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15 November 2024

Heritage Victoria
Department of Transport and Planning
2 Lonsdale Street,
Melbourne, Victoria 3000

[redacted]

[redacted]

Re: Hepburn Mineral Spring Reserve (H2098)
Hepburn Pavilion Flooring Proposal
Permit Application P40269, RFI Responses

Thank you for your letter requesting further information regarding the proposed Pavilion Flooring Proposal at Hepburn Mineral Spring Reserve. We submit the following responses to your queries:

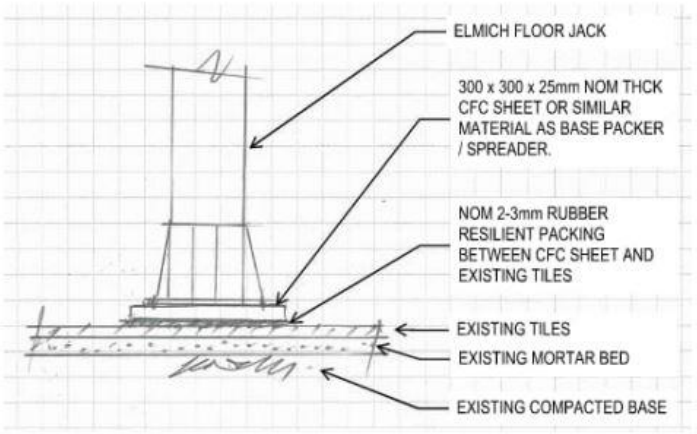
The Heritage Impact Statement outlines two options for resting the proposed pedestals on the original flooring: option A which involves resting the pedestal bases directly on the encaustic tile flooring, or option B which involves layers of protection on top of the flooring that will also level out the space. In reviewing the options it would appear that option B is preferable given the additional protection it places on the original flooring when compared to option A, and some form of protection would be expected prior to installation of the proposed raised flooring. Please provide further information on which option is recommended to have the best long-term outcome for the original tiling, and the rationale for the recommendation.

Following further consultation with Quatrefoil Engineering, a new hybrid solution has been designed to achieve the best long-term outcome for the original tiling. The proposed design incorporates an additional bearing plate with resilient rubber packing beneath the proposed Versijack pedestals. The proposed system is as follows:

- The pedestal jacks will be set on 25mm CFC (compressed fibre cement) sheet bearing plates, sized to match the pedestal base;
- Each bearing plate will rest on a layer of resilient neoprene sheeting to provide further protection to the original tiles.

This system has been specifically engineered to further mitigate point loading on the original tiles, a key consideration in maintaining the integrity of the heritage flooring. Simultaneously, it allows the proven moisture desorption process to continue unhindered, which was the primary concern when determining the appropriate flooring solution. The inclusion of resilient rubber packing beneath the CFC bearing plate acts as an additional

protective layer, 'cushioning' the tiles from the rigid spreader and ensuring the conservation of the original fabric. The proposed introduction of subfloor ventilation is intended to prevent the accumulation of moisture within the environment. Considering the unique challenges within the space, we consider this option to be most suitable with the best long-term outcome for the original tiles.



Proposed jack base detail *(Quatrefoil)*

For additional details, please refer to pp.4-5 of the attached *letter of support* from Quatrefoil Engineering.

Please provide further information on the proposed new flooring, as the drawings refer to 'selected flooring' however do not specify the proposed new flooring surface. Visual impacts of the proposal will be considered during assessment of the permit application and a sympathetic and appropriate flooring type is anticipated, such as hardwood or tile, rather than modern finishes such as vinyl. Please include commentary on the visual impacts of the proposed flooring type, finish and colour.

New timber flooring is proposed throughout the Pavilion to the extents of the proposed pedestal system. There are two options being considered for the space;

- **Option 1:** Hardwood floorboards with a natural red tone, or applied red semi-gloss polyurethane finish. The natural material would provide a robust outcome, that compliments the heritage setting;
- **Option 2**: Plywood panels laid in situ with a red semi-gloss polyurethane finish. This option closely replicates the tones of the original encaustic tiles, ensuring continuity in the aesthetic while introducing a subtle point of difference between the original fabric and the new intervention.

