

16 July 2024

Claire Muir
Senior Planning Advisor
Development and Commercial
Health Infrastructure
1 Reserve Road
St Leonards NSW 2065

Dear Claire,

**RE: REF 20/2023
BROKEN HILL HOSPITAL REDEVELOPMENT PROJECT
ADDENDUM #1 TO APPROVED REF**

1.0 PURPOSE AND BACKGROUND

This letter serves as Addendum #1 to the approved Broken Hill Hospital Redevelopment REF (REF 20/2023). REF 20/2023 was approved by HI on 12 December 2023.

The approved REF provides for the staged redevelopment of the existing hospital involving:

- The development of the new 1-storey 8-bed Acute Mental Health Unit (MHU) building.
- Alterations and additions to the existing Emergency Department (ED) to reconfigure and expand upon its operations and reconfigure its ambulance bay.
- Associated civil engineering works (involving internal roadworks and carpark reconfiguration, and earthworks and stormwater management works). The carpark reconfiguration works have the potential to deliver up to a maximum additional 41 spaces within the lower campus through the Stage 2 car park expansion.
- Associated tree removal in the respective locations of the MHU, ED, car parking and road reconfiguration works within the lower campus.
- Limited services relocation works in the upper and lower campuses.
- New landscaping and replacement tree planting in various locations.

The REF is subject to the range of mitigation measures, including stamped approved architectural and landscape drawings, and restrictions upon construction hours.

Following approval of the REF, the appointed contractor (Barpa) has undertaken a Value Engineering (VE) exercise with HI and the design team to seek to reduce project costs through refining the design, including its scope and choice of materials and finishes, as well as adjustments to the planting schedule. A new Disaster Store location is also included to replace the existing location displaced by the approved ED works. This has the direct impact of affecting the stamped approved drawing set as well as an indirect impact of having to review and consider any further impacts upon other requirements from the mitigation measures (such as traffic and ESD). The proposed changes and affected mitigation measures are set out below.

Additionally, it is proposed to also refine the approved construction hours by extending the Saturday hours only by an additional 3.5 hours to reduce the overall duration of the works. This in turn will reduce the level, and duration, of disruptions to the operational hospital, particularly those works carried out works within and above a live ED environment.

Lastly, it is proposed to delete Mitigation Measure No. 20 related to the appointment of a NSW EPA-accredited Site Auditor throughout the duration of the works to provide advice to ensure contamination is managed appropriately. The intent is to remove this requirement as the relevant NSW legislation related to the appointment of, and role of, Site Auditors otherwise provides for this. The inclusion of the mitigation measures unnecessarily duplicates this separate process.

This REF Addendum considers the environmental impacts of the proposed changes, including considering if these are lesser than the original impacts (or improve upon already-assessed impacts), as well as whether the original conclusions regarding the need for an Environmental Impact Statement (EIS), Biodiversity Development Assessment Report (BDAR), or Species Impact Statement (SIS) are maintained.

2.0 PROPOSAL

The VE exercise includes a wide range of minor design changes to the project. Most of these are able to be successfully absorbed within the existing terms of the approval, its mitigation measures, and the Crown Certification process. A small number of changes, however, will require adjustment to the approved stamped drawing set based on input from the project's certifier. These matters are set out below, including the new Disaster Store location. The requested refinement of the Saturday construction hours is also separately addressed.

2.1 Design Refinements arising from VE

Two key design refinements arise from the VE exercise which necessitate refinement of the approved stamped drawing set. These are:

- Retaining the original ambulance bay roof adjacent to the ED. The proposal maintains the approved extension of the ED, however the approved new ambulance bay roof has been deleted in favour of building under the existing roof canopy (see **Figures 1** and **2**).
- Replacing the approved rammed earth wall finish on the MHU with a rendered brick finish.

Renders of the approved and proposed for these items are included at **Figures 2** and **3**. **Figure 4** shows an extract of the approved and proposed materials and finishes.

