

Tweed Valley Hospital, Cudgen

Stage 2 Main Works Construction Traffic and Pedestrian Management Sub-Plan



2 October 2020



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Document Issue History

Report File Name	Prepared	Reviewed	Issued	Date	Issued to
P4770.001R Tweed Valley Hospital Stage 2 Main Works CTPMSP				18/09/2020	(via Aconex)
P4770.002R Tweed Valley Hospital Stage 2 Main Works CTPMSP				02/10/2020	(via Aconex)



CONTENTS

		Page
1.		1
1.1	Background	1
1.2	Purpose	1
1.3	Statutory Requirements	1
2.	EXISTING CONDITIONS	5
2.1	Road Network	5
2.1.1	Cudgen Road	5
2.1.2	Turnock Street	5
2.1.3	Tweed Coast Road	5
2.1.4	Pacific Highway	5
2.2	Parking	5
2.3	Public Transport	6
2.3.1	Buses	6
2.4	Active Transport	7
3.	CONSTRUCTION ACTIVITIES	8
3.1	Description of Construction Activities	8
3.2	Construction Hours	8
3.3	Construction Worker Induction	9
3.3.1	SafeWork Requirements	9
3.3.2	Safe Work Method Statements	9
3.3.3	Truck Driver Code of Conduct	9
3.4	Construction Worker Parking	10
3.4.1	Construction Worker Alternate Transport	11
3.5	Construction Site Access	11
3.5.1	Gate 1 – Auxiliary Left Turn	11
3.5.2	Gate 2 – Temporary Access Driveway	12
3.5.3	Gate 3 – Signalised Intersection	12
3.5.4	Gate 4 – Auxiliary Left Turn	12
3.5.5	Gate 5 – Cudgen Road / Turnock Street Roundabout	13
3.6	Delivery, Loading and Unloading of Plant, Equipment and Materials	13
3.7	Dust Minimisation	13
3.8	Road Occupancy Licence	13
3.9	Road Dilapidation Report	14
	Road Safety Audits	14
4.	CONSTRUCTION TRAFFIC	15
4.1	Types of Construction Traffic	15
4.2	Vehicle Frequency	15
4.2.1	Impact on the Local Road Network	16
4.3	Construction Vehicle Routes	17
4.3.1	Access Routes	17
	Review of the Route	19
4.4	Road Restrictions	19
4.5	Vehicle Movement Plans	19



Tweed Valley Hospital Cudgen: Stage 2 Main Works ConstructionTraffic and Pedestrian Management Sub-Plan
Project: P4770Version: 002

5.	TRAFFIC IMPACTS	20
5.1	General Traffic	20
5.2	On-street Parking	20
5.3	Pedestrians and Cyclists	20
5.4	Bus Zones and Bus Services	20
5.5	Adjacent Properties	20
5.6	Emergency Services	20
5.7	Agricultural Vehicles	20
6.	CONSTRUCTION TRAFFIC MANAGEMENT	21
6.1	Traffic Control Plans	21
6.2	Traffic Controllers	21
7.	STAKEHOLDER CONSULTATION	22
7.1	Tweed Shire Council and Transport for NSW	22
7.2	Community	22
8.	MONITORING AND EVALUATION	23
8.1	Ongoing Inspections	23
8.2	Reporting	23
8.3	Responsibilities	23
8.3.1	Works Supervisor	23
8.3.2	Team Leader	24
8.3.3	Project Manager	24
8.3.4	Drivers	25

Tables

- Table 1.1: Conditions Relevant to This CTPMSP
- Table 2.1: Nearby Bus Routes and Service Frequency
- Table 3.1: Description and Staging of Stage 2 Main Works
- Table 4.1: Types of Construction Traffic Per Stage
- Table 4.2: Heavy Vehicle Frequency Per Stage
- Table 7.1: Stakeholder Engagement Register

Figures

- Figure 1.1: Subject Site Location
- Figure 2.1: Nearby Bus Services
- Figure 2.2: Nearby Cycling Routes
- Figure 3.1: Construction Worker Parking Locations
- Figure 3.2: Proposed Gate Locations
- Figure 4.1: Existing No Right Turn Sign at Gate 2 Exit
- Figure 4.2: Surrounding Road Network

Appendices

- Appendix A: Driver Code of Conduct
- Appendix B: Traffic Control Plans
- Appendix C: Construction Access Plans
- Appendix D: Swept Path Analysis
- Appendix E: Written Incident Notification and Reporting Requirements



1. INTRODUCTION

1.1 Background

Bitzios Consulting has been engaged by Lendlease to prepare a Construction Traffic and Pedestrian Management Sub-Plan (CTPMSP) for Stage 2 (Main Works and Operation) of the Tweed Valley Hospital (TVH) project at 771 Cudgen Road, Cudgen, opposite Kingscliff TAFE.

The location of the subject site is shown in Figure 1.1.



Adapted from Nearmap

Figure 1.1: Subject Site Location

1.2 Purpose

The purpose of this CTPMSP document is to ensure the safety of the public and maintain an accessible and efficient road network for all users.

This document has been prepared to assist Lendlease staff to implement vehicle and pedestrian management measures when carrying out the early works phase of the TVH project.

1.3 Statutory Requirements

Conditions of Consent for the Development Application (SSD-10353) stipulate the requirements for this project. Table 1.1 details requirements relevant to this CTPMSP and where they are addressed in this document.



Table 1.1: Conditions Relevant to This CTPMSP

Cond	ition	Addressed in Section
c a t	The Planning Secretary must be notified in writing to <u>compliance@planning.nsw.gov.au</u> immediately after the Applicant becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one) and set out the location and nature of the incident.	8.3.3
	Subsequent notification must be given, and reports submitted in accordance with the requirements set out in Appendix 2 .	8.3.3
F	Prior to the commencement of construction, the Applicant must update the ore-construction dilapidation report for public infrastructure, submitted for Stage 1 works of SSD-9575. The report must	
((a) consult with the relevant owner and provider of any additional services that are likely to be affected by the proposed works under this development consent (in addition to the Stage 1 works under SSD-9575) to make suitable arrangements for access to, diversion, protection and support of the affected infrastructure;	3.9
((b) include an additional dilapidation report (or update the Stage 1 dilapidation report for public infrastructure) identifying the condition of all additional public infrastructure in the vicinity of the Site (including roads, gutters and footpaths); and	
((c) submit a copy of the updated dilapidation report to the Planning Secretary, Certifier and Council. 	
F	Prior to the commencement of construction, the Applicant must update the pre-construction dilapidation report submitted for Stage 1 works of SSD-9575. The report must:	
	a) include all the detailed submitted with the pre-construction dilapidation report for Stage 1 works of SSD-9575; and	3.9
((b) provide an accurate record of the existing condition of any additional adjoining private properties, and Council assets that are likely to be impacted by the proposed works that are subject of this development consent (including the Tweed Coast Road / Cudgen Road intersection).	
k r	A Construction Traffic and Pedestrian Management Sub-Plan (CTPMSP) must be prepared to achieve the objective of ensuring safety and efficiency of the road network and address, but not be limited to, the following: (a) details that are consistent with the CTPMSP approved for the Stage 1 works pursuant to development consent SSD-9575;	This CTPMSP
((b) be prepared by a suitably qualified and experienced person(s);	This CTPMSP
(c) be prepared in consultation with Council and TfNSW;	7.1
((d) demonstrate that all construction vehicles can enter and leave the Site in a forward direction;	4.5, Appendix D
(demonstrate that the swept path of the longest vehicle entering and exiting the Site in association with the construction works, would be in accordance with AUSTROADS; 	4.5, Appendix D
((f) detail the measures to be implemented to ensure road safety and network efficiency during construction in consideration of potential impacts on general traffic, cyclists and pedestrians, bus services and slow-moving agricultural vehicles using the same road network as the construction vehicles;	5, 6
((g) include a procedure for identifying additional impacts and recording the duration of the impacts and measures proposed to mitigate any associated general traffic, public transport, pedestrian and cyclist impacts;	6.2, 8



Condi	tion	Addressed in Section
(h) include a procedure to manage the movement of slow-moving agricultural vehicles (tractors etc.) on Tweed Coast Road and Cudgen Road along with the construction traffic (specifically heavy vehicles); 	5.7
(1	 detail heavy vehicle routes (including separate access routes for vehicles entering and leaving the Site), access and parking arrangements and demonstrate that all heavy vehicles routes would be via arterial / regional roads only (such as Tweed Coast Road) prior to entering Cudgen Road, and not via any of the local roads within the Kingscliff urban area; 	3, 4.3
(j	 includes details that specify that the total number of daily two-way movements for heavy vehicles are restricted to 20 vehicles per hour (average) as identified in the <i>Stage 2 Traffic Impact Assessment</i> prepared by Bitzios dated 23/09/2019; 	4.2
(k) include details to demonstrate that all heavy vehicle access to / from the Site would occur outside of the identified morning peak period (8am – 9am) and afternoon peak period (2:45pm – 4:15pm) except circumstances (such as continual supply of concrete pouring) where evidence is provided to the Planning Secretary and 	3.2
(include a Traffic Control Plan (TCP) to manage road closures and the works within the Cudgen Road and Tweed Coast Road reserve. 	Appendix B
۲ () () ()	 A Driver Code of Conduct must be prepared and communicated by the applicant to heavy vehicle drivers and must address the following: a) minimise the impacts of earthworks and construction on the local and regional road network; b) minimise conflicts with other road users; c) minimise road traffic noise; and d) ensure truck drivers use specified routes. 	3.3.3, Appendix A
s p	Prior to the commencement of construction, the Applicant must provide ufficient parking facilities on-site, including for heavy vehicles and for site personnel, to ensure that residential streets and nearby public carparks are not itilised for any vehicle parking associated with construction of the project.	3.4
b (;	Construction, including the delivery of materials to and from the site, may only be carried out between the following hours: a) between 7am and 6pm, Mondays to Fridays inclusive; and b) between 8am and 1pm, Saturdays.	3.2
if (; () (1) (1)	 Construction activities may be undertaken outside of the hours in condition C4 required: a) by the Police or a public authority for the delivery of vehicles, plant or materials; or b) in an emergency to avoid the loss of life, damage to property or to prevent environmental harm; or c) where the works are inaudible at the nearest sensitive receivers; d) where a variation is approved in advance in writing by the Planning Secretary or his nominee if appropriate justification is provided for the works; or e) for the delivery, set-up and removal of construction cranes, where notice of the crane related works is provided to the Planning Secretary and affected residents at least seven days prior to the works. 	3.2
b	Interview of such construction activities as referenced in condition C5 must be given to affected residents before undertaking the activities or as soon as is practical afterwards.	3.2



Condition	Addressed in Section
C9. All construction vehicles are to be contained wholly within the site, except if located in an approved on-street work zone, and vehicles must enter the site or an approved on-street work zone before stopping.	3.6
C11. The public way (outside of any approved construction works zone) must not be obstructed by any materials, vehicles, refuse, skips or the like, under any circumstances.	3.6



2. EXISTING CONDITIONS

2.1 Road Network

2.1.1 Cudgen Road

Cudgen Road is an undivided two-lane rural collector/distributor road connecting Kingscliff to the east with Cudgen and Tweed Coast Road to the west. In the vicinity of the subject site, the posted speed limit is 60km/h. Cudgen Road fronts the subject site on its southern side. Cudgen Road is a local road under the jurisdiction of Tweed Shire Council. Traffic flows on Cudgen Road are primarily related to commuter and school traffic movements.

It is understood some rural properties have approvals (understood to be issued by NSW Police) to operate tractors and machinery on Cudgen Road and Tweed Coast Road. It is also understood that trucks service some non-residential properties via restricted manoeuvring to/from Cudgen Road.

A heritage rock wall is located on Cudgen Road, approximately 375 metres east of the Tweed Coast Road intersection.

2.1.2 Turnock Street

Turnock Street is an undivided two-lane rural arterial road connecting Kingscliff to the east with Cudgen Road to the west. In the vicinity of the subject site, the posted speed limit is 60km/h. Turnock Street fronts the subject site on its eastern side. Turnock Street is a local road under the jurisdiction of Tweed Shire Council.

2.1.3 Tweed Coast Road

Tweed Coast Road is a north-south rural arterial road connecting coastal towns including Pottsville, Hastings Point, Cabarita, Casuarina and Kingscliff. The posted speed limit is generally 80km/h, which is reduced to 60km/h in the vicinity of the Cudgen Road intersection and Pacific Highway. The typical cross-section of Tweed Coast Road is two-lane undivided. Tweed Coast Road is classified as a regional road under the jurisdiction of Tweed Shire Council.

Tweed Coast Road carries predominantly commuter traffic, with a tidal flow pattern (northbound in the morning and southbound in the afternoon). It is understood some rural properties have approvals to operate tractors and machinery on Tweed Coast Road.

2.1.4 Pacific Highway

The Pacific Highway is a state road under the jurisdiction of Transport for NSW connecting Sydney and Brisbane. In the vicinity of the subject site, the Pacific Highway is a four-lane divided road with a posted speed limit of 110km/h. Further north (approximately 2km from the Tweed Coast Road interchange), the posted speed is 100km/h and consists of a six-lane cross-section north to South Tweed Heads, then four-lane divided to the Queensland border.

2.2 Parking

The road network immediately surrounding the subject site consists predominantly of rural arterial or local access and collector streets. There are no formalised on-street parking facilities in the area.



2.3 Public Transport

2.3.1 Buses

Three bus routes operate along Cudgen Road fronting the subject site, with two bus stops (eastbound and westbound) on both sides of the road. Their routes and service frequencies are summarised in Table 2.1. A map of the bus routes and stop locations is shown in Figure 2.1.

