ARCHITECTURAL DESIGN STATEMENT

CONTEXTUAL, LOCAL AND OF ITS PLACE

The architectural heritage of Mudgee provides a rich reference point for the development which has closely considered the local architectural vernacular of Mudgee’s public and residential building forms. The objective was to design a new development that can contribute to the existing context and character of Mudgee that will resonate and fit within the community, creating a strong sense of local ownership.

A local Mudgee Architectural study has informed the architectural design palette which includes elements such as:
- Generous building setbacks;
- Landscaped forecourts;
- Expansive verandas;
- Familiar façade rhythms and proportions of colonnades;
- Pitched roofs including various gable and hipped forms;
- Use of brickwork including various patterns and expressed concrete, beams; and verandas that have a rendered or paint finish.

The Mudgee Hospital site is nestled within a residential area, the development is low-rise in nature and set at two stories with an upper plant deck setback to minimise its impact to the streetscape. There is a noticeable fall in the existing site topography from east to west. The design takes advantage of the natural topography, with the bulk of the proposed 2 storey building sitting in the lower part of the site and reducing down to a single level as the natural topography rises up, so that built form follows the natural topography, without increasing the perceived height of the precinct.

Through multiple yield studies, identification of future site development opportunities and the site’s orientation – a campus-style development with the main entrance off Meares Street was established as the preferred solution. A minimum 7.7m building setback from the boundary was established as appropriate for the two storey built form (only 5m setback is required and 9m setback being the average for the houses across Church Street).

A visual connection with the existing Medical Centre forecourt along Church Street is a way to reinforce established medical precinct. Establishment of civic space along Church Street is the way to visually connect to Medical Centre and as means to address the street corner with generous space and civic importance, providing opportunities for wayfinding elements.

The Church Street civic space acts as the presentation of the integrated medical precinct. Extension of civic generosity along Meares Street with the building setback and rich landscaping – boulevard of trees augmenting the pedestrian experience.

The corner of Church and Meares Street will be articulated with a design-integrated signage element to identify the Hospital and lead the way to the Hospital entry. As one moves along Meares Street, the main entry to the Hospital reveals itself with the rising roof element, echoing the rise in natural topography. The Hospital entry features an expressed awning over a transparent glazed façade which encloses the main entry and the associated public concourse.

The transparency of the entry allows for light to fill through the public concourse. The proposed expressed building elements and materials echo the local vernacular and include:
- Face Brick (lighter colour)
- Layered Elements: Gutters, Downpipes, Slab edges, Window openings
- Diffused light glazing for the main entry
- Expressed material for main entry canopy

Using the guiding principles of Crime Prevention Through Environmental Design (CPTED), the public domain created is open to the streetscape, with use of landscaping defining public and semi-public areas, and ensures passive surveillance from the hospital or adjoining buildings.

The location of the mechanical plant has been carefully considered and is either integrated into the terrain on lower ground or in case of the roof plant, is significantly set back from the street to reduce any visual impact and the design of the plantroom enclosure is fully integrated with the building façade. The loading dock/service yard is situated to the north of the site with direct access via an internal road off Lewis Street. The Lewis Street entry point will be used for ambulance access, delivery/logistics and as a staff vehicular entry point. Waste collection at the existing hospital was a focus during the consultation process. Currently, contaminated waste is kept outside and collections are done too infrequently causing issues with odours. The new design will offer a temperature controlled, fully ventilated, dedicated room for the storage of contaminated and cytotoxic waste. Contaminated waste collection times with the private waste collection contractor will also be increased as part of the new development’s change management strategies. General waste will be kept in a large skip bin located in the new service yard, staff will collect and empty the bins gathered from throughout the facility into the large skip bin in the service yard. General waste will be collected from within the service yard. Bin wash and bin store spaces have been included as part of the new development. Recycling is a council service therefore staff will collect recycling and wheel bins out to a collection point on Church Street via the service yard, a concrete path has been provided to Church Street for access.

Being a street corner site, the building forms the street, however due to the generous setbacks landscape never dominates over the public domain or adjoining buildings. All of which contributes to the lack of negative impact on the amenity to adjoining residences. Due to orientation and street corner site the proposed doesn’t overshadow any buildings or private open space. The street corner location also means that there is no privacy or views loss as all the residential development is located across the street to the hospital and the medical centre has a substantial setback to the north.

It is not anticipated that the proposal will have any adverse environmental impacts with respect to wind, due to the following:

- The potential impact for wind tunnelling is limited due to the site not being located within a high density environment with towers.
- Due to the generous setbacks and the reduced building height, the established residential properties surrounding the hospital will remain unaffected.

Traffic movements of emergency and service vehicles remain as per existing, with the services entry of Lewis Street. The helipad is retained in its current position, and doesn’t have any adjoining residential properties.

The façade design with expressed punched windows limits the glazed areas and thus reduces the reflectivity impact, also the building’s orientation, with the majority of public domain being to the east and to the south of the building, doesn’t contribute to the chance of any negative reflectivity impact.

