

# TWEED VALLEY HOSPITAL NSW

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SSD STAGE 2

ARCHITECTURAL AND  
URBAN DESIGN REPORT

PREPARED FOR HEALTH INFRASTRUCTURE NSW

23 SEPTEMBER 2019

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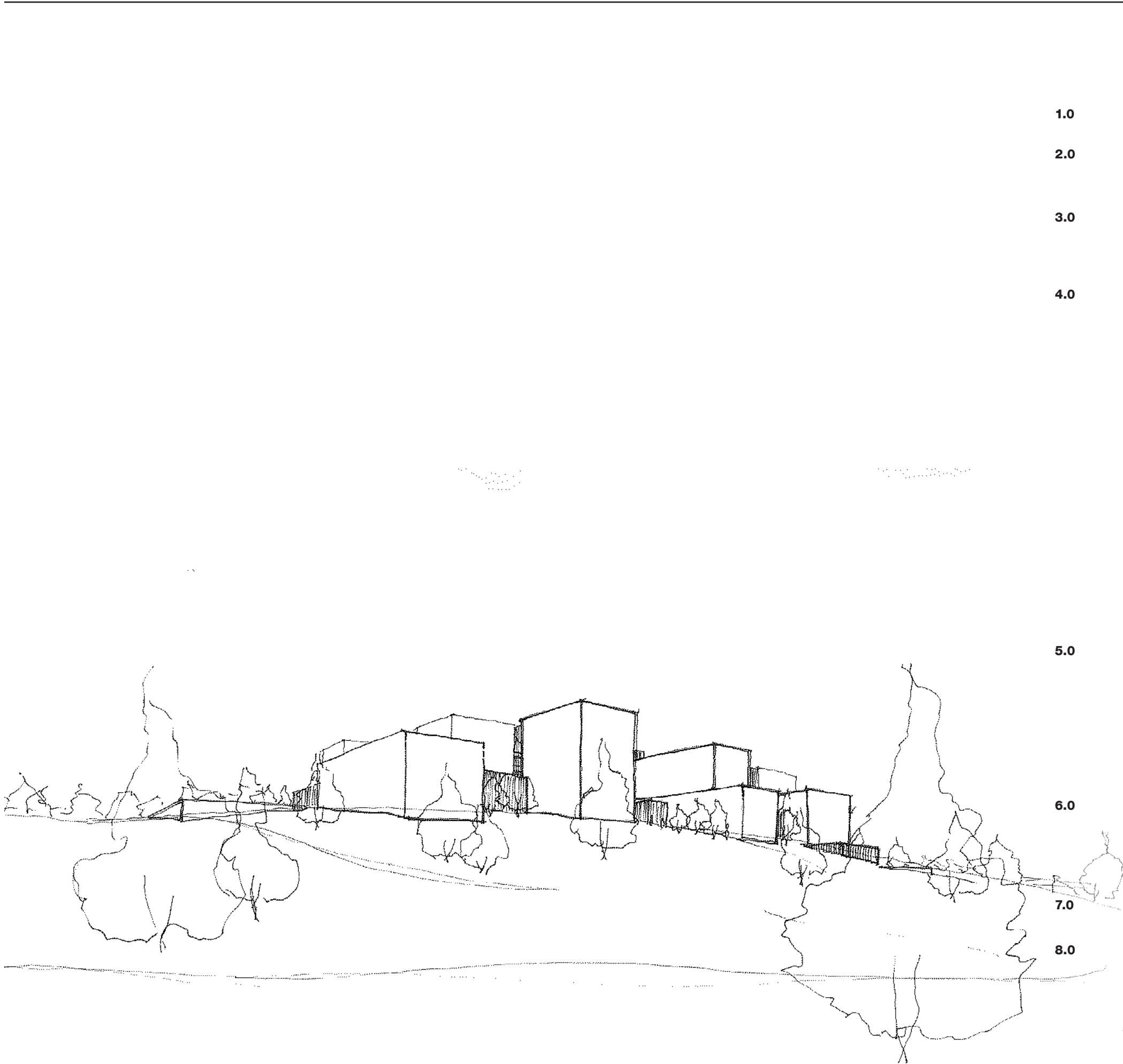
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# 1.0 INTRODUCTION

1.1 OVERVIEW

On the 11 June 2019 the Minister for Planning and Public Spaces granted approval for the Concept Proposal and Stage 1 Early and Enabling Works for the new Tweed Valley Hospital (SSD 9575) located at 771 Cudgen Road, Cudgen (Lot 11 DP1246853). All documents relating to this consent can be found on the major project website of DPIE at <https://www.planningportal.nsw.gov.au/major-projects/project/10756>.

The Environmental Impact Statement (EIS) has been prepared to assist in the State Significant Development (SSD) Stage 2 Application for the Tweed Valley Hospital which will be assessed under Part 4 Division 4.7 of the Environmental Planning and Assessment Act 1979 (EP&A Act). This, along with supporting documentation, provides a clear outline of the Stage 2 Application.

The Tweed Valley Hospital Project broadly consists of:

- Construction of a new Level 5 major regional referral hospital to provide the health services required to meet the needs of the growing population of the Tweed-Byron region (in conjunction with the other hospitals and community health facilities across the region);
- Delivery of the supporting infrastructure required for the Tweed Valley Hospital, including green space and other amenities, roads and carparking, external road upgrades and connections, utilities connections, and other supporting infrastructure.

1.1.1 STAGE 2 HOSPITAL MAIN WORKS AND OPERATION

The Stage 2 SSD component seeks consent for the Main Works and Operation of the Tweed Valley Hospital, including:

- / Construction of Main Hospital Building:
  - Main entry and retail area

- Administration
- Community health
- Inpatient units
- Outpatient clinics and day only units
- Child and Adolescent Services
- Intensive Care Unit
- Mental Health Unit
- Maternity Unit and Birthing Suites
- Renal Dialysis
- Pathology
- Pharmacy
- Radiation Oncology as part of integrated Cancer Care
- Emergency Department
- Perioperative Services
- Interventional Cardiology
- Medical Imaging
- Mortuary
- Education, Training, Research
- Back of House services
- Rooftop Helipad

- / Construction of support building, referred to as the ‘Health Hub’, containing:
  - Oral Health
  - Community Health
  - Aboriginal Health
  - Administration
  - Education, Training and Research

- / Internal Roads and Carparking, including Multi-Deck parking for staff, patients and visitors
- / Construction of a temporary building for the ‘Tweed Valley Skills Centre’
- / External road infrastructure upgrades and main site access

- / Environmental and wetland rehabilitation, including rehabilitation of existing farm dam as outlined in the Biodiversity Development Assessment Report (BDAR) prepared for the Concept Proposal and Stage 1 works
- / Site landscaping
- / Signage
- / Utility and service works

The works outlined above comprise five key components, which are subject to various funding allocations and may be delivered independently to each other. Stage 2 has therefore been defined in the following sub-stages:

- Stage 2A – Main Hospital Building complete with supporting roads, services infrastructure and landscaping
- Stage 2B – Main Hospital Building incremental expansion areas
- Stage 2C – Health Hub
- Stage 2D – Tweed Valley Skills Centre
- Stage 2E – Multi-Deck Carpark.

(Note: Stages are not listed in chronological order and may be delivered independently to each other)

Development consent is sought for the all 5 components of Stage 2 under this SSDA.

Plans for Stage 2 Main Works and Operation are attached in Appendix B of the EIS. Approval of Stage 2 will enable the new Tweed Valley Hospital to be built which will provide a much-needed contemporary health service facilities for the surrounding region.

1.1.2 POTENTIAL FUTURE EXPANSIONS

Any subsequent stages or modifications to the proposal would be subject to separate applications as required including the potential future expansion of the facility.

2.0

DEPARTMENT OF PLANNING  
AND ENVIRONMENT —  
NSW GOVERNMENT

PART A: SECRETARY’S ENVIRONMENTAL ASSESSMENT REQUIREMENTS (SEAR)

Planning Secretary’s Environmental Assessment Requirements were received on 18 July 2019, issued under Section 4.12(8) of the Environmental Planning and Assessment Act, Schedule 2 of the Environmental Planning and Assessment Regulation 2000.

The submission comprises a detailed Stage 2 DA application for the proposed new Tweed Valley Hospital and associated facilities.  
Table 1 references the architectural response to the SEAR key issues. The SSD Stage 2 scope of works is further supported by detail drawings reference Appendix B.

