Traffic and Transport Management Plan

HumeLink West

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TransGrid

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Document Control

Approvals

Title	HumeLink West Traffic and Transport Management Plan
Endorsed by Environment Representative	Derek Low (WolfPeak Group Ltd Pty)
Approved on behalf of HLWJV by	Tim Burns
Signed	
Dated	

Version Control

Revision	Date	Revision Detail/Status	Author	Reviewer	Approver
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Distribution of controlled copies

This Traffic and Transport Management Plan (TTMP) is available to all personnel and sub-contractors via the HumeLink West Project (HLW) document control management system. An electronic copy can be found on the HumeLink website.

The document is uncontrolled when printed. One controlled hard copy of the TTMP and supporting documentation will be maintained by the Quality Manager at the HLW office (and, if required on the HumeLink website link to be provided).

Copy number	Issued to	Version

This TTMP was created as per Condition B39 in CSSI 36656827

Contents

Figures

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Definitions

Term	Definition
Enabling Works	An initial stage (as defined under an approved Enabling Works Management Plan under condition B64 of the Project Approval) of the following activities defined as low risk in the Enabling Works Management Plan: 1. Site establishment and the operation of construction compounds, including excavations, surface preparation, site access points and utility connections; 2. Site establishment of worker accommodation facilities; 3. Minor adjustments to existing access tracks and road improvement; 4. Utility relocations and adjustments; Establishment of new access tracks in the Enabling Works Management Plan.
Environmental aspect	Defined by AS/NZS ISO 14001:2015 as an element of an organisation's activities, products or services that can interact with the environment.
Environmental impact	Defined by AS/NZS ISO 14001:2015 as any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organisation's environmental aspects.
Environmental incident	An unexpected event that has, or has the potential to, cause harm to the environment and requires some action to minimise the impact or restore the environment.
Environmental objective	Defined by AS/NZS ISO 14001:2015 as an overall environmental goal, consistent with the environmental policy, that an organisation sets itself to achieve.
Environmental policy	Statement by an organisation of its intention and principles for environmental performance.
Environmental target	Defined by AS/NZS ISO 14001:2015 as a detailed performance requirement, applicable to the organisation or parts thereof, that arises from the environmental objectives and that needs to be set and met in order to achieve those objectives.
Environmental Representative	A suitably qualified and experienced person independent of HumeLink design and construction personnel employed for the duration of construction. The principal point of advice in relation to all questions and complaints concerning environmental performance.
HumeLink Approvals	HumeLink approvals include: • *HumeLink Infrastructure Approval NSW SSI 36656827* • *HumeLink EPBC Approval Cth EPBC 2021/9121*
Long Term Traffic Management	Traffic management devices and/or equipment installed for periods longer than one shift, once installed it is not removed, for example concrete barriers and line marking
Non-compliance	Failure to conform to the requirements of HLW system documentation or supporting documentation but is not considered a non-compliance.
Non-conformance	Failure to conform to the requirements of HLW system documentation

Term	Definition
	including this CEMP or supporting documentation.
Planning Approval Documentation	The NSW planning approval documents, as they relate to the HLW and as listed in MCoA A2 of the NSW Infrastructure Approval for HumeLink (SSI 36656827)
Principal, the	Transgrid
Short Term Traffic Management	Traffic management devices and/or equipment installed for only one shift. The devices may be re-installed on the next shift, for example boom gates and cones
Synergy	UGL-EMS incident management software program to manage, report, record and take action on emergency and incidents.

Abbreviations

Abbreviation	Expanded text
BMP	Biodiversity Management Plan
CCS	Community Communications Strategy
CEMP	Construction Environmental Management Plan
CSSI	Critical State Significant Infrastructure
DPHI	Department of Planning, Housing, and Infrastructure
EIS	Environmental Impact Statement
EMS	Environmental Management System
ER	Environmental Representative.
EP&A Act	*Environmental Planning and Assessment Act 1979* (NSW)
FAS	Flashing arrow signs
FCNSW	Forestry Corporation of NSW
HLWJV	HumeLink West Joint Venture (UGL Limited and CPB Contractors)
HLW	The HumeLink West Stage of the HumeLink project
IVMS	In-Vehicle Monitoring System, installed on all vehicles used on the project.
MCoA	NSW Minister's Conditions of Approval (SSI-36656827)
NSW	New South Wales
OSOM	Oversize and overmass
PTS	Portable Traffic Signals
ROL	Road occupancy licence
RtS	Response to Submissions Report
Secretary	Secretary of the NSW Department of Planning and Environment or nominee, whether nominated before or after the date on which this approval was granted
SSI	State Significant Infrastructure
SZA	Speed Zoning Authorisation
TfNSW	Transport for NSW
TGS	Traffic Guidance Schemes (formerly TGSs)
TMC	Transport Management Centre
TMP	Traffic Management Plan
TRSB	Temporary Road and Safety Barrier
TTMP	Traffic & Transport Management Plan (this Plan)
UGL-EMS	UGL Pty Limited's Environmental Management System

Abbreviation	Expanded text
UHF	Ultra High Frequency
UMM	Updated Mitigation Measures as outlined in the HumeLink Planning Approval Documentation
VMS	Variable Message Sign
WWCC	Wagga Wagga City Council

1. Introduction

1.1. Context

This Traffic and Transport Management Plan (TTMP or Plan) forms part of the HumeLink West project (HLW) Construction Environmental Management Plan (CEMP). The TTMP describes how the UGL Limited and CPB Contractors Joint Venture (HLWJV), during the construction of HLW, will comply with the Minister's Conditions of Approval (MCoA), the Updated Mitigation Measures (UMM), and undertake its duties in accordance with the Planning Approval Documentation listed under MCoA A2.

1.2. Background and project description

Transgrid's HumeLink project (HumeLink) will increase the energy network capacity in southern New South Wales (NSW) through the development of around 360 kilometres (km) of new 500 Kilovolt (kV) high-voltage transmission lines and associated infrastructure between Wagga Wagga, Bannaby and Maragle substations.

HumeLink will involve construction of a new substation east of Wagga Wagga at Gugaa, as well as connection to existing substations at Wagga Wagga and Bannaby and a future substation at Maragle in the Snowy Mountains (referred to as the future Maragle 500 kV substation). The future Maragle 500 kV substation is subject to a separate major project assessment and approvals (reference SSI-9717, EPBC 2018/836).

The Environmental Impact Statement (EIS) was prepared and finalised in August 2023 to assess the impacts of construction and operation of HumeLink and was placed on public exhibition between 30 August to 12 October 2023. A Response to Submissions Report (RtS) along with an Addendum Report (AR) under Section 179(2) of the *Environmental Planning and Assessment Regulation 2021* (EP&A Reg), was prepared and finalised in May 2024.

The NSW Minister for Planning has declared HumeLink to be Critical State Significant Infrastructure (CSSI) as part of the 'Snowy 2.0 and Transmission Project' defined under Schedule 5, clause 9 of the State Environmental Planning Policy (Planning Systems) 2021 (Planning Systems SEPP). As CSSI, the HumeLink requires approval from the NSW Minister for Planning under Division 5.2, Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

A referral under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) was submitted in March 2022. The Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW – Cth) determined HumeLink to be a controlled action under section 75 of the EPBC Act on 13 April 2022. In May 2022, Supplementary SEARs were issued to provide additional requirements from DCCEEW.

In accordance with the NSW Assessment Bilateral Agreement made under Section 45 of the EPBC Act, the NSW Government has assessed matters of national environmental significance on behalf of the Australian Government and submitted an assessment report for DCCEEW – Cth to issue EPBC Act approval.

HumeLink was approved by the Minister for Planning and Environment (the NSW Minister) on 13 November 2024 and by the Minister for Climate Change, Energy, the Environment and Water (the Cth Minister) on 18 December 2024.

In accordance with NSW Minister for Planning's Conditions of Approval (MCoA) C3, the Proponent may (with the approval of the Planning Secretary):

> *prepare and submit any strategy, plan or program required by this approval on a staged basis (if a clear description is provided as to the specific stage and scope of the development to which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program);*

Consistent with the requirements of MCoA C3, the following staging of the project was approved on 22 November 2024:

Stage 1 – Initial Development

- Stage 1A – Pre-construction Minor Works HLE
- Stage 1B – Pre-construction Minor Works HLW

Stage 2 – Enabling Works

- Stage 2 – Enabling Works – both HLE and HLW

Stage 3 – Construction

- Stage 3A – Construction Works HLE
- Stage 3B – Construction Works HLW

Stage 4 – Operation

- Stage 4 – Operation HumeLink

To accommodate additional stakeholder consultation and the planning of Over-size and Over-mass (OSOM) loads and stringing over State roads, an additional Staging Request was prepared to include the following phasing of Stage 3B:

- **Stage 3B(i):** HLW construction activities, excluding cable stringing over State roads and transportation of high-risk OSOM on unapproved routes.
- **Stage 3B(ii):** HLW construction activities, including transportation of high-risk OSOM.
- **Stage 3B(iii):** HLW construction activities, including cable stringing over State roads.

This TTMP is applicable to Stage 3B(i). Following confirmation of the Port of arrival for transformers and other high risk OSOM, the routes required for OSOM movements will be finalised in consultation with TfNSW, Snowy Valleys Council, and Wagga Wagga City Council (WWCC). The agreed OSOM routes for high risk OSOM will be reflected in this TTMP and the revised Plan will be submitted to the Planning Secretary for approval. Following consultation with the relevant road authority on a stringing specific TMP the revised Plan will be submitted to the Planning Secretary for approval.

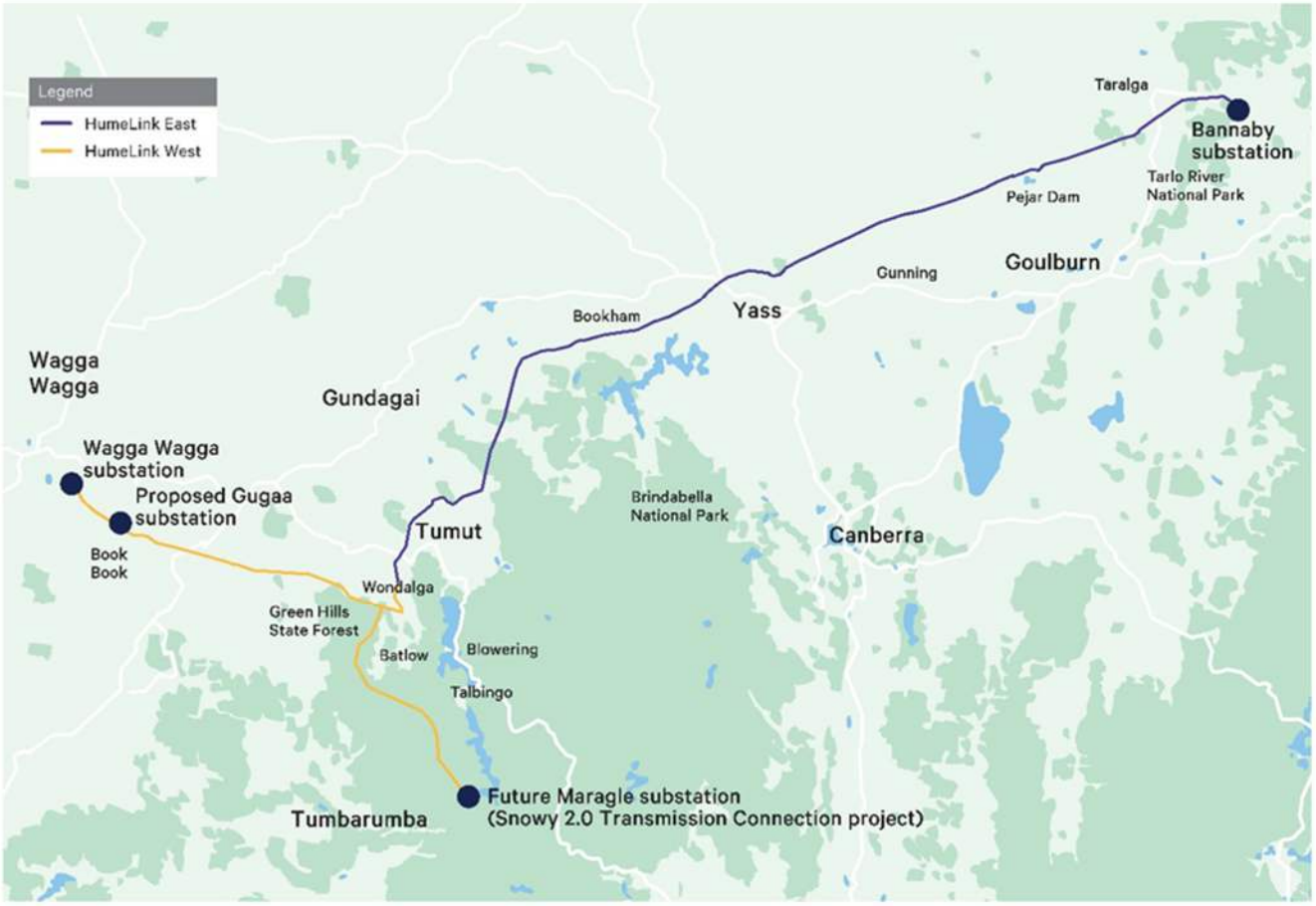


Figure 1: Staging for HumeLink

1.2.1. HumeLink project description

The HumeLink project includes the following key components:

- Construction and operation of around 365 kilometres of new double circuit 500 kV transmission lines and associated infrastructure between Wagga Wagga, Bannaby and Maragle.
- Construction of a new 500/330 kV substation at Gregadoo (Gugaa 500 kV substation) approximately 11 kilometres south-east of the existing Wagga 330/132 kV substation (Wagga 330 kV substation).
- Demolition and rebuild of a section of Line 51 (around two kilometres in length) as a double circuit 330 kV transmission line connecting into the Wagga 330 kV substation.
- Modification of the existing Wagga 330 kV substation and Bannaby 500/330 kV substation (Bannaby 500 kV substation) to accommodate the new transmission line connections.
- Connection of transmission lines to the future Maragle 500/330 kV substation (Maragle 500 kV substation, approved under the Snowy 2.0 Transmission Connection Project (SSI-9717)).
- Telecommunications connections to existing substations.
- Establishment of new and/or upgraded temporary and permanent access tracks.
- Ancillary works required for construction of the project such as construction compounds, worker accommodation facilities, utility connections and/or relocations, brake and winch sites, and helipad/helicopter support facilities.

1.2.2. HumeLink West project description

HLW consists of the following design and construction works:

Transmission Line Works:

- Wagga 330 kV substation to Gugaa 500 kV substation (approximately 11 km) - L4 Works.
- Gugaa 500 kV substation to Wondalga (approximately 65 km) - L2 Works.
- Wondalga to Maragle 500 kV substation (approximately 46 km) - L1 Works.
- Rebuild of the 330kV 'transmission line 051' for approximately 2 km near Wagga 330/132kV substation on double circuit towers strung both sides - L6 Works.
- T point to Hume Link Interface (approximately 10km) - L3 Works.

Substation Works:

- New Maragle 500kV substation works (to be undertaken under SSI-9717).
- Augmentation of the existing 330/132 kV substation.
- Augmentation of 330Kv switching station (delivered by Snow 2.0) to establish a combined 500/330 kV substation.
- New Gugaa 500/330kV substation.
- Wagga 330kV substation augmentation.

Reflecting the requirements of MCoA A15, the HLW scope also includes the:

- Repair, or payment of the full costs associated with repairing, any public infrastructure that is damaged by the HLW (unless HLWJV and the applicable authority agree otherwise)
- Relocation, or payment of the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the HLW (unless HLWJV and the applicable authority agree otherwise).

All new buildings and structures, and any alterations or additions to existing buildings and structures, that are part of the development, will be constructed in accordance with the relevant requirements of the Building Code of Australia; and where the Building Code of Australia is not applicable, to the relevant Australian Standard.

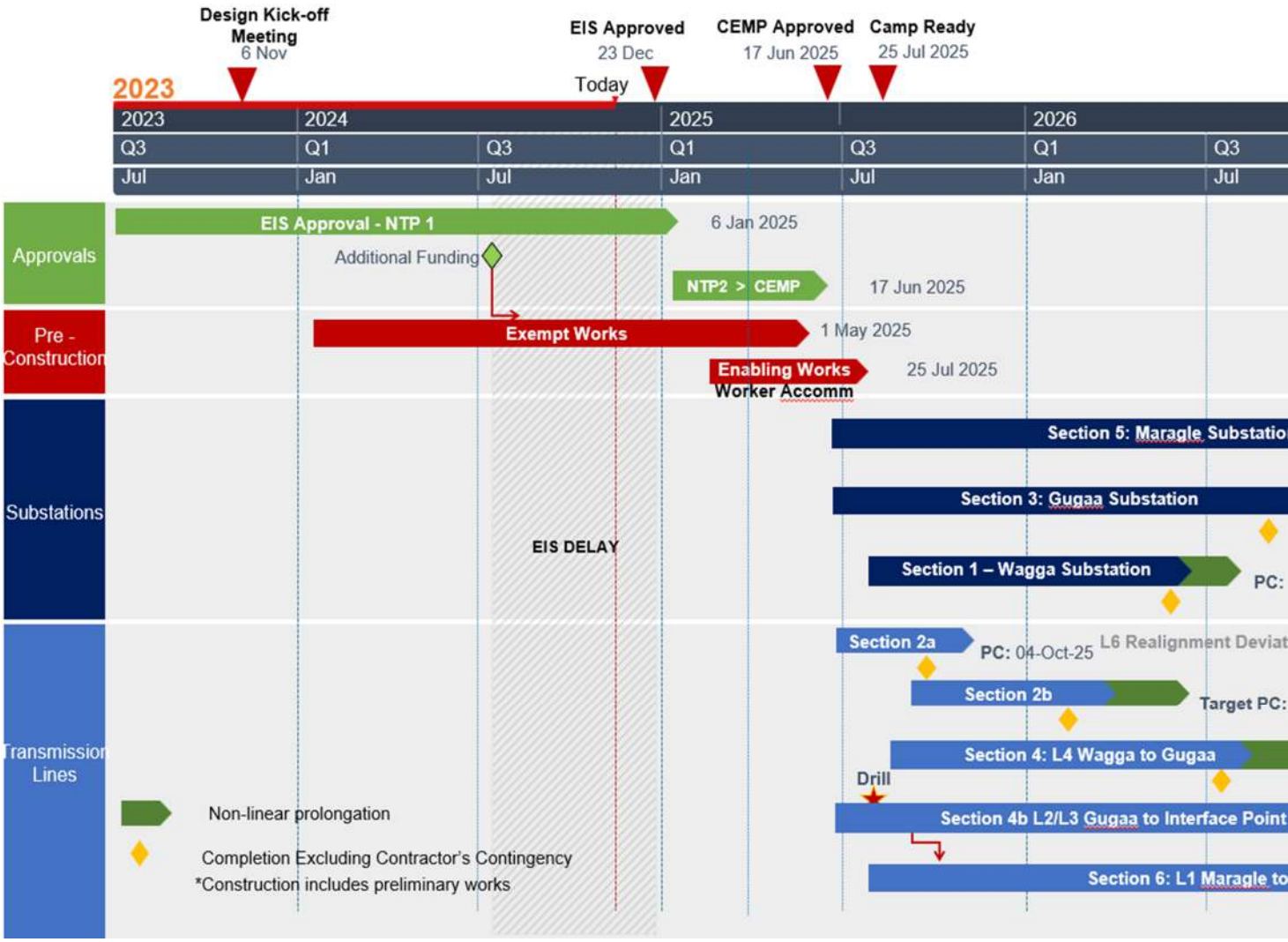
Transmission line structures will have a pre-dulled steel finish to minimise the potential for glare and reflection.

1.3. Scope

This Plan describes how the HLWJV proposes to manage transport and traffic during the HLW construction, including HLWJV team roles and responsibilities, stakeholder engagement processes, management and mitigation measures, and continual improvement processes.

The requirements of the TTMP will apply to all personnel, including all contract workforce and subcontractors.

An indicative schedule of construction works is provided below



. The schedule is indicative only and will be subject to change during construction in consultation with key stakeholders (refer to Section 4.2 and Section 5).

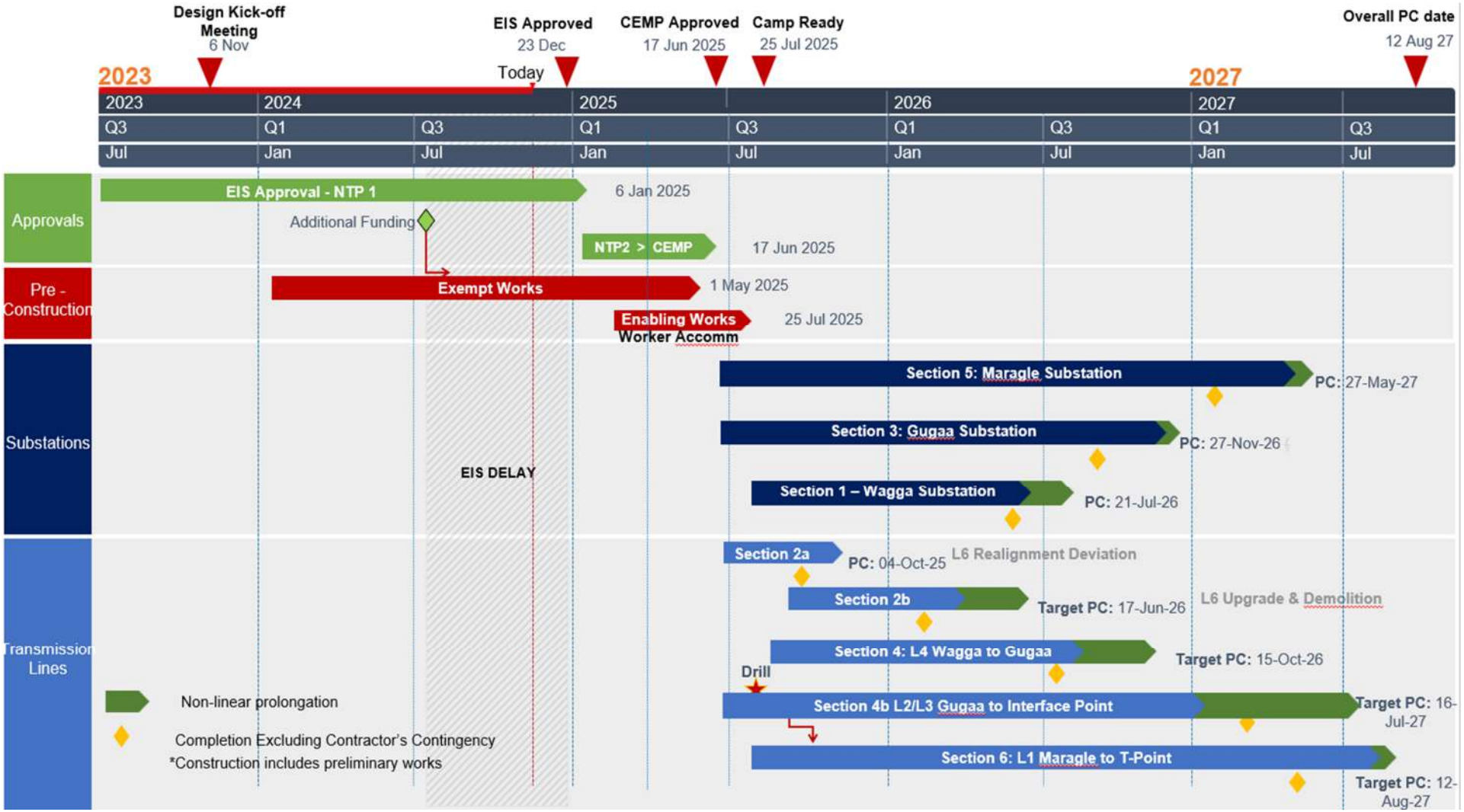


Figure 2 - Indicative schedule of construction works

1.4. Interface with other planning documents

This Plan is a component of a suite of documents, prepared as part of the implementation of HLW's Environmental Management System (UGL–EMS). The UGL-EMS overview is described in the Section 1.4 of the CEMP.

The key documents that interface with this Plan are outlined in Table 1.

Table 1 - Key interfaces with this document

Plan	Reference	Interface
CEMP	HLW internal management document	• Provides details on overall HLW staging, interactions between Management Plans and the CEMP, and management of cumulative impacts. • Provides a framework for how the construction works will be managed. • Identifies procedures, processes and management systems that will apply in relation to construction activities. • Provides environmental planning and controls for construction including environmental risk assessment, regulatory requirements, protection measures and sustainability requirements.
Community Communication Strategy	MCoA A24	• Details the framework for stakeholder engagement. • Provides processes and procedures to guide community engagement. • Provides an assessment of sensitive receivers indicating special considerations that will impact traffic control devices.
Sustainability Management Plan	HLW internal management document	• Identifies the sustainability policy commitments, objectives, and targets for HumeLink West. • Describes the sustainability management framework. • Provides a summary of how the sustainability targets will be achieved.
Health & Safety Management Plan	HLW internal management document	• Details the framework for health and safety processes. • Provides health and safety procedures for waste streams that have potential human health risks.
Interface and Third-Party Management Plan	HLW internal management document	• Details the framework for third party interaction. • Provides procedures, processes and management systems that will apply in relation third party management.

Plan	Reference	Interface
Enabling Works Management Plan (EWMP)	MCoA B64	• Outlines the environmental management practices and procedures to be implemented during the traffic and transport activities and works undertaken during the enabling works. • Within four months of the commencement of the enabling works, this Plan will be updated to include any relevant traffic and transport aspects of the EWMP.

In addition to the HLWJV documents, the TTMP will also interface with external documents including, but not limited to the HLE works and the Snowy 2.0 Transmission Line works (SSI-9717). These documents are separate to the UGL-EMS and will be managed through the HLWJV Interface Management Plan.

Within the CEMP this TTMP operates as the overarching document in a set of plans, drawings and topic instructions dealing with the safe and effective management of traffic during the design and construction of HLW. These documents and associated operational procedures, shown in

Figure 3, are integrated with and referenced in this TTMP.

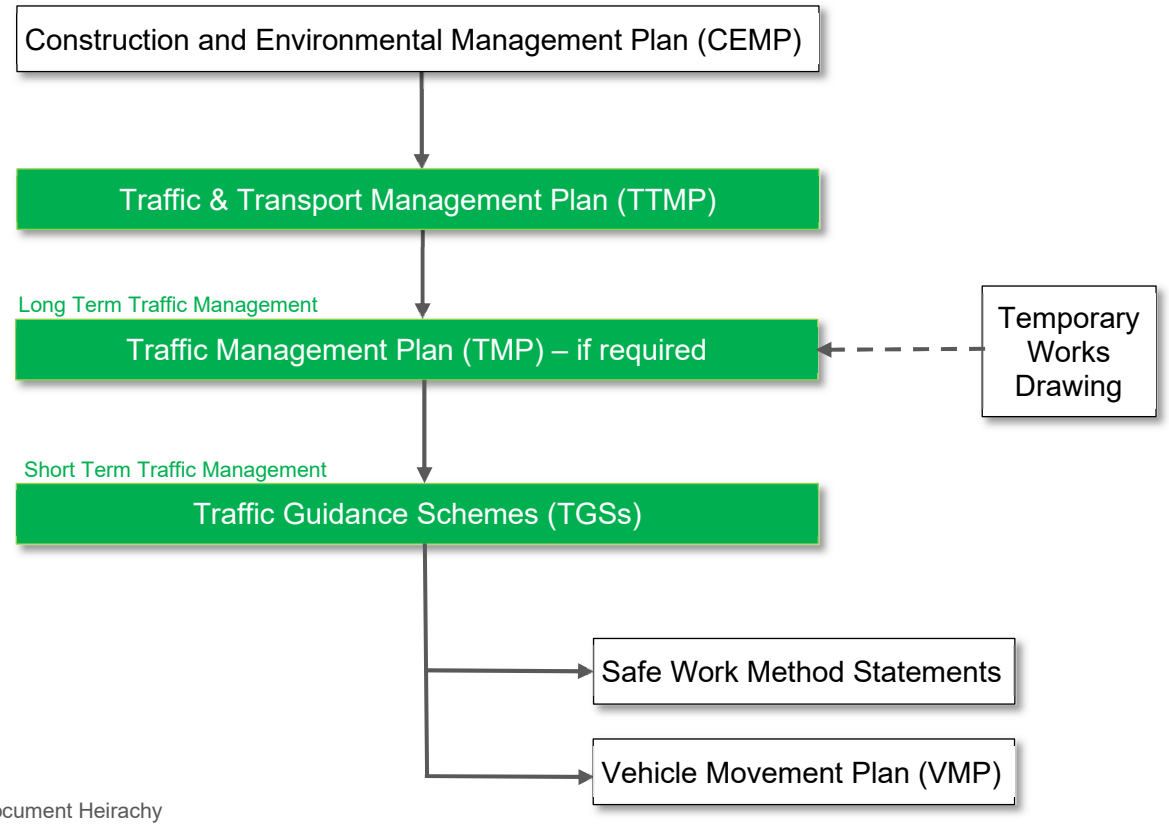


Figure 3 - Document Heirachy

1.5. Traffic Management Plans

TMPs detail the specific road safety and traffic management measures that will be applied whilst undertaking HLW construction works, for example a rolling closure on the Hume Hwy. TMPs are only developed when impacts may be greater than those associated with short term traffic management.

The TMPs are based on the principles and strategies of the TTMP, and the obligations under the

Project Deed, environmental approvals and the requirements of relevant road authorities and other stakeholders.

TMPs will be discussed, reviewed, and finalised in consultation with Transport for NSW (TfNSW), local councils and Forestry Corporation of NSW (FCNSW), (as required). Where the TMP identifies the need for road closures, the works will be undertaken with the approval of the appropriate road authority / road asset manager and under the relevant road occupancy licence (ROL) to be obtained prior to works. Where feasible, road closures will be planned outside of the traffic peak to minimise the impact on the road network.

TMPs will generally include:

- Overview of the construction activities and traffic management requirements.
- A description of how traffic management will be established.
- A description of traffic management during construction.
- A description of traffic management for specific construction events (e.g. full road closure).
- Traffic management measures/devices that will be implemented (e.g. crossing point stringing methodology, measures to mitigate queuing, program of works, etc).
- An analysis of resultant traffic conditions and impacts analysis.
- Details of stakeholder consultation.

1.6. Traffic Guidance Scheme (TGS)

A TGS is defined as short term traffic management and consists of a diagram showing signs and devices arranged to warn and inform traffic and guide it around, past, or if necessary, through a work site or temporary hazard. All TGS will be developed with the aim of:

- **Warning** drivers of changes to the usual road conditions,
- **Informing** drivers about changed conditions,
- **Guiding** drivers through the work site, and
- **Safety** for workers, motorists, pedestrians and cyclists.

To obtain an ROL and/or a s138 approval from councils, site-specific TGS will be developed by a suitably qualified person (Prepare Work Zone Traffic Management Plan accreditation). Each TGS will be prepared in accordance with the principles and measures outlined in this TTMP, AS1742.3, and Austroads Guide to Temporary Traffic Management. TGS will be consistent with the temporary traffic management measures as described in this TTMP.

It is noted that TGS are not approved by road authorities / road asset managers and remain the responsibility of the Contractor.

Standard TGSs may be adopted directly from the Austroads Guide to Temporary Traffic Management. However, the standard TGS will be modified to suit site conditions. Where modifications to the standard TGSs are necessary, these modifications must be shown clearly and recorded on a copy of the TGS by a suitably qualified person.

Where possible, all TGS will be prepared using computer aided software, which will provide a clear, concise, and consistent format.

In addition to the specifications above, all unique TGS design parameters, created during the Project, will be tabled to ensure these parameters are consistently applied Project wide.

All TGSs required for accesses and intersections must align with the mitigation measures that are stipulated within this TTMP. In the event of inconsistencies that impact the state road network, further consultation with TfNSW will be undertaken and the TTMP updated in accordance with MCoA B39.

1.7. Temporary Works Drawings

Temporary Works Drawings are detailed design plans of changes to roadways that are required to facilitate construction access or road building. These drawings may include details of the required earthworks, drainage, horizontal and vertical alignments, carriageway cross sections, lane configuration, intersection treatments, property access modifications, environmental controls, pavement design, lines and sign posting, safety barriers and roadside furniture.

2. Purpose and objectives

2.1. Purpose

This TTMP has been prepared in accordance with MCoA B39 and describes the frameworks for undertaking road upgrade works and minimising traffic safety impacts during delivery of the HLW. The development of this TTMP has been guided by the following traffic management principles:

- Provide a safe environment for all road users.
- Minimise disruptions to all road users and surrounding properties.
- Maintain access for emergency services.
- Inform road users, transport operators, emergency services and local communities, in relation to changed traffic conditions.

This TTMP will be submitted to the Projects Principal in accordance with the contract and will be monitored, updated and controlled throughout the construction phase of HLW.

2.2. Objectives

This TTMP forms the basis of the HLWJV traffic management system and guides the planning, implementation and review of all road network and traffic system changes during the HLW construction. The key objectives of the TTMP are to ensure that compliance obligations relevant to traffic and transport management are described, scheduled and assigned responsibility and complied with. This TTMP has been developed to specifically address:

- Traffic management required for HLW works.
- Road transport studies and permits (if required).
- Traffic management plans and traffic guidance schemes.
- Obtaining ROLs.
- Obtaining relevant council approvals.
- Proposed construction phasing.
- Key responsibilities and accountabilities.
- Potential traffic and transport impacts, and measures to eliminate or mitigate impacts.
- Continual improvement processes guided by reporting of plant and vehicle movements and construction traffic incidents.
- Communication and stakeholder engagement processes (including Emergency services).
- Auditing, document review and reporting requirements.
- Contractual obligations.

The traffic and transport performance outcomes identified in the Environmental Impact Statement (EIS) are detailed in Table 2, including a description of how outcome will be addressed.

Table 2 – Traffic and transport performance outcomes

Performance outcome	How outcome will be addressed	Records
Section 6.3.1, of the EIS. Road condition is not affected by the works.	Road damage identified as being caused by HLW will be rectified in consultation with the road authority / road asset manager.	Dilapidation reports. Authority release waiver.
Section 6.3.4, of the EIS. Road Safety is not affected by the works	Traffic management will be implemented to minimise potential road safety impacts.	TGS and TMPs.
Section 6.3.7, of the EIS. Property Access will be maintained.	Direct consultation and engagement with property owners and/or occupiers to provide alternative access.	Community engagement log.
Section 6.3.1, of the EIS. Road Capacity is not affected.	Workers will be accommodated away from the populated centres to mitigate increased traffic volume. Shuttle buses will transport workers to/from site. Nominated haul roads and transport routes will be selected.	Road capacity audit Community complaint records.
Section 6.3.7 of the EIS. Public Transport will not be affected.	Workers will be transported via shuttle buses to and from the work site and will be housed in self-reliant accommodation, limiting the need to use public transport (where relevant) and limiting impacts of community traffic.	Community complaint. Bus records (where relevant).

2.3. Targets

Fundamental to the successful construction of HLW is implementing effective traffic management strategies that will ensure the safety of road users, construction personnel and the public. The TTMP will eliminate, or where not possible, minimise disruption caused by construction activities.

The relevant traffic and transport targets for the construction phase include:

- Provide safe and efficient movement of vehicles past/through the site boundary.
- Provide a safe environment for all personnel during the works.
- Provide and maintain safe and efficient access for the community, farms, and residents to private properties.
- Provide timely, accurate and credible information to affected public, landholders, farms, and other stakeholders regarding traffic changes, including any required traffic alerts.
- Where possible, maintain the carrying capacity and connectivity of roads and minimise traffic delays, congestion, and disruptions.
- Provide adequate guidance to other road users including pedestrians and cyclists during the works.
- Respond appropriately to traffic issues that may arise during the works.

3. Transport and traffic requirements

3.1. Legislation

Legislation and regulatory requirements relevant to traffic and transport for this Project include:

- *Australian Road Rules 2023.*
- *Roads Act 1993.*
- *Road Transport Act 2013.*
- *State Environmental Planning Policy (Transport and Infrastructure) 2021.*
- *Heavy Vehicle National Law (NSW) (2013 No 42a).*
- *Dangerous Goods (Road and Rail Transport) Act 2008.*
- *Road and Rail Transport (Dangerous Goods Road and Rail Transport) Regulation 2022.*
- *Dangerous Goods (Road and Rail Transport) Regulation 2022.*
- *Environmental Planning and Assessment Act 1979* (EP&A Act).
- *Protection of the Environment Operations Act 1997* (POEO Act).

Relevant provisions of the above legislation are available in the register of legal and other requirements included in Appendix A4 of the CEMP.