The building only contributes to the precinct and enhances its public domain without any loss of amenity to the existing residential developments. All these elements were important considerations for establishing a unique character for the building that is responsive, sensitive and relevant and will be valued by local people, helping to reinforce a sense of ownership.
SUSTAINABLE, ADAPTABLE AND DURABLE
The project has sought to include sustainability as a fundamental aspect of the project design response and function design. The project design has sought to limit the ecological footprint and greenhouse gas emissions profile of the development via the adoption of the following sustainability frameworks as identified within the NSW Health Infrastructure Engineers Services Guidelines, including:

- The project is to be constructed on previously developed site, limiting the impact to biological diversity & ecology;
- Adoption of an equivalent Australian best practice standard – 4 Star Green Star for environmental design & construction;
- Minimum 10% improvement on energy efficiency / greenhouse gas emissions reduction comparative to minimum industry standards;
- Adoption of a range of design initiatives with the aim to reduce potable water demand.

Building material impacts have been addressed via architectural design specification including the selection of responsible building materials – best practice PVC products and steel sourced from sustainable supply chains. Recycling & diversion from landfill targets for construction & demolition waste have also been set for the project.

Indoor Environmental Quality (IEQ) has been considered as to ensure minimum performance levels are achieved. The following initiatives are aimed to improve the IEQ performance of the project, including Improved acoustic performance, minimum lighting & visual comfort performance, reduced indoor pollutants such as volatile organic compounds & formaldehyde emissions and improved thermal comfort for building occupants have all been considered by the project design.

Consideration of energy & water efficiency has been included within the project design, including – Comprehensive building commissioning & building systems tuning periods, metering & monitoring systems for improved operational energy & water efficiency; LED lighting, automated controls, variable speed fans, economy cycle on air-conditioning, high efficiency MEPS rated equipment, optimised HVAC zoning. Potable water savings – via high WELS rated FFE and sub-surface drip irrigation.

INCLUSIVE, CONNECTED AND DIVERSE
A large proportion of Mudgee Hospital provides for Ambulatory and Community based care. The design features shared spaces on each floor from the entry to the lower ground floor, public stair and lift connections provide access between floors. Generous landscaped outdoor courtyard spaces are provided that flood natural light into the internal areas. Many patient zones are linked to the external courtyards that will be used as therapeutic and active/ mobility spaces. These external zones also offer opportunities for diverse community, cultural activities and customs to take place, cultural activities in open spaces can help to reduce racial and ethnic disparities across local populations. The outdoor spaces will be multi-functional catering for community group activities, support groups and educational groups which can all enjoy these spaces whilst allowing staff to interact and consult with patients in a calming, relaxed environment helping to enhance the level of care and responsiveness of patients to that care and ultimately reduced re-admissions.

The location of the new Mudgee Hospital building is in close proximity to the existing Mudgee Medical Centre to the north and establishes a medical precinct and a link with the adjoining Mudgee Medical centre. Shared services between the Medical Centre and Mudgee Hospital can continue and benefit from the new Mudgee Hospital building and enhanced co-location.

SAFE, COMFORTABLE AND LIVEABLE
Based on contemporary design standards, the new Mudgee Hospital will provide a high level of safety and comfort for clients and staff alike. A passive design approach is always the first option. Passive design solutions towards items such internal and external security, infection control, maintenance, work health safety, public and whole of facility flow. The design responds to regional hospital practices where staff can at times be multi-skilled, the new spaces provided support this concept. The built environment will be safe, comfortable, promoting an enjoyable experience for visitors and staff and also helping to attract highly desirable medical staff to the facility.

FUNCTIONAL, EFFICIENT AND FIT FOR PURPOSE
Through an exhaustive consultation process, current existing hospital operation and practices have been taken into consideration. The new design provides opportunities to improve current practices and stream-line work flows in a more efficient and fit-for-purpose facility. The building has allowed for ‘space’ that can be utilised in the future for expansion of certain services which have been nominated as having projected growth in the coming years. The new building location will allow for future Mudgee Hospital expansion to the east and to the north, the location of the new building can support a future medical precinct, established within the site and with linkages to the existing Mudgee Medical Centre.

CREATING AND ADDING VALUE
The new Mudgee Hospital will serve as a catalyst for good design and future developments on the site and will encourage further good design in the neighbouring areas, raising the standards of the wider area, and multiplying value over time. The design of the new hospital is highly pragmatic, efficient, streamlined and cost effective while delivering long-term returns for investors and users. Return on investment will be ongoing, non-financial returns such as the long-term social benefits the new facility will be capable of providing are important requirements for the community. To avoid potential cost-cutting with short-term gains, early consultation with Health Infrastructure (ERG) and the Quantity Surveyor has taken place, the concepts have been developed so they can be fully realised as initially intended.

ENGAGING, INVITING AND ATTRACTIVE
The visual setting for the new Mudgee Hospital will be inviting, engaging and attractive, fostering a sense of local pride and identity. The forecourt and main entry area will serve as a feature and focal point for the development. The project will endeavour to use this space for displaying the various existing memorials which are currently scattered around the existing Mudgee Hospital site. The existing reinstated memorials will be integrated within the new landscaping and can be viewed by the public. The building will be clad in materials that are robust, ‘timeless’ and easy to maintain. Particular focus is being applied in the detailing to ensure that the building will maintain its appearance over time.