Route No.	Route Description	Direction	Service Frequency
601	Kingscliff to Tweed Heads West via Tweed City, The Tweed Hospital & Coolangatta	Both directions	30 mins (daily)
603	Pottsville to Tweed City via Hastings Point, Cabarita Beach, Kingscliff TAFE & Chinderah	Both directions	60 mins (daily)
600		Murwillumbah to Kingscliff TAFE	3 services (Monday to Friday)
609		Kingscliff TAFE to Murwillumbah	2 services (Monday to Friday)



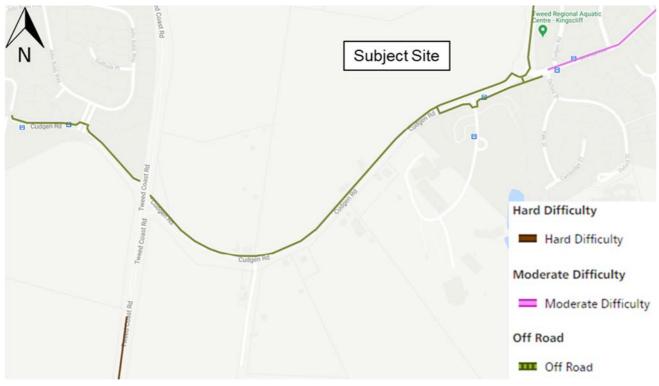
Adapted from Google Maps

Figure 2.1: Nearby Bus Services



2.4 Active Transport

An existing off-road shared path is provided along the subject site frontage on Cudgen Road. The shared path connects to residential areas west of Tweed Coast Road and to Kingscliff in the east and provides access to the wider cycling network as shown in Figure 2.2.



Source: https://www.rms.nsw.gov.au/maps/cycleway_finder

Figure 2.2: Nearby Cycling Routes



3. CONSTRUCTION ACTIVITIES

3.1 Description of Construction Activities

This CTPMSP covers Stage 2 of the TVH project, which includes Crown Certificate 1 and internal construction works within the site over four stages as summarised in Table 3.1.

Stage	Description of Construction Works	Indicative Commencement Date*	Indicative Completion
Stage 1 – Site Establishment & Base Structure	 Site establishment, including installing tower crane, construction hoist, concrete pumps Sitewide fencing and barriers Internal roads Structure (slab on ground) (B1-00) Lift and stair cores (vertical members) (B1-00) Services (inground) (B1-00) 	Quarter 3 2020	Quarter 1 2021
Stage 2 – Structure & Services	Structure (B1-08)Service infrastructure	Quarter 4 2020	Quarter 1 2022
Stage 3 – Facade & Base Fit Out	 Facade for MHB Services (B1-08) Service infrastructure Lifts Fit out (B1-00) External plant 	Quarter 2 2021	Quarter 3 2022
Stage 4 – Fit Out & External Works	 Fit out (B1-08) External works (i.e. landscaping) Commissioning 	Quarter 3 2021	Quarter 1 2023

Table 3.1: Description and Staging of Stage 2 Main Works

*Some stages will run concurrently

It is noted that a number of road upgrades are proposed external to the subject site along Cudgen Road and at the Tweed Coast Road / Cudgen Road intersection as part of the overall Tweed Valley Hospital Project. These works include upgrade of Cudgen Road, construction of site accesses, construction of new pathways and upgrade of the Cudgen Road / Tweed Coast Road intersection. **All external works are specifically excluded from this CTPMSP and the associated TCPs**. These works will be subject to a separate CTPMSP and TCPs which will be prepared by the contractor(s) responsible for external works.

3.2 Construction Hours

Construction works, including the delivery of machinery and materials to and from the site, will occur between the approved hours of:

- 7:00am and 6:00pm Monday to Friday
- 8:00am and 1:00pm Saturday.

Where possible, access and activities requiring external heavy vehicle movements should be scheduled to occur outside network peak periods which occur between 8:00am and 9:00am in the morning and 2:45pm and 4:15pm in the afternoon to avoid school start and finish times.



No work shall be carried out on Sundays or public holidays. Activities may be undertaken outside of the approved working hours for construction if required:

- By the police or a public authority for the delivery of vehicles, plant or materials
- In an emergency to avoid the loss of life, damage to property or to prevent environmental harm
- Where the works are inaudible at the nearest sensitive receivers
- Where a variation is approved in advance in writing by the Planning Secretary or his nominee if appropriate justification is provided for the works
- For the delivery, set up and removal of construction cranes, where notice of the crane related works is provided to the Planning Secretary and affected residents at least seven days prior to the works
- Or if permitted under COVID-19 provisions.

Notification of such activities must be given to affected residents before undertaking the activities or as soon as is practical afterwards.

Deliveries of heavy machinery may be required out of the construction hours of operation to conform to the overriding requirements of Transport for NSW.

3.3 Construction Worker Induction

All workers and subcontractors engaged onsite will be required to undergo a site induction. The induction should include permitted access routes to and from the construction site for all vehicles, as well as standard environmental, Work Health and Safety, Driver Code of Conduct and emergency procedures.

3.3.1 SafeWork Requirements

To protect the safety of workers and the public, the worksite should be adequately secured (i.e. security fence) to prevent access by unauthorised personnel. Additionally, all works must be conducted in accordance with the relevant SafeWork requirements at all times.

3.3.2 Safe Work Method Statements

A Safe Work Method Statement should be prepared whenever any person is undertaking works on or adjacent to the public domain.

3.3.3 Truck Driver Code of Conduct

All drivers associated with the project are to abide by a Code of Conduct in order to:

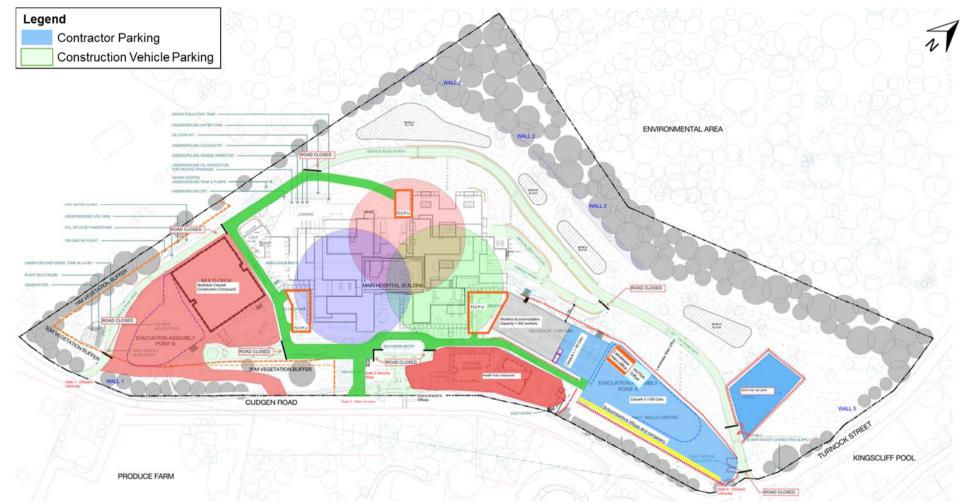
- Minimise impacts of construction on the local road network
- Minimise conflicts with other road users
- Minimise road traffic noise
- Ensure truck drivers use specified routes.

A Driver Code of Conduct has been included in **Appendix A**.



3.4 Construction Worker Parking

It is anticipated that there will be a peak of 400-500 workers onsite for around eight months when parts of Stages 2 to 4 run concurrently. Throughout the project, all personnel shall park within the designated parking area onsite, accessible via the site gates on Cudgen Road and the internal road network. The proposed locations of construction worker parking are shown in Figure 3.1.



Source: Lendlease

Figure 3.1: Construction Worker Parking Locations



3.4.1 Construction Worker Alternate Transport

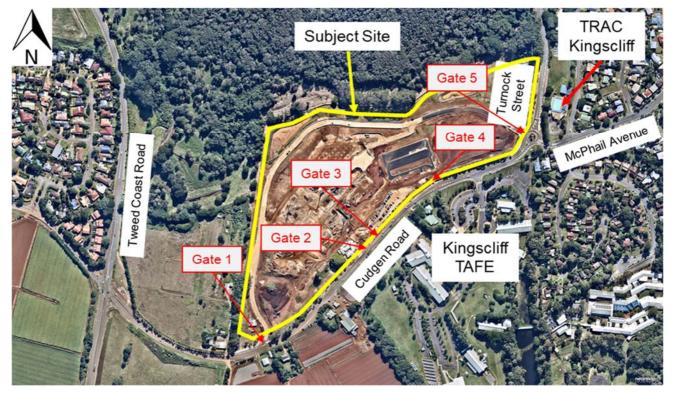
Public and active transport trips generated by construction activities are expected to be low. Regardless, the subject site is reasonably serviced by alternate transport including eastbound and westbound bus stops on Cudgen Road and shared path facilities on Cudgen Road and Turnock Street on the subject site frontage. The existing infrastructure will adequately cater for any additional demand generated by construction activities. Carpooling should be encouraged where possible.

3.5 Construction Site Access

Construction vehicle access during the main works phase of the project will be via five gates on Cudgen Road as shown in Figure 3.2 and detailed below. Gate 2 will be used as the primary access during construction. Gate 2 will be removed and replaced by Gates 3 and 4 once permanent site access for the hospital is operational. Construction traffic management for the site accesses therefore has two key elements:

- 1. Construction traffic management for the construction of the site accesses (which does not form part of this CTPMSP or associated TCPs will be prepared separately by others)
- 2. Construction traffic management for the use of the constructed accesses as site accesses.

Construction vehicles will enter and exit the site in a forward direction.



Adapted from Nearmap

Figure 3.2: Proposed Gate Locations

3.5.1 Gate 1 – Auxiliary Left Turn

Gate 1 will be in the form of an Auxiliary Left Turn (AUL) treatment and tie-in to Cudgen Road on the northern side. It will facilitate construction vehicle ingress in a minor function to avoid damage and be utilised as a permanent access for the multi-storey hospital car park once opened.



The entry gate will generally be kept closed at all times, except to allow construction vehicles to enter the site. When this gate is in use, a gateman will be required at the entry gate to the site compound during construction hours to open and close the gate as required and manage the ingress of vehicles.

Appropriate signage will be placed at the entry gate to notify vehicles. Details of the required signage are provided on the Traffic Control Plan (TCP) in **Appendix B**.

A swept path analysis demonstrating ingress of the largest design vehicle in a forward are presented in **Appendix D**.

3.5.2 Gate 2 – Temporary Access Driveway

Gate 2 will be in the form of a driveway and tie-in to Cudgen Road on the northern side. It is to be constructed with splays to cater for all design vehicle swept paths (refer **Appendix D**). Gate 2 will be temporary in nature and facilitate the primary construction vehicle ingress and egress while Gates 3 and 4 are constructed. It will be removed and replaced by Gates 3 and 4 once completed.

The entry gate will generally be kept closed at all times, except to allow construction vehicles to enter and exit the site. A gateman will be required at the entry gate to the site compound during construction hours to open and close the gate as required and manage the ingress and egress of vehicles.

Appropriate signage will be placed at the entry gate to notify vehicles. Details of the required signage are provided on the TCP in **Appendix B**.

A swept path analysis demonstrating ingress and egress of the largest design vehicle in a forward gear are presented in **Appendix D**.

3.5.3 Gate 3 – Signalised Intersection

Gate 3 will be in the form of a north-western leg to a new signalised intersection on Cudgen Road. It will facilitate the primary construction vehicle ingress and egress once Gate 2 is removed. It is intended to have the traffic signals operating at that stage. Gate 3 will be utilised as the main access for the hospital once opened.

The entry gate will be managed at all times, to allow construction vehicles to enter and exit the site.

Appropriate signage will be placed at the entry gate to notify vehicles. Details of the required signage are provided on the TCP in **Appendix B**.

The access design plans are presented in **Appendix C**. A swept path analysis demonstrating ingress and egress of the largest design vehicle in a forward gear are presented in **Appendix D**. The design of this access is still in design development and is being consulted with Tweed Shire Council and Transport for NSW.

3.5.4 Gate 4 – Auxiliary Left Turn

Gate 4 will be in the form of an AUL treatment and tie-in to Cudgen Road on the northern side. It will be used in a minor function to avoid damage. It will facilitate construction vehicle ingress and be utilised as a permanent access for the hospital health hub once opened.

The entry gate will generally be kept closed at all times, except to allow construction vehicles to enter the site. A gateman will be required at the entry gate to the site compound during construction hours to open and close the gate as required and manage the ingress of vehicles.

Appropriate signage will be placed at the entry gate to notify vehicles. Details of the required signage are provided on the TCP in **Appendix B**.



The access design plans are presented in **Appendix C**. A swept path analysis demonstrating ingress of the largest design vehicle in a forward gear are presented in **Appendix D**. The design of this access is still in design development and is being consulted with Tweed Shire Council and Transport for NSW.

3.5.5 Gate 5 – Cudgen Road / Turnock Street Roundabout

Gate 5 will be in the form of the western leg to the Cudgen Road/Turnock Street roundabout and facilitate construction vehicle ingress and egress in a minor function to avoid damage. It will be utilised as a permanent access for the hospital once opened.

The access will generally be kept closed at all times, except to allow construction vehicles to enter and exit the site when safe to do so.

Appropriate signage will be placed at the entry gate to notify vehicles. Details of the required signage are provided on the TCP in **Appendix B**.

A swept path analysis demonstrating ingress and egress of the largest design vehicle in a forward gear are presented in **Appendix D**.

3.6 Delivery, Loading and Unloading of Plant, Equipment and Materials

During all stages of the works, the loading and unloading and storage of all plant, equipment and/or materials will only occur within the site boundary. In the event that loading, unloading and/or storage of any plant, equipment and/or materials is required outside of the site area, an appropriate application for a Work Zone should be made to the relevant road authority (Tweed Shire Council).

3.7 Dust Minimisation

Gate 2 has a shakedown device installed in accordance with Tweed Shire Council requirements so that trucks do not track dirt onto the public road network. Additionally, all trucks entering or exiting the site are to have their loads sealed and covered. To further control dust onsite, exposed surfaces and stockpiles should be supressed by regular watering.

3.8 Road Occupancy Licence

Under Section 138 of the *Roads Act 1993*, Road Occupancy Licenses (ROL) are required where an activity requires an existing road to be used in such a way that affects traffic flow. This type of traffic control is required for proposed road works associated with the early works phase of the project. Further details of the proposed traffic controls are provided in Section 6.

Applications for ROLs should be submitted to the relevant authority (Tweed Shire Council) at least 10 working days prior to the planned commencement of the activity requiring the road occupancy. The activity must not commence until the ROL has been obtained.

An ROL is also required from Transport for NSW for any signage within 100 metres of the Tweed Coast Road/Cudgen Road intersection. The ROL is to be obtained prior to installation of any signage within 100 metres of this intersection.



3.9 Road Dilapidation Report

Before the commencement of construction, consultation with the relevant owner and provider of services that are likely to be affected by the development should be undertaken to make suitable arrangement for access to, diversion, protection and support of the affected infrastructure.