3.2. Guidelines and standards

The main guidelines, specifications and policy documents relevant to this Plan include:

- NSW Road Noise Policy.
- *Australian Code for the Transport of Dangerous Goods by Road and Rail* Edition 7.7 *(*National Transport Commission 2020).
- AUSTROADS *Guide to Traffic Management.*
- AUSTROADS *Guide to Temporary Traffic Management.*
- AUSTROADS *Guide to Road Design Part 4 - Rural Property Access.*
- TfNSW Supplements to Austroads *Guide to Temporary Traffic Management.*
- *Australian Standard AS1742.3 - Manual of Uniform Traffic Control Devices*.
- Relevant Australian Standards:
  - AS1742 suite of standards (1 to .14)
  - TfNSW Supplement to Australian Standard AS 1742.9:2018, *Manual of Uniform Traffic Control Devices*
  - AS 1743:2023 – Road signs – Specifications.
- RMS Standards and Guides for relevant areas.
- Council Standards and Guides for relevant areas.
- Road Occupancy Licence (ROL) as required for the occupation of the road space at approved times, provided certain conditions are met.
- *Traffic Control at Work Sites – Technical Manual Version 6.1* (TfNSW, 2022).

3.3. Minister's Conditions of Approval

The MCoA of relevance to this Plan are listed in Table 3. A cross reference is also included to indicate where and how the conditions are addressed in this Plan or other HLW management documents.

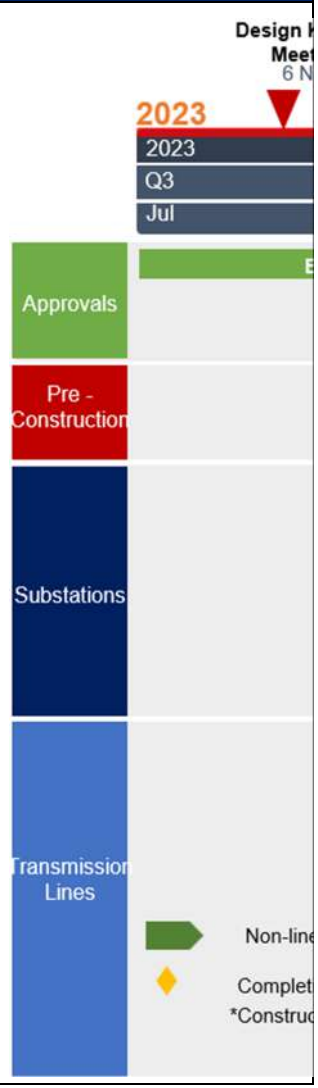
Table 3 - MCoA relevant to the TTMP

MCoA No.	Condition Requirements	Document Reference
Designated Heavy and Over Dimension Vehicle Routes		
B34	All heavy vehicles requiring escort associated with the development must only travel to and from the site via the construction routes described in the EIS, as identified in Figure 4-2 in Appendix 4, unless the Planning Secretary agrees otherwise. *Note: The Proponent is required to obtain relevant permits and approvals under the Heavy Vehicle National Law (NSW) for the use of over-dimensional vehicles on the road network.*	Section 7.1 Section 7.1.1 Annexure E
B35	All heavy and light vehicles associated with construction, upgrading and decommissioning of the development must travel to and from the site via the construction routes as described in the EIS and identified in the Figure 4-1 in Appendix 4, unless the Planning Secretary agrees otherwise.	Section 7.1 Annexure E
Transport Strategy		
B36	Prior to commencing the relevant road upgrades referenced in Table 4-1 of Appendix 4, the Proponent must prepare a Transport Strategy for those road upgrades, in consultation with the TfNSW and relevant Council(s), to the satisfaction of the Planning Secretary, which: (a) identifies the location and type of any necessary road upgrades (including roads, intersections and access points); (b) ensures the road upgrades comply with the Austroads Guide to Road Design (as amended by TfNSW supplements), unless the relevant road authority agrees otherwise; (c) includes strategic concept designs prepared in accordance with Austroads Guide to Road Design (as amended by TfNSW supplements); (d) includes a detailed assessment of potential impacts of any necessary road upgrades (such as heritage and biodiversity impacts) and appropriate mitigation measures, including consideration of cumulative traffic impacts from approved projects; (e) include a schedule for the commencement and completion of all necessary road upgrades; (f) identifies whether intersections and access points would be permanent or temporary.	The requirements of this condition are relevant to Mates Gully Road and are addressed in the Transport Strategy
Road Upgrades		

MCoA No.	Condition Requirements	Document Reference
B37	Unless the Planning Secretary agrees otherwise, the Proponent must implement the road upgrades and the mitigation measures identified in Appendix 4 in accordance with the relevant standard and timing requirements in Appendix 4, and to the satisfaction of the relevant roads authority. If there is a dispute about the road upgrade works, or the implementation of these works, then either party may refer the matter to the Planning Secretary for resolution.	Enabling Works Management Plan (EWMP), Section 1.3 Section 7.4 Required road upgrades are presented in Annexure D, where not completed under EWMP will be undertaken under this TTMP.
Road Maintenance		
B38	The Proponent must: a) undertake an independent dilapidation survey: (i) assessing the existing condition of all local roads on the transport route shown in Figure 4-1 in Appendix 4 (including local road crossings) prior to Enabling Works, construction, upgrading or decommissioning works; and (ii) assessing the condition of all local roads on the transport route (including local road crossing); • within 1 month of the completion of construction, upgrading or decommissioning works, or within a timeframe agreed to by the relevant roads authority/manager; • on an annual basis during construction, or within a timeframe agreed to by the relevant roads authority/manager;	EWMP, Section 1.3 Section 7.2.1
	b) repair (or pay the full costs associated with repairing) any damage to local roads on the transport route (including local road crossings) as a result of development related road traffic: (i) as soon as possible after the damage is identified but within 7 days at the latest if it	Section 7.2.2

MCoA No.	Condition Requirements	Document Reference
	could endanger road safety; and (ii) within 2 months of the completion of the survey; unless the relevant road authority agrees otherwise:	
	c) prepare a report in consultation with the relevant road's authority. If there is a dispute about the road maintenance works, or the implementation of these works, then either party may refer the matter to the Planning Secretary for resolution.	Section 7.2.2
Traffic and Transport Management-Plan		
B39	Prior to commencing construction or road upgrades identified in condition B37 (whichever comes first) but excluding Enabling Works where the relevant requirements of this condition are adequately addressed in the Enabling Works Management Plan of condition B64, the Proponent must prepare a Traffic Management Plan for the development in consultation with FCNSW, TfNSW, Snowy Valleys Council, Wagga Wagga City Council, Cootamundra-Gundagai Regional Council, Yass Valley Council, Upper Lachlan Shire Council and Goulburn-Mulwaree Council, and to the satisfaction of the Planning Secretary. This plan must include:	This Plan
	(a) details of the transport route to be used for all development-related traffic;	Annexure E
	(b) details of the road upgrade works required by condition B37;	Section 7.4 Annexure D
	(c) details of the measures that would be implemented to comply with the transport management requirements in conditions B34 to B38;	Section 7.1 Section 7.2 Section 7.4 Annexure E

MCoA No.	Condition Requirements	Document Reference
	(d) details of the measures that would be implemented to: (i) minimise traffic safety impacts of the development and disruptions to local road users during construction, upgrading or decommissioning works, including:	Section 8
	• a description of the proposed timeframe and schedule of construction works	Section 1.3

MCoA No.	Condition Requirements	Document Reference
		

MCoA No.	Condition Requirements	Document Reference
	• a description of the proposed dilapidation surveys required by condition B38;	Section 7.2.1 Annexure C
	• strategic concept designs and procedures for stringing cables and transmission lines across roads to ensure compliance with Austroads Guide and TfNSW requirements (for crossing of state roads);	Section 7.4.2 Section 1.2 Annexure F
	• scheduling heavy vehicle movements to avoid peak periods where reasonable and feasible;	Section 7.1
	• reducing the speeds of development-related traffic at key intersections (not applicable to Hume Highway);	Section 8.1
	• temporary traffic controls, including detours and signage;	Section 1.5 Section 1.6 Section 1.7 Section 8
	• notifying the local community about development-related traffic impacts;	Section 5 Community Communication Strategy
	• procedures for receiving and addressing complaints from the community about development related traffic;	Section 5.7 Community Communication Strategy

MCoA No.	Condition Requirements	Document Reference
	• minimising potential cumulative traffic impacts with other projects in the area;	Section 4.2.1 Section 6.1
	• minimising potential conflict between development-related traffic and rail services, stock movements and school buses, in consultation with local schools, including preventing queueing on the public road network;	Section 4.2 Section 5.3 Section 5.5 Section 8.9 Section 8.14 Annexure B
	• implementing measures to minimise development-related traffic on the public road network outside standard construction hours;	Section 8.7
	• minimising dirt and debris tracked on to the public road network from development related-traffic;	Section 8.10
	• details of the employee shuttle bus service, including pick-up and drop-off points and associated parking arrangements for construction workers, and measures to encourage employee use of this service;	Section 8.13
	• measures for managing light vehicle peak numbers, such as car-pooling or ride sharing by employees;	Section 8.13
	• scheduling the haulage vehicle movements to minimise convoy lengths or platoons;	Section 6.1 Section 7.1

MCoA No.	Condition Requirements	Document Reference
	• responding to local climate conditions that may affect road safety, such as, fog, dust, wet weather and flooding;	Section 8.11 Annexure B (Driver's Code of Conduct, 3(f))
	• ensuring loaded vehicles entering or leaving the site have their loads covered or contained and leave site in a forward direction;	Section 7.1 Section 8.11 Annexure B
	• a schedule for the periodic inspection and maintenance of the condition of all local roads used by development-related traffic;	Section 7.2
	• responding to any emergency repair or maintenance requirements;	Section 7.2.2
	• provisions for maintaining emergency vehicle access to the site at all times;	Section 2.1 Section 6.1 Section 8 Section 8.5 Section 9.3
	• a traffic management system for managing over-dimensional vehicles; and	Section 7.1
	• fatigue management;	Section 9.5 Annexure B
	(ii) minimise the impacts of the road and intersection upgrades of the development;	Section 7.3 Section 7.4 Section 8

MCoA No.	Condition Requirements	Document Reference
	(iii) minimises parking on the public road network;	Section 8.13.2
	(iv) maintain all roads and water-related infrastructure on site in a safe and serviceable condition;	Section 7.2.2 Section 8.6 Section 9.5 Section 9.5.1
	(v) minimise the traffic noise impacts of the development;	Section 8.12
	(e) include a drivers code of conduct that addresses: (i) travelling speeds; (ii) procedures to ensure that drivers to and from the development adhere to the designated heavy vehicles requiring escort and heavy vehicle routes; (iii) procedures to ensure that drivers to and from the development implement safe driving practices; and; (iv) including a detailed program to monitor and report on the effectiveness of these measures and the code of conduct.	Annexure B
	(f) include a program to: (i) ensure drivers working on the development receive suitable training on the code of conduct and any other relevant obligations under the Traffic and Transport Management Plan; and (ii) monitor and publicly report on the effectiveness of these measures.	Section 9.4 Annexure B Refer to the CEMP for additional details on the training and induction programs
	(g) a flood response plan detailing procedures and options for safe access to and from the site in the event of flooding.	Section 8.15 Annexure H

MCoA No.	Condition Requirements	Document Reference
	Following the Planning Secretary's approval, the Proponent must implement the Traffic and Transport Management Plan. *Note: The Traffic and Transport Management Plan must incorporate all relevant aspects of the development, including Enabling Works consistent with the requirements of condition B67.*	Section 4.1
B67	Unless otherwise agreed by the Planning Secretary, within 4 months of the commencement of the Enabling Works, the Proponent must update the approved management plans for the development to incorporate any relevant aspects of the Enabling Works Management Plan.	Section 7.4
Dangerous Goods		
C41	The Proponent must ensure that the storage, handling, and transport of dangerous goods is undertaken in accordance with the relevant Australian Standards and guidelines, particularly AS1940 *The storage and handling of flammable and combustible liquids* and AS/NZS 1596:2014 *The storage and handling of LP Gas, the Dangerous Goods Code, and the EPA's Storing and Handling of Liquids: Environmental Protection – Participants Manual.*	Refer to the CEMP and Accommodation Management Plans for storage and handling. Section 8.18

3.4. Updated Mitigation Measures

UMMs of relevance to this Plan are listed in Table 4. A cross reference is also included to indicate where and how the measures are addressed in this Plan or other HLW management documents.

Table 4 - UMMs relevant to the Traffic and Transport Management sub-plan

UMM No.	Requirements	Document Reference
Land Use and Property		

UMM No.	Requirements	Document Reference
LP4	Biosecurity controls will be implemented to minimise the risk of off-site transport or spread of disease, pests, or weeds. Controls will be in accordance with a Biosecurity Management Plan developed as part of the BMP during construction, and Transgrid's Biosecurity Procedure and Biosecurity Environmental Guidance Note and include development of specific controls if high biosecurity risks are identified. Appropriate measures will be implemented with respect to foot and mouth disease to control any risk of introduction via the project. The specific controls applicable to a property will be identified in consultation with the affected landowner. The effectiveness of these controls will be monitored in a manner and time interval consistent with the level of risk on each property. In the event of new infestations of notifiable weeds because of construction activities, the relevant control authority will be notified as per *Biosecurity Act 2015* (NSW) and Biosecurity Regulation 2017.	Driver Code of Conduct (Annexure B) Section 8.16 CEMP Biosecurity Management Plan Property Management Plans
Hazards and Risks		
HR10	Dangerous goods and hazardous substances will be transported in accordance with relevant legislation and codes, including the *Dangerous Goods (Road and Rail Transport) Act 2008*, *Road, and Rail Transport (Dangerous Goods) (Road) Regulation 1998* and the *Australian Code for the Transport of Dangerous Goods by Road and Rail* (National Transport Commission, 2018).	Health and Safety Plan Hazardous Chemicals Management Plan
Traffic Transport and Access		
TT1	Access tracks, access connections and road upgrades required to facilitate the movement of project related traffic will be designed and constructed in a fit for purpose manner for construction. Where required, intersection works with public roads will be designed and constructed according to relevant Austroads guides or the relevant asset owners' standards.	Section 7.4 Annexure G
TT2	Prior to commencement of transportation activities, the validity of the previously undertaken haulage route studies will be confirmed in consideration of final haulage route conditions and applicable route restrictions for the period during which transportation of such components is planned.	Section 7.1 Section 7.1.1

UMM No.	Requirements	Document Reference
	Any relevant permits and approvals will be sought from National Heavy Vehicle Regulator, the relevant road and rail authorities, NSW Police, and utility owners and providers.	
TT3	Traffic controls will be aligned with *Traffic Control at Work Sites – Technical Manual Version 6.1* (TfNSW, 2022). Traffic controls will be confirmed in consultation with the relevant road authority.	Sections 3.2 Section 8
TT4	Prior to construction, road condition assessments will be carried out for all local roads to be used during construction. The surveys will assess the current condition of the road surface and will be documented in a road condition report, with a copy being provided to the relevant road authority. Road condition assessments will be undertaken during and following construction to assess the damage to roads accessed by project-related traffic. Damage caused by the project will be rectified or compensated for during or after construction in consultation with the relevant road authority.	Section 7.2.1 Section 7.2.2
TT5	All project activities in rail corridors will be undertaken in accordance with the permission granted by the appropriate rail authority. Stringing of transmission line over rail tracks will be scheduled during rail maintenance periods or in a duration which permits sufficient gap between scheduled freight or passenger services to undertake the work.	Not Applicable to HLW as there are no active rail corridors
TT6	Road closures will be undertaken with the approval of the appropriate road authority and under the relevant road occupancy licence to be obtained prior to construction. Where feasible, road closures will be planned outside of the traffic peak to minimise the impact on the road network.	Section 1.5 Section 7.4.2 Section 8.1.2 Section 8.5
TT7	A Code of Conduct applicable to all construction workers will be developed and implemented which will define acceptable driver behaviour. The purpose of the Code of Conduct is to promote road safety and ensure that the impacts of construction-related vehicle movements on local roads and the local community are minimised. The Code of Conduct will be developed as part of a wider suite of documents under work health and safety requirements.	Annexure B
TT8	Community and stakeholder communication strategies will be established and implemented to	Section 4

UMM No.	Requirements	Document Reference
	notify the affected communities, visitors, emergency services and relevant road and rail authorities in advance of any disruptions to traffic, anticipated delays, disruptions to property access and changes to travel routes. The strategies will be developed including details on communication channels, frequency of communication and response measures in relaying information to the community and stakeholders.	Section 5 Community Communications Strategy
Waste		
W3	All waste will be assessed, classified, managed, and disposed of in accordance with the Waste Classification Guidelines (NSW EPA 2014b). Waste will be appropriately transported, stored and handled according to their waste classification and in a manner that prevents pollution of the surrounding environment. All waste related documentation such as waste classifications, transfer and disposal documentary evidence will be held by the proponent for a minimum of seven years from the date the waste is generated.	Waste Management Plan
Biodiversity		
B18	A BMP will be prepared in consultation with BCD and approved by DPE prior to construction. The BMP will be prepared by a qualified ecologist and include a plan for implementing, evaluating and reporting on the effectiveness of all mitigation measures outlined in the BDAR, including: • Education of construction teams regarding the presence of native fauna and risks of vehicle collision, particularly early in the morning and late in the afternoon/at night; implementation of speed limits on sealed and unsealed tracks and roads	Annexure B Section 9.4 Biodiversity Management Plan
B19	A Biosecurity Management Plan will be developed as a part of the BMP, to be implemented during construction. The plan will include: • Protocols for the identification of priority weed species, relevant pests and diseases of concern, mandatory reporting obligations and management of Emergency, Control and Biosecurity zones as per the NSW *Biosecurity Act 2015*.	Section 8.16 Annexure B Biodiversity Management Plan (Annexure E)

UMM No.	Requirements	Document Reference
	Weed and pest animal management and monitoring requirements would also be outlined within the plan where relevant. Locations, timing and methods for removing soil and plant matter from vehicles and machinery and sourcing clean soil and materials free of contaminants for construction work. Clean down stations (water or air, dependent on the identified biosecurity risk) will be constructed at suitable locations to clean down vehicles and employee shoes to stop the spread of weeds, pathogens (e.g. amphibian chytrid fungus, Phytophthora cinnamomic, exotic rust fungi and Epizootic Haematopoietic Necrosis Virus (EHNV)) and the introduction of new species. The biosecurity plan would address any Property Management Plan requirements where relevant.	
B30	Access tracks will be used as necessary for the construction work and as far as is practicable, vehicle traffic shall be confined to these tracks. Track construction will be carried out to cause minimum disturbance to soil and vegetation both on and adjacent to the track. Tracks will be routed to follow the natural contour of the land as far as practicable to minimise the amount of cut and fill and soil disturbance. For any temporary access tracks, the disturbed surfaces and formed areas will be revegetated in accordance with the approved CEMP or *Managing Urban Stormwater: Soils and Construction - Volume 2C Unsealed Roads* (DECC, 2008a). In addition, other erosion control mechanisms will be put in place during the initial track construction work to contain any sediment that may erode from the disturbed surfaces.	Section 7.4 Biodiversity Management Plan (Annexure G)
Air Quality		
AQ2	All vehicles and machinery will be maintained in accordance with manufacturer's specifications	Annexure B
AQ3	Dust generation from project-related traffic movements on unsealed roads and access tracks (routes) in proximity to sensitive receivers will be visually monitored. Where dust from project-related traffic movements is impacting or has the potential to impact the sensitive receivers, measures to minimise dust emissions and potential associated amenity impacts will be implemented where practicable and appropriate.	Annexure B Air Quality Management Plan

UMM No.	Requirements	Document Reference
Climate Change and Greenhouse Gas		
CC2	Options to minimise transport distances between construction compounds, accommodation facilities and work sites will be considered, for example utilising vehicle pooling / mini buses and sourcing equipment and materials locally where practicable.	Section 8.13 Sustainability Management Plan
Noise and Vibration		
NV6	All construction vehicle movements will adhere to the following measures:	
	• out-of-hours vehicle movements will be minimised where possible	Section 8.7
	• construction delivery vehicles will be fitted with straps rather than chains for unloading, wherever possible	Section 8.12
	• use of engine compression brakes will be avoided at night and in residential areas	Section 8.12
	• site access points and roads/flight paths will be located as far as possible away from sensitive receivers	Section 8.12
	• traffic flow, parking and loading/unloading areas will be planned to minimise reversing movements	Section 8.12
	• construction inductions will include driver behaviour requirements to minimise vehicle noise emissions.	Section 8.12

4. Consultation

4.1. Consultation and Plan approval process

Reflecting the requirements of MCoA B39, this Plan has been prepared in consultation with FCNSW, TfNSW, Snowy Valleys Council, and WWCC. A detailed Consultation Report is provided in Annexure A and a summary is provided in Table 5.

Subject to ER endorsement, this Plan will be submitted to the Planning Secretary for approval. Following the Planning Secretary's approval, HLWJV will implement the requirements of this Plan during Stage 3B(i).

Following confirmation of the Port of arrival for transformers and other high risk OSOM, the routes required for OSOM movements will be finalised in consultation with TfNSW, Snowy Valleys Council, and WWCC. The agreed OSOM routes for high risk OSOM will be reflected in this TTMP and the revised Plan will be endorsed by the ER and submitted to the Planning Secretary for approval.

Table 5 – Stakeholder consultation summary

Stakeholder	Consultation Summary
FCNSW	• Consultation included the submission of several versions of the TTMP to the stakeholder for review and one meeting during an extended consultation period • During a meeting on 31-Jan-2025, the stakeholder was generally supportive of the project and no specific concerns were communicated • Stakeholder confirmed they have no further comments on the Subject Document
TfNSW	• Consultation included the submission of several versions of the TTMP to the stakeholder for review and multiple meetings during an extended consultation period • Comments were received from the stakeholder on three versions of the TTMP • All comments received from the stakeholder have been adequately resolved • The design of access points that connect to TfNSW assets will be as agreed with TfNSW (refer to Annexure G)
Snowy Valleys Council	• Consultation included the submission of several versions of the TTMP to the stakeholder for review during an extended consultation period • Comments were received from the stakeholder on two versions of the TTMP • All comments received from the stakeholder have been adequately resolved • Stakeholder confirmed that they have no further comments on the TTMP

Stakeholder	Consultation Summary
WWCC	• Consultation included the submission of several versions of the TTMP to the stakeholder for review and one meeting during an extended consultation period • Comments were received from the stakeholder on two versions of the TTMP • All comments received from the stakeholder have been adequately resolved • Stakeholder confirmed that they have no further comments on the TTMP

4.2. Ongoing consultation

Ongoing consultation with TfNSW, relevant councils and other stakeholders will continue to be undertaken throughout the construction of HLW regarding the construction traffic impact on the local community, special event planning, significant procedural change and the effectiveness of mitigation strategies. Updates will be provided through regular meetings (at a frequency agreed with key stakeholders) to communicate upcoming changes and impacts in advance of the changes taking place.

Consultation will be undertaken with the relevant road authority / road asset manager in response to:

- Changes to the state road network, including intersections, accesses, and assets
- New or changed traffic impacts, including construction routes
- Stringing and crossings over state roads
- High-risk Oversize and Overmass (OSOM) movements and routes
- Changes in the EIS traffic assumptions
- Reduced speed zones
- Temporary road barriers and end treatments
- Out-of-hours work required for agreed access points or intersections within the State road network.

In response to consultation, HLWJV will adjust its traffic management to accommodate the needs of stakeholders where reasonable and feasible.

4.2.1. Cumulative Impacts

While HLWJV will plan works to reduce the impact on the road network, the cumulative impacts of other major projects may impact the road network in a manner outside HLWJV's control. HLWJV will liaise with all neighbouring projects to reduce cumulative impacts wherever possible and ensure synergy in communications. Neighbouring major infrastructure projects include:

- HumeLink East
- Project EnergyConnect
- Inland Rail
- Snowy 2.0
- VNI West
- Maragle Substation

- Riverina Redevelopment Program.

Details on project communication processes and protocols are provided in Section 5 of this TTMP.

Examples of cumulative impact mitigation methods that may be undertaken include:

- Ensuring OSOM loads have staggered delivery times and have been assessed.
- Adjusting delivery and/or work schedules for days when heavier construction vehicle movements are planned, e.g. concrete pours.
- Discussing access point locations and operations.

5. Notification Process

5.1. General

HLWJV will undertake a cooperative and coordinated approach to ensure the public receive timely and accurate traffic information. All information intended for release to the community and stakeholders in relation to the traffic management of the roadways in HLW area, will be prepared in consultation with Transgrid. The HLWJV key communication and engagement activities are described in the Community Communications Strategy (CCS), available at www.transgrid.com.au/humelink-west/ under 'Strategies'.

5.2. Changed Traffic Conditions

The HLWJV Community and Stakeholder Engagement team will:

- Be available at all reasonable times to address any community questions concerning planned traffic management/arrangements.
- Inform stakeholders about traffic management and associated modifications to public transport. The following bus operators are key operators for modifications to local bus transport routes:
    - Live Better Community Transport
    - Goode's Coaches Tumut
    - Hassett Buses Adelong
- Busabout Wagga
    - Shaw Coach Hire Batlow
- Makehams Coaches Wagga Wagga
    - IL & CM Kennedy Tarcutta
    - SL & SL Hardwick Tarcutta
    - Apple Transport Services Tumbarumba
- Inform stakeholders when traffic management will modify conditions on the active transportation routes identified in the *EIS Technical Report 16 - Revised Traffic and Traffic Impact Assessment*:
    - Reedy Street, Batlow
    - Mayday Road, Batlow
    - Pioneer Street, Batlow.

5.3. Notifications and Advertising

The HLWJV Community and Stakeholder Engagement team will:

- Notify the impacted community about construction activities which is expected to affect them. Such notification shall be made at least seven days in advance of work starting.
- Notify the relevant council and TfNSW as the road manager for local and regional roads.

The notification will advise the nature of the work and its impacts, why it is necessary, what equipment is to be used, the expected duration and any changes to arrangements for traffic or property access, public or active transport.

Contact details for the HLWJV team shall also be provided. In the event of potential conflict between works and stock movements, graziers may contact the HLWJV Community and Stakeholder Engagement team to identify measures to mitigate potential impacts.

5.4. Media and Community Events

The HLWJV team will:

- Hold on-going discussions with Transgrid, TfNSW, relevant councils, and community groups prior to the anticipated occurrence of media events, for major milestones/traffic switches or any staging of the works and impact to traffic.
- Consult with Transgrid prior to staging media and community events.

5.5. Key Stakeholders

HLWJV recognise a critical first step is to identify the audience and key stakeholders. The following stakeholders will be consulted when preparing long term traffic management plans as required:

- WWCC
- Snowy Valleys Council
- TfNSW
- Rural Fire Services and Fire NSW
- NSW Police and Ambulance NSW
- FCNSW
- Local bus companies
- Local schools and school bus operators
- Local landowners and graziers.

5.6. Communication Methods

HLWJV will notify community and key stakeholders seven days in advance of disruptions to traffic, travel conditions, anticipated delays, disruptions to property access and changes to travel routes. Consistent with the CCS, the Traffic Manager in conjunction with the Community and Stakeholder Engagement Manager will disseminate changed traffic condition information through:

- Temporary roadwork information signage.
- Changed traffic condition advertising and/or traffic alerts.
- Community letterbox and email notifications.

5.7. Feedback and Complaints

HLWJV encourages and welcomes community and stakeholder feedback. HLWJV will manage all complaints and enquiries in accordance with the CCS community feedback approach which specifies a response to phone enquiries within two business days, and a response to complaints within two hours. The following channels have been established to ensure the community can contact the team to ask questions, provide feedback or to make a complaint:

- **Phone** 24/7 toll free number 1800 317 367
- **Email** humelink@transgrid.com.au
- **Mail** HumeLink Community Engagement Team PO Box A1000 Sydney South NSW 1235

- **In person** includes but is not limited to:
- **C&SE team members**
    - Land Access Coordinators
    - Members of the wider project team.
- **Other**
    - Surveys
    - Transgrid Discovery Hub
    - Community information drop-in sessions and pop-up stands
    - Community meetings and forums
    - Community events.

6. Identifying Construction Impacts

This section identifies the potential impacts of HLW construction. The key reference documents are Chapter 20 and Traffic and Transport Impact Assessment EIS Technical Report 16 of the EIS and EIS Technical Report 16 – Revised Traffic and Transport Impact Assessment.

At all times HLWJV aims to:

- Maximise safety for workers and road users by isolating work areas from traffic flow, maintain existing capacity where possible and provide safe access points
- Minimise road user delays, avoid major activities during peak periods and avoid restrictions on transport operators.

The effective planning of all construction activities is the key to achieving these objectives. Some of the construction activities to be undertaken during the HLW construction are listed below, with a complete list in the Project Management Plan:

- Establishment of site compounds and accommodation
- Property modifications (if required)
- Services relocations and survey
- Installation of erosion and sediment control measures (as required)
- Construction of temporary access points
- Construction of new pavements as part of some access point constructions
- Clearing and grubbing of trees and vegetation
- Placement of topsoil and planting of vegetation
- Installation of transverse drainage pipes and structures (as required)
- Installation of pavement stormwater drainage including sub-soils (if required)
- Construction of permanent structures (substations, overhead wires and towers)
- Stringing cables across public assets (Appendix E presents a typical stringing methodology)
- Deliveries of materials (e.g. steel, concrete)
- Excavation and spoil haulage
- Oversize deliveries e.g. accommodations
- Installation of roadside furniture including permanent (life of project) signage, temporary signage, traffic control devices, and safety barriers (likely to be Hume Hwy only)
- Conducting dilapidation surveys.

6.1. Potential transport and traffic impacts

The HLW construction will potentially impact on the existing traffic flows along various roads near the works. Indicative vehicle movements, inclusive of all work fronts, peak hour traffic volumes, and carpooling/shuttle buses are detailed in Table 6. As detailed in this TTMP, HLWJV will aim to keep road user delays to an absolute minimum and maintain access for transport operators.

Wider traffic implications and impacts that could result from construction activities will be avoided through pre-construction planning. The capacity of roads (number of traffic lanes) will be maintained,

as once access points are constructed, all works will be within the alignment. S138 permits and ROLs approvals will be obtained as required.

Potential traffic and transport impacts arising from HLW construction include:

- One lane alternate (stop/slow) operations that may result in temporary delays and increased travel times.
- Haulage operations and OSOM vehicle movements that may create temporary traffic hazards for other vehicles in the vicinity of haulage operations.
- Short term contra-flow with reduced a speed limit, usually to 40km/hr (undertaken in consultation with the relevant road authority / road asset manager where all other mitigation measures are not feasible).
- Changes to speed limits and installation of signs, e.g. TRUCK TURNING signs.
- Temporary short-term traffic control may be required to allow for turn movements during OSOM deliveries (undertaken in consultation with the relevant road authority / road asset manager where all other mitigation measures are not feasible).

As detailed in the EIS (*Revised Traffic and Transport Impact Assessment, Technical Report 16*), active transport provisions within the project area, such as footpaths, exist in urban environments only. The impact on such roads is expected to be negligible, considering the low volume of additional construction traffic and presence of off-road active transport facilities which separate active transport users from vehicles.

Bus services form the main public transport service surrounding the project footprint. During construction, road network performance would operate with the same Level of Service, therefore no impacts to bus services are expected.

The management and mitigation measures detailed in this Plan (Section 7 and Section 8) have been developed in response to the potential impacts of HLW construction, including:

- Considering the access requirement of adjacent properties and emergency services when determining compound and construction site access points (Section 7.3).
- Banning queuing of construction vehicles in the local road network (Section 8.11).
- Avoiding peak hour operations where possible (Section 1.5 and Section 7.1).
- Where practicable, scheduling deliveries and heavy vehicle movements to minimise platoon lengths (Section 7.1).
- Using approved haul and delivery routes (Section 7.1).
- Appropriate design of OSOM routes / accesses, and police escort of high-risk OSOM (Section 7.1.1).
- Encouraging car-pooling and implementing a shuttle bus to transport workers (Section 8.13).
- Reinforcing the need to maintain property access along the Project alignment via inductions and pre-starts (Section 8.6).

Table 6 - Indicative Vehicle Movements

Construction compound/ combined worker accommodation facility and compound	Daily movement (vehicles per day in both directions of travel)				Peak hour movement (vehicles per day in both directions of travel)			
	Typical construction		Construction peak		Typical construction		Construction peak	
	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy
Wagga 330 kV substation compound	60	70	120	140	10	15	25	30
Maragle 500 kV substation compound	70	105	195	285	10	10	20	25
Gregadoo Road compound	85	140	230	340	10	15	20	30
Snubba Road compound	55	85	100	155	10	10	10	15
Gadara Road compound	145	50	140	175	20	5	20	15
Ellerslie Road compound	55	85	100	150	10	10	10	15
Tarcutta accommodation facility and compound	140	225	200	440	20	20	30	30
Green Hills accommodation facility and compound	130	180	190	535	20	15	30	40

7. Heavy Vehicles and Road Maintenance

This section provides details on heavy vehicle management, including:

- Designation of haul routes.
- Assessment and maintenance of local roads as a result of HLW operations
- Road upgrade requirements to meet HLW requirements for construction.

The location of laydown areas and accommodation facilities has been selected to be near existing transport infrastructure to reduce the impact of HLW construction operations.

7.1. Haul & Delivery Routes

Prior to commencement of transportation activities, the validity of the previously undertaken haulage route studies will be confirmed in consideration of final haulage route conditions and applicable route restrictions for the period during which transportation of such components is planned. Haul and high frequency delivery heavy vehicle movements associated with the construction will be developed in consultation with road authorities, with the view to minimising impacts to local streets while maximising use of state and regional roads.

The routes will be chosen based on the expected construction traffic volume, the existing road condition, and the expected turning circle for the proposed haulage vehicles. The selected routes should also minimise potential impacts on traffic and sensitive receivers along the route, avoid school bus and public bus routes where reasonable and feasible, and generally use state and/or regional roads as a preference. HLWJV will ensure scheduling of heavy vehicle movements will avoid peak periods (where reasonable and feasible) and minimise the potential for any convoy/freight platooning.

As detailed in Annexure E, all heavy and light vehicles associated with construction, upgrading and decommissioning of the development will travel to and from the site via the construction routes described in the EIS and the Planning Approval Documentation (Figure 4-1 in Appendix 4). Consistent with Annexure E, haul and delivery routes will be reflected in the VMP.

All heavy vehicles (excluding OSOM, section 7.1.1) requiring escort associated with the development will only travel to and from the site via the construction routes described in the EIS, as identified in Annexure E (Appendix 4 of the Planning Approval Documentation), unless the Planning Secretary agrees otherwise.

A light vehicle route is a route used by for example a car, ute, mini bus and small Pantech (delivery) type truck

A heavy vehicle route contains specific restrictions that must be adhered to for use and are classified as truck, buses, cranes, flatbeds, truck and dogs, sweepers and vacuum trucks or similar.

The VMP will be provided to all subcontractors for dissemination to their drivers and will be readily available at each of the compound sites for review by any drivers.

All loaded vehicles entering or leaving the site will have their loads covered or contained and leave site in a forward direction. In any cases where a forward direction is not possible, short term traffic control will be installed.

All reasonable and feasible measures will be implemented during heavy vehicle deliveries to avoid peak periods, including:

- Ensuring OSOM loads have staggered delivery times and have been assessed.
- Establishing a schedule of heavy vehicle deliveries to ensure peak periods are avoided where reasonable and feasible and to minimise convoy lengths or platoons.

- Adjusting delivery and/or work schedules for days when heavier construction vehicle movements are planned, e.g. concrete pours.
- Discussing access point locations and operations with drivers.
- Operation of an In-Vehicle Management System (IVMS) to monitor adherence to the approved travel schedule and routes through live tracking and real time Geofence alerts.
- Driver behaviour reports and real time alerts will be monitored and actioned as required.

7.1.1. Oversize and Overmass

OSOM vehicles are defined as Class 1 vehicles under the Heavy Vehicle National Law. A vehicle or vehicle combination is OSOM if it exceeds any general access mass or dimension limits. Typical examples include:

- Vehicle combinations carrying large indivisible items such as mining and construction vehicles, bridge components or building infrastructure.
- Special purpose vehicles such as mobile cranes, concrete pump trucks and drilling rigs.

If the Project has deliveries on vehicles (or combinations) that exceed the general access limits, they will operate under a Class 1 Notice or Ministerial Order, i.e. an Access (OSOM) Permit. OSOM Access Permits are issued by the National Heavy Vehicle Regulator (NHVR) and will be obtained by heavy haulage sub-contractors (for the Project) through the NHVR Portal. Any relevant permits and approvals will also be sought and obtained from the relevant road and rail authorities, NSW Police, and utility owners and providers.

The Project does not decide on which roads an OSOM load will be permitted to travel. OSOM routes are designated by TfNSW and NHVR, with the NHVR National Network Map providing a geospatial representation of stated routes and areas specified by an authorisation (permit or gazetted exemption notice) under the Heavy Vehicle National Law. Heavy vehicle (OSOM) access routes are shown in Annexure E and via this link: National Network Map | NHVR.

OSOM loads are not permitted to use State road intersections unless the turn manoeuvre can be completed within the existing pavement. With regard to local roads, HLWJV will adhere to any associated make good conditions within the permit issued under Heavy Vehicle National Law (NSW).

