Modification Application

Tweed Valley Hospital – Concept Proposal (SSD 9575)





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Prepared for: NSW Health Infrastructure

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UPR	Description	Date Issued	Issued By
2682-1156	First Issue	06/09/19	SJW
2682-1220	Second Issue	26/09/19	SJW

Table of Contents

<u>1.</u>	Intro	duction		10		
	<u>1.1</u>	Purpose	e of this Report	10		
	1.2	2 Background and Overview of the Proposed Modifications				
<u>2.</u>	The	Project S	Site and Locality	12		
	<u>2.1</u>	Cadastr	ral Description	12		
	2.2	Land O	wnership	12		
	<u>2.3</u>	Site Cor		12		
	<u>2.4</u>		Site History and Current Use	12		
	<u>2.5</u>	Site Ana	alysis	16		
		<u>2.5.1</u>	Topography	16		
		2.5.2	Soils and Geotechnical	16		
		<u>2.5.3</u>	Vegetation	16		
		<u>2.5.4</u>	Constraints	16		
<u>3.</u>	Pro	osed Mo	odifications	19		
	<u>3.1</u>	Car Par	king Reconfiguration and Multi-deck Car Park	20		
	3.2	<u>Internal</u>	Road Network Refinement	20		
	<u>3.3</u>		Valley Skills Centre			
	<u>3.4</u>	<u>Hospita</u>		21		
	<u>3.5</u>	<u>Amendr</u>	ment to Approved Planning Envelopes	21		
		<u>3.5.1</u>	Main Hospital Envelope	21		
		3.5.2	Health Hub Envelope	22		
		<u>3.5.3</u>	Electrical Switching Station and Backup Generator Co-location	22		
		<u>3.5.4</u>	GFA Changes	22		
	3.6	Landsca	ape Zonal Plan	23		
	3.7	Amendr	ment to Consent Preamble	23		
	3.8	Amendr	ment to Conditions of the Consent	23		
<u>4.</u>	Stat	utory and	d Strategic Context	26		
	4.1	Statutor	y Planning Controls	26		
		4.1.1	Zoning and Permissibility	26		
		4.1.2	Environmental Planning & Assessment Act 1979 & Regulation 2000	26		
		4.1.3	Consideration of Section 4.15 Matters	27		
	<u>4.2</u>	State E	nvironmental Planning Policies	28		
	<u>4.3</u>	Local P	lanning Controls	31		
		4.3.1	Tweed Local Environmental Plan 2014	31		
		4.3.2	Development Control Plans	32		
		<u>4.3.3</u>	Other NSW Legislation and Approvals	32		
5.	Fny	ironment	al Assessment of Modifications	36		

<u>5.1</u>	Biodiversity			
<u>5.2</u>	<u>Agricultu</u>	ural Impact and Land Use Conflict Risk Assessment	36	
<u>5.3</u>	Built For	m and Urban Design	37	
	<u>5.3.1</u>	Hospital Envelope Changes	37	
	5.3.2	Health Hub Envelope Changes	38	
	<u>5.3.3</u>	Addition of Multi-deck Car Park Envelope	38	
	<u>5.3.4</u>	Electrical Substation Kiosk and Backup Generator Co-location	39	
	<u>5.3.5</u>	Landscape Strategy	39	
	<u>5.3.6</u>	Addition of Tweed Valley Skills Centre Envelope	39	
<u>5.4</u>	Environr	mental Amenity	40	
	<u>5.4.1</u>	Overshadowing and Solar Access	40	
	5.4.2	Visual Impact	40	
	<u>5.4.3</u>	Visual Privacy	41	
	<u>5.4.4</u>	Acoustic Impacts	41	
	<u>5.4.5</u>	Light Spill	41	
	<u>5.4.6</u>	Wind Impacts	41	
<u>5.5</u>	Traffic, A	Access and Parking	42	
<u>5.6</u>	<u>Ecologic</u>	cally Sustainable Development	43	
<u>5.7</u>	<u>Aborigin</u>	al Heritage	43	
<u>5.8</u>				
<u>5.9</u>				
<u>5.10</u>	Services	s and Utilities	45	
<u>5.11</u>	Bush Fir	e Hazard	45	
<u>5.12</u>	Flooding]	45	
<u>5.13</u>	<u>Drainage</u>	e and Stormwater	45	
<u>5.14</u>	Socio-ed	conomic	46	
<u>5.15</u>	<u>Aviation</u>		46	
<u>5.16</u>	Cumulat	tive Impacts	46	
<u>6.</u> Con	clusion		47	
Illustra	itions			
Illustration	2 1	Project Site	14	
Illustration		Site Context	15	
Illustration		Site Analysis – Flood, Bush Fire, Acid Sulfate Soils, Vegetation	17	
Illustration		Site Analysis - Coastal Management SEPP	18	
Tables				
		CCD 0575 Condition Amondments as a result of Mardiffertion	0.0	
		SSD 9575 Condition Amendments as a result of Modifications	23	
	Fable 4.1 Relevant State Environmental Planning Policies		29 31	
Table 4.2		Consideration of TLEP Clauses Assessment of Matters of National Environmental Significance		
<u>Table 4.3</u>		Assessment of Matters of National Environmental Significance	35	

Appendices

Appendix A Modified Concept Proposal Plans and Drawings Appendix B Architectural and Urban Design Report

Appendix C Traffic Assessment

Appendix D Biodiversity Assessment

Appendix E Visual Impact Assessment

Glossary of terms and acronyms

Term	Description/Definition
Aboriginal Heritage Information Management System (AHIMS)	This holds information about Aboriginal objects, Aboriginal places with special significance with respect to Aboriginal culture, and archaeological reports.
Acid Sulphate soils (ASS)	Naturally acid clays, mud and other sediments usually found in swamps and estuaries. They may become extremely acidic when drained and exposed to oxygen and may produce acidic leachate and runoff that can pollute receiving waters and liberate toxins. ASS are classified as materials which are above the groundwater, are undergoing oxidation and have a pH of less than 4.0.
Amenity	The degree of pleasantness of an area or place.
Annual average daily traffic (AADT)	The total traffic in both directions at a specified location calculated from mechanically obtained axle counts.
Annual Exceedance Probability (AEP)	The chance of a flood of a given size (or larger) occurring in any one year, usually expressed as a percentage. For example, if a peak flood discharge of 500 m3 /s has an AEP of 5%, it means that there is a 5% chance (i.e. a 1 in 20 chance) of a peak discharge of 500 m3 /s (or larger) occurring in any one year (see also Average Recurrence Interval).
Archaeological site	A site with any material evidence of past Aboriginal activity that remains within a context or place that can be reliably related to that activity.
Australian height datum (AHD)	The standard reference level used to express the relative height of various features. A height given in metres AHD is essentially the height above sea level.
Average Recurrence Interval (ARI)	The long-term average number of years between the occurrence of a flood as big as (or larger than) the selected event. For example, floods with a discharge as great as (or greater than) the 20yr ARI design flood will occur on average once every 20 years. ARI is another way of expressing the likelihood of occurrence of a flood event (see also Annual Exceedance Probability).
BC Act	NSW Biodiversity Conservation Act 2016
Borehole	A hole produced in the ground by drilling for the investigation and assessment of soil and rock profiles.
Catchment	The area drained by a stream or body of water, or the area of land from which water is collected.
CIV	Capital investment value
Concept Proposal	Initial functional layout of a concept, such as a building, to provide a level of understanding to later establish detailed design parameters.
Concept Development Application	A development application that sets out concept proposals for the development of a site, and for which detailed proposals for the site or for separate parts of the site are to be the subject of a subsequent development application or applications
CPTED	Crime Prevention Through Environmental Design Principles
Culvert	An enclosed channel for conveying a stream below a road.
dBA	Decibels using the A-weighted scale. Decibels are used to measure sound levels. dBA measures loudness according to the human perception of sound.
Decibel	Decibels are used to measure sound levels.

Term	Description/Definition
Earthworks	The process of extracting, moving and depositing earth during construction.
Ecologically sustainable development (ESD)	Using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained and the total quality of life, now and in the future, can be increased. ESD incorporates four key principles:
	 the precautionary principle inter-generational equity conservation of biological diversity and ecological integrity improved valuation and pricing of environmental resources.
EIS	Environmental impact statement
EP&A Act	Environmental Planning and Assessment Act 1979 (NSW)
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)
EPI	Environmental Planning Instrument
EPL	Environmental Protection Licence issued under the POEO Act
Flood immunity	Relates to the level at which a particular structure would be clear of a certain flood event.
FSR	Floor Space Ratio
Geological unit	A volume of rock of identifiable origin and age range that is readily mapped, such as a series of inter-bedded sandstone and claystone beds or a body of granite.
Geotechnical	Application of the methods of engineering and science to construction that involves natural soil and rock materials.
Grade/gradient	Slope or steepness
Habitat	The place where an organism lives. Habitats are measurable and can be described by their flora and physical components.
Health and Education Campus	A site that allows health and education providers to collaborate, share resources and grow to their mutual benefit and benefit the community.
HI	New South Wales Health Infrastructure
HV	Heavy vehicle
IPU	In Patient Unit
KLP	Kingscliff Locality Plan (exhibition draft)
LALC	Local Aboriginal Land Council
LEP	Local environmental plan
LGA	Local government area
Longitudinal section or 'long section'	The section drawn along the length of the route showing vertical elevation.
NCRP 2036	North Coast Regional Plan 2036
OEH	Office of Environment and Heritage
POEO Act	Protection of the Environment Operations Act 1997
Project	Development of a new hospital on a greenfield site in the Tweed, referred to as the Tweed Valley Hospital.
Project Site	The location of the Project, on land at 771 Cudgen Road, Cudgen, legally described as Lot 11 DP 1246853.
SEPP	State Environmental Planning Policy

Term	Description/Definition
SRD SEPP	State Environmental Planning Policy (State and Regional Development) 2011
SSD	State Significant Development
Threatened ecological community (TEC)	An ecological community identified by relevant legislation as having endangered status under the NSW <i>Biodiversity Conservation Act</i> 2016 or the Commonwealth <i>Environment Protection and Biodiversity Conservation Act</i> 1999.
Threatened species	Animals or plants listed as endangered or vulnerable under the NSW Biodiversity Conservation Act 2016 or the Commonwealth Environment Protection and Biodiversity Conservation Act 1999.
TTH	The (existing) Tweed Hospital at 14-34 Powell Street (Lot 628 DP755740), Tweed Heads on the far north coast of NSW.

Statement of Validity

Submission of Environmental Assessment (Modification Report)

Prepared under Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act)

Modification Report prepared by

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In respect of

Applicant and Land Details

Proponent Health Infrastructure

Subject Site 771 Cudgen Road, Cudgen NSW

Lot and DP Lot 11 DP 1246853

Project Summary Tweed Valley Hospital – Modification to Concept Proposal

Environmental Assessment

Modification Report pursuant to Section 4.55 Part 4 of the EP&A Act.

Declaration

I certify that I have prepared the contents of the Modification Report in accordance with the requirements of the *Environmental Planning and Assessment Act 1979* and Regulation, the Modification Report contains all available information that is relevant to the environmental assessment of the Proposal, and that, to the best of my knowledge, the information contained in this report is not false or misleading.

Date 26 September 2019

Executive Summary

Purpose of Report

This report supports a request for modification, pursuant to Section 4.55 of Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act), of State Significant Development (SSD) 9575 for the new Tweed Valley Hospital (the Project). It has been prepared for Health Infrastructure (HI) in support of the modification request to the Department of Planning, Industry and Environment (DPIE). It identifies the proposed modifications to the Concept Proposal and assesses any associated impacts from those modifications pursuant to section 4.15(1) and Section 4.55 of the EP&A Act.

