LONDON NORTH EASTERN RAILWAY

LONDON KINGS CROSS STATION

WESTERN RANGE

CATERING SERVICE CENTRE WORKS

DESIGN, ACCESS AND HERITAGE IMPACT STATEMENT

11th November 2022

Prepared by

STRALA architects

CONTENTS

1.0 INTRODUCTION AND CONTEXT

1.1 *To be read in conjunction with the planning statement 2949-01-PS01 attached to this application.*

1.2 This Heritage Impact Statement has been produced to support the Listed Building Application for the proposed new construction elements as part of the Accommodation Works project at London Kings Cross Station by Strzala Architects on behalf of London North Eastern Railway (LNER).

1.3 The intention of this document is to provide an overview of the design scheme with the client's reasoning for the works and to demonstrate that due consideration has been given to the heritage value of the existing features and appearance of the building, and to preserve the historic character of this Grade I Listed Building and its surrounding environment.

1.4 Strzala Architects have been appointed by LNER to remodel the existing catering service centre within the basement of the Western Range building at London Kings Cross Station. It is the Client's aspiration that the design provides a step-change upgrade to this facility, to align with plans for future growth, improvements for operational efficiency and reduction of the carbon footprint of the operation, to provide an overall improved on-board catering experience for LNER's passengers.

1.5 It is the intention of Strzala Architects to provide a design which fulfils the Client's requirements whilst preserving all existing historic elements within the areas of the proposed works.

1.6 A description of the existing building condition can be found in sections 3.0 (Existing Photographs) and 5.0 (Current Condition). The proposed works are described in Section 6.0 (Design Statement) of this document.

2.0 BACKGROUND AND HISTORY

2.1 The Station Building

London's King's Cross Station dates back to 1848 when architect Lewis Cubitt designed a railway hub for the Great Northern Railway located to the north of central London. Built by John and William Jay under the direction of George Turnbull, this major terminus opened in 1852 and its design consisted of two large arched train sheds with cream brick structures in Flemish Bond to house offices and ticket sales to the south (façade), west and east. The South façade had a large Italianate clock tower in matching brick. On opening, the ribs of the station arches were constructed in timber but these had to be replaced with iron in 1866 and 1886 respectively. The station originally boasted two platforms (todays platforms 1 & 8) – one platform for arrivals and one platform for departures, but soon after its opening further platforms were added to cope with the increasing passenger demand.

In 1972, British Rail added a single storey extension obscuring the original station façade to house the main passenger concourse and ticket office. This was designed as a temporary structure in a rather utilitarian '70's style with no thought to integrate with the Cubitt building behind, and although 'temporary', this unpopular addition remained for 40 years until it was demolished in 2012 and replaced with 7000m² of Yorkstone and granite paving, creating an open plaza area that reveals and compliments the original façade.

As part of the King's Cross conservation area renovations, John McAslan + Partners designed a new glass and steel Western Concourse to the exterior of the Western Range of station buildings. The centrepiece of the £547m redevelopment is the new vaulted, semi-circular concourse to the west of the existing station. The concourse rises some 20m and spans the full 150m-length of the existing Grade I Listed Western Range, creating a new entrance to the station through the south end of the structure and at mezzanine level to the northern end of the Western Concourse.

The 7,500m² concourse has become Europe's largest single-span station structure, comprising of 16 steel tree form columns that radiate from an expressive, tapered central funnel. The graceful circularity of the concourse echoes the form of the neighbouring Great Northern Hotel, with the ground floor of the hotel providing access to the concourse. The Western Concourse sits adjacent to the façade of the Western Range, clearly revealing the restored brickwork and masonry of the original station.