This TTMP is applicable to Stage 3B(i) which excludes high risk OSOM movements. As defined by TfNSW, high risk movements and routes include:

- > 40 metres long on single carriageway sections and > 50 metres long on dual carriageway sections
- > 5.2 metres high and within 200 millimetres of an overhead structure(s) including trees, overpasses and bridges
- >7.5 metre rear overhang
- >5.5 metres forward projection
- >6.0 metres wide
- >184.5 tonnes in total combined weight.

Refer to the TfNSW website for further details on high risk movements and routes (https://www.transport.nsw.gov.au/operations/roads-and-waterways/business-and-industry/heavy-vehicles/road-access/oversize-andor#Transport_Management_Plan_(TMP))

Following confirmation of the Port of arrival for transformers and other high risk OSOM, the routes required for OSOM movements will be finalised in consultation with TfNSW, Snowy Valleys Council,

and WWCC. The agreed OSOM routes for high risk OSOM will be reflected in this TTMP and the revised Plan will be endorsed by the ER and submitted to the Planning Secretary for approval (refer to Section 4.1).

It should be noted that preliminary route inspections have been undertaken and further route inspections will be undertaken as part of the NHVR / TfNSW approval process. This process is managed by the HLW Heavy Vehicle Compliance Manager (full-time position). It is also noted that the access points detailed in Annexure G have not been designed to accommodate OSOM loads. In the event that an OSOM vehicle is required to travel on an access point detailed in Annexure G, the access point must be redesigned in consultation with TfNSW. Any required upgrades will include an appropriate environmental assessment and be undertaken in accordance with the approved mitigation measures.

7.2. Road Assessment and Maintenance

7.2.1. Road Dilapidation

In accordance with MCoA B38 and UMM TT4, HLWJV will commission independent road dilapidation surveys of all local roads, including local road crossings, on the transport route shown in the Planning Approval Documentation (Annexure E, Figure E1). The surveys will be undertaken prior to enabling works, construction, upgrading or decommissioning works, and within one month of the completion of construction, upgrading or decommissioning works (or within a timeframe agreed to by the relevant roads authority/manager). The surveys will:

- Assess the existing condition of the road infrastructure (pavement deflection and remaining life, subgrade response, measuring ride including surface, shoulders, kerbs)
- Identify and document any signs of damage, wear, or deterioration, including cracking, potholes, surface deformation, shoving and rutting
- Include georeferenced pictures of road surface & furniture including (signs / poles, streetlights, barriers / guard rails / bollards, road marking, traffic islands / medians etc.)
- Align with the current IPWEA Guidelines
- Be documented in a road condition report and provided to the relevant road authority / road asset manager.

Consistent with the Planning Approval Documentation (Annexure E, Figure E1), dilapidation surveys will not be undertaken on unsealed roads (dirt road and dirt tracks). Unsealed roads are not included in the Planning Approval Documentation (Annexure E, Figure E1) and the condition of the road may change due to varying uncontrollable factors (e.g. weather). However, a photographic and laser survey will be undertaken on all other identified project roads, sealed and unsealed roads.

The intent is to provide the current road authority / road asset manager with a record of defects and/or maintenance items on the road network prior to the establishment of the HLW and to create a baseline record for future comparison purposes.

Additional road dilapidation surveys will be undertaken annually or at a frequency agreed with the relevant road authority / road asset manager, in accordance with MCoA B38.

Annexure C displays the initial list of roads to be surveyed for the WWCC and Snowy Valleys Council areas. If additional roads are identified as being required as part of HLW works, these roads will be discussed with the relevant road authority / road asset manager for agreement of use and a road dilapidation survey will be undertaken prior to use by heavy vehicles and again on completion of construction activities.

7.2.2. Road Maintenance

Road maintenance and repairs may be required because of development related traffic. HLWJV will maintain all roads and water-related infrastructure on site in a safe and serviceable condition. The method, timeframes, inspection schedules and scope of how repairs will be made and compensated will be discussed and agreed with each road authority / road asset manager to ensure compliance with the Infrastructure Approval. There are likely three types of maintenance required:

1. The management of routine (non-emergency repair) defect identification and rectification identified as caused by HLW. The road dilapidation survey outlines existing conditions and as new conditions arise, and it is proven to be caused by development related traffic, repairs (and agreed compensation) will be made within one month of completing enabling works and construction and annually during construction or in line with the processes agreed with each road authority / road asset manager.
2. The management of any impacts identified as caused by HLW that could endanger road safety (emergency repairs). These will be rectified as soon as possible after the damage is identified but within 7 days at the latest. In such cases the road authority / road asset manager may activate their existing processes with the compensation for the work/repair discussed with HLW after the fact and in line with the processes agreed with each road authority / road asset manager.
3. The management/rectification/action of the items outlined in Table 4-1 of the Infrastructure Approval to be managed through self-delivered rectification or financial compensation.

Road maintenance works undertaken by HLW will be detailed in a report which is prepared in consultation with the relevant road authority / road asset manager. If there is a dispute about the road maintenance works, or the implementation of these works, then either party may refer the matter to the Planning Secretary for resolution.

Water related infrastructure

Maintenance and repairs to water infrastructure may be required because of development related vehicles. HLWJV will maintain all roads and water-related infrastructure on site in a safe and serviceable condition. The method, timeframes, inspection schedules and scope of how repairs will be made and compensated will be discussed and agreed with each asset owner to ensure compliance with the Infrastructure Approval. Any damage to water supply infrastructure, will following discovery, be immediately reported to the asset owner by the site manager, to allow for repairs and reduce the loss of water.

7.3. Property Access

Written authority must be obtained from HLW Land and Property Access Coordinators prior to accessing land for all construction activities including site investigations, early and enabling works, permanent construction, and defect rectification activities. In addition, the property team will be responsible for managing and arranging the access requirements for all Interface Contractors.

An email notification and/or request must be sent to the HLW Land and Property Access Coordinators at hlw_property@ugllimited.com for all access requests and all property related enquiries.

During the enabling and permanent works stages, the JV property team will advise and engage with the relevant landowner of all upcoming works no less than 60 working days prior to the date access is required and will provide the landowner with minimum notification timelines in advance of the access date as follows:

- One (1) week prior to entry; and
- 24 hours prior to entry.

Access requests will include:

- Property address, property holding number and/or Lot and DP number
- Location maps / co-ordinates showing location of proposed activity and photos
- Proposed entry dates/period/times and any proposed weekend works
- Scope of proposed activity to include specifications/drawings/plans with distances, off sets and measurements
- Anticipated impact associated with the entry and proposed activity e.g. noise, spoil or ground disturbance, tree / vegetation removals.

7.4. Access & Crossing Point Construction

Access tracks will be used as necessary for the construction work and as far as is practicable, vehicle traffic shall be confined to these tracks.

Reflecting the road upgrades and mitigation measures identified in the Planning Approval Documentation (Annexure D), approximately 79 access points and 38 crossing points will be constructed. The works will be undertaken in accordance with the timing requirements of the Planning Approval Documentation and to the satisfaction of the relevant road authority (Annexure D).

Where the timing of the works is defined as ‘prior to construction’ (Annexure D), the works will be managed through the processes detailed in the EWMP. Reflecting the requirements of MCoA B67, within four months of the commencement of the enabling works, HLWJV will update this Plan to incorporate any road upgrades and mitigation measures that were not completed during the enabling works.

Access tracks, access connections and road upgrades required to facilitate the movement of project related traffic will be designed and constructed in a fit for purpose manner for construction. Where required, intersection works with public roads will be designed and constructed according to relevant Austroads guides or the relevant asset owners' standards.

Track construction will be carried out to cause minimum disturbance to soil and vegetation both on and adjacent to the track. Tracks will be routed to follow the natural contour of the land as far as practicable to minimise the amount of cut and fill and soil disturbance.

Access points will remain in place for the life of the Project while crossing points will remain in place until the overhead wires are installed (the time frame varies based on location, terrain, weather).

If there is a dispute about the road upgrade works, or the implementation of these works, then either party may refer the matter to the Planning Secretary for resolution.

For any temporary access tracks, the disturbed surfaces and formed areas will be revegetated in accordance with the approved CEMP and *Managing Urban Stormwater: Soils and Construction - Volume 2C Unsealed Roads* (DECC, 2008a). In addition, erosion and sediment controls will be established during the initial track construction work to contain any sediment that may erode from the disturbed surfaces.

A summary of the access and crossing points is provided in Annexure D. Further details on the TfNSW road upgrades are provided in Annexure G, including length of time permitted for use, traffic volumes, typical intersection design, timing for construction, use of the access during construction, and turning restrictions.

7.4.1. Access Points

Access points described in Annexure D and Annexure G will be identified, designed and constructed by the HLWJV. Access points onto private property, including measures such as fencing, or cattle

grids will be identified through consultation with the respective landholder. Access points will be designed and built to minimise impacts to road users and maintain the associated roads in a safe and serviceable condition. Access points connecting to public roads are divided into three categories of design as follows:

- **Category 1** – access points located at intersections where the major roads are expected to have a high estimated peak hour volume, and may have a speed limit above 100 km/h.
- **Category 2** – access points where the major roads have a low estimated peak hour volume and major roads have a speed limit range from 50 km/h to 100 km/h, where a basic right or basic left turn treatment would generally be suitable.
- **Category 3** – access point where the major road is a local road which typically carries a peak hour traffic volumes of fewer than 50 vehicles per hour per direction.

Access points for accommodation facilities and compounds will be through existing roads or temporary access tracks and will be designed to allow safe and efficient access to and from site. Drivers using access points to access public roads will be instructed to give way to those entering to avoid queuing on public roads. Movements to and from access points will be managed in line with a VMP.

Access points will be constructed under the Enabling Works Management Plan (EWMP) and associated road upgrades will be designed and constructed in consultation with the road authority / road asset manager. Construction will occur under the principles of this TTMP, the ROL and/or S138 approval, and comply with the Austroads Guide to Road Design (as amended by TfNSW supplements), unless the relevant road authority / road asset manager agrees otherwise.

During the operation of access points, one heavy vehicle will be permitted to use each access point at any given time. As part of the UHF Protocol (Annexure B), heavy vehicle drivers will contact the site on approach and on departure to ensure compliance with this requirement. In the unlikely event that an access point experiences higher traffic volumes, a traffic controller will be employed to manage the gate and the call-up procedure. Periodic inspections (detailed in Section 9.5) will be undertaken to manage compliance. To avoid the creation of slow convoys on the Hume Highway, the departure of heavy and light vehicles will be staggered by a minimum of one minute to enable the previous vehicle to achieve a safe operating speed on the Hume Highway.

7.4.2. Crossing Points

A crossing point is where the new transmission line (overhead wire) is proposed to cross a road. This involves the construction of hurdles and then the actual crossing and lifting (stringing) of the wire into place. The strategic concept designs and procedures for stringing cables and transmission lines across roads detailed in Annexure F are compliant with Austroads Guide and TfNSW requirements (for crossing of state roads).

Various traffic management measures may be required during crossing point works, including shoulder, road and lane closures, rolling blocks, stop/slow and staging of works. Traffic management measures will be managed via the relevant approval process and traffic management document (TMP and/or TGS). Refer to Section 1.5 and Section 1.6 for additional details on TMP and TGS, respectively.

The TMP will be appended to a subsequent version of this TTMP in accordance with staging 3b(iii) detailed in Section 1.2.

7.5. State and Local Road Intersection Review

The State and Local Road Intersection Review, including mitigation measures, has been developed in consultation with TfNSW (Annexure I). Mitigation measures will be implemented before the use of the intersection for the projects construction works. If there is a dispute about the implementation of these

measures, then either party may refer the matter to the Planning Secretary for resolution.

8. Traffic Management Measures

Modifications to traffic conditions will be subject to approved ROLs issued by the relevant road authority / road asset manager. Traffic control measures, including temporary changes to road conditions and measures to ensure worker health and safety will be designed and installed and maintained in accordance with *Traffic Control at Work Sites* technical Manual and confirmed in consultation with the relevant road authority / road asset manager. Emergency vehicle access will be maintained at all times.

8.1. Temporary Roadwork Speed Limits

Temporary roadwork speed limits, both short and long term through key intersections, are one of many traffic controls that will be implemented to manage the speed of traffic approaching and passing through and/or past the work sites.

HLWJV acknowledges that roadwork speed zones must be logical, credible and enforceable. When considering the use of a roadwork speed zone, HLWJV will adopt the principles outlined in AS 1742.3, which state that roadwork speed zones must:

- Only be used where they are self-enforcing or will be enforced.
- Not be used alone but with other traffic control signs and devices.
- Not be used in place of more effective traffic controls.
- Only be used while road work is in progress or where lower standard road conditions exist.
- Meet clearance and lane width requirements of Australian Standard 1742.3.
- Reflect speed zones agreed with the relevant road authority / road asset manager (Annexure G).
- Apply to state road crossing points (as agreed with the relevant road authority / road asset manager) (Section 7.4.2)
- Capture key intersections (excluding Hume Highway) within reduced speed zones.

8.1.1. Long Term Reduced Speed Zone

On Mates Gully Rd and Lower Bago Rd, in both directions, a long term reduced speed zone (100km/hr to 80km/hr) is planned by HLWJV. A long-term speed reduction from 80km/hr to 60km/hr, in both directions, is also likely for Greenhills Access Rd.

No other long term reduced speed zones are planned, but if the need to provide a safe road and working environment arises, HLW will apply for and reduce the existing long term speed limits, in accordance with AS1742.3, Austroads Guide to Temporary Traffic Management and a Speed Zoning Authorisation (SZA), in one or both directions.

HLWJV may, where required, implement a strategy to reduce the existing 100km/h (and in some cases 50km/hr) speed limits to 40km/h on local roads where works occur. Potential areas where speed will be reduced includes existing traffic hazards, traffic hazards resulting from construction activities, conflict points between traffic and existing structures, construction vehicle movements.

As detailed in Section 4.2, reduced speed zones will be developed in consultation with the relevant road authority / road asset manager.

8.1.2. Short Term Reduced Speed Zones

To provide a safe working environment during short term works, reduced speed zones will be installed, in accordance with AS1742.3 and Austroads Guide to Temporary Traffic Management, e.g. during alternate flow, rolling blocks or lanes.

Approvals will be obtained following the relevant road authority / road asset manager approval process, e.g. ROLs. As detailed in Section 4.2, reduced speed zones will be developed in consultation with the relevant road authority / road asset manager.

Refer to Annexure G for further details on TfNSW access points.

8.1.3. Hume Highway

There will be no long term (longer than one working shift) speed zone restrictions on the Hume Highway. All speed zone restrictions on the Hume Highway will be short term (generally one working shift, which may reoccur over consecutive days) and approved by TfNSW. Stringing activities over the Hume Highway and Keajura Truck Bay (AP23) are short term works and will be managed through specific TMPs. TMPs will be prepared in consultation with TfNSW in accordance with Section 1.5 and the principles of this TTMP.

8.2. Traffic Control Devices

Traffic control devices include all signs, traffic signals (permanent and temporary), road markings, pavement markers, traffic islands, and/or other devices placed or erected to regulate, inform, warn and/or guide road users. The function of any traffic control device is to:

- Promote orderly traffic flow
- Regulate traffic (assign right of way, and indicate regulations in force)
- Warn road users of hazards or regulatory controls ahead (in particular they also warn of temporary hazards that could endanger road users or workers at roadwork sites)
- Enforce turning prohibitions or other restrictions
- Guide and control road users to safely negotiate the road ahead (e.g. guide signs to inform road users of directions to destinations, identify routes, and pavement markings to guide the travel path of vehicles)
- Ensure the traffic control device is not a hazard in themselves
- To provide data in a controlled and consistent way to avoid information overload.

Signs and road markings are an important aspect of road safety and traffic management. Regulatory signs control specific traffic movements; warning signs give advance notice of traffic hazards; road markings (and pavement markers) provide delineation and reinforce signage; and guide signs give advance guidance and advice of routes and destinations which assist all drivers to make clear, early decisions.

HLW recognises the value of providing road users with timely, clear and consistent messages and HLW will ensure all signs, road markings and devices installed during the construction of the Project are:

- Assessed for use in accordance with the appropriate TfNSW guidelines and/or Australian Standard/s
- Manufactured and installed in accordance with the requirements of the Australian Standard/s

- Installed in accordance with the relevant guides and standards
- Not contradictory to existing signs or markings
- When no longer required, covered or removed
- Regularly maintained and repaired / replaced when damaged or lose reflectivity.

All sign posting installed throughout the Project will comply with the requirements outlined in the *Austroads Guide to Temporary Traffic Management*, the TfNSW Delineation Manual, *AUSTROADS Guide to Traffic Engineering Practice, Part 8 – Traffic Control Devices* and the relevant parts of Australian Standard 1742.

8.2.1. Project Sign Requirements

In addition, to the sign posting requirements stipulated in the *Austroads Guide to Temporary Traffic Management* and the Australian Standards, HLW may apply the following sign posting parameters:

- The minimum size of signs used on the Project will be Type B
- Consideration will be given to the installation of short-term signs on permanent posts with secure covers, where works occur in the same location on a regular basis, and
- All non-standard road and directional signs (not gate or project specific signs) will be submitted to TfNSW for design and approval. It is not expected there will be many non-standard signs required, regardless TfNSW should provide a sign design, for HLW to manufacture within 5 working days.

HLW will conduct detailed reviews of all short and long term signage with the aim to ensure a clear and concise message is given to approaching road users, without creating sign clutter.

8.2.2. Flashing Arrow Signs

Flashing Arrow Signs (FAS) are mainly used when closing traffic lanes and conducting mobile traffic control operations.

When stipulated by the TGS, HLWJV will implement FAS in accordance with Section 3.12 of the AS 1742.3 Austroads Guide to Temporary Traffic Management . Where applicable, FAS will comply with the RMS equipment requirements FAS/4 and be controlled by a trained sub-contractor traffic control team member.

8.2.3. Portable Traffic Signals

There is currently no need to utilise portable traffic signals (PTS) for any long term works on this Project, but they may be used to provide safer alternate flow operations (i.e. no human traffic controller within proximity of traffic). Signals used for stop/slow will be manual controlled (human pushes a button).

If stipulated by a site specific TGS, HLW will implement the portable traffic signals in accordance with Section 3.5.4 of AS 1742.3, and Austroads Guide to Temporary Traffic Management.

All portable traffic signals used will comply with the RMS's equipment specification PTS/3 and be operated by a trained sub-contractor traffic control team member and monitored by the Construction Team.

8.3. Temporary Road Barriers and End Treatments

Temporary Road Safety Barriers (TRSB) shall be used to contain and redirect errant vehicles to reduce the likelihood of them entering the work site. They may also be used to separate opposing

traffic or enforce turning prohibitions. Opposing flows of traffic may be separated with TRSB with sufficient offset provided to reduce the likelihood that TRSB would deflect into opposing traffic flow in the event of impact.

When TRSB are used to protect the worksites, the requirements to maintain a clearance zone behind the TRSB shall apply. The maximum dynamic deflection is specified by the manufacturer. Provision shall be made to treat the approach and/or departure ends of both permanent and TRSB that are exposed to on-coming traffic. End treatments to be used will comply with the list of end treatments provided in “TfNSW Safety Barrier Products (Terminals) accepted for use on classified Roads in NSW”.

There are no plans to use TRSB on the state classified road network. In the unlikely event that TRSB are required on the state classified road network, this will occur in consultation with TfNSW.

8.4. Direction and Street Signage

Where access to streets and side roads has been altered during HLW construction, temporary signs will be installed to assist wayfinding and to minimise the impact of changed road layouts. It is envisaged that other directional signage may need to be erected to ensure construction site related traffic find the nominated routes to the works. This will be shown on traffic management (TMP and/or TGS) and construction communication plans.

8.5. Restrictions to Traffic Lanes

In some cases, it may be required to reduce the capacity of the road to complete the construction works. This includes road upgrades of site access and intersection works for access to work locations (compounds, laydowns, farms etc.). Also, in some instances, traffic management will be required for overhead stringing of new power lines including the use of hurdles at some locations. This may include short term road closures or rolling blocks, including the Hume Highway. In all instances, traffic control will include provisions for ensuring emergency vehicle access is maintained at all times.

The HLWJV traffic team will prepare the TMP (Section 1.5) and/or TGS (Section 1.6) to show what restrictions may be required and submit these to the relevant road authority / road asset manager for approvals and ROLs. Examples of the types of traffic control include:

- **Single lane alternate flow** – Where single lane alternate flow (to serve both directions) is allowed, HLWJV shall maintain traffic flow under the control of portable boom gates or traffic signals in such a way that no road user is unduly delayed.
- **Stopping traffic in both directions** – HLWJV may stop traffic in both directions simultaneously only for purposes of construction of specific work and during the specific period. Where it is necessary to stop traffic, the time should not extend greater than three minutes. Longer stop periods may require the installation of a suitable detour to avoid extensive queueing.

8.6. Access to Private Property

Existing accesses to private properties affected by the work shall be maintained in safe and useable condition during the construction, or alternative access arrangements acceptable to the property owners/tenants shall be made.

Access points will include appropriate measures to manage the biosecurity risks of each site, in accordance with the landowner’s biosecurity management requirements as set out in the Property Management Plan (PMP). Details of how ‘clean-in, clean-out’ will be achieved are set out in the Soil and Water Management Plan (SWMP).

HLWJV shall always permit and provide for the free movement of traffic in/ out of properties, except as otherwise agreed to by the property owners/tenants. This requirement will be communicated to the HLW workforce through toolbox talks, pre-starts and the Driver’s Code of Conduct (Annexure B).

8.7. Out of Hours Works

All construction activities will be completed within construction hours (Monday to Friday 7am to 6pm and Saturday 8am to 1pm). All short-term traffic management within the road reserve will be subject to ROL approval. No construction work activities will be completed outside of construction hours (including Sundays and Public Holidays), and in accordance with the out-of-hours work Protocol.. Truck bays will not be closed to the public and the public will be discouraged from using the truck bay during construction hours via VMS notifications.

If work is required outside of construction hours for example, delivery of large materials and OSOM movements, an Out of Hours Works Permit is required. The Project has developed a Protocol to obtain this permit in alignment with MCoA B16 (refer to the Noise and Vibration Management Plan).

The use of access points onto State Roads which do not have appropriate sight distance are not permitted to be used outside of daylight hours (unless otherwise agreed with TfNSW).

8.8. Delineation of Traffic Corridors

Where described in the *Austroads Guide to Temporary Traffic Management*, direction hazard markers, temporary raised reflective pavement markers, line marking, reflective mesh fencing and/or other such delineation devices shall be used in addition to the requirements of the AS1742.3 to delineate trafficked corridors.

8.9. Rail corridors

HLW contains no operational rail lines that would impact the safety, integrity, or operation of the railway network. Access to the rail corridor will be managed through the Property Management Plan process to ensure all necessary permits and approvals for corridor access are obtained be in accordance with the Australian Rail Track Corporation's requirements.

8.10. Tracking of Mud / Dirt onto Roads

HLWJV will ensure that appropriate measure will be implemented during the construction works to control mud and dirt from being tracked onto public roads. These measures will include wheel washes and hydro spraying of wheels before vehicles leave site areas. A street sweeper will also be provided to ensure no debris is left on public roads from the HLWJV works.

8.11. Driver Code of Conduct

HLWJV will ensure that drivers are educated on and adhere to the HLW Code of Conduct (Annexure B) during HLW construction, including minimising noise, driving to conditions, ensuring loads are appropriately distributed, restrained and covered before leaving site, using approved traffic routes, and responding to local climate conditions that may affect road safety, such as, fog, dust, wet weather, ice, snow, black ice, and flooding.

As part of the Driver's Code of Conduct, an Ultra High Frequency (UHF) radio protocol will be adopted where heavy vehicles are unable to concurrently use a State road intersection (as listed in Annexure B and Annexure I). Static CALL UP signs will be installed 100 metres from the relevant intersections to advise heavy vehicle drivers of the UHF protocol. Vehicles exiting the Hume Highway and vehicles entering the site will be prioritised over vehicles leaving the site.

Compliance with the Drivers Code of Conduct will be monitored through the IVMS, visual monitoring and the complaints register. Reporting will be undertaken in accordance with Section 3.9.4 of the CEMP.

8.12. Traffic noise

Traffic noise will be managed through the Noise and Vibration Management Plan, drivers code of conduct, and UMM NV6. Measures to minimise noise impacts will include:

- Out-of-hours vehicle movements will be minimised where possible.
- Construction delivery vehicles will be fitted with straps rather than chains for unloading wherever possible
- Use of engine compression brakes will be avoided at night and in residential areas.
- Site access points and roads/flight paths will be located as far as possible away from sensitive receivers.
- Traffic flow, parking and loading/unloading areas will be planned to minimise reversing movements.
- Construction inductions will include driver behaviour requirements to minimise vehicle noise emissions.

8.13. Staff Travel Shuttle Bus and Carpooling

The following measures will be implemented during the HLW works to minimise vehicle movements:

- Except for deliveries, staff working at each transmission line structure site will only be able to use HLW Project Inducted Vehicles, light vehicles and HLW Shuttles fitted with IVMS, to travel to and from site
- Private vehicles are not permitted to be taken to transmission line structure sites
- Private vehicles may be used by local employees to travel to compounds only
- Construction traffic volumes, at intersections, will be consistent with those in State and Local Road Intersection Review (Annexure I).

8.13.1. Shuttle Bus

Due to the anticipated large number of employees required to construct the HLW, it is anticipated that the project will deliver various coach services.

During the enabling works:

- A 12-seater minibus will transport workers from Wagga Wagga airport to varying accommodations around Wagga e.g. Quest
- Quad cab utes are parked at the airport ready for use by staff (booking system)

During construction, two coaches will transport workers from Albury/Wodonga airport to worker accommodations, four times a week (two trips from and two trips to the airport).

Up to two, 24-seater buses operating from Wagga Wagga airport will transport workers to accommodations twice a week (one trip from and one trip to the airport). Workers will be transported from accommodation to construction sites via a 12-seater bus.

Table 7 displays approximate travel distances and times to key HLW areas from airport locations.

Table 7 - Estimated travel times from airport locations

Airport - West	To	Distance	Travel Time
Wagga Wagga	Gugaa	14.5km	0.25hr
	Batlow	102km	1.25hr
	Tumbarumba	100km	1.25hr
	Maragle	138km	1.5hr
Albury	Gugaa	135km	1.5hr
	Batlow	167km	2hr
	Tumbarumba	135km	1.5hr
	Maragle	170km	2hr

8.13.2. Carpooling and parking

Carpooling refers to maximising the number of staff in each HLW Project Inducted Vehicle. Carpooling is the main form of transport during construction, with 30 dual cab utes provided at Wagga Wagga airport and at the project office located at 6 Ball Pl, East Wagga Wagga.

All staff, not on a bus, will be transported to site and accommodations using a dual cab ute. Local workers (who drive to work) will park their personal vehicle at Ball Place and join a carpool to site. This process will be encouraged through communication initiatives (e.g. toolbox talks and pre-starts) and regular monitoring (Section 9.5.1).

There will be limited private parking at the accommodation sites (e.g. Tarcutta) as all workers will be transported via bus or carpool. Construction parking on public roads will be minimised by having appropriately sized laydown and work areas. All staff (including those in site utes and construction vehicles) will be trained to park within the project footprint, and to minimise parking on the public road network.

8.13.3. Travel routes

All heavy and light vehicles associated with construction, upgrading and decommissioning of the development will travel to and from the site via the construction routes described in the EIS and the Planning Approval Documentation (Figure 4-1 in Appendix 4). Consistent with Annexure E, haul and delivery routes will be reflected in the VMP and monitored as per Section 9.5.

The VMP will be provided to all project staff and subcontractors for dissemination to their drivers and will be readily available at each of the compound sites for review by any drivers. VMPs are sperate, but informed by the TTMP, plans that set out the routes to key destinations and roads identified in the EIS traffic study area that are to be used by project vehicles. HLWs VMP includes details for drivers to follow, including:

- Roads for use by light and heavy vehicles.
- Roads for use by light vehicles only.
- Access points.
- Schools and school zone speed limits.
- Dates of school terms.
- Routes for water supply access.
- Compound locations.
- Specific project information, such as:
    - Project vehicle speed restrictions.
    - Seasonal use restrictions
    - Where road use is restricted to certain parts of a road.

- No through road usage of Keajura Road and Westbrook Road (south of Stewarts Road)
- 80km/h speed limit on Westbrook Road and Humula Road

8.14. Manage Public (Special) Events

A special /major event (in traffic management terms) is any planned activity that is wholly or partially conducted on a road, requires multiple agency involvement, requires special traffic management arrangements, and may involve large numbers of participants and / or spectators. Major events generally attract crowds more than 30,000 people.

In 2003, the NSW Government published "*The Guide to Traffic and Transport Management for Special Events*" regarding the organising, managing, and controlling of special events. This guide was developed in consultation with the NSW Premier's Department; TMC; TfNSW; Local Government Association; numerous local councils; Police Force and the events industry.

Role of HLWJV

HLWJV acknowledges considerable planning is required to successfully move large volumes of people in an efficient manner to minimise disruption to normal transport patterns.

HLWJV will openly and actively participate in regular forums, communicate, and cooperate in the management process with event organisers and relevant project members and clients as required via the Traffic and Community Teams. The purpose of the consultation is to identify measures to mitigate the impact of the HLW construction on the special event.

Classes of special events

Special / major events are generally categorised based on the potential disruption to traffic and transport systems, and the disruption to the non-event community. The four broad categories are below with Minor and Local likely to be the most common type occurring around the Project:

Major – is an event that impacts major traffic and transport systems and there is significant disruption to non-event community. For example: an event that affects a principal transport route, or one that reduces the capacity of the main highway through a country town, e.g. New Years Eve celebrations in Sydney.

Minor – is an event that impacts local traffic and transport systems and there is low scale disruption to the non-event community. For example: an event that blocks off the main street of a town or shopping centre but does not impact a principal transport route or a highway.

Local – is an event with minimal impact on roads and negligible impact on the non-event community. For example: an on-street neighbourhood Christmas party.

Police Controlled – is an event that is conducted entirely under police control (but is not a protest or demonstration). For example: a small march conducted with a police escort.

8.14.1. Utilise Variable Message Signs

During construction, HLWJV will utilise portable and permanent variable message signs (VMS) to provide advanced warning of changed traffic conditions to road users.

The use of VMS and the appropriate message/s will be incorporated within a TMP and/or a TGS.

The Traffic Team, which includes the traffic control sub-contractor, will co-ordinate the VMS approved messages in accordance with the TfNSW VMS Policy.

Existing Permanent VMS

As the TMC controls permanent VMS to manage the road network, the location of viable VMS will vary and the responsibility and control for what messages, are shown when, remains with the TMC.

Portable (trailer mounted, temporary) VMS

The Traffic Team will co-ordinate and deploy portable VMS (senior and junior boards) to allow as much advance warning as possible, as well as set agreed and approved messages in accordance with TfNSW's VMS Policy. VMS devices utilised on the Project will comply with TfNSW's specifications.

8.15. Flooding Response

The potential risk for flood around the Project is low and in most of the cases, warning from authorities on river water level will be relayed to effective organisations. In the case of a flood warning, HLWJV will take direction from the Emergency Control Organisation on evacuation routes and:

- Monitor the rate of rise of water level in the adjacent area
- Communicate relevant information to the workforce
- Initiate the evacuation procedure in consultation with the Emergency Control Organisation
- Liaise with Local Emergency Services and Local Emergency Management Officer for specific emergency exit routes to be used in the case of flood.
- After the flood, liaise with the Emergency Control Organisation regarding what course of action needs to be taken to recover operations.

8.16. Biosecurity

A Biosecurity Management Plan for weeds, predators/pests and diseases is provided in Annexure E of the Biodiversity Management Plan. The Biosecurity Management Plan includes:

- Protocols for the identification of weeds, predators/pests and diseases of concern.
- Management/control methods.
- Monitoring requirements.
- Mandatory reporting obligations.
- Weed hygiene protocols for all vehicles and machinery.
- A Trigger Action Response Plan.

Management of weeds, pests and pathogens throughout HLW construction will follow the mitigation measures outlined in the Biosecurity Management Plan and will be subject to ongoing consultation with species experts in accordance with requirements from regulators. Of particular relevance to vehicle drivers and operators of heavy plant are the following biosecurity controls:

- Checkpoints will be established to carry out visual inspections of plant and equipment to ensure compliance with the Hygiene Declaration Form. Where cleanliness standards are not met, site entry will be refused, and thorough off-site wash down at an appropriate facility will be required prior to site access being granted.
- Where incoming and outgoing vehicles, vessels, machinery and equipment do not satisfy the cleanliness requirements of the Hygiene Declaration Form, washdown will be required.
- In locations of key weed or pathogen outbreaks (restricted areas), vehicle and machinery inspection and washdown will be required upon entering the HLW area from outside and when leaving restricted areas.
- Implement the following washdown protocol for vehicles and heavy machinery:

- Check the exterior and interior of vehicles and machinery for soil, plant material and other debris.
- Remove large clods of dirt and soil using a stiff brush or crowbar.
- Remove all soil, plant material and other debris from the interior using a vacuum or dustpan and brush. Focus on the cabin floor, floor mats and pedals.
- Place debris in a bag and dispose of in a commercial waste bin.
- If returning from a potentially contaminated area, wash vehicle and/or machinery as soon as possible (e.g. at a commercial carwash) before heading back to site. If a carwash facility is not available, spray tyres thoroughly with a disinfectant.
- Use a wash-down facility for vehicles and machinery if available, or wash-down on a hard, well-drained surface, for example a road, and on ramps if possible.
- Dispose of wash-down water so that it drains back into a low area of the infested zone away from waterways. If this is not possible, empty it into a waste container for responsible disposal offsite. Do not drive through wash-down water or allow wash-down water to drain into clean bushland.
- Where practical, allow vehicle or machinery to dry before proceeding.

8.17. Keajura Rest Area

The Keajura Rest Area (truck bay) access point 23 will be subject to a TMP that will outline how HLW will manage access, such as the management of the number of vehicles making left in, left out movements (as per Appendix G), UHF protocols, staggering of heavy vehicle arrivals and departures, VMS messaging. The TTMP will be updated to append the approved TMP and if required any necessary environmental approvals necessary to allow sealing of the rest area. The area will remain available for public use, though, during construction activities public use will be discouraged. A VMS will be established during the use of the Keajura Rest Area to guide members of the public to use the Tarcutta truck change-over yard as an alternative rest stop.

8.18. Dangerous Goods Transportation

In NSW, the transportation of dangerous goods and hazardous substances is governed by the *Dangerous Goods (Road and Rail Transport) Act 2008*. All contractors involved in the transportation of such will be expected to adhere to the requirements of this Act, Road and Rail Transport (Dangerous Goods) (Road) Regulation 1998 and the Australian Code for the *Transport of Dangerous Goods by Road and Rail* (National Transport Commission, 2007) while travelling on both public roads and on the site.

Dangerous goods will be stored, handled and transported in accordance with AS1940 The storage and handling of flammable and combustible liquids and AS/NZS 1596:2014 *The storage and handling of LP Gas*, the Australian Code for the *Transport of Dangerous Goods by Road* and Rail (National Transport Commission 2020), and the *EPA's Storing and Handling of Liquids*.

9. Compliance management

9.1. Roles and responsibilities

Traffic management (including pedestrian and cyclist management) and road maintenance will be designed, installed and managed by the design and construction teams with technical advice provided by the Traffic Team, under the leadership of the Traffic Manager.

The Traffic Team positions and their responsibilities are shown in Figure 4 and detailed in the sections that follow.

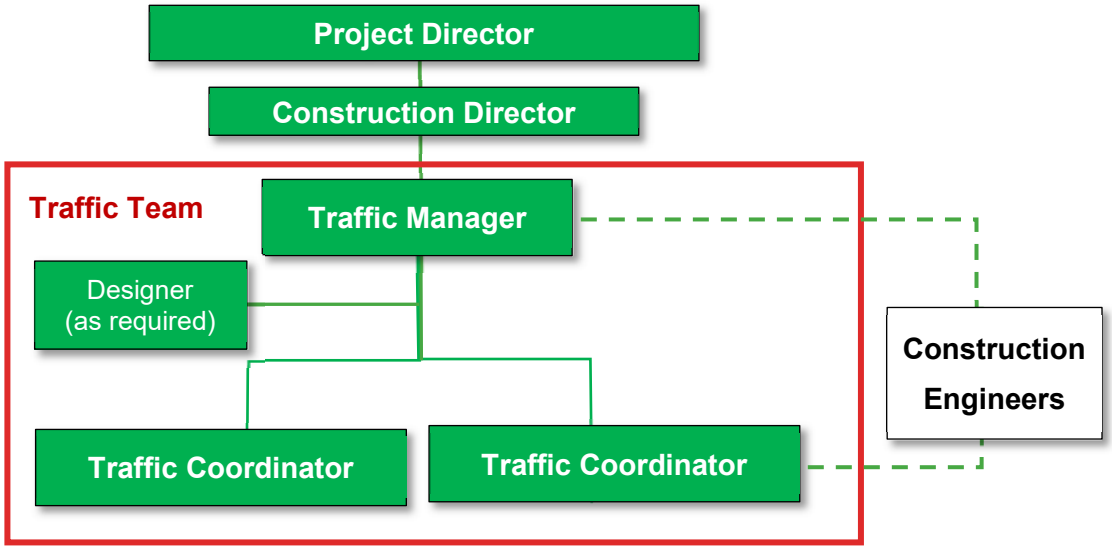


Figure 4 - HLWJV Traffic Management structure

9.1.1. Traffic Manager

The Traffic Manager will be a HLWJV employee who has proven capability in managing complex infrastructure works and traffic management schemes. This role will be supported by a dedicated traffic coordinator/s.