A dilapidation report identifying the condition of all public infrastructure in the vicinity of the site (including roads, gutters and footpaths) shall be carried out by a suitably qualified person prior to the commencement of and after the completion of the Stage 2 construction works.

A copy of the dilapidation report shall be provided to the Certifying Authority and Tweed Shire Council prior to the commencement of the Stage 2 construction works for that activity and no later than one month upon completion of the Stage 2 construction works.

The cost of repairing any damage caused to Council or other Public Authority assets in the vicinity of the site as a result of the construction works associated with the approved development shall be met in full by the Contractor prior to the commencement of use of any stage of the development.

3.10 Road Safety Audits

Independently Road Safety Audits shall be conducted of the TCPs in accordance with the *Transport for NSW Guidelines for Road Safety Audit Practices (2011), Austroads Guide to Road Safety Part 6: Road Safety Audit* and IPWEA guidelines.



4. CONSTRUCTION TRAFFIC

4.1 Types of Construction Traffic

A combination of truck and vehicles types will be used during each stage of the main works phase of the project as detailed in Table 4.1. Predominantly, the upper limit of heavy vehicles will be semitrailers (articulated vehicles (AV)), however, in the event that a B-double is required, the site has capacity to facilitate these movements and all exit movements will be assisted by traffic control/gatemen and liaison with Tweed Shire Council will occur.

Table 4.1: Types of Construction Traffic Per Stage

Stage	Vehicles
1	Frannas, 80 Tonne Crane, Body Trucks, Aggregate Concrete Trucks, Mobile Pumps, B-doubles, Water Trucks and Low Loader.
2	Aggregate Concrete Trucks, Mobile Pumps and Body Trucks
3	Frannas, Mobile Cranes, Body Trucks, Semi-trailers, B-doubles, Low Loaders, Water Trucks
4	Frannas, Mobile Cranes, Body Trucks, Semi-trailers, B-doubles, Low Loaders, Water Trucks, Aggregate Concrete Trucks, Mobile Pumps

4.2 Vehicle Frequency

Daily two-way heavy vehicle movements are to be limited to 20 movements per hour (equating to 240 per day) in accordance with Clause B15(j) of the development consent. Peak hours are proposed to be between 7:00am and 1:00pm. The expected daily cumulative two-way heavy vehicle movements during each stage of the main works phase are detailed in Table 4.2. The 240 vehicle limit is not expected to be exceeded. The worst-case peak worker vehicle movements are expected to be in the order of 400-500 movements (800-1,000 daily trips) based on the estimated number of workers, noting that the main works is the primary stage of the overall project. Again, carpooling should be encouraged where possible.

Indicative Month	Stage 1	Stage 2	Stage 3	Stage 4	Total
September 2020	70				70
October 2020	100				100
November 2020	150				150
December 2020	90	120			210
January 2021	90	150			240
February 2021	90	150			240
March 2021	90	150			240
April 2021	10	190	40		240
May 2021		140	100		240
June 2021		140	100		240
July 2021		140	100		240
August 2021		100	80	60	240
September 2021		100	80	60	240

Table 4.2: Heavy Vehicle Frequency Per Stage



Indicative Month	Stage 1	Stage 2	Stage 3	Stage 4	Total
October 2021		100	80	60	240
November 2021		100	80	60	240
December 2021		100	80	60	240
January 2022		100	80	60	240
February 2022		100	80	60	240
March 2022			100	140	240
April 2022			100	140	240
May 2022			100	140	240
June 2022			100	140	240
July 2022			50	150	200
August 2022				150	150
September 2022				120	120
October 2022				120	120
November 2022				120	120
December 2022				110	110
January 2023				110	110
February 2023				100	100
March 2023				50	100

4.2.1 Impact on the Local Road Network

The Traffic Impact Assessments for Stage 1 – Concept Proposal and Early Works and Stage 2 – Main Works and Operations prepared by Bitzios Consulting investigated the operations of the external road network including surrounding intersections for a range of scenarios. This included assessment of peak hour background traffic and design traffic volumes (design volumes being Hospital traffic plus background traffic). The assessment identified the surrounding road network and intersections generally operate within acceptable performance limits, with the exception of the Tweed Coast Road/Cudgen Road intersection, which experienced high queuing and delays on some approaches during peak hours. Peak hours were typically 8:00am to 9:00am for the morning peak and 3:00pm to 4:00pm for the afternoon/evening peak.

Construction accesses will be managed by gatemen to mitigate traffic impacts and control deliveries and at access locations. In the instance the B-doubles are required at Gate 2 (noting the frequency is expected to be very low), traffic controllers will manage the access under a Traffic Control Plan. Traffic impacts of Stage 2 construction works will be managed by scheduling deliveries and staff shift changes outside of peak traffic periods. Stage 2 construction works are expected to have relatively low impacts to the surrounding road network as traffic generation is generally low (relative to the operational Hospital which was assessed as part of the Traffic Impact Assessment). However, impacts will be moderate to significant for around eight months when parts of Stages 2 to 4 run concurrently. As such, truck movements should be spread throughout the day and staff will generally arrive before the morning peak hour (noting that construction hours start at 7:00am) and will leave after the afternoon/evening peak (noting that construction hours end at 6:00pm). Traffic surveys undertaken as part of the traffic impact assessment for the hospital prepared by Bitzios Consulting identified the network peak periods as generally being between 8:00am-9:00am and 2:45pm-3:45pm.



These peaks are expected to be largely due to school and TAFE traffic. Any significant shift changes should be scheduled to occur outside these hours.

Due to the residential nature of some of the surrounding streets, queuing and idling of heavy vehicles on the external road network will not be permitted. This shall be managed by engaging trusted suppliers and the spreading of heavy vehicle movements throughout the day. Vehicles may only wait inside the worksite. Truck drivers delivering prior to 7:00am will be instructed in advance to park at the BP Truckstop located at 68-89 Ozone Street, Chinderah NSW 2487 (around 4.2km away from site) to avoid parking around residential streets. Once it is 7:00am, truck drivers will use their radios to confirm that it is acceptable to come to the site. It shall be noted that this activity only occurs between 6:30am and 7:00am, and that during site opening hours, all trucks will park within the site upon arrival.

Some minor increase to intersection delays may occur due to additional vehicles on the network associated with construction. Overall, construction traffic impacts are expected to be low and the aforementioned mitigation measures will be implemented to further reduce impacts (such as scheduling of deliveries and staff shifts).

4.3 Construction Vehicle Routes

4.3.1 Access Routes

Construction vehicle movements will occur between the site and the Pacific Highway (and then to and from the wider road network). The construction access routes are as follows:

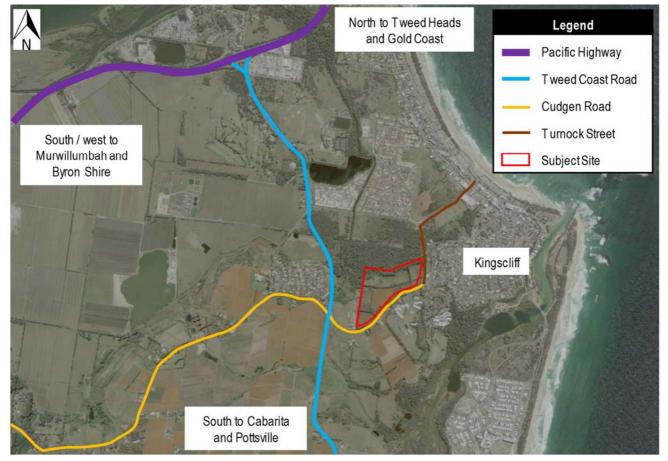
- Construction traffic travelling on the Pacific Highway will access the site via the following route:
 - Exit the Pacific Highway at the Tweed Coast Road Interchange
 - Proceed along Tweed Coast Road before turning left onto Cudgen Road
 - Access the site via one of the site access locations on Cudgen Road which permit ingress movements. All ingress movements are to be in a forward gear. Once Gate 2 is removed, AVs will need to ingress via Gates 1 and egress via Gate 5.
- Construction traffic travelling from the site to the Pacific Highway will travel via following route:
 - Egress the site from one of the site access locations which permit egress movements. All egress movements are to be in a forward gear. Right turns from Gate 2 onto Cudgen Road will continue to be banned (as indicated by a No Right Turn sign on the driveway during a site visit on Friday, 11 September 2020 as shown in Figure 4.1), and construction vehicles will need to turn left and U-turn at the Cudgen Street/Turnock Street roundabout. It is however noted, that if B-doubles are required they will still need to turn right directly onto Cudgen Road as the Cudgen Street/Turnock Street roundabout is not designed to facilitate B-double movements. A separate TCP and the use of Traffic controllers will be required to be implemented for B-double deliveries (noting the frequency of these movements is expected to be rare)
 - Proceed along Cudgen Road before turning right onto Tweed Coast Road
 - Proceed to the Pacific Highway at the Tweed Coast Road Interchange.
- Construction traffic moving waste material from the site will also follow the above routes between the site and the Pacific Highway. Vehicles will then utilise Tweed Valley Way (via the Tweed Valley Way interchange, Leddays Creek Road and Bartletts Road in order to access the Stotts Creek Resource Recovery Centre, which is located at Leddays Creek Road, Stotts Creek NSW 2487.





Figure 4.1: Existing No Right Turn Sign at Gate 2 Exit

The surrounding road network is shown in Figure 4.2.



Adapted from SIX Maps

Figure 4.2: Surrounding Road Network



4.3.2 Review of the Route

Starting from the Tweed Coast Road/Chinderah Road interchange on the Pacific Highway, the route:

- Is approximately 3.5-4km long (depending on the site access used)
- Takes approximately four minutes to drive at the posted speed limit.

4.4 Road Restrictions

Tweed Coast Road and Cudgen Road are not approved B-double routes. Given B-doubles will be used during the main works phase of the project, and if other oversize and/or overweight vehicles or loads are required, approval must be sought from Transport for NSW and managed under that approval.

4.5 Vehicle Movement Plans

Vehicle movement plans (swept paths) have been prepared in accordance with Austroads for the following:

- Gate 1 ingress of the largest design vehicle (19m AV)
- Gate 2 ingress and egress of the largest design vehicles (19m AV and 26m B-double)
- Gate 3 ingress of the largest design vehicle (12.5m heavy rigid vehicle (HRV))
- Gate 4 ingress of the largest design vehicle (12.5m HRV)
- Gate 5 ingress and egress of the largest design vehicle (19m AV)
- Cudgen Street / Turnock Street roundabout U-turn from the Cudgen Road southern leg (19m AV).

The swept path analysis demonstrates that all construction vehicles can enter and exit the site in forward direction, however, each access can only accommodate a certain vehicle as specified above. B-doubles can only use Gate 2, despite this access being temporary, and cannot U-turn at the Cudgen Street/Turnock Street roundabout as it is not wide enough. Once Gate 2 is removed, no B-doubles would be permitted onsite (that being said, B-doubles will be infrequent and there will a gateman at the gate who can assist with egress when required) and AVs will need to ingress via Gates 1 and egress via Gate 5. Right turns from Gate 2 onto Cudgen Road will continue to be banned (as indicated by a No Right Turn sign on the driveway during a site visit on Friday, 11 September 2020 as shown in Figure 4.1), and construction vehicles will need to turn left and U-turn at the Cudgen Street/Turnock Street roundabout. It is however noted, that if B-doubles are required they will still need to turn right directly onto Cudgen Road as the Cudgen Street/Turnock Street roundabout is not designed to facilitate B-double movements. As a result, the existing water-filled barriers on the Gate 2 driveway will need to be removed.

The swept paths are provided in Appendix D.



5. TRAFFIC IMPACTS

5.1 General Traffic

The project team will maximise the safety for road users and workers by isolating the active work areas from live traffic. This will be achieved by providing sufficient clearance between the work areas and adjacent travel lanes and using temporary safety barriers where required.

5.2 On-street Parking

There are no parking areas on Cudgen Road in proximity to the subject site. Therefore, construction works will not impact on any on-street or off-street parking spaces.

5.3 Pedestrians and Cyclists

Pedestrian management will be in place at the site entry/exit points. During the external works phase of the project, pedestrian and cyclist access to the surrounding road network will be maintained. This is subject to a separate CTPMSP and TCPs undertaken as part of the external works package.

5.4 Bus Zones and Bus Services

The existing bus stops on Cudgen Road are proposed to be relocated immediately east of Gate 3 as part of the external works phase of the project and as such will impact existing bus services. This is subject to a separate CTPMSP and TCPs undertaken as part of the external works package.

5.5 Adjacent Properties

Vehicular access to adjacent properties will be maintained at all times as per the existing conditions.

5.6 Emergency Services

The proposed construction activities are not expected to impact emergency services.

5.7 Agricultural Vehicles

The proposed construction activities are not expected to impact agricultural vehicles (tractors etc.). Vehicular access to adjacent properties will be maintained at all times as per the existing conditions (including to agricultural properties). All existing traffic lanes and widths are being maintained as part of works being undertaken as part of the CTPMSP. Further, the volume of agricultural vehicles is expected to be low, given there is no agricultural land east of the subject site. No agricultural vehicle movements were observed during the site inspection.



6. CONSTRUCTION TRAFFIC MANAGEMENT

6.1 Traffic Control Plans

Prior to implementation, construction traffic management measures will require the preparation of approved TCPs. TCPs indicate the road worksite arrangements to ensure the safety of all road users as well as workers at the site.

Works that have been identified as requiring a TCP are detailed as follows.

- Construction of Gates 3 and 4, comprising Cudgen Road widening, main entry works, services relocation and HV installation (which will be prepared separately)
- Operation of Gates 1-5.

Preliminary TCPs have been developed in accordance with AS1742.3 and the *Transport for NSW Traffic control at work sites Technical Manual (July 2018)*. These have been designed by a qualified person holding the current Transport for NSW 'Prepare Work Zone Traffic Management Plans' accreditation. The TCPs are provided in **Appendix B**.

It is noted that a specific, supplementary TCP has been designed for Gate 2 for occasions where Bdouble access is required. Refer TCP Sheet 3 "*TRAFFIC CONTROL PLAN GATE 2 CUDGEN ROAD TEMPORARY ACCESS OPERATION FOR B-DOUBLES*". This also requires prior approval from Tweed Shire Council. Whenever B-Double access is not required and Gate 2 is in use, TCP Sheet 2 "*TRAFFIC CONTROL PLAN GATE 2 CUDGEN ROAD TEMPORARY ACCESS OPERATION NO B-DOUBLES*" will be implemented.