Historic photograph of King' Cross Station sourced at Rail News website

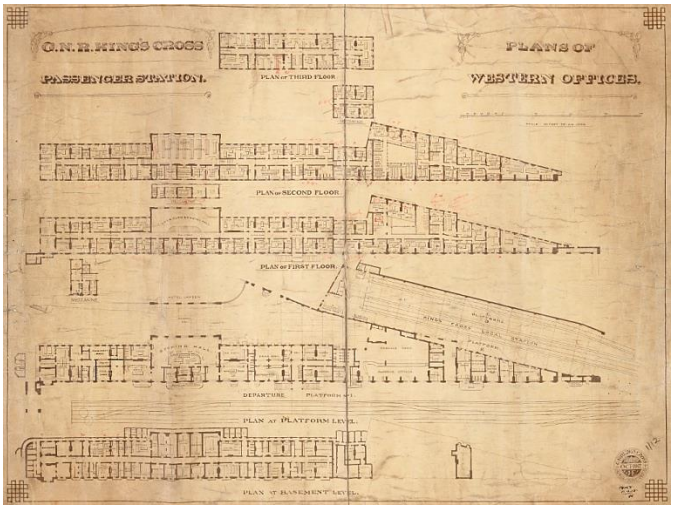
2.2 The Western Range Buildings

The Western Range at London Kings Cross is the station's largest component at approximately 230 metres in length by 20 metres at its widest point, and has accommodated a wide range of uses. It was originally built to house the station offices and booking hall, constructed over 3 floors plus a basement, in the same brick and style as the Station façade. This part of the Station was the departures area and housed all the necessary administration and commercial activities required by Great Northern Railways.

During the ascendancy of the Modern Movement, King's Cross was frequently cited as an example of proto-modernism and compared favourably with Euston's classicism - "display" as Nikolaus Pevsner described it — and the brilliant, though misguided, medievalism of St. Pancras. John Betjeman captured prevailing attitudes in architectural circles towards King's Cross in the 1930s: "…we were all told to admire King's Cross for its functional simplicity, an earnest of the new dawn. We were told to despise St Pancras for its fussiness though we were allowed to admire the engineer's roof."

Cubitt, perhaps because he came from a family of builders and engineers, looked at his job with equal pride but no romanticism. The two arched roofs…are frankly displayed as the predominant motif of the façade…The roof of the clock tower heralds the coming of the new Italian villa ideals. Otherwise one does not look for motifs at King's Cross. The architect was satisfied to depend, as The Builder put it in 1851, 'on the largeness of some of the features, the fitness of the structure for its purpose, and a characteristic expression of that purpose'. **Stuart Durant – VictorianWeb**

The heritage buildings to both the west and east of the Station are built with a simple palette of basic materials, typical of their day: brick, timber, cast iron, wrought iron, and - more recently - steel. The individual building reports describe particular instances of their use, and comment on them in relation to function and architecture.



Original plans for the Western Offices sourced from Network Rail Archives

Most of the buildings are constructed with walls of yellow or red stock bricks in Flemish Bond, types very commonly used in the 19th century. The later Western Goods Shed is faced with grey-cream gault bricks from East Anglia. Stronger and more durable Staffordshire Blue (actually dark grey-black) or dark red engineering bricks were used where particular strength or impact resistance was needed, for example under beam bearings or at doorways.

As part of recent remodelling works, the southern wing ground floor structure has been remodelled to allow the free flow of passengers from the new western concourse to the platforms, and the new Western Concourse structure by McAslan + Partners has been added to the west of the buildings to create a new light and airy passenger area.

2016 Western Concourse / Main Facade

Images sourced at McAslan + Partners website

3.0 LISTED BUILDING ENTRY

List Entry Summary

This building is listed under the Planning (Listed Buildings and Conservation Areas) Act 1990 as amended for its special architectural or historic interest.

***Name**: KINGS CROSS STATION*

***List entry Number**: 1078328*

***Location:** KINGS CROSS STATION, EUSTON ROAD*

***County**: Greater London Authority*

***District**: Camden*

***District Type**: London Borough*

***Grade**: I*

***Date first listed**: 10-Jun-1954*

CAMDEN

TQ3083SW EUSTON ROAD 798-1/85/420 (North side) 10/06/54 King's Cross Station

GV I

Railway terminus. 1850-52. By Lewis Cubitt (architect), and Sir William and Joseph Cubitt (engineers). Yellow stock brick. 2 train sheds (originally 1 for arrivals, the other for departure) closed by monumental plain brick screen of 2 glazed semicircular openings, framed with recessed arches (echoing the train sheds behind) with central and flanking towers; ground storey obscured by late C20 additions. Central tower with rectangular clock turret with pyramidical roof, eaves cornice and weather vane. To the west, 3 storey 3 window office block with booking hall and service rooms at rear; 1st floor with thin, debased Venetian windows, cornice at 2nd floor level, 2nd floor segmental-arched sashes (flanking bays tripartite), cornice. On east side, an extension with archway to the cab drive (now bricked up); rusticated surround to arch and quoins; cornice above which 3 tripartite sashes and parapet. INTERIOR: train sheds separated by round-arched brick colonnade. Originally, train shed roofs of laminated wood, inspired by the Crystal Palace, but these rapidly deteriorated and were replaced by the present iron-ribbed roofs to the eastern shed 1869-70, to the western 1886-7. (Laminated wood trusses successfully used at 26 Pancras Road (qv).