The project will subcontract the traffic management services to a licensed traffic management company and / or companies. Two traffic supervisors and foreman/s may be required at peak periods to cater to demand for on-site traffic control. Also, considering the distance between the work locations, more supervisory traffic management services may be required.

Position descriptions will be reviewed and amended as the HLWJV progresses and roles change.

The Traffic Manager's responsibilities include:

- Provide support to the construction team to ensure documentation and compliance for all matters relating to traffic and transport management and systems compliance.
- Develop and maintain contact with local councils, emergency services, police, TfNSW, and other stakeholders with respect to traffic management
- Support Transgrid outcomes for the works.
- Implement procedures and processes to develop and approve TGS and permits.

- Investigate and maintain a register of all incidents and accidents.
- Ensure that only adequately trained and qualified personnel are engaged in traffic control duties.
- Issue controlled copies of the TMP and staging plans
- Advise the design team to facilitate delivery of temporary works drawings, in accordance with the relevant standards

9.1.2. Traffic Co-ordinator

The Traffic Coordinator responsibilities include:

- Minimum 2 years in a similar or related role
- Create, maintain, apply for and manage the Section 138, ROL and Speed Zone Authorisation approval process
- Create and update site specific TGS for all short term works on the Project
- Create and maintain tracking documents, registers and maps as required
- Create and update TMPs for long term works on the Project
- Undertake traffic control inspections as required.

9.2. Out of Hours and Emergency Response Representatives

HLWJV will nominate representatives who will be always available to address traffic management issues outside of normal working hours, including project emergencies as detailed in the Emergency Management Plan. Contact details of key individuals will be available to authorities including NSW Police.

Responsibility for out of hours impacts will be rotated between the team members set out in Table 8. The out of hours representative will be responsible for coordinating and expediting immediate response to emergencies, repairs or maintenance of any part of the works under this contract.

Table 8 - OOH Traffic Management Responsibilities

Name	Role	Mobile
Tim Burns	Project Director	0417 759 637
Vincent Newton	Construction Director	0404 801 300
Berin Gordon	Traffic Manager	0429 956 866
Killian Makurumidze	Interface Manager	0473 061 059

9.3. Traffic Control Subcontractor

One or more subcontractor(s) will be engaged to provide traffic management services during the HLW construction in accordance with *Traffic Control at Work Sites – Technical Manual Version 6.1* (TfNSW, 2022).

9.4. Training

All personnel (including sub-contractors) are required to attend a compulsory site induction that includes the Driver's Code of Conduct (Annexure B) prior to commencement on-site. All drivers must agree to abide by their responsibilities set out in the Driver's Code of Conduct (Annexure B). Compliance with the Drivers Code of Conduct will be monitored through the IVMS, visual monitoring and the complaints register.

All traffic management personnel supplied by subcontractors are to hold current and appropriate traffic control qualifications, including the SafeWork NSW Traffic Control Work Training Card. The subcontractor's supervisor must also hold TfNSW Prepare Work Zone qualifications, where required on TfNSW controlled roads.

9.5. Monitoring and inspections

The HLWJV management team will be tasked with undertaking weekly observations or workplace inspections of all active worksites and intersections described in Annexure G. Observations and inspections will be documented on a suitable checklist form. These workplace inspections will review the work to ensure it complies with approved SWMS and with critical risk activities (working near live traffic). The observation will also review if the delivery of the activity can be improved. Traffic management subcontractors will also monitor and inspect traffic work setups and workforce according to their own internal quality audit practices.

Further, fatigue management (driving) will be a safety focus for the HLWJV project to ensure our people will be safe and healthy in the workplace. An IVMS is planned to be implemented to monitor and track driving hours, routes driven and speed. All workers will be issued with the Driver's Code of Conduct as part of the HLW Induction. Refer to the Health and Safety, and Fatigue Management Plans for further details.

A periodic report will be developed in accordance with MCoA B39(f)(ii) to capture the effectiveness of controls outlined within this Plan. The report will initially be prepared on a quarterly basis, with the frequency revised after 1 year of construction in consultation with Transgrid. The report will be issued to Transgrids Traffic Advisor within one month of the period ending. This report will capture records of:

- Traffic related incidents on site.
- Effectiveness of VMPs and vehicle tracking:
    - Any incidents involving reported (by public) non-conformance of vehicles using non-approved local roads.
    - Incidents of GPS tracked vehicles using non-approved local roads report (by project)
- Effectiveness of the Driver Code of Conduct.

The following additional monitoring will be undertaken at State and local road intersections for the duration of the HLW construction:

- Baseline traffic volume data collection through automatic traffic counters or manual traffic counts for a minimum of seven consecutive days to understand existing traffic volumes and patterns
- Weekly traffic volume monitoring during peak construction via IVMS to monitor construction traffic entering / exiting sites, as set out in Appendices G and I. Data will be provided to TfNSW on request.
- Adjustments, such as signal timing changes, additional signage, training and awareness, etc., will be made if traffic impacts exceed predicted levels in the Environmental Assessment Documentation or if community complaints arise.

9.5.1. Traffic Control Inspections

The aim of regular traffic control inspections is to:

- Provide a safe environment for workers and road users
- Monitor compliance against the TGS
- Identify safety hazards to inform corrective actions.

All traffic control inspections will be undertaken in accordance with Australian Standard 1742.3 and Austroads guide using the drive through video method whereby a video recording device (mobile phone or camera) is fixed to the dash of a vehicle and driven (within Australian road rules and posted speed limits) through and/or past the relevant work site/s. Inspection not conducted by video will be undertaken by attending the site.

Following the inspection, the video will be reviewed in the office and deficiencies actioned as soon as reasonably practical. The relevant TGS and subordinate documentation will be amended, as required.

If issues, deficiencies or improvement opportunities are identified relevant to this TTMP, the Traffic Manager (or delegate) will amend the Plan in accordance with the process detailed in Section 10.2.

9.6. Auditing

Audits (both internal and external) will be undertaken to assess the effectiveness of controls and compliance with this Plan, Planning Approval Documentation and other relevant approvals, licences, and guidelines. Audit requirements are detailed in Section 3.9.3 of the CEMP.

Internal audits of temporary traffic management arrangements, both long term and short term will be undertaken at least annually by key traffic staff, with appropriate certification and experience. The audit may include:

- Approvals and accreditation and compliance.
- Site specific constraints and impacts.
- Emergency planning and record keeping.
- Communications and consultation.
- Risk identification and traffic assessment.
- Traffic management controls.

9.7. Incidents and non-compliances

9.7.1. Incidents

In the event of an environmental, traffic or transport incident, the Incident and Emergency Response Plan will be implemented. The Incident and Emergency Response Plan has been prepared in accordance with the Transgrid's HSE Incident Management procedure.

HLWJV may be the First Response Agency during construction hours and take a lead role making the scene safe until Emergency Service personnel arrive. HLWJV may also provide traffic control by qualified personnel for emergencies and develop strategies to manage non-HLW related incidents. Non-HLW related incidents within the HLW boundary or adjacent sites which may have a negative impact on the operation of the road network include:

- Motor vehicle accidents.

- Bushfires (Refer HLWJV Bushfire Management Plan).
- Localised flooding (Refer HLWJV Emergency Response Plan).
- Inclement weather conditions (Updates via Bureau of Meteorology, WWCC etc.).
- Anti-social behaviour relating to traffic.

An environmental incident is defined in the Planning Approval as an unexpected event that has, or has the potential to, cause harm to the environment and requires some action to minimise the impact or restore the environment.

In accordance with MCoA C10,

'The Department must be notified via the Major Projects website portal immediately after the Proponent 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. Subsequent notification requirements must be given, and reports submitted in accordance with the requirements set out in Appendix 5.' of the MCoA.

All environmental incidents must be reported to Transgrid, the Planning Secretary (NSW), DCCEEW – Cth and the ER within 24 hours (NSW) and 2 days (Cth) of becoming aware of the incident. A subsequent incident report must be submitted to the same nominated parties within 7 days of an incident notification (NSW) and 12 days of an incident notification (Cth).

Refer to the CEMP (Section 3.8) for further details on environmental incident reporting and management.

9.7.2. Non-compliances

An environmental non-compliance is a breach with any condition of approval, licence condition or any other statutory approval relevant to the activity and/or area where the activity occurs. Potential and actual non-compliances will be classified and reported in accordance Section 3.9.4 of the CEMP.

Non-compliance can include administrative non-compliances (e.g., failure to submit documentation within the specified timeframe), as well as incident non-compliances. In accordance with MCoA C11, if a non-compliance has been reported as an incident it does not require reporting as a non-compliance as well.

A non-compliance notification must be provided to Transgrid, the Planning Secretary (NSW), DCCEEW – Cth and the ER within seven days after becoming aware of the non-compliance.

9.8. Reporting

Reporting requirements are set out in Section 3.9.4 of the HLW CEMP. HLWJV will report to Transgrid, and other stakeholders as required, on all traffic and transport management issues related to the HLW. Traffic and transport reporting requirements include:

- Road dilapidation surveys (Section 7.2.1) – Surveys will be undertaken of all local roads, including local road crossings, on the transport route shown in the Planning Approval Documentation (Annexure E, Figure E1). The surveys will be undertaken prior to enabling works, construction, upgrading or decommissioning works, and within one month of the completion of construction, upgrading or decommissioning works (or within a timeframe agreed to by the relevant roads authority/manager).
- Road maintenance report (Section 7.2.2) – Road maintenance works undertaken by HLW will be detailed in a report which will be prepared in consultation with the relevant road authority / road asset manager.

Public reporting on the effectiveness of traffic and transport measures will be achieved through

Independent Audit Reports and the report listed in Section 9.5. In addition, HLWJV will prepare a public report which will respond to the findings of each Independent Audit. Additional details on Independent Audit Reports, including the frequency and report recipients, are provided in the CEMP (Section 3.8.3 and Section 3.9.4).

10. Review and improvement

10.1. Continuous improvement

As outlined in the CEMP, management reviews will be undertaken as part of the continual improvement process. The reviews will be initiated by the key HLWJV staff and include relevant HLWJV team members and stakeholders. Continuous improvement of this Plan will be achieved by the ongoing evaluation of traffic management performance against planning approval requirements, policies, objectives, and targets.

The continuous improvement process will be designed to:

- Identify areas of opportunity for improvement of traffic management and performance.
- Determine the cause or causes of non-conformances and deficiencies.
- Develop and implement a plan of corrective and preventative action to address any non-conformances and deficiencies.
- Verify the effectiveness of the corrective and preventative actions.
- Document any changes in procedures resulting from process improvement.
- Make comparisons with objectives and targets outlined in Section 2.2 and Section2.3 of this Plan.

10.2. Plan update and amendment

The processes described in the CEMP and changes to the construction methodology or stakeholder requirements (including the relevant road authorities (TfNSW) and emergency services) may result in the need to update or revise this Plan. All revisions to the TTMP will be co-ordinated by the Traffic Manager and authorised by the Project Director in consultation with the Principal's Representative and other affected stakeholders.

Any revisions to this Plan will be in accordance with the process outlined in the CEMP and MCoA C10 and C14.

Updates to the VMP, including the following requirements from the DPHI TTMP approval (dated 11 September 2025), will undergo consultation with relevant road authorities prior to implementation:

- project vehicle movements would not include the through use of Keajura Road and Westbrook Road south of Stewarts Road; and
- an 80km/h speed limit must be introduced for project vehicles using Westbrook Road and Humula Road.

A copy of the updated Plan and changes will be distributed to all relevant stakeholders in accordance with the approved document control procedure as required.

Annexure A. Consultation Report

Annexure B. Driver's Code of Conduct

Driver's Code of Conduct

Form: DCC HLWJV	**VEHICLE DRIVER CODE OF CONDUCT**	**HUMELINK WEST JV**
Revision: 0		

Purpose and Objectives

The purpose of the Vehicle Driver Code of Conduct is to ensure that the impacts of construction traffic on transport networks and adjoining properties is minimised. This Code clearly defines and details acceptable behaviour for all vehicle drivers operating in connection with the HLWJV Works including employees, suppliers, and subcontractors.

Responsibilities of Drivers

1. Drivers must follow ALL road rules and regulations required by law.
2. Drivers must:
   a) Hold a current and appropriate licence for the class of vehicle they are operating
   b) Comply with speed limits on all sealing and unsealed tracks and roads
   c) Comply with all road works speed limits
   d) Obey construction traffic signs and devices
   e) Obey sign posted (road) load limits
   f) Ensure the vehicle does not exceed mass or dimension limits (except where permitted by an OSOM Access Permit)
   g) Ensure loads are distributed to remain within the capacity of the vehicle and axles
   h) Restrain loads appropriately in accordance with the NTC Load Restraint Guide and Heavy Vehicle National Law and Regulations.
   i) Adhere to the requirements of the National Heavy Vehicle National Law and Regulations, including Chain of Responsibility.
   j) Make sure that your vehicle is roadworthy and well maintained in accordance with manufacturer's specifications
   k) Identify yourself through the IVMS system
   l) Never share your pin number with other or use another person pin number
3. Drivers must drive safely which includes, but is not limited to:
   a) Making sure you are medically fit to drive, have no alcohol in your system and you are not under the influence of drugs
   b) Driving in a calm, courteous manner that is appropriate with existing road, traffic and weather conditions
   c) Not operating any vehicles or machinery while suffering from fatigue
   d) Implementing fatigue management and rest laws and procedures, as set out in the *Heavy Vehicle (Fatigue Management) National Regulation* (NSW) and the HLWJV Procedure *Heavy Vehicle Management - Chain of Responsibility*.
   e) Responding to changes in circumstances (such as delays), reporting these to your base (if possible) to implement short-term fatigue management measures
   f) Responding and driving in response to local climate conditions, e.g., fog, dust, wet weather, ice, snow, black ice and flooding
   g) Demonstrating awareness of the presence of native fauna and the risks of vehicle collision, particularly early in the morning, late in the afternoon and at night
4. Making sure that your rest breaks are taken at the prescribed intervals and are effective.
5. If you are concerned about the placement of a load or mass of loaded materials raise the issue with the HLWJV Supervisor and do not leave site.
6. Drivers must always behave in a professional manner.
7. Drivers must adhere to routes nominated by HLWJV for each specific worksite and they must not use any roads if their weight is over the posted load limit.
8. Routes passing schools and childcare centers are subject to school zone speed restrictions. During the hours of 08:00-09:30 and 14:30 – 16:00 the speed limit is 40KMH. These locations and times will be identified and confirmed by HLW JV during planning of the work and communicated to all drivers.
9. Drivers should only park or wait in approved areas as directed by HLWJV. DO NOT queue at worksite gates.

10. Drivers are to arrive and depart from worksites as required by HLWJV. Drivers will be turned away if they arrive outside of the HLWJV approved hours and the truck operating company will be notified.
11. Turn vehicles off when not in use or required to idle for long periods of time.
12. Drivers must not leave their vehicle unless it is correctly parked, has been turned off, hand brake applied, and the keys removed.
13. Drivers leaving their vehicle must wear appropriate PPE (safety boots, long pants, Hi-Vis long sleeve shirt, hard hat and safety glasses).
14. Vehicles must not transfer dirt or debris onto public roads. You must use rumble grids/ wheel wash units where they are installed. If any materials are deposited on public roads you must immediately contact your Supervisor and the HLWJV Supervisor to arrange for the road to be cleaned.
15. Drivers will present their materials and equipment clean and free of dirt, mud, seed and biological materials including weeds, seeds, pathogen and other organisms. The supplier will complete the Hygiene Declaration Form (TransGrid Biosecurity Form) prior to entry to site.
16. Before leaving any site it is mandatory to cover truck loads and tailgates and draw bars must be free of loose material.
17. If approached by people with enquiries about the HLWJV Works, drivers should remain polite and provide them with the community information line number 1800 317 367. Do not provide any other information about the project.
18. Drivers must comply with the HLW JV 'Non - negotiables', which have been communicated via Inductions.
19. As a courtesy to people who may be impacted by driver behavior, drivers will:
    a) Use horns only in an emergency or for safety reasons
    b) Not tailgate (drive too close to other vehicles)
    c) Not use compression braking, if possible, where noise is likely to adversely impact on residents
    d) Ensure that there is no littering
    e) Not block residential driveways or any other access points
    f) Minimise parking and queuing on public roads.

In Vehicle Monitoring System (IVMS)

An IVMS, also known as GPS Tracking or Telematics, is an electronic device that is installed in a vehicle or mobile machine, that enables the owner, or authorised third party, to collect and monitor vehicle data.

All HLWJV authorised vehicles and road going mobile plant will be fitted with a Project approved IVMS system including a forward-facing dash camera. The platform and data received will be owned and managed by the HLWJV project.

The IVMS system will provide monitoring and reporting information on driving behaviour on the following topics:

- Speeding
- Seatbelt utilisation
- 4WD engagement
- Harsh braking, cornering, and acceleration
- Driver Identification
- Idling time

Information provided by the IVMS may be used to inform internal and external audits (Section 9.6).

HLWJV will monitor adherence to the approved travel hours and routes, Bio security zones, Cultural heritage sites and No go zones through live tracking and real time Geofence alerts.

Driver behaviour reports and real time alerts will be monitored and actioned as required.

UHF Protocol

The UHF Protocol will be adopted where heavy vehicles are unable to concurrently use the intersections, including but not limited to the following State roads:

- Hume Hwy Keajura Rd, West
- Hume Hwy Keajura Rd, East
- Hume Hwy Comatawa Rd

Static CALL UP signs will be installed 100 metres from the relevant intersections to advise heavy vehicle drivers of the UHF protocol. Vehicles exiting the Hume Highway and vehicles entering the site will be priorities over vehicles leaving the site. To avoid the creation of slow convoys on the Hume Highway, the departure of heavy and light vehicles will be staggered by a minimum of one minute to enable the previous vehicle to achieve a safe operating speed on the Hume Highway.

Declaration

I have read and understand the above conditions and will ensure that I abide by this Code of Conduct.

Signed:	**Date:** / /
Print Name:	Company:

Annexure C. Dilapidation Surveys

Road Name	Road classification	Start	Finish	Surface
Snowy Valleys Council				
Elliott Way	Regional	Tooma Road	100m east of overhead power lines	Sealed
Memorial Avenue	Local	Kurrajong Avenue	11 Memorial Ave, Batlow NSW 2730	Sealed
Kurrajong Avenue	Local	Batlow Road	Memorial Avenue	Sealed
Greenhills Rd - Old Tumbarumba Rd	Local	Wondalga Rd	Batlow Road	Sealed
Wondalga Road	Regional	Rimmers Overbridge	Lower Bago Road	Sealed
Wondalga Road	Regional	Greenhills Rd	Batlow Rd	Sealed
Broadleaf Rd "South end of Wondalga Rd"	Regional	Wondalga Road	Lower Bago Road	Sealed
Green Hills Access Road	Forestry	Wondalga Road	Lower Bago Road	Sealed
Lower Bago Rd	Local	Greens Hill Access Road	Broadleaf Park Rd	Sealed
Lower Bago Rd	Local	Broadleaf Park Rd	Westbrook Rd	Mix
Yaven Creek Road	Local	Snowy Mountain Hwy	Lower Bago Road	Sealed
Ellerslie Road	Local Road	Snowy Mountain Hwy	Yaven Creek Road	Unsealed
Dunns Road	Local Road	Ellerslie Road	One Tree Hill Trail	Unsealed
Tooma Rd / William St / Regent St / Winton St / Bridge St / The Parade	Regional Road	Kent St	Elliott Way	Sealed
Westwood Road	Local Road	Yaven Creek Road	Millers Road	Unsealed

Road Name	Road classification	Start	Finish	Surface
Millers Road	Local Road	Westwood Road	1st property entrance	Unsealed
Sharps Road	Local Road	Westwood Road	Homestead	Unsealed
Sharps Creek Road	Local Road	Wondalga Road	Back Nacki Creek Road	Unsealed
Back Nacki Creek Road	Local Road	Sharps Creek Road	State Forest	Unsealed
Tumut Street Adelong	Regional Road	Snowy Mountains Hwy	Selwyn Street	Sealed
Selwyn Street Adelong	Regional Road	Tumut Street	Rimmers Bridge	Sealed
Westbrook Rd	Local Road	Lower Bago Rd	Little Mannus Creek	Sealed
Tumbarumba Rd/Albury St	Regional road	The Parade	Welcome to Wagga Wagga Sign	Sealed
Little Billabong Rd	Regional road	Hume Hwy	Tumbarumba Rd	Sealed
Batlow Road	State Road	Snowy Mountain Hwy	Tumbarumba	Sealed
Kopsens Road	Forestry Road	Batlow Road	Bago Forest Way	Mix
Bago Forest Way	Forestry Road	Kospens Road	Snubba Road	Unsealed
Snubba Road	Forestry Road	Bago Forest Way	Yellowin Access Road	Sealed
Yellowin Access Road	Forestry Road	Snubba Road	Forest Road	Unsealed
Bartoman St - Mill Rd - Forest Rd	Local Road	Batlow Road	Yellowin Access Road	Sealed
Mill Road	Local Road	Bartoman St	Memorial Avenue	Sealed
Route to Paddys River	Local Road	Elliott Way	Paddys River	Unsealed
Kent St / Power St	Local Road	Batlow Rd	1.5m East	Sealed
Campbell St	Local Road	Snowy Mountain Hwy	Todds Rd	Sealed
Wagga Wagga City Council				
Westbrook Road/Centenary Avenue	Local Road	Sydney Street Tarcutta	Little Mannus Creek	Sealed

Road Name	Road classification	Start	Finish	Surface
Tumbarumba Road	Regional Road	Sturt Highway	Welcome to Wagga Wagga Sign	Sealed
Humula Road	Local Road	Humula Link Road	Oberne Umbango Road	Sealed
Humula Link Road	Local Road	Sydney Street Tarcutta	Hume Highway	Sealed
Sydney Street	Local Road	Hume Hwy	Mates Gully Road	Sealed
Mates Gully Road	Local Road	Sturt Highway	Hume Hwy	Sealed
Oberne-Umbango Road	Local Road	Humula Road	Westbrook Road	Unsealed
Comatawa Road	Local Road	Hume Highway	5.3km	Unsealed
Wilds Road	Local Road	Comatawa Road	1.7km	Unsealed
Keajura Road	Local Road	Tumbarumba Road	Hume Highway	Sealed
Trewalla Road	Local Road	Tumbarumba Road	100m east of last access road - see kmz file	Unsealed
Gregadoo East Road	Local Road	Ashfords Road	Tumbarumba Road	Sealed
Byes Lane	Local Road	Gregadoo East Road	100m south of overhead lines	Unsealed
Livingstone Gully	Local Road	Gregadoo East Road	300m south of overhead lines	Unsealed
Big Springs Road	Local Road	Gregadoo East Road	100m south of overhead lines	Sealed
Elizabeth Ave	Local Road	Sturt Hwy	Gregadoo East	Sealed
Angels Lane	Local Road	Gregadoo East Road	100m south of overhead lines	Unsealed
Ivydale Road	Local Road	Gregadoo East Road	Ashfords Road	Unsealed
Ashfords Road	Local Road	Gregadoo East Road	Ivydale Road	Mix
Tywong Street / Abbots Lane	Local Road	Tumbarumba Road	Keajura Road	Mix
Keajura Road	Local Road	Hume Highway	1.8km	Unsealed

Road Name	Road classification	Start	Finish	Surface
Coreinbob Siding	Local Road	Coreinbob Road	Keajura Road	Unsealed
Coreinbob Road	Local Road	Mates Gully Road	Coreinbob Siding Road	Unsealed
Bioiling Down Rd	Local Road	Ashfords Road	0.24km	Unsealed
Stewarts Road	Local Road	Westbrook Road	2.2km	Unsealed
Mitchell Road	Local Road	Kyeamba Avenue	Ashfords Road	Sealed
Kyeamba Avenue	Local Road	Vincent Road	Mitchell Road	Sealed
Vincent Road	Local Road	Kooringal Road	Kyeamba Avenue	Sealed
Kooringal Road	Local Road	Copland St	Vincent Road	Sealed
Copland St/Sutton St/Ball Place	Local Road	Kooringal Road	3 Ball Place,East Wagga Wagga	Sealed
Burkinshaws Lane	Local Road	Keajura Road	2.1km	Unsealed
Cullinga Park Ln	Local Road	Hume Hwy On-Ramp	0.15km	Sealed

Annexure D. Road Upgrades

Ref	Staging	HLW Reference	Road/Intersection	Treatment	Design	Timing
Road Authority: Cootamundra-Gundagai Regional Council						
296	HLE		Parsons Creek Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
298	HLE		Adjungbilly Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
310	HLE		Parsons Creek Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
311	HLE		Parsons Creek Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
312	HLE		Parsons Creek Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General	Not applicable	Prior to construction / upgrade of the relevant access track off the public road network
317	HLE		Nanangroe Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Not applicable	Prior to construction / upgrade of the relevant access track off the public road network

Ref	Staging	HLW Reference	Road/Intersection	Treatment	Design	Timing
404	HLE		Adjungbilly Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
411	HLE		Sawmill Creek Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
412	HLE		Sawmill Creek Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General	Type 1B	Prior to construction / upgrade of the relevant access track off the public road network
Road Authority: Snowy Valleys Council						
32	HLW	Access Point 64	Elliott Way	Lengthening and widening required for north bound access on Powerline Road	Type 1	Prior to construction / upgrade of the relevant access track off the public road network
88	HLW	Access Point 56	Greenhills Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1	Prior to construction / upgrade of the relevant access track off the public road network
89	HLW	Access Point 49	Wondalga Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1	Prior to construction / upgrade of the relevant access track off the public road network

Ref	Staging	HLW Reference	Road/Intersection	Treatment	Design	Timing
117	HLW	Access Point 50	Wondalga Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1	Prior to construction / upgrade of the relevant access track off the public road network
180	HLE		Meadow Creek Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
181	HLE		Rocky Gully Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
186	HLE		Brungle Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
187	HLE		Brungle Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
190	HLE		Webbs Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Not applicable	Prior to construction / upgrade of the relevant access track off the public road network

Ref	Staging	HLW Reference	Road/Intersection	Treatment	Design	Timing
192	HLE		Gadara Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
193	HLE		Gadara Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
196	HLW	Access Point 37	Yaven Creek Road	New site access point required. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 2	Prior to construction / upgrade of the relevant access track off the public road network
197	HLW	Access Point 34	Ellerslie Road	New site access point required. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 2	Prior to construction / upgrade of the relevant access track off the public road network
201	HLW	Access Point 38	Sharps Road	New site access point required. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 2	Prior to construction / upgrade of the relevant access track off the public road network
300	HLE		Brungle Creek Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
303	HLW	Access Point 65	Elliott Way	Lengthening and widening required for north bound access on East Sago Powerline Road	Type 2	Prior to construction / upgrade of the relevant access track off the public road network
346	HLW	Access Point 43	Green Hills Access Road	New site access point required. Lengthening and widening of site	Type 1	Prior to construction / upgrade of the relevant access track off the public road network

Ref	Staging	HLW Reference	Road/Intersection	Treatment	Design	Timing
				access point inside property boundary and Road Reserve		
347	HLW	Access Point 51	Wondalga Road	New site access point required. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1	Prior to construction / upgrade of the relevant access track off the public road network
348	HLW	Access Point 52	Wondalga Road	New site access point required. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1	Prior to construction / upgrade of the relevant access track off the public road network
349	HLW	Access Point 53	Wondalga Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1	Prior to construction / upgrade of the relevant access track off the public road network
369	HLW	Access Point 35	Ellerslie Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 2	Prior to construction / upgrade of the relevant access track off the public road network
410	HLW	Access Point 39	Millers Road	Treatment in accordance with the approved Section 138 application and all relevant accompanying Council conditions outlined in the Section 138 approval.	To the satisfaction of the road authority	Prior to construction / upgrade of the relevant access track off the public road network
181B	HLE		Rocky Gully Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network

Ref	Staging	HLW Reference	Road/Intersection	Treatment	Design	Timing
AC04	HLE		Adjungbilly accommodation facility and compound (Gobarralong Adjungbilly Road)	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1C	Prior to construction of the relevant accommodation facility and compound / construction compound
ACO7	HLW	Access Point 44	Green Hills Accommodation facility and compound (Green Hills Access Road)	New site access point required. Widening required to the intersection. CHR and CHL intersection	To the satisfaction of the road authority	Prior to construction of the relevant accommodation facility and compound / construction compound
C18	HLW	C18	Snubba Road compound (Sago Forest Way)	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	To the satisfaction of the road authority	Prior to construction of the construction compound
C19	HLE		Gadara Road Compound (Gadara Road)	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction of the construction compound
C21	HLW	C21	Ellerslie Road compound (Ellerslie Road)	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	To the satisfaction of the road authority	Prior to construction of the construction compound
Road Authority: Upper Lachlan Shire Council						

Ref	Staging	HLW Reference	Road/Intersection	Treatment	Design	Timing
205	HLE		Unnamed Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
207	HLE		Dawes Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
211	HLE		Walshs Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
213	HLE		Rugby Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
216	HLE		Rye Park Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
217	HLE		Rye Park Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network

Ref	Staging	HLW Reference	Road/Intersection	Treatment	Design	Timing
218	HLE		Rye Park Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
219	HLE		Sapphire Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
220	HLE		Gurrundah Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
223	HLE		Bannister Lane	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
225	HLE		Prices Lane	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
226	HLE		Prices Lane	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network

Ref	Staging	HLW Reference	Road/Intersection	Treatment	Design	Timing
232	HLE		Taralga Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
233	HLE		Taralga Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
235	HLE		Hillcrest Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
236	HLE		Hillcrest Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
237	HLE		Hillcrest Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
239	HLE		Bannaby Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network

Ref	Staging	HLW Reference	Road/Intersection	Treatment	Design	Timing
240	HLE		Bannaby Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
241	HLE		Hanworth Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
247	HLE		Hanworth Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1B	Prior to construction / upgrade of the relevant access track off the public road network
251	HLE		Taralga Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
252	HLE		Rhyanna Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
254	HLE		Back Arm Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1B	Prior to construction / upgrade of the relevant access track off the public road network

Ref	Staging	HLW Reference	Road/Intersection	Treatment	Design	Timing
257	HLE		Middle Arm Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
323	HLE		Unnamed Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Not applicable	Prior to construction / upgrade of the relevant access track off the public road network
324	HLE		Grabben Gullen Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
330	HLE		Unnamed Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Not applicable	Prior to construction / upgrade of the relevant access track off the public road network
370	HLE		Stink Pot Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
371	HLE		Flacknell Creek Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network

Ref	Staging	HLW Reference	Road/Intersection	Treatment	Design	Timing
373	HLE		Greendale Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
378	HLE		Range Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
382	HLE		Middle Arm Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
383	HLE		Back Arm Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
406	HLE		Stink Pot Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
213B	HLE		Rugby Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network

Ref	Staging	HLW Reference	Road/Intersection	Treatment	Design	Timing
219B	HLE		Sapphire Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
223B	HLE		Bannister Lane	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
241B	HLE		Hanworth Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
323B	HLE		Unnamed Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Not applicable	Prior to construction / upgrade of the relevant access track off the public road network
324B	HLE		Grabben Gullen Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
330B	HLE		Unnamed Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Not applicable	Prior to construction / upgrade of the relevant access track off the public road network

Ref	Staging	HLW Reference	Road/Intersection	Treatment	Design	Timing
371B	HLE		Flacknell Creek Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
378B	HLE		Range Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
382B	HLE		Middle Arm Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
409B	HLE		Lower Greendale Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Design)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
Road Authority: Wagga Wagga City Council						
142	HLW	Access Point 29	Humula Road	New site access point required. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1	Prior to construction / upgrade of the relevant access track off the public road network
143	HLW	Access Point 30	Humula Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1	Prior to construction / upgrade of the relevant access track off the public road network

Ref	Staging	HLW Reference	Road/Intersection	Treatment	Design	Timing
155	HLW	Access Point 19	Trewalla Road	New site access point required. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 2	Prior to construction / upgrade of the relevant access track off the public road network
156	HLW	Access Point 12	Big Springs Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1	Prior to construction / upgrade of the relevant access track off the public road network
157	HLW	Access Point 13	Big Springs Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1	Prior to construction / upgrade of the relevant access track off the public road network
161	HLW	Access Point 11	Angels Lane	New site access point required. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 2	Prior to construction / upgrade of the relevant access track off the public road network
163	HLW	Access Point 6	Ivydale Road	New site access point required. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 2	Prior to construction / upgrade of the relevant access track off the public road network
164	HLW	Access Point 7	Ivydale Road	New site access point required. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 2	Prior to construction / upgrade of the relevant access track off the public road network
165	HLW	Access Point 4	Ashfords Road	New site access point required. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1	Prior to construction / upgrade of the relevant access track off the public road network

Ref	Staging	HLW Reference	Road/Intersection	Treatment	Design	Timing
166	HLW	Access Point 9	Boiling Down Road	New site access point required. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 2	Prior to construction / upgrade of the relevant access track off the public road network
168	HLW	Access Point 1	Gregadoo East Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1	Prior to construction / upgrade of the relevant access track off the public road network
170	HLW	Access Point 14	Livingstone Gully Road	No upgrade required for access point as per Austroads Guide to Road Design Part 4 Figure 7.4 - only minor maintenance	Not applicable	Prior to construction / upgrade of the relevant access track off the public road network
170a	HLW	Road Upgrade	Livingstone Gully Road	Maintain and gravel resheet Livingstone Gully Road from Gregadoo East Road to the new Gugaa 500kV substation as required for the duration of the project construction.	To the satisfaction of the road authority	In accordance with the inspection and maintenance schedule approved under the Traffic and Transport Management Plan
171	HLW	Access Point 16	Livingstone Gully Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 2	Prior to construction / upgrade of the relevant access track off the public road network
172	HLW	Access Point 15	Livingstone Gully Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 2	Prior to construction / upgrade of the relevant access track off the public road network

Ref	Staging	HLW Reference	Road/Intersection	Treatment	Design	Timing
176	HLW	Access Point 22	Keajura Road	No upgrade required as per Austroads Guide to Road Design Part 4 Figure 7.4-only minor maintenance.	Not applicable	Prior to construction / upgrade of the relevant access track off the public road network
178	HLW	Access Point 21	Trewalla Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 2	Prior to construction / upgrade of the relevant access track off the public road network
319	HLW	Access Point 31	Westbrook Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1	Prior to construction / upgrade of the relevant access track off the public road network
357	HLW	Access Point 32	Westbrook Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1	Prior to construction / upgrade of the relevant access track off the public road network
358	HLW	Access Point 33	Westbrook Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1	Prior to construction / upgrade of the relevant access track off the public road network
360	HLW	Access Point 25 / Access Point 26	Wilds Road	New site access point required. Lengthening and widening of site access point inside property boundary and road reserve	Type 2	Prior to construction / upgrade of the relevant access track off the public road network

Ref	Staging	HLW Reference	Road/Intersection	Treatment	Design	Timing
364	HLW	Access Point 17	Gregadoo East Road / Byes Lane	Maintain intersection condition as at commencement of construction, and for the duration of project construction.	To the satisfaction of the road authority	In accordance with the inspection and maintenance schedule approved under the Traffic and Transport Management Plan
177B	HLW	Access Point 18	Tumbarumba Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1	Prior to construction / upgrade of the relevant access track off the public road network
AC03	HLW	AC03	Tarcutta Accommodation facility and compound (Mates Gully Road)	New site access point required. CHR and CHL intersection in accordance with the Austroads guide	To the satisfaction of the road authority	Prior to construction of the relevant accommodation facility and compound / construction compound
AC03a	HLW	AC03a	Mates Gully Road	Upgrade as required in accordance with the Transport Strategy in condition B36	To the satisfaction of the road authority	As agreed in the Transport Strategy in condition B36
C01	HLW	Access Point 3	Wagga 330kV substation compound (Ashfords Road)	Widen Ashfords Road at the existing entrance to the substation as a BAR configuration	To the satisfaction of the road authority	Prior to construction
C06	HLW	C06	Amended Gregadoo Road compound (Livingstone Gully Road)	New site access point required. Widening required to the intersection.	Type 1	Prior to construction of the construction compound

Ref	Staging	HLW Reference	Road/Intersection	Treatment	Design	Timing
C06a	HLW	C06a	Amended Gregadoo Road compound (Livingstone Gully Road)	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	To the satisfaction of the road authority	Prior to construction of the construction compound
Road Authority: Yass Valley Council						
204	HLE		Cooks Hill Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
206	HLE		Unamed Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Desian)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
260	HLE		Bango Lane	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1B	Prior to construction / upgrade of the relevant access track off the public road network
266	HLE		Wargeila Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Desian)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
267	HLE		Wargeila Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Desian)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network