It should be noted that any road occupancy will require approval from Tweed Shire Council with local residents/neighbours also being consulted prior to activities commencing.

6.2 Traffic Controllers

The services of a qualified Traffic Control subcontractor must be used to provide traffic control services for the construction phase of the project if need be. Traffic controllers will be trained, hold a current SafeWork NSW Traffic Control Work Training Card and comply with the requirements of the *Transport for NSW Traffic control at work sites Technical Manual (July 2018)*.



7. STAKEHOLDER CONSULTATION

7.1 Tweed Shire Council and Transport for NSW

Consultation was undertaken with Tweed Shire Council and Transport for NSW as part of the CTPMSP for Stage 1 works. The extent of works and impacts to the external network are generally consistent with Stage 1. Further consultation with Tweed Shire Council was undertaken as part of this CTPMSP. A draft version of this CTPMSP was provided to Council for comment. A summary of consultation, key comments and outcomes is provided in Table 7.1.

Date (Authority)	Council Comment	Response
23/09/2020 (Tweed Valley Council)	Some concerns in relation to the use of B Doubles for this site. At first I thought the reference to B Doubles were actually to Truck and Dogs. However they provide a swept path for access to Gate 2 using a 26m B Double.	Predominantly, the upper limit of heavy vehicles will be AVs, however, in the event that a B-double is required, the site has capacity to facilitate these movements and all exit movements will be assisted by traffic control/gatemen and liaison with Tweed Shire Council will occur. A specific, supplementary TCP has been designed for Gate 2 for occasions where B-double access is required.
	Turning right from the site at Gate 2 is noted as banned. Therefore 26m B Doubles would be required to turn left towards Kingscliff and use the roundabout at Turnock Street for their return journey. The report notes the roundabout is not wide enough to accommodate 26m B Doubles.	Generally, as a safety measure, right turns from Gate 2 onto Cudgen Road will be banned. However, B-doubles will still need to turn right directly onto Cudgen Road as the Cudgen Street/ Turnock Street roundabout does not cater for B-double movements/turnaround. A specific, supplementary TCP has been designed for Gate 2 for occasions where B-double access is required. Liaison with Council will be undertaken prior to this occurring. It is noted the frequency of B-double movements is expected to be very low.
	All Traffic Control Plans included in this report make no reference to the use of Traffic Controllers. Notes above refer to the use of Accredited Traffic Controllers. Additional TCP's will be required for the use of Traffic Controllers.	The majority of TCPs do not require traffic controllers. A supplement to the Gate 2 TCP has been prepared to include traffic controllers and associated signage (refer TCP Sheet 3). This is provided in Appendix B .

Table 7.1: Stakeholder Engagement Register

7.2 Community

Information is to be provided to nearby residents and other non-residential landowners adjacent to the site (i.e. on Cudgen Road between Tweed Coast Road and Turnock Street and on Turnock Street between Cudgen Road and Elrond Drive). This information should include:

- Proposed works on Cudgen Road and Turnock Street
- Impacts to amenity as a result of proposed works (i.e. traffic conditions, pedestrian diversions etc.)
- Information on the timing of the proposed works.

This information is to be provided via a flyer delivered to local letterboxes.



8. MONITORING AND EVALUATION

8.1 Ongoing Inspections

Formal and documented short-term and long-term inspections shall be undertaken at worksites by persons holding the Prepare Work Zone Traffic Management Plan qualification.

8.2 Reporting

It is also important for any near miss incidents to be recorded and documented then reviewed as part of any inspection.

In the case of incidents, either witnessed or reported, involving the public or from which legal proceedings might arise, the actual type, size and location of signs, and devices in use at the time of the incident should be recorded and the sign arrangement photographed for subsequent reporting. The actual travelled path width and condition and weather conditions should also be recorded, as well as personal injury, extent of vehicle damage and vehicle details, such as registration.

8.3 Responsibilities

8.3.1 Works Supervisor

For all long-term worksites, the works supervisor who is appropriately qualified shall:

- Inspect the traffic control layout on the day before the work begins and at least once per week during the duration of the work
- Inspect the traffic control layout between shifts at least once during the first week and at least once every two months for the duration of work
- Review the reported near miss incidents
- Provide after-hours contact to local police for the duration of the work
- Inspect the site on the final day to ensure that unnecessary signs and devices are removed
- Record results of these inspections noting date, time, deficiencies and any corrective action taken or specified
- Ensure that any specified corrective action is taken.



8.3.2 Team Leader

For all works, the team leader (or site supervisor) shall:

- Keep a record of the TCPs that were used
- Have a copy of the TCPs used onsite
- Record start and finish times and location of the works
- Record near misses
- Carry out inspections before work starts, during the works and pre-closedown of the site using the nominated checklist, noting:
 - Date and time of inspection
 - Deficiencies identified and corrective action taken
 - Changes or modifications made to the site.
- Periodically check that all signs and devices are satisfactory and in their correct position
- Make these records available to authorised staff.

8.3.3 Project Manager

The project manager shall:

- Record near misses
- Carry out inspections before work starts, during the works and pre-closedown of the site using the nominated checklist, noting:
- Liaise with school management on a daily basis (minimum) regarding any changes to scheduled works, traffic control and construction vehicle movements
- Ensure that a traffic control safety inspection is carried out at least once per month by a person qualified in 'Prepare Work Zone Traffic Management Plans' and that the date, time and deficiencies are recorded
- Ensure that a traffic control safety inspection or Road Safety Audit is carried out prior to the implementation of any changes in traffic control or a TCP
- Ensure that a traffic control safety inspection or Road Safety Audit is carried out prior to the implementation of any lateral shift tapers to ensure that geometric requirements and delineation methods are in accordance with the approved TCP
- Ensure that near miss incidents are being reported and recorded then reviewed
- Ensure that any corrective action specified is taken and recorded.

This information may be critical, should legal proceedings follow an incident.

The Department of Planning, Industry and Environment must be notified in writing to <u>compliance@planning.nsw.gov.au</u> immediately after the applicant becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one) and set out the location and nature of the incident. **Appendix E** contains the Written Incident Notification and Reporting Requirements (Appendix 2 of the development consent).



8.3.4 Drivers

Drivers are to:

- Obey road rules at all times
- Follow the haulage routes defined in this CTPMSP or the site-specific CTPMSP
- Notify the site contact/escort of arrival
- Follow instructions from traffic controllers to access the site or perform manoeuvres specified in a TCP
- Follow instructions from the site contact/escort, including directions to nominated laydown or holding areas
- After arriving at the nominated laydown area, exit the vehicle and remain in a predefined safe area while loading or unloading of plant, equipment and/or materials is undertaken
- Once unloading of the plant, equipment and/or materials has been completed, return to the vehicle and exit the site, following instructions from the site contact/escort and traffic controllers. The driver is then to follow the designated haulage routes
- Read, understand and follow this CTPMSP, site-specific TCPs and any other relevant project documentation regarding road safety and traffic management
- Abide by the Driver Code of Conduct.





Appendix A: Driver Code of Conduct





TRUCK DRIVER CODE OF CONDUCT

TWEED VALLEY HOSPITAL - STAGE 2 MAIN WORKS

CONTENTS

Contents	i		
I. General Responsibilities	1		
2. Legal Driving Hours and Rest Period			
3. Safety	3		
3.1 General			
3.2 Use of Mobile Phones			
3.3 Site Safety	3		
4. Work Ethics			
4.1 Alcohol and Drugs	5		
4.2 Standards of Behaviour	5		
5. Pre-Departure Check			
6. Hours of Operation			
7. Truck Routes			
7.1 Truck Routes			
8. Information Sources9			

1. **GENERAL RESPONSIBILITIES**

As a professional driver working in the transport industry, I agree to and adopt this code of conduct. I accept that as a professional driver I have responsibilities under both chain of responsibility and OH&S Legislation to maintain my fitness for duty and not accept unsafe practices or breaches of the law. I share the road with other road users and aim to improve community safety.

- 1. I recognise and accept my obligations as a professional driver by:
- setting a good example to others
- supporting safety within the workplace
- actively supporting this code and promoting it to other drivers
- encouraging safety on the road.
- 2. I undertake to comply with all road laws, and be considerate of others by:
 - being professional at all times
 - being considerate of other road users
 - being fit for duty alert, healthy and prepared for the driving task
 - observing speed limits & seat belt laws
 - observing fatigue regulations
 - observing drug & alcohol laws
 - leaving a safe distance between other vehicles
 - travelling in left lanes unless overtaking
 - avoiding the use of noisy engine brakes at inappropriate times
 - not being under the influence of drugs or alcohol
 - not tailgating other vehicles.
- 3. I agree to and adopt all the company's working policies and regulations.
- 4. I agree to obey all other related laws.
- 5. I support the introduction in companies of "Safe Systems" of work that include practices & procedures to reduce the risk of injuries or death.
- 6. I take pride in my vehicle and conduct regular checks to ensure my truck and the load is in a safe condition.
- 7. I understand that driver distraction is a risk and will reduce this risk through:
- avoiding the use of mobile phones, two-way radios or other forms of communication whilst the vehicle is moving
- fully preparing for any journey to avoid being distracted when driving.
- 8. I actively support this code of conduct for the purpose of promoting compliance with laws and promoting safe behaviour, within the workplace and on the road.
- 9. I undertake to actively participate through my OH&S representatives/delegates to commit to industry codes of conduct, codes of practice and safety guidelines.

2. LEGAL DRIVING HOURS AND REST PERIOD

Definition of *"rest time"* – The rest time is any continuous period of at least 15 minutes that is not driving time or work time. Breaks of less than 15 minutes are classed as work time.

Definition of "work time" - The work time of a driver includes driving time, and other time spent by the driver doing the following tasks:

- a. loading or unloading
- b. inspecting, servicing or repairing
- c. cleaning or refuelling
- d. performing marketing tasks
- e. helping with or supervising an activity mentioned in paragraphs a to c
- f. recording information, or completing a document in accordance with the regulations, or in relation to the operation of a truck.

The maximum a driver can drive without a break is five hours and 15 minutes and a driver must have a minimum of 15 minutes rest in every 5.5 hours.

A driver can take a rest period in the driver's seat with the engine turned off, in an approved sleeper berth, or away from the vehicle. However, rest periods of 7 continuous hours must be taken away from the vehicle.

A driver cannot work more than 12 hours in any 24 hour period. A rest period of 7 continuous hours must be taken during this 24 hour period. This applies for any 24 hour period, e.g. 6:00am to 6:00am or 5:30pm to 5:30pm.

The maximum number of hours a regulated truck driver can work in any 168 hour (7 day) period is 72 hours.

Table 2.1 summarises the standard allowable truck driver working hours. Standard hours apply to all drivers who do not have accreditation for fatigue management.

In any period of…	A driver must not work for more than a maximum of	And must have the rest of that period off work with at least a minimum rest break of
5 ½ hours	5 ¼ hours work time	15 continuous minutes rest time
8 hours	7 ¹ / ₂ hours work time	30 minutes rest time in blocks of 15 continuous minutes
11 hours	10 hours work time	60 minutes rest time in blocks of 15 continuous minutes
24 hours	12 hours work time	7 continuous hours stationary rest time*
7 days	72 hours work time	24 continuous hours stationary rest time
14 days	144 hours work time	2 x night rest breaks [#] and 2 x night rest breaks taken on consecutive days

 Table 2.1:
 Standard hours – work and rest hours requirement

* Stationary rest time is the time a driver spends out of a heavy vehicle or in an approved sleeper berth of a stationary heavy vehicle.

Night rest breaks are 7 continuous hours stationary rest time taken between the hours of 10pm on a day and 8am on the next day (using the time zone of the base of the driver) or a 24 continuous hours stationary rest break.

3. SAFETY

3.1 GENERAL

The driver must adhere to the following rules:

- comply with the instructions given for health and safety
- comply with all Australian Road Rules
- comply with all requirements of the National Heavy Vehicle Regulator (NHVR)
- comply with Lendlease's Code of Conduct
- comply with all safety instructions, including safe working practices and procedures set in place and use any equipment that is issued for personal protection and ensure that it is maintained in proper order
- never wilfully, recklessly or intentionally interfere with, remove, misuse or damage anything that is
 provided in the interests of safety, health or welfare nor wilfully place at risk the safety and health of any
 other person at their workplace
- work with due care and consideration to safeguard your own safety and health and the safety and health of others
- smoking is forbidden in all vehicles, mobile plant, buildings and enclosed structures
- protect the environment.

3.2 USE OF MOBILE PHONES

The driver must adhere to the following relating to use of mobile phones:

- it is strictly forbidden to drive a vehicle while using (includes talking, sending or receiving text messages, playing games or taking photos) when using a hand-held phone. It is also forbidden to perform these activities when the vehicle is stopped but not parked, for example when you are waiting at traffic lights
- a hands-free device can reduce the physical effort to make and receive calls but doesn't necessarily
 make it safe to use a phone while driving. It is forbidden to use a hands-free phone while driving if it
 causes you to lose proper control of your vehicle. The penalty includes significant fines and loss of
 demerit points
- if using a hands-free phone while driving is required:
 - make sure it is a hands-free phone that is set up and working before you start driving
 - keep the conversation short. Don't engage in complex or emotional conversations
 - tell the person on the other end that you are driving and may have to end the call
 - never text message (SMS) while driving
 - end the call if it is distracting you from driving.

3.3 SITE SAFETY

The driver must follow the following rules relating to site safety:

- site speed limit
- maintain a clean and orderly site
- comply with safety directions
- assess hazards in a task before commencing
- immediately report all potential hazards seen on site

- immediately report all injuries
- immediately report any environmental damage oil spills, noise, soil contamination etc.
- drivers are not allowed to enter confined spaces. Entry to confined spaces is subject to a permit, which
 is issued to appropriately trained authorised persons only.

4. WORK ETHICS

4.1 ALCOHOL AND DRUGS

It is Lendlease's policy to maintain a drug and alcohol-free work environment. The use, sale, transfer or possession of illegal drugs or other illegal substances, is strictly prohibited at the work site. This also includes illegal or improper use of controlled substances.

Reporting to work under the influence of any such substance is also strictly prohibited. Doing so will result in the application of the relevant disciplinary procedures.

In addition, compliance with any laws, policies or regulations regarding the use or possession of alcohol, illegal drugs, or controlled substances by persons who operate motor vehicles is mandatory.