The Project Site

The Project Site is a 19.38 ha single lot described as Lot 11 DP 1246853 and located at 771 Cudgen Road, Cudgen NSW. The land is owned by Health Administration Corporation (HAC). It fronts Cudgen Road immediately west of the Kingscliff urban area and has proximal access to Tweed Coast Road, which connects to the Pacific Motorway (M1) in the north. The Site is approximately 13.5 km south of Tweed Heads. The Project Site is primarily zoned SP2 Infrastructure (Health Services Facility). Environmental areas, including mapped Coastal Wetlands, occur along its northern boundary. The surrounding land use context comprises a mix of urban, rural and environmental areas.

The Approved Development

The Concept Proposal and Stage 1 Early and Enabling Works were approved for the new Tweed Valley Hospital (SSD 9575) by the Minister for Planning (as of 1 July 2019 this portfolio is now known as the Minister for Planning and Public Spaces) on 11 June 2019. All documents relating to the approval can be found on the project website at https://www.planningportal.nsw.gov.au/major-projects/project/10756

Proposed Modification - Concept Proposal

The application to modify SSD 9575 proposes the following amendments and inclusions to the Concept Proposal:

- Reconfiguration and provision of additional on-site parking, including a multi-deck car park (based on a maximum planning envelope) in conjunction with consolidated at-grade parking to better service the hospital.
- Design refinement of the on-site road network, including modifications to support the inclusion of the proposed multi-deck car park.
- Addition of an envelope to accommodate a temporary building for the 'Tweed Valley Skills Centre' which will include:
 - A Prototype and Simulation Suite to inform and verify the detailed design of key clinical spaces for the hospital, and in turn be used as a low-fidelity simulation space for TAFE NSW health education programs.
 - A Skills and Employment Hub a drop-in facility for community and local industry, providing information on training and careers in the construction industry, jobs on the Project and support in developing business capability and tendering for subcontract work packages and supply contracts.
- An increase in the proposed number of hospital beds (day only and overnight beds) from 430 to 499 beds (excluding emergency treatment spaces (46)).

- Amendments to the approved maximum planning/building envelopes to accommodate the following design changes to the hospital and health hub:
 - Minor adjustments/refinements to the main hospital envelope (including addition of envelope for central energy plant)
 - Minor adjustments/refinements to the health hub envelope (and removal of reference in the consent to a single building i.e. to allow for more than one building within the health hub envelope).
- Increase maximum Gross Floor Area (GFA) to approximately 65,050 m² (GFA, as defined in the Standard Instrument: Principal Local Environmental Plan as at the date of this development submission).
- Relocation/adjustment of the electrical switching station kiosk planning envelope and addition of an approximate envelope for the co-location of backup generators.
- Amendment to the Landscape Zonal Plan to reflect the detailed landscape design presented in the Stage 2 SSD application.

Conclusion

The proposed modifications are a result of detailed design progression, further analysis and internal and external consultation. The modifications do not constitute a transformation of the development and the Project remains substantially the same development. The modifications are acceptable and would provide more efficient and suitable parking provision on the Project Site which will benefit the Project and in turn staff, stakeholders, and the wider community. The built form changes would effectively integrate into the overall Project and will provide for an acceptable development outcome. Potential impacts of the modifications are assessed as minor and can be managed by implementation of mitigation measures and consent conditions. The proposed modifications warrant approval by the Minister for Planning and Public Spaces or delegate.

1. Introduction

1.1 Purpose of this Report

On behalf of NSW Health Infrastructure (HI) (at 14/77 Pacific Highway, North Sydney NSW 2060), GeoLINK has been engaged to prepare an application under Section 4.55(2) of the *Environmental Planning and Assessment Act 1979* (EP&A Act) for a modification to a State Significant Development (SSD) consent for the Concept Proposal and staged development of the new Tweed Valley Hospital (SSD 9575).

The purpose of this Modification Report is to describe the proposed modifications to the consent and provide an assessment of the relevant matters contained within Sections 4.55(2) and 4.15(1) (as relevant) of the EP&A Act. The assessment of the proposed modifications includes assessment against the existing planning provisions applying to the site including permissibility and assessment of the potential environmental impacts and key issues.

1.2 Background and Overview of the Proposed Modifications

On 13 June 2017, the NSW Government announced \$534 million for a new state-of-the-art hospital for the Tweed-Byron region on a greenfield site, including an expanded emergency department (ED), inpatient care and enhanced surgical and outpatient services. New services, including interventional cardiology and radiotherapy, will also be provided in response to clinical service planning priorities. The 2018-19 State Budget confirmed a \$582 million investment in health for the Tweed-Byron LGAs, which will deliver the Tweed Valley Hospital as well as interim upgrades at TTH to help meet community needs until services transfer to the new hospital.

HI submitted a SSD application (SSD 9575) for staged development consent, consisting of a Concept Proposal and Stage 1 Early and Enabling Works to Department of Planning, Industry and Environment (DPIE) in 2018. The Concept Proposal and Stage 1 Early and Enabling Works were approved by the Minister for Planning (this portfolio is now known as the Minister for Planning and Public Spaces) on 11 June 2019. All documents relating to the Concept Proposal and Stage 1 Early and Enabling Works can be found on the major projects website of DPIE at https://www.planningportal.nsw.gov.au/major-projects/project/10756. Consent was granted for:

A Concept Proposal comprising:

- the maximum building envelope for a nine-storey hospital with helipad and plant rooms on the rooftop
- the maximum building envelope for a building for support services (health hub)
- the maximum gross floor area of 65,000 square metres for the hospital and health hub building on the site
- the site layout, internal roads, site access arrangements and car parking provisions
- a landscape masterplan, concept public domain treatments and stormwater strategy
- Tweed Coast Road and Cudgen Road intersection upgrade works.

Concurrent Stage 1 Early and Enabling Works comprising:

- site preparation and bulk earthworks to establish site levels
- identification of the construction compound with temporary car parking areas, laydowns and internal roads
- new vehicular access points from Cudgen Road
- improvements to the roundabout intersection of Turnock Street and Cudgen Road
- utility augmentation and connection of permanent services for the future hospital
- construction of retaining walls
- stormwater drainage works and soil and water management measures
- site remediation works
- piling works associated with the future hospital.

Since lodgement and subsequent approval of SSD 9575, following further analysis, design development and consultation, it has been determined that amendments are required to the Concept Proposal to accommodate design improvements and changes to the Project that have occurred through design development. These are reflected in the Stage 2 (Main Works and Operation) SSD application that has been concurrently submitted with this Modification Application to ensure consistency between the approved Concept Proposal and Stage 2 of the Project. The modifications are detailed in **Section 3**.

2. The Project Site and Locality

2.1 Cadastral Description

The Project Site is a single lot located at 771 Cudgen Road, Cudgen NSW. It is legally described as Lot 11 DP 1246853 and has an area of 19.38 ha. **Illustration 2.1** is an aerial image of the Project site and shows the lot boundary.

2.2 Land Ownership

The Project Site is owned by the Health Administration Corporation (HAC) and this Modification Application is made by HAC's Health Infrastructure (HI) division.

2.3 Site Context

The Project Site fronts Cudgen Road immediately west of the Kingscliff urban area. It has proximal access to Tweed Coast Road, which connects to the Pacific Motorway (M1) in the north. The Project Site is approximately 13.5 km south of Tweed Heads and is situated on the immediate urban periphery of Kingscliff.

Other land uses in proximity to the Project Site include urban, rural and environmental uses/zones. To the east is the main Kingscliff urban and residential area. To the north is vegetated land, including environmental protection areas and mapped Coastal Wetlands. Beyond this, further to the north is existing residential development. To the south, on the opposite side of Cudgen Road, is an educational facility in the form of the Kingscliff TAFE. To the south-west and west is fallow rural land and active farmland. The village of Cudgen is located west of the Project Site, on the western side of Tweed Coast Road.

Immediately to the north of the environmental area is land identified in the draft Kingscliff Locality Plan (KLP), as having major development potential including a Business and Knowledge Precinct adjacent to the M1 and residential development.

Illustration 2.2 shows the approximate location of the Project Site in its regional context.

2.4 Project Site History and Current Use

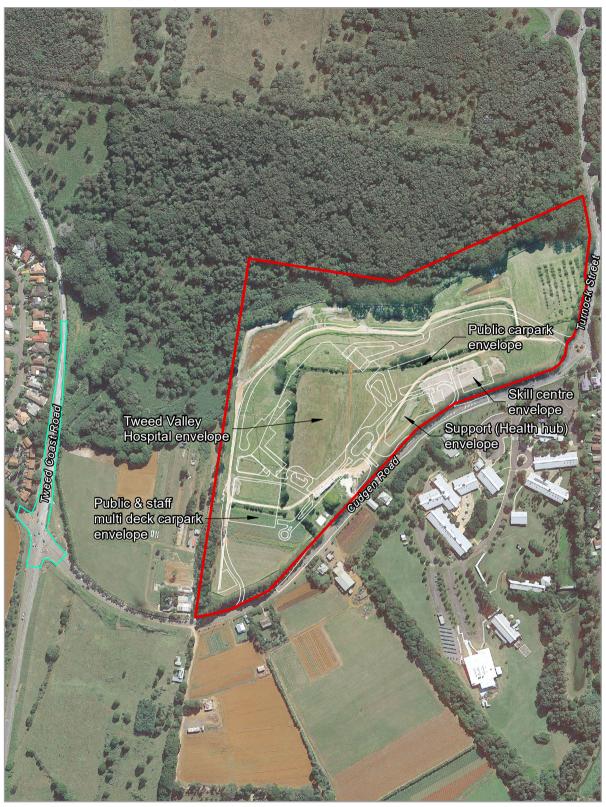
The Project Site was previously used for small-scale agricultural purposes, including cropping and horticulture (predominantly sweet potatoes). It is understood that no stock animals have been on-site since 2010.

Under the former agricultural uses, approximately 11.24 ha of land was available for cultivation, with around eight hectares previously planted with sweet potato crops.

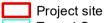
The northern fringe of the Project Site is mapped as Coastal Wetlands under the Coastal Management SEPP and is zoned 7(I) Environmental Protection (Habitat), along with smaller slivers of 2(c) Urban Expansion and 1(b1) Agricultural Protection pursuant to the TLEP 2000. These areas are deferred matters of the TLEP 2014.

Since acquisition and ownership of the Project Site by HAC, HI undertook some separate preliminary works to secure the Project Site, demolish redundant buildings (house and farm sheds), and ensure appropriate soil and water management control measures were in place to mitigate impacts of stormwater runoff from the unimproved site. These works have been completed.

Stage 1 Early and Enabling Works in accordance with the SSD 9575 consent have commenced on the Project Site.



