

**DIORAMA, 18 PARK SQUARE EAST
LONDON BOROUGH OF CAMDEN
NW1 4LH**

Written Scheme of Investigation for
Built Heritage Fabric Recording of Exploratory Openings

Ordnance Survey National Grid Reference: TQ 28776 82279

June 2020

**Written Scheme of Investigation for Built Heritage Fabric Recording at the Diorama, 18
Park Square East, London Borough of Camden, NW1 4LH**

Ordnance Survey National Grid Reference: TQ 28776 82279

Site Code: PSE20

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1 BACKGROUND

1.1 Pre-Construct Archaeology Limited has been commissioned by Quartz Project Services Ltd on behalf of The Diorama Estate Ltd to prepare and implement a Written Scheme of Investigation for the Built Heritage Fabric Recording of 12 Exploratory Openings at the Diorama, 18 Park Square East, London Borough of Camden, NW1 4LH (**Figure 1**). The investigation detailed here is an initial investigation. It has been agreed that further investigation may be required. The Diorama lies in the Regent's Park Conservation Area and is Grade I Listed as part of 'Nos 13-24 Park Square East and Attached Railings' and is described in its citation as:

'Includes: The Diorama, Bedford College Annexe Peto Place. Terrace of 12 houses, the northern most bay forming part of No.1 St Andrew's Place (qv). c1823-5. By John Nash. Nos 13-16 and Nos 20-24 converted to flats c1986, many original interior features destroyed. Stucco and slated mansard roofs with dormers.

EXTERIOR: symmetrical terrace, 3 bays at either end and centre 7 window bays projecting. Projecting bays 4 storeys, and basements; otherwise, 3 storeys, attics and basements. 3 windows each. Ground floor with attached Ionic order supporting an entablature surmounted by a continuous cast-iron balcony (the northern most projection without railings). Square-headed doorways with architraves, cornices, pilaster-jambes carrying cornice-heads and patterned fanlights (except Nos 16, 19, 21, and 23) and panelled doors. Architraved sash windows with cornices and some glazing bars. 1st floor windows arcaded with keystones, archivolts and moulded impost. 2nd floor sill band. Dentil cornice at 3rd floor with attic storeys over centre and end bays and balustraded parapets between.

INTERIORS: with stone stairs, cast-iron, foliated balusters and wreathed wood handrails. Some panelled rooms; most with enriched ceiling cornices and central roundels. Rear ground floor room of No.24 with good vaulted and moulded ceiling, roundels of Classical figures, pilasters and pedimented mirror over original fireplace.

SUBSIDIARY FEATURES: attached cast-iron railings with urn finials to areas. No.18 incorporates at the rear, in Peto Place, a 3 storey, altered, polygonal building in brick with stone capped buttresses between round-arched 2nd floor windows. This was the Diorama, a picture show designed by Augustus Charles Pugin. By 1854 it had been converted into a Baptist Chapel which closed 1922 when the Middlesex Hospital used it for a rheumatism treatment pool. An arts co-operative at time of inspection in 1989.

1.2 The Diorama is described in the Heritage Statement (Bidwells 2020) as follows:

'A. C. Pugin and James Morgan had been commissioned by James Arrowsmith, brother-in-law of Louis Daguerre, to design a building to house the country's first Diorama. Daguerre and Charles Bouton had created the world's first Diorama, in Paris, the previous year. The Diorama was an early form of cinema which presented two different scenes to the audience. Each scene was formed by a series of suspended canvases which were approximately forty feet tall by eighty feet wide. They were partly translucent and were painted with a scene – usually one of the two scenes was a landscape and the other was landmark building. Natural light from windows behind and a 'ground-glass roof' (Timbs "Curiosities of London, 1860) was manipulated through the skilful use of blinds behind, above and in front of the canvases to illuminate different parts of the canvases and create the illusion of moving scenes.

Pugin's original plan and elevation for nos. 17-19 and the Diorama provide some details of the intended appearance of the Park Square East elevation and the principal (first) floor of the houses at the front and Diorama at the centre and rear of the group (**Figure 2**). Nos. 17-19 form the central, projecting section of the Park Square East terrace. It is seven windows wide, with no. 18 (the entrance to the Diorama, to the rear) occupying the central three bays. Visitors to the Diorama entered through the central door at the ground floor of no. 18. Stairs against the inside of the front wall led to the first floor *Vestibule* which gave access into the viewing Saloon. The

saloon seated approximately 200 people.

The saloon rotated between two deep *Picture rooms* which each housed a scene on the suspended canvases. These were back-lit by large windows in the rear walls of the Diorama building in Peto Place. The side and return walls contained no windows, but blank arches on the external elevations.

The audience of the Diorama sat thirty to forty feet from the canvases in a circular 'saloon' at the centre of the building, 'tastefully decorated, and fitted up with boxes and a pit' which rotated 73° between the two scenes, with approximately ten to fifteen minutes facing each scene. The saloon was rotated by an arrangement of wheels beneath:

The revolution of the saloon is effected by means of a sector, or portion of a wheel, having teeth formed upon its edge; these work in a series of wheels and pinions, so that one man placed at a winch is enabled to give motion to the whole. (Kidd's Picturesque Pocket Companion, 1829)

The patent for 'Arrowsmith's Specification' (**Figure 3**) provides a detailed description of the mechanism:

