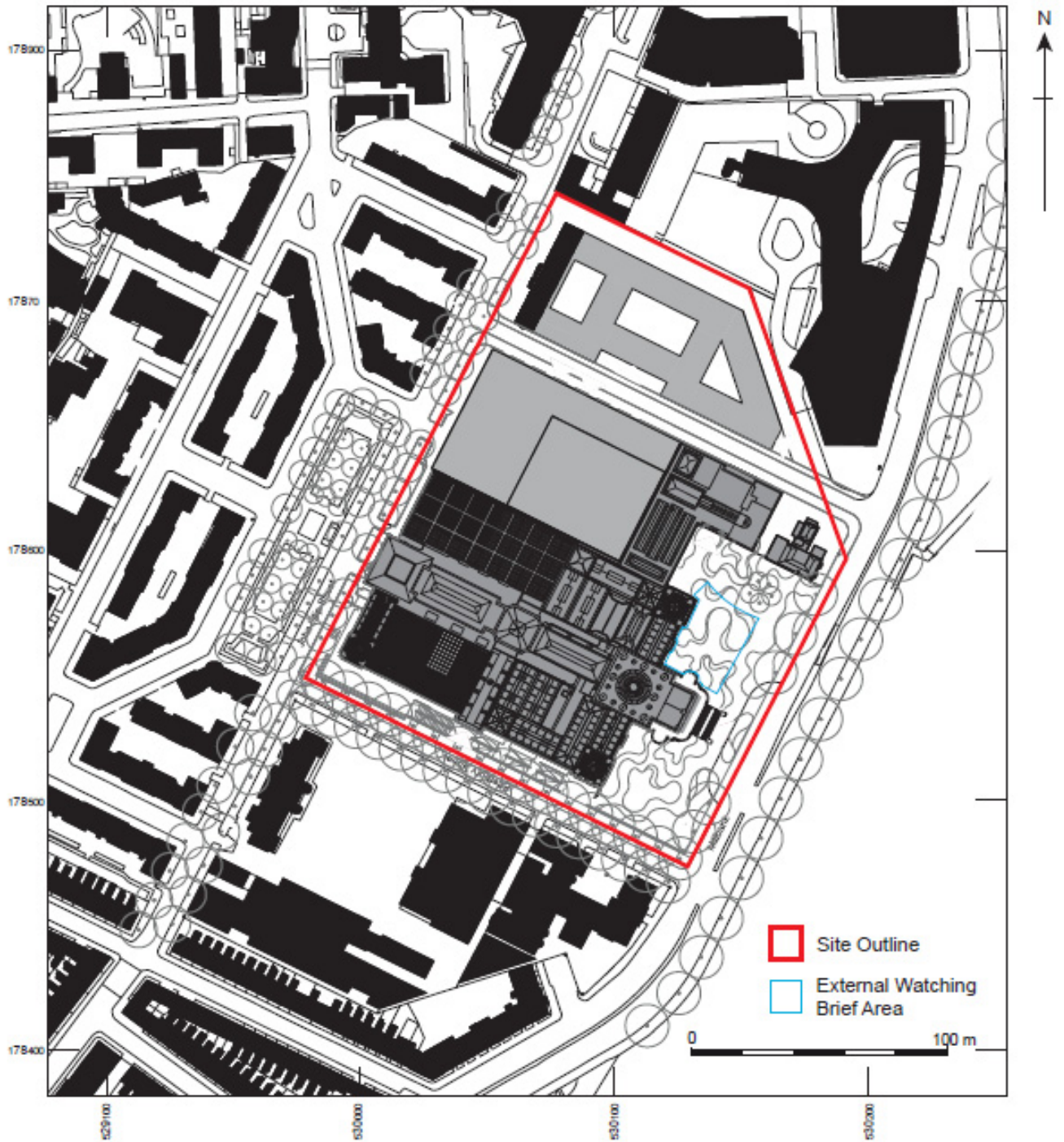


Figure 2: Detailed Site Location

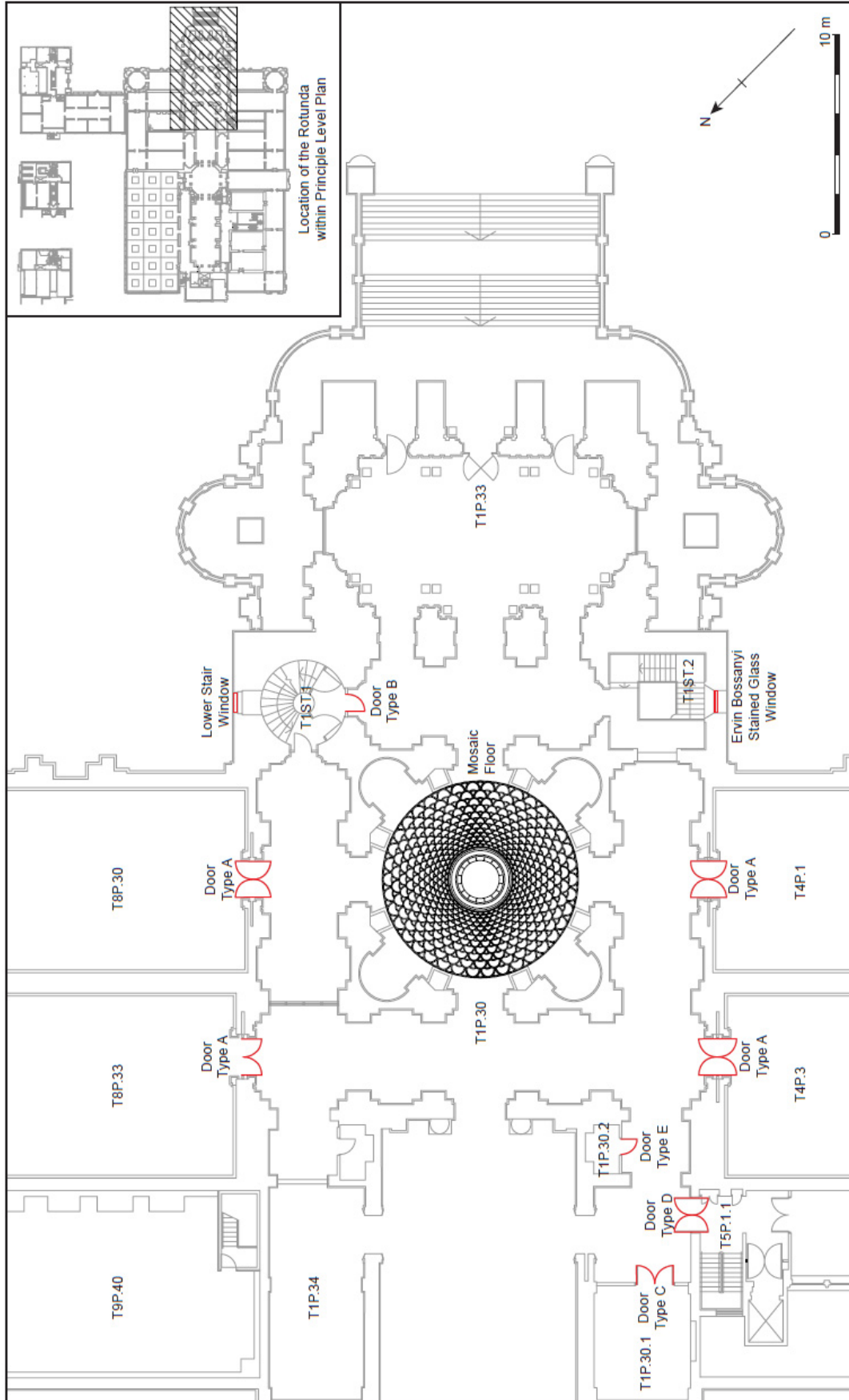
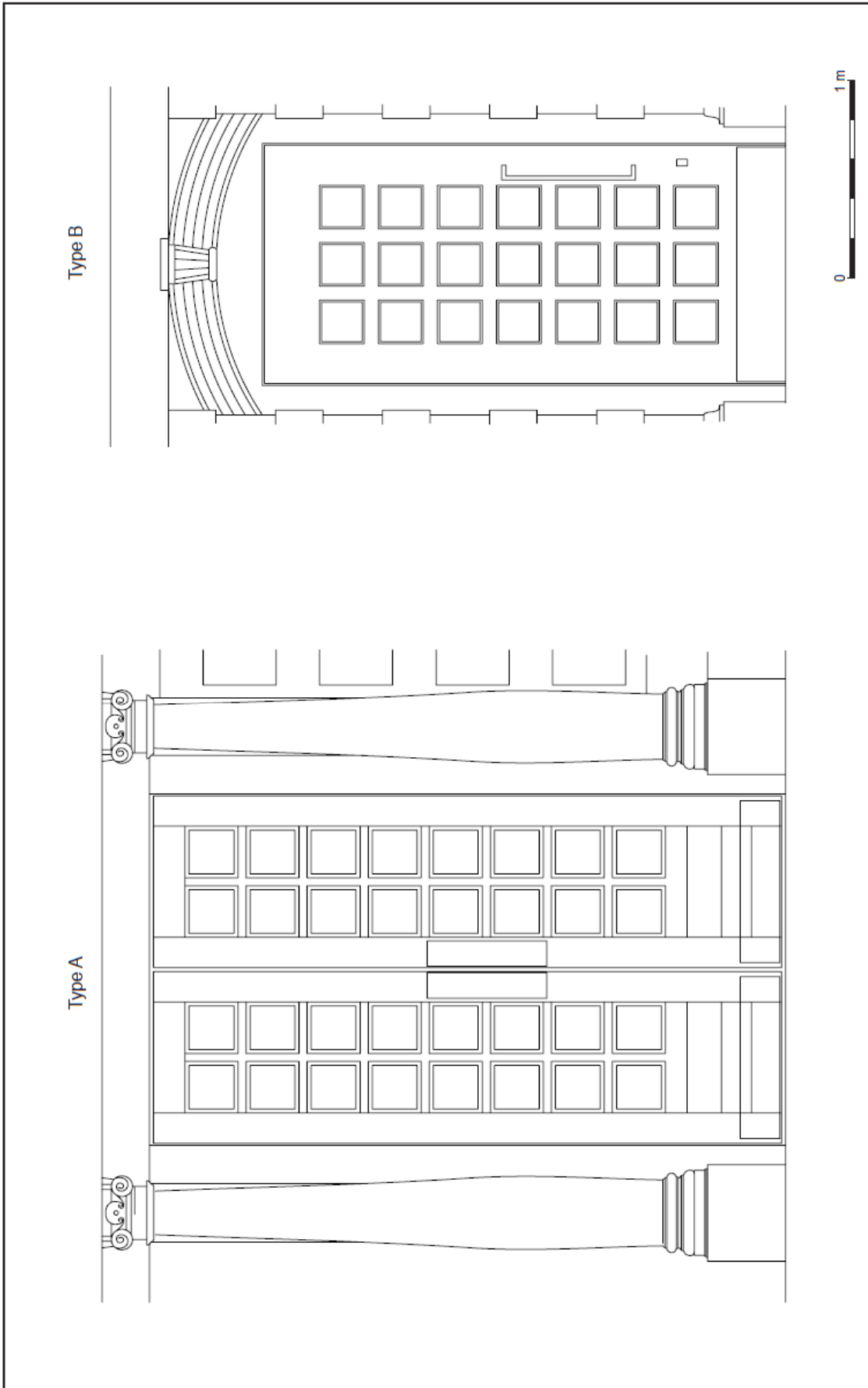