The following Blood Alcohol Content (BAC) levels apply for entry to the Tweed Valley Hospital site:

- BAC level of 0.0% applies to heavy vehicle drivers
- the consumption of alcohol and other drugs, except prescribed and over the counter medicines during work hours is prohibited
- bringing alcohol and other drugs on site is prohibited
- if planning to consume alcohol locally after work ensure your vehicle is parked outside the Tweed Valley Hospital project site.

4.2 STANDARDS OF BEHAVIOUR

The following behaviour is unacceptable in the workplace:

- instigating a fight and/or workplace bullying
- assaulting or threatening other employees or persons
- theft
- harassment and discrimination of any kind
- initiation or participation in unauthorised activities that may cause personal injury, property damage or physical stress or anxiety to other employees or members of the public
- abuse, damage or destruction of property
- interfering with or removing without permission, the property of the company or any other person
- failing to adhere to safe operating procedures
- horseplay, practical jokes and skylarking
- the taking of unauthorised photographs and removal of company assets is strictly forbidden.

Employees under the influence of alcohol and/or drugs will not be permitted on any worksite. Employees affected by alcohol and/or drugs must not drive vehicles or operate any plant, equipment or machinery.

5. **PRE-DEPARTURE CHECK**

A pre-departure check is a procedure to be completed daily. Each driver is to carry out a visual inspection of the items listed. This is to be done by the driver prior to the commencement of each shift/or when changing into another vehicle mid-shift.

A pre-trip check involves the inspection of critical equipment. Each driver has to visually inspect as a minimum the items listed below:

- Wheels and Tyres:
 - tyres are adequately inflated
 - tyre tread, depth and integrity
 - wheels are secure.
- Lights and reflectors:
 - all lights, including clearance lights, are working
 - reversing alarm (where applicable)
 - all reflectors and lenses are intact and clean.
- Windscreens, mirrors and wipers:
 - windows, mirrors for security, damage and grime
 - wipers and windscreen washers ensuring clear forward vision.
- Structure, Bodywork and Fluid Systems:
 - all panels and readily visible structural members are secure; and
 - leaks of any fluid (oil, water, refrigerant/coolant, hydraulic fluid, brake fluid or other).
- Brakes:
 - brake failure indicators
 - pressure/vacuum gauges; and
 - drain air tanks daily.
- all roadworthiness faults found during the daily vehicle inspection shall be documented in the driver maintenance report book and reported immediately to the appropriate personnel to ascertain the urgency of the fault, in accordance with procedures.
- responsibility for communicating faults:
 - any major faults are to be reported by the driver directly to their manager or their delegate as well as being recorded/ reported in the vehicle logbook.

6. HOURS OF OPERATION

Drivers are likely to be driving across different periods of the day and are to be aware of the requirement to drive to the prevailing conditions.

As a driver you need to be aware that your driving behaviour and level of attention will need to vary across different times of the day, for instance:

Day-Time Periods

- you will need to pay additional attention to congestion and possible queuing
- you will need to be patient and drive according to the road conditions at the time
- you will need to reduce the number of times you change lanes to minimise the potential of a crash
- you will need to be more cognisant of cyclists and pedestrians along the roadside and crossing the road.

Night-Time Periods

- you will need to pay additional attention to adhering to speed limits
- you will need to take greater caution of other speeding or non-complying motorists
- you will need to take greater caution of animals possibly crossing the road or feeding on the road's edge
- you will need to be mindful of coming across early morning or late evening pedestrians/cyclists that may
 or may not be under the effects of alcohol.

7. TRUCK ROUTES

7.1 TRUCK ROUTES

You are to remain on designated truck routes. The primary designated truck routes are as follows:

Pacific Highway to Site

The designated route is via:

- Pacific Motorway
- Tweed Coast Road (accessed via the Tweed Coast Road interchange)
- Cudgen Road.

Site to Pacific Highway

The designated route is via:

- Cudgen Road
- Tweed Coast Road
- Pacific Motorway (accessed via the Tweed Coast Road interchange).

Any required deviations to the designated truck route are to be authorised by the Construction Manager.

8. INFORMATION SOURCES

- Driving Hours and Rest Periods
 <u>https://www.nhvr.gov.au/safety-accreditation-compliance/fatigue-management/work-and-rest-requirements/standard-hours</u>
- NSW Government, RMS, Heavy Vehicle Driver Handbook
 http://www.rms.nsw.gov.au/documents/roads/licence/heavy-vehicle-driver-handbook.pdf
- Truck Drivers Manual

http://www.infrastructure.gov.au/roads/safety/publications/1990/pdf/Edu_book_Truck.pdf



Appendix B: Traffic Control Plans





- All lanes and road layouts must be verified onsite prior to the implementation of this Traffic Control Plan (TCP).
 Size B signs are to be used.
- Size B signs are to be used.
 Signs and devices to be positioned where they will not be obscured by trees, parked vehicles or other objects and
- will not obscure other signs
 Signs and devices must not be placed on footpaths to avoid blocking pedestrians, mobility scooters, bicycles, prams and wheelchairs..
- 6. Extra signs to be placed if required.
- Traffic controllers must be TfNSW/SafeWork NSW-accredited.
- 8. Traffic controllers must be in contact with the worksite at all times.
- 9. The Traffic Manager should:
 - Make the decision on the use of this TCP during the works
 - Install/remove traffic control signs and devices as required
 Periodically review local traffic conditions and the
 - TCP
 - Ensure traffic control signs are in good condition
 Ensure sight distances are maintained for pedestrians at all times.





Gold Coast Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au Brisbane Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au Sydney Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202

Drawn Date S.D 11.09.2020

REVISIONS

Revisions/Descriptions

001 INITIAL TCP

PREPARE A WORK ZONE TRAFFIC MANAGEMENT PLAN CARD NO. 0052309026 EXPIRY 11/03/2023 Project TWEED VALLEY MAIN WORKS TRAFFIC AND PEL

> TRAFFIC CONT CUDGEN ROAL

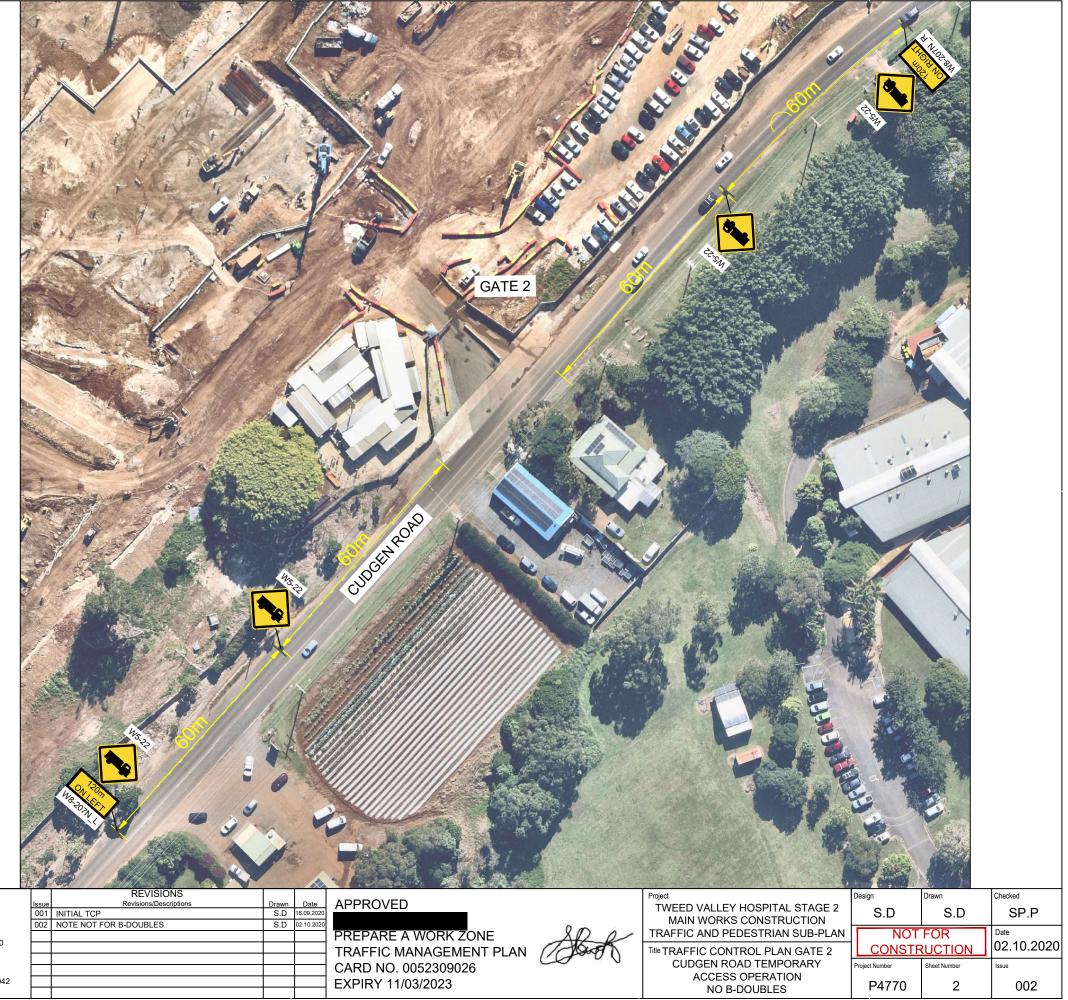
VALLEY HOSPITAL STAGE 2	Design S.D	Drawn S.D	Checked SP.P
NWORKS CONSTRUCTION AND PEDESTRIAN SUB-PLAN FIC CONTROL PLAN GATE 1 GEN ROAD AUXILIARY LEFT TURN OPERATION	NOT	FOR RUCTION Sheet Number	Date 11.09.2020



- 1. All lanes and road layouts must be verified onsite prior to the implementation of this Traffic Control Plan (TCP).
- 2. Size B signs are to be used. 3.
- Signs and devices to be positioned where they will not be obscured by trees, parked vehicles or other objects and will not obscure other signs
- 4. Signs and devices must not be placed on footpaths to avoid blocking pedestrians, mobility scooters, bicycles, prams and wheelchairs ...
- Extra signs to be placed if required. 6
- 7. The existing water-filled barriers in the centre of the driveway must be removed prior to the implementation of this TCP.
- 8. Traffic controllers must be TfNSW/SafeWork NSW-accredited.
- 9. Traffic controllers must be in contact with the worksite at all times.
- 10. This TCP for Gate 2 will be replaced by TCPs for Gates 3 and 4, which will be used by construction vehicles once Gate 2 is removed.
- 11. This TCP must not be used for B-double access. Another TCP for B-double access has been prepared.

12. The Traffic Manager should:

- Make the decision on the use of this TCP during the works
- Install/remove traffic control signs and devices as required
- Periodically review local traffic conditions and the TCP
- Ensure traffic control signs are in good condition Ensure sight distances are maintained for
- pedestrians at all times.





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	REVISIONS		
Issue	Revisions/Descriptions	Drawn	0
001	INITIAL TCP	S.D	16.0
002	NOTE NOT FOR B-DOUBLES	S.D	02.1





- 1. All lanes and road layouts must be verified onsite prior to the implementation of this Traffic Control Plan (TCP).
- Size B signs are to be used.
 Signs and devices to be positioned where they will not be obscured by trees, parked vehicles or other objects and
- will not obscure other signs
 Signs and devices must not be placed on footpaths to avoid blocking pedestrians, mobility scooters, bicycles, prams and wheelchairs..
- 6. Extra signs to be placed if required.
- 7. The existing water-filled barriers in the centre of the driveway must be removed prior to the implementation of this TCP.
- 8. Traffic controllers must be TfNSW/SafeWork NSW-accredited.
- 9. Traffic controllers must be in contact with the worksite at all times.
- This TCP for Gate 2 will be replaced by TCPs for Gates 3 and 4, which will be used by construction vehicles once Gate 2 is removed.
- 11. This TCP is to be used only when B-double access is required.
- 12. The Traffic Manager should:
 - Make the decision on the use of this TCP during the works
 - Install/remove traffic control signs and devices as required
 - Periodically review local traffic conditions and the TCP
 - Ensure traffic control signs are in good condition
 Ensure sight distances are maintained for
 - pedestrians at all times.





