

27 January 2026

Queensland Office of Coordinator- General
1 William Street
Brisbane, QLD 4000

ATT: Maddison Granzin
Manager, Office of the Coordinator-General
Via email: maddison.granzin@coordinatorgeneral.qld.gov.au

Dear Maddison,

RE: Response to a coordinated request for additional information required by referral entities in order to properly assess an SDA application, - AP2023/015 – SDA application for a material change of use (MCU) of premises for special industry (50MW hydrogen production facility), substation and major electricity infrastructure in the Gladstone State Development Area (SDA)

We, Vena Energy Services (Australia) Pty Ltd (Vena Energy), the Applicant, acknowledges receipt of the above-mentioned request for additional information required by referral entities from the Office of Coordinator General (OCG) dated 11 November 2025 and provides the following responses to each issue requested, pursuant to Schedule 2, item 2.2 of the Gladstone State Development Area (GSDA) Development Scheme.

Issue 1 – Construction Traffic

Information Requested:

The Traffic Impact Assessment, prepared by L+R Engineers, Managers and Scientists, reference no. B25169TR001, Revision A, dated 14 October 2025 (TIA) assumes 80 workers during the construction phase, with 40 inbound and 40 outbound trips during peak hours. This assumption of evenly split traffic is considered unreasonable, as there is no logical basis for 40 outbound trips in the morning peak and 40 inbound trips in the afternoon peak from a construction site. The peak hour trip generation should be revised to reflect a more realistic and relevant distribution.

Proponent requested to:

Provide a reasonable split of construction traffic between inbound and outbound movements, including justification for the proposed distribution

Vena Energy Response to Issue 1:

As detailed in the Town Planning report, the assumption of 80 workers is estimated to be the maximum number of workers on site during the peak construction period based on a preliminary construction assessment. The peak construction period currently estimated to be a 3-5 month period with the average workforce over the entire construction to be 40 persons. Lambert and Rehbein (L+R) consultants have provided a response to the issue in the response found in Appendix A.

Issue 2 – Road intersection layout

Information Requested:

The projected 2027 peak hour right-turn and through traffic volumes at the Gladstone Mount Larcom Road / Aldoga Road intersection require CHR(s) turn treatment, as per the Austroads Guide to Traffic Management Part 6: Intersections, Interchanges and Crossings. However, the TIA does not include a turn warrant assessment or propose any intersection upgrades.

Proponent requested to:

Provide detailed information to confirm the suitability of the current layout of the Gladstone Mount Larcom Road / Aldoga Road intersection for the proposed development. This should include but not limited to:

- a) A turn warrant assessment in line with the Austroads Guide to Traffic Management Part 6: Intersections, Interchanges and Crossings to verify the adequacy of the existing turn treatment*
- b) Identification of any geometric constraints and details of necessary upgrade works*
- c) Confirmation of the required upgrade works through a detailed swept path analysis, following the Austroads Design Vehicles and Turning Path Templates Guide 2013.*

Vena Energy Response:

L+R consultants have undertaken a Warrant assessment, please find their response to this item in Appendix A.

Issue 3 – Traffic Impact Assessment

Information Requested:

The TIA does not appear to account for traffic generation from recently approved developments in the area. Section 2.5.2 of the Gladstone State Development Area Development Scheme (May 2022) requires that increased traffic arising from the development is able to be accommodated within the existing road network, or works are undertaken to minimise adverse impacts on existing and future uses and road networks.

Proponent requested to:

Provide an updated TIA, including traffic volumes and impacts from recently approved developments within the traffic catchment of the Gladstone Mount Larcom Road / Aldoga Road intersection.