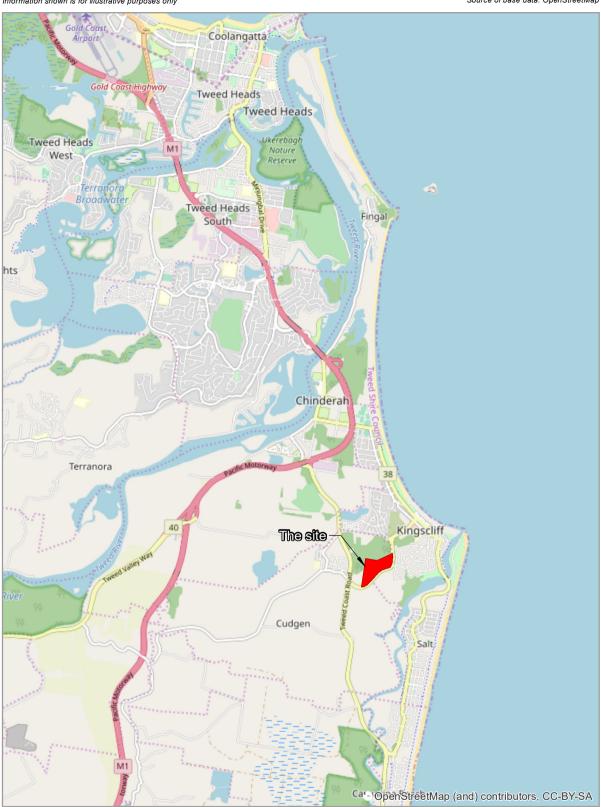
LEGEND



Tweed Coast Road intersection upgrade











2.5 Site Analysis

2.5.1 Topography

The topography of the site is varied, including elevated relatively flat areas in the south, to sloping and low-lying in the north. The boundary to Cudgen Road represents its high point with maximum elevations of approximately 27 m Australian Height Datum (AHD). There is a relatively large plateau in this area that would support the main hospital building/development zone. Elevations in the northern point are low-lying, down to approximately one metre AHD.

2.5.2 Soils and Geotechnical

DPE's eSPADE website indicates the site is largely made up of Residual (Cudgen) soil landscapes. The majority of the site is mapped as Class 5 Acid Sulfate Soils; however, the northern portion includes Classes 2 and 3. The Project Site is considered satisfactory for development in relation to slope stability.

Soil contamination investigations concluded that the site is suitable for the proposed purpose (hospital), subject to localised remediation in accordance with a Remediation Action Plan. This is occurring as part of Stage 1 Works.

2.5.3 Vegetation

The Project Site is substantially clear of vegetation, with some sparse scatters and strands of trees. More dense vegetation occurs along its northern fringe in low-lying areas, largely within the existing environmental protection zone.

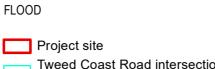
2.5.4 Constraints

The Project Site contains a number of environmental and development constraints, as outlined and addressed in the originally submitted Concept Proposal and Stage 1 Works Environmental Impact Statement (EIS), including:

- Remediation of a small area on the Project Site subject to an approved Remediation Action Plan (RAP) being undertaken as part of Stage 1 works
- Part of the Project Site supports and is adjacent to mapped Coastal Wetlands, including the Coastal Wetlands proximity buffer under the Coastal Management SEPP
- Bush fire prone land (category 1 vegetation and buffer)
- The northern portion is flood prone, however, the majority of the Project Site including the main development area and access is above the PMF
- The majority of the Project Site is mapped as Class 5 Acid Sulfate Soils; however, the northern portion includes Classes 2 and 3.

Illustrations 2.3 and **2.4** provides mapping relevant to the Project Site analysis, showing constraints and environmental features present. Site analysis plans are also included at **Appendix B**.







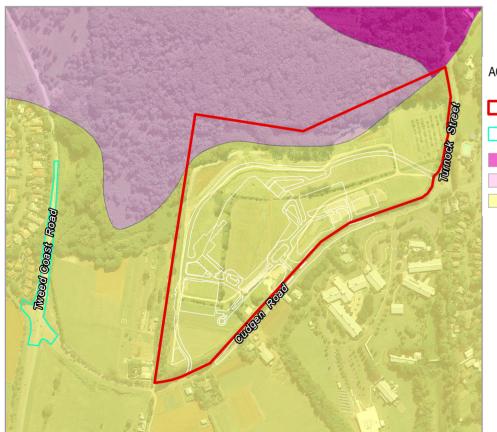




upgrade Vegetation Buffer

Vegetation Category 1

Vegetation Category 2





Project site

Tweed Coast Road intersection upgrade

Class 2

Class 3

Class 5



VEGETATION

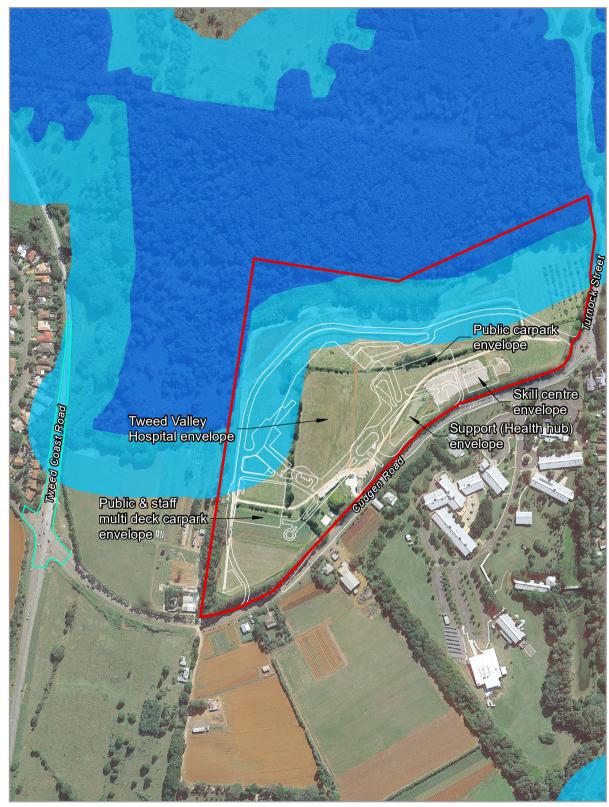
Project site

Tweed Coast Road intersection

Forested Wetlands - Coastal Swamp Forest







LEGEND

Project site

Tweed Coast Road intersection upgrade

Coastal wetland

Proximity area for coastal wetland







3. Proposed Modifications

Pursuant to Section 4.55(2) of the EP&A Act, HI proposes the following modifications and inclusions to the Concept Proposal approved under consent SSD 9575:

- Reconfiguration and provision of additional on-site parking, including a multi-deck car park (based on a maximum planning envelope) in conjunction with consolidated at-grade parking to better service the hospital.
- Design refinement of the on-site/internal road network, including modifications to support the inclusion of the proposed multi-deck car park
- Addition of an envelope to accommodate a temporary building for the 'Tweed Valley Skills Centre' which will include:
 - A Prototype and Simulation Suite to inform and verify the detailed design of key clinical spaces for the hospital, and in turn be used as a low-fidelity simulation space for TAFE NSW health education programs.
 - A Skills and Employment Hub a drop-in facility for community and local industry, providing information on training and careers in the construction industry, jobs on the Project and support in developing business capability and tendering for subcontract work packages and supply contracts.
- An increase in the proposed number of hospital beds (day only and overnight beds) from 430 to 499 beds (excluding emergency treatment spaces (46)).
- Amendments to the approved maximum planning/building envelopes to accommodate the following design changes to the hospital and health hub:
 - Minor adjustments/refinements to the main hospital envelope (including addition of envelope for central energy plant)
 - Minor adjustments/refinements to the health hub envelope (and removal of reference in the consent to a single building – i.e. to allow for more than one building within the health hub envelope).
- Increase maximum Gross Floor Area (GFA) to approximately 65,050m² (GFA, as defined in the Standard Instrument: Principal Local Environmental Plan as at the date of this development submission).
- Relocation/adjustment of the electrical switching station kiosk planning envelope and addition of an approximate envelope for the co-location of backup generators.
- Amendment to the Landscape Zonal Plan to reflect the detailed landscape design presented in the Stage 2 SSD application.

These modifications are further described in the following sub-sections and in the amended architectural drawings and accompanying Architectural and Urban Design Report provided at **Appendix A** and **B** respectively.

3.1 Car Parking Reconfiguration and Multi-deck Car Park

Following further demand analysis, design development and consultation in the lead up to preparing and lodging the Stage 2 SSD application, a combined multi-deck and at-grade car parking solution, rather than entirely tiered at-grade car parking on the site, is considered the most suitable and efficient solution to cater for the hospital's parking needs. The construction of a multi-deck car park to service the hospital in conjunction with at-grade parking has been proposed in the Stage 2 SSD application. Hence an amendment to the Concept Proposal is proposed to ensure consistency and permit the multi-deck car park.

The multi-deck is situated to the west of the main hospital building, being the least sensitive side of the Project Site in terms of residential amenity.

As presented in the Stage 2 SSD application, the combination of multi-deck (providing up to 1388 spaces), at-grade and short-term parking facilities has the ability to support a maximum potential parking supply of up to 1538 on-site car parking spaces, with a minimum 1201 spaces provided at year of opening based on demand to 2023/24.

The maximum planning envelope parameters for the multi-deck car park are:

- A maximum height of RL 47.45 (supporting a multi-deck car park up to 10 storeys in height).
- Lowest level RL 16.00
- Setback 30.4 m from the western boundary
- A footprint of 69.1 m by 74 m.

The Concept Proposal parking arrangement, including the maximum planning envelope parameters for the multi-deck car park, is shown in the plans at **Appendix A**.

3.2 Internal Road Network Refinement

As presented in the attached plans, the proposed on-site/internal road layout is generally consistent with the approved concept layout however design refinement is proposed, including minor modifications to support the inclusion of the proposed multi-deck car park.

3.3 Tweed Valley Skills Centre

An additional temporary building - the 'Tweed Valley Skills Centre' – has been included for approval in the Stage 2 SSDA and therefore modification to the Concept Proposal is also sought to include this. The Tweed Valley Skills Centre will be a contemporary working, learning and teaching environment, which includes:

- A Prototype and Simulation Suite to inform and verify the detailed design of key clinical spaces for the hospital, and in turn be used as a low-fidelity simulation space for TAFE NSW health education programs.
- A Skills and Employment Hub a drop-in facility for community and local industry, providing
 information on training and careers in the construction industry, jobs on the Project and support in
 developing business capability and tendering for subcontract work packages and supply contracts.

The Tweed Valley Skills Centre is proposed to be developed in partnership with NSW TAFE, subject to funding. It is proposed as a modular building capable of being relocated as it is anticipated that the Skills Centre would transition to a suitable location on the NSW TAFE Kingscliff Campus at completion of the hospital's construction period (relocation will be subject a separate planning process, as required).

The Skills Centre is expected to have a maximum building height of RL 30.40. It is set back 10.9 m from Cudgen Road, and approximately 134 m from the east boundary (as dimensioned on the application plans).

Given its anticipated temporary nature on the Project Site, it is proposed to provide pedestrian access to the Skills Centre and temporary parking would be provided as required as part of the Tweed Valley Hospital Stage 2 works.

Following removal of the Skills Centre towards the end of the Stage 2 (Main Works) construction period, the subject area would be finished as part of the overall Tweed Valley Hospital landscape design.

Operational details of the Skill Centre are provided in the Stage 2 SSD application for the Tweed Valley Hospital.

3.4 Hospital Beds

For the purposes of the traffic analysis consistent with benchmarking against other NSW regional hospitals, the Concept Proposal was originally based on a yield of 430 day only and overnight beds (excluded emergency treatment spaces). Hospital bed numbers have increased from 430 to 499 day only and overnight beds (note this number excludes emergency treatment spaces).

The Stage 2 SSD application proposes 545 hospital beds/treatment spaces (comprising 48 day beds, 451 in patient unit (IPU) beds, and 46 emergency treatment spaces); inclusive of 56 IPU beds to be constructed as Stage 2B subject to demand and funding (as detailed in the Stage 2 SSD application – SSD 10353). The Stage 2 SSD application is supported by an updated Traffic Impact Assessment based on the increased bed yield. This Concept Modification is supported by a Traffic Impact Technical Note (attached at **Appendix C** and summarised at **Section 5.5**) that references that Stage 2 assessment.

