

29 JULY 2022

Sally Lynch Assistant Project Manager Mostyn Copper Suite 2, Level 8, 60 Pitt Street Sydney, NSW 2000

Updates to the Architects Design Statement for the Parramatta Eels – Kellyville Park Centre of Excellence and Community Facility

Dear Sally,

This letter has been prepared to outline the updates that have been made by HB Architects to the Architects Design Statement (ADS) and accompanying SSDA Plans, drawings an images that were prepared for the Parramatta Eels – Kellyville Park Centre of Excellence and Community Facility project (the 'project').

The updates were required in response to comments from the Department of Planning and Environment (DPE) following a review of the ADS and accompanying plans, drawings and images. Table 1 below provides a list of the comments raised by DPE with a response from HB Arch as well as reference to relevant sections of the ADS that have been updated.

DPE Comments	HB Arch response	Location within the ADS and SSDA Drawings
Provide details of any design treatments along the eastern elevation, and where none are currently proposed, incorporate treatments to improve the visual interest of the eastern elevation.	The East elevations for both the CF and COE buildings have been further developed to enhance how these buildings present on arrival to the site and how the buildings address the nearest street edge being Stone Mason Drive – in short to improve the visual interest of the East elevations and the landscape context the buildings sit within. The design of the area between the two proposed buildings has also been further developed as a key social space to mark and celebrate the Indigenous Cultural Heritage of both the site and the Parramatta Eels. The Architects Design Statement includes further details with regard to the proposed use of materials, form and articulation of the form. The design intent aims to facilitate the activation of the east edge of the CF building as key arrival point to the site for all users that then leads users into the different functional areas.	Architects Design Statement Revision E Section 6.4 (page 53-55) SSDA Drawings A53 rev A A54 rev A A55 rev A

Provide external sun shading to minimise mid-summer sun during working hours. This can be designed so as not to interfere with sightlines to the playing field.

Further design development and assessment of the COE's Thermal envelope including the glass design of the west facade has been undertaken. This work supports the design balance as reflected in the proposed Centre of Excellence by drawing natural daylight inside, achieving a high level of visual connection between the inside and outside functional areas (which includes the training fields) and controlling any detrimental impact of direct sunlight late afternoon in the summer months.

Architects Design Statement Revision E Section 6.4 (page 56)

Erbas Sustain (Sustainability Consultants for the project) have considered the need for western sun-shading and advise;

- External shading device would typically be used to reduce solar gains. Glare from low western sun is best managed with internal blinds by individual building users.
- 2. In the response to RFI, we are considering the following statement 'We are proposing the glazing system with best selectivity (VLT/SHGC)>2 to maximise daylight and minimise solar gains'.
- 3. We recommend Viridian Performatech PH(60) + Super Clear (Double glazed 6-12-6mm) with a VLT70% and SHGC0.33, resulting a Selectivity Ratio of 2.12, which will reduce the solar gains by more than 30%, whilst providing necessary Thermal Comfort and maintaining a relatively high daylight value for a solar control glass.

Selectivity is the balance or ratio between VLT (visible light transmission) and SHGC (solar heat gain co-efficient). Values higher than 2.0 are considered to be best practice and are achieved with relatively clear glass DG units that achieve high performing solar and thermal control.

The JV3 model confirms the proposed internal environment has a high level of Thermal Comfort, Human comfort, and Daylight (reducing the demand for artificial lighting) whilst minimising Energy demand (for heating / cooling) to be at least 10% lower than the Building Code Deemed to Satisfy values.

Providing simple but effective internal blinds is a fundamental of 'Healthy user-friendly building design' as recognised by Greenstar, where individuals have the choice to lower and adjust internal blinds to adjust and suit their own preferences for the work environment.

The building form (roof overhang and facade articulation) does assist in screening the direct sun into the COE work spaces.

To further screen direct sun (Mid-summer 3pm-5pm) would require sun-shading to be square (perpendicular) to the low sun angle – this would result in a significant reduction to the visual connection between the indoor and outdoor functional spaces, as well as reduced in-direct ambient daylight from early morning until later in the afternoon when the west sun reaches the west face.

Operable sun-shading is not supported by the design team as the complexity of an operable system is considered a maintenance risk with the poor durability of such systems often leading to operable systems breaking down and becoming inoperable within a short lifespan.

We trust the additional details in response to the SSDA RFI's satisfactorily address the comments raised by the DPE. Please do not hesitate to contact us should you have any queries.

Yours faithfully

Gray Barton,

HB Arch

Director

PNRL Eels
Kellyville Park – Centre of Excellence and Community Facility