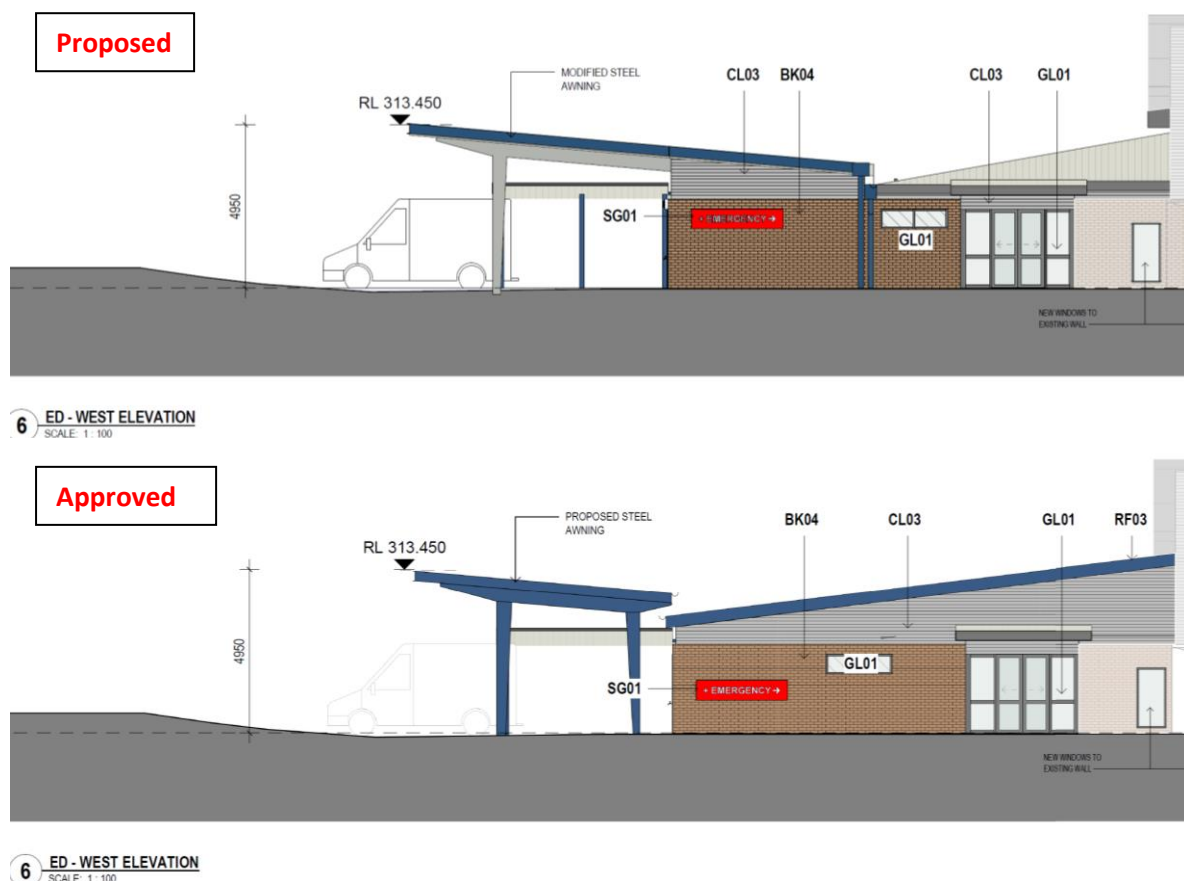


Figure 1 – Proposed (above) and approved (below) west elevation of the ED extension and ambulance bay roof (STH)



Figure 2 – Proposed (above) and approved (below) render of the ED extension and ambulance bay roof (STH)



Figure 3 – Proposed (above) and approved (below) render of the MHU wall finishes at the MHU entry (STH)