Table 1 - Secretary’s Environmental Assessment Requirements

| A   | SECRETARY’S ENVIRONMENTAL ASSESSMENT REQUIREMENTS  | REPORT REFERENCE                           |
|-----|--|--|
| 4   | BUILT FORM AND URBAN DESIGN  |  |
| 4.1 | Assess how the proposed built form is consistent with and located in accordance with the built form, urban design and landscaping conditions imposed under SSD 9575  | Refer Table 2                              |
| 4.2 | Assess how the proposal achieves consistency with the Tweed Valley Hospital Built Form and Urban Design Report.  | Refer Table 2                              |
| 4.3 | Address design quality and built form, with specific consideration of the overall site layout, street-scape, open spaces, façade, rooftop, massing, setbacks, building articulation, materials and colours   | 4.4 and 4.7                                |
| 4.4 | Provide details of any digital signage boards, including size, location and finishes   | 4.8 and Way-Finding, Signage Design Report |
| 4.5 | Detail how services, including but not limited to waste management, loading zones, and mechanical plant are integrated into the design of the development.   | 4.14                                       |
| 4.6 | Provide detailed site and context analysis to justify the proposed site planning and design approach, including massing options and preferred strategy for future development  | 4.2 and 4.3                                |
| 4.7 | Provide a detailed site-wide landscape strategy  | 4.7 and Landscape Design Report            |
| 4.8 | Provide detail on way-finding and visual integration with scenic landscape   | 4.8 and Way-Finding, Signage Design Report |
| 4.9 | Address CPTED Principles   | 4.16                                       |
| 5   | ENVIRONMENTAL AMENITY ASSESSMENT/STATEMENT   |  |
| 5.1 | Address amenity impacts in accordance with the built form, urban design and landscaping conditions imposed under SSD 9575  | 5.6  |
| 5.2 | Detail how a high level of internal amenity for the patients and workers will be provided relating to:<br>1. Access to natural daylight and ventilation<br>2. Acoustic separation and solar shading provisions<br>3. Additional spaces for patients and visitors to gather<br>4. Visual and physical access to outdoor landscape from inpatient rooms and waiting and circulation areas<br>5. Interior design strategies to promote patient recovery | 5.1, 5.2, 5.3, 5.4 and 5.5                 |
| 6   | STAGING  |  |
| 6.1 | Provide details regarding the staging of the proposed development (if any)   | 4.13                                       |

**PART B: DEVELOPMENT CONSENT, PART B CONDITIONS TO BE SATISFIED IN FUTURE DEVELOPMENT**

Development Consent under Section 4.38 of the Environmental Planning and Assessment Act 1979, was received from the Minister for Planning and Public Spaces 11th June 2019, Application Number; SSD 9575 for the proposed Tweed Valley Hospital at the site, 771 Cudgen Road, Cudgen (Lot 11 DP 1246853).

Development Consent has been granted for the Tweed Valley Hospital, including;  
/ Concept Proposal  
/ Stage 1 Early and Enabling Works

Table 2 references the Architectural Report, response to Part B Conditions to be Satisfied in Future Development Application(s).

Table 2 - Development Consent, Section 4.38 of the Environmental Planning and Assessment Act 1979, Part B Conditions

| DEVELOPMENT CONSENT,<br>SECTION 4.38 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979<br>PART B CONDITIONS TO BE SATISFIED IN FUTURE DEVELOPMENT |  | REPORT REFERENCE                                      |
|---|--|---|
| BUILT FORM, URBAN DESIGN AND LANDSCAPING  |  |   |
| B2  | The future hospital building and the Health Hub, including the setbacks to the boundaries, must be consistent with the approved plans listed in condition A2 of Schedule 2.  | 3.0   |
| B3  | The future hospital building in the Stage 2 application is restricted to:<br>(a) maximum building height of RL 67.1 including the helipad and plant rooms;<br>(b) maximum building height of RL 54.85 for the main building mass;<br>(c) the lowest basement level at RL 14.25; and<br>(d) the level of the entry from Cudgen Road at RL 27.75   | 4.3   |
| B4  | The Health Hub fronting Cudgen Road is restricted to:<br>(a) a maximum height of RL 39.4; and<br>(b) an entrance level floor height of RL 27.75 from Cudgen Road.  | 4.3   |
| B5  | The maximum gross floor area of the two buildings within the Site (hospital and Health Hub), are to be approximately 65,000 square metres (m2) excluding the helipad on the roof top of the future hospital building.  | 7.0   |
| B6  | All proposed retaining walls within the Site, forming part of the Stage 2 application, must be restricted to a maximum height of approximately 3.4m from the proposed ground level on each side of that location. The Stage 2 application must include the details of treatment of retaining walls, the proposed battered embankment and the landscaping treatment on top of the walls.  | Landscape Design Report and Civil Engineering Package |
| B7  | The site plan and the landscape master-plan for the Stage 2 application must include the following as identified in the approved Landscape Zonal Plan prepared by Turf Design Studio dated 03/05/2019:<br>(a) details of the tree trunk line along the southern edge of the retained vegetation to the north of the Site;<br>(b) details of Asset Protection Zones (APZ);<br>(c) a minimum 10m wide vegetative buffer on the western side;<br>(d) a minimum 30m wide vegetative buffer fronting Cudgen Road on the southern side;<br>(e) vegetative buffer on the eastern side along Turnock Street;<br>(f) a planting schedule of trees replacing the proposed loss of canopy on the Site;<br>(g) details of species that would be suitable to screen agricultural spray drift from the southern and western side of the Site;<br>(h) the identified landscape zones including farm landscape with details of edible produce;<br>(i) details of 'Koala food trees' to be planted in proximity to the identified potential koala habitat locations in vegetation Zone 6 of the Biodiversity Development Assessment Report prepared by Greencap dated January 2019;<br>(j) details of the low maintenance native species to be planted in the APZ areas;<br>(k) details of suitable species to be planted within the bio-retention basins proposed for treatment of nutrients within the "proximity area for coastal wetlands";<br>(l) details of the replanting of the exotic grass of Zone 9 as detailed in the Biodiversity Development Assessment Report prepared by Greencap dated January 2019 including rainforest species suitable for habitat of Mitchell's Rainforest Snail; and<br>(m) evidence of consultation with NSW Rural Fire Service (RFS) in identifying the suitable species to be planted within the bio-retention basins and the mapped proximity area to coastal wetlands of the State Environmental Planning Policy (Coastal Management) 2018 (Coastal Management SEPP) to avoid any inconsistencies with the Planning for Bushfire Protection (PBP) 2006 and PBP 2018 (pre-release version) in relation to APZ guidelines. | 4.7 and Landscape Design Report                       |
| B8  | The urban design and built form of the buildings, public spaces and open areas, proposed as part of the Stage 2 application must not be inconsistent with the "Tweed Valley Hospital Built Form and Urban Design Report" prepared by Bates Smart dated 19 October 2018 and the addendum dated 24 January 2019.   | 4.1   |

Table 2 - Continued.

|              |   |                                      |
|--------------|---|--------------------------------------|
| B9           | The public spaces, landscaped areas and the buildings proposed as part of the Stage 2 application must have regard to the following matters:  | Section 4.0 generally                |
|              | (a) a high standard of architectural design, materials and detailing appropriate to the building type and location;   | 4.4                                  |
|              | (b) the form and external appearance of the proposed development to improve the quality and amenity of the public domain;   | 4.2, 4.3 and Landscape Design Report |
|              | (c) the relationship of the built form with the Site topography including appropriate level changes and built form articulation (where relevant) so that the built form follows the natural contours and avoids the need for high retaining walls, cut and fill where possible;                     | 4.2                                  |
|              | (d) environmental impacts such as solar access to the internal areas of the hospital, specifically, in patent units (IPU) and public spaces within the Site, impacts of noise due to surrounding land uses on the users (specifically the patients);  | 5.5                                  |
|              | (e) environmental amenity impacts on the surrounding residents, users of agricultural land and other identified sensitive users due to overshadowing, visual privacy, visual amenity, wind impacts on surrounding areas, reflectivity, light spill and other identified impacts;                    | 5.6                                  |
|              | (f) the integration of the future buildings (specifically the hospital building) with the landscaped areas and public spaces within the Site including connectivity between the hospital building and ground level landscaped areas for patients, staff and visitors;                               | 4.12 and Landscape Design Report     |
|              | (g) screening of the external courtyards within the building, accessible to the patients and visitors, from the agricultural land uses, as per recommendations of the Land Use Conflict Assessment Report prepared by Tim Fitzroy and Associates dated 18 October 2018 and the addendum;            | 5.5                                  |
|              | (h) integrating local indigenous identity, culture and innovation in design and delivery;   | 4.10                                 |
|              | (i) the creation of a Boulevard within the Site that would act as the central vehicular spine and complemented by pedestrian walkways connecting all the public and service areas of the Site (with appropriate separation where needed);   | 4.2 and Landscape Design Report      |
|              | (j) pedestrian, cycle, vehicular and service access and circulation requirements, including the permeability of any internal pedestrian network, covered pedestrian connections throughout the Site, and improvements to the public domain;   | 4.2 and Landscape Design Report      |
|              | (k) achieving appropriate interfaces between the hospital building and the public domain; and   | 4.2 and 4.3                          |
| B10          | (l) mitigation measures around mosquito (including mosquito breeding) and biting insects  | 5.5                                  |
|              | (m) future proofing the development so that it can adapt to foreseeable changes and future expansion.   | 4.13                                 |
| B10          | The Stage 2 application must include evidence of consultation with GANSW in developing the design of the final built form of the hospital and the associated buildings within the Site.   | 4.11 and Appendix 8.1                |
| SOLAR ACCESS |   |                                      |
| B13          | The Stage 2 application must be supported by solar access diagrams to address whether adequate solar access is provided, between 9am and 3pm during winter solstice, to the public spaces (immediately south of the proposed building footprint); internal landscaped courtyards (if any) and IPUs. | 5.5                                  |



The background of the slide features several overlapping, irregular shapes filled with a dense, grey, hand-drawn hatched pattern. A red dotted line forms a jagged, irregular polygon that encloses a portion of these hatched areas in the upper right quadrant of the slide.