3.5 Amendment to Approved Planning Envelopes

The following amendments to the approved maximum planning/building envelopes are proposed to accommodate to accommodate Schematic Design Stage design development changes.

3.5.1 Main Hospital Envelope

Minor adjustments/refinements to the main hospital envelope are sought. The modified main building envelope parameters include:

- Unchanged maximum height of RL 67.1 including the helipad and plant rooms
- Unchanged maximum height of RL 54.85 for the main building mass
- Unchanged lowest basement level at RL 14.25
- Unchanged level of the entry from Cudgen Road at RL 27.75



- The footprint of the proposed modified planning envelope measures approximately 143 m x 199 m in plan, being marginally larger than the currently approved version (136 m x 187 m)
- A marginally reduced minimum setback of approximately 61.4 m from the boundary with Cudgen Road, compared to the currently approved setback of 63.5.

An additional envelope for a Central Energy Plant between the main hospital building and multi-deck car park is proposed. The maximum envelope for the Central Energy Plant:

- is setback 32.4 m from the western boundary
- has maximum height of RL 27.75.

3.5.2 Health Hub Envelope

Minor adjustments/refinements to the health hub envelope parameters include:

- Unchanged maximum height of RL 39.40
- Changed ground level from RL 27.75 to RL 26.60
- A marginally reduced minimum setback of approximately between 8.1 m and 12.6 m from the boundary with Cudgen Road, compared to the currently approved setback of between 9.3 m and 13.3 m.

The SSD 9575 consent preamble and conditions also refer to the health hub as a support building (i.e. singular). It is proposed to amend this wording to remove reference to a single building and allow for more than one building to be developed within the health hub maximum planning envelope.

3.5.3 Electrical Switching Station and Backup Generator Co-location

The electrical switching station kiosk has been relocated further to the east.

The high-voltage electrical network for the hospital will be backed by standby diesel high-voltage generators. These generators will operate in the event of a utility supply outage to provide electricity to critical patient care areas. The addition of an approximate planning envelope for the co-location of the backup (emergency) generators with the electrical switching station kiosk has also been included in the modified Concept Proposal. The area will also accommodate a fuel storage/source for the generators. Access and a truck lay-by are included from the service ring road. Further operational details are applicable to and provided in the Stage 2 SSD application.

3.5.4 GFA Changes

An increase in the permitted maximum Gross Floor Area (GFA) of the hospital and support building (excluding helipad) to approximately 65,050 m² is proposed (GFA, as defined in the Standard Instrument: Principal Local Environmental Plan as at the date of this development submission). This is as a result of Stage 2 detailed design and to accommodate expansion of the hospital for additional inpatient units (subject to demand and funding) and expansion of the health hub.

3.6 Landscape Zonal Plan

The Concept Proposal Landscape Zonal Plan has been amended and refined to align with the Stage 2 detailed design, including:

- Reduction of proposed farm landscape to the east of the site, reverting certain zones to low maintenance native landscaping
- General modifications to align the landscape design with the Concept Modification site masterplan design
- Farm landscape zone reduced and split into new zones named 'Existing Orchard', 'Community Garden Opportunity' and 'Therapy Garden Opportunity'
- 'Low Maintenance Native Landscape' zone split into 'Hydromulched/drill seeded lawn' and 'Lawn with clusters of native planting'
- 30 m section of 'Vegetation buffer' extended south to meet western boundary
- Pathways down to and north of the loop road removed.

The landscape design proposal is principally similar to the endorsed EIS Concept Masterplan.

3.7 Amendment to Consent Preamble

The following amendments to the SSD 9575 consent preamble are suggested/proposed:

A Concept Proposal comprising:

- the maximum building envelope for a nine-storey hospital with helipad and plant rooms on the rooftop
- the maximum building envelope for support services (health hub)
- the maximum gross floor area of 65,050 m² for the hospital and health hub on the site
- the site layout, internal roads, site access arrangements and car parking provisions
- a landscape masterplan, concept public domain treatments and stormwater strategy
- Tweed Coast Road and Cudgen Road intersection upgrade works.

3.8 Amendment to Conditions of the Consent

The following table identifies the conditions of consent SSD 9575 that require amendment to reflect various changes to the Concept Proposal. Suggested amendments are also provided.

Table 3.1 SSD 9575 Condition Amendments as a result of Modifications

Existing Schedule 2 Conditions of Consent for Concept Development Application - Part A Administrative Conditions	Suggested/Proposed Amendment
Terms of Consent - A2.	Requires amendment to reference modified plans/drawings (refer to Appendix A and B for modified drawing list).

Existing Schedule 2 Part B - Conditions to be Satisfied in Future Development Application(s)	Suggested/Proposed Amendment
B3. The future hospital building is restricted to:	No change required.
(a) maximum building height of RL 67.1 including the helipad and plant rooms;	
(b) maximum building height of RL 54.85 for the main building mass;	
(c) the lowest basement level at RL 14.25; and	
(d) the level of the entry from Cudgen Road at RL 27.75	
B4. The health hub fronting Cudgen Road is restricted to:	B4. The health hub fronting Cudgen Road is restricted to:
(a) a maximum height of RL 39.4; and	(a) a maximum height of RL 39.4; and
(b) an entrance level floor height of RL 27.75 from Cudgen Road.	(b) an entrance level floor height of RL 26.6 from Cudgen Road.
B5. The maximum gross floor area of the two buildings within the Site (hospital and health hub), are to be 65,000 m ² excluding the helipad on the roof top of the future hospital building	B5. The maximum gross floor area of the buildings within the Site (hospital and health hub), are to be 65,050 m² excluding the helipad on the roof top of the future hospital building
B7. The site plan and the landscape masterplan 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:	B7. The site plan and the landscape masterplan for the Stage 2 application must include the following as identified in the approved Landscape Zonal Plan prepared by Turf Design Studio dated 23/09/2019.
(h) the identified landscape zones including farm landscape with details of edible produce;	(h) the identified landscape zones including community garden opportunity with details of edible produce;
B8. The urban design and built form of the buildings, public spaces and open areas, proposed as part of the Stage 2 application must be consistent 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.	B8. The urban design and built form of the buildings, public spaces and open areas, proposed as part of the Stage 2 application must be consistent 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, subject to any subsequent modifications and supporting architectural and urban design statements.
B11. The Stage 2 application must be supported by a Visual Impact Assessment Report to identify and assess all impacts of the proposed hospital, associated retaining walls and proposed health hub building on the visual catchment of the Site. The Visual Impact Assessment must be:	B11. The Stage 2 application must be supported by a Visual Impact Assessment Report to identify and assess all impacts of the proposed hospital, associated retaining walls and proposed health hub building(s) on the visual catchment of the Site. The Visual Impact Assessment must:
(a) be based on the identified view locations in the Visual Impact Assessment Report prepared by GeoLINK dated 20 October 2018 and by the approved drawings AR-SKE-53- 200 Rev 01	(a) be based on the identified view locations in the Visual Impact Assessment Report prepared by GeoLINK dated 20 October 2018 and by the approved drawings AR-SKE-53- 200 Rev 01

Existing Schedule 2 Part B - Conditions to be Satisfied in Future Development Application(s)

prepared by Bates Smart dated 22 January 2019; and

(b) consider the impact of the future design of the hospital, health hub building and the retaining walls on the settings, view lines and significant landmarks identified in the draft Kingscliff Locality Plan and include appropriate management and mitigation measures to minimise adverse visual impacts (where relevant), specifically in relation to distant views to Mt Warning and the associated forested hills.

B22. The Stage 2 application must be accompanied by a detailed assessment of the traffic and transport impacts of the development having regard to Roads and Maritime Services (RMS's) Guide to Traffic Generating Development, prepared in consultation with Transport for NSW (TfNSW), RMS and Council and include (but not be limited to) the following:

(b) provision of approximately 700 car spaces for the users and the staff members within the public and staff car parking areas and a minimum of 43 bicycle spaces, with adequate spaces (bicycle and cars) provided to meet the demand for all staff, users and visitors accessing the site in accordance with the parking demand study required by condition B22(a)(iv) of Schedule 2.

Suggested/Proposed Amendment

prepared by Bates Smart dated 22 January 2019; and

(b) consider the impact of the future design of the hospital, health hub building(s) and the retaining walls on the settings, view lines and significant landmarks identified in the draft Kingscliff Locality Plan and include appropriate management and mitigation measures to minimise adverse visual impacts (where relevant), specifically in relation to distant views to Mt Warning and the associated forested hills.

B22. The Stage 2 application must be accompanied by a detailed assessment of the traffic and transport impacts of the development having regard to Roads and Maritime Services (RMS's) Guide to Traffic Generating Development, prepared in consultation with Transport for NSW (TfNSW), RMS and Council and include (but not be limited to) the following:

(b) provision of a minimum of approximately 1201 car spaces for the users and the staff members within the public and staff car parking areas and a minimum of 43 bicycle spaces, with adequate spaces (bicycle and cars) provided to meet the demand for all staff, users and visitors accessing the site in accordance with the parking demand study required by condition B22(a)(iv) of Schedule 2.

4. Statutory and Strategic Context

4.1 Statutory Planning Controls

4.1.1 Zoning and Permissibility

The proposed modifications occur within the SP2 Infrastructure (health services facility) zone under the Tweed Local Environmental Plan (TLEP) 2014.

The proposed modifications to the hospital and associated infrastructure are permissible with consent within the SP2 Infrastructure (health services facility) zone under the TLEP 2014.

The proposed modifications are consistent with the objectives of the SP2 Infrastructure zone and will contribute to the provision of a high-quality health facility and adequate on-site parking.

There are no height limits, floor space ratios or minimum lot size controls applicable to the area of the site covered by the SP2 Infrastructure zone.

4.1.2 Environmental Planning & Assessment Act 1979 & Regulation 2000

The EP&A Act and the *Environmental Planning & Assessment Regulation 2000* constitute the principle planning legislation in NSW and provides the statutory framework for the assessment of this proposed modification.

The approved development (SSD 9575) is declared as SSD. Part 4, Division 4.9, Section 4.55(2) of the EP&A Act applies to the proposed modifications and is addressed below.

(2) Other modifications

A consent authority may, on application being made by the applicant or any other person entitled to act on a consent granted by the consent authority and subject to and in accordance with the regulations, modify the consent if:

(a) it is satisfied that the development to which the consent as modified relates is substantially the same development as the development for which consent was originally granted and before that consent as originally granted was modified (if at all), and

The development, as proposed to be modified, is substantially the same development as that originally approved in that it:

- Does not change the purpose for which the development is being carried out, being for a health facility
- Does not change the type of health facility approved, that being a hospital
- Does not change the extent of the site upon which the development was approved
- Does not significantly alter the scale of the development (the approved building envelopes are subject to minor modifications and the addition of the multi-deck car park is set lower and a notably smaller element than the main hospital building in terms of scale and its visual impact has been assessed as not being significant in context of the Project)

- Does not give rise to any new significant environmental impacts compared to the approved development in terms of the relevant matters for consideration under Section 4.15(1) of the EP&A Act
- Remains consistent with applicable plans, policies and controls.

For the above reasons, the consent authority can be satisfied that the modified Concept Proposal represents substantially the same development for which consent was originally granted.

(b) it has consulted with the relevant Minister, public authority or approval body (within the meaning of Division 4.8) in respect of a condition imposed as a requirement of a concurrence to the consent or in accordance with the general terms of an approval proposed to be granted by the approval body and that Minister, authority or body has not, within 21 days after being consulted, objected to the modification of that consent, and

DPIE would consult the relevant Minister, public authority or approval body with respect to the proposed modifications, as required.

