

TRAVEL HUB (PLOT G) - SUMMARY OF DESIGN CHANGES AND TECHNICAL NOTE

June 2024

1.1 This Note has been prepared by Asteer Planning and the project's technical team, on behalf of the Applicant ("The Prestwich Regeneration LLP"), to set out a summary of the design changes and information/clarifications in relation the following Travel Hub matters:

- Proposed Design Changes
- Ventilation
- Design and Safety
- Surface Water Drainage
- Public Safety
- Air Quality

2 PROPOSED DESIGN CHANGES

2.1 As set out in the Covering Letter (prepared by Asteer Planning) and Summary of Scheme Amendments (prepared by JMA) submitted to Bury Council on the 10th May 2024, the following minor design changes are proposed to the Travel Hub:

- The building footprint has moved further away from the nearest existing residential property (2 Highfield Place) increasing from 11.43 to 12.7 metres.
- The high quality materiality of all elevations remains unchanged.
- The height of the building remains unchanged.
- The Fairfax Road facing elevation (south) includes minor changes to the ground floor to account for the internal reworking of the new core placement and cycle store, as a result of the ramp reconfiguration. The material quality is not amended, and the number of cycle spaces is the same as previously submitted.
- The Church and Highfield Road facing elevations (west) have been simplified. The angles have now been omitted and replaced with a series of repeating brick panels.
- This same design approach of a series of brick panels, now flat to the façade is applied to the Highfield Place (north) elevation.

- The Metrolink facing elevation (east) remains as the previous design, fully open with a 1100mm balustrade plus a vehicle barrier to comply with building regulations.
- The cores have been reduced from 3 to 2, with an escape stair core only located at the northern edge of the building and an escape stair core and 2no lifts located at the Fairfax elevation (south).
- A new staff welfare facility has been located at ground floor adjacent to the plant room and storage room.

2.2 The reasons for the design changes to the Travel Hub primarily relate to the internal reconfiguration and change from different platforms connect by ramps to a continuous ramp design which means no deck is enclosed the deck above and therefore there is no requirement for the openings in the façade to draw air into or out of the car park decks. These changes are explained in more detail below.

3 VENTILATION

3.1 A Ventilation Statement prepared by Hannah Associates was enclosed within the original planning submission. Section 3.5 of the Statement relates to the Travel Hub and advises that the Travel Hub is to be “open-sided” allowing for natural ventilation, as per Building Regulations Approved Document B and Approved Document F. To comply with the natural ventilation strategy, the Travel Hub must meet the following criteria:

- The equivalent free area of openings at each level must be at least 5% of the floor area;
- A minimum of 1.25% of the floor area must be provided on opposing elevations.
- The remaining free area can be distributed anywhere on the floor.

3.2 The design of the Travel Hub facilitates natural cross-flow ventilation as the ramps are open to the atmosphere. The free area at each level of the building will achieve the minimum required under Building Regulations Part B (Fire Safety) and Part F (Ventilation) to enable the car park to be classified as ‘naturally ventilated’.

3.3 This negates the requirement to provide mechanical smoke & fume extract/clearance system(s), as this will occur naturally. The natural ventilation of the Travel Hub offers a benefit in being more energy efficient (no associated energy use), and reduces both capital cost of initial installation, and costs associated with ongoing maintenance requirements and replacement at the end of the systems useful design life etc. On this basis, the changes to the Travel Hub meet the criteria for natural ventilation set out in paragraph 3.1 of this Note and the submitted Ventilation Statement.

- 3.4 Since the internal configuration of the Travel Hub has changed from different platforms connected via ramps to a continuous ramp design, this has allowed the omission of openings, creating a simpler solution for the façade.
- 3.5 The previous design required ventilation at each level while the amended ramp design enables only two ramp/levels, one being at the ground level which has a completely open façade and the other at the second floor which is open as this is now the roof level, therefore no openings are required in the facade. The triangular openings at the Fairfax Road elevation are purely decorative and serve no natural ventilation purpose.

4 DESIGN AND SAFETY

- 4.1 As set out in the Crime Impact Statement prepared by GMP submitted and submitted in support of the planning application, all new build non-residential space will be built in accordance with 'Design for Security' standards to demonstrate an acceptable level of physical security.