# **3.0 SITE AND CONTEXT ANALYSIS**



# 3.1 SITE AND LOCALITY

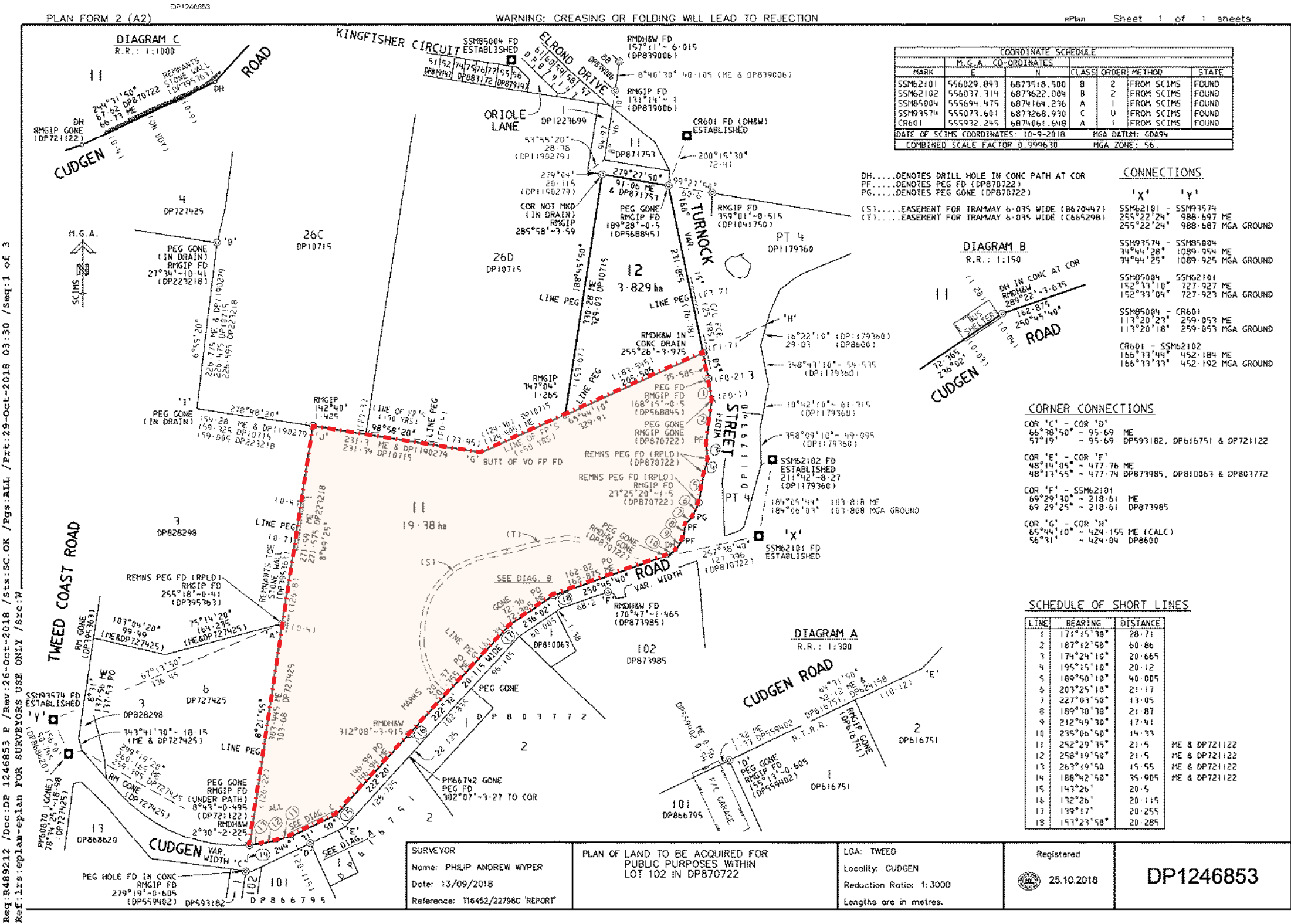
## TITLE

The site for the Tweed Valley Hospital is a single lot located at 771 Cudgen Road, Cudgen NSW. The site legally described as Lot 11 DP 1246853 has an area of 19.38 ha and is owned by Health Administration Corporation (HAC).

The site is zoned SP2 (Special Purpose Zone 2) – permitting, infrastructure and related uses (Health Services Facility).

The site is located approximately 13.5km south of Tweed Heads and can be accessed from the Pacific Motorway (M1) (Chinderah/Kingscliff exit) via Tweed Coast Road (3.3km) or Cudgen Road (6.3km). The site for the new Tweed Valley Hospital is located fronting Cudgen Road in the peripheral west of Kingscliff urban area and is well connected by an established road network system. Tweed Shire Council's Tweed Road Development Strategy further identifies a number of future roadway capacity improvement proposals including a four-lane upgrade of Tweed Coast Road which will enhance connections to the Tweed Valley Hospital.

The site is currently serviced by two existing bus routes, including the T603 – Tweed Heads to Pottsville, and T601 – Kingscliff to West Tweed. The routes connect to the north and south regions of Tweed Heads. Bus stops currently exist either side of Cudgen road, immediately in front of the site. The scope of works includes the upgrade of the two bus stops, to be relocated adjacent to the proposed new campus main public entrance.





3.1 SITE AND LOCALITY

TRAFFIC CONNECTIVITY - SURROUNDING ROADS

The site is located approximately 13.5km south of Tweed Heads and can be accessed from the Pacific Motorway (M1) (Chinderah/Kingscliff exit) via Tweed Coast Road (3.3km) or Cudgen Road (6.3km). The site for the new Tweed Valley Hospital is located fronting Cudgen Road in the peripheral west of Kingscliff urban area and is well connected by an established road network system. Tweed Shire Council's Tweed Road Development Strategy further identifies a number of future roadway capacity improvement proposals including a four-lane upgrade of Tweed Coast Road which will enhance connections to the Tweed Valley Hospital.