Ref	Staging	HLW Reference	Road/Intersection	Treatment	Design	Timing
269	HLE		Black Range Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Desian)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
270	HLE		Black Range Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
273	HLE		Buggali Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Desian)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
274	HLE		Buggali Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Desian)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
276	HLE		Mcintosh Lane	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
279	HLE		Black Range Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network

Ref	Staging	HLW Reference	Road/Intersection	Treatment	Design	Timing
280	HLE		Black Range Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
281	HLE		Black Range Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
283	HLE		Childowla Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Desian)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
286	HLE		Childowla Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Desian)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
293	HLE		Childowla Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Desian)	Not applicable	Prior to construction / upgrade of the relevant access track off the public road network
295	HLE		Talmo Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Desian)	Type 1B	Prior to construction / upgrade of the relevant access track off the public road network

Ref	Staging	HLW Reference	Road/Intersection	Treatment	Design	Timing
385	HLE		Cooks Hill Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Desian)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
388	HLE		Bango Lane	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Desian)	Type 1A	Prior to construction / upgrade of the relevant access track off the public road network
392	HLE		Black Range Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Desian)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
393	HLE		Childowla Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
394	HLE		Childowla Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Desian)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
395	HLE		Childowla Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Desian)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network

Ref	Staging	HLW Reference	Road/Intersection	Treatment	Design	Timing
397	HLE		Childowla Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Desian)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
398	HLE		Childowla Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Desian)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
399	HLE		Burrinjuck Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Desian)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
267B	HLE		Wargeila Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Desian)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
295B	HLE		Talmo Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Desian)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
399B	HLE		Burrinjuck Road	New rural site access point (as per Austroads Guide to Road Design Part 4: Intersections and Crossings: General, Figure 7.4 and the Project Strategic Desian)	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
Road Authority: Forestry Corporation of NSW						

Ref	Staging	HLW Reference	Road/Intersection	Treatment	Design	Timing
305	HLE		Honeysuckle Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
308	HLE		Honeysuckle Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
305B	HLE		Honeysuckle Road	No widening required to the opposite side of the through road. Lengthening and widening of site access point inside property boundary and Road Reserve	Type 1C	Prior to construction / upgrade of the relevant access track off the public road network
114	HLW	Access Point 54	Wondalga Road	No upgrade required as per Austroads Guide to Road Design Part 4 Figure 7.4-only minor maintenance.	Not applicable	Prior to construction / upgrade of the relevant access track off the public road network
124	HLW	Access Point 55	Wondalga Road	No upgrade required as per Austroads Guide to Road Design Part 4 Figure 7.4-only minor maintenance.	Not applicable	Prior to construction / upgrade of the relevant access track off the public road network
335	HLW	Access Point 59	Wondalga Road	No upgrade required as per Austroads Guide to Road Design Part 4 Figure 7.4-only minor maintenance.	Not applicable	Prior to construction / upgrade of the relevant access track off the public road network
354	HLW	Access Point 40A	Prickle Road	No upgrade required as per Austroads Guide to Road Design Part 4 Figure 7.4-only minor maintenance.	Not applicable	Prior to construction / upgrade of the relevant access track off the public road network

Ref	Staging	HLW Reference	Road/Intersection	Treatment	Design	Timing
Road Authority: TfNSW						
86	HLW	Access Point 46	Batlow Road	Sealing and upgrading the rural property access per Austroads Guide to Road Design Part 4 Figure 7.4. Maximum design vehicle length 19m.		Commencement of Rural Property Access upgrade with commencement of use. Use of the access to cease upon completion of construction at this location
194	HLE		Snowy Mountains Highway	Sealing and upgrading the rural property access per Austroads Guide to Road Design Part 4 Figure 7.4. Maximum design vehicle length 19m.		Commencement of Rural Property Access upgrade with commencement of use. Use of the access to cease upon completion of construction at this location
194B	HLE		Snowy Mountains Highway	Sealing and upgrading the rural property access per Austroads Guide to Road Design Part 4 Figure 7.4.Maximum design vehicle length 19m.		Commencement of Rural Property Access upgrade with commencement of use. Use of the access to cease upon completion of construction at this location
199B	HLW	Access Point 48B	Batlow Rd	Sealing and upgrading the rural property access per Austroads Guide to Road Design Part 4 Figure 7.4.Maximum design vehicle length 19m.		Commencement of Rural Property Access upgrade with commencement of use. Use of the access to cease upon completion of construction at this location
202B	HLW	Access Point 48	Batlow Road	Sealing and upgrading the rural property access per Austroads Guide to Road Design Part 4 Figure 7.4.Maximum design vehicle length 19m.		Commencement of Rural Property Access upgrade with commencement of use. Use of the access to cease upon completion of construction at this location
272	HLE		Derringullen Creek Rest Area/Hume Highway Snowy Mountains Highway	Installation of access gate. Maximum design vehicle is 19 m.Post-construction access gate is to be removed		Commencement of Rural Property Access upgrade with commencement of use. Use of the access to cease upon completion of construction at this location

Ref	Staging	HLW Reference	Road/Intersection	Treatment	Design	Timing
275	HLE		Lachlan Valley Way	Sealing and upgrading the rural property access per Austroads Guide to Road Design Part 4 Figure 7.4. maximum design vehicle length 19m.		Commencement of Rural Property Access upgrade with commencement of use. Use of the access to cease upon completion of construction at this location
318	HLW	Access Pont 23	Tarcutta Rest Area/Hume Highway	Installation of access gate. Maximum design vehicle is 19 m. Post-construction access gate is to be removed and the rest area is required to bere-sealed. No requirement for full re-build of rest area.		Commencement of Rural Property Access upgrade with commencement of use. Use of the access to cease upon completion of construction at this location
334	HLW3e	Access Point 62	Nursery Access Road/Batlow Road	The throat of the intersection of Nursery Road is to be sealed per Austroads Guide to Road Design Part 4 Figure 7.4 prior to use. Maximum design vehicle 19m.		Commencement of Rural Property Access upgrade with commencement of use. Use of the access to cease upon completion of construction at this location
340	HLW	Access Point 46	Rural property accesses/Batlow Road	Sealing and upgrading the rural property access per Austroads Guide to Road Design Part 4 Figure 7.4. Maximum design vehicle length 19m.		Commencement of Rural Property Access upgrade with commencement of use. Use of the access to cease upon completion of construction at this location
366	HLE		Stockpile site/Gocup Road	Installation of access gates. Maximum design vehicle is 19m.		Commencement of Rural Property Access upgrade with commencement of use. Use of the access to cease upon completion of construction at this location
376	HLE		Rural property access/Goulburn Road (Crookwell Road)	Sealing and upgrading the rural property access per Austroads Guide to Road Design Part 4 Figure 7.4. Maximum design vehicle length 19m.		Commencement of Rural Property Access upgrade with commencement of use. Use of the access to cease upon completion of construction at this location

Ref	Staging	HLW Reference	Road/Intersection	Treatment	Design	Timing
377	HLE		Rural property access/Crookwell Road	Sealing and upgrading the rural property access per Austroads Guide to Road Design Part 4 Figure 7.4. Maximum design vehicle length 19m.		Commencement of Rural Property Access upgrade with commencement of use. Use of the access to cease upon completion of construction at this location

Annexure E. Construction Traffic Routes

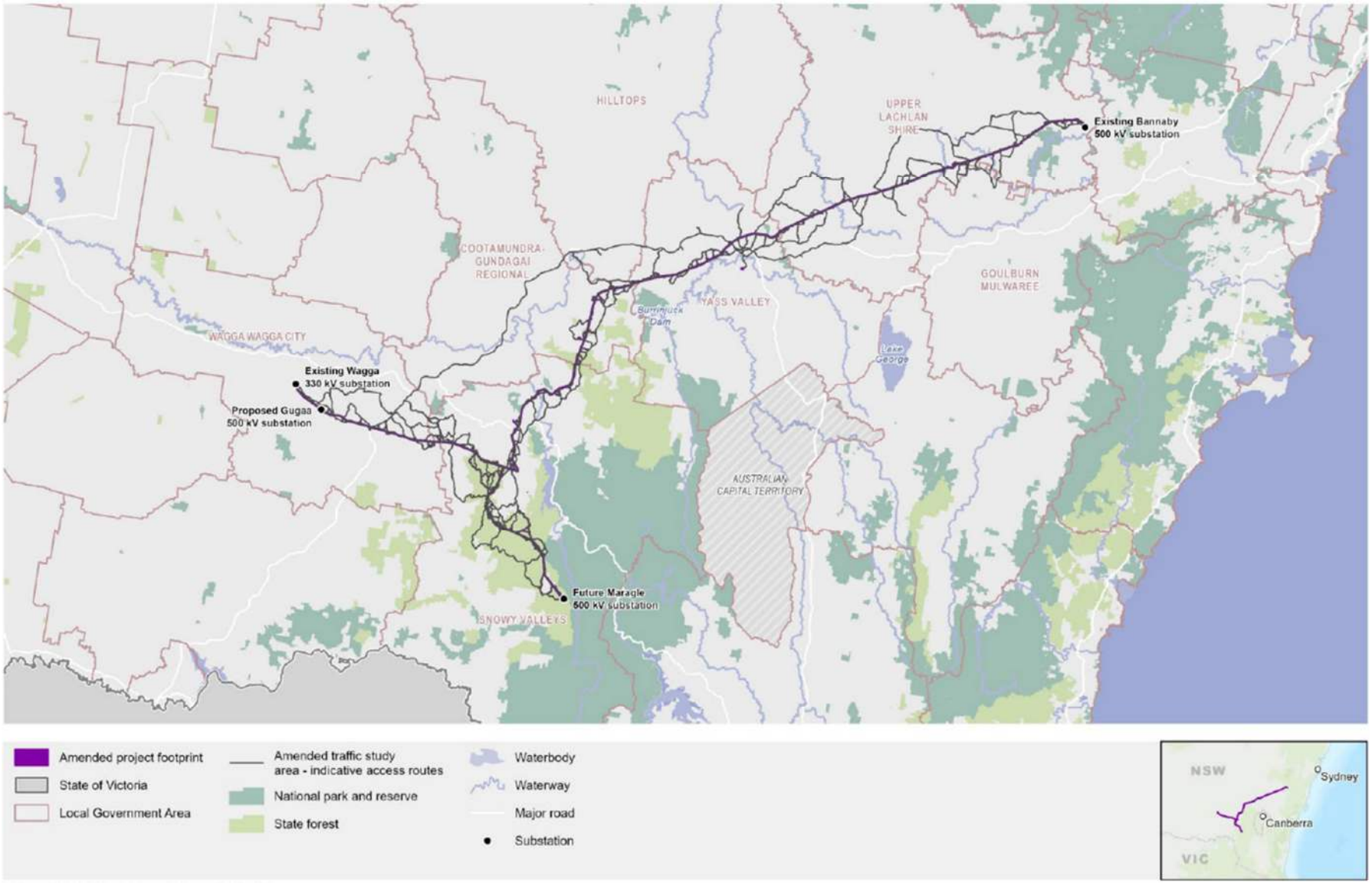


Figure E1 – Construction traffic routes overview (source: Planning Approval, Appendix 4)

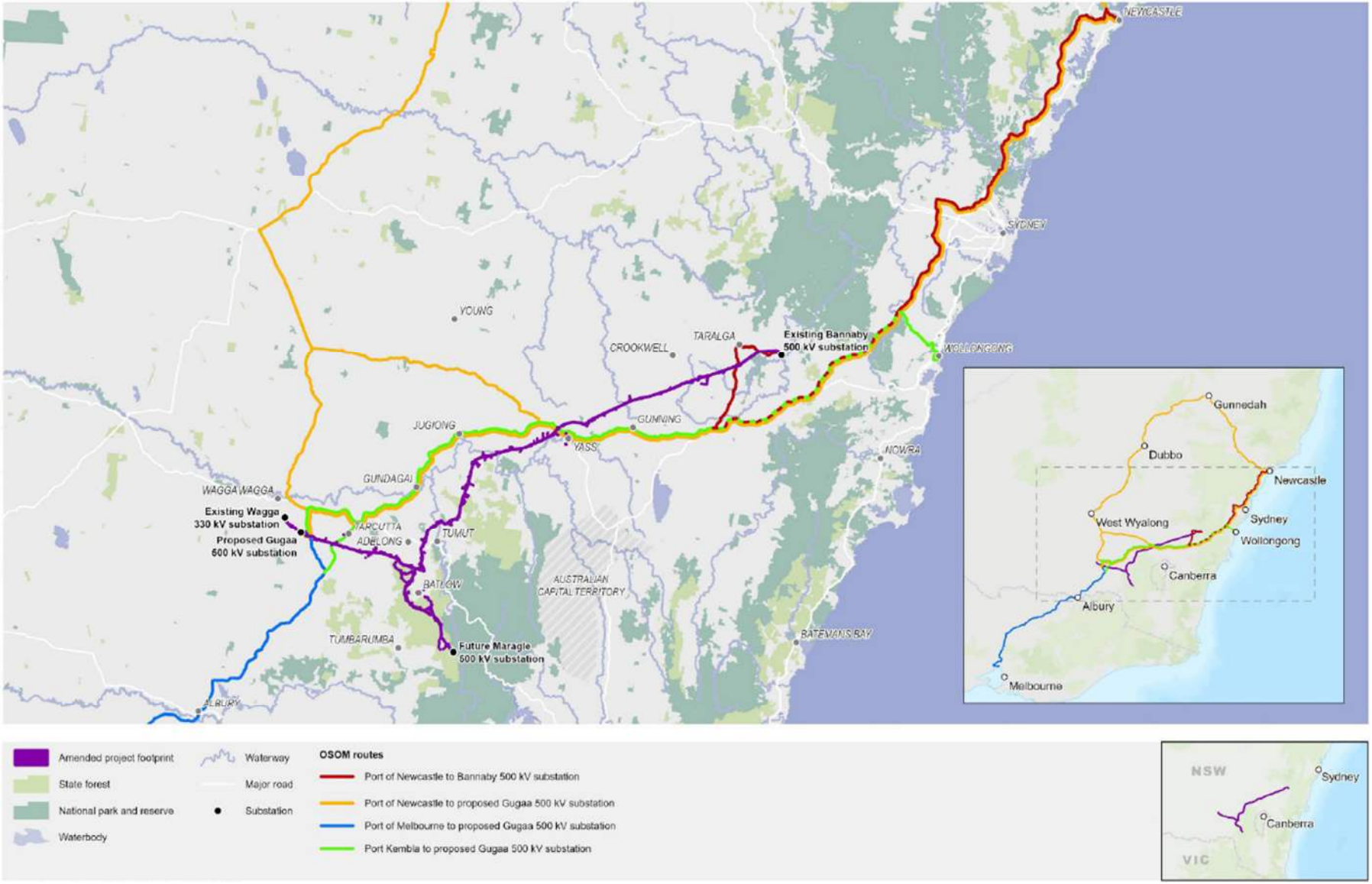


Figure E2 Transport route for heavy vehicles requiring escort (source: Planning Approval, Appendix 4)

Annexure F. Strategic Concept Designs and Procedure – Stringing Cables and Transmission Lines

Reflecting the requirements of MCoA B39(d)(i), this annexure details the strategic concept designs and procedures for stringing cables and transmission lines across roads to ensure compliance with Austroads Guide and TfNSW requirements (for crossing of state roads).

Stringing Operation Procedure

Where hurdles are required over roads, generally the following will occur:

- Community communications will be issued.
- ROLs will be obtained from the relevant road authorities;
- The appropriate traffic control measures will be established in accordance with the TMP;
- Rider poles, scaffolding or other appropriate protection will be used to ensure that the conductors remain at height.

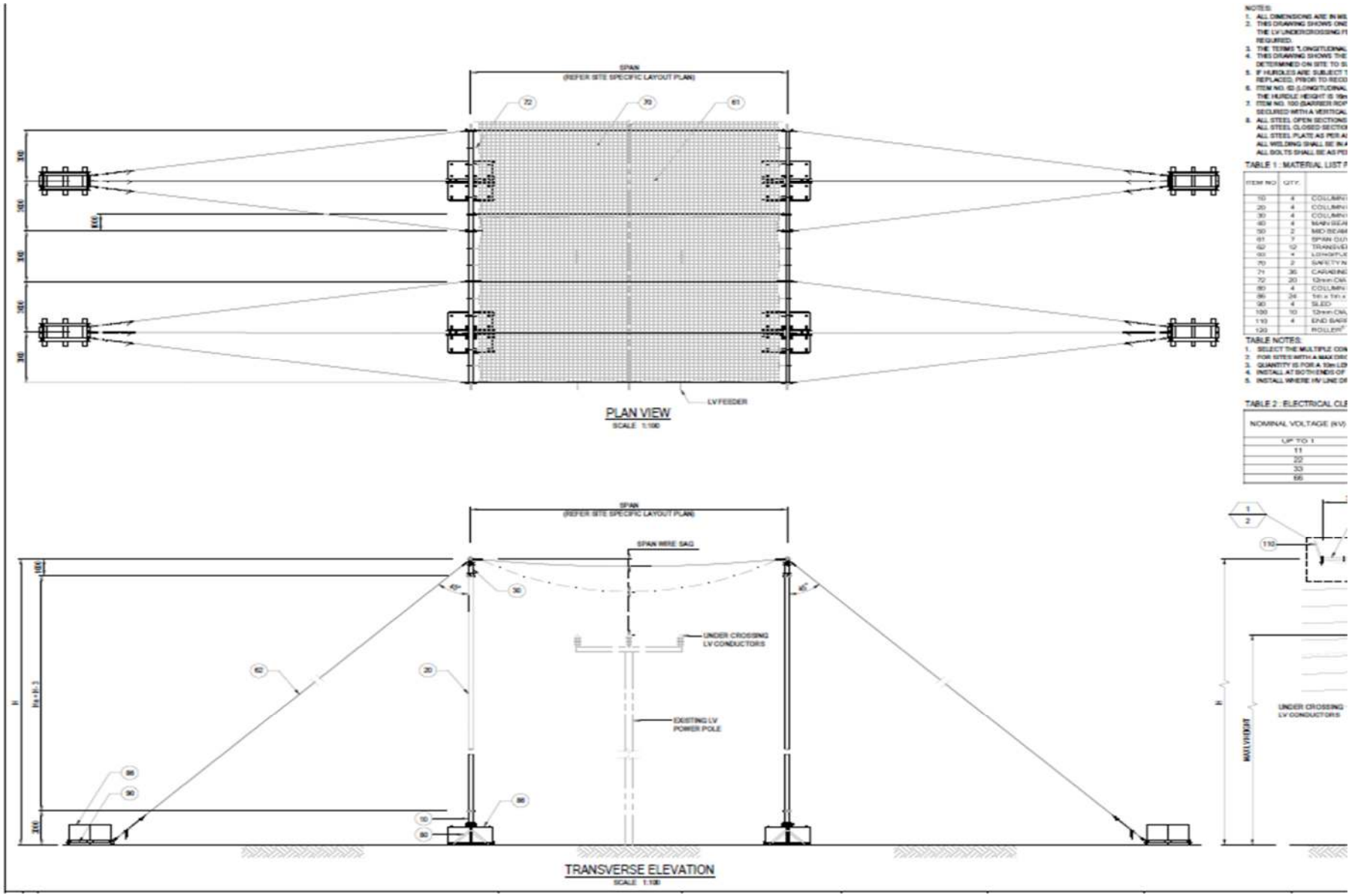
Details of the process intended to be used, including any requirement for intermittent road closures, will be provided to the appropriate road authority / road asset manager for approval with the ROL application. Stringing of the transmission line over roads will be subject to change as the process is finalised through the ROL process. The following procedure is generally applied for this method:

- the ports will be assembled by sections, ensuring that the minimum proximity distance is maintained;
- once the supports are installed, the side rails will be installed between them, making good use of the crane and controlling their movement with insulation ropes, or using service pulleys and/or gear placed on the head of the supports;
- wearing insulated gloves, the insulation ropes will be passed from one side of the line to the other, making a mesh between the side rails

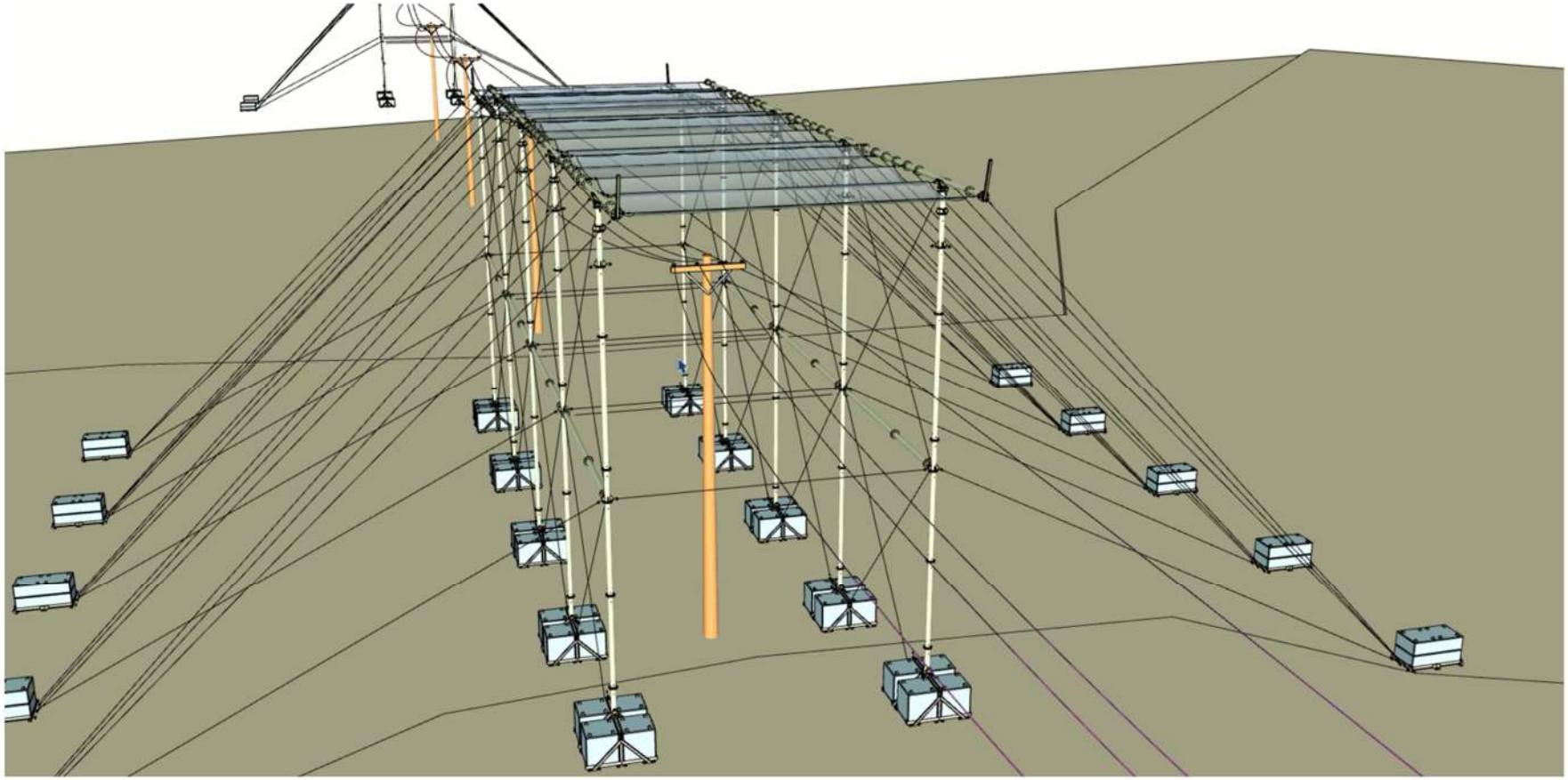
or alternatively crossings will be achieved through the installation of safety mesh where:

- assembly of the protection:
    - installation of cranes in defined location/s;
    - cranes to be supplied with a basket and pulley to avoid the stay rope falling while it is being hung;
    - the stay rope is hung through pulleys installed in the cranes that protect the crossings;
    - once the rope is hung, the steel stay will be passed and duly braced, securing its attachment to a static element (blocks);
    - a mesh comprising steel ropes and slings between both hung stay (safety) in order to cover the services to be protected and prevent a cable accidentally falling;
    - this protection will be installed until the stringing is concluded. Once the work is completed the owner of the services will be informed, which will proceed to disassemble said protection;
- disassembly of the protection.
    - For the removal of the protection area, the following steps will be followed:
    - the mesh comprising steel ropes and slings between the hung stays will be removed;
    - once the mesh is removed, the stay cables will be removed one by one. This operation will be done using as support, the lower phases of the recently strung line.

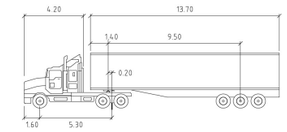
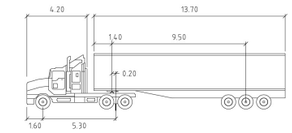
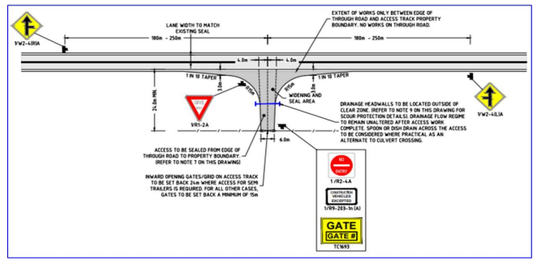
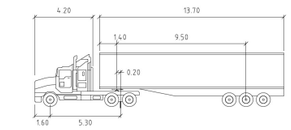
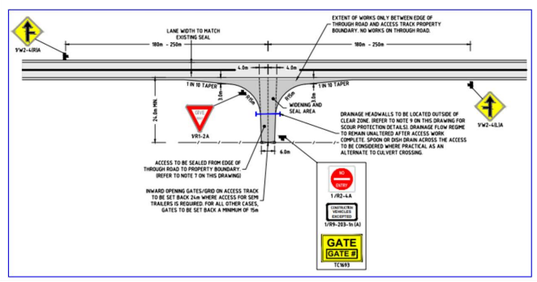
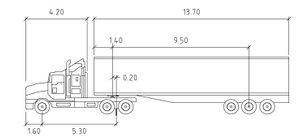
Strategy concept designs for stringing cables and transmission lines across roads are provided in the figures that follow.


SPAN
(REFER SITE SPECIFIC LAYOUT PLAN)
LV FEEDER
PLAN VIEW
SCALE 1:100
SPAN WIRE SAG
UNDER CROSSING
LV CONDUCTORS
EXISTING LV
POWER POLE
TRANSVERSE ELEVATION
SCALE 1:100
TABLE 1 : MATERIAL LIST
TABLE NOTES:
TABLE 2 : ELECTRICAL CLE
NOMINAL VOLTAGE (kV)
UP TO 1
11
22
33
66

Concept **H**urdle – this is what will be installed for cables to rest on, next to roads and rail, until they are ready to be pulled taut. All hurdles are likely to sit a minimum of six metres above the road corridor, but each will be designed specifically for its location. They are temporary works.



Annexure G. TfNSW Access Points

CoA ID	HLW Access Point ID Number	Latitude	Longitude	Road Name	Road Owner	LGA	New/Upgrade/Existing + concept design	Indicative HV Movements (in/out) (hourly)	Indicative LV Movements (in/out) (hourly)	Proposed Traffic Movement	Assessment Numbers	Access Point duration of use for construction activity (including peaks and troughs)	Largest Vehicle 19m Semi-Trailer	s138 required	Temporary traffic management measures
318	23	-35.3168682611213	147.660365576768	Hume Highway	TfNSW	Snowy Valleys Council	 Design Underway A Traffic Management Plan (TMP) has been prepared to guide the management of this access point and submitted to TfNSW. The TMP details closure requirements for the rest area, and confirms that the access point must be resealed after HLW use is complete. Access Point 23 will be left in/left out only and there are no reduced speed zones. Use of access point is limited to standard construction hours.	8	6	Left(in/out)	Qm= 280vph Ql= 2vph	4x Months	 PM S 19M meters Tractor Width : 2.50 Trailer Width : 2.50 Tractor Track : 2.50 Trailer Track : 2.50 Lock to Lock Time : 6.0 Steering Angle : 27.8 Articulating Angle : 70.0	Yes	No Temporary Traffic Management Measures identified by TfNSW
334	62	-35.57735442	148.0900038	Batlow Road	TfNSW	Snowy Valleys Council	Existing sealed intersection No modification/upgrade works planned for this access point at this stage. Short term traffic management may be required for any maintanace works may become required to the Access Point. Use of access point is limited to standard construction hours.	2	2	Right(in/out) Left(in/out)	Qm= 140vph Qr= 3vph Ql= 3vph	7x Months	 PM S 19M meters Tractor Width : 2.50 Trailer Width : 2.50 Tractor Track : 2.50 Trailer Track : 2.50 Lock to Lock Time : 6.0 Steering Angle : 27.8 Articulating Angle : 70.0	Yes	Temporary traffic management is required while access is in use, reduced speed zones and associated signage to achieve compliant SISD.
340	46	-35.4208187555257	148.128156554034	Batlow Road	TfNSW	Snowy Valleys Council	Use of access point is limited to standard construction hours. 	2	2	Right(in/out) Left(in/out)	Qm= 140vph Qr= 3vph Ql= 2vph	6x Months	 PM S 19M meters Tractor Width : 2.50 Trailer Width : 2.50 Tractor Track : 2.50 Trailer Track : 2.50 Lock to Lock Time : 6.0 Steering Angle : 27.8 Articulating Angle : 70.0	Yes	Temporary traffic management is required while access is in use, reduced speed zones and associated signage to achieve compliant SISD.
N/A	47	-35.40620453	148.1221801	Batlow Road	TfNSW	Snowy Valleys Council	Use of access point is limited to standard construction hours. 	2	2	To be determined in consultation with TfNSW during detailed design.	Qm= 140vph Ql= 6vph	6x Months	 PM S 19M meters Tractor Width : 2.50 Trailer Width : 2.50 Tractor Track : 2.50 Trailer Track : 2.50 Lock to Lock Time : 6.0 Steering Angle : 27.8 Articulating Angle : 70.0	Yes	Temporary traffic management is required while access is in use, reduced speed zones and associated signage to achieve compliant SISD.

Annexure H. Flood Evacuation Plan

The following outlines the designated emergency assembly areas and specific evacuation routes to be utilized in various emergency scenarios, including floods. The planning process has incorporated flood risk assessments to ensure the safety and accessibility of these routes. The methodology employed in determining these routes is detailed below, with references to relevant flood risk studies and access agreements with landowners.

The following locations have been identified as emergency assembly areas due to their strategic positions and accessibility:

- Wagga Wagga Compound: 3 Ball Pl, Wagga Wagga, NSW 2650
- Tarcutta Compound: 28 Mates Gully Rd, Tarcutta, NSW 2652
- Kunama Compound: Lot 1 DP 739328 Green Hills Access Rd, Kunama, NSW 2730

The selection of evacuation routes involved:

- Flood Risk Identification: Utilizing data from NSW Flood Data Portal including Wagga Wagga Major Overland Flow Floodplain Risk Management Study and Plan; Tarcutta, Ladysmith and Uranquinty Floodplain Risk Management Studies and Plans, areas prone to flooding were identified.
- Route Evaluation: Roads were evaluated based on elevation, historical flood data, and connectivity to emergency assembly areas. Preference was given to major roads and highways with higher elevations and minimal flood history.
- Access Agreements: Where evacuation routes traverse private properties, access agreements, such as rights of carriageway, have been established with landowners to ensure unimpeded passage during emergencies. These agreements are documented and maintained by the project management team.

The following tables detail the primary and secondary evacuation routes from each access point to the nearest emergency assembly area.

Access Point Address	Emergency Assembly Area	Primary Evacuation Route	Secondary Evacuation Route
Wagga Wagga 330kV Substation, 50 Ashfords Rd, Gregadoo NSW 2650	Wagga Wagga Compound	Head west on Ashfords Rd, turn right onto Gregadoo Rd, continue to Kooringal Rd, proceed to 3 Ball Pl, Wagga Wagga.	Head east on Ashfords Rd, turn left onto Holbrook Rd, continue to 3 Ball Pl, Wagga Wagga.
Gugaa Substation, Livingstone Gully Rd, Gregadoo NSW 2650	Wagga Wagga Compound	Proceed north on Livingstone Gully Rd, turn left onto Gregadoo Rd, continue to Kooringal Rd, proceed to 3 Ball Pl, Wagga Wagga.	Head south on Livingstone Gully Rd, turn right onto Holbrook Rd, continue to 3 Ball Pl, Wagga Wagga.

Access Point Address	Emergency Assembly Area	Primary Evacuation Route	Secondary Evacuation Route
Ellerslie Rd Laydown, Cnr Ellerslie Rd & Yaven Creek Rd, Darlow NSW 2729	Kunama Compound	Proceed south on Ellerslie Rd, turn right onto Batlow Rd, continue to Green Hills Access Rd, then to Kunama Compound.	Head north on Ellerslie Rd, turn left onto Yaven Creek Rd, continue to Batlow Rd, then to Kunama Compound.
Lower Bago Rd Batchplant & Laydown, Lower Bago Rd, Green Hills NSW 2730	Kunama Compound	Proceed south on Lower Bago Rd, turn right onto Batlow Rd, continue to Green Hills Access Rd, then to Kunama Compound.	Head north on Lower Bago Rd, turn left onto Bago Forest Way, continue to Batlow Rd, then to Kunama Compound.
Memorial Avenue Compound, Memorial Avenue, Batlow NSW 2730	Kunama Compound	Proceed north on Memorial Avenue, turn left onto Batlow Rd, continue to Green Hills Access Rd, then to Kunama Compound.	Head south on Memorial Avenue, turn right onto Batlow Rd, continue to Green Hills Access Rd, then to Kunama Compound.
Boiling Down Rd, Gregadoo NSW 2650	Wagga Wagga Compound	Proceed north on Boiling Down Rd, turn left onto Holbrook Rd, continue to 3 Ball Pl, Wagga Wagga.	Head south on Boiling Down Rd, turn right onto Gregadoo Rd, continue west to Kooringal Rd, proceed to 3 Ball Pl, Wagga Wagga.
102 Ashfords Rd, Gregadoo NSW 2650	Wagga Wagga Compound	Head west on Ashfords Rd, turn right onto Gregadoo Rd, continue to Kooringal Rd, proceed to 3 Ball Pl, Wagga Wagga.	Head east on Ashfords Rd, turn left onto Holbrook Rd, continue to 3 Ball Pl, Wagga Wagga.
Ivydale Rd, Gregadoo NSW 2650	Wagga Wagga Compound	Proceed north on Ivydale Rd, turn left onto Gregadoo Rd, continue to Kooringal Rd, proceed to 3 Ball Pl, Wagga Wagga.	Head south on Ivydale Rd, turn right onto Holbrook Rd, continue to 3 Ball Pl, Wagga Wagga.
1075 Gregadoo E Rd, Gregadoo NSW 2650	Wagga Wagga Compound	Head west on Gregadoo E Rd, turn right onto Holbrook Rd, continue to 3 Ball Pl, Wagga Wagga.	Head east on Gregadoo E Rd, turn left onto Tumbarumba Rd, continue to Ladysmith, then proceed to 3 Ball Pl, Wagga Wagga.
Angels Ln, Gregadoo NSW 2650	Wagga Wagga Compound	Proceed north on Angels Ln, turn left onto Gregadoo Rd, continue to Kooringal Rd, proceed to 3 Ball Pl, Wagga Wagga.	Head south on Angels Ln, turn right onto Holbrook Rd, continue to 3 Ball Pl, Wagga Wagga.