Figure 3: The Rotunda Mosaic and Location of the Surrounding Doors by Type

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Figure 4: Door Types A and B

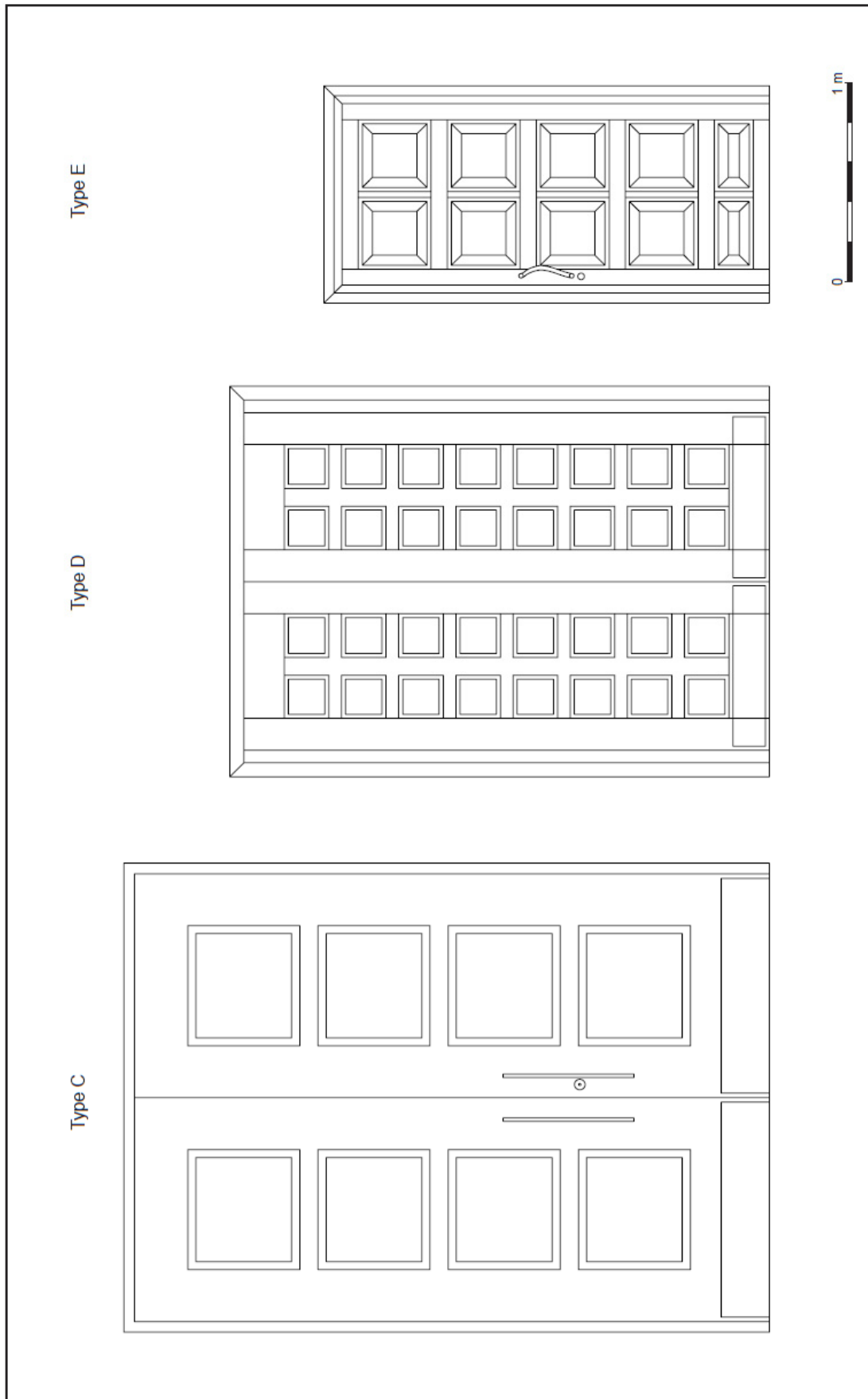


Figure 5: Door Types C, D and E

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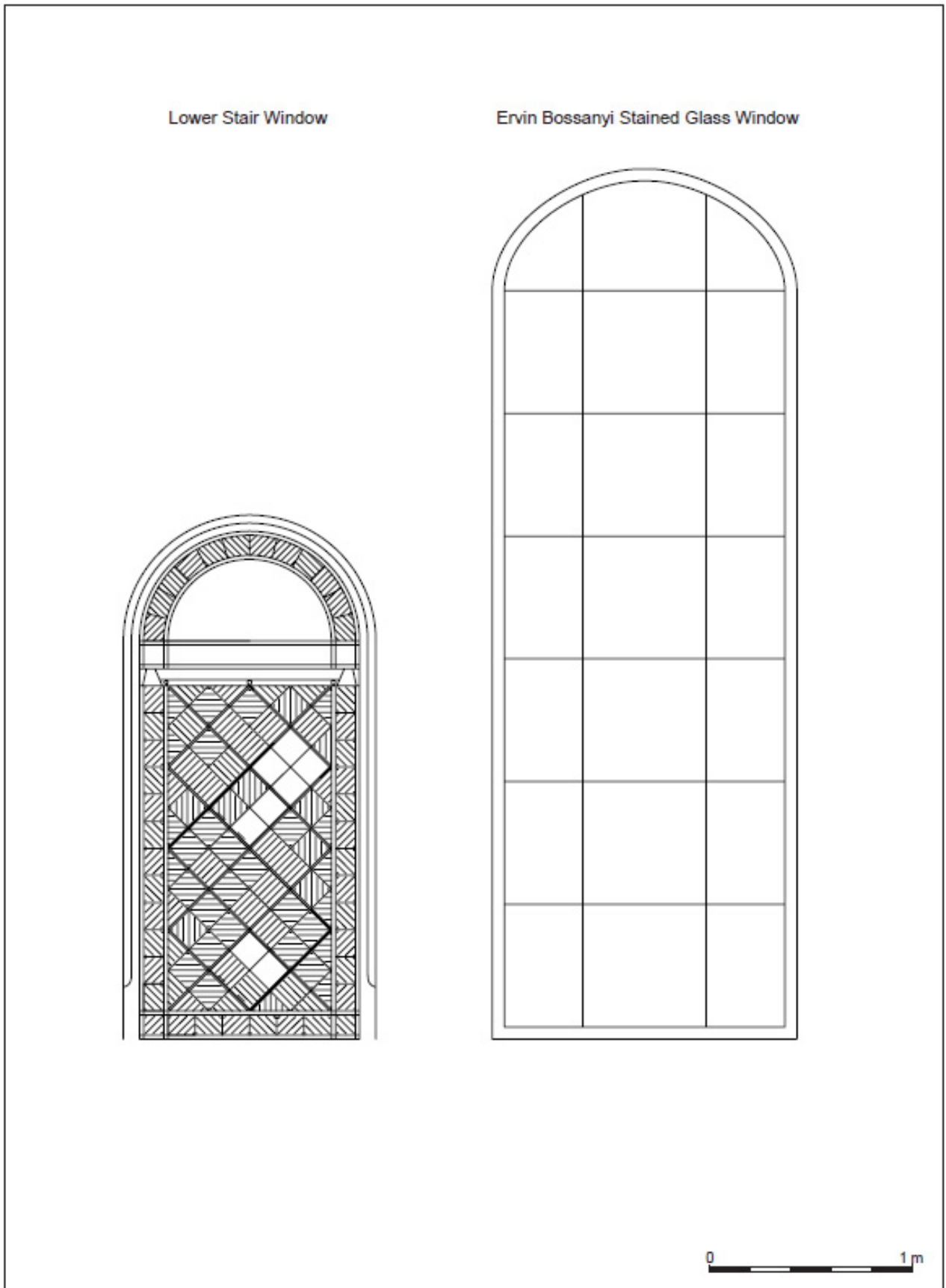


