Transmission House – External Lighting Statement

EXECUTIVE SUMMARY

The proposed external lighting scheme for the Transmission House rooftop bar as indicated on the Roof Level lighting drawing 260124-KRD-ZZ-RF-DR-E-6300 has been developed to support the intended hospitality use of the space, while seeking to appropriately manage potential effects on the surrounding urban environment.

The design adopts a controlled and hierarchical lighting strategy, whereby higher lighting levels are contained within the covered bar and canopy area, and the majority of the open terrace is treated with low-level, ambient lighting. This approach reflects the character of the space as a rooftop venue, rather than a fully illuminated external circulation or public realm area.

Lighting within the canopy zone is designed to provide suitable levels for its operational use (approximately 200 lux), utilising directional, predominantly downward-facing luminaires to contain light within the active area. The wider terrace areas are intentionally lit at substantially lower levels, using integrated low-level lighting and portable elements to provide orientation and visual comfort without creating unnecessary brightness.

A zoned and dimmable lighting control strategy is proposed, enabling light levels to be adjusted in response to operational requirements. This includes an indicative curfew approach, with non-essential lighting reduced during late evening hours and minimal lighting retained thereafter for safety and security purposes.

The site is situated within a dense urban context (generally consistent with ILP Environmental Zone E3), and the lighting approach has been developed with reference to this classification. In particular, the scheme seeks to limit light spill at the site boundary, with vertical illuminance levels expected to be broadly consistent with typical E3 guidance (circa 5–10 lux prior to curfew), and lower during late-night periods.

The use of directional luminaires, low mounting heights, and integrated lighting elements is intended to minimise upward light, glare, and visual intrusion. The overall appearance of the rooftop is therefore expected to remain subtle within the wider townscape, without giving rise to significant adverse lighting effects.

On this basis, the proposals are considered to represent a proportionate and contextually appropriate lighting solution, which responds to the operational requirements of the development while aligning with the intent of relevant planning policy and guidance.

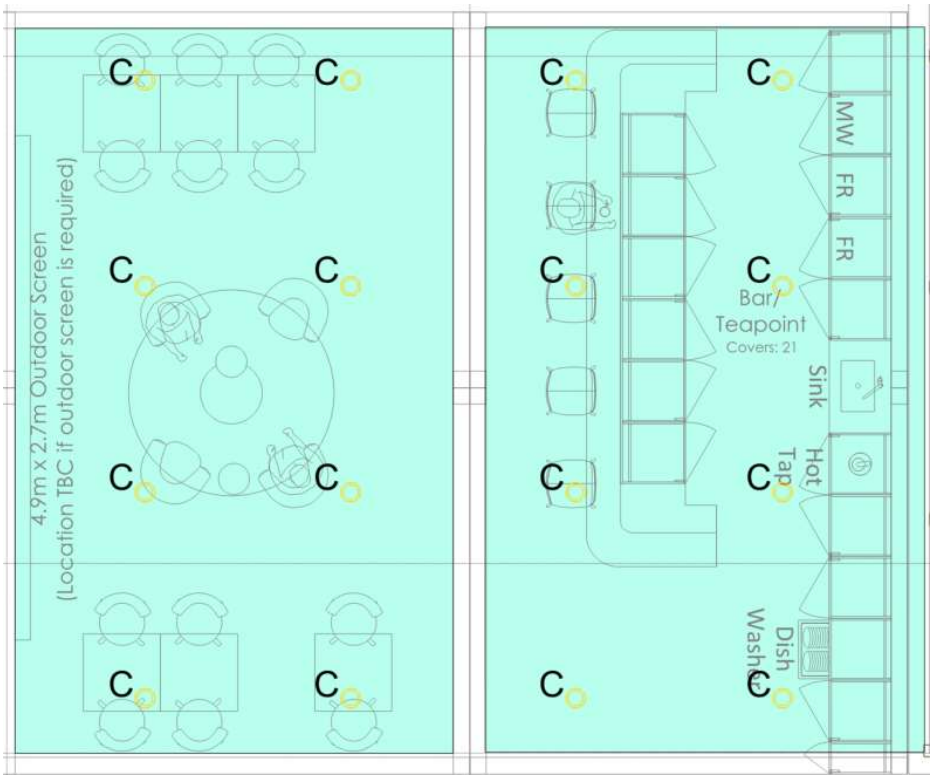
LIGHTING DESIGN APPROACH

The proposed external lighting scheme for the rooftop bar has been developed to provide a safe, functional, and visually comfortable environment for users, while seeking to minimise potential environmental impacts. The design has been informed by Manchester City Council planning policies and relevant industry guidance, including the Institution of Lighting Professionals (ILP) GN01: Guidance for the Reduction of Obtrusive Light.

