

16 April 2024

Jack Naven
Planning Department
Manchester City Council
Town Hall
Manchester
M60 2LA

Dear Jack,

New Warehouse, Science and Industry Museum, Liverpool Road, Manchester, M3 4JP
Listed Building Consent application

Please find enclosed an application for listed building consent at the Science and Industry Museum for:

“Listed Building Consent for the erection of scaffolding and associated ties to the New Warehouse, Science and Industry Museum”

The applicant is the Science and Industry Museum.

1. Background

In April 2022, £14.2 million of funding from the Government’s Department of Culture, Media and Sport (DCMS) was awarded to the Science and Industry Museum (SIM) to complete urgent repairs and improvements. This funding will facilitate works to substantially improve thermal efficiency and futureproof the Site against predicted increased rainfall as a result of climate change. Overall, this will support the museum’s resilience and ensure its environmental sustainability in support Greater Manchester’s goal to become carbon neutral by 2038 – 12 years ahead of the national target.

Proposals forming this application are part of a wider programme of refurbishment works across the Science and Industry Museum including repair and refurbishment works to the external fabric of the New Warehouse, the Special Exhibitions Gallery (SEG), and the Viaduct between the Station Building and the 1830s Warehouse. This application specifically relates to the erection of the scaffolding at the New Warehouse. The original design of the scaffolding, which allowed for ties into the building façade, was approved under planning and listed building consent for repair and refurbishment works to the New Warehouse and SEG under applications (138404/LO/2023 and PP-12340236).

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Following approval, an application to discharge Condition 23 of 138404/LO/2023 has been made and approved (CDN/24/0184). This application detailed the scaffolding ties required to ensure structural stability of the scaffolding. The erection of the scaffolding has now commenced on site.

The scaffolding design is complex and also allows for a full temporary roof covering to ensure weather tightness whilst the consented works to the roof are taking place. The structural soundness of the scaffolding and the building has been reviewed in light of the consented refurbishment works, and specifically in relation to the necessary roof repairs. It has been recommended by the structural advisor that an amended scaffolding design is required due to ensure structural stability of the structure. It is necessary to install additional braces into the purlins at roof level to meet the requirements of the scaffolding loads on the building.

The scaffolding is vital to allow the approved refurbishment and repair works consented under 138404/LO/2023 and PP-12340236 to be implemented at the New Warehouse. These works will ensure the longevity of the listed building and its continued optimum use as a Museum. Further detail on the proposed works is set out in Section 5 below.

This application is seeking listed building consent for the revised scaffolding design. The only alteration from the design already approved is the additional braces required into the purlins on the roof. However, for completeness, this listed building consent application considers the scaffolding proposals holistically.

2. Site Context

The Science and Industry Museum is located to the northwest of central Manchester, to the east of the River Irwell and is within the Castlefield Conservation Area.

New Warehouse is a Grade II listed Building within the Science and Industry Museum complex. 'New Warehouse' was built in 1880, specifically for use by the Great Western Railway and housed both goods and livestock that were transported on the railway. The four storey construction was unlike the earlier warehouses, designed with the use of cast iron columns with wrought iron beams internally. The station and its buildings handled a significant amount of goods during the latter part of the 1800s and into the first quarter of the twentieth century with traffic as diverse as cotton, grain timber and meat.

The decline of the railways for goods transportation, political and policy decisions and new developments in road and shipping all contributed to the steady neglect of the site from the years after World War I. Therefore, following decades of investment shortages Liverpool Road was closed by British Rail in 1975.

Following negotiations and with pressure from the Liverpool Road Station Society New Warehouse was bought by the Greater Manchester Council in 1982 to house the new Greater

Manchester Museum of Science and Industry which opened in 1983. This was originally limited to the Power Hall and Passenger Station; however, shortly afterwards, the ground and basement floors of New Warehouse were brought into use as exhibition and storage space respectively. The upper floors were then renovated in the late 1980s for museum use by BDP, with alterations including insertion of a ramp and lift, fire escape stairs, restaurant, education and conference spaces, and a new main entrance to Lower Byrom Street. The library and records areas were added in the basement in 1990 and in 1992 the shop was extended with a new frontage and additional basement storage created. In 1995, additional funding allowed further works to be completed with the exhibition gallery undergoing renovations with a new partial floor being inserted. Between 1996 and 2000, the remainder of the first and second floors of New Warehouse were converted, a new glass lift and stair tower added, the shop further extended, first floor partitioned and top floor restaurant formed, alongside a new interactive zone and meeting rooms. Finally, Work on New Warehouse was undertaken again in 2009-10, incorporating a Learning Centre, Conference Centre, new shop facilities and new main entrance.