Both options reference the original red encaustic tiled flooring, ensuring the new flooring maintains the tonal harmony and integrity of the Pavilion. This approach aims to minimise visual disruption and preserve the overall aesthetic, while the choice of materials and finishes balances the historic character with modern interventions.

Please provide structural engineering advice regarding the suitability or limitations of the proposed pedestal system for different loading scenarios, such as anticipated normal usage, or events with high attendance numbers.

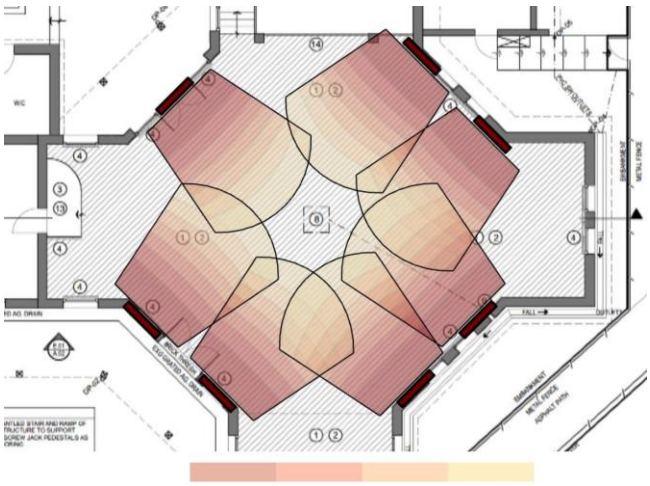
Further advice from Quatrefoil Engineering has confirmed that the proposed flooring solution is suitable for the space. In response to this advice, it is proposed that the flooring system is bolstered by incorporating two 22mm layers of James Hardie Secure Interior subflooring. This configuration exceeds the maximum loading requirements for all relevant activity and occupancy types as outlined in AS1170.1.

Please refer to the attached letter of support from *Quatrefoil Engineering.*

Please provide the model-type for the proposed infrared spot heaters to replace the existing gas tile heaters, and include further information on any make-good works required and any physical impacts of this aspect of the proposal.

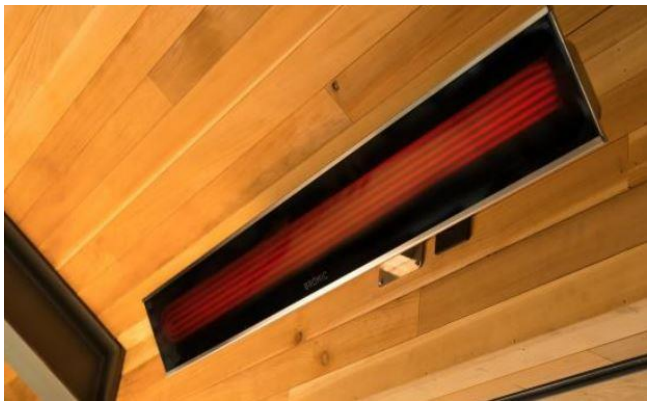
Following further consultation with relevant stakeholders, it is proposed that the new heaters would no longer be suspended from the existing roof members but instead wall-mounted to replace the existing tile heaters. This revised approach optimises radiant heat distribution and efficiency while minimising both structural and aesthetic impacts on the space.

The wall mounted units would be fixed to the existing masonry mortar bedding with non-ferrous fixings. This system ensures reversibility with minimal impact to the historic fabric.



Proposed heating panel configuration & unit locations

The Bromic 4500W Platinum Smart-Heat Electric heater is proposed, and will be installed at the upper height of the masonry walls.



Proposed Bromic 4500W Platinum Smart-Heat

Existing fixings to the redundant heaters will be removed and penetrations patched using an approved lime-based mortar. The new proposed heaters will be fixed to the mortar beds via nonferrous fixings and are entirely reversible.

Please contact us if you require any further information on the above.

Yours Faithfully,

ANDRONAS CONSERVATION ARCHITECTURE
Mark Joseph