HISTORICAL NOTE: when opened as the terminus of the Great Northern Railway, was the largest station in England and is the earliest great London terminus still intact. The contrast of its functional simplicity with St Pancras Station next door (qv) is powerful. (Hunter M and Thorne R: Change at King's Cross: London: -1990: 59-64).

4.0 EXISTING PHOTOGRAPHS

Western Range Platform Side - Author's photograph

Western Range Platform Side – Author's photograph

Western Range Platform Side - Author's photograph

Western Range Concourse Side

Central corridor to catering service centre located within the basement

Example storage space within the basement catering service centre displaying poor lighting

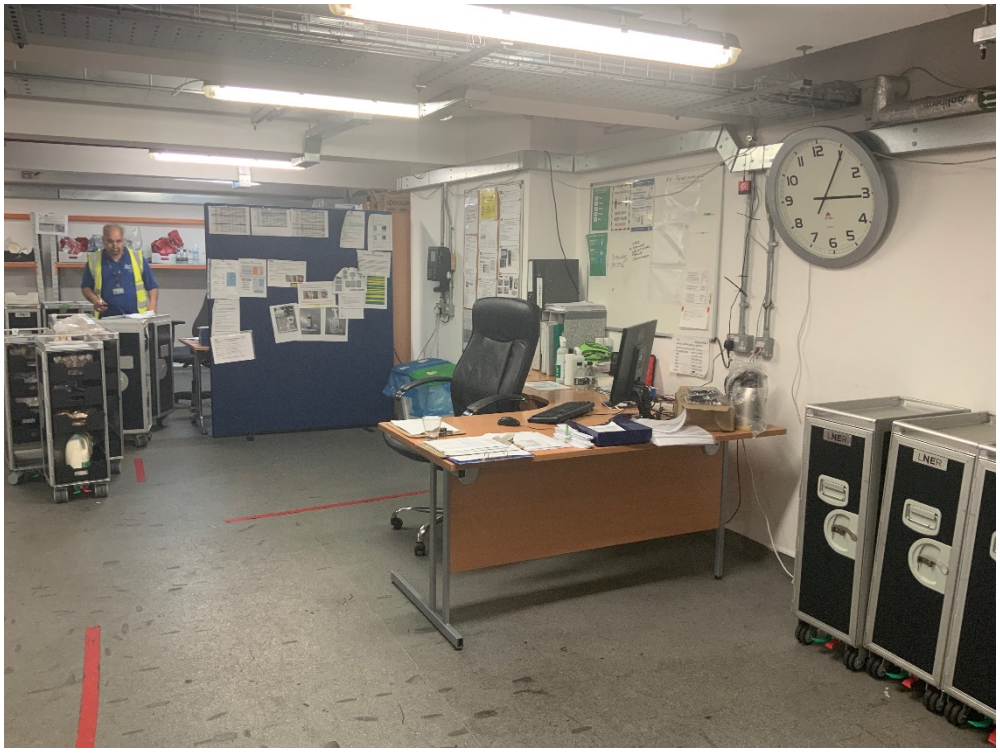
The proposed wash plant area displaying taller ceiling heights of 2.88m

The loading dock where the historic basement meets new services tunnels constructed during the 2006 – 2012 refurbishment and alteration works