- (c) it has notified the application in accordance with:
 - (i) the regulations, if the regulations so require, or
 - (ii) a development control plan, if the consent authority is a council that has made a development control plan that requires the notification or advertising of applications for modification of a development consent, and
- (d) it has considered any submissions made concerning the proposed modification within the period prescribed by the regulations or provided by the development control plan, as the case may be.

DPIE would notify the application as required and consider any submissions in accordance with the *Environmental Planning & Assessment Regulations 2000*.

4.1.3 Consideration of Section 4.15 Matters

Under Section 4.15(1) of the EP&A Act, the following matters are required to be considered as part of the assessment of the application:

- (a) the provisions of:
 - (i) any environmental planning instrument, and

The proposed modifications to the development under SSD 9575 are not inconsistent with any State Environmental Planning Policies and there are no relevant provisions of the TLEP 2014 that prevent this modification (refer to **Section 4.2** and **4.3**).

(ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Planning Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and There are no known proposed Environmental Planning Instruments (EPI's) that apply to the site or would prevent this modification.

(iii) any development control plan, and

The proposed modifications are not inconsistent with the Tweed DCP 2008. Refer to Section 4.3.2.

(iiia) any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4, and

There are no planning agreements relevant to the approved development, or the development as modified.

(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph),

The only matters prescribed by the regulations that are relevant to the proposed modifications are in relation to Clause 115, which sets out additional requirements that all applications for modifications of consent under Section 4.55 must comply with. This Modification Report provides all relevant information in accordance with Clause 115 of the Regulations and is supported by appropriate assessment (including a consistency assessment with the Concept Proposal and Stage 1 Biodiversity Development Assessment Report (BDAR)).

(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,

Consideration has been given to the potential environmental impacts of the proposed modification (refer to **Section 5** of this report), and it is considered that the proposal as modified does not result in any significant adverse impacts.

(c) the suitability of the site for the development,

The development, as modified, is substantially the same as the development that was originally approved, and the suitability of the site for the new Tweed Valley Hospital is not affected by the proposed modifications.

(d) any submissions made in accordance with this Act or the regulations,

Any submissions would be considered by DPIE as required.

(e) the public interest

The proposed modifications will be in the public interest. The development, as modified, will facilitate the continued development and delivery of a high-quality hospital and improved health services for the Tweed-Byron region, coupled with adequate on-site car parking.

4.2 State Environmental Planning Policies

The following table addresses relevant State Environmental Planning Policies (SEPPs) with regard to the Project in light of the proposed modifications.

Table 4.1 Relevant State Environmental Planning Policies

Policy	Detail	Complies
State Environmental Planning Policy No. 44 – Koala Habitat	State Environmental Planning Policy No. 44 aims to encourage the conservation and management of areas of natural vegetation that provide habitat for koalas to ensure a permanent free-living population and reverse the current trend of koala population decline.	The proposed development has been specifically sited within an area of the site that is largely cleared and would not significantly impact flora or fauna. The modifications occur with the approved/disturbed development footprint and there would be no significant impact to Koala habitat. An updated BDAR has been prepared to support the Stage 2 SSD application (which in turn considers all modifications).
State Environmental Planning Policy No. 55 – Remediation of Land	The objective of this policy is to provide for a State-wide planning approach to the remediation of contaminated land. It aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment. A consent authority must consider the provisions of clause 7(1) of SEPP 55 in order to grant consent for a development.	The modifications occur with the approved/disturbed development footprint. Contamination was previously assessed, and localised remediation approved to be undertaken as part of the Stage 1 Works, in accordance with a Remediation Action Plan (RAP) and conditions of consent. The modifications sought do not change considerations relating to contamination and the required remediation would continue to occur in accordance with Stage 1 Works approval, overseen by an independent auditor. No further assessment is required.
Draft Remediation of Land State Environmental Planning Policy	State Environmental Planning Policy No. 55, and Contaminated Land Planning Guidelines, have provided the planning framework for the management of contaminated land in NSW. The draft Remediation of Land SEPP is part of a review program by the NSW Government. The new SEPP will retain key objectives from SEPP 55 as they remain relevant and add new provisions.	Refer to above response.
State Environmental Planning Policy (Coastal Management) 2018 (Coastal Management SEPP)	The Coastal Management SEPP aims to promote an integrated and co-ordinated approach to land use planning in the coastal zone in a manner consistent with the objectives of the Coastal Management Act 2016.	A comprehensive assessment of the modification in accordance the relevant provisions of this SEPP is provided below.

The Coastal SEPP applies to part of the Project Site. An assessment of the relevant development controls contained within the SEPP and how they relate to Stage 2 is provided below.

Division 1 Coastal wetlands and littoral rainforests area

The Tweed Valley Hospital and associated infrastructure (as modified) does not occur on land mapped as Coastal Wetlands or Littoral Rainforest on the "Coastal Wetlands and Littoral Rainforests Area Map" (refer **Illustration 2.4**). However, low-lying areas of the Project Site, north of the development area, are mapped as Coastal Wetlands and the associated proximity buffer

Policy Detail Complies

extends southward into the Project Site. Similar to the original proposal, some areas of the hospital and ancillary infrastructure would fall within the proximity buffer (refer **Illustration 2.4**).

The proposed modifications occur with the approved and disturbed development footprint and would not adversely impact the Coastal Wetland, directly or indirectly.

Clause 11 of Division 1 - development on land in proximity to coastal wetlands or littoral rainforest - provides the following:

- (1) Development consent must not be granted to development on land identified as "proximity area for coastal wetlands" or "proximity area for littoral rainforest" on the Coastal Wetlands and Littoral Rainforests Area Map unless the consent authority is satisfied that the proposed development will not significantly impact on:
 - (a) the biophysical, hydrological or ecological integrity of the adjacent coastal wetland or littoral rainforest, or
 - (b) the quantity and quality of surface and ground water flows to and from the adjacent coastal wetland or littoral rainforest.
- (2) This clause does not apply to land that is identified as "coastal wetlands" or "littoral rainforest" on the Coastal Wetlands and Littoral Rainforests Area Map.

Concept approval has already been given to the Project and the Concept Proposal and Stage 1 EIS provided an assessment of water resources and biodiversity matters, demonstrating that the development would not adversely affect the hydrological or ecological processes of the wetland. The proposed modifications occur within the approved Concept Proposal and Stage 1 works development footprint. The Stage 2 SSD application provides further relevant environmental assessment of the Project, including stormwater, ecological and hydrological considerations in light of the detailed design of the development and in accordance with SSD 9575 conditions of consent. The assessment undertaken (inclusive of the modifications proposed within this application) has found that the development would not significantly impact upon the Coastal Wetland and the above Coastal Management SEPP policy requirements associated with development in proximity to Coastal Wetlands would be satisfied.

Furthermore, the Project would likely result in an improved environmental outcome for the Coastal Wetland and receiving environment. This is achieved by way of a reduction in sediment and pollutant impacts by effectively designing for and managing stormwater runoff quantity and quality, compared to the previous existing conditions where pollutant and sediment laden runoff resulted from agricultural activities.

Division 2 Coastal vulnerability area

The Project modifications do not impact on land mapped as a "coastal vulnerability area".

Division 3 Coastal environment area

Project modifications do not impact on land mapped as a "coastal environment area".

Division 4 Coastal Use Area

Project modifications do not impact on land mapped as a "coastal use area".

State	State Environmental Planning	Consistent with the original proposal and
Environmental	Policy (Infrastructure) 2007	in accordance with Clause 104 and
Planning Policy	(ISEPP) aims to facilitate the	Schedule 3 of ISEPP, the proposed
(Infrastructure)	effective delivery of infrastructure	hospital will continue to have more than
2007 (ISEPP)	across the State. Division 10 of	200 beds and therefore triggers referral to
	the ISEPP outlines approval	RMS.
	requirements for health facilities.	
	Clause 58 of the ISEPP stipulates	RMS has been consulted throughout the
	the thresholds for health facilities	planning and design process. An updated
	that can be assessed as	Traffic Impact Assessment accompanies



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Policy	Detail	Complies
	Development Without Consent. The proposal does not meet these requirements and therefore requires development consent.	the Stage 2 SSD application and demonstrates that the Project (inclusive of the proposed modifications) is acceptable from a traffic perspective.
State Environmental Planning Policy (State & Regional Development) 2011	This SEPP declares what constitutes SSD.	The Project remains SSD as declared by this SEPP.
State Environmental Planning Policy No. 33 – Hazardous and Offensive Development	If a development is found to be potentially hazardous according to SEPP 33 screening, a Preliminary Hazard Analysis (PHA) is required in accordance with guidelines and circulars published by the NSW Department of Planning.	SEPP 33 is not specifically relevant to the Concept Proposal. SEPP 33 has been addressed as part of the Stage 2 SSD application given its relevance to detailed design and operation.
Draft State Environmental Planning Policy – Environment	Seven existing SEPPs will be merged into one SEPP (i.e. the draft SEPP Environment).	None of the SEPPs identified under the draft SEPP Environment have current application to the Project Site and therefore the draft SEPP Environment is not applicable.

4.3 Local Planning Controls

4.3.1 Tweed Local Environmental Plan 2014

The proposed modifications occur with the SP2 Infrastructure zone (health services facility) under the TLEP 2014 and are permissible with consent. An overview of relevant local provisions (in relation to the modifications), including consideration of their objectives, has been provided in **Table 4.2**.

Table 4.2 Consideration of TLEP Clauses

Local P	Local Planning Instruments and Controls		
TLEP 2014	Clause 4.3 Height of Buildings	No height control applies to the SP2 zone on the Site. No change to the hospital or health hub maximum envelope heights is proposed. The multi-deck car park provides for additional, consolidated parking to better service the hospital and reduces the heat-island effect. The design response (as modified) continues to balance the functional needs of the hospital (including associated parking) while suitably responding to contextual, amenity and urban design considerations. Based on the merits of the modified Project, the envelope heights are acceptable.	
	Clause 4.4 Floor Space Ratio (FSR)	No floor space ratio controls apply. As above, the design response is acceptable.	
	Clause 5.10 Heritage Conservation	The site does not contain listed heritage items. The modifications would not adversely impact on heritage values.	
	Clause 7.1 Acid Sulfate Soils (ASS)	The modifications are related to the Concept Proposal. Disturbance of ASS would not occur, and no further action is required.	

Local Planning Instruments and Controls	
Clause 7.2 Earthworks	This Modification Application applies to the Concept Proposal. Bulk earthworks were assessed as part of Stage 1. No further consideration is required.
Clause 7.3 Flood Planning	The proposed location of the new hospital and associated buildings and critical infrastructure remain above the PMF level.
Clause 7.10 Essential Services	Services and utilities are available, and it has been demonstrated that the hospital can be adequately serviced. Refer to the infrastructure management plans that accompany the Stage 2 SSD application for detail.

4.3.2 Development Control Plans

The Tweed Development Control Plan (DCP) 2008 supports the provisions of LEP and provides a set of development objectives and provisions for local development within the Tweed LGA. The SRD SEPP excludes the consideration of DCPs for SSD. As outlined in the Department of Planning and Environment's Fact Sheet on SSD (February 2012):

"DCPs do not apply to SSD. This is because development control plans are generally concerned with local or specific issues and do not provide appropriate planning controls for large, complex developments of importance to the State or region and are not a relevant matter for consideration in the assessment of SSD".

The Project including the proposed modifications are therefore not subject to the requirements of the DCP 2008, however the DCPs general guidelines for development have been considered where appropriate.