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REVISIONS Revisions/Descriptions	Drawn	Date	APPROVED	
CP	S.D	01.10.2020		
			PREPARE A WORK ZONE	81
			TRAFFIC MANAGEMENT PLAN	THE
				Co
			CARD NO. 0052309026	
			EXPIRY 11/03/2023	



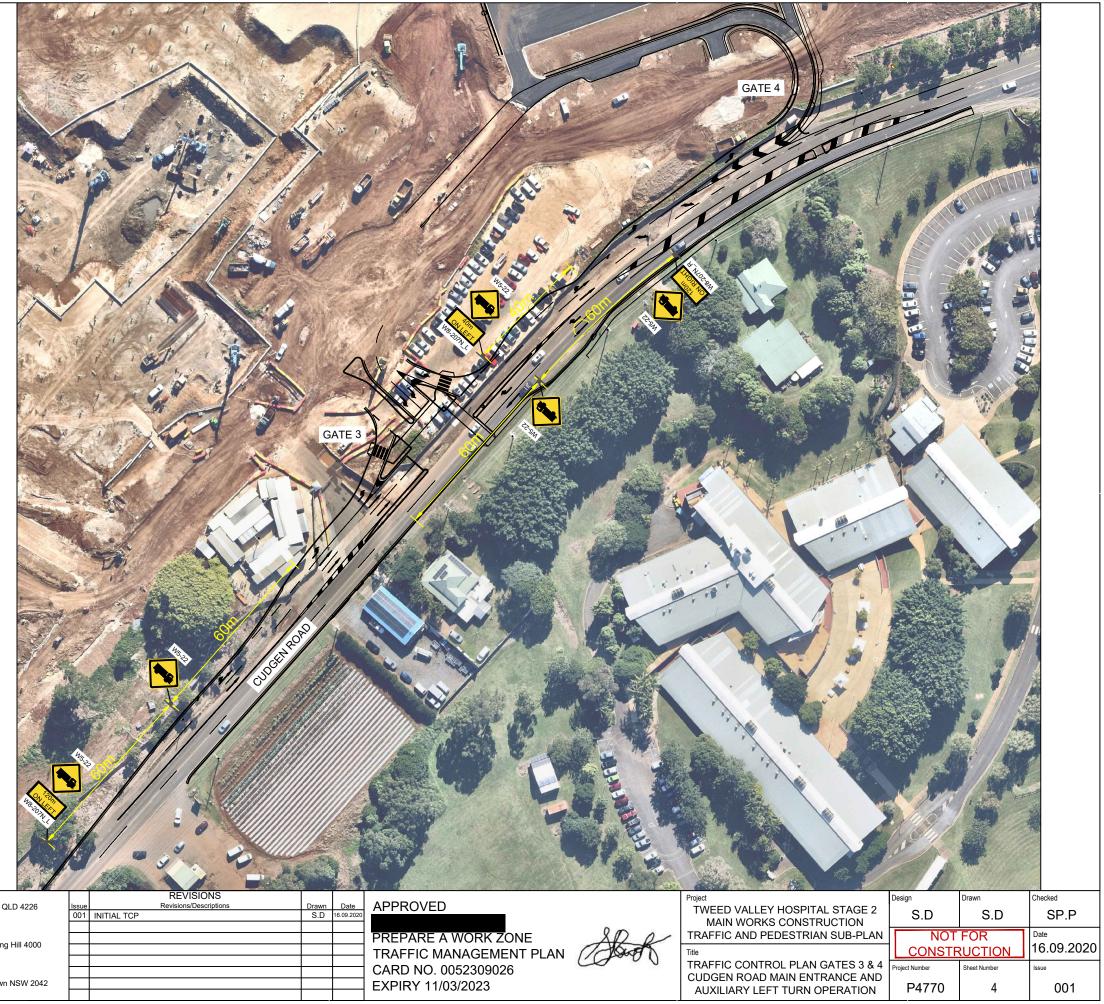
Title TRAFFIC CONT CUDGEN RO/ ACCESS FOR B-



	Design	Drawn	Checked	
Y HOSPITAL STAGE 2 S CONSTRUCTION	S.D	S.D	SP.P	
EDESTRIAN SUB-PLAN	NOT		Date	
TROL PLAN GATE 2	CONSTR	01.10.2020		
DAD TEMPORARY	Project Number	Sheet Number	Issue	
S OPERATION 3-DOUBLES	P4770	3	001	



- 1. All lanes and road layouts must be verified onsite prior to the implementation of this Traffic Control Plan (TCP).
- 2. Size B signs are to be used.
- Signs and devices to be positioned where they will not be obscured by trees, parked vehicles or other objects and 3. will not obscure other signs
- Signs and devices must not be placed on footpaths to avoid blocking pedestrians, mobility scooters, bicycles, prams and wheelchairs...
- Extra signs to be placed if required. 6
- Traffic controllers must be TfNSW/SafeWork 7. NSW-accredited.
- Traffic controllers must be in contact with the worksite at 8. all times.
- The design of Gate 3 is subject to change, pending TfNSW approval for Traffic Control Signals. 9.
- 10. This TCP will be implemented once Gate 2 is removed. 11. The Traffic Manager should:
 - Make the decision on the use of this TCP during the works
 - Install/remove traffic control signs and devices as required
 - Periodically review local traffic conditions and the TCP
 - Ensure traffic control signs are in good condition -
 - Ensure sight distances are maintained for pedestrians at all times.



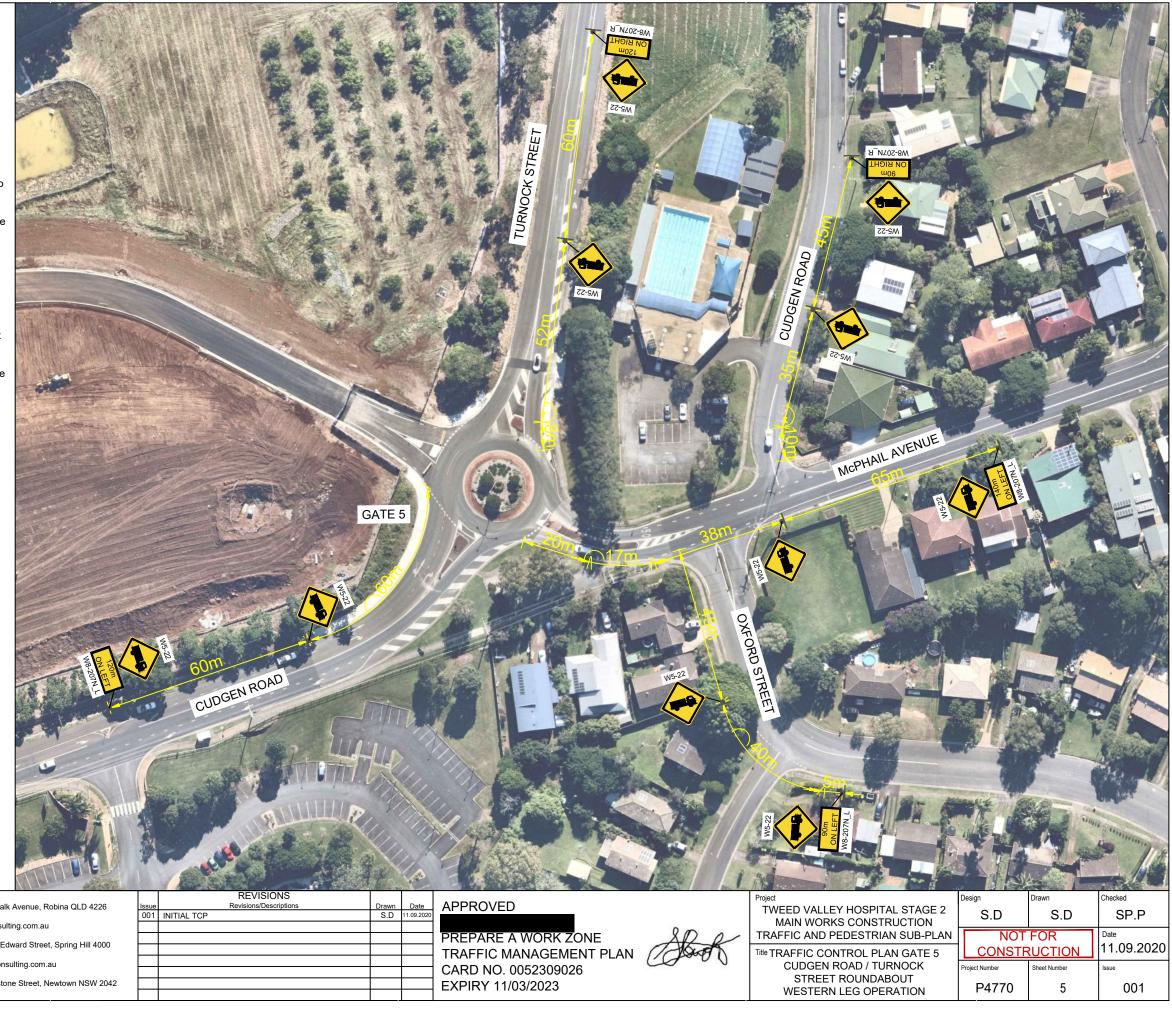


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- 1. All lanes and road layouts must be verified onsite prior to the implementation of this Traffic Control Plan (TCP).
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 - TCP Ensure traffic control signs are in good condition
 - -Ensure sight distances are maintained for pedestrians at all times.





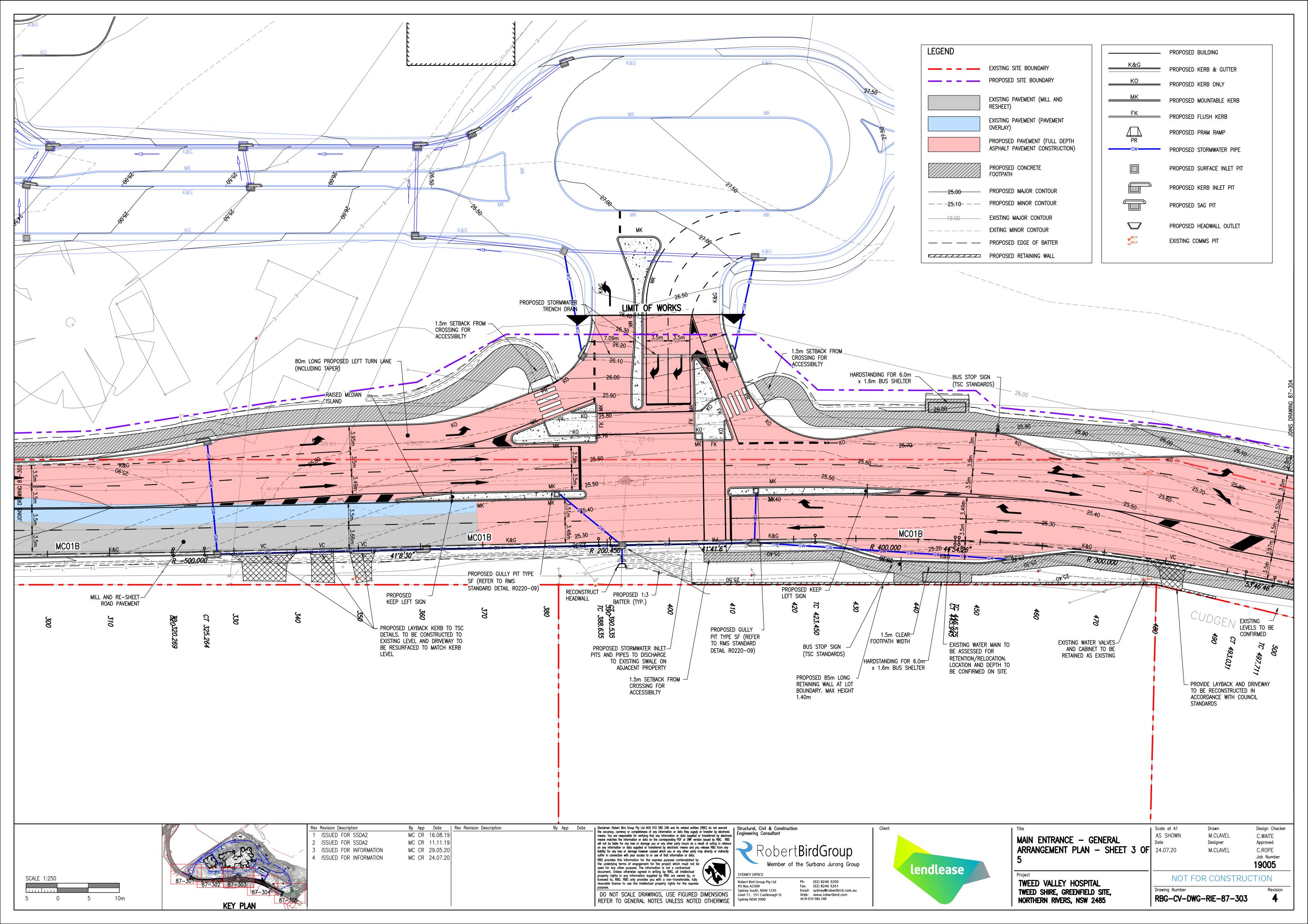
Gold Coast Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au Brisbane Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au Sydney Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202

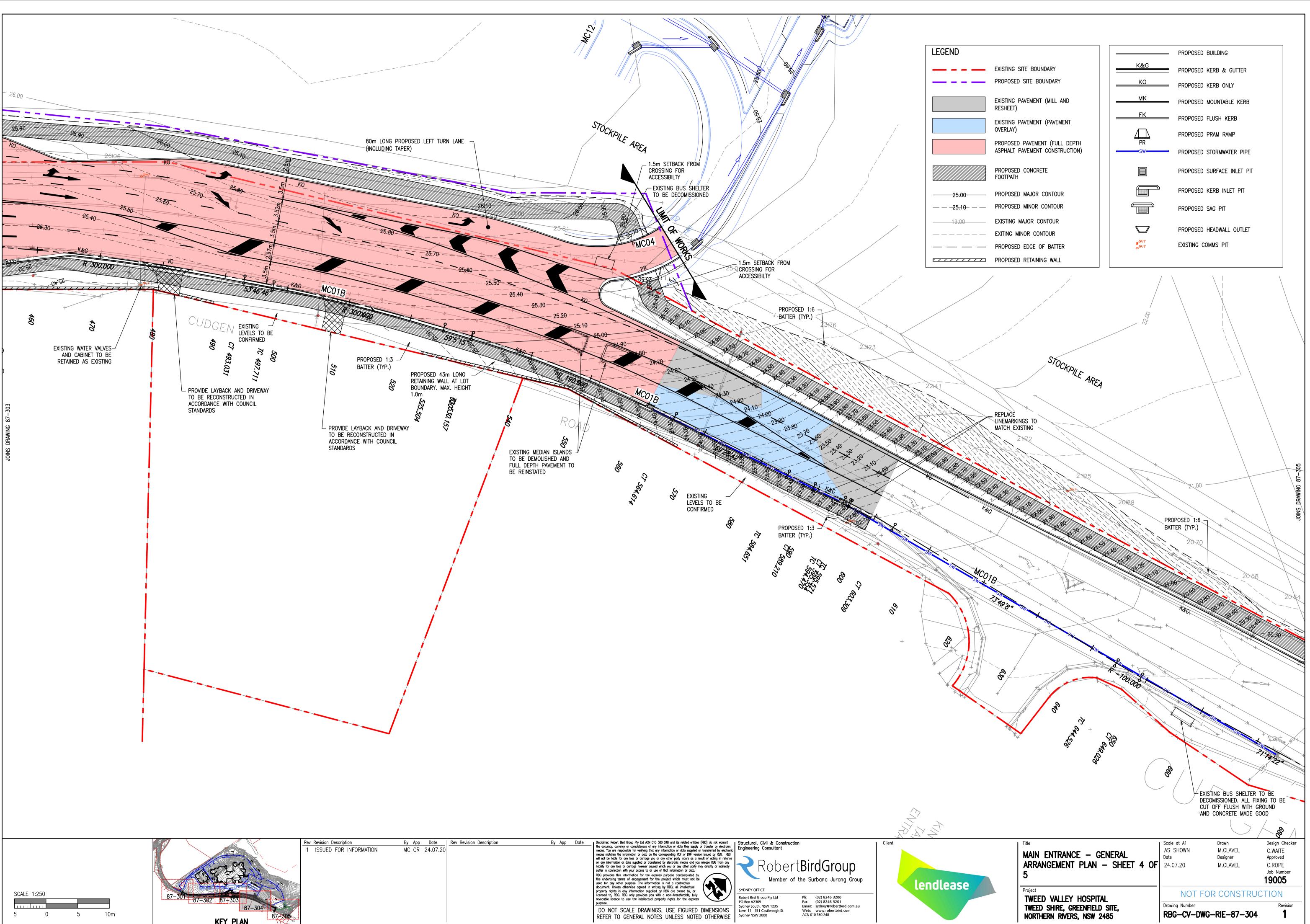
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Appendix C: Construction Access Plans