*The floor of the revolving saloon is supported upon a very strong timber framing, which consists of a central shaft of axis Q, having twelve timbers or arms similar to those seen at R and T, arranged round it at equal distances, in the manner of radii. The extremities of these timbers are connected together by upright pieces V, V, and the whole framing is farther strengthened by diagonal braces v, v, and cross timbers w, w, which proceed from one arm to the next, and are firmly bolted to each arm, so as to form a pentagonal framing. The cross timbers w, w, serve to carry the bearings of twelve strong iron shafts or axes similar to those seen at x, x, which have cast-iron wheels or rollers X, X, fixed upon them, being adapted to roll round upon the surface of a metal kirb or ring e, e, which is bolted down firmly to a course or coping of masonry situated upon the top edge of the circular wall Y, Y. This wall, if seen in plan, would appear like a large well, and its foundation proceeds some feet below the surface of the ground, in order to obtain a solid foundation for the support of the revolving saloon. The framing of the saloon above described is steadied in its revolving motion by the central shaft Q, which is furnished with a pivot or gudgeon at its lower extremity, working into a brass top-piece N, being fitted with adjusting screws, as shewn in **Figure 3**, and bolted securely upon the surface of a pier of masonry y, y.*

- 1.3 The Heritage Statement (Bidwells 2020) considers the Diorama building at the rear to have a high level of significance since it 'is believed to be the last surviving purpose-built Diorama building in the world' but that 'The floor plan and levels in no. 18 have been considerably altered during the nineteenth and twentieth centuries and there is no clear evidence of 1820s fabric surviving inside the Diorama building'. A number of elements are shown as 'Date Uncertain' in their phased basement plan (**Figure 4**).
- 1.4 Planning Applications (2020/0846/L and 2020/0802/P) for Listed Building Consent and planning permission have been submitted to Camden Council for 'Change of use of building (The Diorama 18 Park Square East) from institutional use (sui generis) to be used as Offices (Class B1), extension at roof level to provide new third floor with roof terrace above, internal subdivision, infilling, refurbishment and associated works.'
- 1.5 Regent's Park Conservation Area Advisory Committee (RPCAAC), which advises the London Borough of Camden on applications in the conservation area, are concerned that elements of the mechanism of the Diorama still survive within the building and that these may be demolished or removed by the proposals. They have requested that certain elements mainly in the basement are investigated and their significance established before any decision is made on their removal, partial removal or alteration. These include:
 - The Diorama drum,
 - The circular wall on which the perimeter supports of the Diorama auditorium rested,

- The central support for the Diorama auditorium.
- 1.6 The position of these elements has been roughly estimated by overlaying the 1857 patent section (**Figure 3**) on the existing section (**Figure 5**) and existing basement plan (**Figure 6**). It was agreed at a site meeting on 5th June 2020 with RPCAAC, Bidwells, Marek Wojciechowski Architects and PCA that an initial stage of investigation could be carried out by removing plaster from the walls of these potential 1823 Diorama elements in 12 locations. The 12 Exploratory Openings (EOs) were marked on the walls in black felt tip pen during the meeting and their positions marked on plans (**Figures 7** and **8**). Investigation of the elements by trial trench was discussed at the meeting in order to understand their foundations but due to the difficulties and effects (noise nuisance for neighbours) of removing parts of the deep reinforced concrete basement floor, it was agreed that this might be undertaken as a further stage of investigation.
- 1.7 This document forms the Written Scheme of Investigation (WSI) for the Built Heritage Fabric Recording of 12 Exploratory Openings at the Diorama, 18 Park Square East, London Borough of Camden, NW1 4LH as required by RPCAAC. It is an initial stage of investigation and is in accordance with national planning policy guidance, specifically NPPF (National Planning Policy Framework), and the local authority's policy towards built heritage. It sets out in detail the methodology that will be employed by Pre-Construct Archaeology Limited.
- 1.8 Pre-Construct Archaeology Limited is a *Registered Archaeological Organisation* with the Chartered Institute for Archaeologists.

2 STANDARDS

- 2.1 The investigation of the 12 Exploratory Openings will be undertaken in accordance with standards set out in:
- ClfA (2014, updated 2019) *Standard and guidance for the archaeological investigation and recording of standing buildings or structures*
 - English Heritage (now Historic England) (2005) *The presentation of historic building survey in CAD*
 - Historic England (2015) *Guidelines for Archaeological Projects in Greater London Archaeological Advisory Service*
 - Historic England (2016) *Understanding Historic Buildings: A Guide to Good Recording Practice*
- 2.2 General security is the responsibility of the overall client or their agent.
- 2.3 Health & Safety procedure and a risk assessment will be undertaken prior to commencement of works.

3 METHOD STATEMENT

3.1 Aims and objectives

3.1.1 The aim of the Built Heritage Fabric Recording of 12 Exploratory Openings at the Diorama, 18 Park Square East, London Borough of Camden, NW1 4LH is to understand the survival (or not) of significant features (drum walls, circular bearing wall and pivot) of the 1823 Diorama, initially through a series of Exploratory Openings (EOs) in the basement and ground floor walls of the building. The purpose is to clarify the date of these elements. The aim is to provide a better understanding of these elements and their significance in order to inform decisions on the proposals. The investigation aims to compile a lasting record, to analyse the results and to disseminate these results.

3.2 Monitoring procedures

3.2.1 RPCAAC and the London Brough of Camden will be informed as soon as possible by PCA of the commencement of the recording works.

3.2.2 Reasonable access, subject to the health and safety requirements at the site, will be granted to representatives of RPCAAC, the Local Planning Authority and the client, or their agent, who wish to be satisfied, through site inspections, that the recording is being conducted to proper professional standards and in accordance with the agreements made.