The proposed modifications would not alter the assessment/conclusions of the Concept Proposal and Stage 1 Works EIS with regard to an assessment against the DCP 2008. The on-site parking provision will exceed the DCP minimum requirements.

4.3.3 Other NSW Legislation and Approvals

4.3.3.1 National Parks and Wildlife Act 1974

An Aboriginal Cultural Heritage Assessment was prepared by Niche Environment and Heritage for the Concept Proposal and Stage 1 EIS that involved site clearing and bulk earthworks, highly disturbing activities. The assessment found no Aboriginal cultural heritage objects and there is no significant likelihood of Aboriginal objects occurring within the development area. The modifications occur with the approved development/disturbance footprint and based on the original assessment findings they would not result in significant harm to Aboriginal Heritage. No further assessment is required.

Pursuant to Clause 4.41 (1) (d) of the EP&A Act, an Aboriginal heritage impact permit under section 90 of the NPW Act 1974 is not required for SSD.

4.3.3.2 Fisheries Management Act 1994

Concurrence is required from the Minister for Department Industry for dredging and reclamation works on land that is periodically inundated by water in accordance with Section 199 of the *Fisheries Management Act 1994*. The modifications do not involve such works.

The Project, as modified is not within a marine environment and no marine vegetation would be affected.

The modifications do not occur in areas that are likely to support threatened aquatic habitat for flora or fauna. Thus, the Project as modified, is considered unlikely to impact on any threatened aquatic species and communities. Pursuant to Clause 4.41 (1) (b) of the EP&A Act, a permit under section 201, 205 or 219 of the *Fisheries Management Act 1994* is not required for SSD.

4.3.3.3 Biodiversity Conservation Act 2016

The BC Act sets out the assessment framework for threatened species and biodiversity.

Biodiversity is addressed at **Section 5.1** and **Appendix D**. The proposed modifications occur within the approved Concept Proposal and Stage 1 Works development footprint and no further clearing is proposed as part of this Modification Application. The biodiversity assessment has concluded the proposed modifications to the Concept Proposal do not introduce any additional significant biodiversity impacts that have not been assessed in the Stage 1 BDAR, and an updated BDAR has been prepared for submission with the Stage 2 SSD application.

4.3.3.4 Heritage Act 1977

No part of the Project Site is listed as an item of State significance on the NSW State Heritage Register. Accordingly, the proposal does not require heritage approval under the *NSW Heritage Act* 1977. The archaeological provisions of the *NSW Heritage Act* 1977 are applicable, however, as all "relics" are protected under the NSW Heritage Act, regardless of whether or not the place is listed as a heritage item at a local, State or National level.

Section 4.41 (previously 89J) of the EP&A Act outlines approvals that do not apply to SSDs. Of relevance to heritage approvals, under s4.41 the following do not apply to SSDs:

- An approval under Part 4, or an excavation permit under s139, of the Heritage Act 1977
- Division 8 of Part 6 of the Heritage Act 1977, which relates to controlling and restricting harm to buildings, works, relics and places not subject to interim heritage orders or State Heritage Register listing.

Historic Heritage is addressed in Section 5.8.

4.3.3.5 Environmental Protection and Biodiversity Conservation Act 1999 (Cwth)

Under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), any action that has, or is likely to have, a significant impact on Matters of National Environmental Significance (MNES) or other aspects of the environment, such as on Commonwealth land, may progress only with approval of the Commonwealth Minister for the Environment under Part 9 of the EPBC Act.

The assessment undertaken for the Concept Proposal and Stage 1 Works EIS, including an assessment of MNES by Greencap, confirmed that there would be no significant impact to MNES or Commonwealth land as a result of the development. The proposed modifications do not change the considerations relevant to MNES and Commonwealth land and the modifications to the Project would be consistent with the assessment's findings. The main potential MNES identified in that assessment was with regard to the Mitchell's Rainforest Snail (*Thersites mitchellae*). An expert assessment (by

Invertebrate Identification Australasia) of the potential impacts to the Mitchell's Rainforest Snail was submitted during the previous stage and this has been further investigated to support the Stage 2 SSD application (which is inclusive of all modifications to the Concept Proposal). No significant impact to MNES pertaining to the Mitchell's Rainforest Snail in relation to Stage 2 (and therefore the modifications) would result, and the Project would enhance not reduce available habitat.

In addition to this, the Stage 2 SSD application is supported by a Hydrology Assessment which assesses the ecological impact of the Proposal's stormwater outflows on the adjoining coastal wetland and wetland species. The assessment concluded that there is no increase in the total site discharge rate in the 5-year and 100-year Average Recurrence Interval (ARI) storm events (peak flows), and that the increase in frequent flows from the Proposal can be mitigated and will have minimal ecological impact on the wetland and that improved water quality through reduction of sediment load and nutrients may be of ecological benefit to wetland species.

The recommendations of the BDAR and BMP submitted with the Stage 2 SSD application would mitigate direct, indirect and prescribed biodiversity impacts.

As no significant impact to MNES is expected in relation approval of the proposed modifications, referral to the Federal Department of Environment and Energy is not required. A summary of the relevant matters for consideration is provided in the following table.

Table 4.3 Assessment of Matters of National Environmental Significance

	Factor	Impact
а	Any Environmental Impact on a World Heritage Property?	
	The proposed modifications are not in proximity to any lands listed as World Heritage Property, and therefore would have no impact on such lands. The original mitigation measures stated in the Concept Proposal and Stage 1 EIS would negate any potential environmental impacts off-site.	Nil
b	Any Environmental Impact on National Heritage Places?	
	A search indicated that there are no nearby National Heritage Places. Therefore, the proposed modifications would not have a significant impact on any such places. The original mitigation measures stated in the Concept Proposal and Stage 1 EIS would negate any potential environmental impacts off-site.	Nil
С	Any Environmental Impact on Wetlands of International Importance?	
	The proposed modifications are not in proximity to any lands listed as Wetlands of International Significance (RAMSAR Sites), and therefore would have no impact on such lands.	Nil
d	Any Environmental Impact on Commonwealth Listed Threatened Species or Ecological Communities?	
	This aspect was assessed as part of the Concept Proposal and Stage 1 Works EIS and there would be no changes to the findings attributed to the modifications. An updated BDAR and BMP has been submitted with the Stage 2 SSD application. The main potential MNES identified previously was the Mitchell's Rainforest Snail and this has been further investigated with regard to Stage 2. The modifications are consistent with the Stage 2 SSD application and that assessment has found that the Project would enhance Mitchell's Rainforest Snail available habitat. Overall, it is not expected that any Commonwealth listed species would be significantly impacted.	Nil
е	Any Environmental Impact on Commonwealth Listed Migratory Species?	
	This aspect was assessed as part of the Concept Proposal and Stage 1 Works EIS. The considerations applicable to the modifications are consistent with the previous assessment, and it is not expected that any Commonwealth listed migratory species would be significantly impacted.	Nil
f	Any Environmental Impact on a Commonwealth Marine Area?	
	The modifications do not impact on a Commonwealth Marine Area.	Nil
g	Any impact on the Great Barrier Reef Marine Park?	
	The Project is distant from the Great Barrier Reef Marine Park and there would be no impact.	Nil
h	Does Any Part of the Project Involve a Nuclear Action?	
	The Project does not involve a nuclear action.	Nil
i	Any impact on a water resource, in relation to coal seam gas development and large coal mining development?	
	The Project does not involve coal seam gas or coal mining.	Nil
	Additionally, any impact (direct or indirect) to Commonwealth Land?	
	The protected matters search tool returned results for Commonwealth Land within 10 km of the Project Site; however, none occurs within one kilometre. There would be no impact to Commonwealth Land.	Nil

5. Environmental Assessment of Modifications

This section provides an assessment of the key environmental issues associated with the proposed modifications.

5.1 Biodiversity

The proposed modifications occur with the approved development footprint and no further vegetation clearing is proposed as part of this Modification Application. Greencap have reviewed the Stage 2 SSD application (for main works and operation) and the consequential modifications proposed to the Concept Proposal. Their assessment, including consistency against the endorsed BDAR that accompanied the Concept Proposal and Stage 1 EIS, is attached at **Appendix D**.

Having undergone Stage 2 design, the Tweed Valley Hospital Stage 2 SSD application has remained generally consistent with the original masterplan concept intent. Greencap have determined that the proposed modifications do not introduce any additional significant biodiversity impacts that have not been assessed in the Stage 1 BDAR.

Furthermore, it is noted that a revision of the Stage 1 BDAR has been prepared for the Stage 2 application (Stage 2 BDAR) that considers all additional information regarding detailed design for construction and operations of the Project. The Stage 2 SSD application has been submitted concurrently with this Modification Application. The Stage 2 BDAR confirms that no significant impacts would result, and that after avoiding and minimising the impact of the development on biodiversity, the residual impact of direct, indirect and prescribed impacts that cannot be avoided and minimised would be minor. Hence, the proposed modifications are acceptable.

5.2 Agricultural Impact and Land Use Conflict Risk Assessment

The modifications do not result in any additional impact to State Significant Farmland or agricultural resources.

The modifications do not result in any additional or significantly altered considerations in relation to potential land use conflict, however a revised Land Use Conflict Risk Assessment (LUCRA) has been submitted with the Stage 2 SSD application as a result of modifications to the Concept Proposal and in particular Stage 2 detailed design. The main modifications considered, include refinements to the southwest ring road, siting of Bulk Oxygen Storage and Liquified Gas Cylinder, and inclusion of a multi-deck car park and how these may influence the western buffer between the hospital development and the western adjoining lot. The inclusion of the multi-deck car park, adjacent to the western boundary, is not a sensitive building and would assist in further shielding the hospital from any adjacent agricultural activity (noting that the western adjoining lot is currently fallow and not farmed). An updated LUCRA has been submitted with the Stage 2 SSD application. Adequate vegetated buffers, consistent with the recommendations of the LUCRA are maintained in the modified Concept Proposal.

The only minor change relates to the 10 m western buffer and its potential to be increased in the case of potential land use change/agricultural intensification on the western adjoining lot. Originally, and despite there being no existing agricultural land use on the adjacent property to west, the LUCRA adopted the precautionary principle by recommending a 10 m wide vegetated buffer along the western boundary of the Project Site. This 10 m buffer has not been altered, however previously, this western vegetated buffer also had the potential to be increased between approximately 22 m-30 m, should this be required as a result of intensification of adjoining agricultural production.

Due to the modifications, including refinement of the ring road and the introduction of services (involving, a truck lay-by/bypass, Bulk Oxygen Storage and Liquified Gas Cylinder) opposite the multideck car park, the available setback between the western boundary and proposed infrastructure on the Project Site has slightly reduced for a limited length adjacent to the boundary. Under the modified Concept Proposal, with the exception of a length of approximately 40 m in the location of the bypass lane where an above ground Bulk Oxygen Storage and an underground Liquified Gas Cylinder will be located, the design/siting of the development enables a future increase in the buffer width to the order of 14 m to 30 m total vegetated buffer width should this be required as a result of intensification of adjoining agricultural production. The bypass lane is to be located directly opposite a 10 storey car park which will have a shielding effect on air and noise impacts should there be any intensification of adjoining agricultural production.

The LUCRA has considered the changes in the context of the proposed Stage 2 SSD application and finds the Project remains acceptable. The combination of the vegetated buffer and elevation differential with the adjacent site ground level will contribute to increased buffer effectiveness. The introduction of the multi-deck car park and adjacent infrastructure also provides for further shielding of the main hospital. The arrangement is considered acceptable and would continue to achieve appropriate interface management, as required.