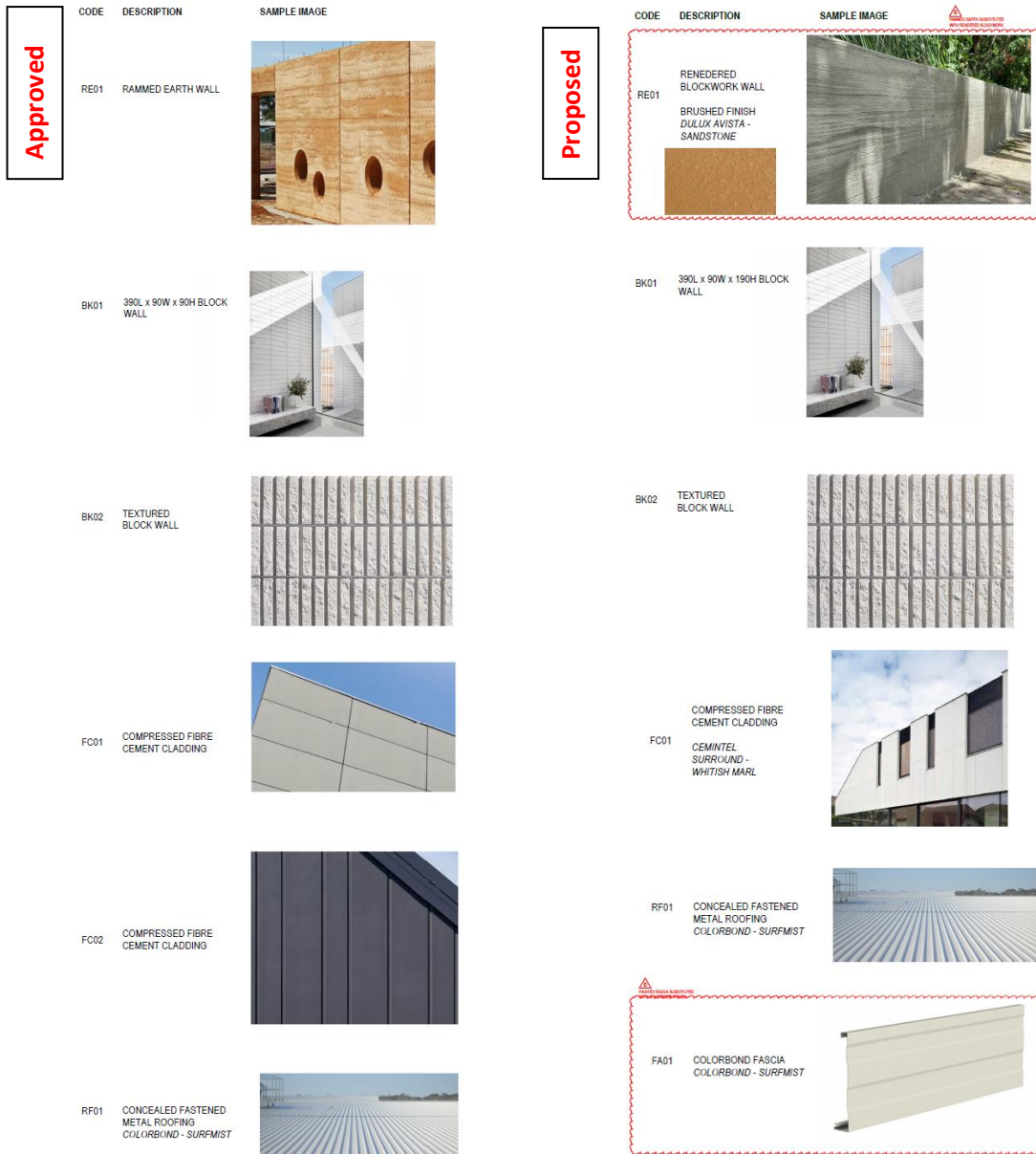


Figure 4 – Selected approved materials and finishes (left) and proposed refined material and finishes (right) (STH)

2.2 Landscape Planting Schedule changes

From a landscaping perspective, all tree species have been proposed with reduced pot sizes at planting stage, with ground covers and shrubs reduced in size and number. This has also helped to reduce existing costs. This again affects the stamped approved drawing set. No reduction in the quality of species mix of planting is proposed, and no additional trees are to be removed or affected and the same number of trees proposed for (offset) planting is maintained. Indeed a minor increase in the number of trees arises from an approved 84 trees to a now proposed 86 trees.

The table over summarises the approved and proposed tree planting scenario, indicating that all 100 litres pot sizes are to be reduced to either a 75 litres or a 45 litres size.

Proposed tree species	Approved pot size and no.		Proposed pot size and no.	
<i>Acacia aneura</i> - Mulga Wattle	100 litres	19	45 litres	19
<i>Acacia victoriae</i> - Gundabluie	100 litres	5	45 litres	5
<i>Eremophila longifolia</i> - Emu bush	100 litres	18	45 litres	19
<i>Eucalyptus camaldulensis</i> – River Red Gum	100 litres	22	75 litres	23
<i>Eucalyptus viminalis</i> - Manna Gum	100 litres	20	75 litres	20
Total Trees		84		86

2.3 Relocated Disaster Store

The approved ED works results in the displacement of the existing hospital Disaster Store. The Disaster Store accommodates surplus or spare medicines, provisions, and equipment in a controlled environment in the event of a large-scale disaster in Broken Hill or the LHD.