Access Point Address	Emergency Assembly Area	Primary Evacuation Route	Secondary Evacuation Route
Big Springs Rd, Gregadoo NSW 2650	Wagga Wagga Compound	Head north on Big Springs Rd, turn left onto Holbrook Rd, continue to 3 Ball Pl, Wagga Wagga.	Head south on Big Springs Rd, turn right onto Tumbarumba Rd, continue to Ladysmith, then proceed to 3 Ball Pl, Wagga Wagga.
Livingstone Gully Rd, Gregadoo NSW 2650	Wagga Wagga Compound	Proceed north on Livingstone Gully Rd, turn left onto Gregadoo Rd, continue to Kooringal Rd, proceed to 3 Ball Pl, Wagga Wagga.	Head south on Livingstone Gully Rd, turn right onto Holbrook Rd, continue to 3 Ball Pl, Wagga Wagga.
Livingstone Gully Rd, Gregadoo NSW 2651	Wagga Wagga Compound	Proceed north on Livingstone Gully Rd, turn left onto Gregadoo Rd, continue to Kooringal Rd, proceed to 3 Ball Pl, Wagga Wagga.	Head south on Livingstone Gully Rd, turn right onto Holbrook Rd, continue to 3 Ball Pl, Wagga Wagga.
Livingstone Gully Rd, Gregadoo NSW 2652	Wagga Wagga Compound	Proceed north on Livingstone Gully Rd, turn left onto Gregadoo Rd, continue to Kooringal Rd, proceed to 3 Ball Pl, Wagga Wagga.	Head south on Livingstone Gully Rd, turn right onto Holbrook Rd, continue to 3 Ball Pl, Wagga Wagga.
Gregadoo E Rd, Book Book NSW 2650	Wagga Wagga Compound	Head west on Gregadoo E Rd, turn right onto Holbrook Rd, continue to 3 Ball Pl, Wagga Wagga.	Head east on Gregadoo E Rd, turn left onto Tumbarumba Rd, continue to Ladysmith, then proceed to 3 Ball Pl, Wagga Wagga.
Tumbarumba Rd, Book Book NSW 2650	Wagga Wagga Compound	Proceed north on Tumbarumba Rd, continue through Ladysmith to 3 Ball Pl, Wagga Wagga.	Head south on Tumbarumba Rd, turn right onto Gregadoo E Rd, continue to Holbrook Rd, then proceed to 3 Ball Pl
Trewalla Rd, Book Book NSW 2650	Wagga Wagga Compound	Head west on Trewalla Rd, turn right onto Tumbarumba Rd, continue through Ladysmith to 3 Ball Pl, Wagga Wagga.	Head east on Trewalla Rd, turn left onto Keajura Rd, continue to Hume Hwy, then proceed to 3 Ball Pl, Wagga Wagga.
Keajura Rd, Tarcutta NSW 2652	Tarcutta Compound	Proceed north on Keajura Rd, turn left onto Hume Hwy, continue to 28 Mates Gully Rd, Tarcutta.	Head south on Keajura Rd, turn right onto Trewalla Rd, continue to Tumbarumba Rd, then proceed to 28 Mates Gully Rd, Tarcutta.

Access Point Address	Emergency Assembly Area	Primary Evacuation Route	Secondary Evacuation Route
Hume Hwy, Tarcutta NSW 2652	Tarcutta Compound	Proceed north on Hume Hwy, continue directly to 28 Mates Gully Rd, Tarcutta.	Head south on Hume Hwy, take the exit toward Tumbarumba Rd, continue to Trewalla Rd, then proceed to 28 Mates Gully Rd, Tarcutta.
Wilds Rd, Tarcutta NSW 2652	Tarcutta Compound	Head north on Wilds Rd, turn left onto Hume Hwy, continue to 28 Mates Gully Rd, Tarcutta.	Head south on Wilds Rd, turn right onto Comatawa Rd, continue to Humula Rd, then proceed to 28 Mates Gully Rd, Tarcutta.
Comatawa Rd, Tarcutta NSW 2652	Tarcutta Compound	Proceed north on Comatawa Rd, turn left onto Hume Hwy, continue to 28 Mates Gully Rd, Tarcutta.	Head south on Comatawa Rd, turn right onto Humula Rd, continue to 28 Mates Gully Rd, Tarcutta.
Humula Rd, Tarcutta NSW 2652	Tarcutta Compound	Head north on Humula Rd, turn left onto Hume Hwy, continue to 28 Mates Gully Rd, Tarcutta.	Head south on Humula Rd, turn right onto Comatawa Rd, continue to 28 Mates Gully Rd, Tarcutta.
Westbrook Rd, Oberne Creek NSW 2650	Tarcutta Compound	Proceed north on Westbrook Rd, turn left onto Humula Rd, continue to 28 Mates Gully Rd, Tarcutta.	Head south on Westbrook Rd, turn right onto Hume Hwy, continue to 28 Mates Gully Rd, Tarcutta.
Ellerslie Rd Cnr One Tree Hill Trail	Kunama Compound	Proceed south on Ellerslie Rd, turn right onto Batlow Rd, continue to Green Hills Access Rd, then to Kunama Compound.	Head north on Ellerslie Rd, turn left onto Yaven Creek Rd, continue to Batlow Rd, then to Kunama Compound.
Ellerslie Rd, Darlow NSW 2729	Kunama Compound	Head south on Ellerslie Rd, turn right onto Batlow Rd, continue to Green Hills Access Rd, then to Kunama Compound.	Head north on Ellerslie Rd, turn left onto Yaven Creek Rd, continue to Batlow Rd, then to Kunama Compound.
Yaven Creek Rd, Ellerslie NSW	Kunama Compound	Proceed south on Yaven Creek Rd, turn right onto Batlow Rd, continue to Green Hills Access Rd, then to Kunama Compound.	Head north on Yaven Creek Rd, turn left onto Ellerslie Rd, continue to Batlow Rd, then to Kunama Compound.
Sharps Rd, Westwood NSW 2729	Kunama Compound	Head south on Sharps Rd, turn right onto Batlow Rd, continue to Green Hills Access Rd, then to Kunama Compound.	Head north on Sharps Rd, turn left onto Yaven Creek Rd, continue to Batlow Rd, then to Kunama Compound.

Access Point Address	Emergency Assembly Area	Primary Evacuation Route	Secondary Evacuation Route
Millers Rd, Westwood NSW 2729	Kunama Compound	Proceed south on Millers Rd, turn right onto Batlow Rd, continue to Green Hills Access Rd, then to Kunama Compound.	Head north on Millers Rd, turn left onto Yaven Creek Rd, continue to Batlow Rd, then to Kunama Compound.
Prickle Rd, Sharps Creek NSW 2729	Kunama Compound	Head south on Prickle Rd, turn right onto Batlow Rd, continue to Green Hills Access Rd, then to Kunama Compound.	Head north on Prickle Rd, turn left onto Yaven Creek Rd, continue to Batlow Rd, then to Kunama Compound.
Back Nacki Creek Rd, Sharps Creek NSW 2729	Kunama Compound	Proceed south on Back Nacki Creek Rd, turn right onto Batlow Rd, continue to Green Hills Access Rd, then to Kunama Compound.	Head north on Back Nacki Creek Rd, turn left onto Yaven Creek Rd, continue to Batlow Rd, then to Kunama Compound.
Wilsons Rd, Sharps Creek NSW 2729	Kunama Compound	Proceed south on Wilsons Rd, turn right onto Batlow Rd, continue to Green Hills Access Rd, then to Kunama Compound.	Head north on Wilsons Rd, turn left onto Yaven Creek Rd, continue to Batlow Rd, then to Kunama Compound.
Wondalga Rd, Wondalga NSW 2729	Kunama Compound	Head south on Wondalga Rd, turn right onto Batlow Rd, continue to Green Hills Access Rd, then to Kunama Compound.	Head north on Wondalga Rd, turn left onto Yaven Creek Rd, continue to Batlow Rd, then to Kunama Compound.
Greenhills Rd, Wondalga NSW 2729	Kunama Compound	Proceed south on Greenhills Rd, turn right onto Batlow Rd, continue to Green Hills Access Rd, then to Kunama Compound.	Head north on Greenhills Rd, turn left onto Yaven Creek Rd, continue to Batlow Rd, then to Kunama Compound.
Batlow Rd, Wondalga NSW 2729	Kunama Compound	Proceed south on Batlow Rd, continue to Green Hills Access Rd, then to Kunama Compound.	Head north on Batlow Rd, turn left onto Yaven Creek Rd, continue to Ellerslie Rd, then to Kunama Compound.
Green Hills Access Rd, Green Hills NSW 2730	Kunama Compound	Proceed south on Green Hills Access Rd directly to Kunama Compound.	Head north on Green Hills Access Rd, turn left onto Batlow Rd, continue to Kunama Compound.
Batlow Rd, Kunama NSW 2730	Kunama Compound	Proceed south on Batlow Rd, turn right onto Green Hills Access Rd, continue to Kunama Compound.	Head north on Batlow Rd, turn left onto Yaven Creek Rd, continue to Ellerslie Rd, then to Kunama Compound.

Access Point Address	Emergency Assembly Area	Primary Evacuation Route	Secondary Evacuation Route
Batlow Rd, Laurel Hill NSW 2649	Kunama Compound	Proceed north on Batlow Rd, turn left onto Green Hills Access Rd, continue to Kunama Compound.	Head south on Batlow Rd, turn right onto Elliott Way, continue to Kunama Compound.
Elliott Way, Nurenmerenmong NSW 2649	Kunama Compound	Proceed north on Elliott Way, turn left onto Batlow Rd, continue to Green Hills Access Rd, then to Kunama Compound.	Head south on Elliott Way, turn right onto Batlow Rd, continue to Kunama Compound.
Dunns Rd, Ellerslie NSW 2729	Kunama Compound	Proceed south on Dunns Rd, turn right onto Batlow Rd, continue to Green Hills Access Rd, then to Kunama Compound.	Head north on Dunns Rd, turn left onto Yaven Creek Rd, continue to Batlow Rd, then to Kunama Compound.

WeatherZone

The weather zone operational forecast system will be utilised on the project to assist with planning for upcoming weather events. The forecast will be communicated at each pre-start daily and will provide information to operations so they can make decision on a risk-based approach to weather planning. The forecast system will supply operations a seven day look ahead for days effected by heavy rainfall risk, high wind risk (>90km/h), thunderstorm risk, wind risk (>36km/h), temperature, rainfall risk, flood risk and chance of rain days.

Weather zone system will also highlight other parameters across the project which can be used to make risk-based decision during project delivery. These parameters which can be displayed are:

- Temperature
- Dew point
- Wind speed/direction
- Wind gusts
- Thunderstorm risk
- Humidity
- Precipitation probability
- Rainfall rate (mm/h)
- Rainfall since 9am
- Feels Like temperature (apparent temperature)
- Fire Danger
- Probability of Exceedance Parameters (POE's/Confidence Bounds).

Annexure I. State and Local Road Intersection Review

State and Local Road Intersection Review

The review, associated results, and identified mitigations are in the following pages.

Seventeen intersections have been considered based on a specified criteria: local and state road intersections included in the HLWJV Vehicle Movement Plan (VMP).

It was agreed, with TfNSW, to undertake an investigation into ten of the seventeen intersections (through a Transgrid representative).

This review pertains to existing TfNSW and/or local council road assets as they were prior to the Project.

The design and construction of the intersections were carried out by TfNSW before the initiation of the HLWJV Project. HLWJV did not design or construct any intersection within this review.

Issues identified during the review, as documented in the following pages, were pre-existing and not caused by any work performed as part of the Project. All reviewed intersections remain under the ownership and control of TfNSW and/or the local council.

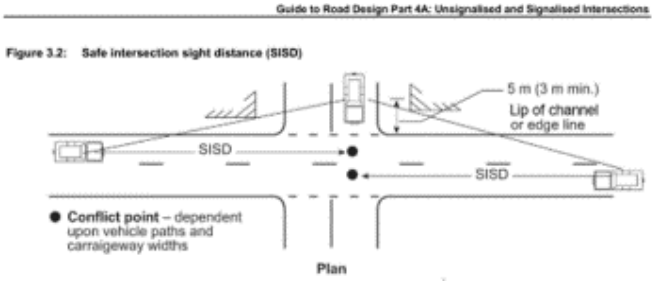
The permanent rectification of any of the pre-existing issues identified require engineering solutions from the asset owner/s. Rectifying pre-existing issues falls outside the scope of this Project's responsibilities and obligations.

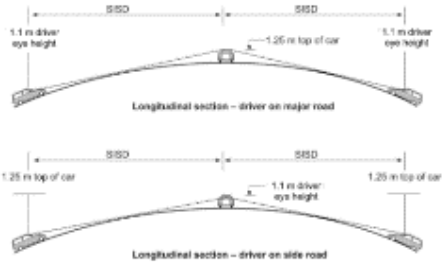
Schedule dates may be subject to change. For details, refer to the HLWJV updated Contract Program.

This review is not a road safety audit.

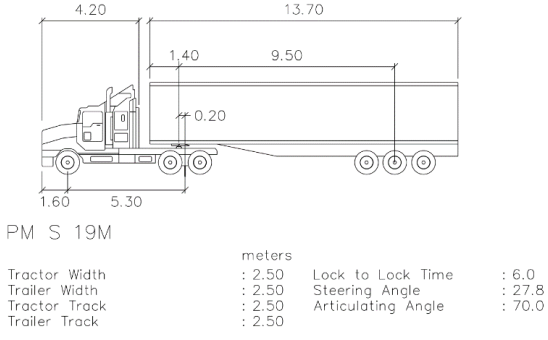
Note:

- Speed limits were obtained from site visits, google maps (street view) and TfNSW Speed Zones Map
- Road Classifications were obtained from TfNSW NSW Road Network Classifications Map
- SISD and SSD studies in accordance with Austroads Guide to Design Part 4A, excerpt below

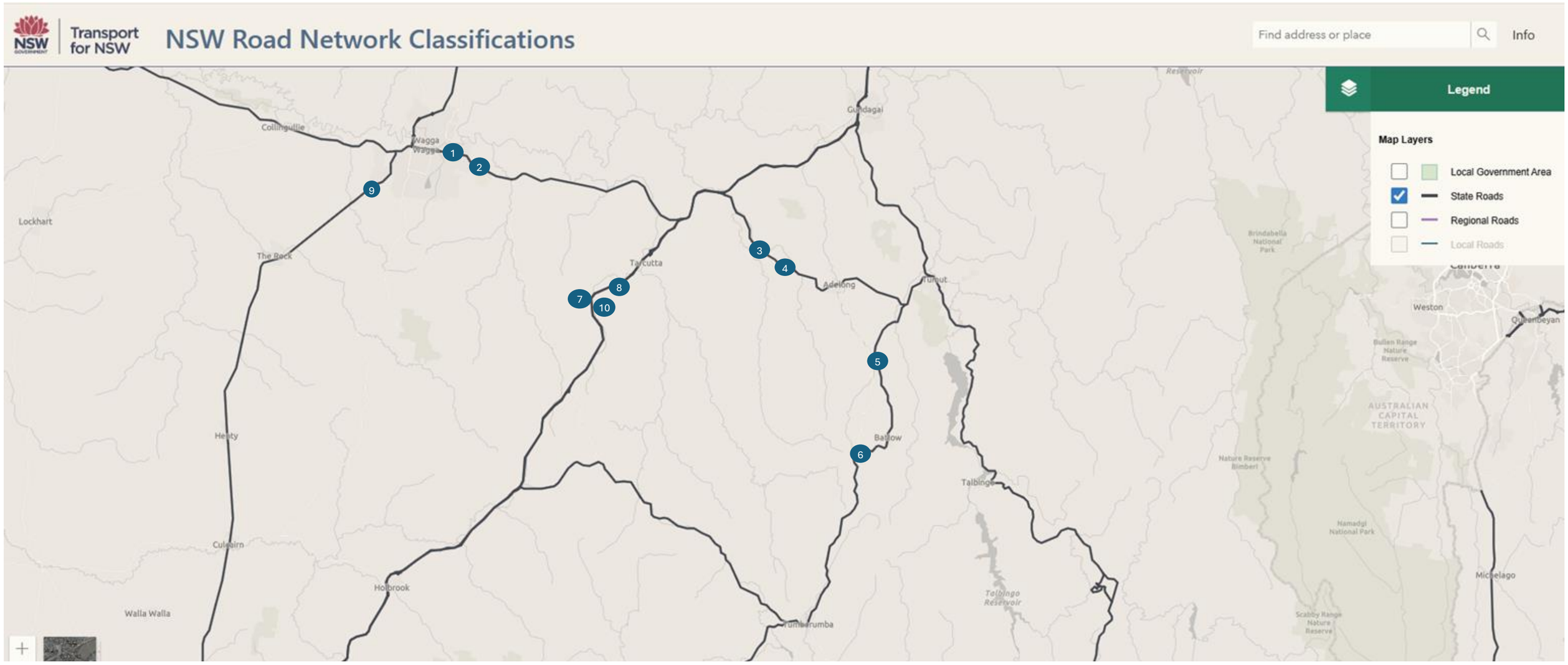




- The design vehicle is a 19m semi unless otherwise shown



Location Map



*The base layer map above is from the TFNSW website.

Summary

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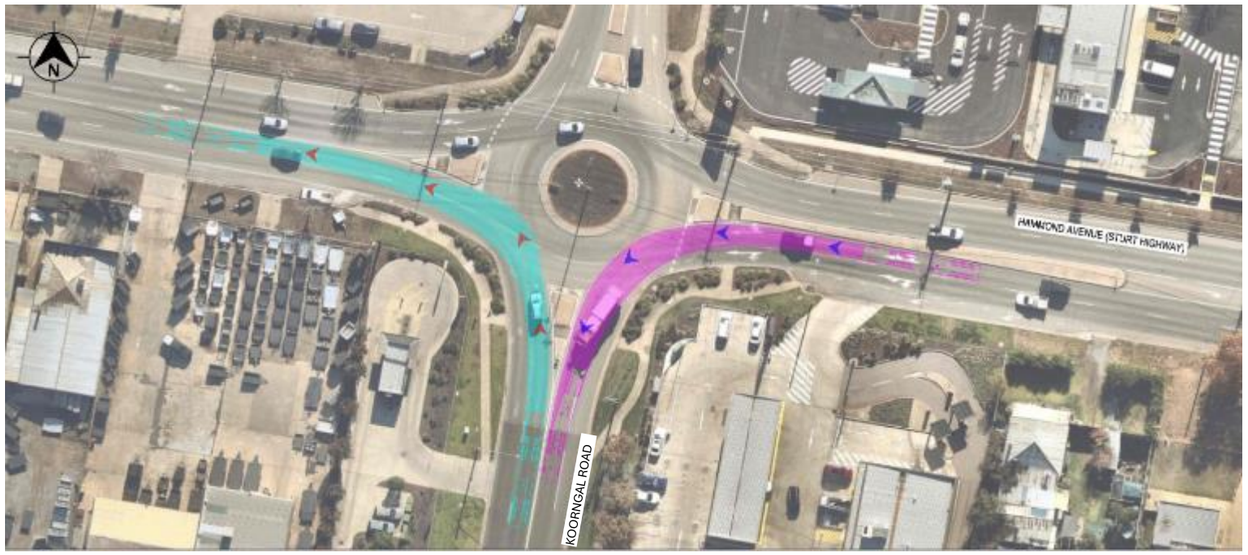
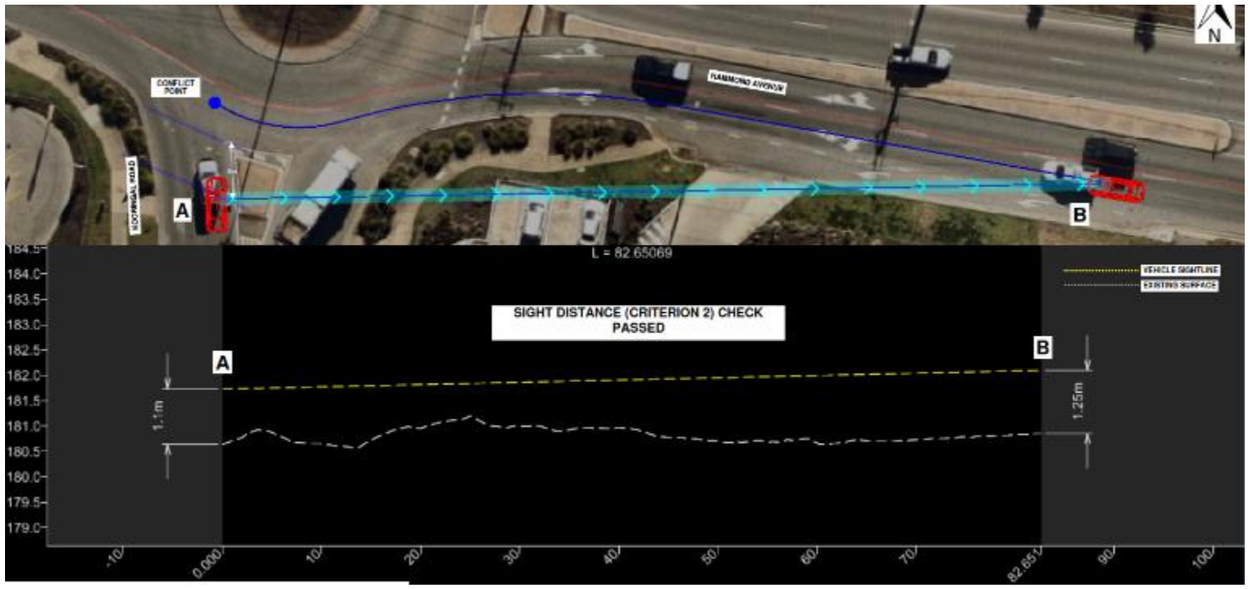
The three headings (orange) are the high level 'parts' of construction, but they are not three distinct parts, they overlap, over the Project lifespan
The project ebbs and flows, the numbers below are not going to occur exactly as shown, all day, every day. Peak = when construction peaks (i.e. worst case)
Movements = in and out

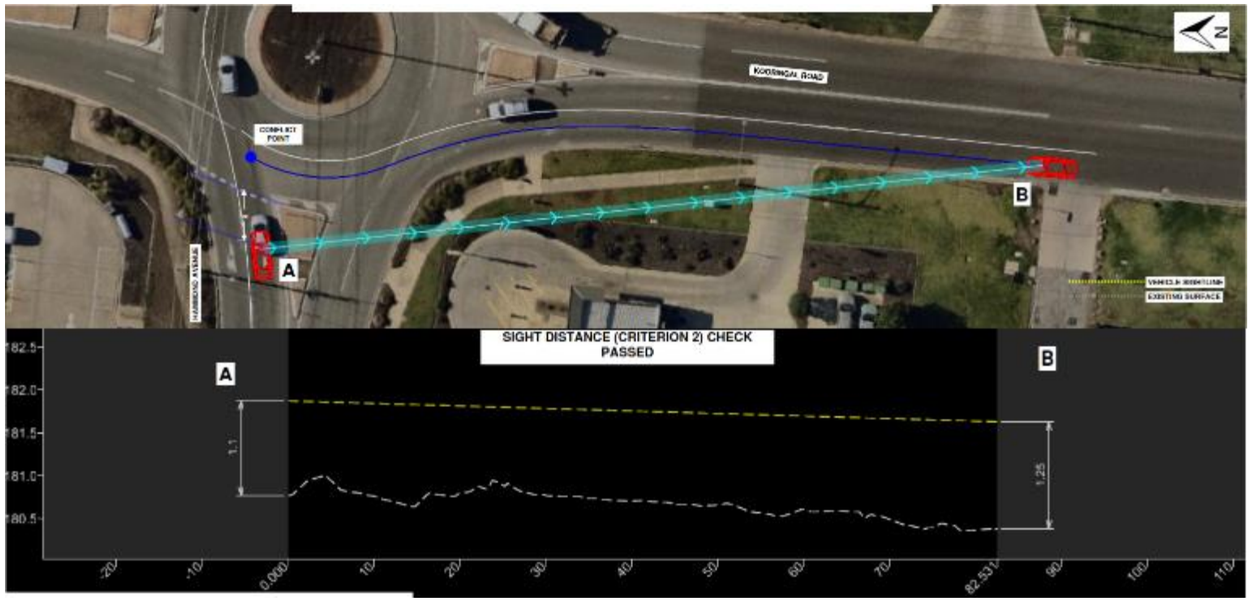
										2025				2026-2027								2027-2028			
										Civil Earthworks - tracks, APs etc Peak Traffic Movements (per hour)				Tower Assembly - Foundation & Structure Peak Traffic Movements (per hour)				Stringing (installing wires) Peak Traffic Movements (per hour)							
ID	Intersection (state/local)	Location	Intended use	SISD Compliant (m)				SSD Compliant (m)		UHF Protocol	Layout (UC = unchannelled)	Light Vehicle	Heavy Vehicle	Total	In use (weeks)	Light Vehicle	Heavy Vehicle	Total	In use (weeks)	Light Vehicle	Heavy Vehicle	Total	In use (weeks)	Issues	Proposed Mitigations	Comment	TfNSW required mitigation measures to be implemented prior to use of the intersection
				Left	Yes/No	Right	Yes/No	NB	SB																		
1	Sturt Hwy/Kooringal Rd	East Wagga Wagga	Light vehicle access to Ball Pl main office Limited rigid trucks from the Olympic Hwy based quarry Some access points for tower assembly and stringing	84	Yes	84	Yes	Yes	Yes	No	Roundabout	6	18	24	31	4	14	18	55	4	6	10	39	None	None	The roundabout currently handles road trains through to light vehicles (every day and night) as the main east-west access to the Olympic Hwy and Wagga Wagga from the Hume Hwy Kooringal Rd is the main access to a heavy industrial estate, which see large numbers of heavy vehicles every day	No mitigation measure identified by TfNSW
2	Sturt Hwy/Elizabeth Rd	Forest Hill	Light vehicles moving staff to the camps Water carts may use the Riverina Water Point, but this will be done from Gregadoo Rd E	120	Yes	120	Yes	Yes	Yes	No	Channelised Right (CHR)	4 (see Comment)	N/A	4	31	18 (see Comment)	N/A	18	55	12 (see Comment)	N/A	12	39	None	None	The largest HLW vehicle using this intersection will be a 22 seater mini bus These numbers are only on two days a week as shifts travel to and from the airport	No mitigation measure identified by TfNSW
3	Snowy Mountains Hwy/Ellerslie Rd	Ellerslie	Access points & access tracks for tower assembly and stringing. Lay down site	248	Yes	255	Yes	Yes	No	No	T - UC flared	6	10	16	42	4	8	12	52-69	4	4	8	41	Southbound SSD failed	Install sign W2-4®	Pruning of vegetation would improve the deficiency identified, but this is not within the project scope. Suggest engineering solutions to this issue. TfNSW has advised engineering solutions are not required	Remove sight consraints or Temporary Speed zone reduction with associated signage is required to be implemented to achieve compliant SSD. Temporary traffic management required for the duration of use, only permitted during construction hours—approvals required - S138 with concurrence from TfNSW for signage and an ROL.
4	Snowy Mountains Hwy/Yaven Creek Rd	Ellerslie	Access points & access tracks for tower assembly and stringing. Lay down site (on Ellerslie Rd)	270	Yes	270	Yes	Yes	Yes	No	T - UC flared	6	10	16	42	4	8	12	52-69	4	4	8	41	No longitudinal or transverse line marking on Yaven Creek Rd.	None	No comment Suggest engineering solutions to this issue. TfNSW has advised engineering solutions are not required	No mitigation measure identified by TfNSW
5	Batlow Road/Wondalga Rd	Wondalga	Access points & access tracks for tower assembly and stringing	245	No	275	No	No	No	No	T - UC flared	8	26	34	42	6	22	28	52-69	4	8	12	41	SISD and SSD failed in both directions	None, as a W2-4(L) has already been installed NB and a W24(R) SB	A reduction of the existing speed on the approach to the intersection would improve the intersection performance but this is not within the project scope Suggest engineering solutions to this issue. TfNSW has advised engineering solutions are not required	Temporary Speed zone reduction with associated signage is required to be implemented to achieve compliant SISD and SSD. Temporary traffic management required for the duration of use, only permitted during construction hours—approvals required - S138 with concurrence from TfNSW for signage and an ROL.
6	Batlow Road/Lower Bago Rd	Batlow	Light vehicles moving staff to the camps and work sites Water carts servicing the camp	250	No	250	No	No	No	No	Basic Right (BAR)	6	18	24	42	20	12	32	52-69	20	12	32	41	SISD and SSD failed in both directions	None, as NB: A W2-4(L) with road name has already been installed, along with a curve warning sign and a W2-9(R) side road on a curve sign SB: A W2-4(R) with road name has already been installed, along with a curve warning sign and a W2-9(L) side road on a curve sign	After camp construction is complete it will mainly be light vehicles moving staff from camp to worksite and back before and after traffic peak hours. Two 19m water carts will make 8 movements from the camp to the water point (almost) every day A reduction of the existing speed on the approach to the intersection would improve the intersection performance but this is not within the project scope	Temporary Speed zone reduction with associated signage is required to be implemented to achieve compliant SISD and SSD. Temporary traffic management required for the duration of use, only permitted during construction hours—approvals required - S138 with concurrence from TfNSW for signage and an ROL.
7	Hume Hwy/Keajura Rd West side	Tarcutta	Access points & access tracks for tower assembly and stringing.	SISD not required NB carriageway on a divided road		290	Yes	Yes	Not required as single carriageway	Yes	T - UC flared	10	14	24	42	10	12	22	52-69	6	4	10	41	None	Install CALL UP signage for 19m semis or larger entering Keajura West from Hume Hwy north bound Access to be left in left out only Stagger/schedule HV arrival and departures to avoid peaks (as far as that is reasonable and practical) AND to avoid convoying of vehicles, especially on exiting site Install single VMS NB to warn of trucks turning during use	The existing intersection (used by hay and cattle trucks) does not have a deceleration or acceleration lane and the construction of one, to TfNSW requirements, is not within the project scope SD is achieved at 110km/hr with a 2.0 reaction time and this may be the reason an deceleration and acceleration lane were not originally constructed	No mitigation measure identified by TfNSW
8	Hume Hwy/Comatawa Rd	Tarcutta	Access points & access tracks for tower assembly and stringing	SISD not required SB carriageway on a divided road		290	Yes	Not required as single carriageway	Yes	Yes	T - UC flared	2	18	20	42	8	14	22	52-69	4	6	10	41	None	Install CALL UP signage for 19m semis or larger entering Comatawa Rd from Hume Hwy south bound Access to be left in left out only Stagger/schedule HV arrival and departures to avoid peaks (as far as that is reasonable and practical) AND to avoid convoying of vehicles, especially on exiting site. Install single VMS SB to warn of trucks turning during use of access by 19m semis	The existing intersection (used by hay and cattle trucks) does not have a deceleration or acceleration lane and the construction of one to TfNSW requirements, is not within the project scope SD is achieved at 110km/hr with a 2.0 reaction time and this may be the reason an deceleration and acceleration lane were not originally constructed	No mitigation measure identified by TfNSW
9	Olympic Hwy/Sunset Ln	Kapooka (Wagga Wagga)	Quarry access	250	No	240	Yes	No	No	No	T - UC flared with a BAL like design at the intersection	2	6	8	31	0	1	1	55	N/A	N/A	N/A	N/A	SISD failed in one direction and the SSD failed for light vehicles For trucks, as they have higher eye height, the SSD did not fail	None, as NB a W2-4(R) has already been installed	Once tracks and foundations are complete vehicle movements from the quarry will be infrequent A reduction of the existing speed on the approach to the intersection would improve the intersection performance but this is not included within the project scope Suggest engineering solutions to this issue. TfNSW has advised engineering solutions are not required	No mitigation measure identified by TfNSW
10	Hume Hwy/Keajura Rd East side	Tarcutta	Access points & access tracks for tower assembly and stringing	SISD not required SB carriageway on a divided road		290	No	Not required as single carriageway	Yes	Yes	T - UC flared	10	13	23	42	10	11	21	52-69	6	4	10	41	SISD failed	Install CALL UP signage for 12.5m trucks Access to be left in left out only Stagger/schedule12.5m arrival and departures to avoid peaks (as far as that is reasonable and practical) AND to avoid convoying of vehicles, especially on exiting site. Install single VMS SB to warn of trucks turning during use of access by 12.5m trucks As this is a driveway installing a W2-4(L) sign is not warranted (W2-4(L) are for (side) roads only	This is not a state and local road intersection This AP will be limited to 12.5m trucks and light vehicles The existing driveway/highway intersection does not have a deceleration or acceleration lane and the construction of one to TfNSW requirements, is not within the project scope SD is achieved at 110km/hr with a 2.0 reaction time and this may be the reason an deceleration and acceleration lane were not originally constructed	No mitigation measure identified by TfNSW

Access Point 1 - Sturt Hwy / Kooringal Rd





1. SD FOR 60km/h = 84m (5 SEC GAP)
2. 1.10m = PASSENGER CAR DRIVER EYE HEIGHT.
3. 1.25m = TOP OF PASSENGER CAR.
4. 2.40m = TRUCK DRIVER EYE HEIGHT.
5. REACTION TIME (Rt) = 2.0 sec
6. GRADE CORRECTION APPLIED = 0% (FLAT)



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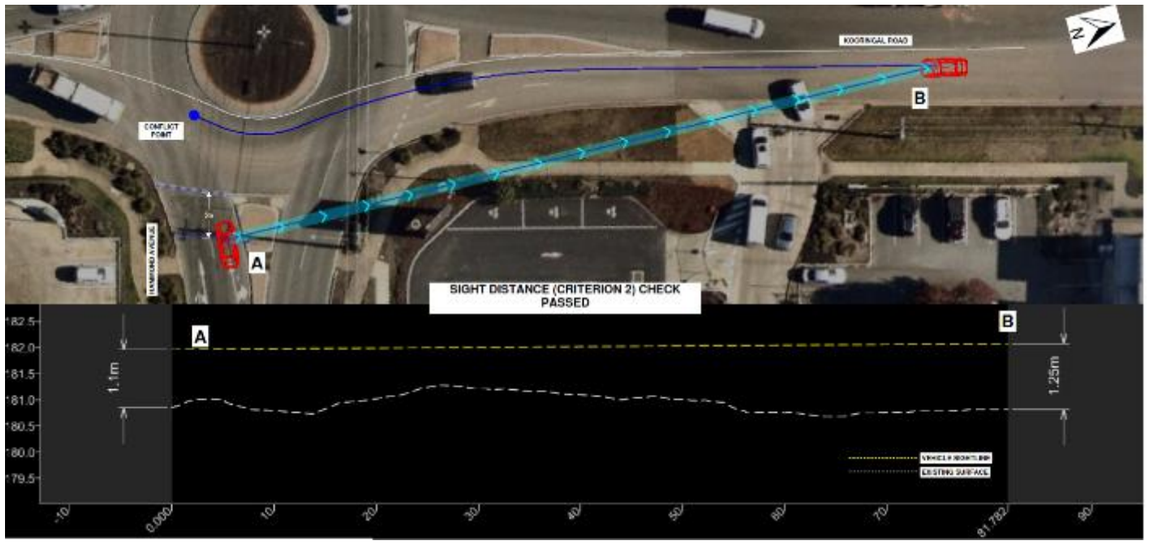
2. 1.10m = PASSENGER CAR DRIVER EYE HEIGHT.
3. 1.25m = TOP OF PASSENGER CAR.
4. 2.40m = TRUCK DRIVER EYE HEIGHT.
5. REACTION TIME (Rt) = 2.0 sec
6. GRADE CORRECTION APPLIED = 0% (FLAT)

Access Point 1 - Sturt Hwy / Kooringal Rd

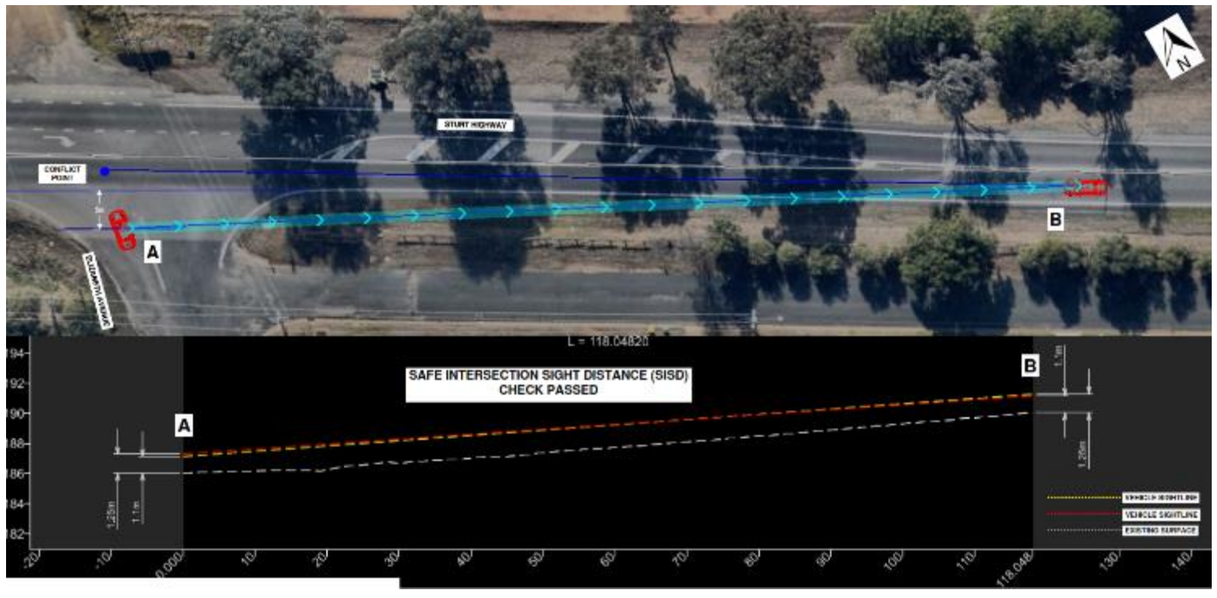


1. SD FOR 60km/h = 84m (5 SEC GAP)
2. 1.10m = PASSENGER CAR DRIVER EYE HEIGHT
3. 1.25m = TOP OF PASSENGER CAR.
4. 2.40m = TRUCK DRIVER EYE HEIGHT.
5. REACTION TIME (Rt) = 2.0 sec
6. GRADE CORRECTION APPLIED = 0% (FLAT)

