

4.10 VISUAL IMPACT

It is necessary when planning hospitals to maximize operational circulation efficiencies both for patient safety and economies of movement and care. Vertical tower compositions leverage this efficiency by providing short travel distances (relying on lifts) between the clinical and nursing functional levels.

While the project does adopt a vertical massing typology, there will be minimal visual impact on the privacy of neighbouring properties of the residential area to the north of the site (beyond the environmental area). The existing environmental area will be retained providing a visual barrier to the new Tweed Valley Hospital. The established environmental area combined with a distance of over 100m from the hospital to the nearest residential property boundaries precludes any overlooking of the hospital onto neighbouring residences and conceals the bulk of the hospital.

Privacy

Kingscliff Hill residents living on the west orientated slope will have views of the hospital, however with no impacts to resident's privacy due to the distance located from the hospital.

On the southern boundary the proposed new Tweed Valley Hospital project is setback an average of 75 metres to the Cudgen Road boundary. An existing wind-row of mature trees located on the site boundary will be modified to accommodate new entry zones to the hospital and further enhanced/augmented to reduce the visual impact of the new building on adjacent neighbouring lands.

The farmhouses located adjacent the proposed main entrance 764 Cudgen Road and 792 Cudgen Road, are in close proximity to the proposed hospital building having a nominal setback of 100m and 120m respectively. These properties are currently screened on the street edge by a wind row of existing on-site trees along Cudgen Road. Landscape strategies will be employed to maintain privacy screening from the hospital.

In-patient wards (IPU's) have been orientated towards the four corners of the developable site, maximizing unimpeded views for patients and staff.

Figure 25 illustrates the approximate location of the New Tweed Valley Hospital to its title boundary. The proposed maximum development footprint has been sited on the ridge of the deeper northern sector of the developable plateau, taking greatest advantage of the sites topography. Placing the hospital deeper into the site further allows spatial allocation for a zone of 3-4 storey street front buildings along Cudgen Road. These future structures should be designed to address the local urban interface with adjacent suburbs and the Kingscliff TAFE located opposite across Cudgen Road to the south of the site.

All loading dock and services related activity has been located on the north western corner