Figure 6: Lower Stair Window and Ervin Bossanyi Stained Glass Window

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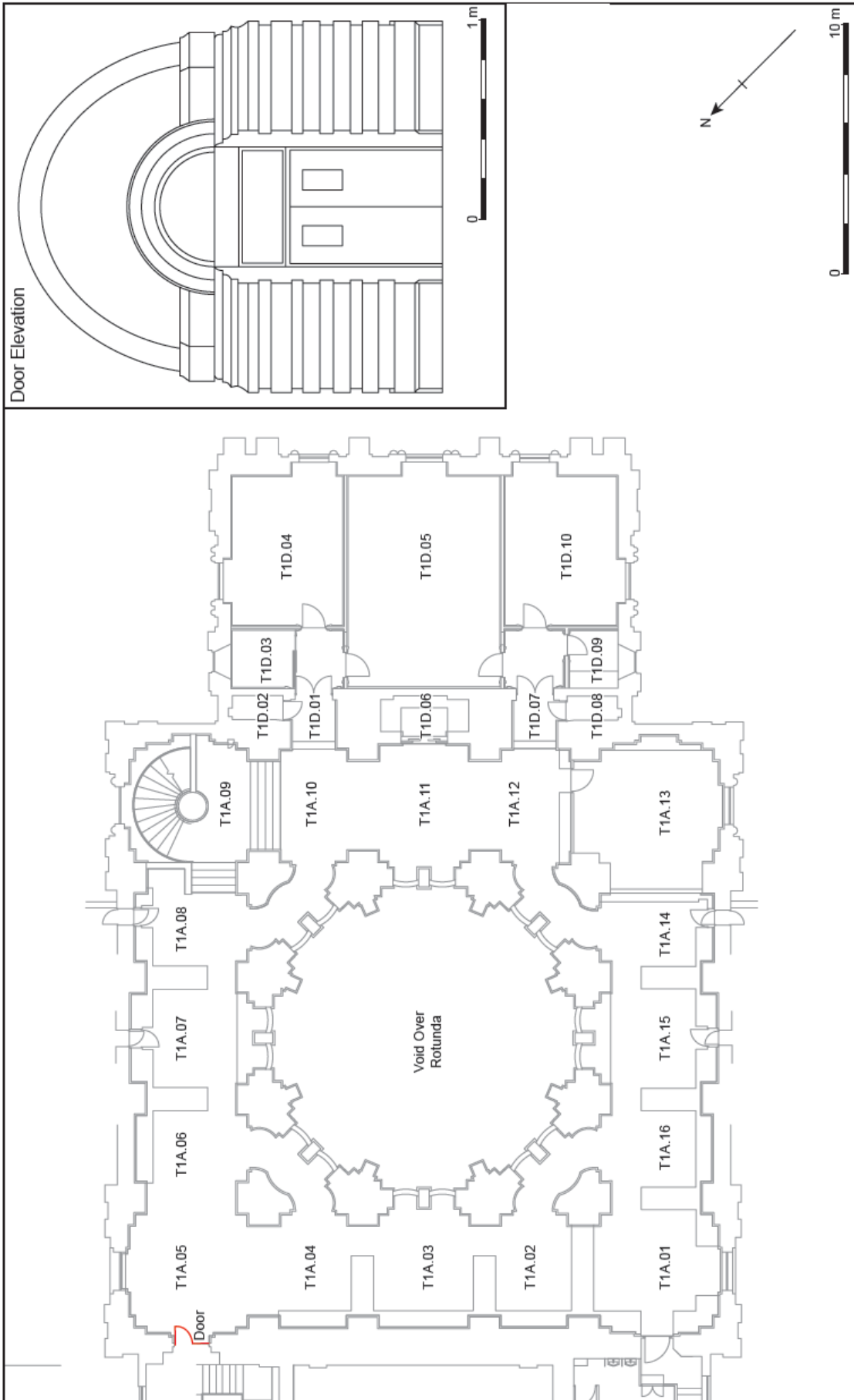