The Stage 2 LUCRA confirms that the Project is suitable and adequate interface management measures have been incorporated into the design in accordance with the recommendations.

5.3 Built Form and Urban Design

5.3.1 Hospital Envelope Changes

The proposed hospital modified planning envelope remains similar in many respects to the endorsed planning envelope, with changes to the form primarily required to the lower levels. The key drivers behind the requirement to modify the planning envelope include:

- Progression of the detailed facility health planning, with deviations impacting the northeast flank at ground and lower ground levels
- Requirement for an on-grade central energy plant. The central energy plant is a screened unroofed zone, located at basement and lower ground levels to the west of the building
- Accommodation of future expansion.

The proposed modified planning envelope retains similar qualities to the endorsed envelope, maintaining the maximum height of RL+ 67.10 and retains the primary building mass height of RL +54.85. The base of the modified planning envelope is marginally larger.

The modified plans and drawings at **Appendix A** (in particular drawings AR-SKE-10-010 and AR-SKE-50-501), illustrate the extent of change proposed compared with the endorsed planning envelope. Due to the location of the changes, the impacts these modifications have are generally imperceptible shadowing and visual impact when viewed from distant vantage points. The modifications are considered to be acceptable.

5.3.2 Health Hub Envelope Changes

The modification proposes a minor change to the effective width and setback of the health hub planning envelope, with no change in height.

Modification to the endorsed planning envelope is required as a result of the developed facility health planning. The health hub maximum planning envelope is now also proposed to accommodate a number of buildings (as detailed in the Stage 2 SSD application) within the defined maximum envelope parameters, rather than being referenced in the current consent as a singular structure/ building. The ground floor level of the health hub will be set in close relationship with the natural ground level (RL +26.6), in order to minimise the requirement for extensive cut and fill.

The modified health hub planning envelope remains substantially similar to the endorsed version and is acceptable.

5.3.3 Addition of Multi-deck Car Park Envelope

The Concept Modification proposes a reconfiguration of the car parking strategy for the site, including the introduction of a multi-deck car park. The multi-deck car park would provide additional parking in a consolidated location and is to be complimented with consolidated (reduced) at-grade parking.

The multi-deck car park and at-grade parking is designed to collectively meet the forecast long-term parking demand for the hospital.

The key benefits of the multi-deck car park, over solely at-grade parking (as previously proposed) include:

- yield capacity to meet long-term parking demand (public and staff parking)
- reduction in hard-stand and paved surfaces which improves landscape amenity, permeability and reduces the heat-island effect
- reduced walking distances from parking to hospital
- sustainable, with low impact on development of any future complimentary program
- reduced requirement for street lighting, with ecological benefits
- more efficient car parking management
- improved vehicle and user security
- increased accessible parking capacity
- parking management flexibility.

The Concept Proposal drawings have been modified to include an additional planning envelope, located west of the hospital envelope, within which the multi-deck car park structure will be designed in its entirety and proposed as part of Stage 2. The planning envelope is approximately 74 m x 69 m in plan and 30 m tall, reducing in height with adjacent site topography which is to be minimally modified. The envelope is expected to be able to accommodate a multi-deck car park up to 10 storeys in height.

Visual impact montages (consistent with the style and methodology of those prepared for the previous Concept Proposal) have been prepared to include the additional planning envelope. The car park's comparative low floor to floor level ensures the structure remains low in height adjacent to the main hospital envelope, adding minimal additional low-level mass to the visible bulk of the development, including when viewed from the local vantage positions studied. The Stage 2 SSD application is also supported by a comprehensive visual assessment based on detailed design of the development, which includes the modifications as proposed in this application. As discussed in **Section 5.4.2** of this report, the visual impact of the development, inclusive of the multi-deck car park, is considered to be acceptable and would be mitigated in Stage 2 by way of the design response.

5.3.4 Electrical Substation Kiosk and Backup Generator Co-location

The concept modification includes the minor relocation of the electrical switching station and the addition of an approximate planning envelope for the co-location of backup generators and associated ancillary features. The electrical switching station would be relocated further east and additional envelope area provided to co-locate these ancillary facilities (including generators and fuel storage/source). The envelope would be located in closer proximity to the internal service road, reducing the extent of hard stand required for maintenance vehicle access. The revised location is set further into the site increasing the offset from the neighbouring west boundary compared to the previous switching station envelope, is set behind provision for landscaped and vegetated buffers on the site (facilitating visual screening) and is appropriate. Suitable servicing access and a truck lay-by are included from the ring road.

5.3.5 Landscape Strategy

The modification includes provision of a revised concept landscape zonal plan. The revised design responds to the following design refinements:

- Reduction of proposed farm landscape to the east of the site, reverting certain zones to low maintenance native landscaping
- General modifications to align the landscape design with the Concept Modification site masterplan design
- Farm landscape zone reduced and split into new zones named 'Existing Orchard', 'Community Garden Opportunity' and 'Therapy Garden Opportunity'
- 'Low Maintenance Native Landscape' zone split into 'Hydromulched/drill seeded lawn' and 'Lawn with clusters of native planting'
- 30 m section of 'Vegetation buffer' extended south to meet western boundary
- Pathways down to and north of the loop road removed.

The landscape strategy is principally similar to the endorsed Concept Proposal. It will achieve a cohesive and appealing urban design outcome that effectively integrates with built form elements and is responsive to the site context.

5.3.6 Addition of Tweed Valley Skills Centre Envelope

The Tweed Valley Skills Centre would be a temporary, low-scale building, positioned east of the health hub. Given the low-scale and substantial setbacks, the addition of the envelope to accommodate the Skills Centre would have no adverse impact on the built form and urban design outcome of the Project Site or surrounding residential amenity.

5.4 Environmental Amenity

5.4.1 Overshadowing and Solar Access

Shadow diagrams have been prepared which depict the overshadowing impact of the modified maximum planning envelopes at hourly intervals from 9:00 am to 3:00 pm during the winter solstice (June 21 – representing the worst-case scenario) as presented in **Appendix A**.

The shadow diagrams demonstrate that shadows cast by the maximum planning envelopes continue to be mostly contained within the Project Site. A negligible encroachment of overshadowing from the multi-deck car park envelope affects the western adjoining rural property at 9:00 am on 21 June. This shadow is removed by 10:00 am. Shadows generally start to extend beyond the south-eastern title boundary at around 1:00-2:00 pm with minor encroachment onto Cudgen Road.

Similar to the original Concept Proposal, a marginal amount of overshadowing extends into the front yard of a dwelling on the opposite side of Cudgen Road at 3:00 pm. There is no overshadowing impact to secluded private open space and the impact would be negligible.

The modifications do not result in any overshadowing of adjacent active agricultural land. The negligible encroachment to the western property boundary at 9:00 am on June 21 would not impact agricultural activity (it is not currently farmed) or potential productivity of the land.

5.4.2 Visual Impact

A Visual Impact Assessment (VIA) was originally prepared for the Concept Proposal based on the proposed maximum planning envelopes, prior to the finalisation of built form and detailed design (i.e. Stage 2). Updated photomontages (consistent with the style and methodology of those prepared for the previous Concept Proposal) have been prepared and accompany this Modification Application (**Appendix A**). Aside from the modest amendments to the approved maximum planning envelopes and inclusion of the Tweed Valley Skill Centre, the most substantial change to the Concept Proposal is the addition of a maximum planning envelope for a multi-deck car park.

Importantly, the appended photomontages do not represent built form or actual massing, but rather provide an indication of the probable visual impacts based on the maximum envelope (worst-case) within which, through the design process, the buildings and forms would be developed and articulated. As part of the separate Stage 2 SSD application (that has been concurrently lodged with this Modification Application) this detailed design process has occurred and buildings have been articulated within the respective concept envelopes. A detailed Stage 2 VIA has been prepared to assess the Project in the context of this detailed design, inclusive of all proposed modifications. The Stage 2 VIA should be read in conjunction with this Modification Report for more detailed assessment and justification. A copy of the Stage 2 VIA is attached as **Appendix E**.

The proposed modifications and refinements to the approved hospital and health hub envelopes are minor in the context of the overall development. The main changes are to the lower portions of the hospital envelope that would generally result in imperceptible visual changes when viewed from surrounding distant viewpoints. The Tweed Valley Skills Centre would be a temporary, low-scale building. Given the low-scale and substantial envelope setbacks, the Skills Centre would have no adverse visual impact on surrounding residential amenity.

The multi-deck car park has been integrated into the topography of the Project Site to reduce its perceived height. Its comparative low floor-to-floor level ensures the envelope and future structure remains low in height adjacent to the main hospital envelope, adding minimal additional low-level mass to the visible bulk of the development, including when viewed from the local viewpoints studied. The multi-deck car park envelope is also situated on the least sensitive side (west) of the Project Site in terms of residential amenity. The detailed design and material treatment applied in Stage 2 would ensure adequate visual interest and minimisation of bulk.

Based on the findings of the Stage 2 SSD VIA (refer **Appendix E**), the addition of the multi-deck car park envelope is not expected to significantly contribute to sensitive view loss or local visual impact in the context of the Project as a whole. Any attributed impact would be further mitigated in Stage 2 by way of the detailed design response, material treatment, and landscape strategy. Furthermore, the Stage 2 VIA concludes that as a result of the sensitive design approach, the visual impacts of the proposed development are compatible with the existing visual context and satisfy the intents and objectives of the TLEP and visual/scenic policy considerations. On this basis, the visual impact of the modified Concept Proposal is considered to be acceptable.

5.4.3 Visual Privacy

The main hospital building envelope continues to be situated nominally at the centre of the deepest zone of the Project Site (proposed building setbacks are depicted in the plans at **Appendix A**). The nearest dwellings are located south of Cudgen Road (setback approximately 80 m from the main hospital building envelope). The main Kingscliff residential area is located over 300 m to the east from the main hospital building envelope. The modification retains substantial setbacks from sensitive receivers and the physical separation and landscaping proposed would ensure that there is no adverse impact to visual privacy.

5.4.4 Acoustic Impacts

The modifications relate to the Concept Proposal and noise and vibration are addressed in **Section 5.9**. Noise and vibration can be appropriately managed during construction and operational noise is not expected to adversely affect sensitive receivers (these aspects are subject to assessment in the Stage 2 SSD application and EIS).

5.4.5 Light Spill

The modifications are not expected to adversely influence potential light spill (assessed as part of the Stage SSD application). A lighting strategy has been prepared for the Stage 2 SSD application and measures would be adopted to minimise the effects of obtrusive lighting and light spill.

The Stage 2 SSD application confirms that the design of the multi-deck car park (which is beyond the considerations of the Concept Proposal), will minimise light spill from vehicle movements. Site landscaping and perimeter vegetation will also assist to filter light from vehicle movements.

5.4.6 Wind Impacts

The proposed modifications will not result in any adverse wind impacts to neighbouring properties.

5.5 Traffic, Access and Parking

The proposed modifications are generally consistent with the approved Concept Proposal layout in terms of car parking and internal road layout, however the following minor changes are proposed and make for improvements:

- Consolidation of the separate at-grade car parks to the east of the main hospital building into a single at-grade car park for public use (noting the proposed multi-deck car park offers an increased supply of car parking in a consolidated location).
- Changes to internal connectivity of the road layout. Specifically, all staff access is proposed via the Project Site access points A and D, which limits unnecessary vehicle movements and circulation through the main hospital drop-off/pick-up areas and high pedestrian activity areas on the site and limitation of public access to Access B and C only which removes public vehicle movements from the internal service ring road, therefore separating public vehicle movements from service vehicles and ambulances.