3.3 Access and safety

3.3.1 All relevant health and safety legislation, CDM, COSHH regulations and codes of practice will be respected. The Health and Safety policies of Pre-Construct Archaeology Limited will be followed and in accordance with all statutory regulations. The work will conform to existing site policies and procedures. There is a duty of care for the client to provide all information reasonably obtainable on contamination (e.g. asbestos) and the location of live services before site works commence.

3.3.2 Any maintenance of gate access and general site security is the responsibility of the client or their agent, unless Pre-Construct Archaeology Limited is instructed to the contrary. The costs of this will be additional to that quoted.

3.3.3 Accommodation, toilet facilities and full washing facilities for the attendant building recording team will be located within reasonable distance of the building.

3.4 Recording systems

3.4.1 A unique-number site code (PSE20) has been provided by LAARC (London Archaeological Archive and Research Centre).

3.4.2 The recording systems adopted during the investigations will be fully compatible with those most widely used elsewhere in Camden.

3.4.3 The site archive will be so organised as to be compatible with the other built heritage fabric recording archives produced in the Local Authority area.

3.4.4 A 'site location plan' indicating site north and based on the current Ordnance Survey 1:1250 map (reproduced with the permission of the Controller of HMSO) will be prepared.

3.5 Recording: methods

Documentary Research

- 3.5.1 Available historic sources and Bidwells (2020) Heritage Statement will be used to provide the Historical Background for the report. No further documentary research is proposed.

On Site Recording

- 3.5.2 PCA Historic Building Specialist will supervise a building contractor (provided by the Client) during the opening up of the 12 EOs. The Historic Building Specialist will make sure each EO is clearly numbered and that the building contractor only removes plaster so that surface finishes of the underlying built heritage fabric (brickwork) can be characterised, if possible.
- 3.5.3 Descriptive and interpretative notes will be made of the built heritage fabric exposed in the EOs by the Historic Building Specialist. These will identify and roughly date the materials (brick, stone, timber, metal, render and mortar) exposed.

Photographic Survey

- 3.5.4 Once all the EOs have been opened up and the dust has settled, a photographic survey will be carried out by PCA's Photographer. A photographic record of the 12 EOs and their context (wider surroundings) will be prepared. High resolution digital images will illustrate the brickwork and mortar exposed.
- 3.5.5 The photographic record will be accompanied by a photographic register detailing (as a minimum) location and direction of shot. In addition, the location and direction of each photograph will be marked on the appropriate plan of the building.

Built Heritage Fabric Analysis

- 3.5.6 PCA Built Heritage Fabric Specialist will identify the brickwork and mortar exposed in each Exploratory Opening as well as determine approximate date of brickwork using comparison with 1857 brickwork already exposed in Store rEG.18.05 (MWA drwg).
- 3.5.7 Notes will be made on site on print outs of the photographs of the EOs taken by the Photographer. Surface finishes will be recorded. Although no samples of bricks will be taken, a fabric analysis of the bricks exposed in the walls will be undertaken. The bricks will be analysed using the system of ceramic building material classification used in archaeological work in Greater London. Each fabric number (e.g. fabric 3032 and 3034) specifies the composition, form, approximate method of manufacture and date range of the material. The results of the brick analysis will be included in the report. Examples of the fabrics can be found in the archives of the Museum of London and Pre-Construct Archaeology Limited.

Drawn Survey

- 3.5.8 Elevations, plans and sections of the existing building have been provided in PDF and will be provided in AutoCAD. Plans will be used as base drawings for the Built Heritage Fabric Recording of the 12 Exploratory Openings and will be annotated on site with the location of these EOs as well as the results of the brick fabric analysis and mortar identification.
- 3.5.9 All drawings will be tied into the Ordnance Survey National Grid. Plans used in the report will be printed at a scale of 1:50, 1:100 or 1:200, depending on the level of detail to be shown.

3.6 Report

- 3.6.1 A report will be prepared based on the above record, describing the built heritage fabric exposed

in each EO. The report will be fully illustrated with plans and photographs and will outline the results of the work. The direction of photographs taken will be indicated within the report.

3.6.2 The report will have the following contents:

Author and date

Non-technical summary

Site location information (including maps) and descriptions

Introduction

Project background

Historical background

Aims and objectives

Methods

Description of the built heritage fabric in each Exploratory Opening

Discussion and conclusions

Archive deposition details

Drawings (plans)

Selected photographs

Oasis form

3.7 The report will be prepared as soon as possible after completion of the on-site work and will be submitted to Quartz in the first instance. Following approval from Quartz it will be submitted to the Client, RPCAAC, Camden Council and the GLHER (Greater London Historic Environment Record). Copies will be lodged in the LAARC (London Archaeological Archive and Research Centre) and Camden Local Studies and Archive Centre.

3.8 Archive and deposition

3.8.1 The project archive will be held temporarily at the offices of Pre-Construct Archaeology Limited in Brockley, London under its site code (PSE20) immediately following the building recording. It is anticipated that the archive will be lodged with the LAARC (London Archaeological Archive and Research Centre) in due course.

3.9 Timetable

3.9.1 It is anticipated that the opening up of the EOs would take a day for the building contractor, the photographic survey would take a day and the built heritage fabric analysis would take another day on site. The report will be completed within three weeks of the completion of on-site built heritage fabric recording.