Figure 7: Upper Level Plan, Historic Fabric and Door Elevation

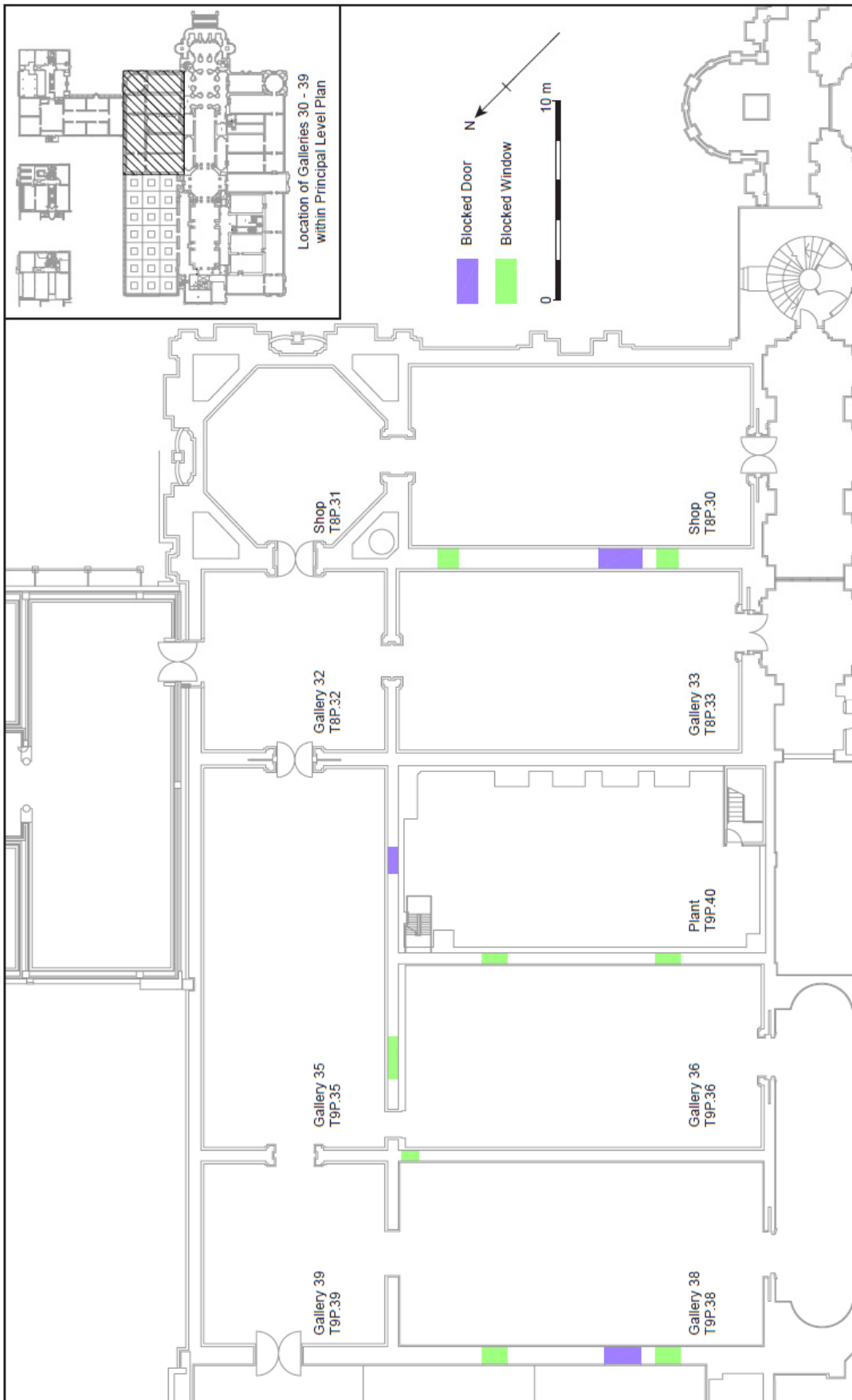


Figure 8: Principal Level Plan, Galleries 30 - 39, Historic Fabric

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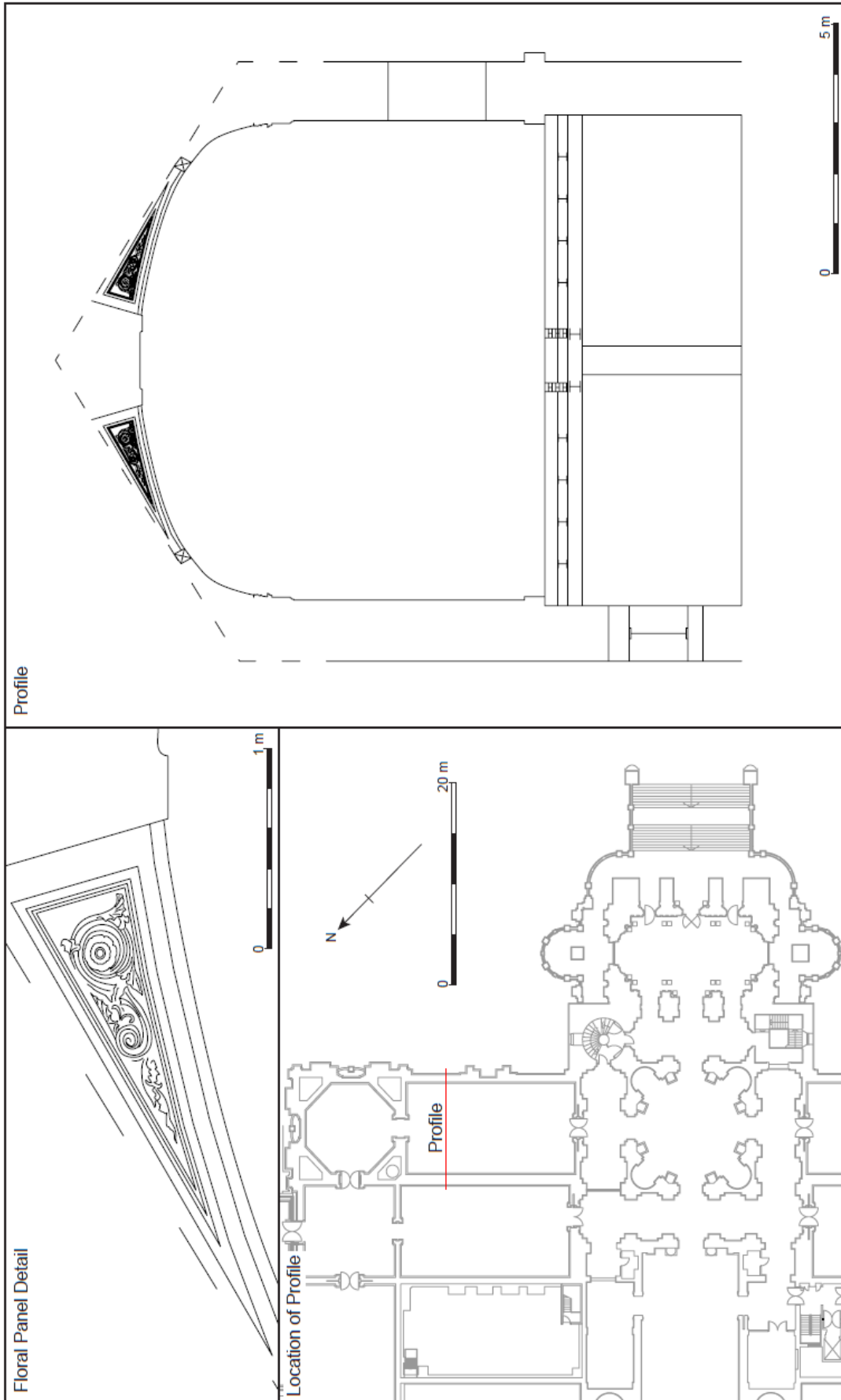