Example cold store fitted in the basement

Example of further storage space located within the basement

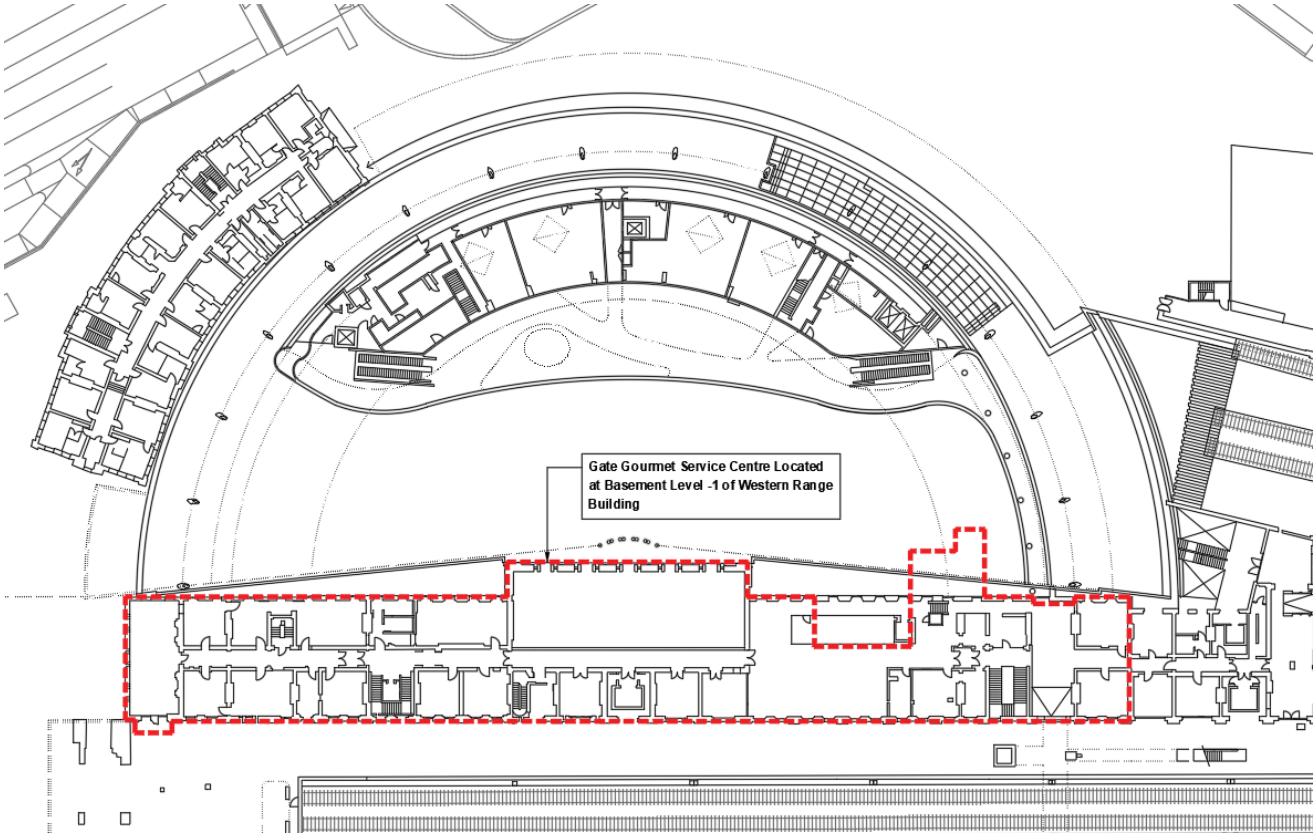
View of the 120m long central corridor which runs through the service centre and along the full length of the Western Range Building basement



Example of existing supervisor's office space

5.0 CURRENT CONDITION

Western Range Building, Basement Catering Service Centre.



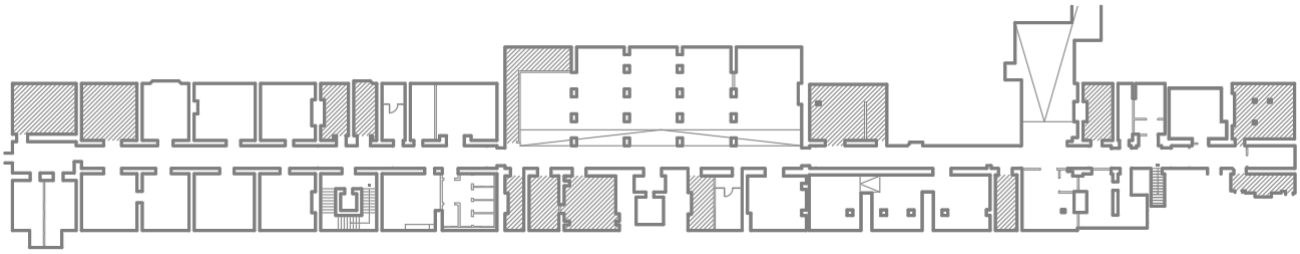
Western Range and Concourse highlighting area of proposed works at basement level

5.1 The catering service centre occupies an area of over 1,200m² within the basement level of the Western Range Building. Within this space can be found an abundance of office spaces, store rooms, staff toilets and circulation space for use by the catering service centre.