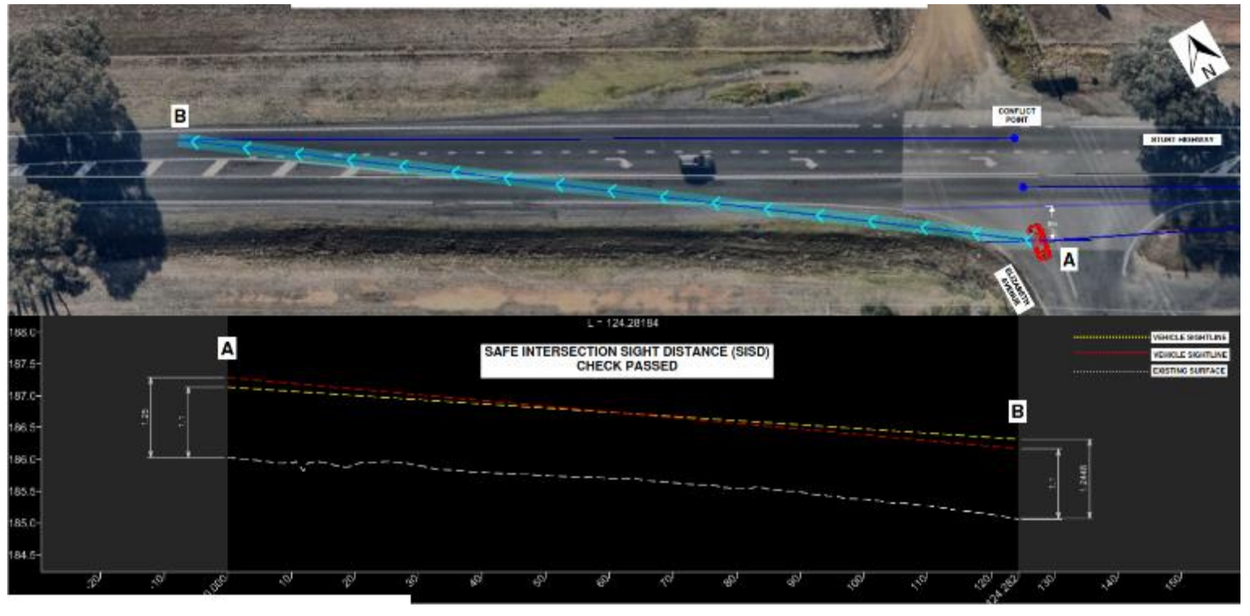
STOPPING SIGHT DISTANCE - EASTBOUND LANE

STOPPING SIGHT DISTANCE - WESTBOUND LANE

Access Point 2 - Sturt Hwy / Elizabeth Rd



1. SISD FOR 60km/h = 120m
2. 1.10m = PASSENGER CAR DRIVER EYE HEIGHT
3. 1.25m = TOP OF PASSENGER CAR.
4. 2.40m = TRUCK DRIVER EYE HEIGHT.
5. REACTION TIME (Rt) = 2.0 sec
6. GRADE CORRECTION APPLIED = 0% (FLAT)



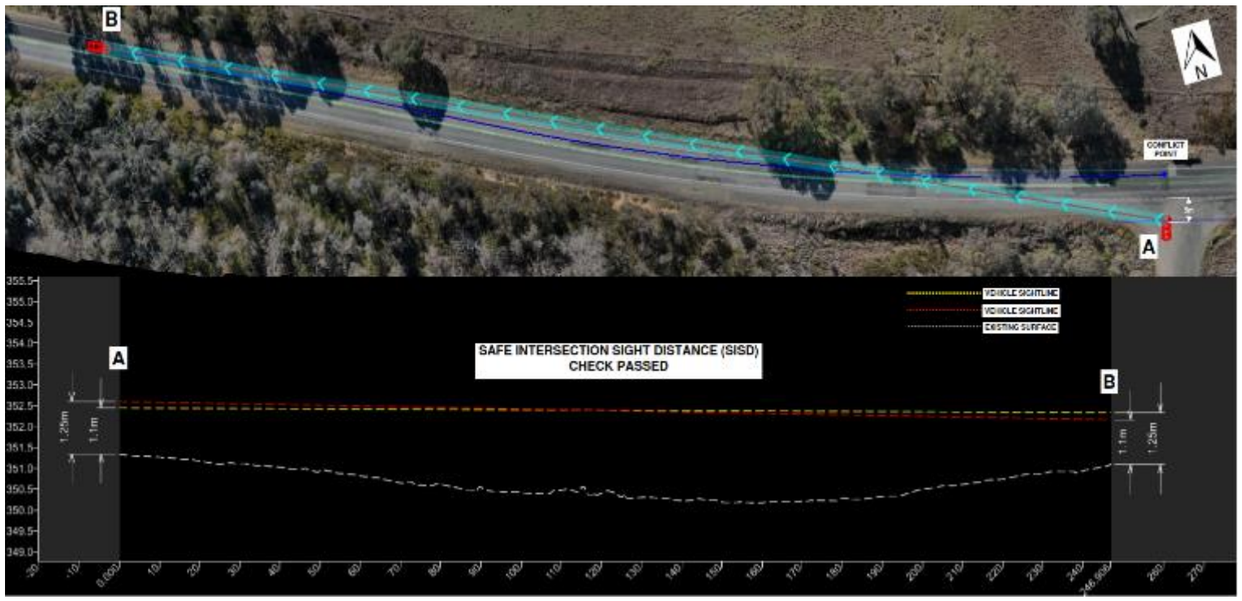
1. SISD FOR 60km/h = 120m
2. 1.10m = PASSENGER CAR DRIVER EYE HEIGHT
3. 1.25m = TOP OF PASSENGER CAR.
4. 2.40m = TRUCK DRIVER EYE HEIGHT.
5. REACTION TIME (Rt) = 2.0 sec
6. GRADE CORRECTION APPLIED = 0% (FLAT)

Access Point 2 - Sturt Hwy / Elizabeth Rd

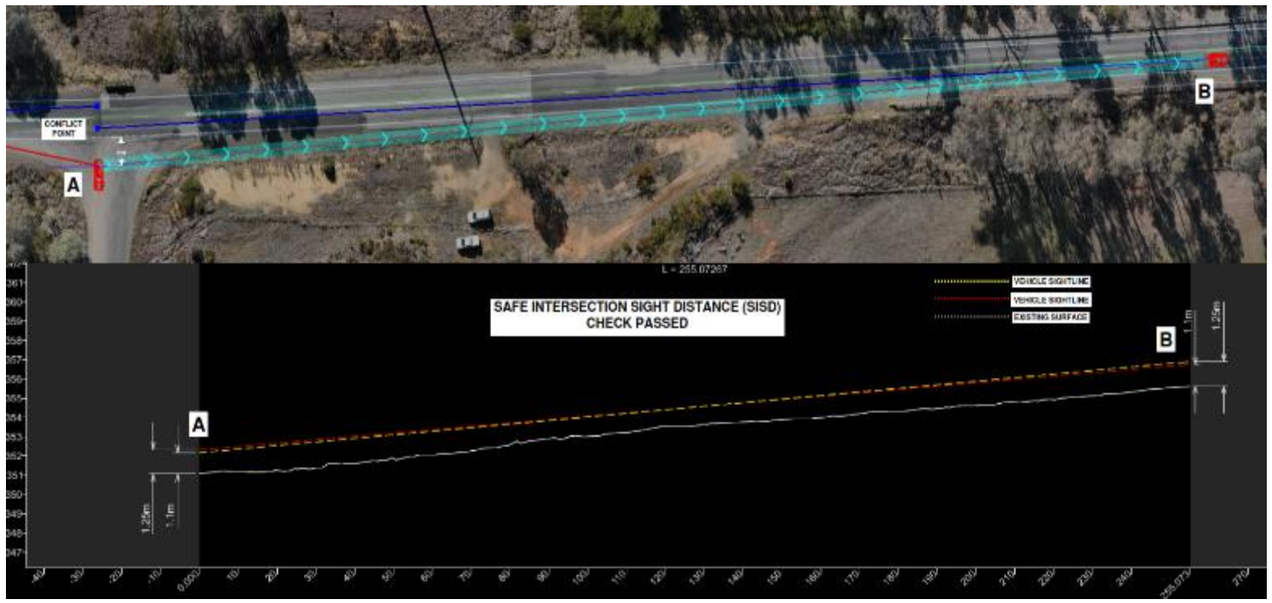
STOPPING SIGHT DISTANCE - EASTBOUND LANE

STOPPING SIGHT DISTANCE - WESTBOUND LANE

Access Point 3 - Snowy Mountain Hwy / Ellerslie Rd

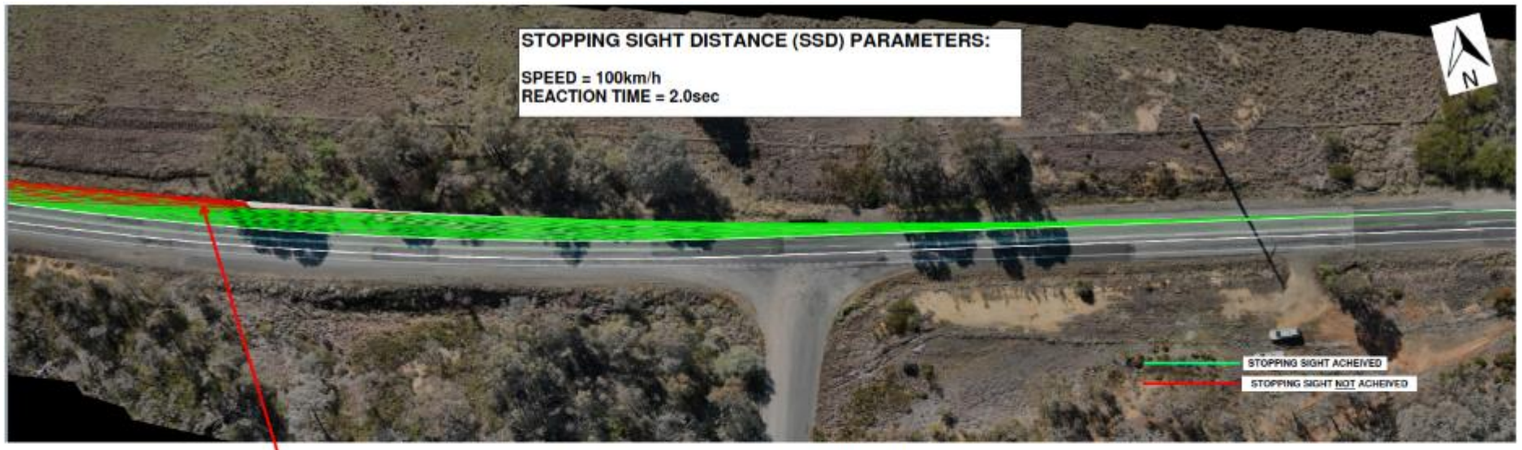


1. SISD FOR 100km/h = 248m
2. 1.10m = PASSENGER CAR DRIVER EYE HEIGHT.
3. 1.25m = TOP OF PASSENGER CAR.
4. 2.40m = TRUCK DRIVER EYE HEIGHT.
5. REACTION TIME (Rt) = 2.0 sec
6. GRADE CORRECTION APPLIED = 0% (FLAT)

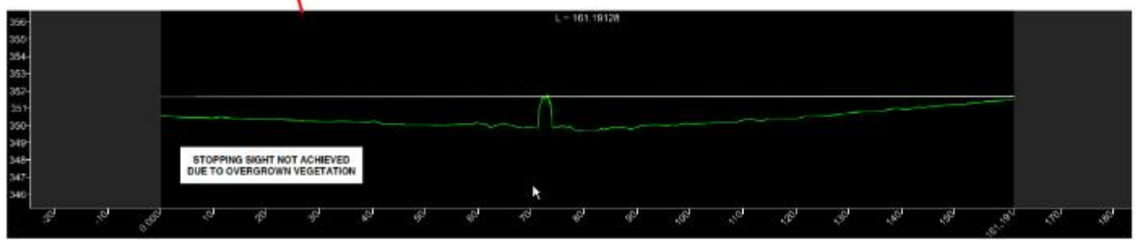


1. SISD FOR 100km/h = 255m (REFER NOTE 6)
2. 1.10m = PASSENGER CAR DRIVER EYE HEIGHT.
3. 1.25m = TOP OF PASSENGER CAR.
4. 2.40m = TRUCK DRIVER EYE HEIGHT.
5. REACTION TIME (Rt) = 2.0 sec
6. GRADE CORRECTION APPLIED = -2% (DOWNGRADE)

Access Point 3 - Snowy Mountain Hwy / Ellerslie Rd

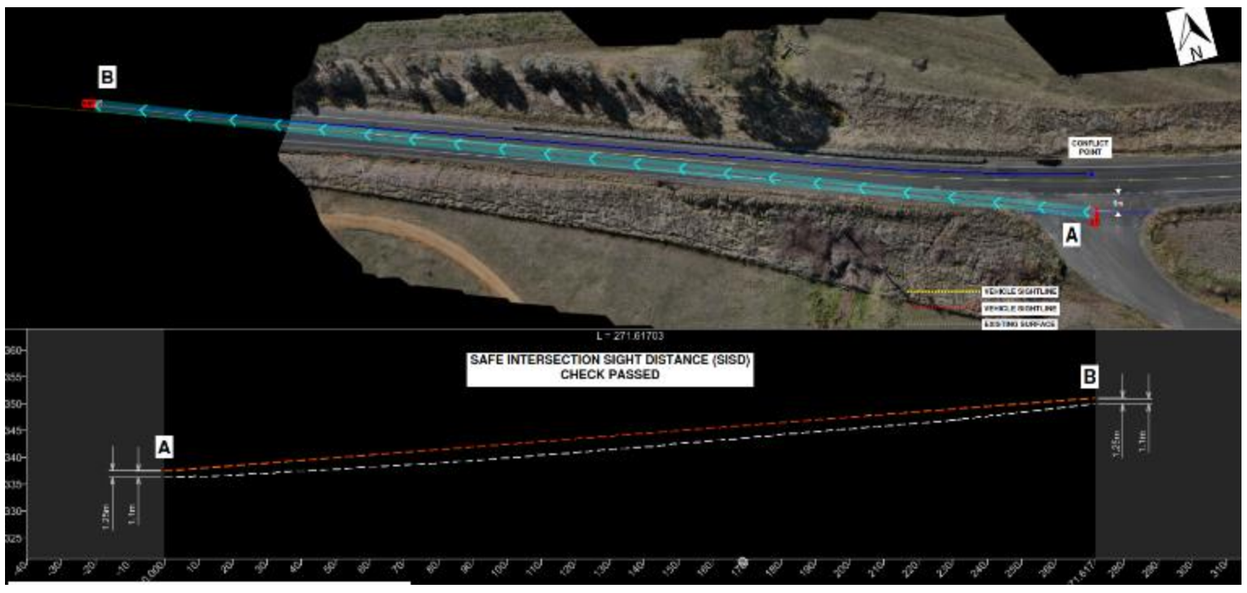


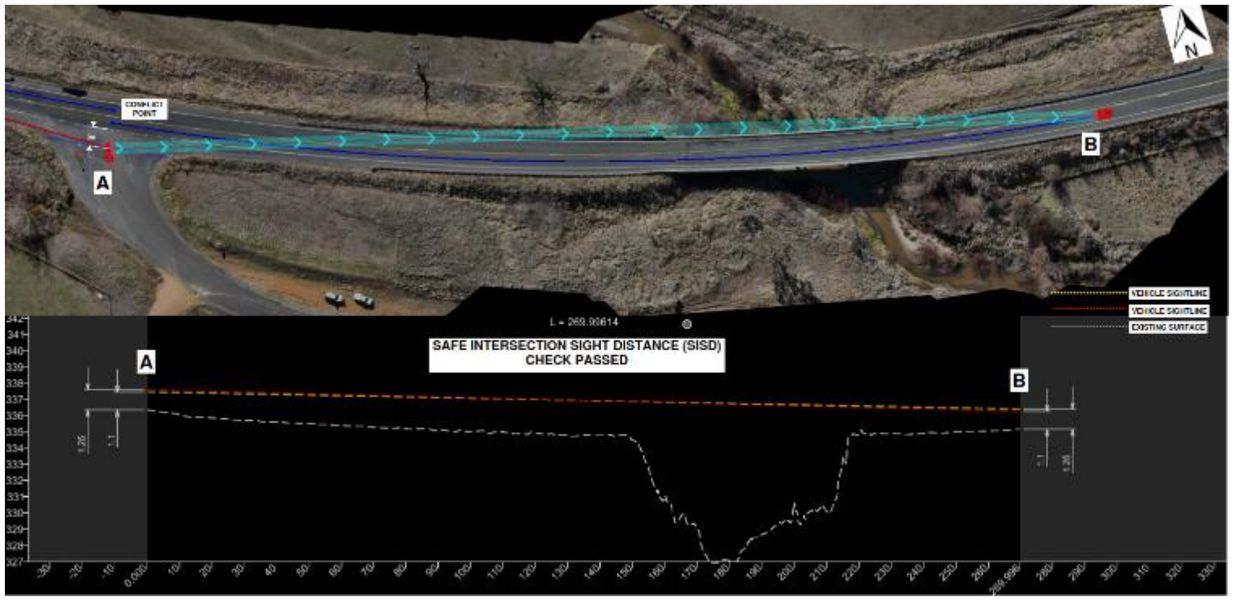
STOPPING SIGHT DISTANCE - SOUTHBOUND LANE



STOPPING SIGHT DISTANCE - NORTHBOUND LANE

Access Point 4 - Snowy Mountain Hwy / Yaven Creek Rd

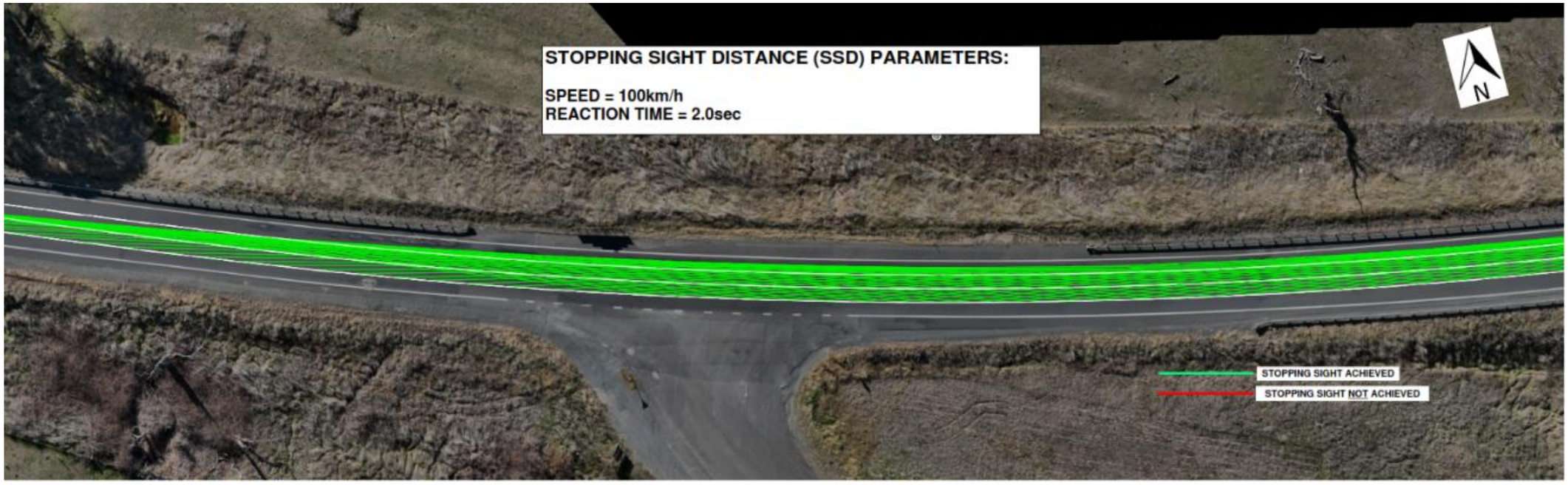




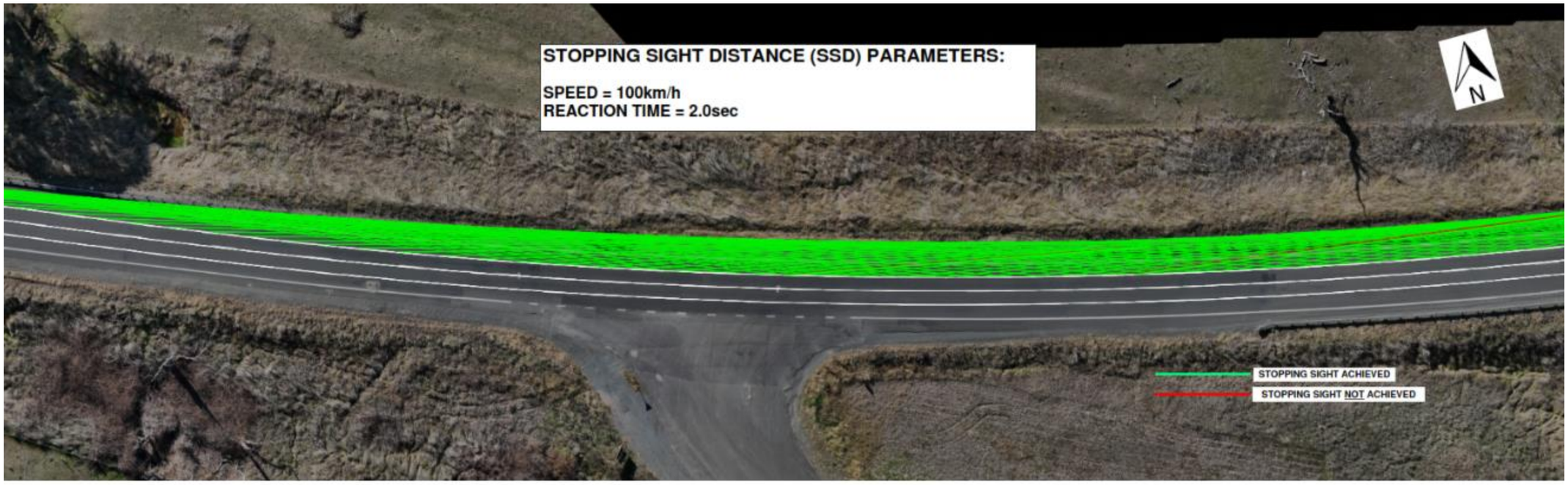
1. SISD FOR 100km/h = 270m (REFER NOTE 6)
2. 1.10m = PASSENGER CAR DRIVER EYE HEIGHT.
3. 1.25m = TOP OF PASSENGER CAR.
4. 2.40m = TRUCK DRIVER EYE HEIGHT.
5. REACTION TIME (Rt) = 2.0 sec
6. GRADE CORRECTION APPLIED = -5% (DOWNGRADE)

1. SISD FOR 100km/h = 270m (REFER NOTE 6)
2. 1.10m = PASSENGER CAR DRIVER EYE HEIGHT.
3. 1.25m = TOP OF PASSENGER CAR.
4. 2.40m = TRUCK DRIVER EYE HEIGHT.
5. REACTION TIME (Rt) = 2.0 sec
6. GRADE CORRECTION APPLIED = -5% (DOWNGRADE)

Access Point 4 - Snowy Mountain Hwy / Yaven Creek Rd

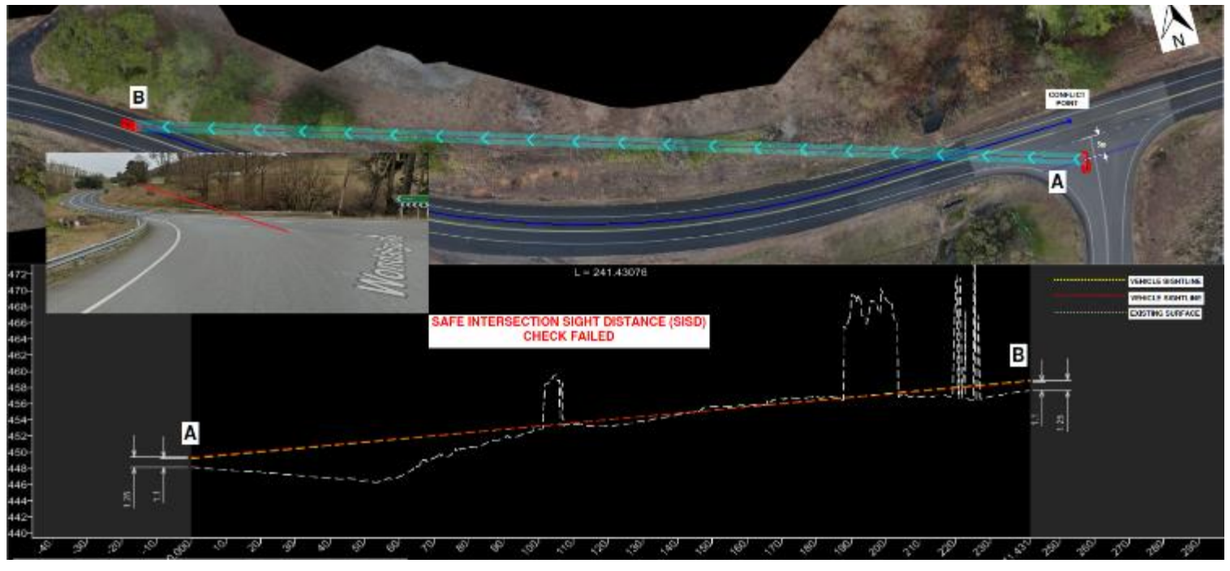


STOPPING SIGHT DISTANCE - NORTHBOUND LANE

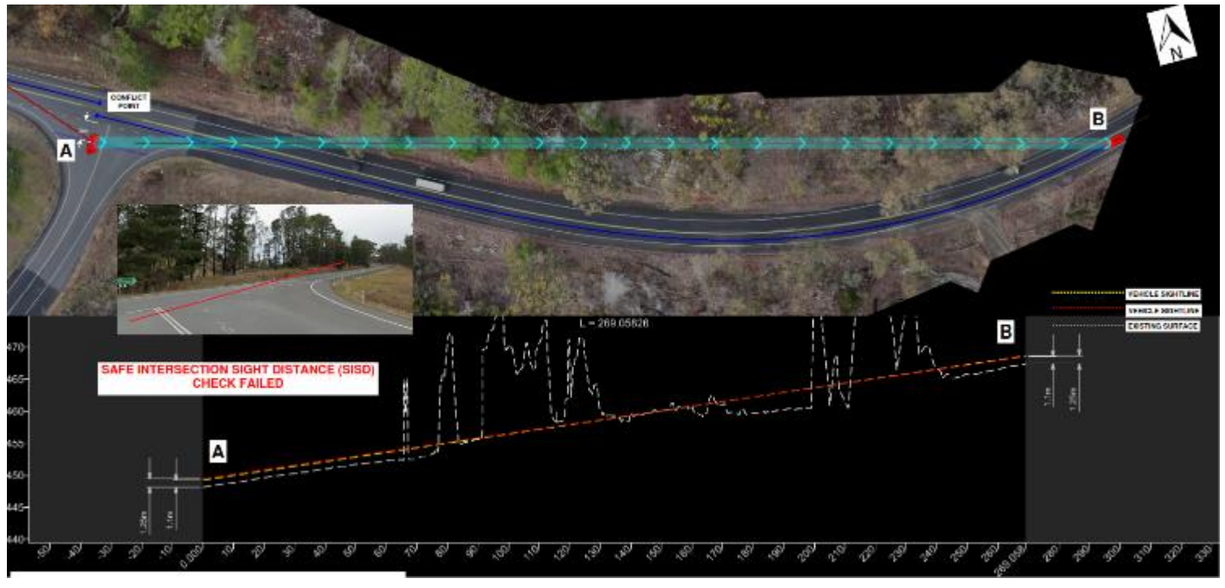


STOPPING SIGHT DISTANCE - SOUTHBOUND LANE

Access Point 5 - Wondalga Rd / Batlow Rd

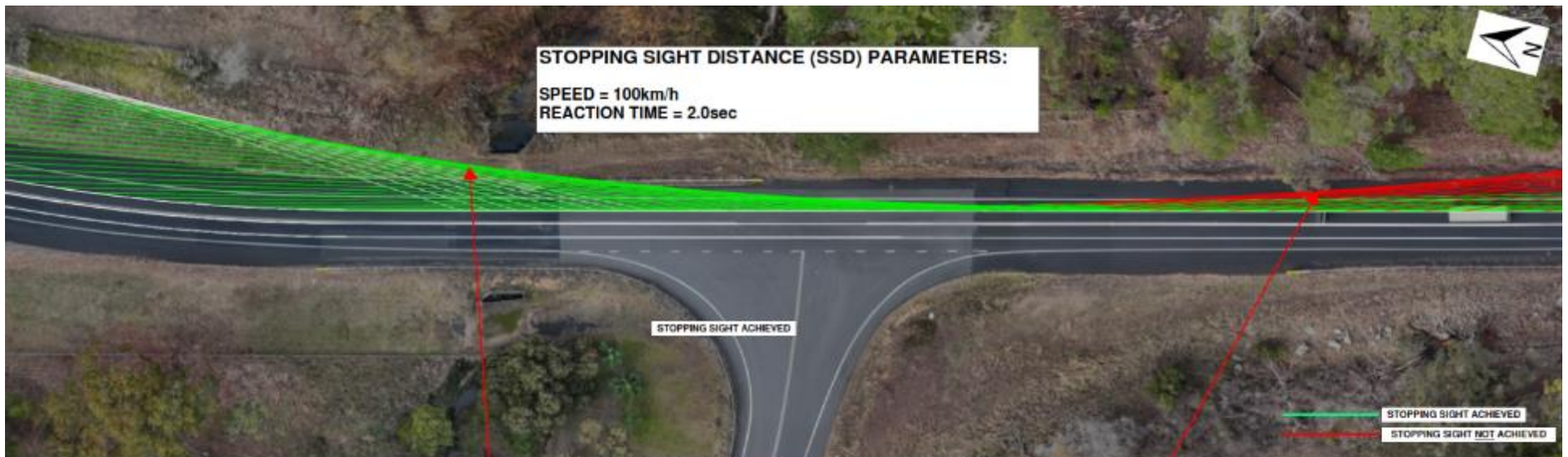


1. SISD FOR 100km/h = 245m (REFER NOTE 6)
2. 1.10m = PASSENGER CAR DRIVER EYE HEIGHT.
3. 1.25m = TOP OF PASSENGER CAR.
4. 2.40m = TRUCK DRIVER EYE HEIGHT.
5. REACTION TIME (Rt) = 2.0 sec
6. GRADE CORRECTION APPLIED = 2.5% (UPGRADE)
7. SUGGESTED 80km/h TO MEET THE SISD REQUIREMENT FOR THIS SITE BASED ON THE AVAILABLE DISTANCE.

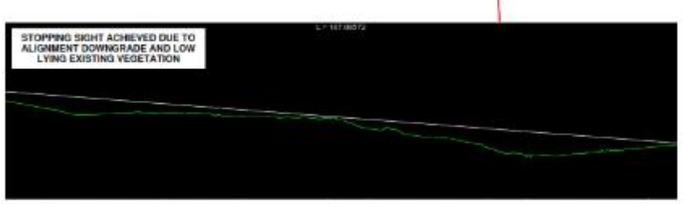


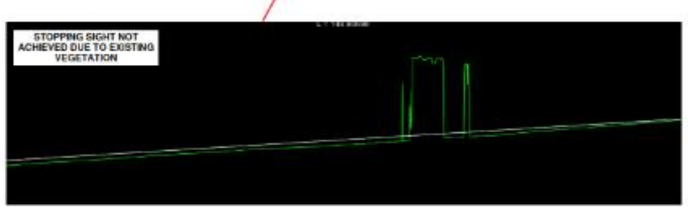
1. SISD FOR 100km/h = 275m (REFER NOTE 6)
2. 1.10m = PASSENGER CAR DRIVER EYE HEIGHT.
3. 1.25m = TOP OF PASSENGER CAR.
4. 2.40m = TRUCK DRIVER EYE HEIGHT.
5. REACTION TIME (Rt) = 2.0 sec
6. GRADE CORRECTION APPLIED = -7.0% (DOWNGRADE)
7. SUGGESTED 80km/h TO MEET THE SISD REQUIREMENT FOR THIS SITE BASED ON THE AVAILABLE DISTANCE.