Figure 9: Location of Profile through Shop TP8.30, Profile and Floral Panel Detail

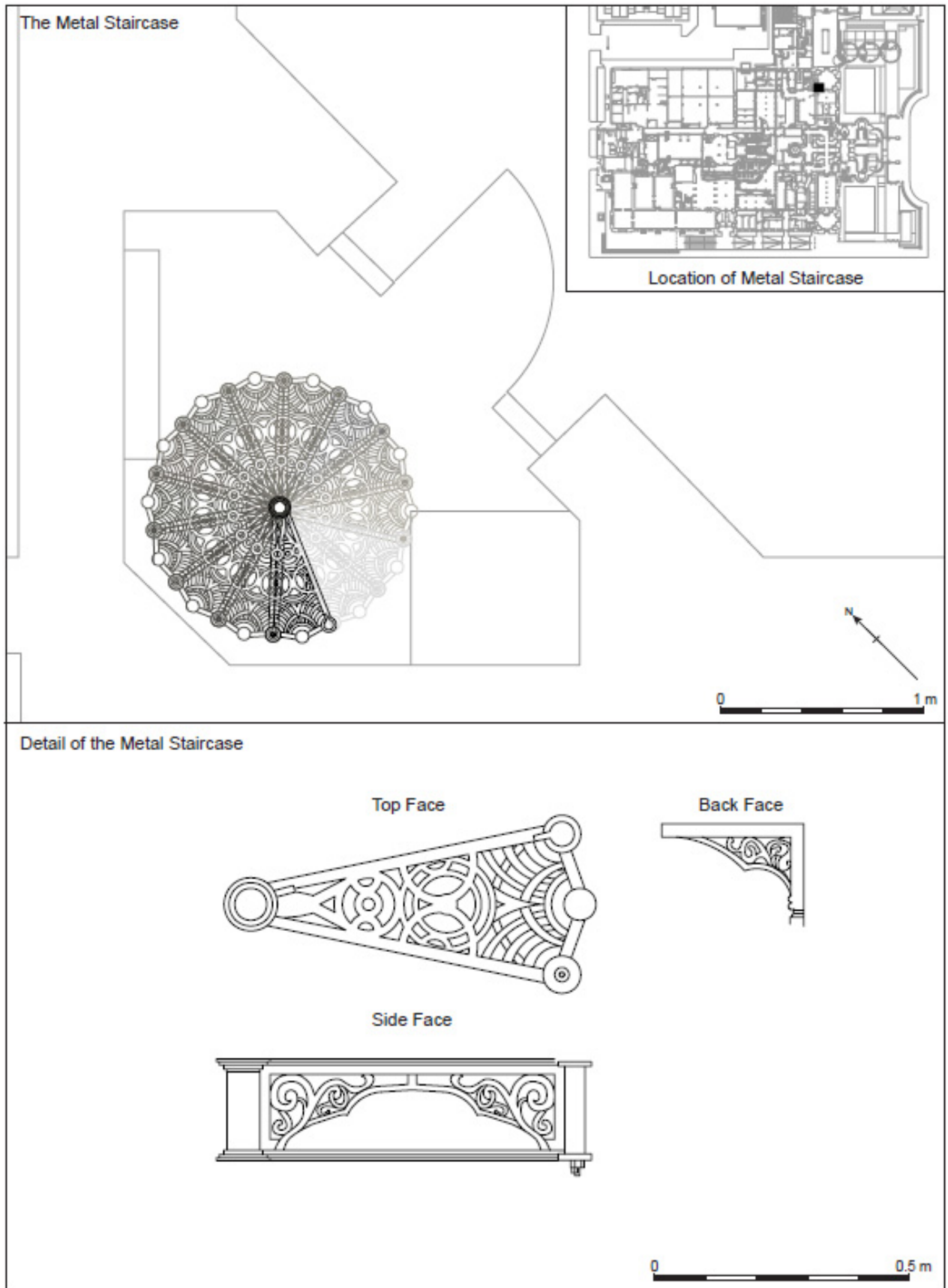


Figure 10: The Metal Staircase and Detail

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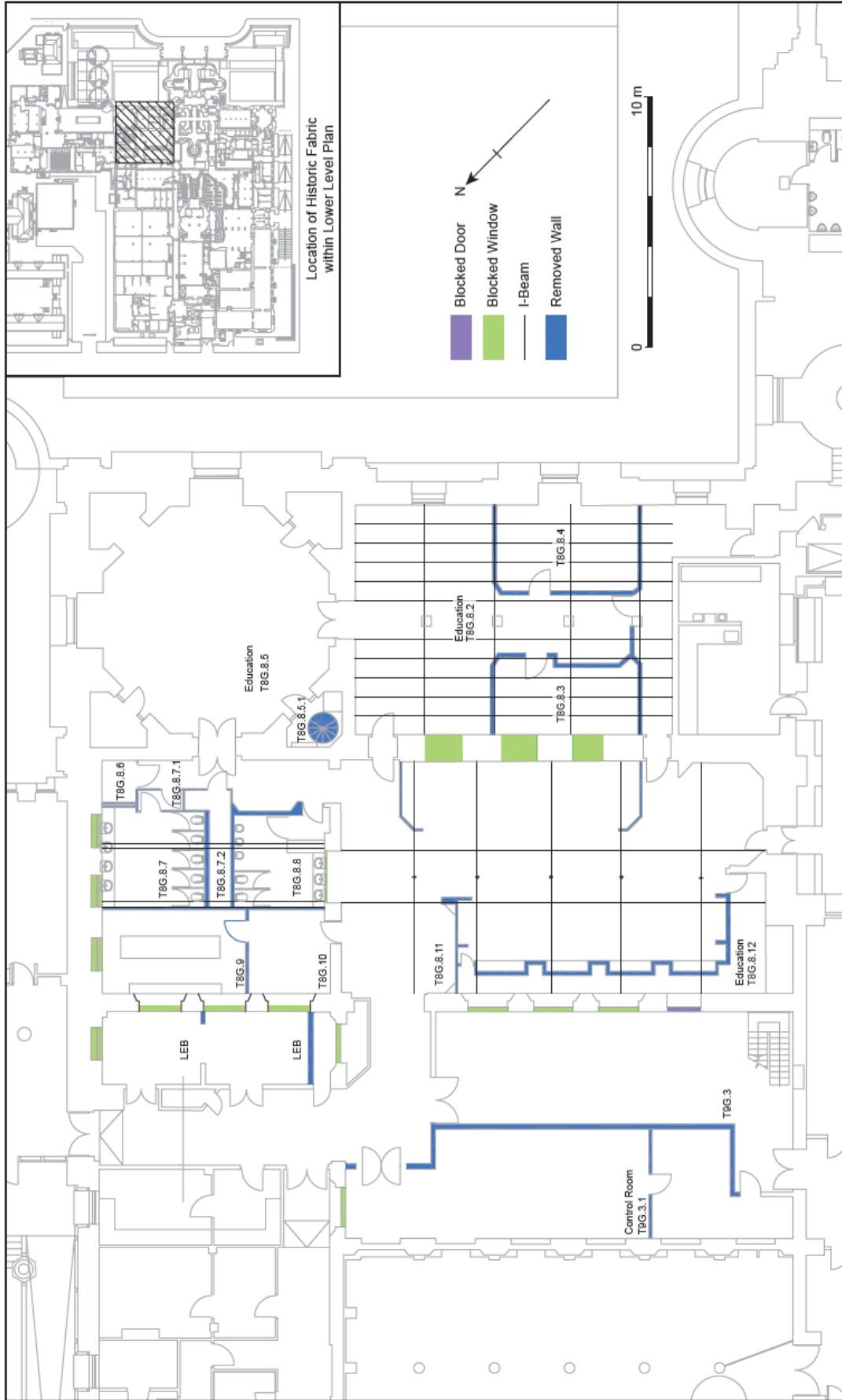