The lighting strategy divides the rooftop into two distinct zones:

BAR / ROOFTOP CANOPY AREA

This area, located beneath the canopy, has been designed to provide an average horizontal illuminance of approximately 200 lux, with a target uniformity ratio of 0.40, appropriate for hospitality environments.



In this zone, luminaires are:

- Mounted at high level within the canopy structure.
- Fixed, dimmable spotlights with controlled beam distribution
- Oriented downward to provide controlled illumination to key activity areas.

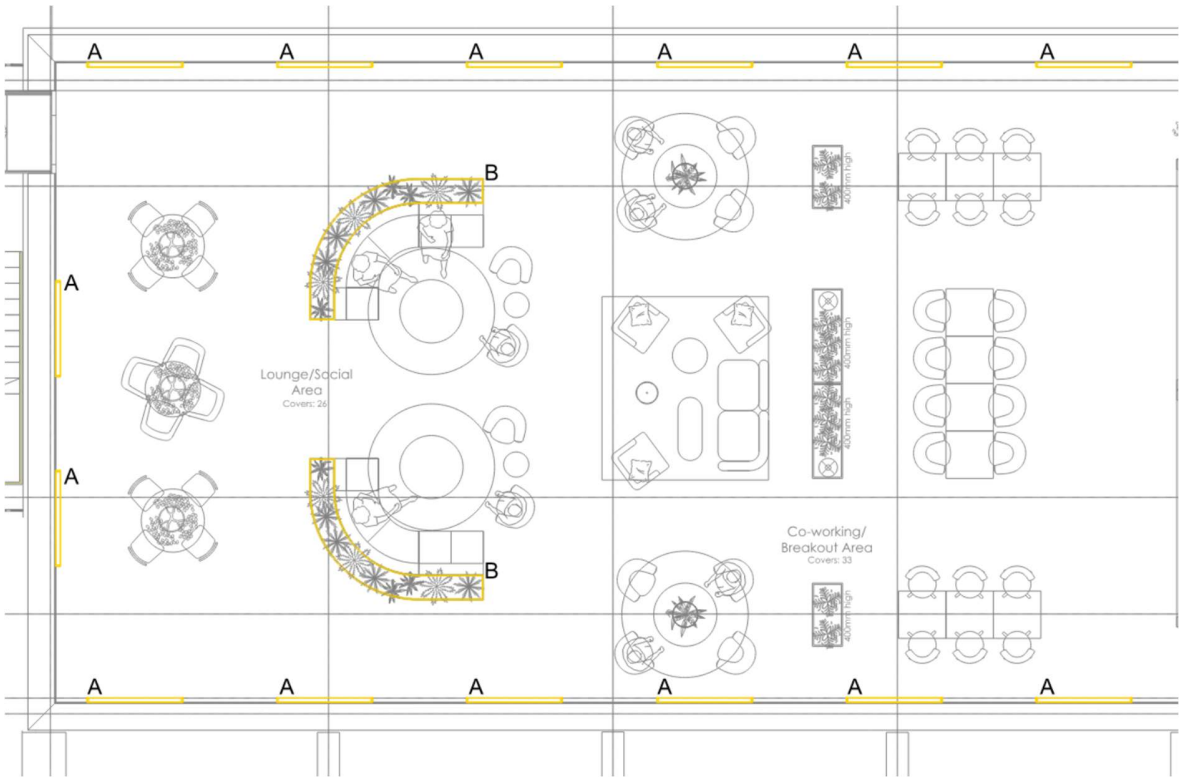
The design approach seeks to ensure that:

- Upward light output is minimised (target ULOR ≈ 0%) to reduce sky glow.
- Light distribution is focused within the canopy zone, limiting spill toward adjacent areas.
- Luminaire aiming and positioning reduce direct views of light sources from surrounding receptors where reasonably practicable.