5.2 The basement within the Western Range Building was extensively refurbished and reconstructed as a result of the 2006 upgrade works which were completed in 2012. As a result of this very little original fabric of the station building can be found at this level, with almost all visible finishes to walls, floors and ceilings being of modern materials and finishes.

5.3 A review of the as-built drawing records from the above scheme of refurbishment reveals that the majority of the floor throughout the basement has been screeded with 100mm or thicker modern concrete screeds, parts of the existing walls have been demolished and rebuilt from modern concrete blockwork and areas of ceiling throughout have been replaced where intermediate floor structures to the ground floor have been replaced with metal deck.

5.4 Despite this the basement visually follows a rigid spatial arrangement, believed to represent the original basement layout, with an approximately 120 metre long corridor running down the length of the building, flanked to either side by a series of regularly sized and cellular spaces which reveal the original layout of the basement itself. A review of the as-built record drawings reveals that the 700mm thick walls which flank the corridor are of original York stone, and that the 400-500mm walls which form the cellular bays are mainly of original brickwork with some demolition and replacement with modern concrete block walls or reinforced concrete columns and beams.



The existing Western Range basement layout showing a rigid cellular spatial arrangement, organised to either side of a 120m long central corridor.

5.5 The photos presented in section 4.0 of this report reveal that there is little in the way of architectural features remaining in the basement which in itself is a purely utilitarian area of the station which is not visible from public-facing areas of the station. The condition of the modern materials installed during the refurbishment works is currently poor in parts with signs of wear and tear and damage showing to wall, floor and even ceiling finishes.

6.0 DESIGN STATEMENT

6.1 The proposed works to the basement of the Western Range Building at London kings Cross Station are limited only to the areas under the lease of LNER and operated by the catering supplier, Gate Gourmet. In total the works cover 42 different rooms comprising of circulation space, offices, store rooms, toilets and cold stores. Whilst these are too numerous to mention individually in this document, the proposed works to each room can be found within the comprehensive package of existing and proposed drawings attached to this application, and a summary of the works proposed follows:

6.2 **General Refurbishment Works**

6.2.1 As sections 4.0 and 5.0 of this document explain the existing basement has been fitted out at the time of the comprehensive refurbishment works with modern finishing materials such as vinyl flooring, carpet tiles, plaster skim and paint to walls and ceiling, and modern door sets throughout. However it also reveals that the use of this facility over the past 10 years has left signs of heavy wear and tear on these finishes.

6.2.2 As such the proposed works seek to replace the majority of these finishes with new hard-wearing and upgraded materials including heavy duty anti-slip vinyl flooring, repainting of walls and ceilings, and wider utilisation of extreme-duty bump rails which will protect the facility from the daily wear and tear in use.

6.2.3 There are no areas of original material finish proposed to be removed or covered up by these refurbishment works.

6.3 **Internal Partition Reconfigurations**

6.3.1 There are several areas where the existing layouts will be adjusted to suit new and repositioned facilities, such as the relocation of the staff toilets and mess room, and the reconfiguration of storage spaces for catering carts.

6.3.2 The proposed reconfigurations limit removal of internal partitions mainly to non-original blockwork walls and lightweight partitions, dating back to the 2012 refurbishment works. The only instance and exception to this is the creation of a minor structural opening for a doorway, to facilitate the installation of a new wash plant within the service centre, which is outlined in further detail below.

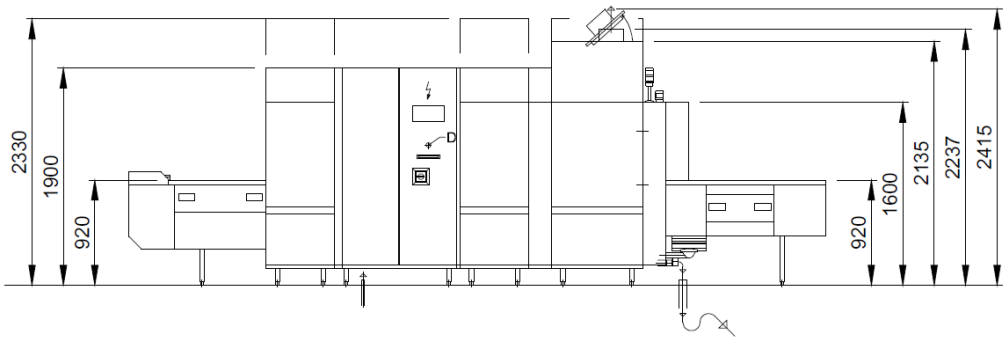
6.4 New Wash Plant

6.4.1 One of the vital parts of the brief for the catering facility refurbishment is the addition of a new wash plant facility within the service centre to wash crockery, cutlery and equipment carts which are used in the train onboard catering offering.