The proposed relocated Disaster Store will be placed adjacent to an existing plantroom opposite the existing ambulance bay in proximity of the ED. See the location in **Figures 5** and **6**, as well as an elevation in **Figure 7**. The works associated with the relocation include minor earthworks and a new slab. The Disaster Store will be separately air-conditioned to ensure a controlled environment is provided. The building is a single storey in rise and will not result in any tree removal.

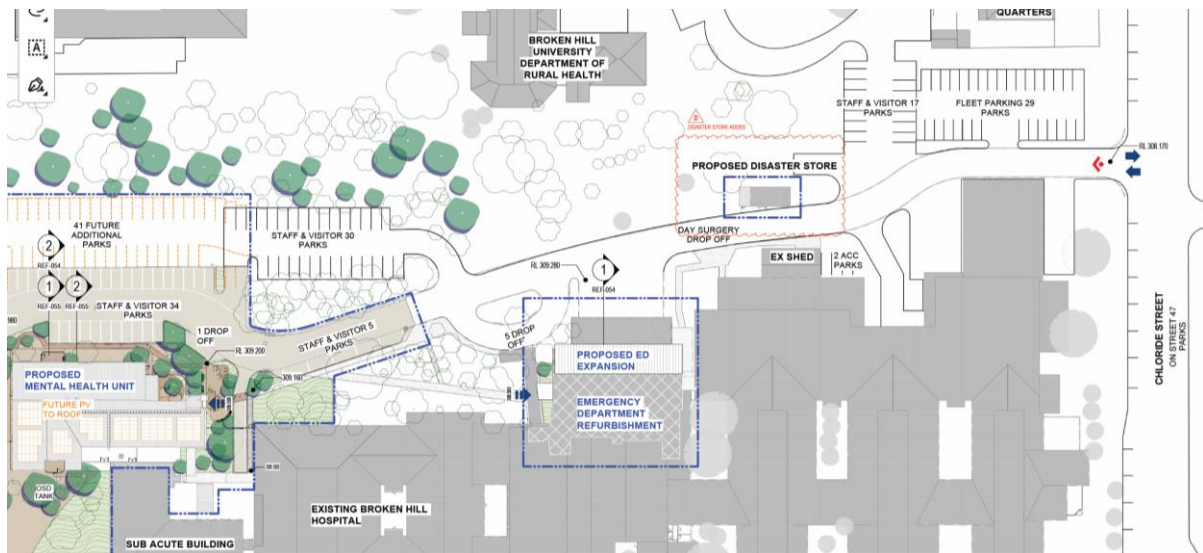


Figure 5 – Proposed location of the new relocated Disaster Store (STH)



Figure 6 – Proposed location of the new relocated Disaster Store as circled (Acorn)