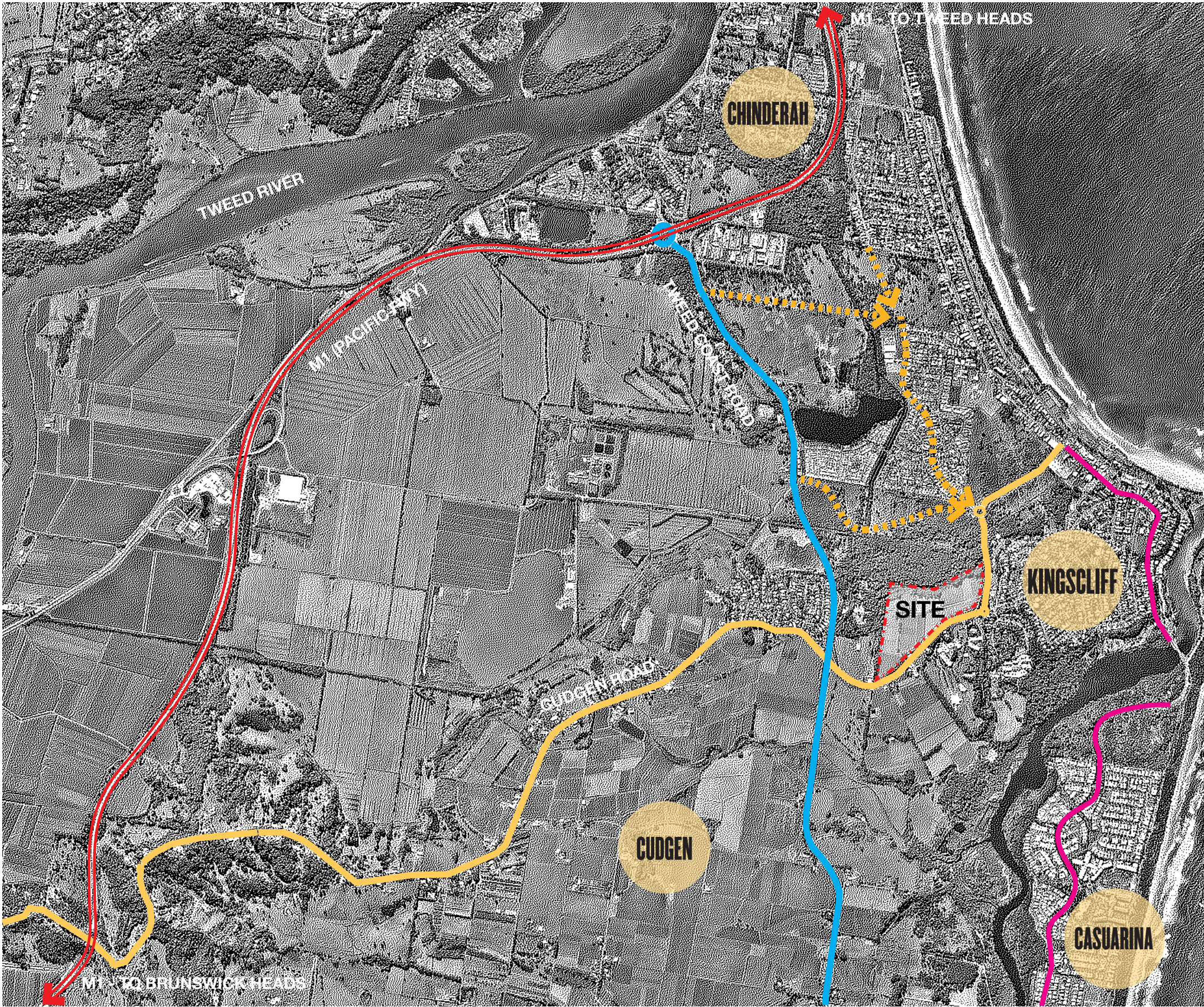
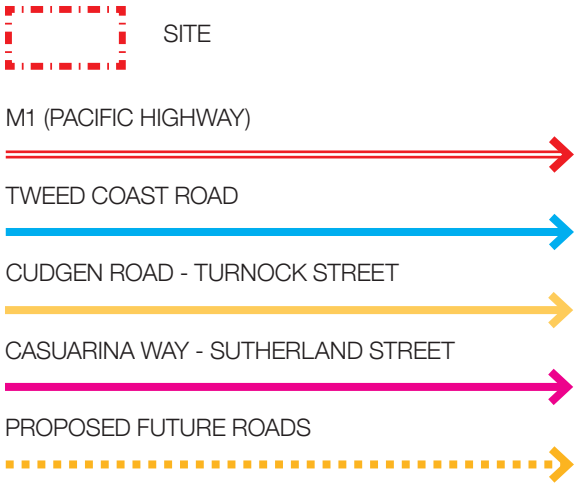


Figure 2. Site Locality Plan - Road Network



3.1 SITE AND LOCALITY

TRAFFIC CONNECTIVITY - PUBLIC TRANSPORT

The site is currently serviced by two existing bus routes, including the T603 – Tweed Heads to Pottsville, and T601 – Kingscliff to West Tweed. The routes connect to the north and south regions of Tweed Heads. Bus stops currently exist either side of Cudgen road, immediately in front of the site. The scope of works includes the upgrade of the two bus stops, to be relocated adjacent to the proposed new campus main public entrance.

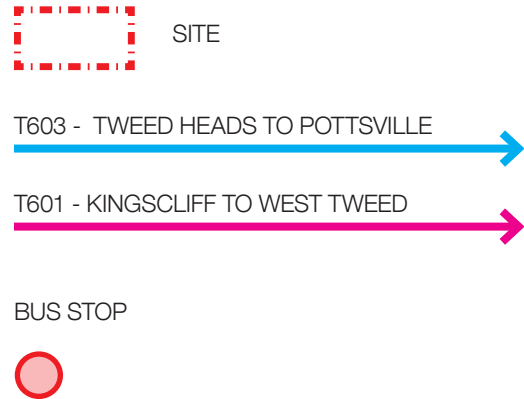


Figure 3. Site Locality Plan - Public Transport



# 3.2 SITE ANALYSIS

## URBAN CONTEXT

The development site is zoned SP2 Infrastructure supporting development of Tweed Valley Hospital and ancillary building functions.

Adjacent land uses include an education precinct (Kingscliff TAFE) to the south of the site on Cudgen Road. To the east, the site is bordered by general residential uses, occurring east of Turnock Street, being a short interface. There is a significant established environmental area adjoining the full length of the north boundary which returns half way along the west boundary to meet the neighbouring agricultural land.

There exists a small agricultural holding adjoining the site along the west boundary, which holds the corner intersection of Tweed Coast Road and Cudgen Road.

The site is located within 500m of the Kingscliff TAFE, Kingscliff Public Library and Kingscliff High School. The site is within 2km of schools, retail and resort areas, Kingscliff Health and a recreational park area.

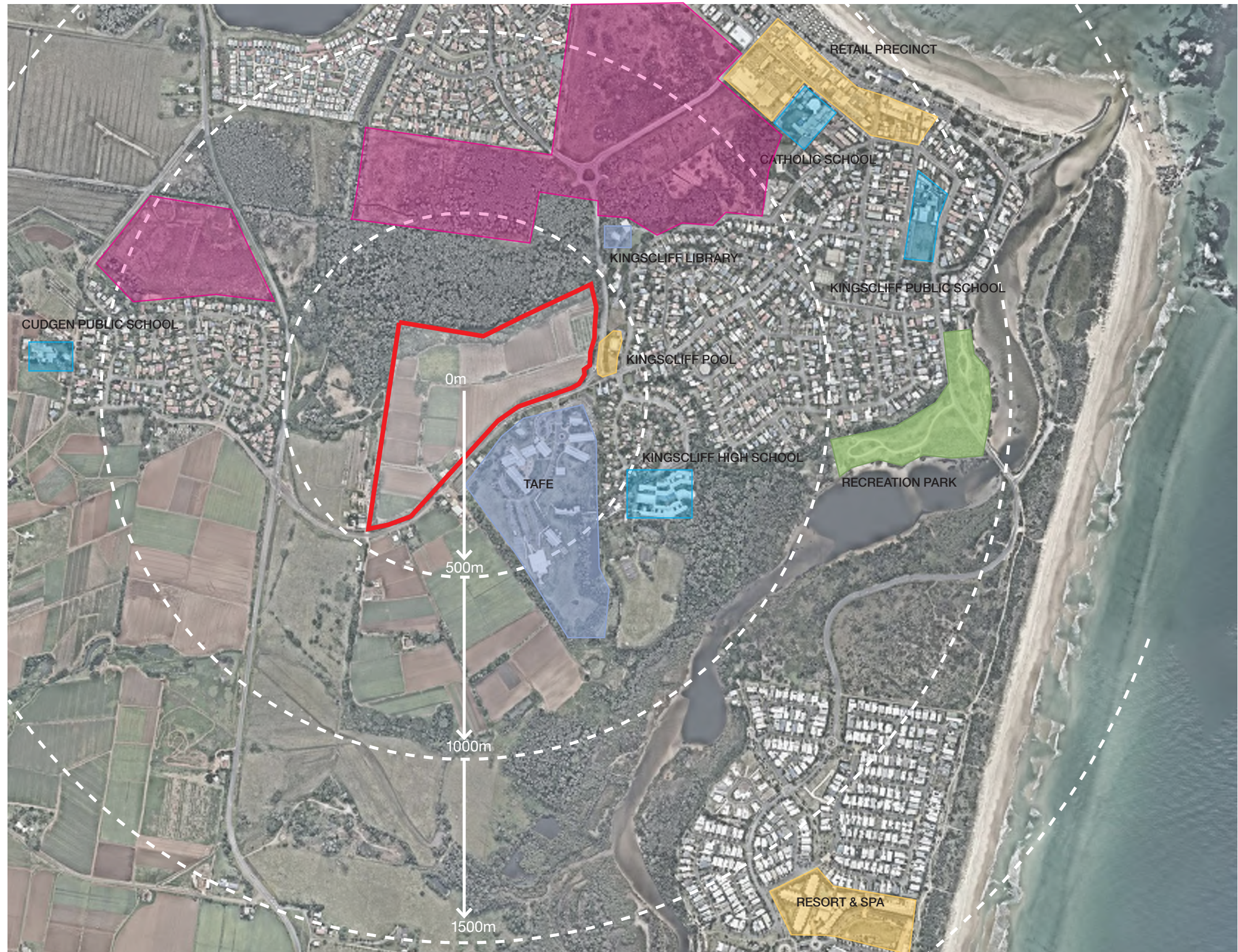
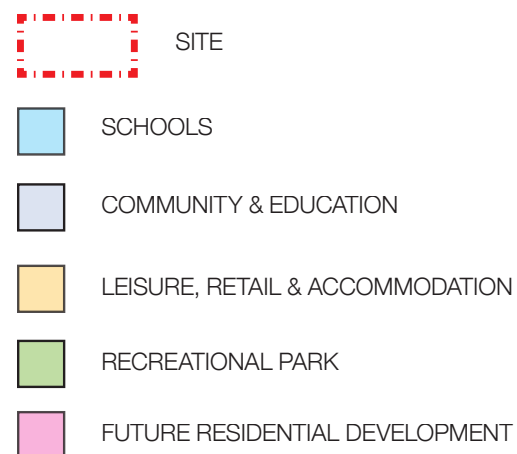


