

**BRITISH MUSEUM
NORTH WEST DEVELOPMENT – ELECTRICAL
SUB-STATION RELOCATION**

DESIGN AND ACCESS STATEMENT

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1 Introduction

As enabling works for the North West Development scheme, whose planning application is currently expected to be submitted in April 2009, the British Museum wish to transfer the EDF electrical sub-station from its present location within the development site to a new location at the east end of the King Edward VII Building.

This application seeks permission for a new building to house the new EDF sub-station switchgear. It is to be built behind the perimeter wall which faces onto Montague Place and located between the vehicular entrance at the east end of the KEVII Building and the rear wing of no. 38 Russell Square.

2 Historical Significance

Purcell Miller Tritton (The Museum's Conservation Architects who prepared the Conservation Plan, which gave a comprehensive review of the Bloomsbury Estate) have conducted an historical evaluation of the surviving section of wall, which would appear to have formerly been part of a building with north-facing windows. The surviving wall clearly shows three stages in its construction, the louvre of which contains the two blocked windows (which extend below present street level). This report is submitted with our application. It shows that this wall is of historic interest, in that it appears to have existed as an outbuilding or pavilion located at the north-east corner of the garden of Bedford House, and as such pre-dates the building of the early nineteenth century terraced houses along Russell Square/Montague Street and Montague Place. A date of the mid – 18th century is suggested.

We have not been able to establish the history of the later two large rectangular and single arched recessing above this early lower storey. It is intriguing that the two upper rectangular openings do not align axially with the older openings below.

On the Montague Place side in front of this wall there is an "area" which has now been slabbed over at street level. The historic wall within the void has been faced with a hard cementitious render.

On the Museum side of the wall the ground appears to have been built up with fill to the present ground level. To the east is the rear wing of 38 Russell Square which has a basement area which is divided from the raised ground to the west by brickwork which looks 18th century in construction.

Immediately west of the Bedford House Estate there was a long-established driveway which originally gave access to the rear garden of Montague House. This continued in use as a rear entrance to the British Museum site. It became encapsulated within the KEVII Building as a vehicular entrance in 1904-14. It was expected at that time that the Museum would expand west to Bedford Square and east to Russell Square, and so the stock brick flank wall was not properly continued to meet the KEVII Building, but instead had only a "temporary" connecting rendered wall with a railing over it.

On the Museum side of the wall during the middle years of the 20th Century were built the present single storey lean-to carpenters' workshops.

The existing situation is shown on drawing 231755/001.

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3 Requirements for the EDF Sub-station

EDF normally require an external access to their sub-stations so that in an emergency they will not have to negotiate access through the property.

In this instance the significance of the historic wall facing onto Montague Place means that it will not be possible to install a new entrance directly off the street. EDF have therefore accepted that their entrance will be accessible off the service yard within the Museum site.

EDF's current requirement for accommodation means that the new sub-station will be considerably smaller than the existing one which is at the west end of the KEVII Building.

The British Museum will however need to provide their own switch room adjacent to the sub-station.

Both the EDF and the Museum switchgear will be contained within separate compartments within the new building.

EDF have strict requirements in terms of space and construction for their sub-stations and consequently the form of the new development is largely pre-determined.

EDF require their duct to enter the sub-station through solid ground, not through an open below-ground void, and they are insisting on having the void filled with a weak concrete mix.

4 The Proposals

The form of the proposed new sub-station is shown on drawing 231755/002.

The existing lean-to workshops will be removed. The plaster at the upper level on the inside of both the north and the west walls will be removed to below new roof level and the brickwork repointed.

The low section of rendered wall adjacent to the KEVII Building will be raised to mask the roof of the new building and the railing will be lowered to suit the new height. The west face will have a new skin of yellow stock bricks to match the adjacent so as to improve its appearance from the west, with a new or re-used Portland Stone coping.

The new single storey building will be masked from the north (Montague Place) and the west by the existing and heightened walls. It will not be visible from the street.

The new building will be built tight to the rear faces of the walls but supported on new 215mm thick structural brick perimeter and subdividing walls in Fletton brickwork. The visible south and east walls will have an added skin of yellow stock bricks in stretcher bond, incorporating the EDF specified pair of access doors facing south and the BM switch room doors facing east, both elevations incorporating the required ventilation bricks.

The roof slab will be of concrete, with a slope to the south and a cast iron or aluminum eaves gutter on a timber fascia.

In order to comply with EDF's requirements the existing below-ground void between the historic wall and the pavement line will be infilled with a weak concrete mix.

5 Access

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EDF require direct vehicular access to the front of the sub-station. Their vehicles will enter via the KEVII east entrance and reverse back up the service yard to the sub-station. This is an area which is restricted to BM staff and contractors and the public have no access.

Access to the sub-station will be restricted to EDF personnel and will be designed to their specification. Access to the BM switch room will be restricted to approved staff and contractors.

Disabled access will not be required, and none is catered for in the design of the new building.

6 Security

The top of the perimeter wall is protected by a fixed steel security device, and apart from where the railing alongside the KEVII Building is to be adapted this will be maintained in place, and any modification will be approved by the BM's security advisers.

7 Environment

There is no requirement for this building to incorporate any insulation as it will be unheated. It will not emit any discharges.

8 Archaeology

The historical assessment of the site shows that there is likely to have been a basement storey behind the surviving historic wall. It is expected that this will have been filled up to present ground level and any new foundations will need to penetrate down to weight-bearing substrate.

The structural concept is shown on drawing 4877/Sk199. In order to reduce the impact of the foundations four corner pad footings will be excavated down to supporting strata, with perimeter downstand beam and floor slab. The feasibility of this will be tested by the excavation of trial holes.

The new EDF cable trench will enter from Montague Place through the blocking of one of the early windows so as to avoid penetrating the historic façade.

The excavations will be subject to a watching brief by an archaeological contractor appointed by the BM.