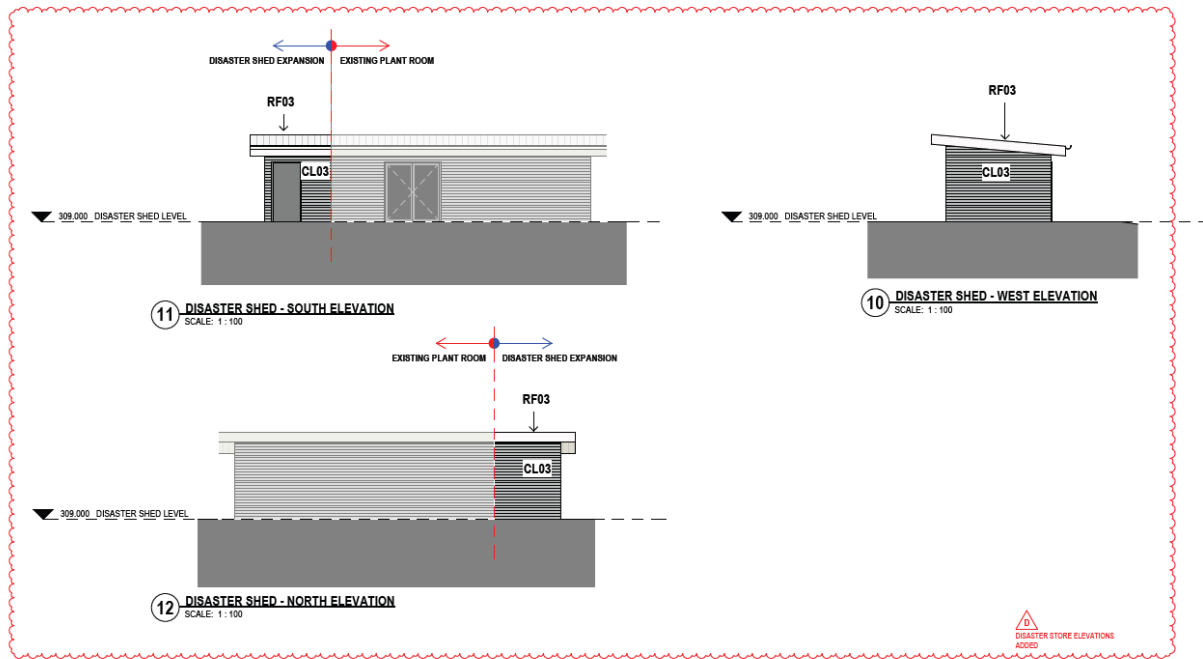


Figure 7 – Proposed elevation of the new relocated Disaster Store (STH)

The proposed changes are reflected in **Appendix A** (revised architectural plans / drawings for approval), **Appendix B** (comparison renders for assessment purposes only), and **Appendix C** (revised landscape drawings / sheets).

2.4 NSW EPA-accredited Site Auditor

As noted, it is proposed to delete Mitigation Measure No. 20 related to the appointment of a NSW EPA-accredited Site Auditor throughout the duration of the works to remove an unnecessary duplication.

Mitigation Measure 20 presently reads as follows:

Prior to the commencement of work, an NSW EPA-accredited Site Auditor must be engaged to provide advice throughout the duration of the works to ensure that any work required in relation to contamination is appropriately managed.

2.5 Mitigation Measure 2 Refinements – Design changes

Accordingly, the revised Mitigation Measure '2 – Development in Accordance with Plans and Documentation' would read as follows, with new text ***bolded in italics*** and text to be deleted shown ~~struck through~~.

2 Development in Accordance with Plans and Documentation

The proposal must be carried out generally in accordance with the Review of Environmental Factors dated 24 October 2023 and prepared by _planning Pty Ltd on behalf of NSW Health Infrastructure (including accompanying Appendices A - AA), ***the REF addendum #1 letter dated 16 July 2024,*** and generally in accordance with the following plans/documentation as modified below and by any of the under-mentioned measures:

Drawing Title	Drawing Ref	Revision	Date	Prepared by
Cover Sheet	STH-AR-DWG-REF-001	€ <i>D</i>	12/10/23 <i>11/7/2024</i>	STH
EXTERIOR FINISHES BOARD	STH-AR-DWG-REF-002	D	12/10/23 <i>11/7/2024</i>	STH

Location Plan	STH-AR-DWG-REF-003	C	12/10/23	STH
Site Plan	STH-AR-DWG-REF-004	€ D	12/10/23 11/7/2024	STH
Demolition Site Plan	STH-AR-DWG-REF-005	€ D	12/10/23 11/7/2024	STH
General Arrangement Plan - MHU	STH-AR-DWG-REF-010	C	12/10/23	STH
General Arrangement Plan – ED and Disaster Store	STH-AR-DWG-REF-011	€ D	12/10/23 11/7/2024	STH
General Arrangement Plan - Roof	STH-AR-DWG-REF-021	€ D	12/10/23 11/7/2024	STH
Building Elevations	STH-AR-DWG-REF-050	€ D	23/10/23 11/7/2024	STH
Site Sections	STH-AR-DWG-REF-054	€ D	12/10/23 11/7/2024	STH
Site Sections	STH-AR-DWG-REF-055	€ D	12/10/23 11/7/2024	STH
Cover Page	REF-LAN-L00-000	F	16/10/2023	Taylor Brammer
Site Plan	REF-LAN-L00-001	F	16/10/2023	Taylor Brammer
Tree Retention and Removal Plan	REF-LAN-L00-002	F	16/10/2023	Taylor Brammer
Landscape Proposal – MHU	REF Design Report 22-147s Page 13	P4	24/10/2023	Taylor Brammer
Landscape Proposal – Main Courtyard	REF Design Report 22-147s Page 14	P4-Rev A	24/10/2023 24/6/2024	Taylor Brammer
Landscape Proposal - Entry	REF Design Report 22-147s Page 15	P4-Rev A	24/10/2023 24/6/2024	Taylor Brammer
Planting Character	REF Design Report 22-147s Page 16	P4-Rev A	24/10/2023 24/6/2024	Taylor Brammer
Material Character	REF Design Report 22-147s Page 17	P4	24/10/2023	Taylor Brammer