3.10 Bibliography

Bidwells, 2020, *Heritage Statement: 18 Park Square East*

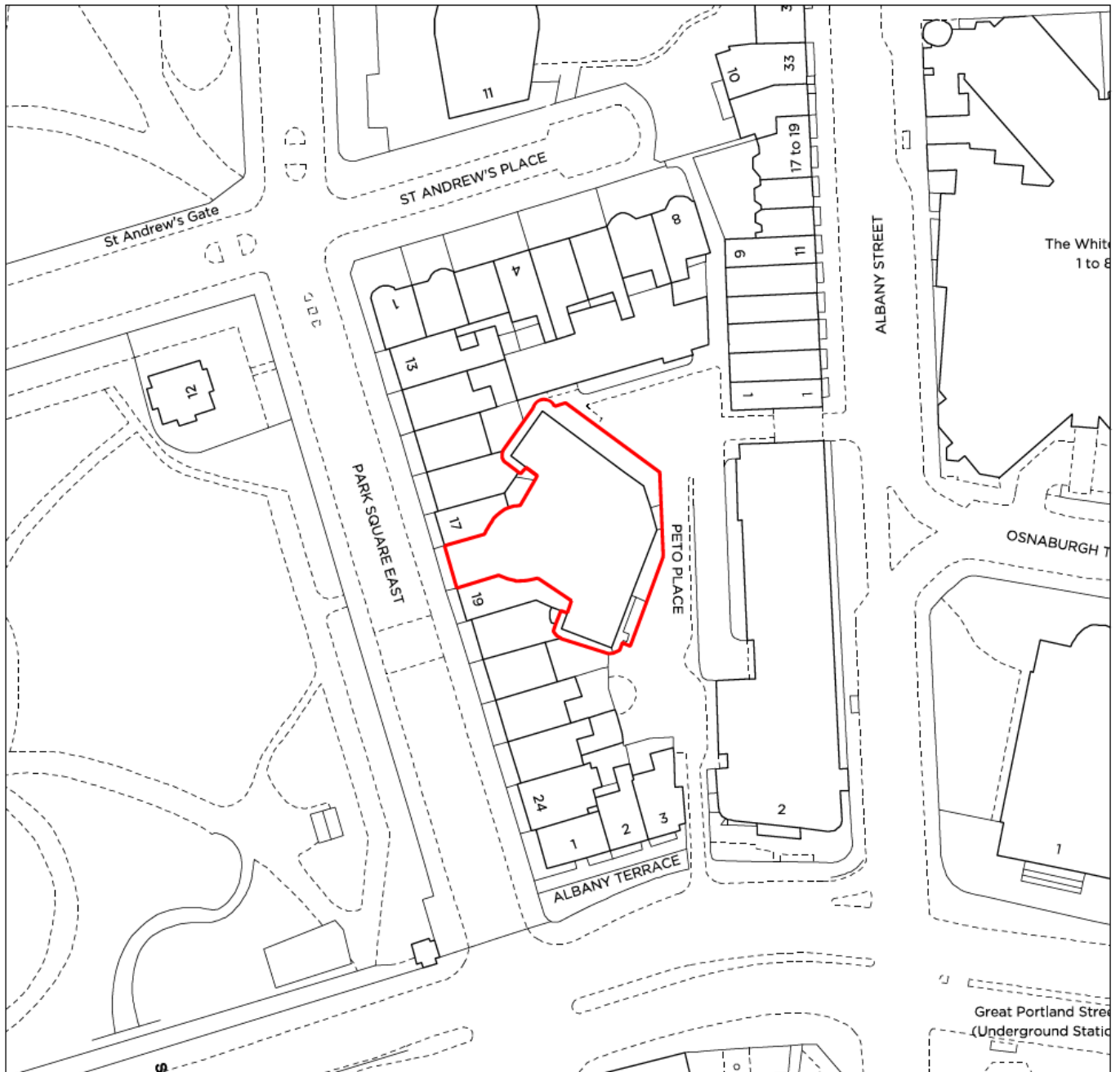


Figure 1: Site Location Plan

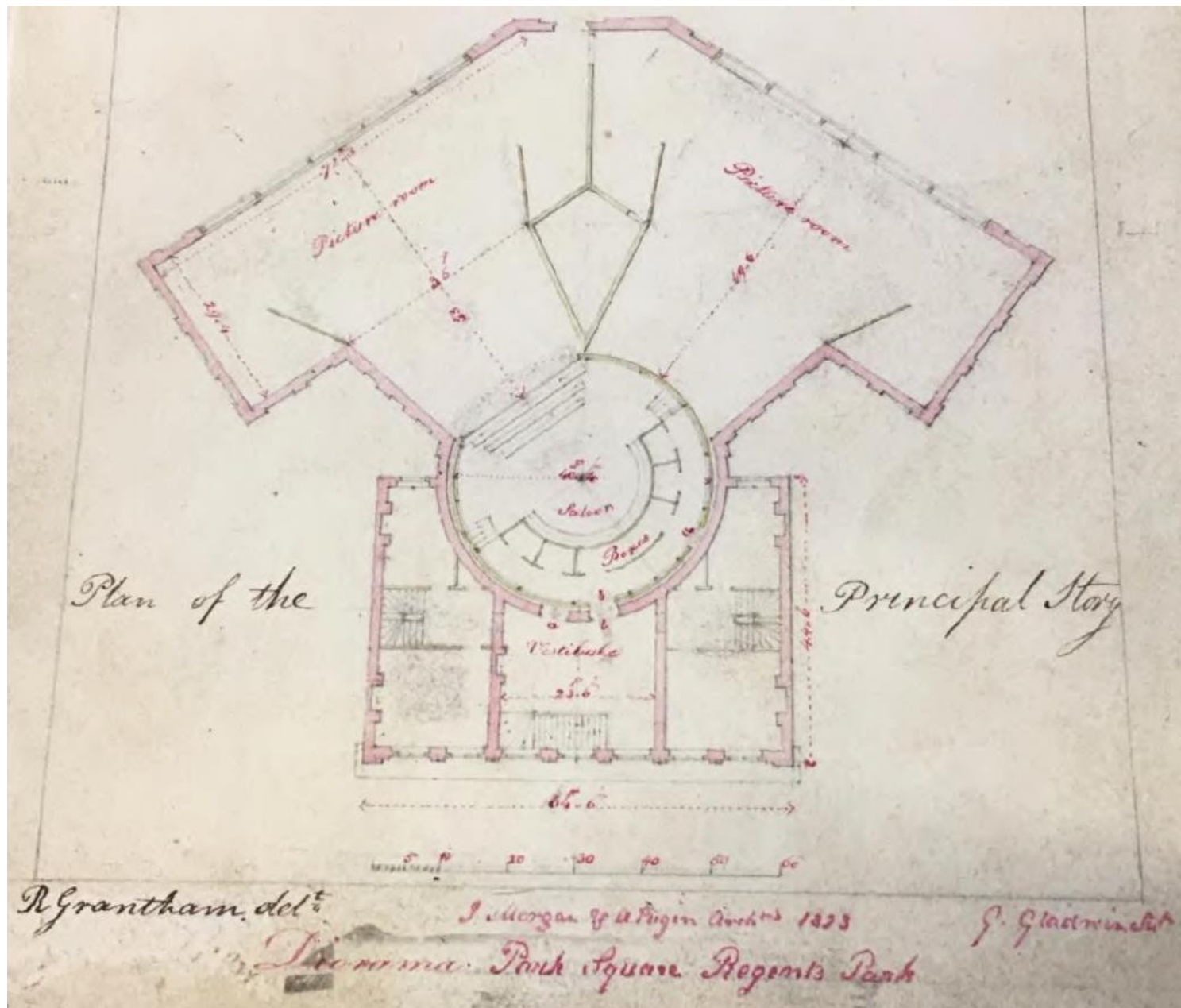


Figure 2: Proposed 'Plan of the Principal Story' of 17-19 Park Square East, including Diorama. RIBA ref: SKB246/2 in PUGIN AC.