Figure 4. Locality Plan - Civic Amenity Proximity



## 3.2 SITE AND CONTEXT ANALYSIS

## CLIMATE

The site experiences a coastal subtropical climate with minimum temperatures ranging from 10°C to 20°C, and maximum temperatures ranging from 20°C to 28°C annually.

Based on the readings from the BOM Coolangatta Weather Station located 13km from the site, the predominant winds affecting the site blow from the south in the morning, and swing around to the east with cooling north easterly sea breezes blowing over the environmental area in the afternoon. Morning winds have a tendency to be light to moderate, with afternoon winds ranging from gentle to strong. The site receives its main winter (cold front) winds from the south west.

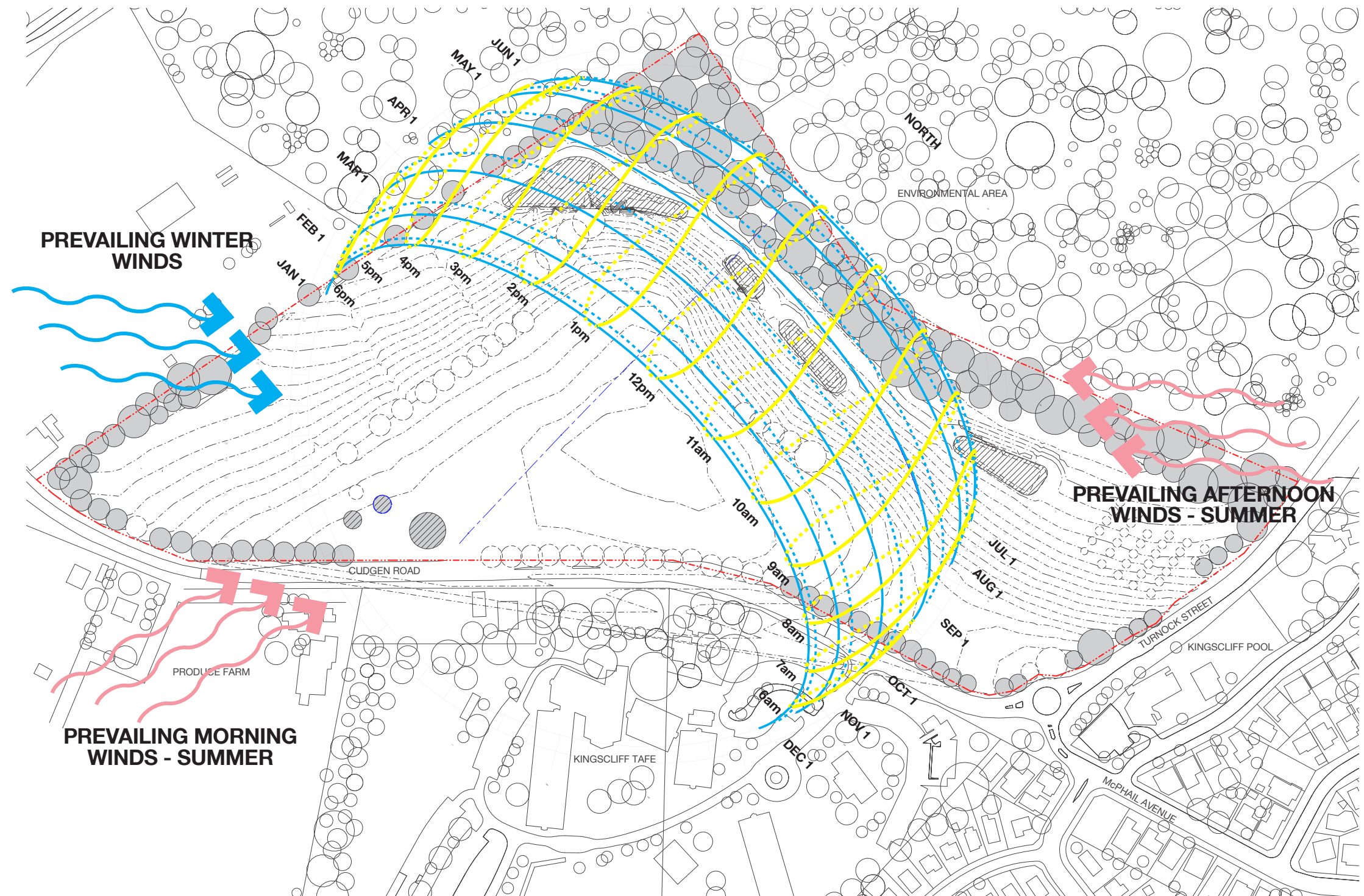


Figure 5. Site Plan - Climate

## 3.2 SITE AND CONTEXT ANALYSIS

## TOPOGRAPHY

The site is roughly triangular polygonal in shape, bounded by Cudgen Road along the south east title boundary. Cudgen Road runs along a local ridge line west of Kingscliff Hill, relatively level with the main develop-able plateau providing opportunity for relatively level street access opportunities along the sites south title boundary.

The sites steep ridge line runs the length of the site in approximate parallel relationship to Cudgen Road. The ridge orientates north (with short west return) towards to the adjoining forested environmental area.

To the east, the site is bound by Turnock Street, which falls away steeply to the north towards Kingscliff Town. The site was previously used for agricultural purposes and is therefore predominantly greenfield, with the exception of the old farmhouse and associated outbuilding structures.

There are also five dry-stone wall structures located on site. The majority of the existing trees on site are located on the periphery with the few exceptions located along the central ridge line.

Positioned on a hill the site garners expansive 360degree views over the adjoining forested area tree canopy beyond to nearby coastline and distant mountain ranges.