GMP made the following positive comments (section 3.2 of the CIS) which are relevant to the Travel Hub:

- The redevelopment of the sites will remove buildings and redevelopment public realm spaces which have been a generator of criminal activity;
- Each of the building plots should provide good levels of ground floor activity, in-turn the building uses will offer good levels of activity and natural surveillance of the adjacent community space and public realm;
- The proposed development provides opportunities to include security features built into the design and construction of the building and avoid the need for obtrusive retrofitted security measures that can increase the fear of crime.

- 4.2 The Applicant has agreed in principle to a planning condition relating to crime and security which would secure physical measures to the Travel Hub relating to doors, shutters, windows, glazing, alarms, access control, lighting and CCTV.

5 SURFACE WATER DRAINAGE

- 5.1 The detailed technical design of the Travel Hub is currently being developed. The car park will be set to falls and channel drains, gullies or gutters which will be connected to the surface water drainage network to intercept surface water on the top deck, wind driven rain where necessary and drips from cars.

- 5.2 The Applicant has agreed in principle to two planning conditions requested by United Utilities and which relate require the submission of a sustainable drainage and management plan prior to the occupation of the development; and for the drainage to be carried out in accordance with the principles set out in the submitted Foul and Surface Water Drainage Design Drawing 2772-CIVXX-XX-D-C-30003 Rev P 06- Dated 19.09.23. It is not anticipated that there will be any risk of water ingress but if the situation does arise it would be managed through the sustainable drainage and management plan.
- 5.3 Neither United Utilities nor the Lead Local Flood Authority have any objections to the proposals from a drainage perspective.

6 PUBLIC SAFETY

- 6.1 The Metrolink (eastern) elevation includes a 1100mm balustrade plus a vehicle barrier to comply with building regulations. The vehicle barrier is a structural profile that stops cars hitting the facade or falling out of the building 'accidentally'. The 1100mm balustrade meets Part K(2) of the building regulations 2010 relating to "Protection From Falling" height requirements. The north (Highfield Place) and west (Highfield Road) elevations have traditional brick solid facades (i.e. they are fully enclosed) so balustrades are not required as there is no risk of falling. The south elevation (Fairfax Road) will also have a 1100mm balustrade but this elevation is also enclosed by a perforated metal screen with height of 3m in its top deck so there is no risk of falling from height.
- 6.2 As shown below this has been used in a number of Travel Hubs/Car Parks including Grand Arcade, Cambridge, Yeovil Hospital and Stamford Quarter in Altrincham.



Grand Arcade, Cambridge

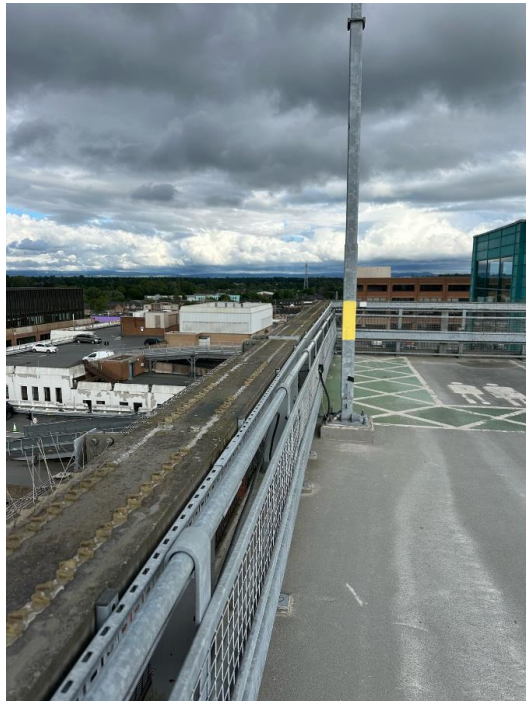




Yeovil Hospital, Yeovil



Stamford Quarter, Altrincham



7 VEHICLE EXHAUST FUMES

- 7.1 The Travel Hub is naturally ventilated and therefore, vehicle exhaust fumes within the Travel Hub will be dispersed via the natural movement of air through the structure of the car park (noting the ramps are open to atmosphere). This will be achieved as a result of prevailing wind and subsequent atmospheric pressure differential on the facades of the building, which encourages natural air movement to dilute and disperse smoke and fumes.