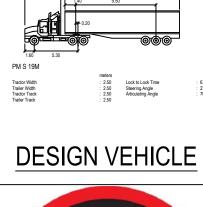




Appendix D: Swept Path Analysis

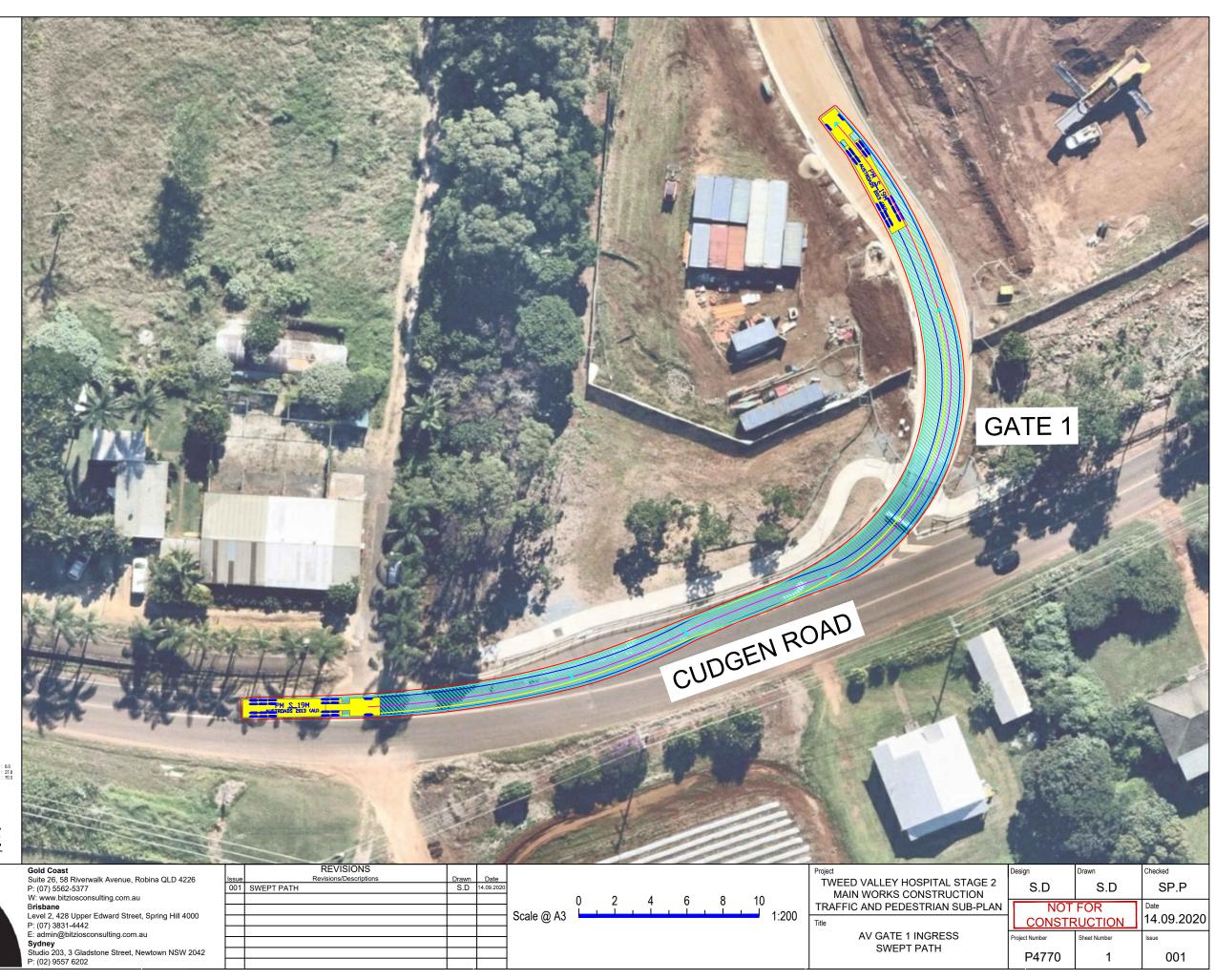


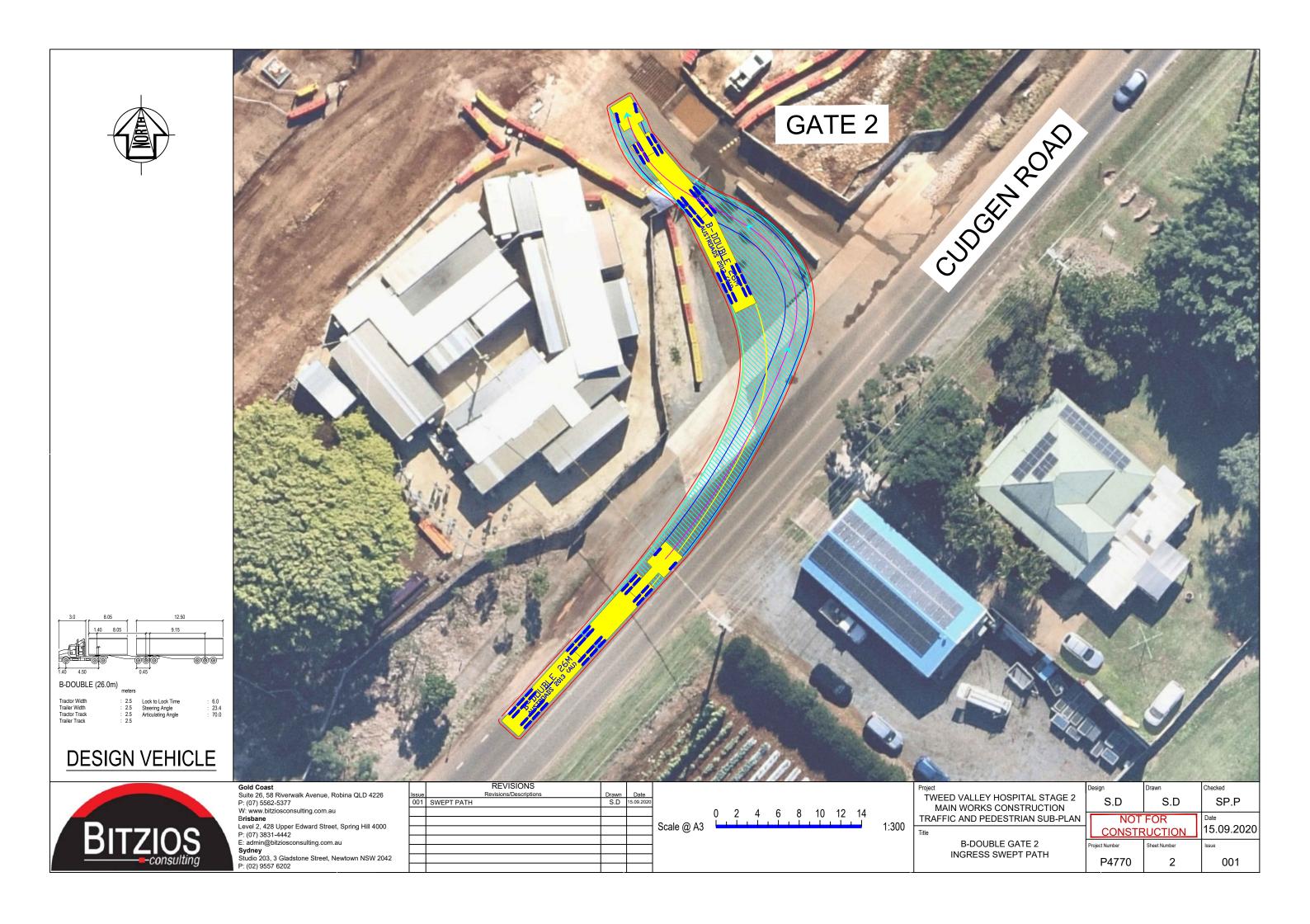


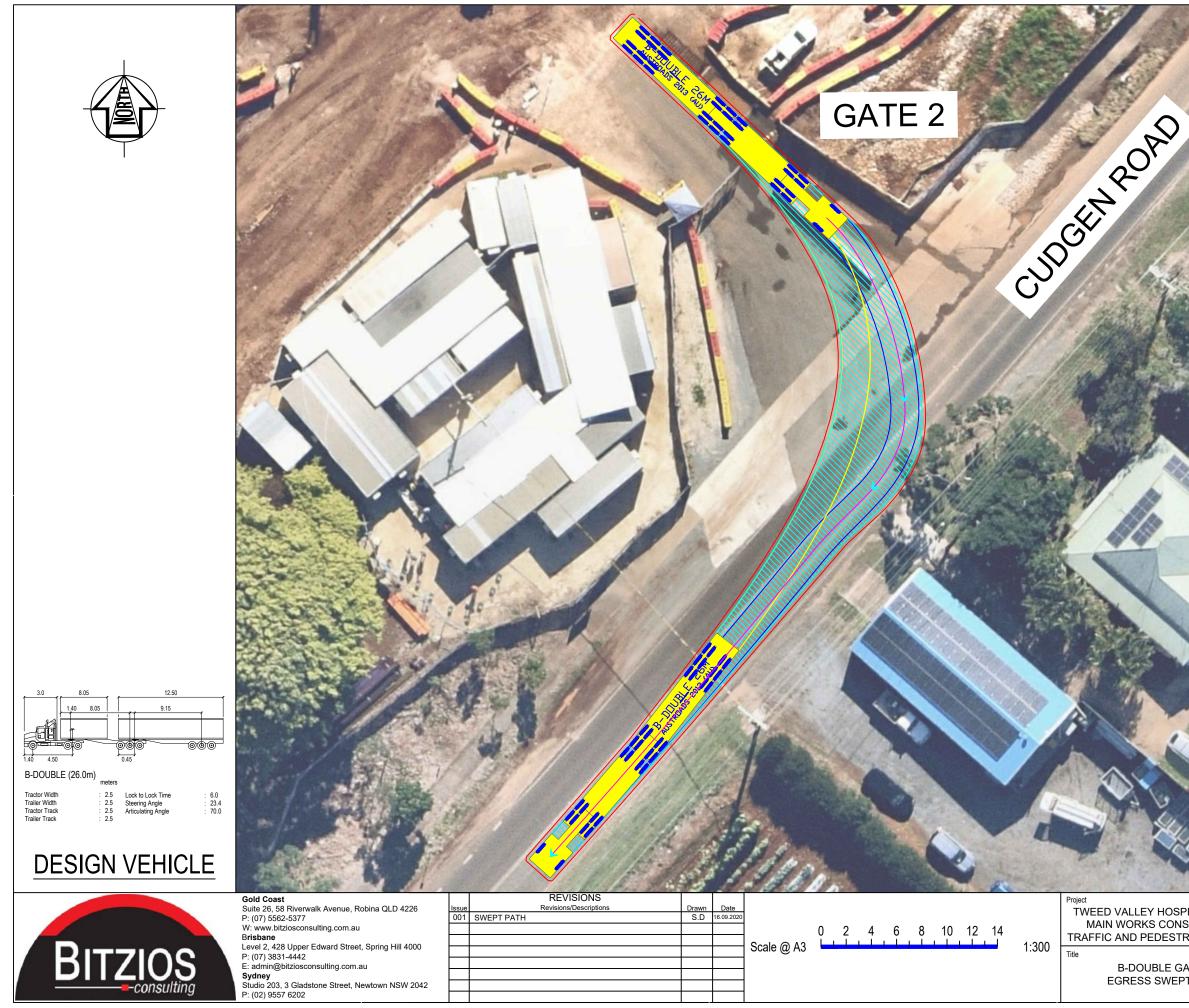


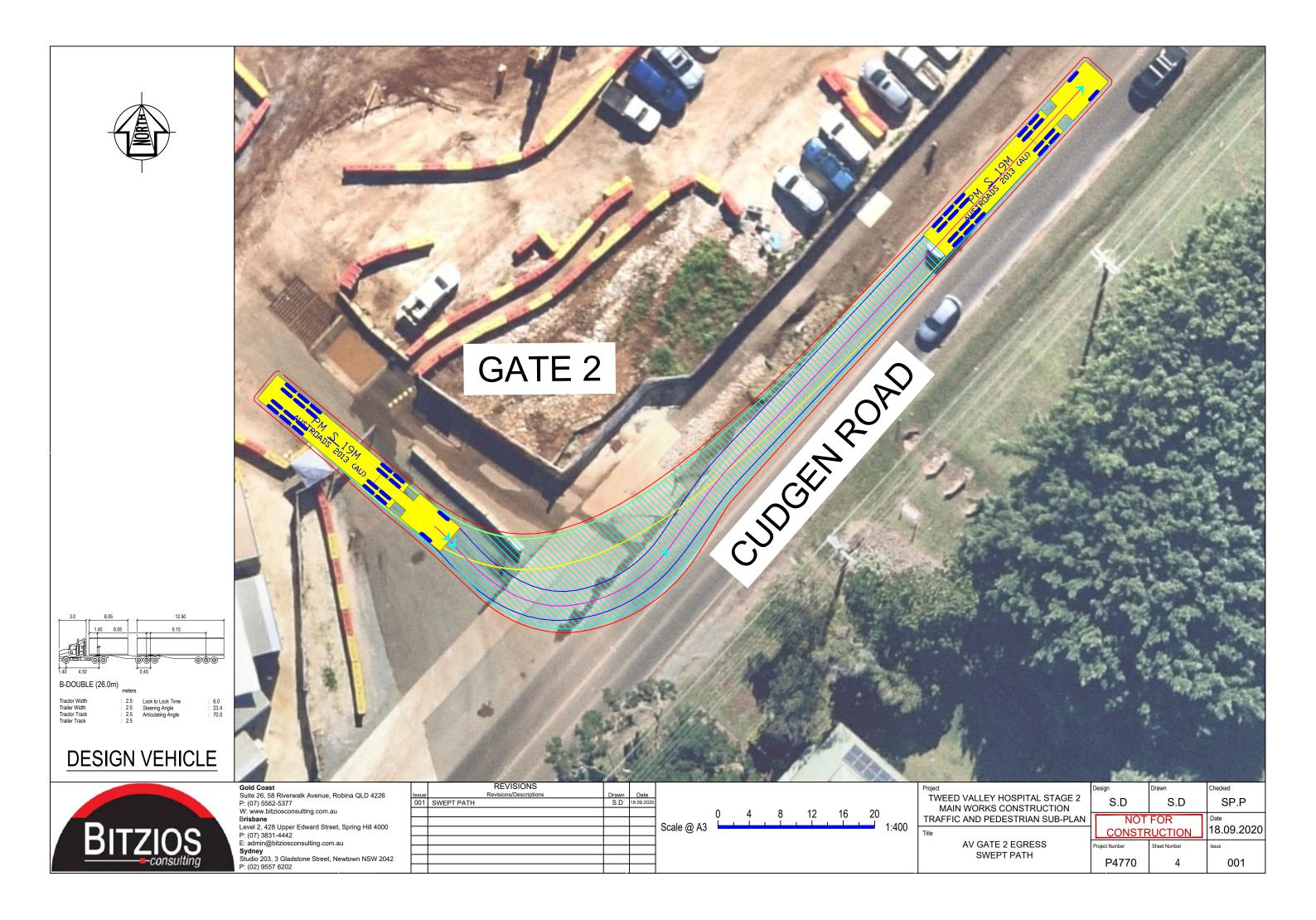


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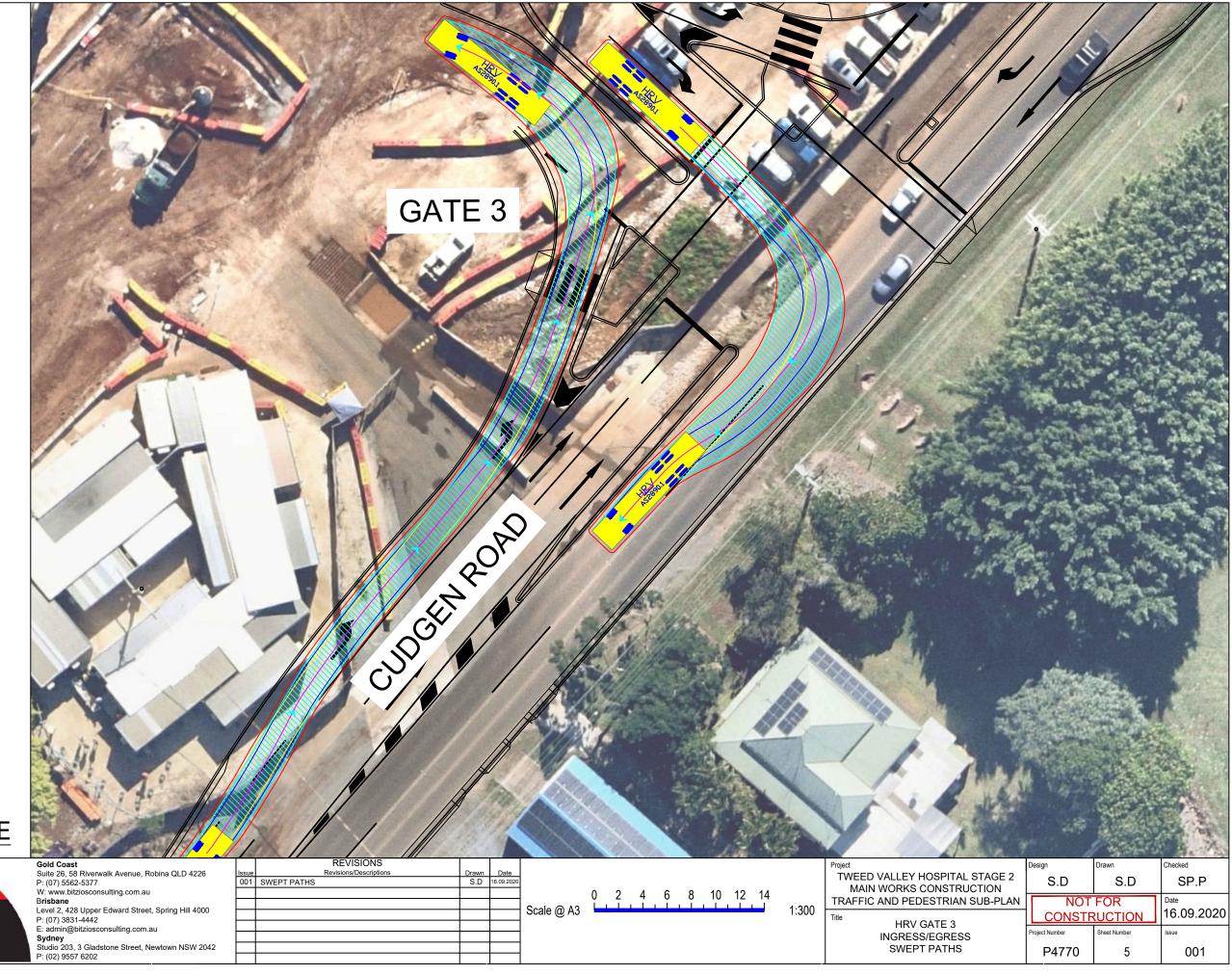


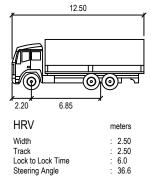










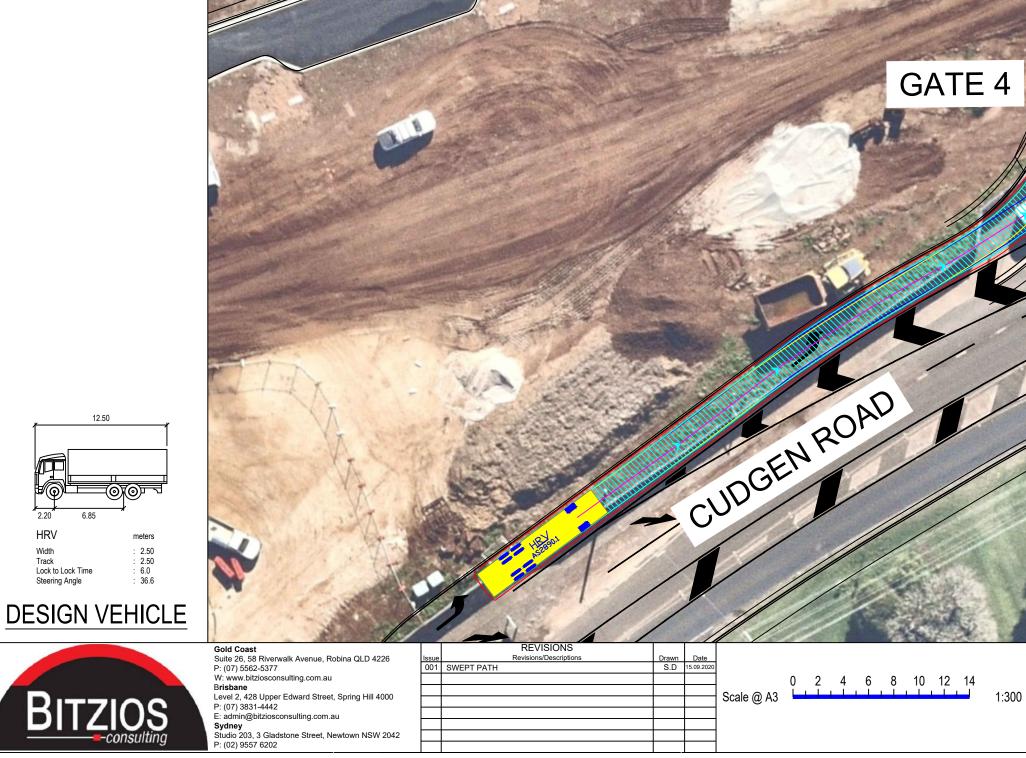


DESIGN VEHICLE

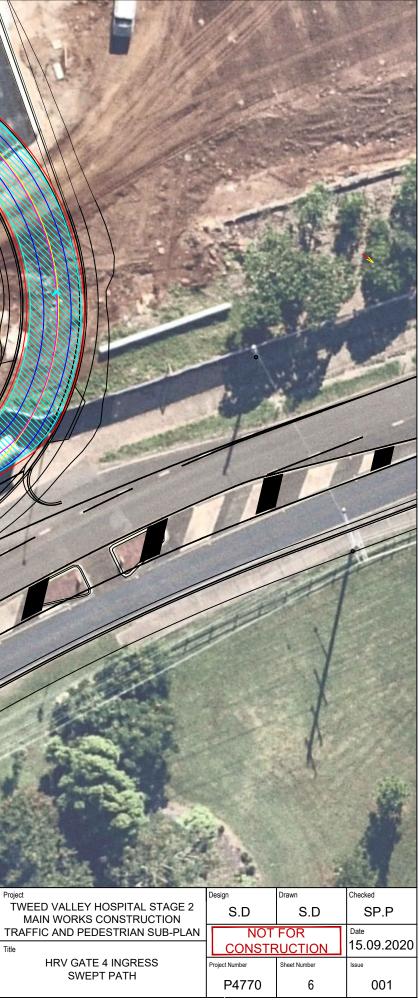


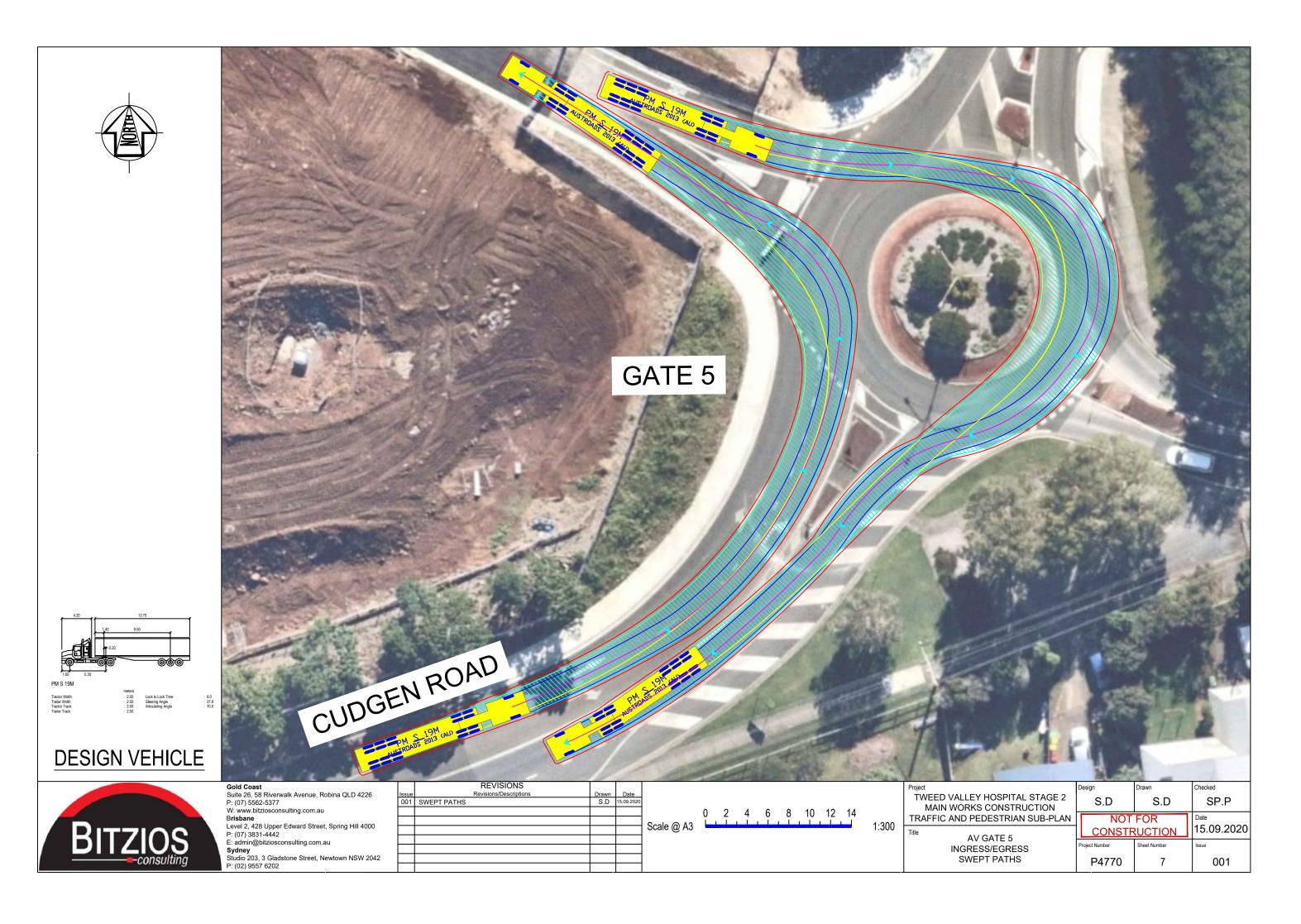


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Appendix E: Written Incident Notification and Reporting Requirements



APPENDIX 2 WRITTEN INCIDENT NOTIFICATION AND REPORTING REQUIREMENTS

Written Incident Notification Requirements

- 1. A written incident notification addressing the requirements set out below must be emailed to the Planning Secretary at the following address: <u>compliance@planning.nsw.gov.au</u> within seven days after the Applicant becomes aware of an incident. Notification is required to be given under this condition even if the Applicant fails to give the notification required under condition A27 or, having given such notification, subsequently forms the view that an incident has not occurred.
- 2. Written notification of an incident must:
 - a. identify the development and application number;
 - b. provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident);
 - c. identify how the incident was detected;
 - d. identify when the applicant became aware of the incident;
 - e. identify any actual or potential non-compliance with conditions of consent;
 - f. describe what immediate steps were taken in relation to the incident;
 - g. identify further action(s) that will be taken in relation to the incident; and
 - h. identify a project contact for further communication regarding the incident.
- 3. Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, the Applicant must provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested.
- 4. The Incident Report must include:
 - a. a summary of the incident;
 - b. outcomes of an incident investigation, including identification of the cause of the incident;
 - c. details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and
 - d. details of any communication with other stakeholders regarding the incident.

48