Figure 11: Lower Level Plan, Historic Fabric

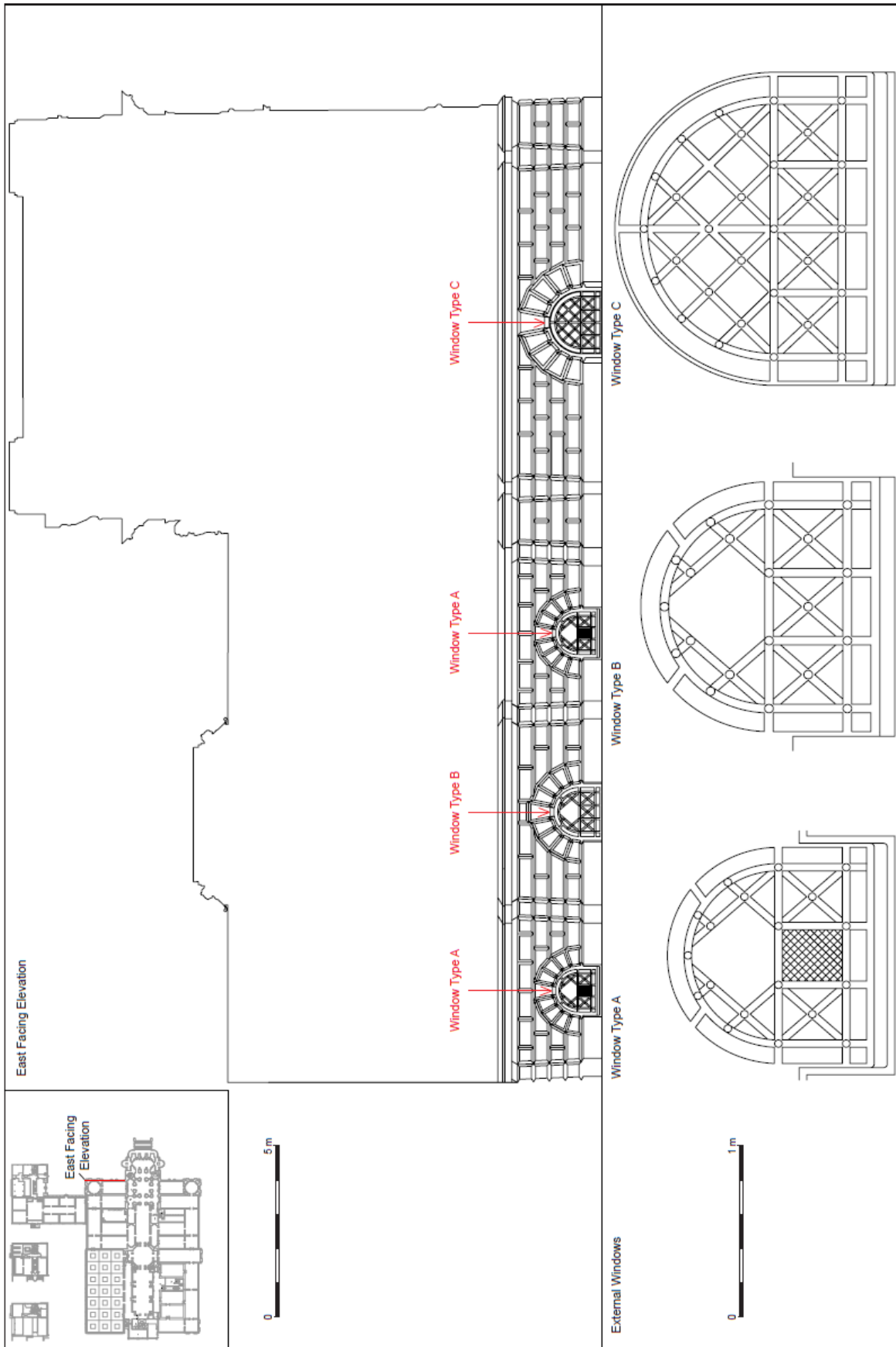


Figure 12: External Windows and Eastern Elevation

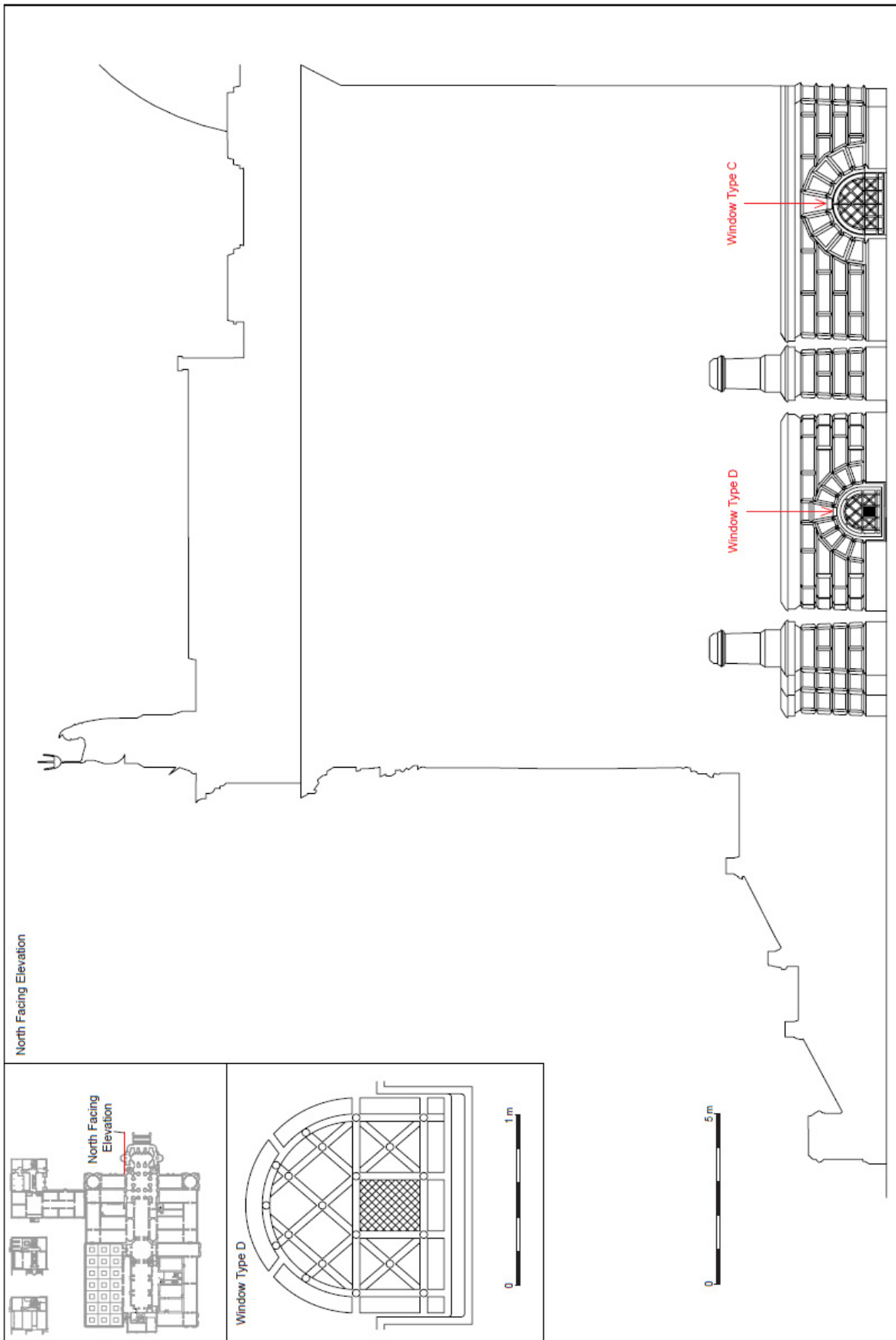


Figure 13: External Windows and Northern Elevation

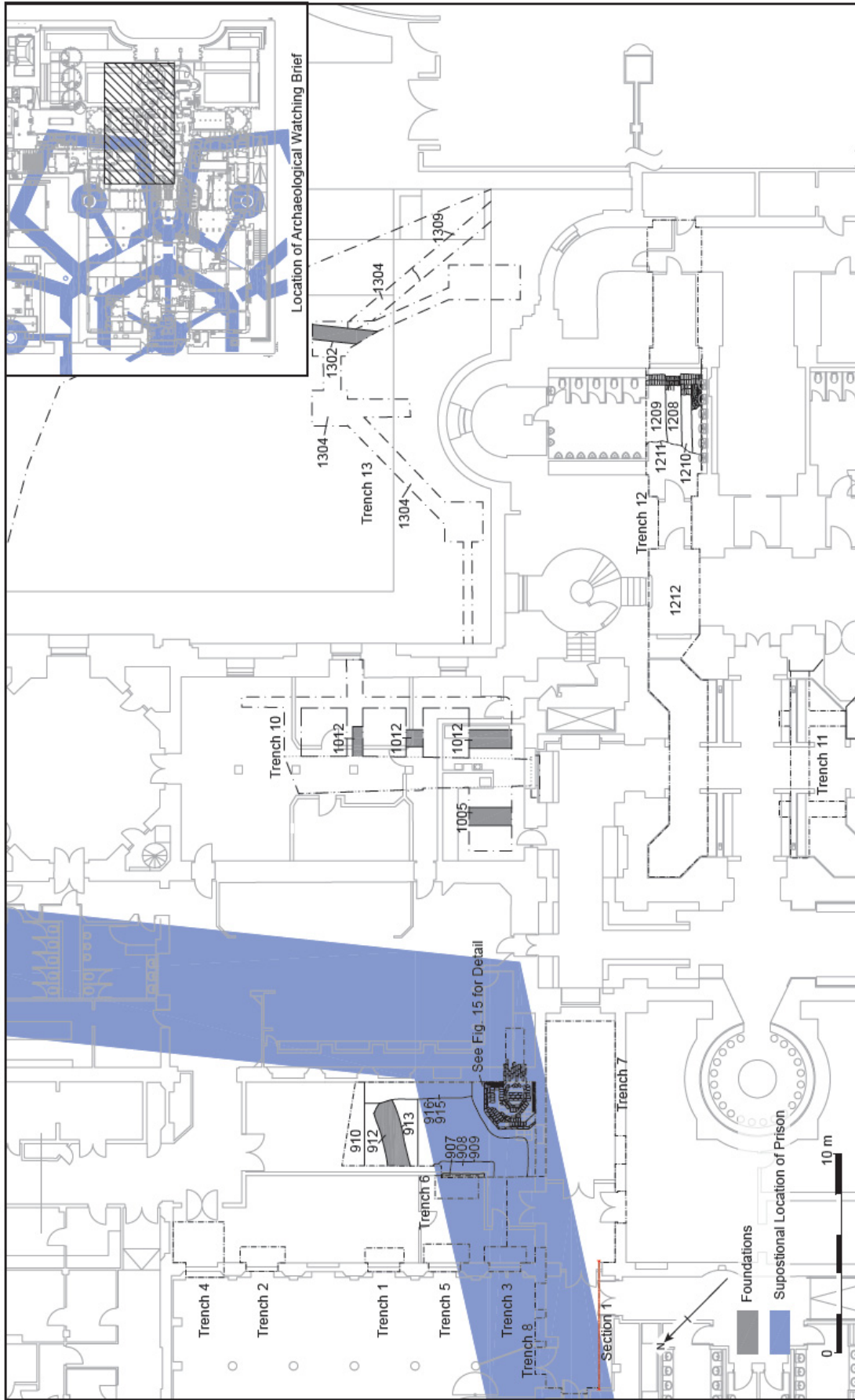


Figure 14: Archaeology Watching Brief Areas

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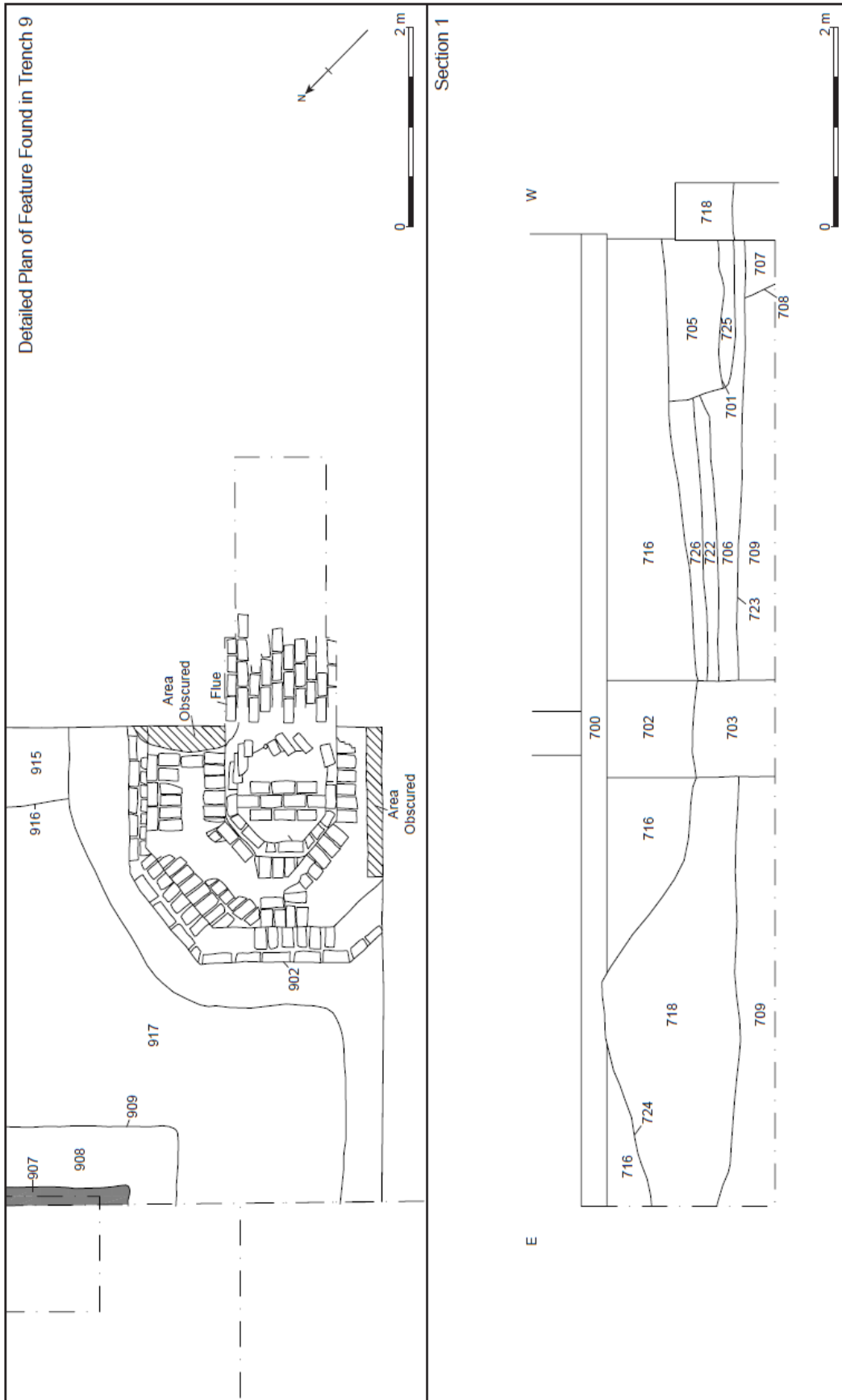


Figure 15: Archaeological Watching Brief : Plan of Trench 9 and Section of Trench 7