In order to ensure the longevity of the listed building, and that the building is suitable to accommodate both staff and visitors moving forward, this application supports a programme of urgent external fabric repairs and improvements that are set to take place over the next two years. These works are consented under 138404/LO/2023 and PP-12340236.

3. Significance of the New Warehouse

New Warehouse is a component of part of the oldest passenger/goods railway in the world. The Liverpool Road Site as a whole is of national and global significance as it is the first of its kind and a model for others that followed. Historically, the whole site, including New Warehouse is of the highest value, for its broader associations with railway pioneers and for its wider global influence on the development of railway transport. The associated communal value, both at the time of their development and today, as an educational and historical resource, is of the highest order. Liverpool Road remains the most complete surviving early railway station complex in the world and the historic buildings make a unique and highly positive contribution to the Castlefield Conservation Area and the wider city.

New Warehouse is a significant component part of the station complex and is a good example of the evolving design of railway warehousing. Its importance is reflected by its Grade II listed status. Architecturally and aesthetically, New Warehouse embraced fire-proofing technology and represents a distinct shift from the early warehousing form (for example, at the 1830s warehouse). The engineering and form displayed in the Liverpool Road buildings went on to influence railway development around the globe.

The original structure of New Warehouse building has a high heritage significance. Numerous alterations have been made to the building, particularly in order to serve its museum function

which is its optimum viable use. For example, the roof covering has previously been replaced in the late Twentieth century. These changes are, for the most part, neutral in their impact, though they have negligible heritage value in themselves. Evidential values remain high despite the numerous adaptations and alterations to facilitate museum use.

4. Pre-Application Engagement

Manchester City Council (MCC) were initially provided with a briefing email on 3 April 2024, which set out the proposed scaffolding approach and relevant justifications. A Site Visit with MCC was then undertaken on 8 April 2024 at which both the Planning and Conservation Officer were present. During this meeting, the need for the proposed works was established. Discussion was also focused on how the approach seeks to balance practicality and maximising protection of the listed building.

5. Proposals

The ongoing sitewide works at the Science and Industry Museum (SIM) include roof replacement and conservation fabric repair works to the New Warehouse building. This requires the construction of scaffolding to all building elevations, plus a full-coverage temporary roof to protect the building's interior during the works. As the scaffold is heavily constrained, the temporary roof places significant loads onto the masonry walls of the building, consequently an assessment of the New Warehouse scaffolding loads have been undertaken by Buro Happold and are submitted in support of this application.

The assessment has confirmed that whilst the existing masonry walls themselves are broadly adequate to resist temporary scaffold loads, the connection between the walls and the structural diaphragm formed by the roof has only minimal capacity and cannot be shown to be able to transfer the required forces into the main building structure. Consequently, localised strengthening is required or there is a high risk of damage to the building fabric.

The assessment included several options for providing the required strengthening, from which a preferred option has been developed. This preferred option is a balance of practicality and minimising impact on the existing building fabric. The internal spaces of the New Warehouse are heavily constrained due to the presence of plant and equipment, and a commercial kitchen. This means that several more common methods for providing internal bracing are not feasible.

The proposed strengthening consists of installing steel brackets to the inside face of the masonry wall at roof level and the roof purlins, to better connect the two structural parts of the building. These will be required at all purlin positions – typically 7 no. per bay. These brackets will be left in place permanently to provide additional robustness at this interface, which is a common failure point for historic buildings.

The design of the proposed strengthening option has been heavily influenced by existing metalwork within the New Warehouse roof structure. The colour of the new braces shall match the red tones of the existing metalwork. There are at least three sets of similar metalwork present in the existing roof.

Full details of the proposed approach alongside details of all the options considered can be found in SIM-BHE-NW-XX-SK-S-0002, SIM-BHE-NW-XSK-S-0003 submitted in support of this application.

6. Accordance with planning policy

The key planning consideration relevant to this application is heritage which is discussed below.

6.1 Heritage

The key material planning consideration for this application is the impact on the designated heritage asset, New Warehouse, and character of the Castlefield Conservation area and therefore adherence to planning policy regarding the historic environment.

Paragraph 190 of the NPPF (2021) states that *“in determining applications, local planning authorities should take account of:*

- *the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;*
- *the positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and*
- *the desirability of new development making a positive contribution to local character and distinctiveness.”*

Paragraphs 201-203 place great weight on the conservation of designated heritage assets, emphasising the need to avoid “substantial harm” in terms of demolition, significant alteration, or compromise the setting unless that harm is clearly justified (via four specific tests) or there are substantial public benefits that outweigh that harm. Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits.