OPEN ROOF TERRACE AREAS

The remaining roof terrace areas sit outside the primary calculated zone and are intentionally designed to operate at low ambient lighting levels.

These areas are lit for visual comfort, orientation, and atmosphere, consistent with the intended use as a rooftop hospitality space, rather than a fully illuminated circulation or public realm environment.



Lighting in these areas comprises:

- Low-level linear lighting integrated into perimeter edges and fixed furniture (typically ~100 mm AFFL)
- Localised feature and wayfinding illumination

- Supplementary portable, battery-operated table lighting to provide flexible, user-controlled ambient lighting.

The lighting strategy for these areas:

- Seeks to maintain very low average illuminance levels, with localised pockets of light rather than uniform coverage.
- Avoids over-illumination of the terrace.
- Provides visual definition of seating areas and roof edges to support safe use.

It is expected that lighting levels across these areas will be significantly lower than typical public realm standards, and uniformity is not a design objective due to the intentionally ambient nature of the scheme.

LIGHTING CONTROLS, DIMMING AND CURFEW STRATEGY

The scheme is intended to incorporate a flexible lighting control system, allowing luminaires to be zoned and dimmed in response to time, occupancy, and operational requirements.

The control strategy is expected to include:

- Zoned switching between canopy and terrace areas
- Dimming capability across all fixed lighting circuits
- Reduced lighting levels during quieter periods and late evening operation
- The ability to deactivate non-essential lighting outside core operating hours.

Curfew Approach (Indicative):

- Post 23:00: gradual dimming of non-essential lighting to reduced output levels.
- Post midnight (or close of operation): terrace lighting reduced to minimal safety lighting only.

This approach is intended to balance amenity considerations with operational needs and to limit potential impacts on neighbouring receptors during sensitive hours.

IMPACT ON SURROUNDING RECEPTORS

The site is located within a dense urban context, typically corresponding to ILP Environmental Zone E3.

The lighting scheme has been developed with this context in mind and seeks to:

- Limit light spill beyond the site boundary.
- Avoid direct illumination of neighbouring façades and windows.
- Reduce the potential for visually intrusive brightness or contrast.

Indicative Obtrusive Light Limits

In line with ILP GN01 guidance for E3 environments, the design aims to limit:

- Vertical illuminance at site boundary: generally, within 5–10 lux (pre-curfew)
- Lower levels expected during curfew periods

These values are indicative targets at this design stage and will be refined as part of detailed design and final luminaire selection.

The calculated average luminance of the rooftop surface (approximately 0.015 cd/m^2) indicates that the roofscape will appear subtle and visually recessive in wider views.

GLARE CONTROL

Potential glare is mitigated through:

- Directional and downward-facing luminaires
- Low mounting heights in open terrace areas
- Shielding and integration of luminaires within architectural elements

As a result, the likelihood of discomfort glare to neighbouring receptors is considered to be low.

COMPLIANCE AND PLANNING CONSIDERATIONS

The scheme has been developed in line with the key principles of ILP GN01 and relevant planning guidance. The design:

- Seeks to minimise upward light and sky glow.
- Incorporates measures to limit light spill beyond the site.
- Uses controlled, low-level lighting to reduce visual intrusion.

While certain terrace areas are not designed to meet prescribed illuminance levels for formal circulation routes, this reflects the intended use of the space and is consistent with a hospitality-led, low-ambient lighting strategy.

Overall, the proposals are expected to align with the intent of Manchester City Council's external lighting requirements, subject to detailed design development.

CONCLUSION

The proposed lighting design adopts a controlled and context-sensitive approach, balancing operational requirements with environmental considerations.

Through the use of:

- Directional, low-glare luminaires
- Clearly defined lighting zones
- Low ambient lighting levels to the open terrace
- Integrated dimming and curfew controls

The scheme is expected to avoid significant adverse effects in terms of light spill, glare, or visual impact.

The lighting proposals are considered appropriate for the site context and are expected to be acceptable in planning terms, subject to detailed design and final luminaire selection.