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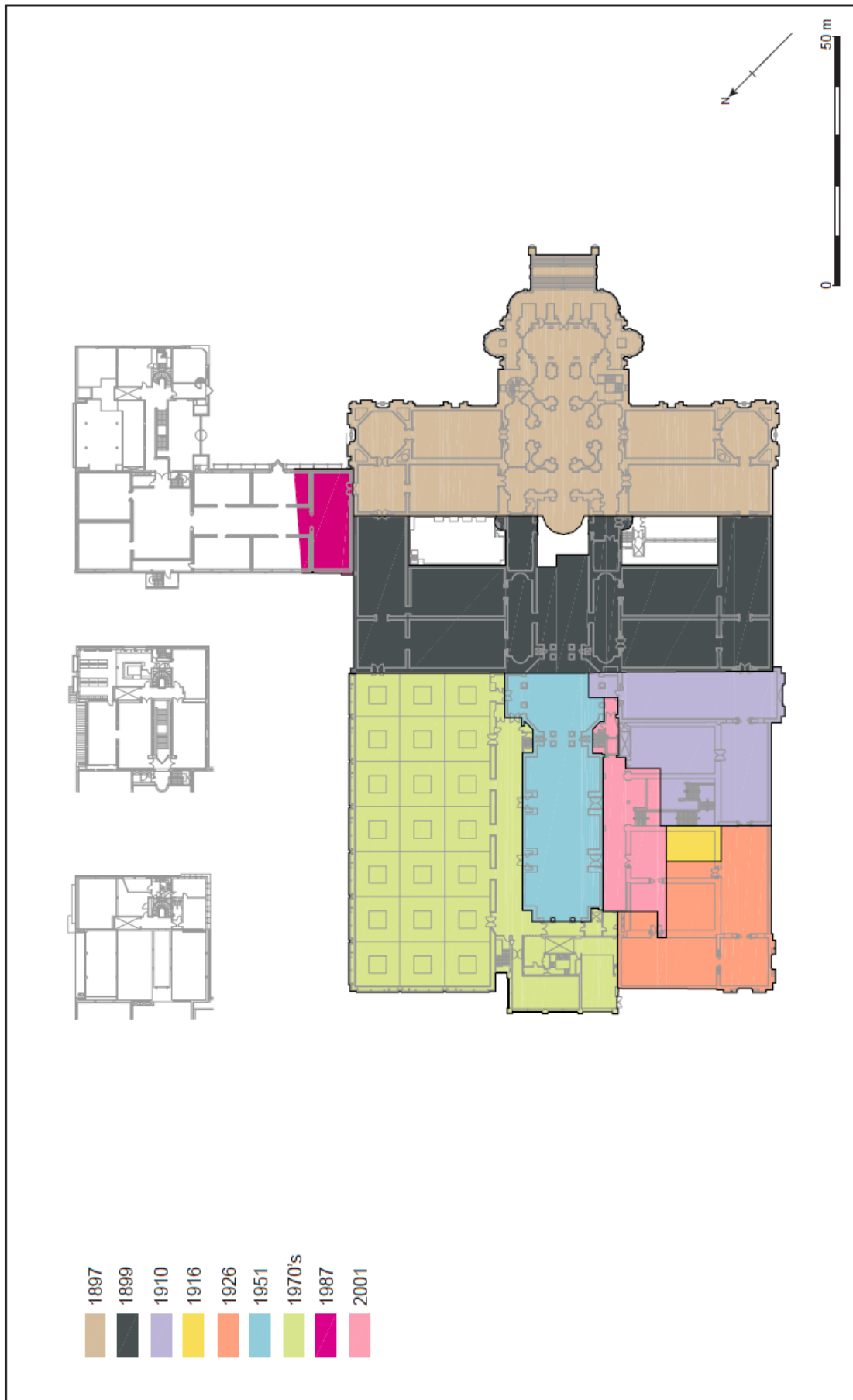


Figure 16: Building Phases

Appendices

Appendix A: Context Register

Context	Description	Length	Width	Depth
1	Concrete floor slab	40.00m	4.00m	0.25m
2	West wall of Room T9G.3.1	40.00m	0.80m	6.72m
3	Construction cut for [2]	40.00m	1.20m	1.10m
4	Backfill of [3]	40.00m	1.20m	2.55m
5	North wall of Room T9G.3.1	3.80m	0.60m	6.72m
6	Layer of rubble/ hardcore	40.00m	2.00m	0.65m
7	Dark brown clayey silt	39.00m	1.40m	0.60m
8	Mid brown sandy silt	39.00m	1.50m	0.65m
9	Dark brown organic clayey silt	39.00m	1.60m	>0.05m
10	Structural arch, Pit 1	1.65m	0.80m	2.70m
11	Structural arch, Pit 2	1.65m	0.80m	2.70m
12	Greyish blue alluvium	1.00m	0.50m	0.05m
13	Structural arch, Pit 3	1.65m	0.80m	2.70m
14	Structural arch, Pit 4 North	1.34m	0.80m	2.70m
15	Structural arch, Pit 4 West	1.65m	0.80m	2.70m
16	Structural arch, Pit 5	1.65m	0.80m	2.70m
17	Slab associated with partition wall	30.00m	2.00m	0.50m
18	Partition wall	28.00m	0.48m	>6.22m
19	Construction cut for [18]	3.40m	2.00m	3.00m
20	Fill of [19]	3.40m	2.00m	2.50m
21	Yellowish brown sandy silt	3.40m	0.25m	0.55m
22	Gravelly sandy silt	39.00m	1.20m	0.70m
23	Rubble deposit	39.00m	1.10m	0.40m
24	Arch (not monitored)	1.65m	0.80m	2.70m
700	Concrete slab	20.75m	3.60m	0.25m
701	Part of Tate construction cut Room T9G.1	3.60m	1.6m	0.75m
702	Concrete fill of 704	7.00m	1.20m	0.85m
703	Modern structural column	1.00m	c.1.00m	>1.75m
704	Modern cut	7.00m	1.20m	0.85m
705	Secondary Fill, 701	3.60m	1.6m	0.60m
706	Fill of 723	4.50	1.20m	0.35
707	Fill of 708	10.60m	0.60m	> 0.40m
708	Part of Tate construction cut, Room T9G.1	10.60m	0.60m	> 0.40m
709	Finds-rich sandy clay (kiln waste)	9.2m	3.60m	0.60m
710	Wall of Tate Gallery	20.75m	c.0.80m	4.00m
711	Rubble hardcore, Rooms T1G.18 and 19	13.2m	3.70m	0.36m
712	Fill of 712	13.2m	0.54m	>1.50m
713	Construction cut, north wall of room T1G.18 and 19	13.2m	0.54m	>1.50m
714	Fill of 714	13.2m	0.61m	>1.50m
715	Construction cut, south wall of room T1G.18 and 19	13.2m	0.61m	>1.50m
716	Upper fill of 724	14.00m	2.60m	0.26m
717	Lower fill of 724	14.00m	2.60m	0.38m

Context	Description	Length	Width	Depth
718	Dark brown sandy clay, Rooms T1G.18 and 19	13.2m	2.65m	0.70m
719	Redeposited sand and gravel	13.2m	2.65m	0.12m
720	Pale greyish brown sandy silt	7.50m	2.70m	0.10m
721	Pale grey sand and gravel	7.30m	2.75m	0.21m
722	Fill of 723	4.50	1.20m	0.10
723	Additional Tate Construction Cut, Room T9G.1	4.50	1.20m	0.55
724	Intrusion into 718	14.00m	2.60m	0.54m
725	Primary Fill, 701	3.60m	1.6m	0.15m
726	Upper Fill of 723	4.50	1.20m	0.20m
800	Concrete Floor,	1.65m	0.85m	0.60m
801	Fill of 802	1.65m	0.38m	>1.30m
802	Cut for 803, = 715	1.65m	0.38m	>1.30m
803	South wall, Rooms T1G.18 and 19	1.65m	0.60m	>2.00m
804	Same as 711	1.65m	0.51m	0.22m
805	Sandy deposit	1.65m	0.52m	0.08m
806	Rubble dump	1.65m	0.53m	0.06m
807	Dark brown sandy clay dump	1.65m	0.55m	0.14m
808	Dump of gravel and yellow sand	1.65m	0.57m	0.10m
809	Dump of brown sand and gravel	1.65m	0.58m	0.42m
810	Dark brown sandy clay, Made ground same as 718	1.65m	0.59m	0.24m
811	Organic-rich dark brown silty clay	1.65m	0.60m	0.36m
900	Concrete slab	9.00m	4.00m	0.38m
901	Made ground	9.00m	4.00m	0.24m
902	Base of chimney	2.40m	1.90m	1.90m
903	Post-use backfill of 902	1.15m	0.86m	0.80m
904	Upper fill of 920	2.80m	2.30m	0.20m
905	Lower fill of 920	2.80m	2.30m	1.00m
906	Sooty fill of 902	3.50m	0.80m	0.40m
907	Partition intrusion	2.10m	0.60m	>2.00m
908	Fill of 909	10.00m	1.00m	>2.00m
909	Cut for 907	10.00m	1.00m	>2.00m
910	Mid brown sandy clay: made ground	8.60m	4.20m	0.42m
911	Inner lining to brick flue	1.12m	0.10m	1.40m
912	Length of degenerating concrete footing	3.50m	1.20m	0.80m
913	Cut for 912	3.50m	1.20m	0.80m
914	East wall of Room	30.00m	5.12m	>2.00m
915	Construction cut for 914	10.00m	0.80m	>2.00m
916	Fill of 915	10.00m	0.80m	>2.00m
917	Dark brown silty sandy clay	4.20m	3.20m	0.72m
918	Mid brown sand and gravel: made ground?	4.20m	3.20m	0.20m
919	Greyish brown silty clay: made ground?	4.20m	3.20m	0.54m
920	Cut for 902	2.80m	2.30m	1.90m