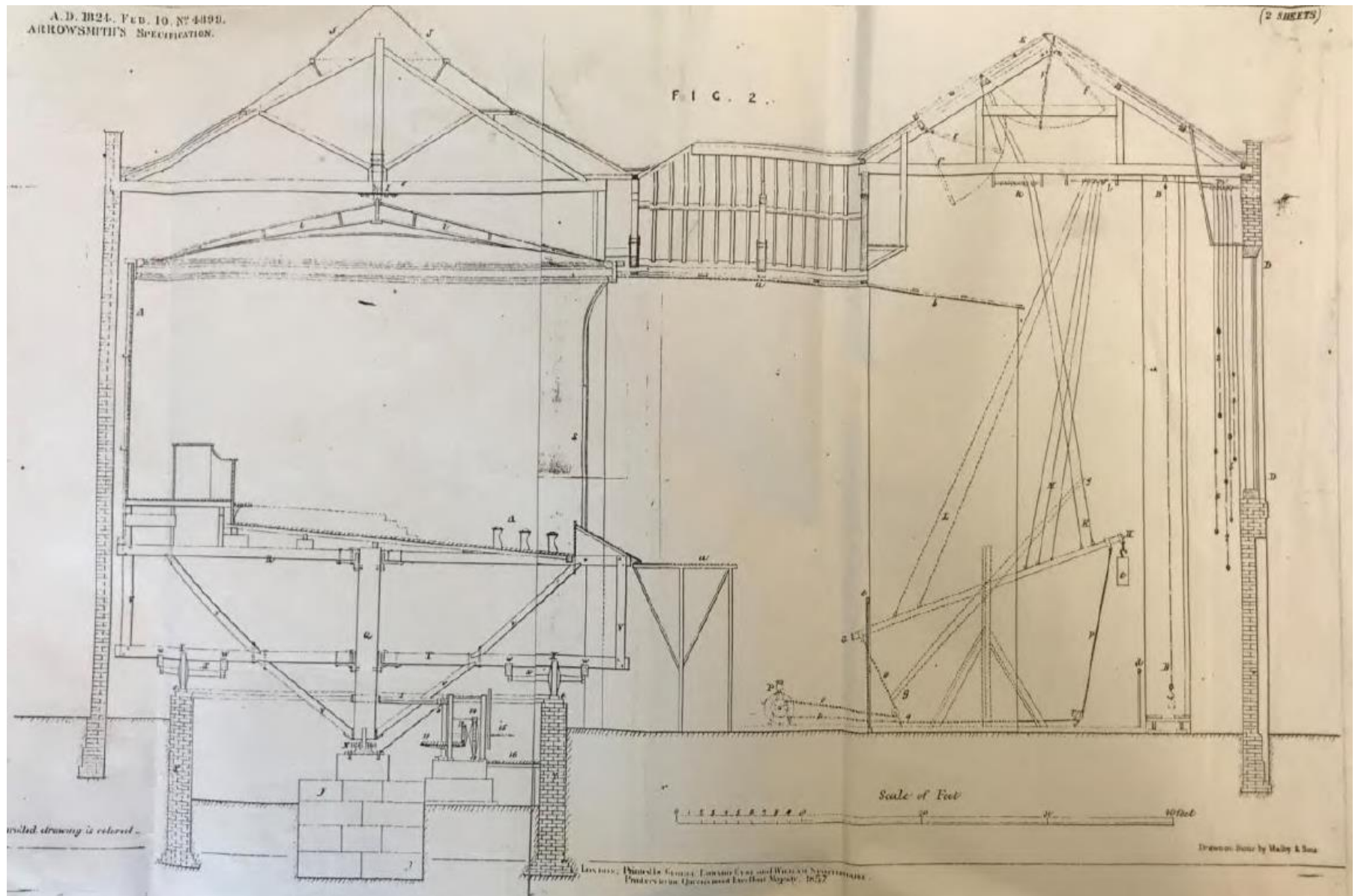
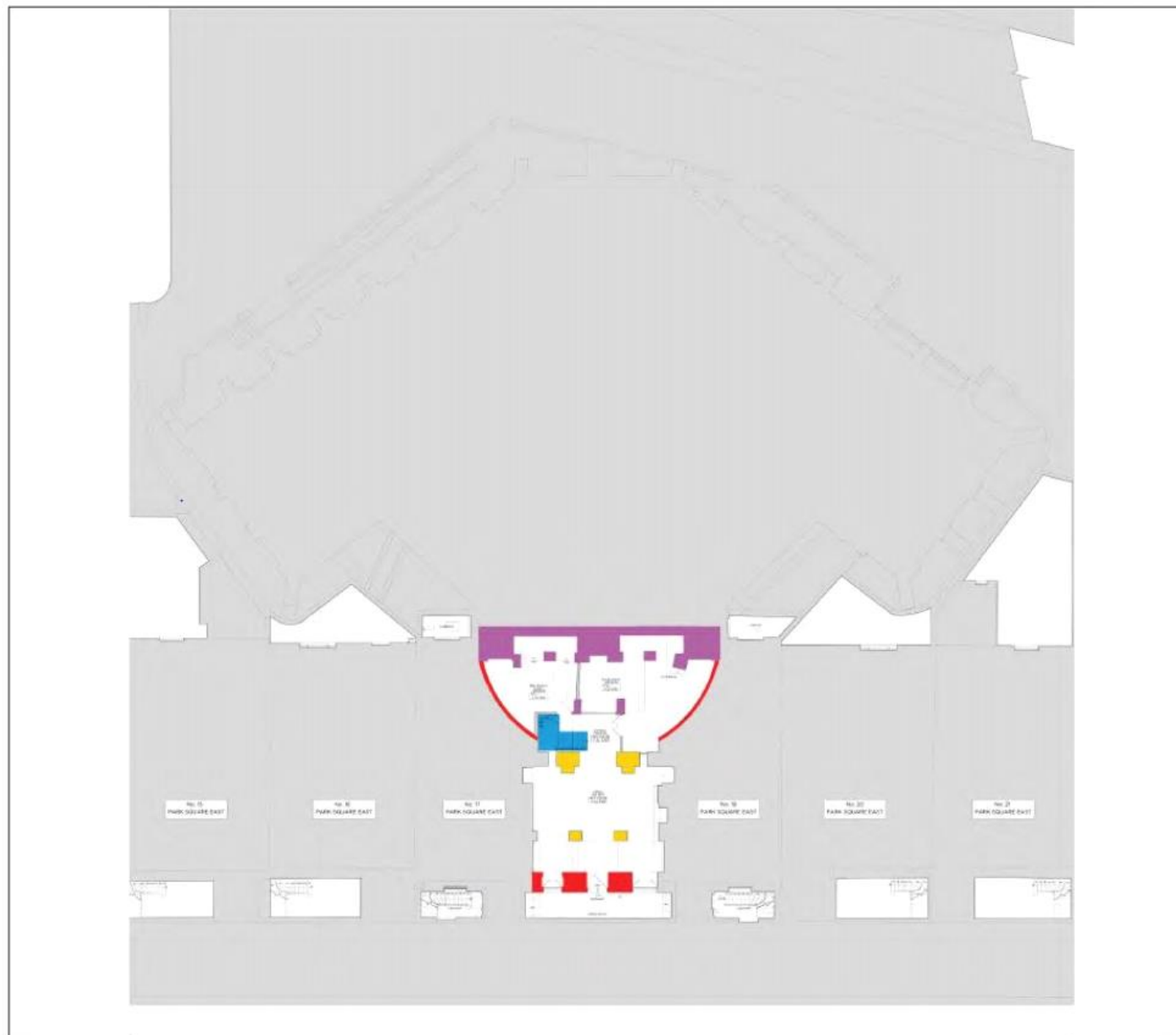


Figure 3: Arrowsmith's Patent No. 4899: Diorama, or Method of Exhibiting Pictures, 1857.

AA: the saloon; BB: one of the pictures; D: large window with a series of adjustable, 'coloured transparent' blinds in front; E: 'a large window or skylight'; F: 'transparent coloured blinds'; G, H: lever to operate the roof blinds; Q: timber shaft; y: masonry piers beneath the saloon floor.



Title: Basement Phasing Plan
Project: 18 Park Square East
Client: Diorama Estates Ltd
Date: November 2019