2.6 Mitigation Measure 49 Refinements - Revised Saturday Construction Hours

As noted, it is proposed to refine the construction hours by extending the Saturday hours only by an additional 3.5 hours to reduce the duration of the works, which in turn will reduce the level and duration of disruptions to the operational hospital, particularly those related to carrying out works within and above a live ED environment. This involves commencing works one hour earlier than approved on Saturday mornings at 7:00am and concluding works 2.5 hours later than approved at 3:30pm. Mitigation measure 49.4 allows for some flexibility on a case by case basis, however, in this instance as the refined hours are a comprehensive extension of hours for the entirety of the works, they require consideration via an addendum process.

This impacts Mitigation Measure 49 – ‘Restriction on Hours during Construction’ which would now read as follows with new text ***bolded in italics*** and text to be deleted shown ~~struck through~~. The change arising relates to Mitigation Measure 49.1. No change is required or proposed to the balance of existing text in, or requirements of, Mitigation Measure 49, however Acoustic Studio in considering works outside of the standard hours has recommended further measures, which are added as new Mitigation Measures 49.5, 49.6 and 49.7 as set out below. See also the assessment section herein.

49 Restriction on Hours during Construction

49.1 The undertaking of any construction activity on the subject site is to be limited to the following hours:

- Monday to Friday inclusive: 7.00am to 6.00pm;
- Saturdays: ~~8.00am~~ **7:00am** to ~~1.00pm~~ **3:30pm**; and
- Sundays and Public Holidays: No work permitted.

49.2 Entry and departure of vehicles from the site will be restricted to the imposed work hours.

49.3 Activities may be undertaken outside of hours in measures 49.1 and 49.2 if required:

- By the police or a public authority for the delivery of vehicles, plant or materials; or
- In an emergency to avoid the loss of life, damage to property or to prevent environmental harm; or
- Where the works are inaudible at the nearest external sensitive receiver, a disruption notice has been issued by the relevant Local Area Health District (LHD) or hospital and a letter of support has been provided from the relevant LHD or hospital for the Out of Hours Works.

49.4 Consideration will be given to extending these hours to allow for specific work tasks on a case by case basis, subject to approval from HI being sought prior to this occurring and the assessment of any impact of this extension.

49.5 *With respect to the extended Saturday hours from 7:00am to 8:00am and from 1:00pm to 3:30pm, a letter box drop shall be carried out to advise neighbouring receivers of the updated work hours and to provide contact information for complaints or additional information. This shall be carried out ahead of the first use of extended hours.*

49.6 *Attended Noise Monitoring shall be considered by the contractor in order to verify noise levels in accordance with the Acoustic Studio Noise and Vibration Impact Assessment dated 18 October 2023, and the REF Extended Construction Hours addendum letter dated 5 July 2024, where predictions are 20dB or more above the Noise Management Levels (NMLs).*

49.7 *Works above Highly Noise Affected Levels (75 dB(A)) and > 30 dB above RBLs at residential receivers will not be carried out during the extended Saturday hours from 7:00am to 8:00am and from 1:00pm to 3:30pm (i.e. activities with predictions in red or purple at residential receivers noted in Table 3 of the REF Extended Construction Hours addendum letter dated 5 July 2024).*

Noise intensive works such as excavation and hammering or saw cutting is not carried out during the 7:00am to 8:00am period, and where practical, will be avoided during the 1pm to 3:30pm periods.

As per Mitigation Measure 41.2, the use of any rock excavation machinery or any mechanical pile drivers or the like will be restricted to the hours of:

- a. 9am to 12pm, Monday to Friday;
- b. 2pm to 5pm, Monday to Friday; and
- c. 9am to 12pm, Saturday.

2.7 Mitigation Measure 20 Refinement – Site Contamination

Mitigation Measure 20 – 'Site Contamination' is proposed to be deleted. Mitigation Measure 20 would now read as follows with new text ***bolded in italics*** and text to be deleted shown struck through.