Saved UDP Policy DC18.1 states that the Council give particularly careful consideration to development within Conservation Areas and will seek to preserve and enhance the character of these designated areas, while saved UDP Policy DC19.1 states that applications for listed building consent involving or having an impact on buildings of Special Architectural or Historic Interest will have regard to securing the retention, restoration, maintenance and continued use of such buildings and to protecting their general setting.

6.2 Applicant Response

The proposed scaffolding is temporary, and the additional braces are internal only. Therefore there shall be no impact on the Conservation Area or setting of neighbouring listed buildings. The impact to the significance of the New Warehouse itself, is the key consideration.

The proposals have been carefully developed to respond appropriately and sensitively to the significance of the Grade II listed asset. Various options were explored to try and minimise the impact on the listed building. Strengthening the existing steel brackets (a modern installation in themselves) was one of these options and did result in the least impact on the historic fabric, however this approach is infeasible to install in this context. An additional option considered was to use diagonal props at tie locations, this approach would however require large holes to be drilled through the historic timber floor structure and large fixings in the masonry doors leading to significant impacts on the listed building. The proposed solution to install new braces into the roof purlins is the only solution that is practically feasible to deliver with the least harm to significant fabric.

The scaffolding is currently being erected on site as consented by 138404/LO/2023, CDN/24/0184 and PP-12340236. The scaffolding is necessary to enable the consented essential refurbishment and repair works to be implemented. The consented refurbishment works themselves will provide significant public benefits through maintaining the building and allowing it to continue to fulfil its optimum role as a museum, its optimal viable use. By virtue of its use as a museum, the building will continue to deliver ongoing public benefit for years to come – through its purpose to provide education and entertainment to visitors, and through its ongoing contribution to the industrial landscape to which it contributes significantly.

7. Application Documentation

The following information is provided in support of this application:

- Application form and Ownership Certificates, prepared by Deloitte (Dated April 2024).
- 9488-BUT-V-XX-DR-A-(01)000 Rev P2 -Site Wide Location Plan (Dated September 2023)
- Covering Letter, prepared by Deloitte (Dated April 2024)
- SIM-BHE-NW-SK-S-0002 Rev P02 – Options for Temporary Works (Dated April 2024)
- SIM-BHE-NW-XX-SK-S-0003 Rev C03 – Temporary Loading Assessment for New Warehouse Scaffolding (Dated April 2024)
- SIM-BHE-XX-XX-DN-S-0003 Rev P01 – Brackets for Scaffolding (Dated April 2024)

- Heritage Impact Assessment (dated April 2024) prepared by Buttress.
- 24-BSD-944-01-01 – Perimeter Access Scaffold and Temporary Roof Scheme prepared by Bespoke Scaffolding Design (Dated January 2024)
- 24-BSD-944-01-02 – Perimeter Access Scaffold and Temporary Roof Scheme prepared by Bespoke Scaffolding Design (Dated January 2024)
- 24-BSD-944-01-03 - Perimeter Access Scaffold and Temporary Roof Scheme prepared by Bespoke Scaffolding Design (Dated January 2024)
- 24-BSD-944-01-04 – Perimeter Access Scaffold and Temporary Roof Scheme prepared by Bespoke Scaffolding Design (Dated January 2024)
- SMG7446-00-01 – G.A of Scaffold & Temp Roof Prepared by P.B Scaffold Design (Dated September 2023)
- SMG7446-00-04 – Scaffold Access Bridge Over Restaurant (Dated September 2023)
- SMG7446-00-05 – Proposed Scaffold Anchor Arrangements (Dated September 2023)
- SMG7446-00-02 – Scaffold and Temp Roof Phasing (Dated September 2023)
- SMG7446-00-03 – Temp Roof over Entrance Annex (Dated September 2023)
- Brick Filler Technical Data Sheet prepared by Stonelux
- Architectural Note prepared by Buttress (Dated March 2024)

The Planning Portal reference is: PP-12971894. We look forward to receiving your confirmation that the application has been formally registered. In the meantime, if you have any queries or require any further information, please do not hesitate to contact my colleagues, Ellie Bird (+44 20 7007 3891 / efbird@deloitte.co.uk) or Josh Wyatt-Smith (0161 455 8451 / jwyattsmith@deloitte.co.uk).

Yours sincerely



Deloitte LLP