- Key
- - 1823
 - - 1850
 - - 1929/30
 - - Late 20th Century
 - - Date Unknown

Figure 4: Bidwells (2020) Phased Basement Plan



Figure 5 Arrowsmith's Patent 1857 Section overlaid on the existing section

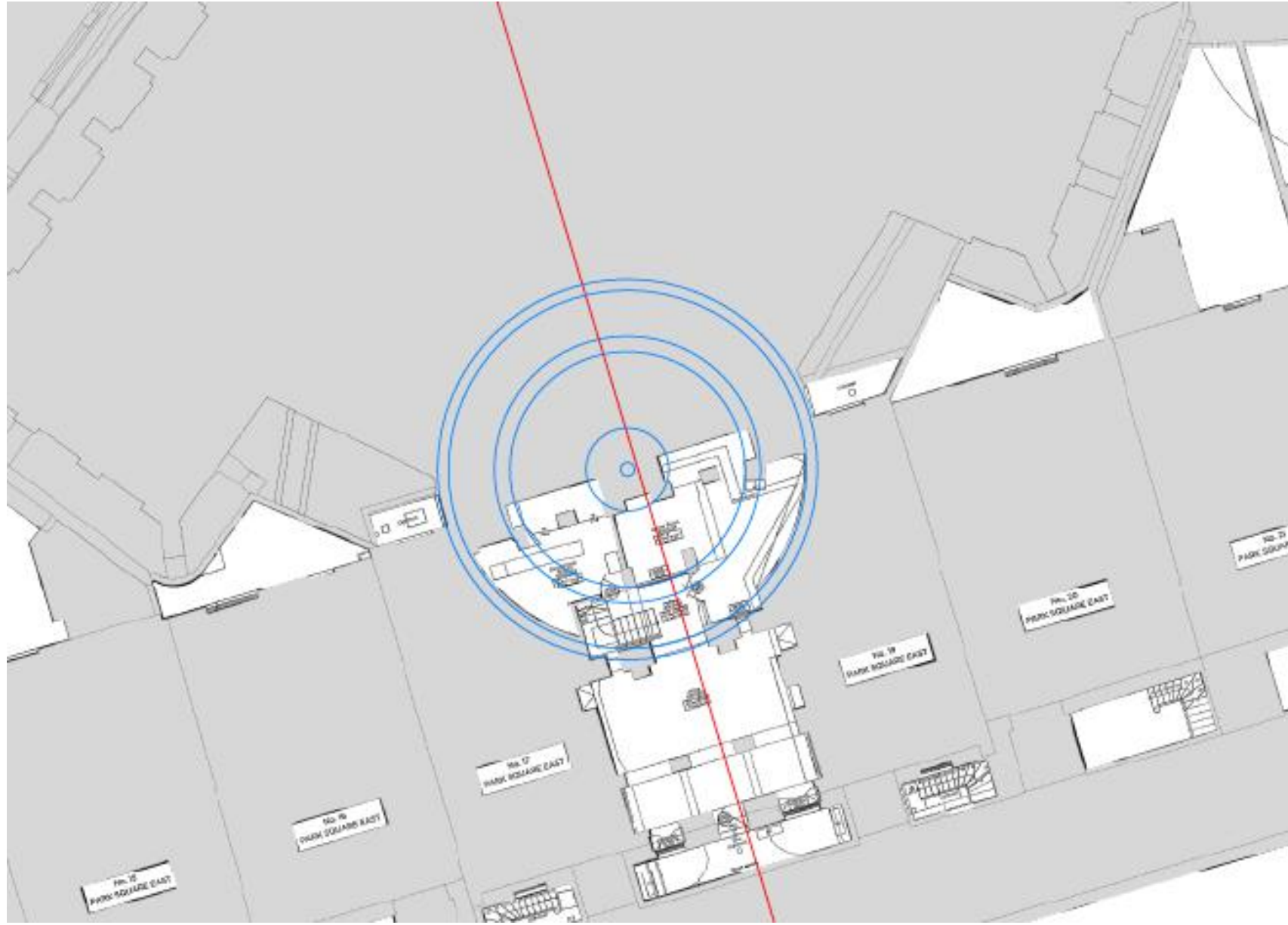