20. Site contamination

~~Prior to the commencement of work, an NSW EPA accredited Site Auditor must be engaged to provide advice throughout the duration of the works to ensure that any work required in relation to contamination is appropriately managed.~~

3.0 ASSESSMENT

3.1 Design and co-related visual or other impacts (MHU and ED)

Based on the abovementioned circumstances, this Addendum REF is both minimal and in part administrative in nature. It does not materially affect the approved project or works in any other way than refining the finishes of the MHU and retaining the existing ambulance bay roof.

No new or different overshadowing, visual, or view impacts arise. Design excellence or design quality is not diminished and in general the changes result in a net neutral environmental planning impact.

3.2 Proposed Disaster Store relocation

The addition of the externally placed Disaster Store is also of a low and minor impact. The earthworks are minor and able to be managed through existing mitigation measures. The construction of the store will be subject to the same requirements as set by the approved REF, as amended by this addendum.

The store itself, being single storey in rise, also satisfies the requirements for Development without consent under section 2.61(1)(b) of the TISEPP as it is works for purposes of restoring or replacing accommodation or administration facilities and is less than 15 metres in height and is not located closer than 5 metres to any property boundary. Under section 2.62(1) this new part of the scope avoids the need for re-notification of the works to Council and adjoining occupiers of land.

The noise generated by the new domestically-scaled split system air conditioning unit will be indiscernible beyond the boundaries of the hospital. It is understood that the Disaster Store does not contain or store any dangerous goods requiring any further detailed assessment.

3.3 Traffic (ED)

The proposed changes will have no material impact upon traffic, including parking, accessibility within the hospital site, as well as the existing operational aspects of the ambulance bay. This is supported by a short statement from STH as set out in **Appendix D**.

3.4 ESD (MHU)

Mitigation Measure 14 of the approved REF requires the ESD initiatives set out in the Steensen Varming report dated 16 October 2023 to be incorporated into the design, construction, and operation of the activity, as well as meeting the requirements of DGN 058 and the assessed minimum of 45 plus 5 buffer points under the HI ESD Evaluation Tool.

JHA has been engaged by the contractor for ESD purposes. JHA has advised that the revised design of the MHU and ED generates *no impacts ... to the ESD assessment and point score, ... (with reference) to the Environmental Factors (REF) Report prepared by Steensen Varming and dated, 16 October 2023 for the scorecard*. See **Appendix E**.

Accordingly, the impacts of the materials and design changes from an ESD perspective are net neutral and do not alter the projects already considered and approved ESD credentials.

3.5 Planting / Tree Offset

The change to the planting schedule seeks to reduce the pot sizes of the approved number and type of tree species. No change occurs with respect to the desired and approved landscape outcomes other than the size of the approved trees at planting stage.

No change arises with respect to any of the approved tree removal nor offset planting. The same number of new trees approved are maintained.

A number of changes have been made to the pot sizes and number of plantings of ground covers and shrubs. This in part has required a modest change to the landscape plan where a previously approved dry creek beds styled landscaping has been replaced by now proposed garden beds. This is considered a minor refinement of the landscape proposal for the MHU.

3.6 Construction Hours / Noise and Vibration Impacts

The proposed additional Saturday construction hours are outside of standard hours and are classified as Out of Hours Works (OOHW) Period 1 – Day hours as demonstrated in **Figure 8** below and based on the 'Out of Hours Works Protocol and application requirements for HI Projects' (dated 27 April 2022). This is founded on the NSW Interim Construction Noise Guidelines (ICNG) (DECC 2009), noting the ICNG recommended standard hours are not mandatory and more or less stringent construction hours may be approved by the relevant consent authority.

The additional hours are shown bounded in red in **Figure 8** and could be considered as the most acceptable extension of construction hours in the context of its minor deviation from the standard hours, and the lack of application of any Sunday or public holiday hours, or the more sensitive OOHW Period 1 – Evening hours, or the most sensitive OOHW Period 2 hours.

Hour commencing	12 AM	1 AM	2 AM	3 AM	4 AM	5 AM	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM
Monday																								
Tuesday																								
Wednesday																								
Thursday																								
Friday																								
Saturday																								
Sunday																								
Public Holiday																								

Figure 8 - Construction Hours - Out of Hours Works – Protocol and application requirements for HI Projects (HI)

The justification for the minor extension of hours is founded upon:

- Minimising the impact on existing hospital operations and vehicle accessibility during core business hours.
- Aiming to reduce the overall construction period by 3 months.
- Reducing impacts upon critical ongoing operation of the ED during refurbishment, by reducing the construction period.