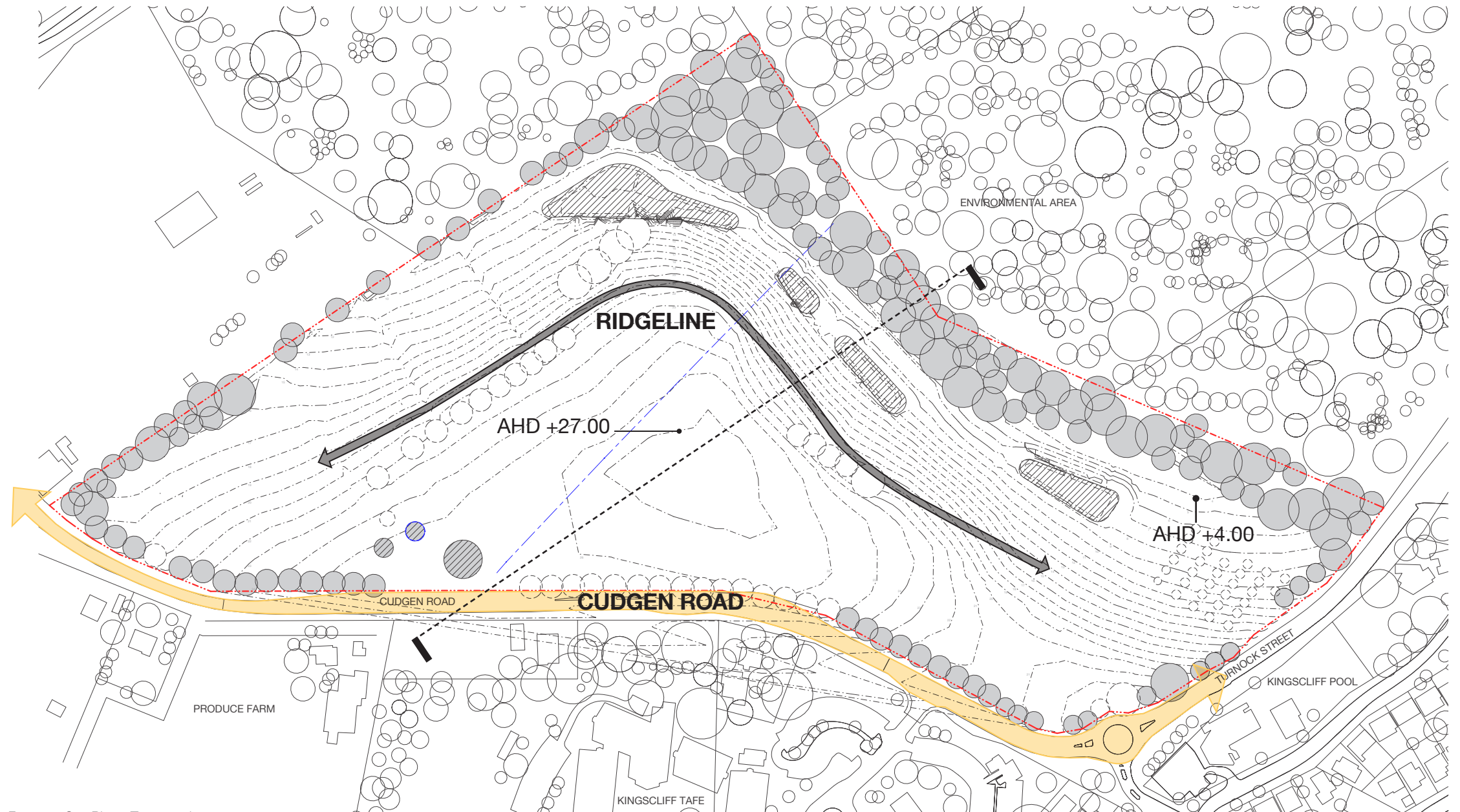


Figure 6. Site Plan - Topography

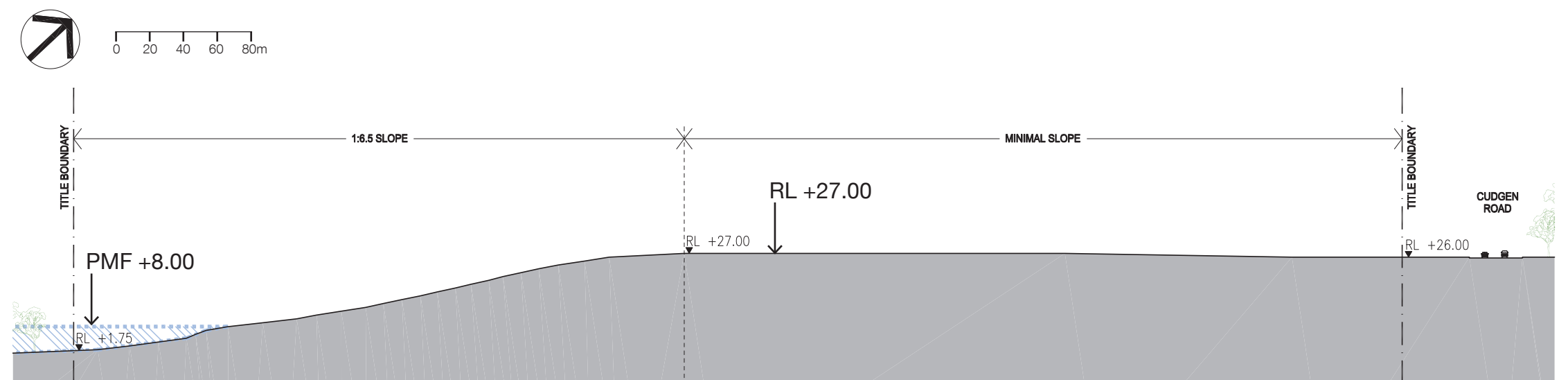


Figure 7. Site Section, Existing Conditions



## 3.2 SITE AND CONTEXT ANALYSIS

## VIEWS AND VISTAS

The Kingscliff region is a popular leisure and lifestyle destination, identified by its picturesque coastline and subtropical climate. Due to the sites relatively elevated level there are notable 360degree views and vistas accessible from the site.

The hospitals proposed ground floor level is located at +27.75 AHD, elevated well above the low-lying environmental area to the north of the site at +1.00 AHD.

Drone views photographed on site demonstrate surrounding views taken at +50.00 AHD, this AHD level being comparable with views to be expected from level 5 of the proposed hospital, refer figure 9d.

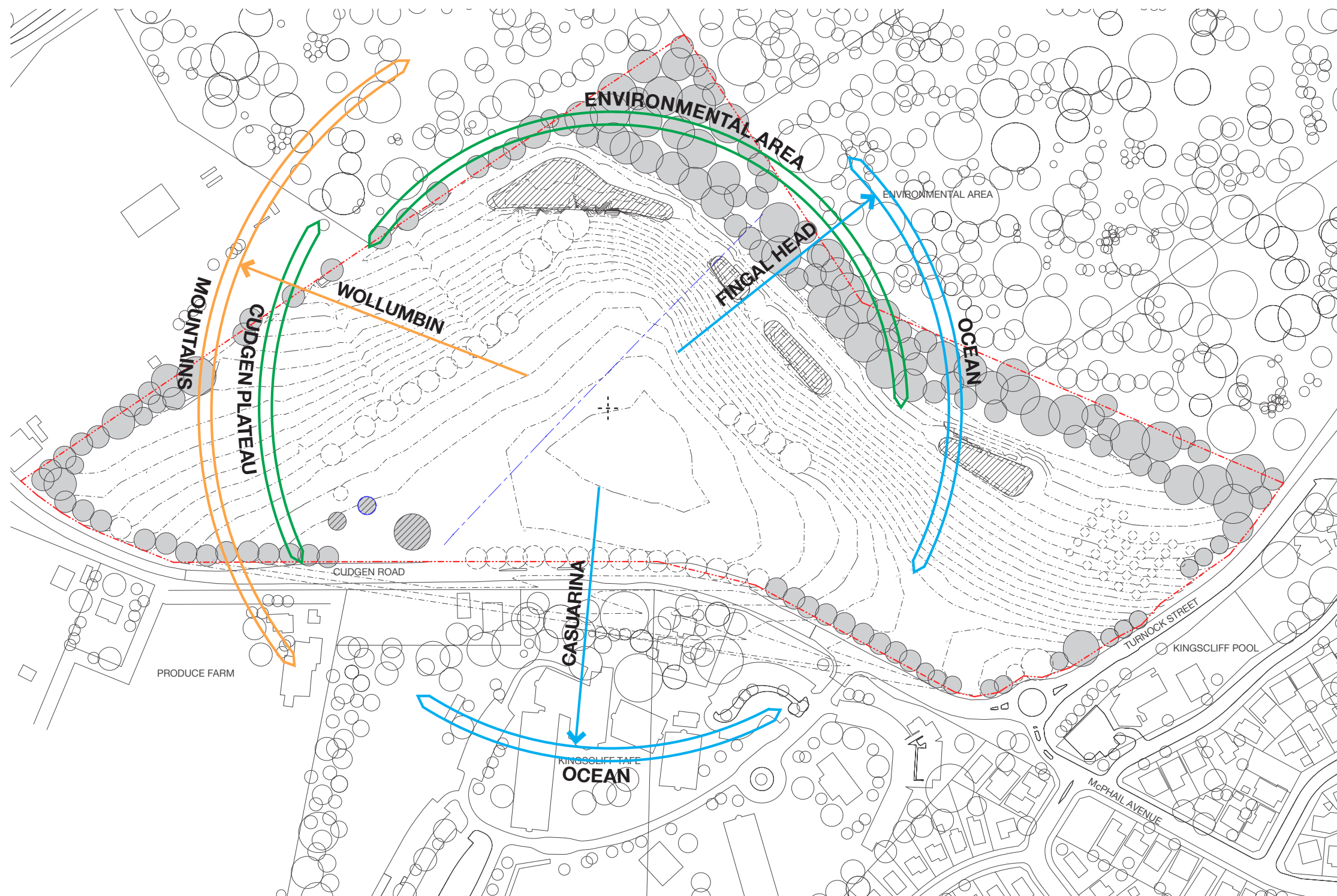


Figure 8. Site Plan - Views





Figure 9a. Site Photograph (Bates Smart), Trees on site



Figure 9b. Site Photograph (Bates Smart), Dawn View



Figure 9c. Site, Geotech Core Samples



Figure 9d. Drone Photography (Skyris), view at level +50.00 AHD



3.2 SITE AND CONTEXT ANALYSIS

ENVIRONMENTAL SETBACK CONDITIONS

There are three principle environmental setback conditions, including;