Figure 6 1857 Section overlaid on the existing basement plan

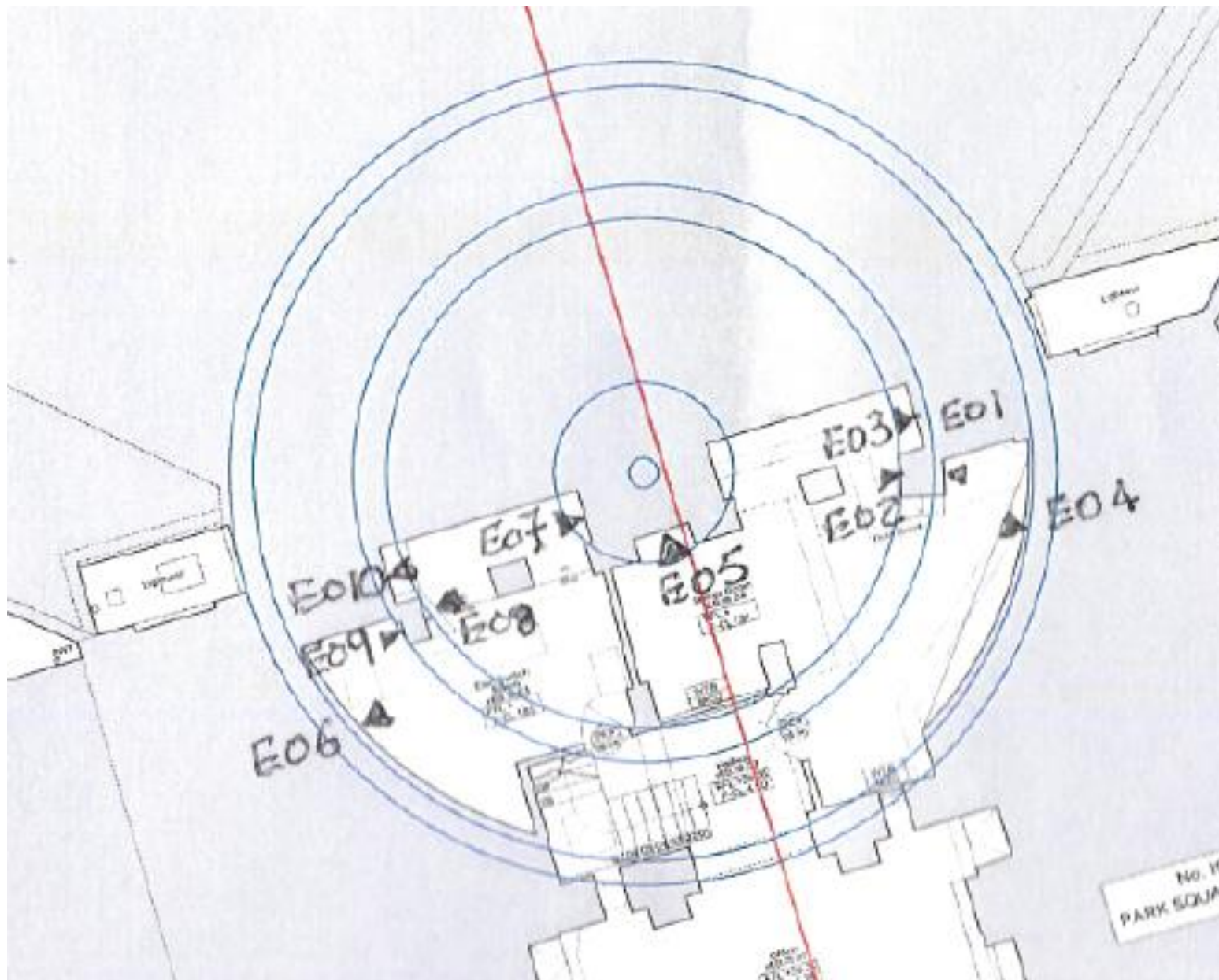


Figure 7 Location of Exploratory Openings on the existing basement plan

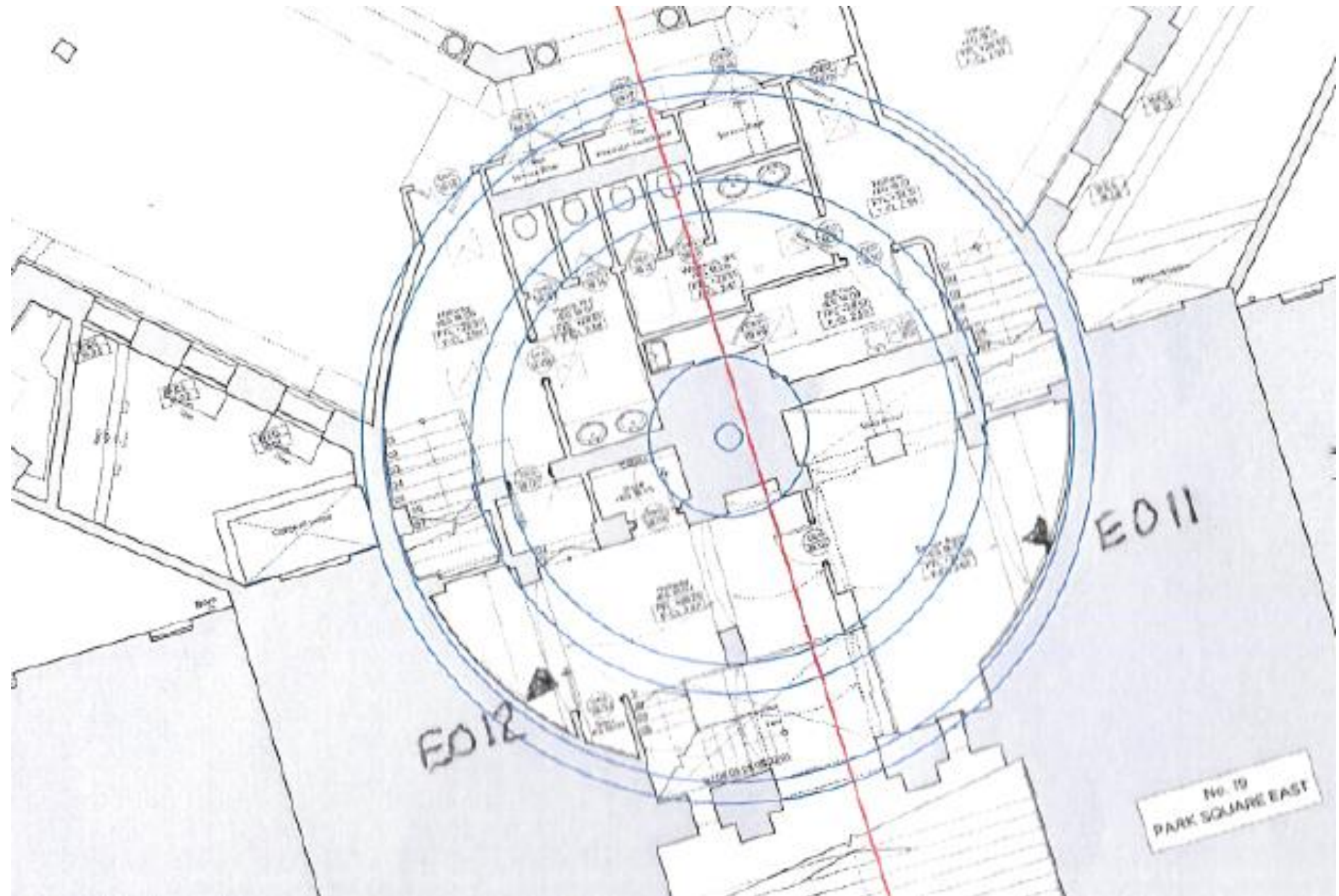


Figure 8 Location of Exploratory Openings on the existing ground floor plan