



September 21, 2025

Mirvac
Attn: Anne Ng
E: anne.ng@mirvac.com
M: +61 466 850 853

**Re: Harbourside Redevelopment
SSDA2 MOD8 - Reflectivity Analysis
RWDI Project #2105658**

This letter has been prepared by RWDI Australia Pty Ltd (RWDI) in relation to the Harbourside redevelopment project. The letter supports Section 4.55 Modification Applications submitted to the Department of Planning, Housing and Infrastructure (DPHI) for removal of the "Northern Bridge".

The impact the removal of the bridge has on solar reflections off of the development is discussed below. RWDI have previously undertaken computational modelling of solar reflectivity for the development as documented in the report submitted as part of SSDA 2 dated 26 February 2025.

RWDI's assessment took place in two parts, with an initial screening to understand locations where veiling luminance could be above target assuming a worst-case viewing angle, then a detailed assessment where the viewing angle (e.g., of motorists) was specified, representing a more realistic view angle. Based on the results in the previous analysis, the removal of the bridge is impactful at two locations (refer to Image 1) where the recommended threshold of 500 cd/m² was predicted to exceeded:

- Receptor D1 - glare impacts were predicted to occur between 5:15 am and 6:00 am AEST in late-February and mid-October, with the impacts occurring for 0.01% of daytime hours.
- Receptor D6 - glare impacts were predicted to occur between 5:45 am and 6:15 am AEST in late-March and mid-September, with the impacts occurring 0.01% of daytime hours.

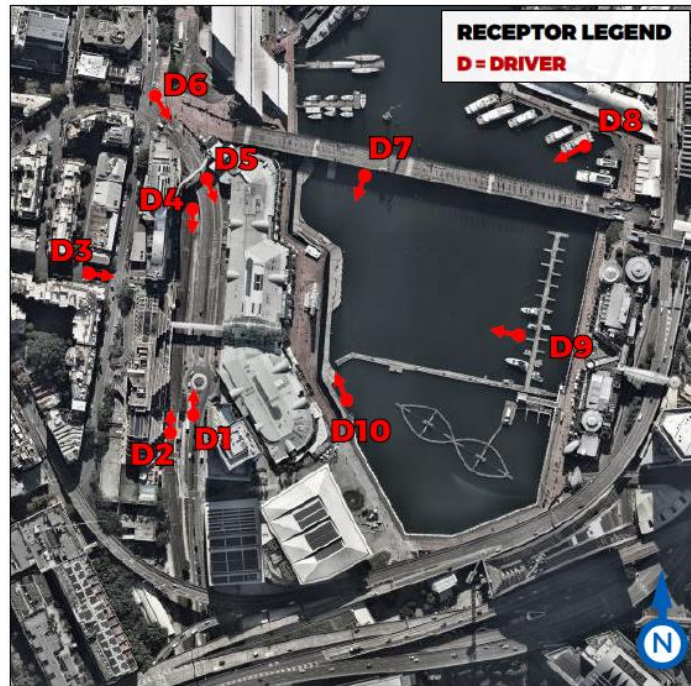


Image 1: Receptors Considered in Detailed Solar Reflectivity Analysis

RWDI's assessment also identified the locations on the façade which were resulting in the predicted glare events (Images 2 and 3).