The internal road and circulation strategy refinements are further discussed in **Appendix B** and **C**, and ultimately provide for refinement and an improvement vehicle and pedestrian movement experience.

Bitzios (traffic consultants) have reviewed the proposed modifications from a traffic engineering perspective and prepared a technical note to support the application (**Appendix C**). This technical note is based on and should be read in conjunction with the Stage 2 Traffic Impact Assessment that has been lodged concurrently with the Stage 2 SSD application. The key findings of the traffic assessment for the Modification Application to the Concept Proposal approved under SSD 9575 are:

- The Modification results in an increase of parking supply from "a minimum of 700 spaces" to a minimum of 1201 spaces at year of opening, and ultimately catering for a total of 1538 spaces. This has been facilitated with the inclusion of a multi-deck car park in place of the at grade parking to the south-west of the main Hospital Building and consolidation of the at-grade parking to the east of the main hospital building. The new parking provision caters for parking demands identified in the Car Parking Demand Study carried out in accordance with SSD 9575 conditions of consent and in support of the Stage 2 SSD application.
- The multi-deck car park generally complies with the requirements of AS2890 for User Class 3 facilities (2.6 m wide by 5.4 m long bays with minimum 5.8 m wide parking aisles). It is noted that the modification is to the Concept Proposal only (detailed design is applicable to Stage 2) and does not include detailed car parking geometry as part of the masterplan.
- No change to the four access locations or form of accesses is proposed as part of this Modification Application.
- No change to servicing provision or operations is proposed as part of this Modification Application.
- With the yields proposed in the Modification Application, there is a minor reduction of peak hour trips in Year 2023 and an increase in peak hour trips in Year 2033.
- The key changes to traffic movements are:
 - A greater number of movements using the western left slip in (i.e. due to the greater proportion of staff car parking)
 - A reduction in movements turning right into the site at the main signalised access (due to no staff car park access via this route)
 - A reduction in movements turning right out of the site at the main signalised access (due to no staff car park access via this route)
 - A greater number of movements turning right out of the Cudgen Road/Turnock Street access (as this is the only location staff can egress and turn right).

- Minor changes to queuing and operations were observed at site access intersections. All site access intersections were identified to operate within acceptable performance limits under the multi-deck option.
- Detailed traffic modelling undertaken for Stage 2 (that is inclusive of the proposed modifications) identified all access and intersections operating within acceptable limits with the exception the Tweed Coast Road/Cudgen Road intersection (note that this operated outside acceptable limits in some scenarios under the original Concept Proposal). In this regard an additional upgrade is proposed to this intersection as part of Stage 2 works which includes extension of the right-turn pocket on the southern approach of Tweed Coast Road by approximately 50 m. The proposed external intersection works therefore adequately address the Project's net traffic impacts.
- No changes to Public and Active Transport are proposed as part of this Modification.
- No changes to the scope for Stage 1 Early and Enabling works are proposed. Therefore, there are no changes to the considerations for the preliminary Construction Traffic Management Plan.

Based on the proposed modifications to the Concept Proposal and Traffic Impact Assessment undertaken for Stage 2 (Main Works and Operation) there are no traffic, parking, or access impediments to the Project as modified.

5.6 Ecologically Sustainable Development

The Project as modified would continue to be in accordance with principles of Ecologically Sustainable Development.

The car parking reconfiguration and consolidation (via provision of a multi-deck and reduced at-grade parking) has reduced the area of hard-paved surfaces on the site and therefore minimises the heat-island effect which is a positive outcome in terms of sustainability.

5.7 Aboriginal Heritage

A detailed Aboriginal Cultural Heritage and Archaeological Report by Niche Environment and Heritage (Niche), including consultation with the Registered Aboriginal Parties, was prepared to support the Concept Proposal and Stage 1 Works EIS. The assessment concluded that there are no Aboriginal cultural heritage objects, places or features situated within the Project Site. The proposed development will not impact on any Aboriginal cultural heritage values. No impacts associated with the modification are expected and no further assessment is required.

5.8 Historic Heritage

A Historical Heritage Assessment was originally prepared for the Concept Proposal and Stage 1 Works EIS by Niche. The assessment identified five dry-stone walls on the site as being considered of local significance. The proposed modifications do not relate to or affect these walls or the associated heritage values/considerations. The requirements of the SSD 9575 conditions in relation to the dry-stone walls are being addressed as part of the Stage 1 works and in the Stage 2 SSD application, as applicable. No further consideration is required in relation to the proposed modifications.

5.9 Noise and Vibration

The modifications are not expected to significantly affect noise and vibration considerations, with most modifications being relatively minor refinements to approved elements, that are subject to detailed noise and vibration assessment (for main works and operation) as part of the Stage 2 SSD application.

The most substantial modification to the Concept Proposal is the consolidation of car parking and introduction of a multi-deck car park, along with increased bed numbers and therefore changes to predicted traffic as discussed on **Section 5.5**.

JHA have prepared a Noise and Vibration Impact Assessment which has been lodged with the Project's Stage 2 SSD application. It found that the resultant noise from the proposed multi-deck car park is expected to comply with the noise criteria at the nearest sensitive receivers. It is recommended that further consideration should be given to the noise resulting from the car park on the proposed hospital during the detailed design and finalisation phase. It is the opinion of JHA that there will be a low risk of sleep disturbances to the nearby residents due to car park noise.

The Stage 2 Noise and Vibration Impact Assessment also considers traffic noise, based on the Stage 2 Traffic Impact Assessment by Bitzios. Based on the predictions presented in the Stage 2 Noise and Vibration Impact Assessment, general traffic generated on Cudgen Road, Turnock Street and Tweed Coast Road associated with the Tweed Valley Hospital will have no adverse noise impacts on surrounding roads and receivers (i.e. less than 2dB increase).

The minor refinement of helicopter approach and departure paths (as discussed in **Section 5.15**) would not fundamentally alter the conclusions of the Concept Proposal and Stage 1 EIS. As concluded in the Stage 2 Aviation assessment:

- The elevated (rooftop) Helicopter Landing Surface (HLS) will have a positive effect in reducing noise and vibration to the surrounding environment as compared to an on-grade HLS.
- Noise and vibration impact on sensitive land uses has been minimised to the maximum extent that safety allows.
- Planned approach and departure paths avoid built-up and sensitive areas (including residential, educational and biodiversity related receivers) to the greatest extent possible.

The high-voltage electrical network for the hospital will be backed by standby diesel high-voltage generators. The co-location of the backup (emergency) generators with the electrical switching station, toward the southwest corner of the Project Site, has been considered in the Stage 2 Noise and Vibration Assessment (with regard to operational noise). It is understood that the new emergency generators will operate up to eight hours operation per month for testing, or will continuously operate in the event of a utility network outage. Further operational details are applicable to and provided in the Stage 2 SSD application.

The Stage 2 Noise and Vibration Assessment outlines that in the absence of any relevant NSW guideline for emergency generators and equipment, an increase of 5dB above the intrusiveness criteria identified in the Stage 2 Noise and Vibration Report is proposed. This criteria is in line with the duration correction provided in Table C3 of the NSW NPI.

Based on the proposed criteria and proximity to the nearest noise sensitive receiver, noise emissions from the emergency generators shall be limited to LAeq 90 dB(A) at one metre in order to meet the proposed criteria.

Noise controls will need to be incorporated to ensure that the noise levels from the emergency generator to the nearest noise sensitive receiver meet the noise level criteria. Usual design noise controls that may need to be implemented will typically include, but are not limited to:

- Selection of appropriate quiet emergency generator
- Schedule maintenance and testing of plant during day time period where feasible
- Acoustic noise control measures to be put in place to minimise noise impacts such as:
 - Noise enclosures as required
 - Sound absorptive panels
 - Acoustic louvres as required
 - Noise barriers as required.

The assessment confirms that the siting of these ancillary facilities would be acceptable from an acoustic impact perspective and any required acoustic attenuation measures would be implemented as part of Stage 2.

The proposed modifications to the Concept Proposal are supported by the findings of the detailed assessments that accompany the Stage 2 SSD application and are acceptable.

5.10 Services and Utilities

The Project, as modified, would be adequately serviced by services and utilities as demonstrated in the Stage 2 SSD Application.

5.11 Bush Fire Hazard

The modifications remain compliant with the bush fire requirements and Asset Protection Zone (APZ) offset approved as part of the SSD 9575 consent for the Concept Proposal.

5.12 Flooding

The modifications do not alter flooding considerations. The Project, including all buildings and critical infrastructure remain above the PMF level.

5.13 Drainage and Stormwater

The concept car parking reconfiguration and consolidation (via provision of a multi-deck and at-grade combination) has reduced the area of hard-paved surfaces on the site and would allow for improved site permeability. Overall, the proposed modifications do not fundamentally change the proposed stormwater management strategy for the Project Site or operation of the development. Stormwater runoff would continue to be discharged via a network of stormwater infrastructure to on-site biodentation basins (to be converted in Stage 2).

Operational drainage and stormwater management, along with supporting hydrology and ecological assessments, has been addressed in the Stage 2 SSD application. These demonstrate that the proposed stormwater management measures and flow regimes would not have a significant impact upon the nearby wetlands and receiving environment.

5.14 Socio-economic

The proposed modifications do not alter the land use (health services facility) approved for the Project Site as part of the Concept Proposal. The modifications would not significantly alter the Project's social or economic outcomes as identified in the Social and Economic Impact Assessment that formed part of the Concept Proposal and Stage 1 Works EIS. A revised Social and Economic Impact Assessment has been prepared for the Stage 2 SSD application. The Project, as modified, will maintain the expected net social and economic benefits throughout the life of this important Project.

5.15 Aviation

The proposed planned helicopter approach and departure paths to the rooftop Helicopter Landing Surface (HLS) have been refined as a result of design progression and further analysis as part of the Stage 2 detailed design. The flight paths continue to avoid built-up residential and sensitive areas to the greatest extent possible, whilst conforming with the most likely wind directions and landing/take-off and safety requirements.

A detailed aviation assessment, in accordance with the SSD 9575 conditions, accompanies the Stage 2 SSD application and confirms that the development (as modified) would be acceptable from an aviation perspective. The siting and design of the rooftop HLS at the Tweed Valley Hospital, and its associated approach and departure paths, would result in an acceptable outcome and minimises impacts to sensitive receivers as far as practical.

5.16 Cumulative Impacts

The modifications to the Concept Proposal would not result in any additional cumulative impacts. Potential cumulative impacts related to construction have been addressed in the Stage 2 SSD application.

6. Conclusion

This Section 4.55(2) Modification Report and supporting documentation demonstrates that the proposed modifications to the approved New Tweed Valley Hospital (SSD 9575 - Concept Proposal and Stage 1 Works) are appropriate and suitable for the subject site when tested against the relevant heads of consideration detailed within Sections 4.55(2) and 4.15(1) of the *Environmental Planning and Assessment Act 1979*.

The proposed modifications are permissible within the SP2 Infrastructure (health services facility) zone under the Tweed Local Environmental Plan 2014, and are consistent with the objectives of the zones, and with local, regional and State government policies.

The Modification Report has established that there are few site constraints impacting on the modified development outcome, with all identified issues able to be appropriately managed or mitigated. The proposed modifications do not alter the predicted environmental impacts and are supported by assessment of the detailed design and main works proposed under the Stage 2 SSD application that has been lodged concurrently with the Modification Application.

The modifications will allow the Stage 2 SSD application to be considered and in turn enable continued development and delivery of vital improved health services for the Tweed-Byron region. Hence the modifications are acceptable, and on balance are in the public interest.

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