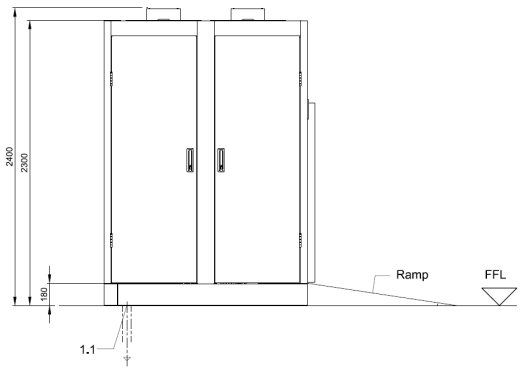
6.4.2 The current arrangement at London Kings Cross Station sees the equipment and carts transported off site to a Gate Gourmet facility at Heathrow Airport via road transport, making an approximately 40-mile round trip on a 7.5 tonne vehicle to the off-site facility where the equipment is washed and returned to the station. Three trips are made per day, and based on calculations provided by the LNER Sustainability Team, this equates to just over **42 tonnes of carbon dioxide (CO2) equivalent per annum**.

6.4.3 Bringing the wash plant into the service centre at this location would stand to save this 42 tCO2e for the business each and every year by removing the need for transport to an off-site facility.

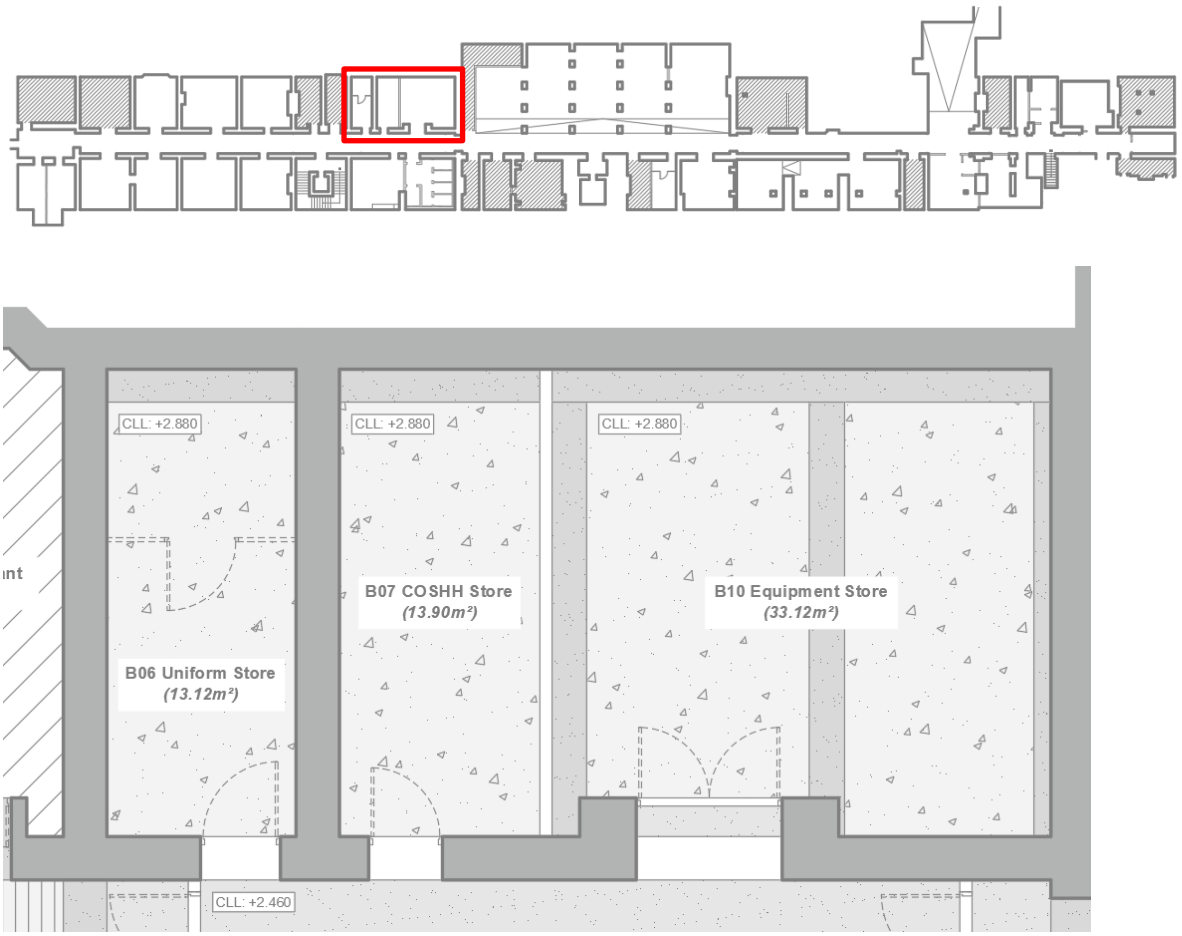
6.4.4 In order to provide an operational wash plant facility, several pieces of equipment are required, the largest of these being the commercial dish washer and the cart washer, the sizes of which are indicated below.