Access Point 5 - Wondalga Rd / Batlow Rd

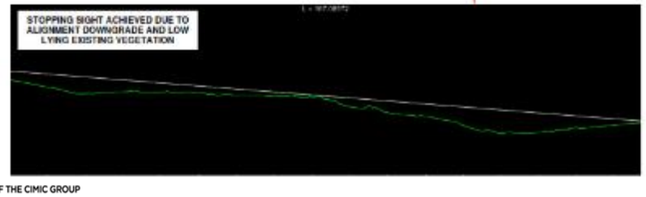


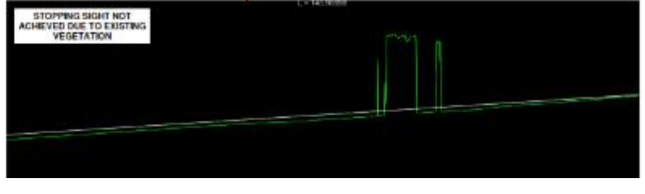
STOPPING SIGHT DISTANCE - SOUTHBOUND LANE



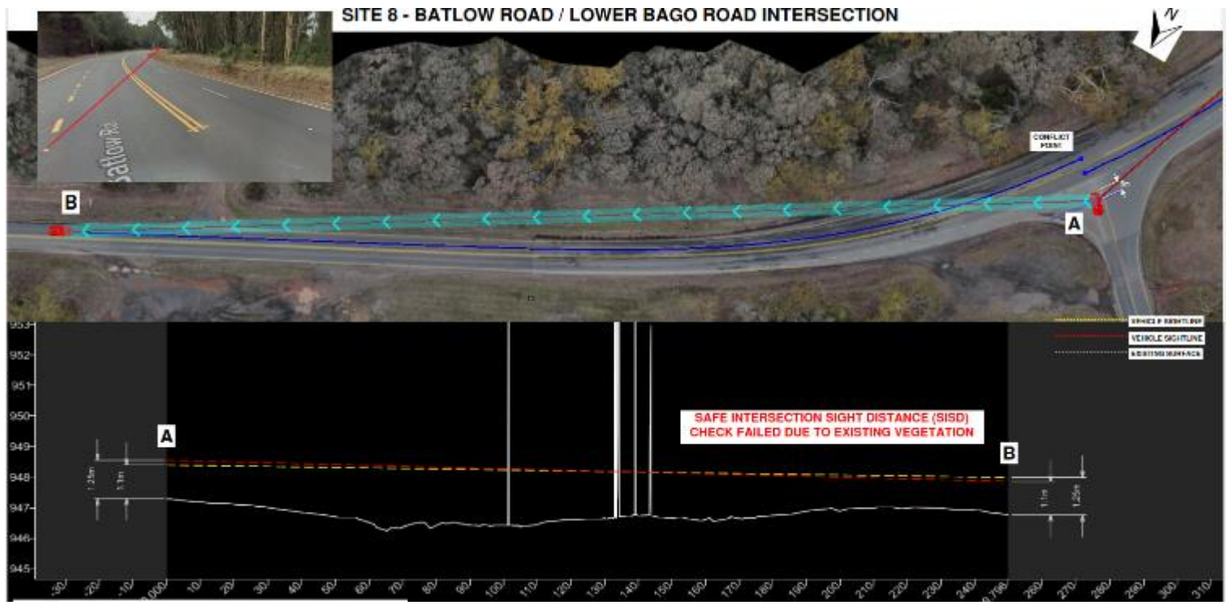


STOPPING SIGHT DISTANCE - NORTHBOUND LANE

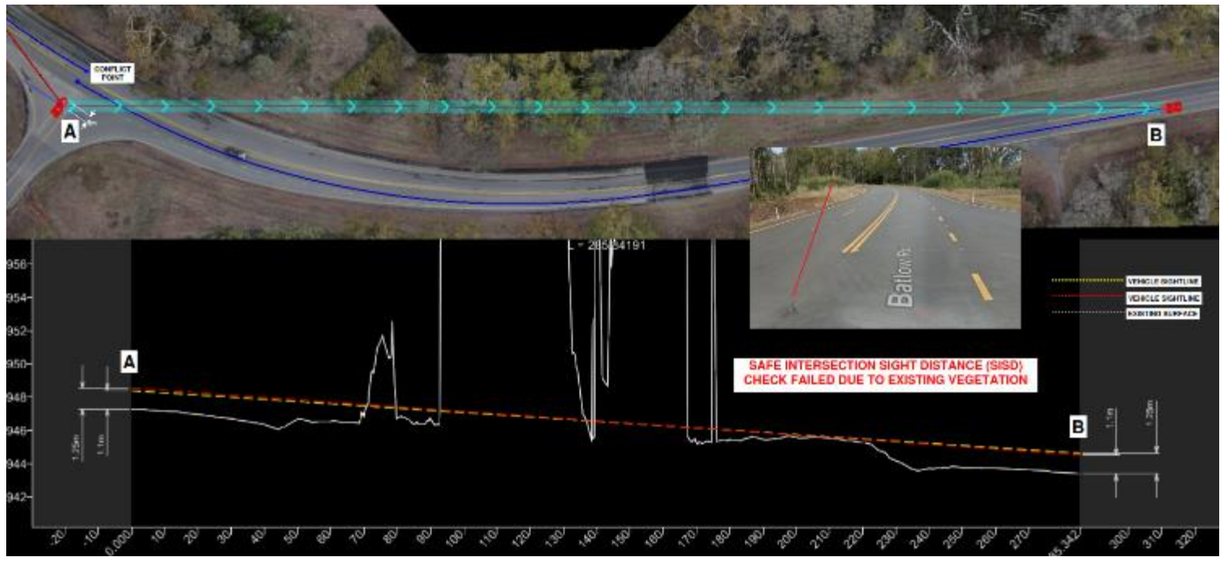




Access Point 6 - Batlow Road/Lower Bago Rd



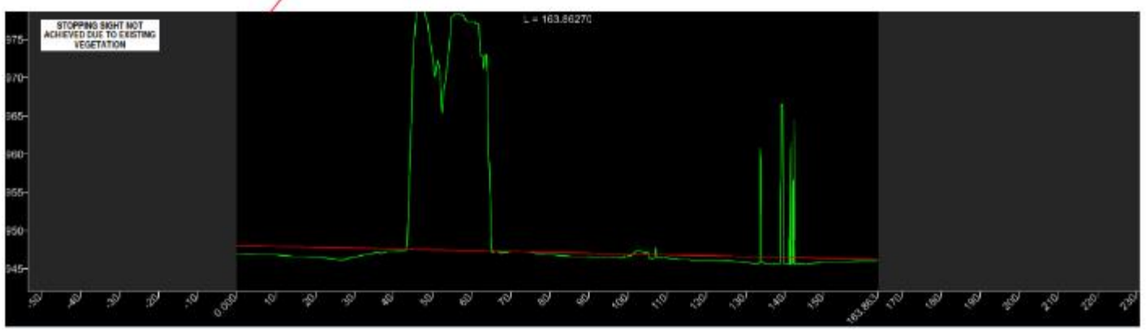
1. SISD FOR 100km/h = 250m (REFER NOTE 6)
2. 1.10m = PASSENGER CAR DRIVER EYE HEIGHT.
3. 1.25m = TOP OF PASSENGER CAR.
4. 2.40m = TRUCK DRIVER EYE HEIGHT.
5. REACTION TIME (Rt) = 2.0 sec
6. GRADE CORRECTION APPLIED = 0% (FLAT)

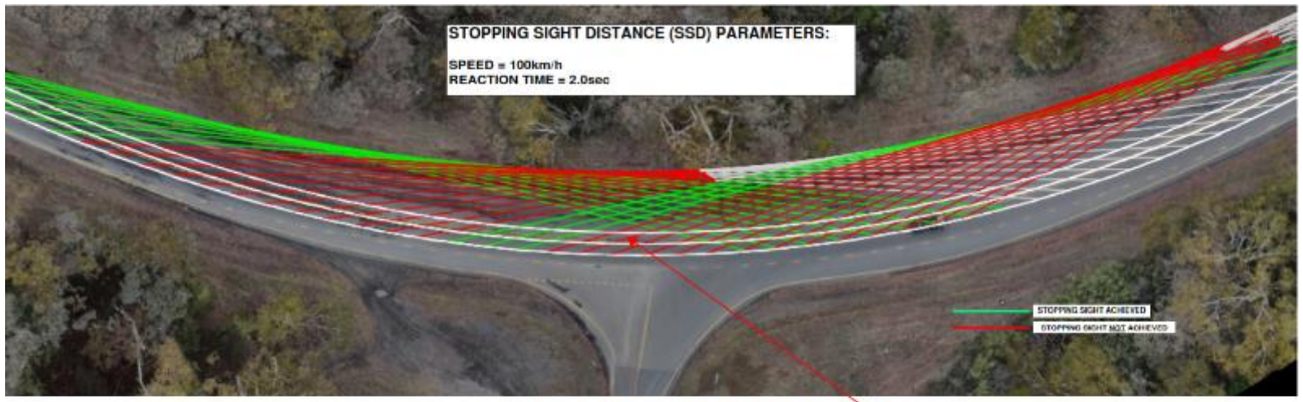


1. SISD FOR 100km/h = 250m (REFER NOTE 6)
2. 1.10m = PASSENGER CAR DRIVER EYE HEIGHT.
3. 1.25m = TOP OF PASSENGER CAR.
4. 2.40m = TRUCK DRIVER EYE HEIGHT.
5. REACTION TIME (Rt) = 2.0 sec
6. GRADE CORRECTION APPLIED = 0% (FLAT)

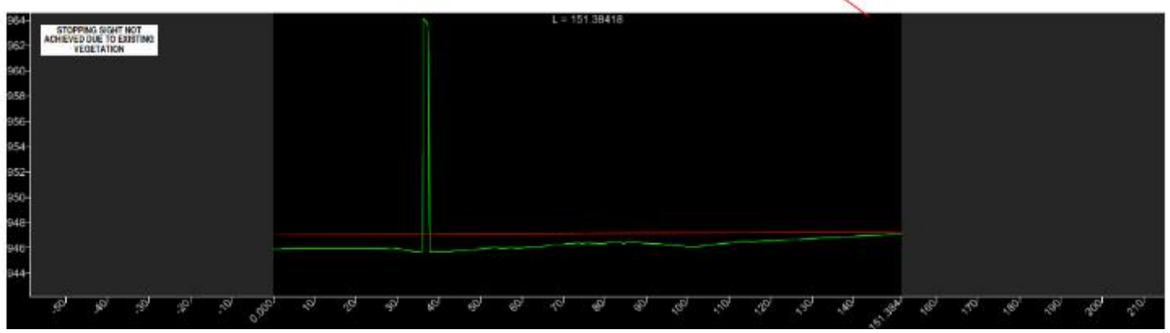
Access Point 6 - Batlow Road/Lower Bago

STOPPING SIGHT DISTANCE - SOUTHBOUND LANE

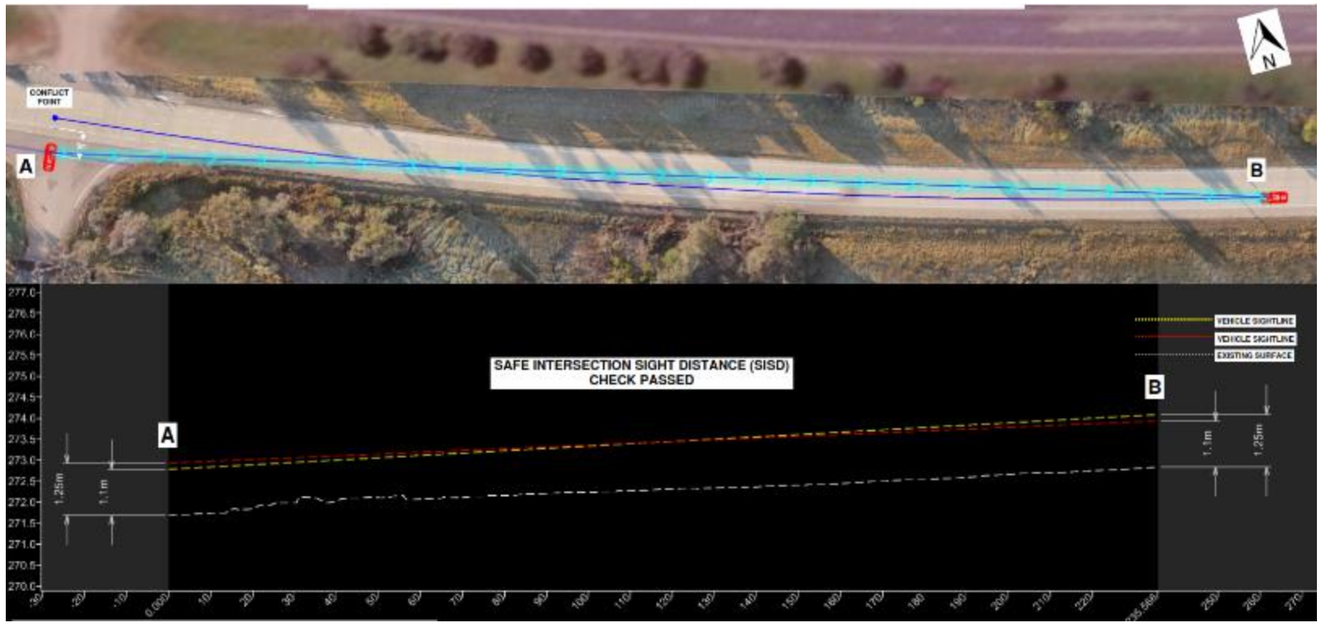




STOPPING SIGHT DISTANCE - NORTHBOUND LANE



Access Point 7 - Hume Hwy/Keajura Rd West side



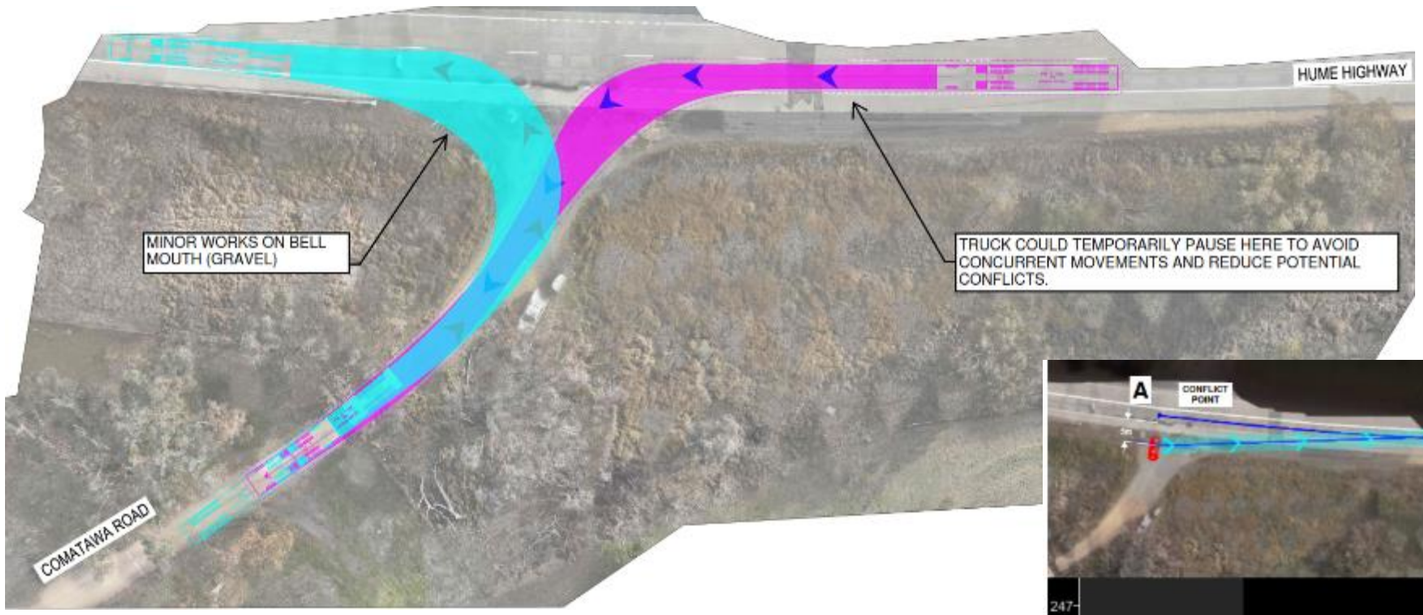
STOPPING SIGHT DISTANCE (SSD) PARAMETERS:

SPEED = 110km/h
REACTION TIME = 2.0sec

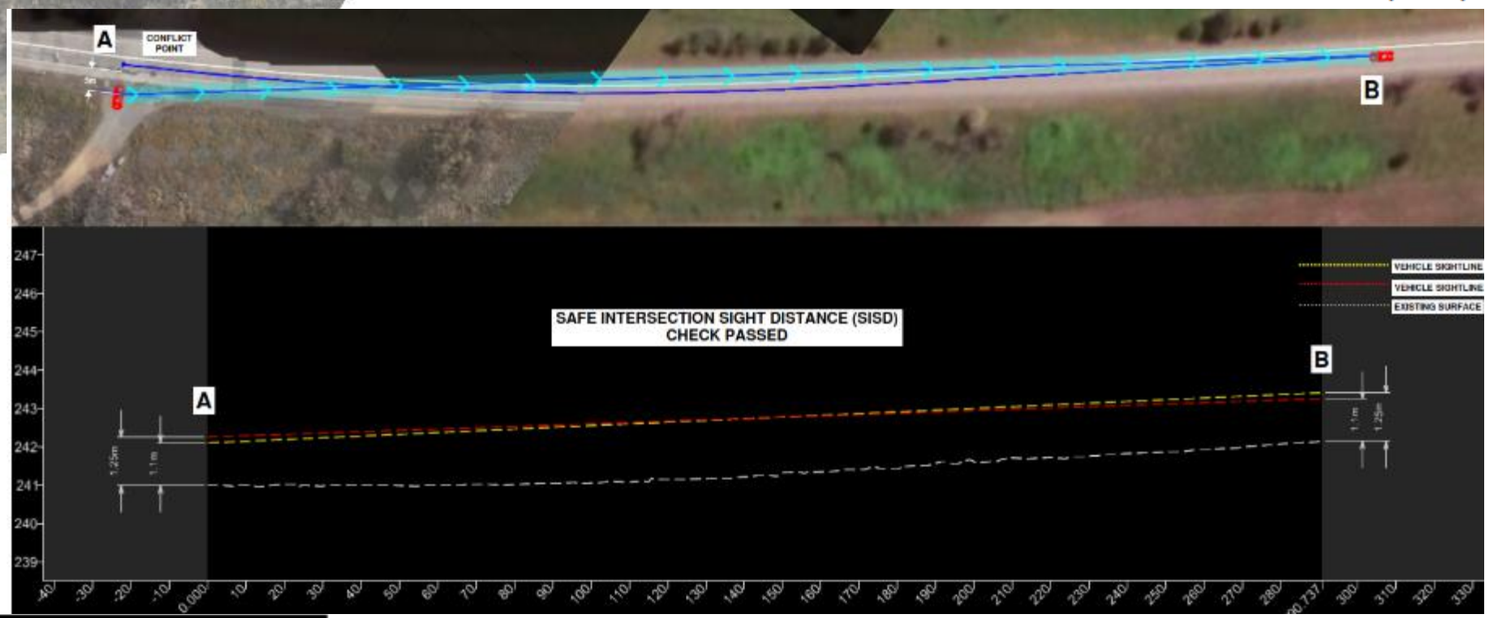
STOPPING SIGHT DISTANCE - NORTHBOUND CARRIAGEWAY

1. **SISD FOR 110km/h = 290m (REFER NOTE 6)**
2. **1.10m = PASSENGER CAR DRIVER EYE HEIGHT.**
3. **1.25m = TOP OF PASSENGER CAR.**
4. **2.40m = TRUCK DRIVER EYE HEIGHT.**
5. **REACTION TIME (Rt) = 2.0 sec**
6. **GRADE CORRECTION APPLIED = 0% (FLAT)**

Access Point 8 - Hume Hwy/Comatawa Rd



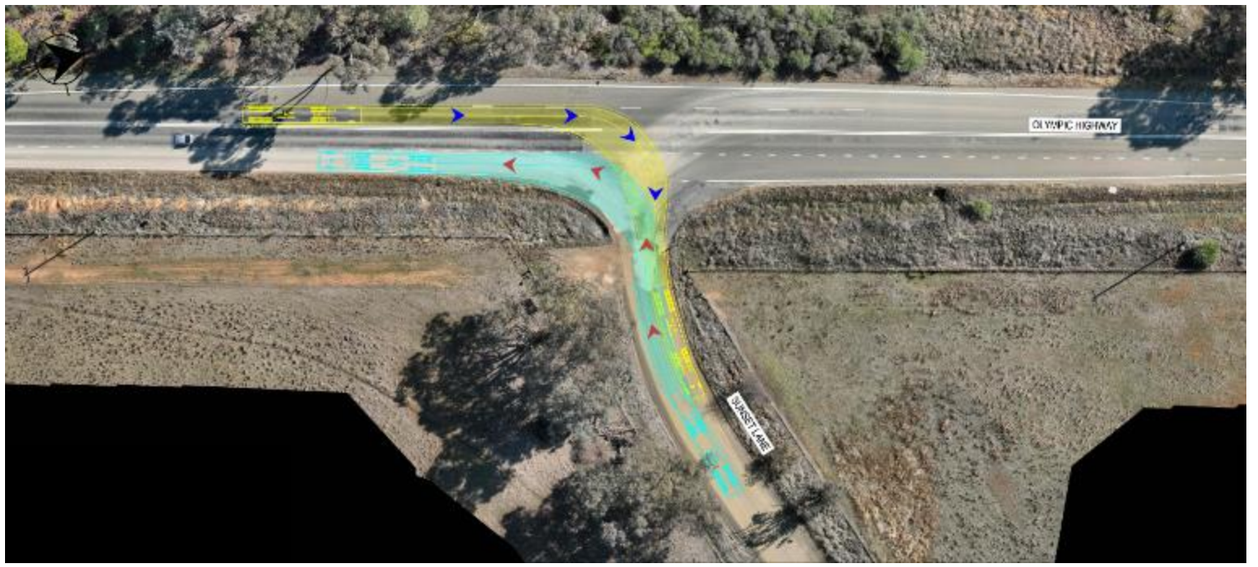
1. SISD FOR 110km/h = 290m (REFER NOTE 6)
2. 1.10m = PASSENGER CAR DRIVER EYE HEIGHT
3. 1.25m = TOP OF PASSENGER CAR.
4. 2.40m = TRUCK DRIVER EYE HEIGHT.
5. REACTION TIME (Rt) = 2.0 sec
6. GRADE CORRECTION APPLIED = 0% (FLAT)

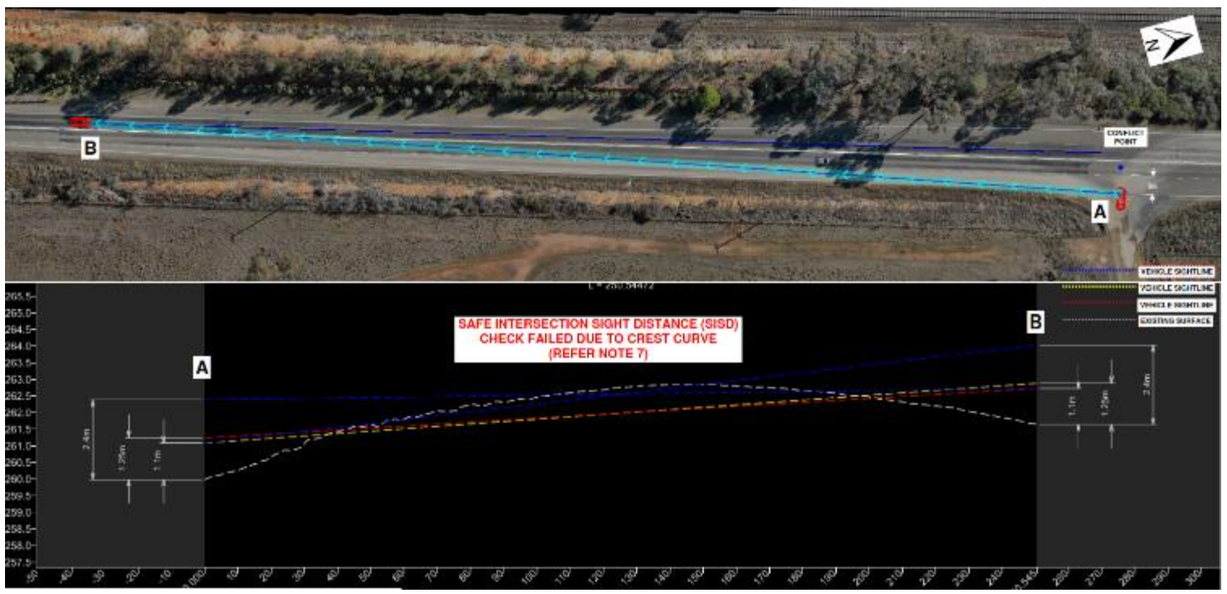


STOPPING SIGHT DISTANCE (SSD) PARAMETERS:

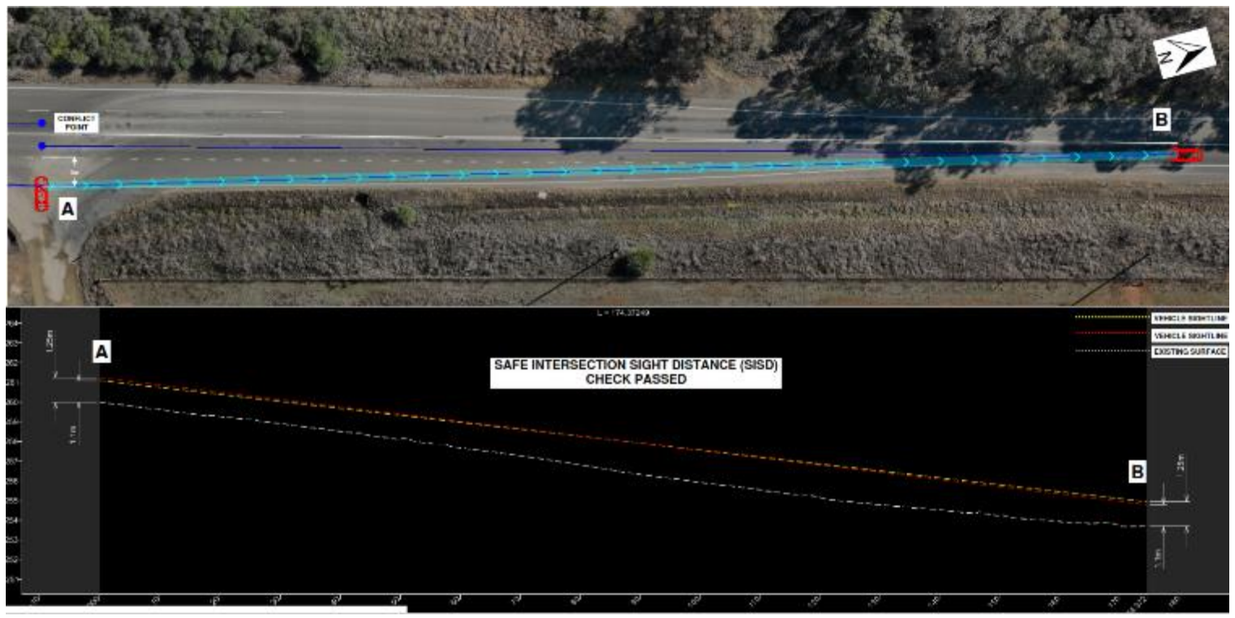
SPEED = 110km/h
REACTION TIME = 2.0sec

Access Point 9 - Olympic Hwy/Sunset Ln





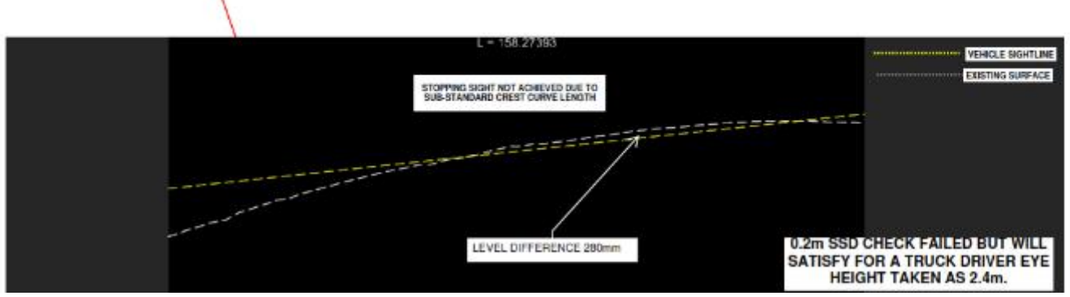
1. SISD FOR 100km/h = 250m (REFER NOTE 6)
2. 1.10m = PASSENGER CAR DRIVER EYE HEIGHT.
3. 1.25m = TOP OF PASSENGER CAR.
4. 2.40m = TRUCK DRIVER EYE HEIGHT.
5. REACTION TIME (Rt) = 2.0 sec
6. GRADE CORRECTION APPLIED = 0% (FLAT)
7. PROPOSED 80km/h TO MITIGATE TO MEET THE SISD REQUIREMENT FOR THIS SITE BASED ON THE AVAILABLE DISTANCE.

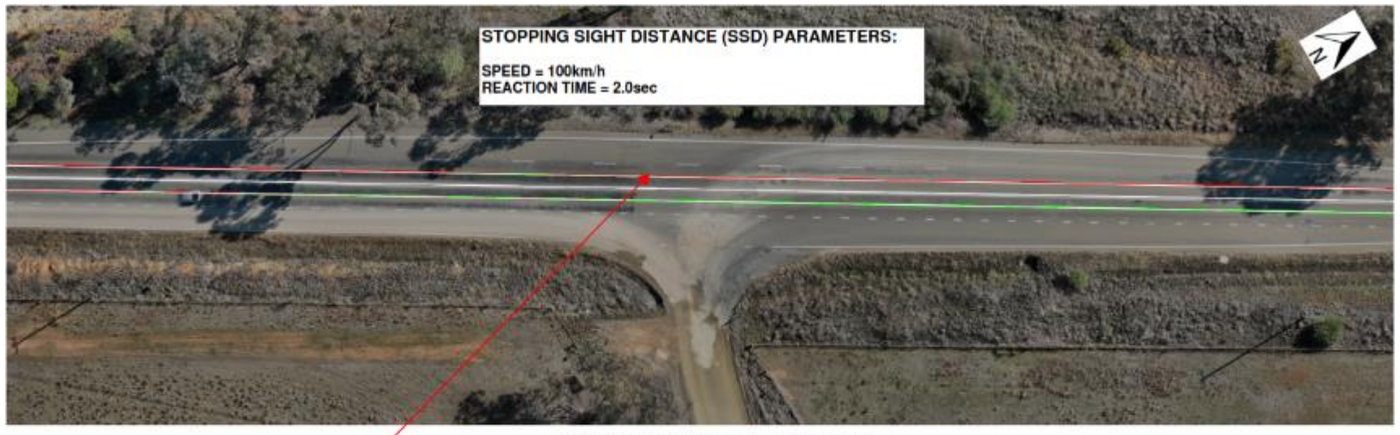


1. SISD FOR 100km/h = 240m (REFER NOTE 6)
2. 1.10m = PASSENGER CAR DRIVER EYE HEIGHT.
3. 1.25m = TOP OF PASSENGER CAR.
4. 2.40m = TRUCK DRIVER EYE HEIGHT.
5. REACTION TIME (Rt) = 2.0 sec
6. GRADE CORRECTION APPLIED = 2.6% (UPGRADE)

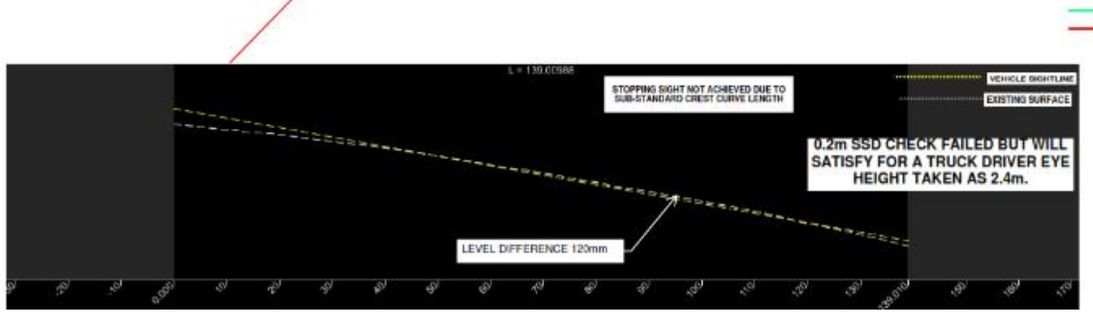
Access Point 9 - Olympic Hwy/Sunset Ln

STOPPING SIGHT DISTANCE - OLYMPIC HWY

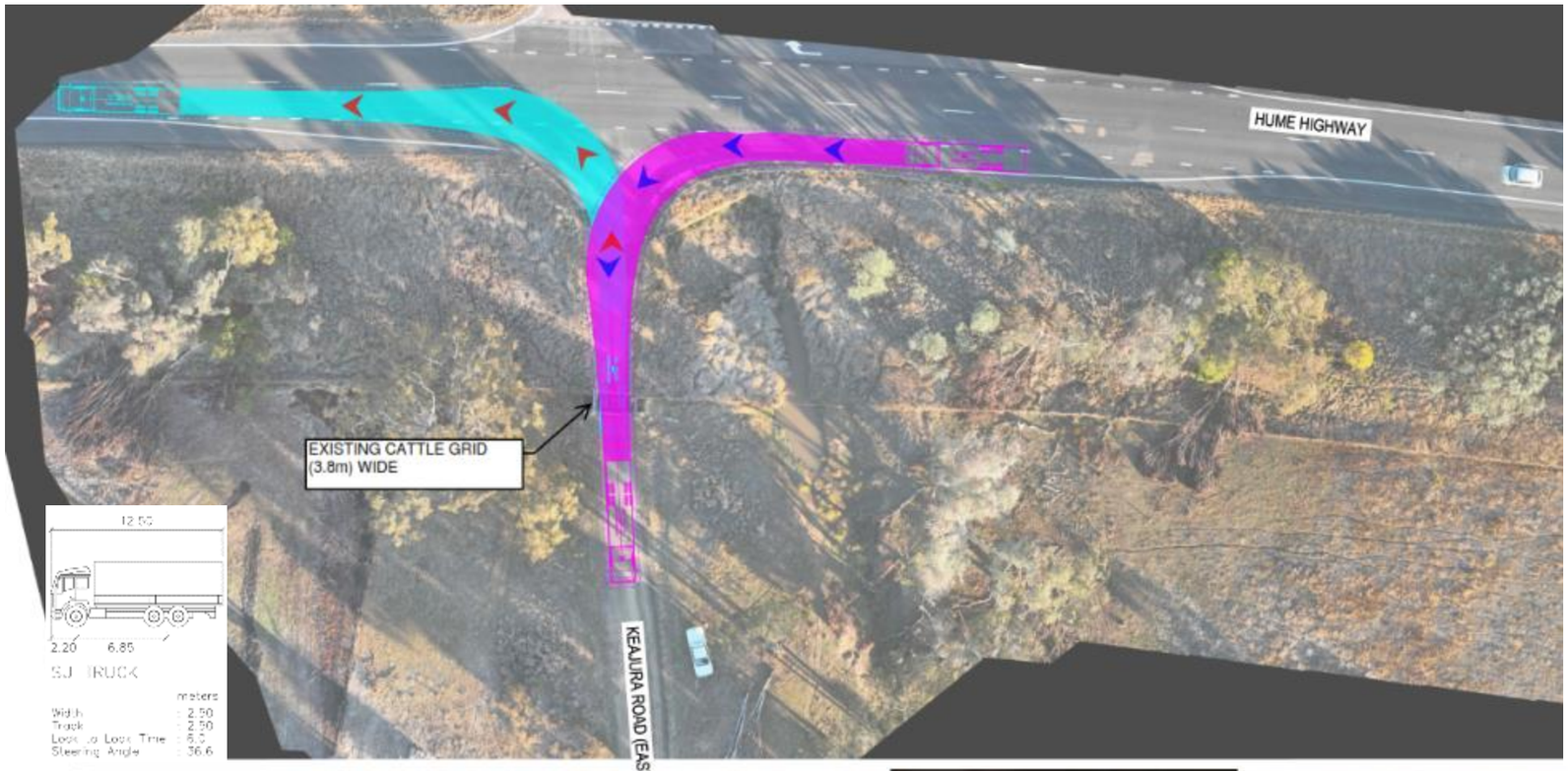


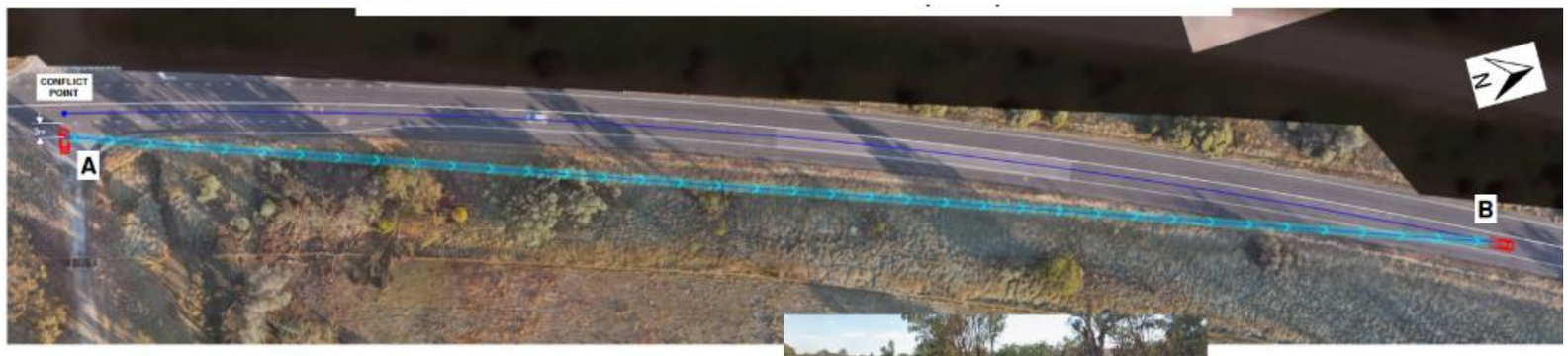


STOPPING SIGHT DISTANCE - OLYMPIC HWY



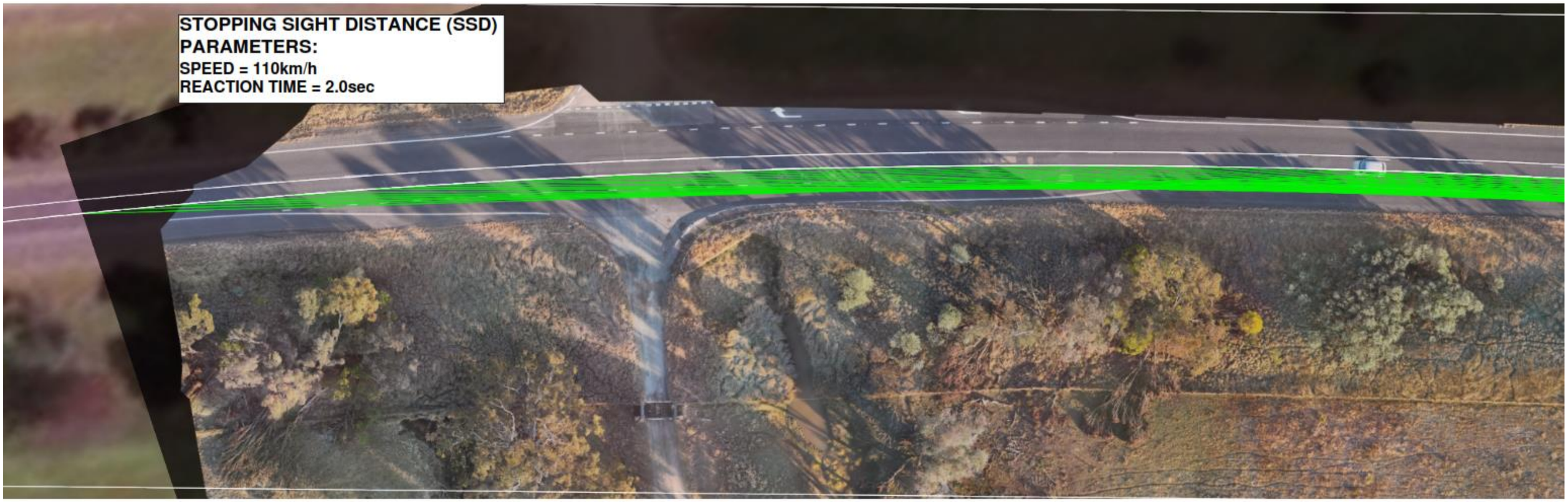
Access Point 10 – Hume Hwy Keajura Rd East (driveway, not local road)





1. SISD FOR 110km/h = 290m (REFER NOTE 6)
2. 1.10m = PASSENGER CAR DRIVER EYE HEIGHT
3. 1.25m = TOP OF PASSENGER CAR.
4. 2.40m = TRUCK DRIVER EYE HEIGHT.
5. REACTION TIME (Rt) = 2.0 sec
6. GRADE CORRECTION APPLIED = 0% (FLAT)

Access Point 10 – Hume Hwy Keajura Rd East (driveway, not local road)



STOPPING SIGHT DISTANCE - SOUTHBOUND CARRIAGEWAY

STOPPING SIGHT ACHIEVED
STOPPING SIGHT NOT ACHIEVED