- 67m APZ (Asset Protection Zone)
  - +8.00 AHD PMF (Probable Maximum Flood Level)
  - 10-30m Agricultural Buffer
1. Based on the slope and hazard vegetation applicable to the site an Asset Protection Zone (APZ) of 50m is required separating the hospital development from the forested environmental area located to the north and west adjoining the site. Imminent revision to the Planning for Bush Fire Protection (PBP) 2016 guideline will bring about minor changes to the construction standards but more importantly increase the required APZ distances. In accordance with the PBP 2018, a revised APZ of 67m has been adopted as a site planning constraint for the proposed hospital and masterplan future development. The environmental setback constraint has been illustrated in the submitted EIS Concept Submission as an offset-zone derived from the Environmental Area trunk-line beyond which the building is to be designed. The formal APZ illustrated as an offset from the proposed building location, confirms the required 67m separation zone has been achieved.
  2. The site is predominantly above the Probable Maximum Flood (PMF) Level. The flood prone part of the site is located along the north boundary tree line, affecting land up to +8.00 AHD. The proposed lowest hospital floor level is designed at +18.75 over 10m above the PMF level. The lowest section of the north services link road is situated at approximately +10.75 AHD nearly 3m above the PMF level.
  3. Based on the proximity of the existing vegetable cropping to the south of the proposed Tweed Valley Hospital, a series of proposed vegetated buffers to screen against spray drift has been recommended. The Land Use Conflict Risk Assessment Report identifies a requirement for a 30m deep buffer along the south western edge of the site along Cudgen Road extending to the mature fig tree. The report further recommends a 10m deep buffer zone be planted along the site's west boundary from the corner on Cudgen Road up to the line of the 67m APZ. The north service road has been set-back from the west title boundary by 22m, which in general accommodates capacity for the future widening of the agricultural buffer should cropping intensification on the neighbouring lands occur.

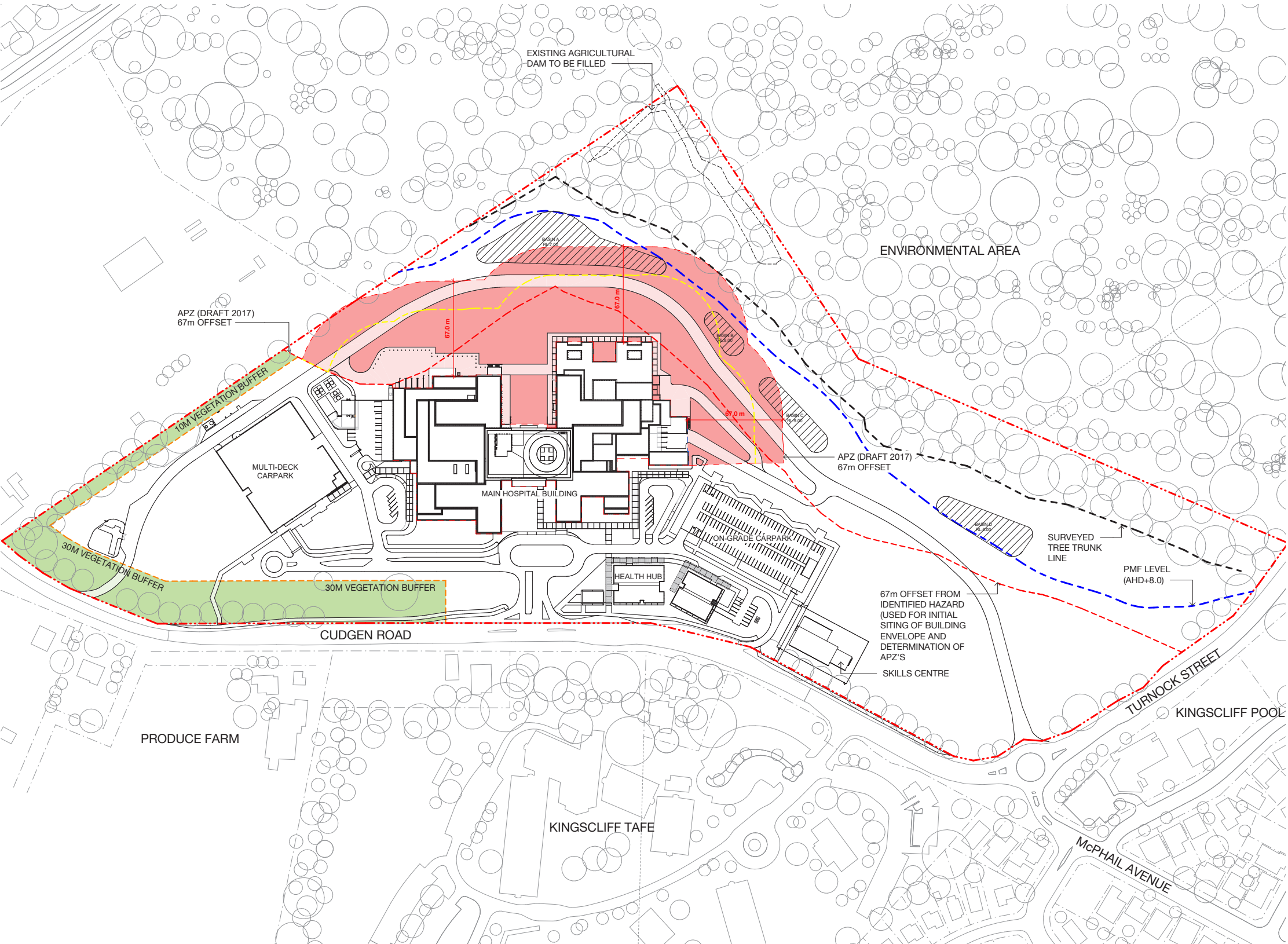
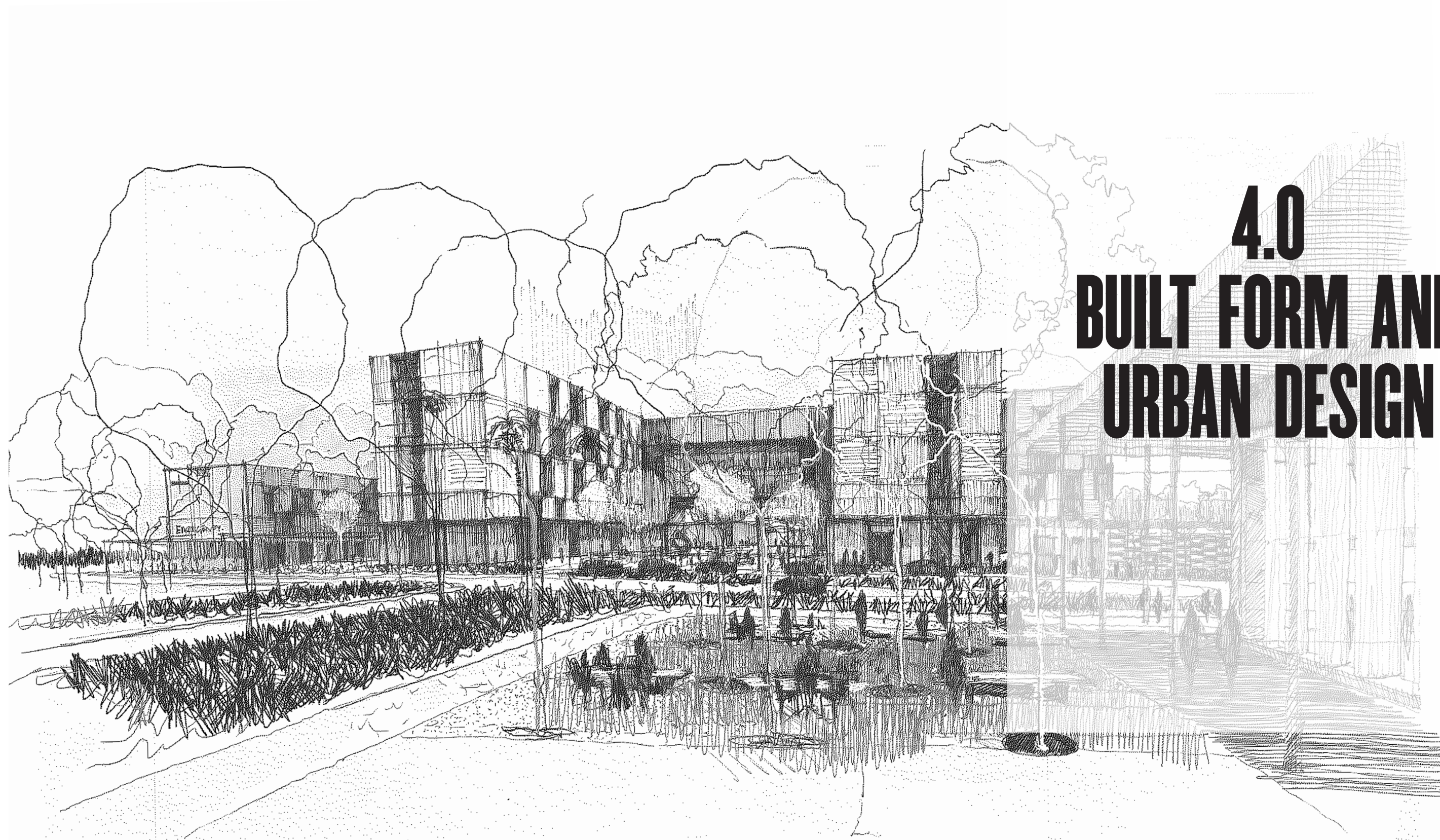


Figure 10. Site Plan - Environmental Setbacks





# **4.0** **BUILT FORM AND** **URBAN DESIGN**



# 4.1

## DESIGN PRINCIPLES

### KEY AIMS

**The Project Aspirations Workshop held 17/11/2017 identified a number of aspirations relating specifically to Built Form and Environments;**

/ **Functionality and Flexibility** – The facility will be highly functional from the outset but will have an in-built capacity for change, flexibility and adaptation.