Context	Description	Length	Width	Depth
1000	Concrete Floor surface, Tate	15.00m	9.8m	0.54m
1001	Fill of 1002	15.00m	1.00m	>0.9m
1002	Cut for Tate Gallery Wall	15.00m	1.00m	>0.9m
1003	Concrete strip footing for Steel posts	15.00m	1.60m	>0.9m
1004	Cut for (1003)	15.00m	1.60m	>0.9m
1005	Cement and gravel footing	2.20m	0.94m	0.26m
1006	Cut for 1005	2.20m	0.94m	0.26m
1007	Rubble horizon	14.00m	7.8m	0.33m
1008	Made ground	14.10m	7.9m	0.10m
1009	Made ground with gravel	14.15m	7.95m	0.12m
1010	Made ground with chalk and CBM	14.20m	8.00m	0.22m
1011	Made ground with gravel and brick	14.24m	8.06m	0.30m
1012	Cement and Gravel footing	8.2m	0.98m	0.38m
1013	Cut for 1012	8.2m	0.98m	0.38m
1014	Demolition scatter	1.40m	0.90m	0.06m
1015	Demolition scatter	1.35m	0.50m	0.04m
o				
1100	Concrete slab	9.5m	0.9m	0.25m
1101	Made ground with rubble.	9.5m	0.9mm	>1.60m
1204	Concrete slab	13.50m	2.85m	0.30m
1205	Made ground	7.80m	2.85m	0.40m
1206	Made ground	7.80m	2.85m	0.30m
1207	Made ground	7.80m	2.85m	0.40m
1208	Vault of flue	3.4m	0.80m	0.11m
1209	North wall, flue	3.5m	1.10m	0.62m
1210	South wall, flue	3.6m	1.00m	0.62m
1211	Truncation cut	2.00m	2.85m	>1.00m
1212	Fill of 1211	2.00m	2.85m	>1.00m
1300	Made ground, dark grey silty clay	16m	8m	0.85m
1301	Loose grey mixed brick rubble	2m	0.70m	0.25m
1302	Red brick wall foundation	2m	0.70m	1.16m
1303	Mid grey sandy made ground	10.00m	5.00m	0.8m
1304	Very dark greyish brown redeposited silt	10.00m	5.00m	0.6m
1305	Sandy silt, made ground	10.00m	5.00m	0.3m
1306	Rubble-rich made ground	20m	10m	0.4m
1307	Clayey silt: made ground	20m	10m	0.75m
1308	Sandy gravel, made ground	20m	10m	0.6m
1309	Rubble and grey silty sand	20m	10m	0.4m

Appendix B: – Finds Assessment

Summary

A small assemblage of predominately ceramic finds of post-medieval date were recovered during watching brief monitoring works at the Tate Gallery and are summarised by material and form below. None of the finds are rare, and generally only provide a broad post-medieval date of deposition, with most datable archaeological layers laid down after 1770. None of the finds may be defined as specific to the known use of the site during the years of Millbank Penitentiary, nor the Tate itself, being layers of made ground or backfill of construction trenches..

Pottery

The assemblage of 69 sherds (9.053 kg) is entirely post-medieval with a mixed date range of 17th-19th century and, like the earlier investigations undertaken at The Tate (MBK97), sagger and kiln discards features prominently. A complete stoneware ink pot was registered <1> for archive purposes

Context	Fabric	Quantity	Weight(G)	Date
705	English stoneware	2	338	1700-1900
	Post-medieval redware	1	24	1580-1900
	Transfer printed ware	2	48	1785-1900
707	Post-medieval redware	1	121	1580-1900
	Pearlware	1	11	1770-1850
	White glazed earthenware	1	10	1745-1900
	Post-medieval glazed redware	1	56	1580-1900
709	Sagger(yellow 'TGW'ware)	14	1,651	1570-1800
	Pink bodied biscuit ware (unglazed tin wares) wasters	22	535	1570-1800
	Unglazed yellow 'TGW' tile(?)	1	278	1570-1800
	Tin glazed wares <TGW H- blue/blue>	3	32	1690-1800
	Creamware	1	4	1770-1900
	(unglazed) yellow 'TGW' pot	2	145	1570-1800
	Stoneware sagger	9	2,261	1570-1800
	English Stoneware vessel	1	124	1700-1900
711	Stoneware ink pot	1	107	18 th -19 th C
714	English stoneware	1	1,571	1700-1900
904	Stoneware (lid)	1	1,306	18 th -19 th C
910	'TGW'/yellow biscuit ware	1	183	1570-1800
918	Sagger(yellow 'TGW'biscuit ware)	2	205	1570-1800
	Post-medieval redware or unglazed biscuit ware	1	43	1570-1800

TAG10 ceramic table

Clay Tobacco Pipes

Tobacco pipe was found in three contexts, and comprises fragments of stem and bowl. Only one complete bowl was collected.

Context (705) has eight pieces, weighing 101g. Seven of which are bowl pieces; five in a near complete state. There is a mix of types 22 (1680-1710) and 25-26 (1680-1800) (Atkinson and Oswald, 1969).

Context (1300) has a complete bowl and foot with 115mm of surviving stem it has a flattish foot with 'W' embossed on the left and an intelligible letter on the right side. The bowl form is type 25 (1700-1770).

Context (711) has a partial bowl piece (8g), possibly a type 20 (1680-1710)

Metals

A complete chisel <2> was found in context (901). Although quite rusted it is apparent it was not used much (possibly dropped and lost?) as the head has not mushroomed out from hammering and the tip does not show any sign of wear.

Glass

Two vessel glass fragments were found in two contexts

(705) has a light aqua coloured base of a squared bottle, weighing 70g. It has a very uniform rounded punt.

Context (707) has a green base with punt, weighing 328g. It is likely to be an 18th – 19th century wine or port bottle.

Discussion/Recommendations

The assemblage as a whole is similar to those retrieved during works in 1997-2000. The large amount of kiln waste and saggars is of note. It is thought that wholesale ground consolidation in this area prior to the building of the penitentiary has led to localised dumping of such tin glaze waste, maybe from the Vauxhall kilns?

Material for illustration

None

Analysis of potential

The ceramic provides broad dating evidence for the features in which they occur.

Significance of the data

International and national

The assemblage is not of international or national significance.

Regional and local

The assemblage is of limited regional / local significance.

Further work required

None

Preparation for deposition in the archive and conservation

The artefacts will be bagged and stored in accordance with the London Archaeological Archive Research Centre (LAARC)

Bibliography/References

Atkinson & Oswald (1969): *London Clay Tobacco Pipes*

Whittingham, L. (2006): *Tate Gallery Centenary Development archaeological archive pottery report*

Appendix C – OASIS Form

OASIS ID: aocarcha1-83636

Project details

Project name	Transforming Tate Britain
Short description of the project	Preliminary Desk Based Assessment for inclusion in Heritage Statement succeeded by a scheme of Building Recording and Watching Brief on alterations/removal of historically significant fabric, fixtures and fittings. Also an Archaeological Watching Brief on internal and external groundworks and exterior landscaping. Early phase Tate fabric revealed, fragmentary foundations of Millbank penitentiary recorded, post-medieval made ground.
Project dates	Start: 01-06-2009 End: 11-03-2013
Previous/future work	Yes / No
Any associated project reference codes	TAG10 - Museum accession ID
Any associated project reference codes	30855 - Contracting Unit No.
Type of project	Recording project
Site status	Listed Building
Site status	Conservation Area
Current Land use	Community Service 2 - Leisure and recreational buildings
Monument type	BUILDING Post Medieval
Significant Finds	VESSEL Post Medieval
Investigation type	"Part Survey", "Watching Brief"

Prompt Direction from Local Planning Authority - PPS

Project location

Country England
Site location GREATER LONDON CITY OF WESTMINSTER CITY OF WESTMINSTER Tate Britain
Postcode SW1P 4RG
Study area 2500.00 Square metres
Site coordinates TQ 3010 7860 51 0 51 29 27 N 000 07 32 W Point

Project creators

Name of Organisation AOC Archaeology
Project brief originator EH GLAAS
Project design originator AOC Archaeology
Project director/manager Alan Ford
Project director/manager Paul Mason
Project supervisor les capon
Type of sponsor/funding body Museum Trustees
Name of sponsor/funding body Tate Britain

Project archives

Physical Archive ID TAG10
Physical Contents "Ceramics", "Glass", "Metal"

Physical Archive notes	held at AOC until transfer
Digital Archive recipient	Museum of London-LAARC
Digital Archive ID	TAG10
Digital Contents	"Ceramics", "Glass", "Metal", "Survey"
Digital Media available	"Images raster / digital photography", "Images vector", "Text"
Digital Archive notes	report text and figures (plan and elevation) and Jpeg images
Paper Archive recipient	Museum of London-LAARC
Paper Archive ID	TAG10
Paper Contents	"Ceramics", "Glass", "Metal", "Survey"
Paper Media available	"Drawing", "Microfilm", "Photograph", "Plan", "Section", "Unpublished Text"
Paper Archive notes	held at AOC until transfer

Project bibliography 1

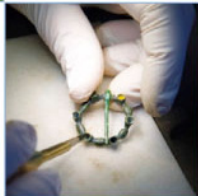
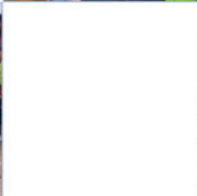
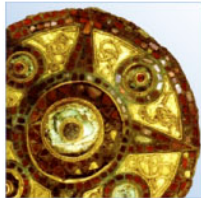
Publication type	Grey literature (unpublished document/manuscript)
Title	South-East Quadrant, Tate Britain, The City Of Westminster Archaeological Desk-Based Assessment
Author(s)/Editor(s)	Carter, N; Simons, E; Smith; C
Date	2010
Issuer or publisher	AOC archaeology
Place of issue or publication	London

Description Desk Based Assessment

Project bibliography 2

Publication type	Grey literature (unpublished document/manuscript)
Title	Tate Britain, Tate Gallery, Millbank, Report on a Historic Building and Archaeological Watching Brief
Author(s)/Editor(s)	Capon, L.
Date	2013
Issuer or publisher	AOC Archaeology
Place of issue or publication	London
Description	87 pages, 16 figures, 59 plates, A4, colour

Entered by	les capon (les.capon@aocarchaeology)
Entered on	22 July 2013



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