MEIKO M-IQ B-S54 N02 P6 Commercial Dishwasher

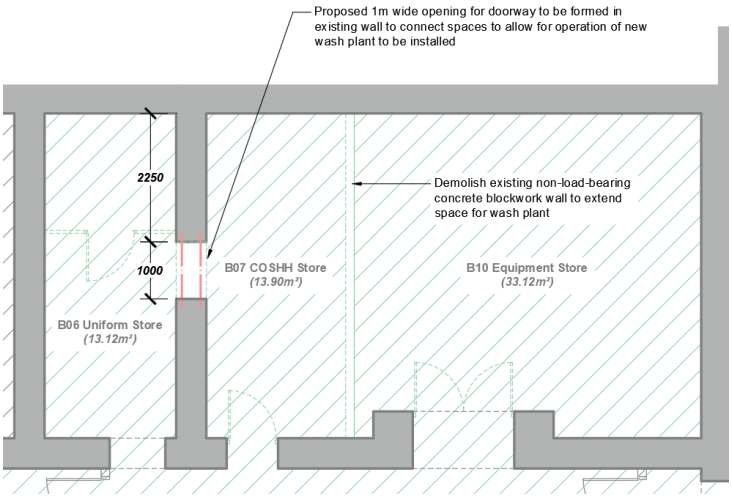


MEIKO Chamber Trolley Washer

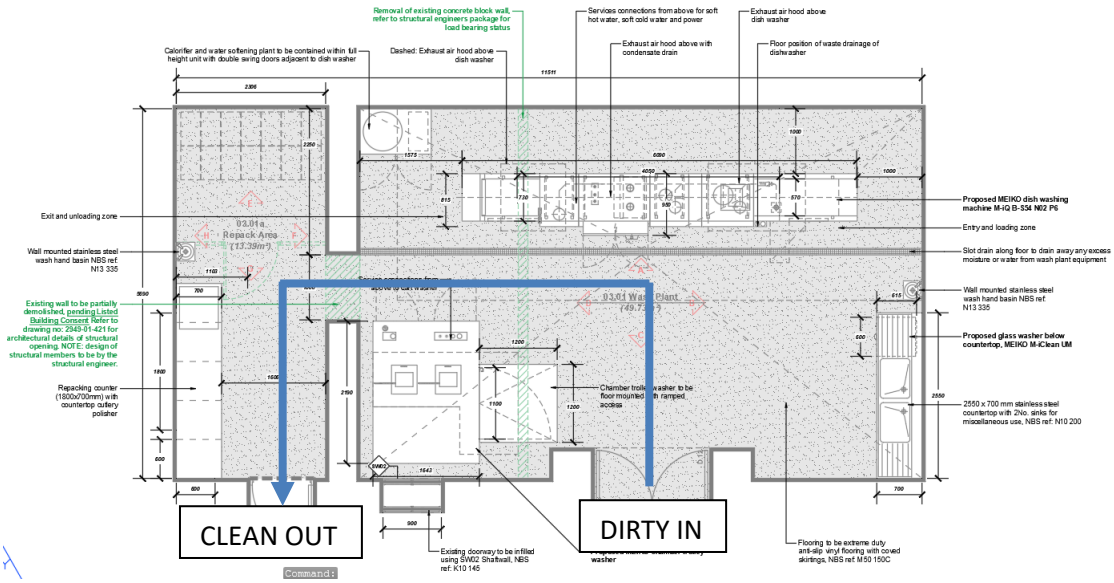


Extract from the existing reflected ceiling plan of the area deemed suitable for location of the dish washer with 2.880m high ceilings between downstands.