4.10
VISUAL IMPACT
(CONT.)

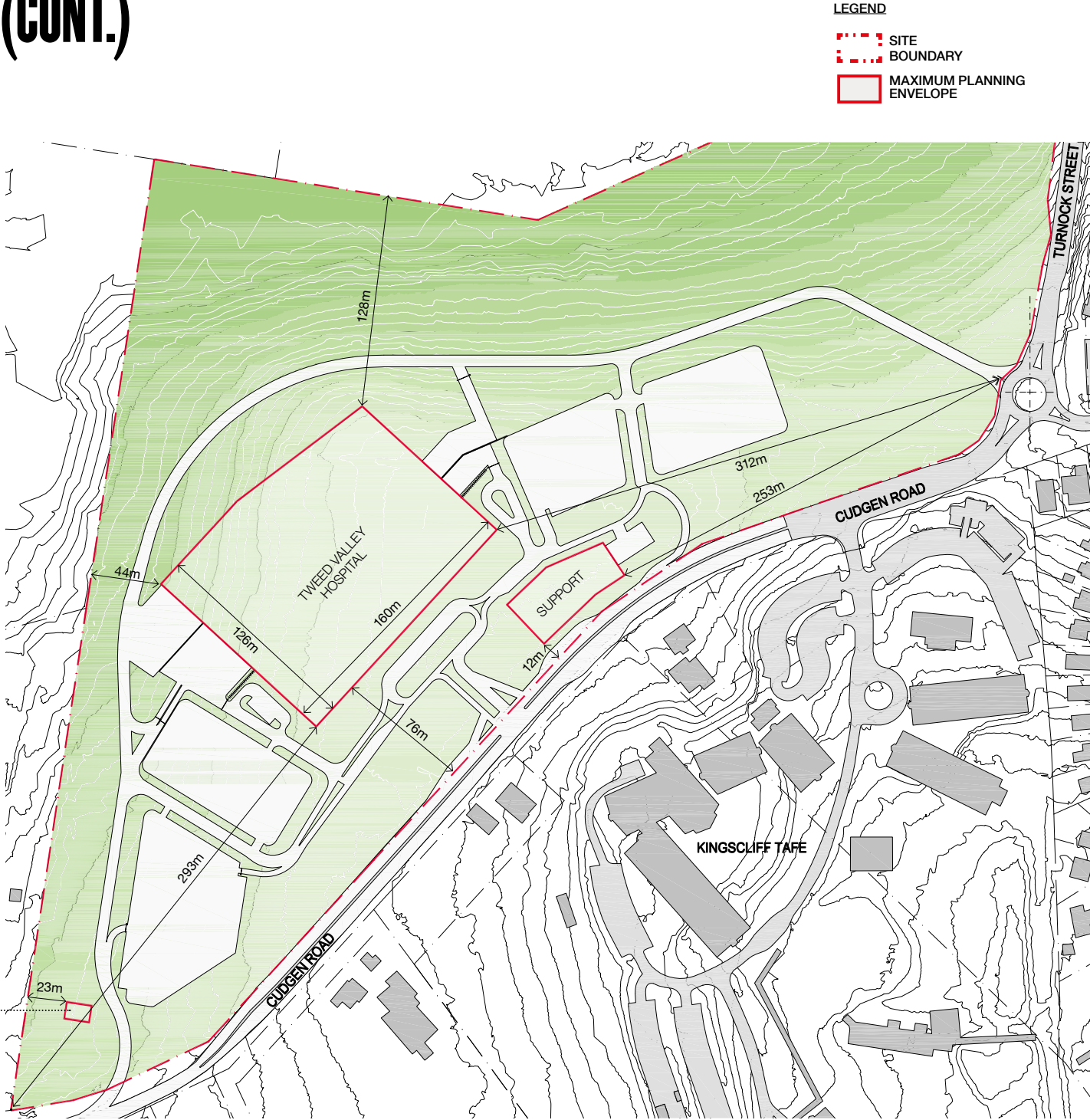


Figure 24: Masterplan - Boundary Setbacks

4.10 VISUAL IMPACT (CONT.)

A helipad has been located on the south west end of the hospital block, directly above the proposed Emergency and perioperative departments at approximately AHD +62m. Helicopter approach is possible from the south or north orientations as required by prevailing local wind conditions. A detailed study was compiled to inform the best location taking flight path restrictions, noise implications and site topography into consideration.

A view analysis has been undertaken to demonstrate the visual impact of the hospital on the surrounding environment. 10 key locations have been selected for this analysis, including:

- 1 McPhail Avenue, Kingscliff
- 1a Oceanview Crescent, Kingscliff
- 2 End of Disney Street, Kingscliff (near the water towers)
- 3 Guilfoyle Place, Cudgen
- 4 Clarke Street, Cudgen
- 5 Kingfisher Circuit, Kingscliff
- 5a Bellbird Drive (cul de sac)
- 6 Tweed Coast Road at junction with Cudgen Road
- 7 Cudgen Road, opposite farm house
- 8 Cudgen Road at junction with Turnock Street

Analysis shows the hospital will be clearly visible from the main site entrance, providing intuitive wayfinding which is to be further complemented with supporting signage. The hospital will also be visible from the adjacent Kingscliff residential area to the east (Kingscliff Hill). This part of the Kingscliff is elevated above the site which the west facing residents currently overlook.

The hospital building distance from the Cudgen Road title boundary and in conjunction with boundary planting will assist to integrate the building mass within the site and locale. Refer to the following drawings for visual impact analysis montages; AR-SKE-53-201, AR-SKE-53-202 and AR-SKE-53-203 and the Landscape Design Report.

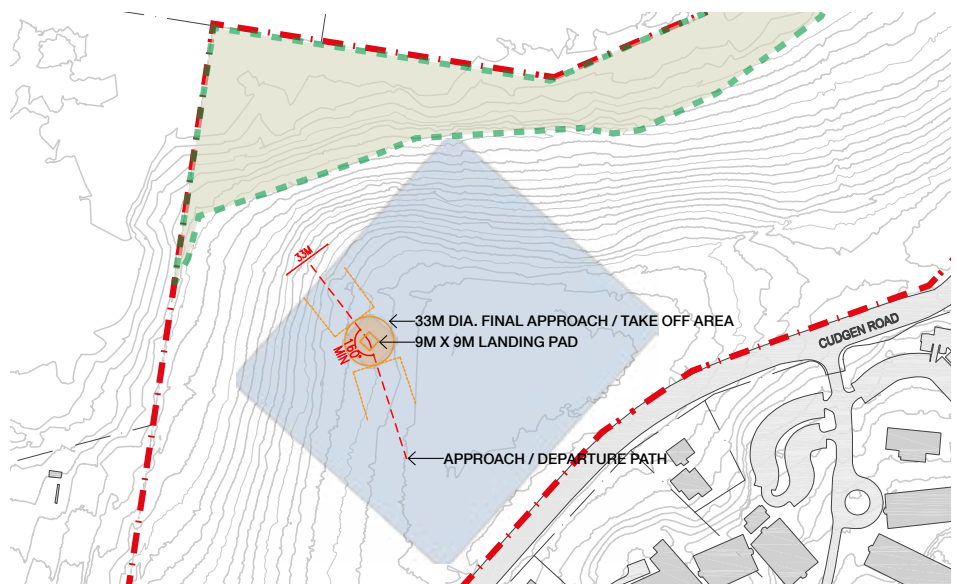


Figure 25: Masterplan - Building Siting and Aviation

4.10 VISUAL IMPACT (CONT.)

The Project provides a significant healthcare service asset to the local community and wider Tweed district. Being a hospital certain services remain perpetually operational, e.g. emergency department. A well-considered, sensitive exterior lighting design will be developed to ensure key components and services of the hospital can be safely accessed and utilized, supporting public amenity and necessary functional zones of the hospital with minimal negative impact to the surrounding locality.

External lighting within the site boundary will be provided to parking, roads and public spaces in accordance with AS/NSZ 1158. This lighting will be private lighting, owned by Health Infrastructure and operated by the LHD.

All exterior lighting will be designed to meet AS 4282 which sets out guidance to control the obstructive effects of exterior lighting. To avoid light spill over all luminaires will have minimal upward light component or be integrated within architectural features such as awnings or canopies that assist to contain light spill.

Particular consideration will be given to residential developments at a lower level than the lighting installation, and direct view of luminaires will be avoided.

New site entrances may require public or private street lighting, this will be designed by a Level 3 ASP and agreed with the local council. Consideration will be given to reliance on sustainable energy sources for external lighting, where feasible.

4.10 VISUAL IMPACT (CONT.)



Figure 26: Viewpoint Analysis - Key Plan