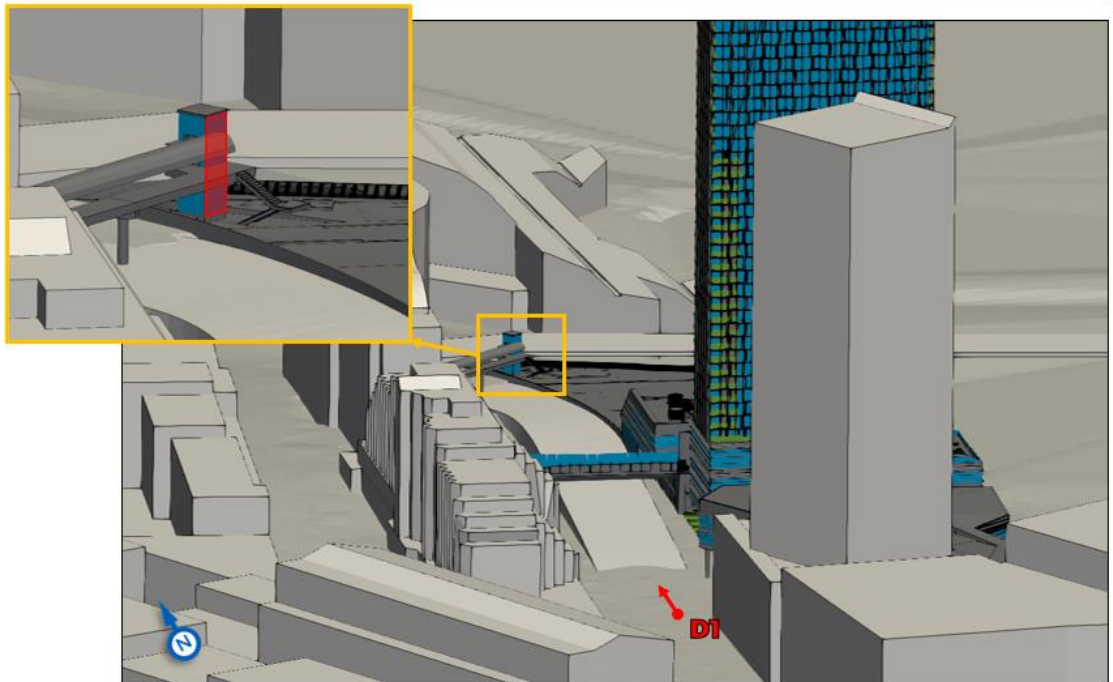


Image 2: Sources of Glare at Receptor D1 (red)

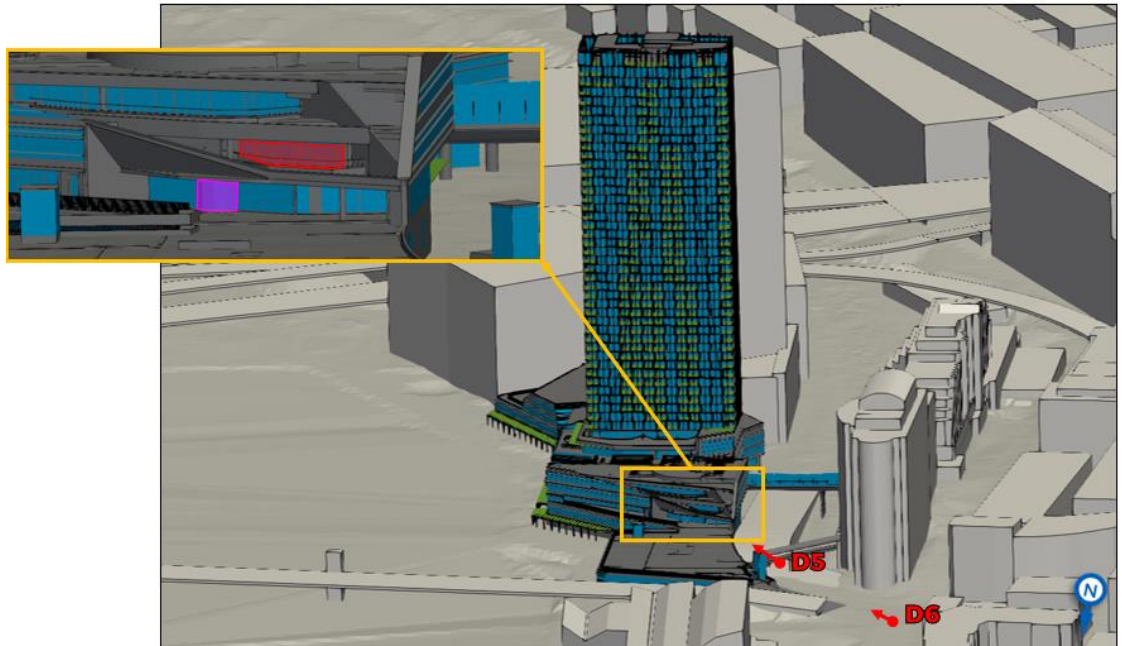


Image 3: Sources of Glare at Receptor D6 (magenta)

The source of reflection impacts at receptor D1 is the lift tower servicing the northern bridge, as such its removal mitigates this impact.

To assess impacts north of the bridge's location, RWDI performed an additional simulation with the northern bridge removed. These simulations confirmed that no additional reflectivity impacts were expected at receptor D6 due to the removal of the bridge (i.e., the bridge did not block reflections that would have otherwise impacted this location).

It is noted that the removal of the northern bridge would result in the relocation of a lift connecting to the waterfront promenade level. The concept shows the new lift to be enclosed in glass. This structure is low in height, generally small, and there is significant landscaping between it and roadways. As such, this structure is likely a low risk for reflectivity impacts to the nearby roads. It is assumed that if glazed, the glass will either be low-reflectivity (e.g., through surface treatment), otherwise detailed simulations will be performed to confirm the limit to spectral reflectivity should SSDA2 MOD 8 and SSDA3 MOD2 be endorsed.



Image 4: Renderings Showing Location of Proposed Lift

Please do not hesitate to contact us if you have any questions.

RWDI



Michael Pieterse
Senior Project Manager | Associate Principal