Acoustic Studio has considered / assessed the likely impacts of works during the extended Saturdays hours and broadly concluded that:

- Construction noise predictions remain the same as per the assessment in the original noise and vibration assessment, however the relevant Noise Management Levels (NMLs) are 6 to 12 dB lower for OOHW Period 1 than for the standard hours.
- Whilst the impacts are unlikely to change, a more stringent threshold level is set commensurate with the more sensitive hours of the day.
- The previously recommended and imposed noise mitigation measures are reinforced to seek to manage noise generation and mitigate the impacts of noise generating construction activities, whether during standard hours or during the proposed extended hours.
- To address the lower thresholds related to the extended Saturdays hours, additional mitigation measures are recommended by Acoustic Studio. These relates to:

- Letter box drops to advise nearby sensitive receivers of the revised hours of construction and to provide contact information for complaints or additional information.
- Consideration of Attended Noise Monitoring in order to verify noise levels in accordance with the Acoustic Studio assessments.
- Restriction on activities likely to generate high (or offensive) levels of noise to nearby residential receivers and prohibition of certain activities being undertaken within the extended Saturdays hours. These include (with reference to Table 3 of the Acoustic Studio addendum letter – see **Appendix F**):
 - Site Establishment generally.
 - Services Diversions and relocation generally.
 - Relocation of Roads, accessways, and car parking-related generally.
 - MHU-related landscaping and external works.
 - ED-related expansion foundation works.
 - ED-related external works.
 - Additional car parking-related - earthworks.
 - Additional car parking-related - asphaltting.
 - Rehabilitation walkway – construction / installation.
 - Landscaping works generally.

As per the original findings of the REF's noise and vibration assessment, the list of plant and activities provided to Acoustic Studio by Acorn are not expected to generate vibration levels exceeding relevant criteria at any external receiver. Ground borne noise from the likely construction activities is not anticipated to be audible above airborne noise inside residential receivers, and will not require specific controls.

Based on the above, generally, the noise impacts remain the same, and the ability to limit additional noise impacts upon residential receivers will be able to be managed to current and approved levels by limiting the types of works able to be carried out during extended hours. A wide range of works remain able to be carried out with respect to the MHU and ED within the proposed extended hours which serve to meet the objective of reducing the levels of impacts caused by noise and the duration of the works within the live operational environment of the hospital. To that end, the proposal serves to improve the likely impacts of the works by enabling a prompter conclusion of the works, including works with noise impacts.

3.7 NSW EPA-accredited Site Auditor

The deletion of Mitigation Measure 20 is justified as, if retained, it provides for an unnecessary duplication of an existing and applicable role by an auditor within the contaminated lands remediation process. As noted in the JBS&G RAP provided by the approved REF, *overall, it is considered that the proposed actions outlined in this RAP conform to the requirements of the Contaminated Sites Guidelines for the NSW Site Auditor Scheme (3rd Edition) (EPA 2017) because they are: technically feasible; environmentally justifiable; and consistent with relevant laws, policies and guidelines endorsed by NSW EPA.*

CONCLUSION

It is requested that HI consider and approve the proposed refined design, expanded construction hours, and deletion of the duplicated site auditor requirement, on the basis of the justifications and assessment set out above.

The addendum maintains the conclusions reached in the approved REF, including that no EIS, BDAR or SIS is required in relation to the project. The changes are minor and manageable in their context and the impacts are at worst net neutral from a design perspective and in part lessen the originally assessed noise impacts (or improve upon already-assessed impacts) by reducing the duration of

works across all construction hours likely to impart noise impacts, and otherwise preventing noisy works during the proposed extended Saturdays hours.

Should you have any questions or seek further information please don't hesitate to contact me on 0437 259 581 or at oliverklein1968@gmail.com.

Yours Sincerely



Oliver Klein
Director
_planning Pty Ltd

Appendices:

- A - Revised architectural drawing sheets for approval
- B – Comparison renders for assessment purposes
- C - Revised landscape drawing sheets
- D - Traffic statement
- E - ESD statement
- F - Noise and Vibration Assessment addendum letter