6.4.5 Strzala Architects have undertaken an extensive feasibility study for where the wash plant equipment could physically fit within the basement catering facility, which due to the length required, combined with the height, has identified just one suitable location for this where an increased soffit height of 2.880m above floor level provides space for the 2.415m high machine, with space above for ventilation extraction. Other areas throughout the basement have either a lower ceiling height of just 2.500m, or insufficient floorspace, and so would not be suitable as locations for this equipment.



Extract from the proposed demolition plan indicating proposed removal works and structural openings required for the creation of a functioning wash plant.



The proposed wash plant layout with all equipment indicated, and route of dirty to clean equipment shown.

6.4.6 In order to accommodate the wash plant equipment within this space minor demolition works are required. The above extracts from the drawings attached to this application highlight the necessary removal of an existing concrete block wall and the formation of a 1-metre-wide doorway through the original brickwork wall to connect the wash plant to the neighbouring repack space, enabling a linear and hygienic route for all equipment which avoids cross-contamination and provides sufficient space for the wash plant equipment and re-pack activity.

6.4.7 It is to be noted that the decision to alter original building fabric is one which is not taken lightly, but is deemed absolutely necessary to allow the wash plant to work in this location. Pre-application advice has been sought from Camden Council, originally submitting proposals for a larger dish washer which required a substantially more significant removal of a 2.9m wide section of this original wall. The conservation officer advised:

"In the main the proposals appear generally acceptable although there is concern about the removal of the wall between what is currently the cold store and the freezer to create the chilled stores. The wall your drawings show as being removed, is in the category considered important. In addition to which there may well be structural implications involved with the removal of this section of wall. I believe this section could have been the location of an original cooking range although this may need confirming. There are the same concerns around the proposed removal of the wall between the Uniform Store and the COSHH Store. The partition wall may not be of significance however the solid wall raises the same concerns as above.

You may know that the central corridors of the Western Range are constructed of huge slabs of York stone and any works that might impact on the structural stability of these stones should be totally avoided."

It is to be noted that the revised design now submitted addresses both of these concerns by:

1. **no longer removing the wall between the freezer and cold store, and**
2. **Specifying a shorter dish washer which removes the need for a larger structural opening to the wall between the Uniform Store and the COSHH Store. An opening is still needed to provide a hygienic flow of equipment through to the repack area however this is now proposed as a 1-metre-wide doorway which significantly minimises the harm to the solid wall.**
3. **Finally note that no alterations are proposed to the York stone walls which flank the central corridor, nor are any works proposed which would affect their structural stability.**

7.0 CONCLUSION

7.1 The designs proposed have been shown to be sensitive to the historical context, comprising of general refurbishment works which only replace existing modern materials and finishes, with minimal layout alterations which mainly affect only modern and non-load bearing fabric.

7.2 The single part of the proposal which seeks to alter original parts of the building is the creation of a 1-metre-wide doorway through the existing brickwork wall between the existing Uniform and COSHH Stores, which is essential to provide a hygienic and functioning wash plant facility. This statement has demonstrated how through a process of pre-application advice and design optioneering the wash plant design has been adapted to result in minimal disruption to the listed building.

7.3 Further to the above we would also quote paragraph 7.62 of the Camden Local Plan 2017, Policy D2 Heritage, which discusses sustainability measures in listed buildings, stating:

"Proposals that reduce the energy consumption of listed buildings will be welcomed provided that they do not cause harm to the special architectural and historic interest of the building or group."

It has been aforementioned in paragraph 6.4.2 that providing a wash plant facility within the station at Kings Cross would remove the current need for transporting the equipment off site to be washed at the gate Gourmet facility at Heathrow North, an activity which if omitted could make carbon savings to the catering operation at London Kings Cross of over 42 tCO2e every year. Therefore in line with policy D2 the incorporation of a wash plant at Kings Cross should be welcomed, and the works required to facilitate this supported, given the minimal harm to the designated heritage asset.

7.4 It is considered that this scheme poses minimal harm to the designated heritage asset, comprising entirely of refurbishment and alteration works to an already heavily modernised and utilitarian area of the station which are considered to be vitally essential to the ongoing operation and efficiency of the catering service centre.