/ **Access** – The built form will be inviting and facilitate ease of access – entry, exit and movement – throughout the facility.

/ **Natural Light and Views** – Patient and staff rooms will have a view to bring the outside inside and to engage with the local environment.

/ **Way-finding** – The hospital will utilise colour and add depth to way-finding methodologies through technology, landscaping and arts.

/ **A Sustainable Facility** – The facility will incorporate sustainable design principles, including recycling, sustainable products and energy efficiency.

/ **A Community Asset** – The campus will be a truly integrated community asset, including inside and outside spaces that promote lifestyle 'wellness' and 'healthy being' for the community, patients, staff and carers

The urban design and built form of the proposed buildings, public spaces and open areas, proposed in this application are generally consistent with the EIS/SSD Stage 1 (as amended), Tweed Valley Hospital Built Form and Urban Design Report and addendum submitted 19th October 2018 and 24th January 2019 respectively. Together, the EIS Concept Design and reaffirmed original Key Design Principles are the basis on which the SSD Stage 2 Hospital Schematic Design has been developed.

*Architecture design principles, together with functional planning and operational considerations, overlap and respond to these aspirations*

#### Way finding

*- Highlight intuitive points of access for public, staff, emergency services, service vehicles and provide clear intuitive links to public transport*

#### ARRIVAL

*- Ensure an intuitive reading of entry to the main hospital entry and emergency department*

#### EXPANSION

*- Optimise position of building to allow for incremental expansion in multiple directions*

#### SCALE

*- Create a building scale which is respectful to the locality*

#### TOPOGRAPHY

*- Arrange built form to minimize disruption to natural land forms, whilst utilizing the sloping land to embed program*

#### NATURE

*- Maximize the dialogue between built form and natural context*

#### NATURAL LIGHT + AIR

*- Align the built form to maximize access to natural light and ventilation to all departments and public spaces*

#### SOCIAL COHESION

*- Ensure a strong sense of community through a range of connected public spaces*

#### SAFETY

*- Ensure there is passive surveillance through street design and building orientation*

## 4.2 SITE LAYOUT AND BUILDING LOCATION

*The site master plan sets the organising framework for future development of the hospital campus, providing for hospital expansion, renewal and capacity for a host of future complementary program. The campus layout and future master plan is informed by organising principles which are developed in response to the site's topography and qualitative features*

### TOPOGRAPHY AND SITE AXES

The shape and topography of the site informs a consistent linear layered site condition, described from south to north as having a layered linear character, including; Cudgen Road with the main street frontage and access roadway, linear develop-able plateau, ridge line edge condition after which the ground plane slopes away steeply falling approximately 20m to the adjoining north wetland forest at the foot of the ridge. The high-lying develop-able plateau ranges in width from approximately 200m at its central deepest to 80m at the narrowest eastern end.

The development spine section topography accommodates development of taller buildings along the ridge line that step down the slope, supported by 2-3 storey buildings along Cudgen Road responding to the street and urban condition.

This sequence of layered elements on entering the site provides opportunities for establishing south-north orientated design axes, with terminating views to the north orientated over the low-lying forest tree canopy below.

### NATURAL LANDSCAPE

The site is adjoined to the north by an established environmental area, with trunk line along the base of the ridge. A key design aspiration for the site was to plan for a loose linear arrangement of building forms, ordered by the site's ridge line, with the built forms framing landscape focused view corridors to the forest canopy and beyond.

There is notable view amenity to be gained from the site. The hospital's main public ground floor level is located at +27.75 AHD which is elevated above the northern valley, in particular the environmental area to the north of the site at +1.00 AHD. The site provides potential 360degree resplendent surrounding views, of the coast line and distant mountain ranges.

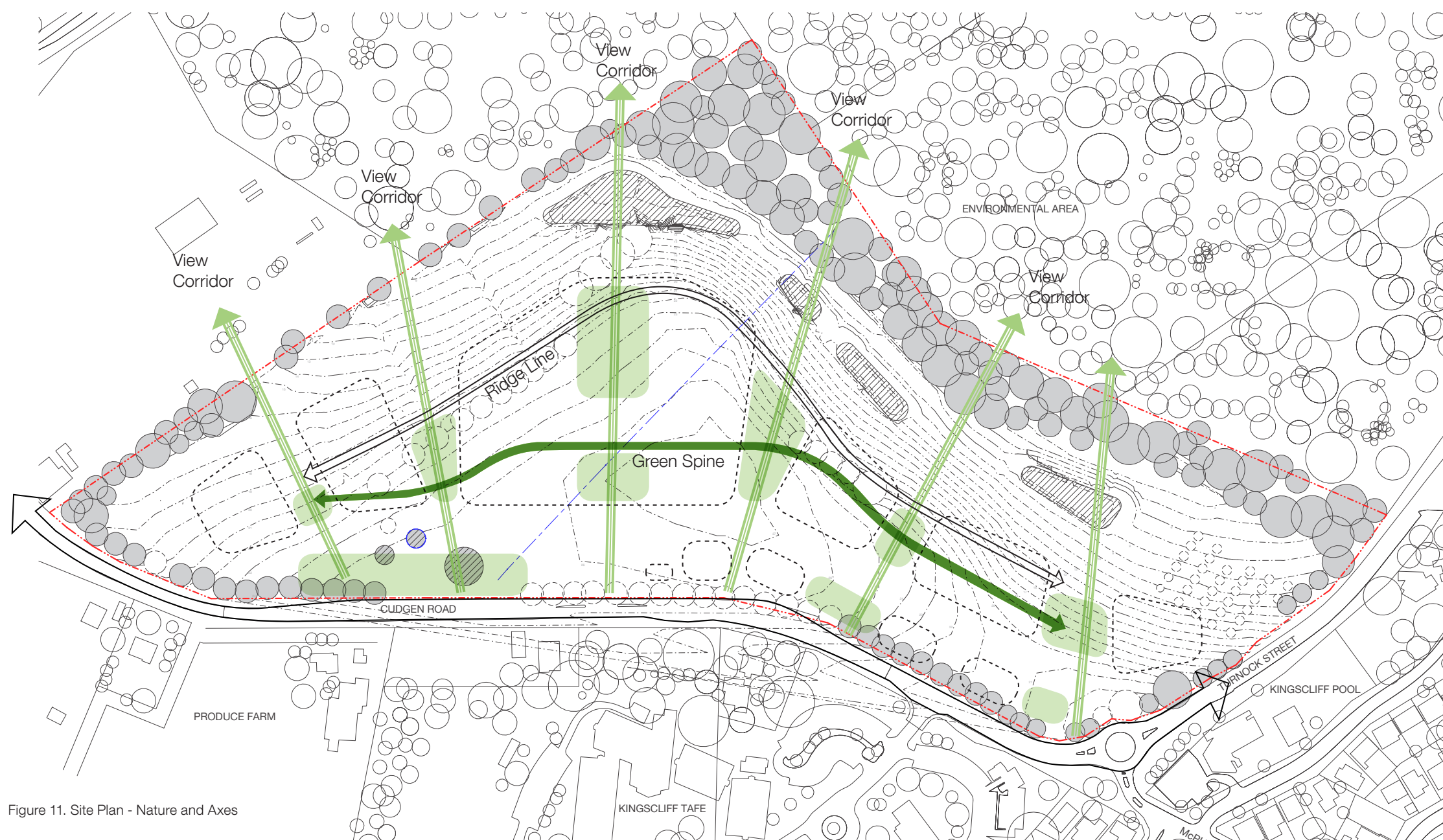


Figure 11. Site Plan - Nature and Axes