Note: State Development Area Decision Notices can be found at <http://www.statedevelopment.qld.gov.au/coordinator-general/state-development-areas/decision-notices>

Vena Energy Response:

The applicant has undertaken a search of the relevant Decision Notices within proximity of the Gladstone Mount Larcom Road / Aldoga Road intersection and note the following projects could potentially impact this intersection:

Fitzroy to Gladstone Pipeline Projects - GAWB

- AP2024/014 - Material change of use for a utility installation (pump station, raw water pipeline and ancillary infrastructure) – Gladstone Area Water Board
- APC2024/007 - Change application for an SDA approval for a utility installation (Fitzroy to Gladstone Water Pipeline) - Gladstone Area Water Board

- APC2023/004 - Change application for an SDA approval for a utility installation - Gladstone Area Water Board
- AP2022/006 - SDA application for a material change of use for a utility installation (water pipeline) and operational works (native vegetation clearing) - GHD on behalf of Gladstone Area Water Board

Fortescue Future Industries

- AP2023/001 - SDA application for a material change of use for special industry (40MW hydrogen test train) - SMEC c/- Gladstone Fortescue Future Industries Pty Ltd
- APC2023/007 - Change application for an SDA approval for a medium impact industry (electrolyser manufacturing plant) - Fortescue Future Industries

The Decision Notices for the Fitzroy to Gladstone pipeline project (GAWB) are not considered to create traffic impacts to the intersection that need to be considered in the traffic assessment for the following reasons:

- It is stated in the application documentation for these approvals, that once in operation as the infrastructure is operated remotely, thus very little traffic is generated on a daily basis.
- There is expected traffic to be generated during construction of the project, however this construction is underway and is expected to be completed before the proposed development is proposed to be constructed.

The Decision Notices for Fortescue Future Industries (FFI) relate to their proposed electrolyser manufacturing facility and the adjoining 40MW electrolyser test train facility located over a property at Euroa Circuit (lot 4 on SP 245936). It is publicly documented by Fortescue, that these projects have permanently ceased operations/construction. It is therefore assumed that no traffic will be generated from their project site into the future. The OCG has confirmed their acceptance that Fortescue's project will no longer proceed via email on 18 November 2025 (refer to Appendix B).

Based on the above it is the applicant's opinion that there is no requirement to update the TIA to include any traffic volumes or impacts from any recently approved developments, hence the TIA has not been updated.

Issue 4 – SIDRA Model

Information Requested:

Within the TIA, incorrect speed limits appear to have been modelled in the SIDRA analysis, particularly for Gladstone-Mount Larcom Road.

Proponent requested to:

- (a) Provide a revised SIDRA model and associated outputs in the TIA to reflect the correct speed limits*
- (b) Provide the updated electronic SIDRA model file.*

Vena Energy Response:

L+R Consultants have updated the SIDRA model to reflect the correct speed limits. Please find a response to this item in by L+R in Appendix A.

We trust the responses provided to the requests for additional information is to the satisfaction of the Office of Coordinator General and will be provided to the referral entities for their assessment, and

upon completion of their assessment, the OCG will notify the applicant of the next stage of the development assessment process.

However, should the OCG have any queries regarding the information provided, please do not hesitate to contact me.

Yours sincerely,



Mark Carter

Senior Manager, Development and Stakeholders

Vena Energy

mark.carter@venaenergy.com

Phone: 0408 883 228

Appendix A L+R responses to information request items 1, 2 and 4.



ENGINEERS
MANAGERS
SCIENTISTS

Lambert & Rehbein (SEQ) Pty Ltd

ABN: 77 126 939 768

Level 3, 12 Commercial Road, Newstead QLD 4006
(PO Box 112), Fortitude Valley QLD 4006

(07) 3250 9000 mail@lar.net.au www.lar.net.au

19 January 2026

Our File Ref: B25169TL001_REVA

Contact: Mark Booth

Vena Energy Services (Australia) Pty Ltd
Level 21, 459 Collins Street
Melbourne VIC 3000

Attention: Mark Carter

RE: EUROA HYDROGEN PROJECT – EUROA CIRCUIT, ALDOGA, QLD 4694
TRAFFIC ENGINEERING RESPONSE TO INFORMATION REQUEST

This letter has been prepared in response to Items 1 to 4 of the Queensland Government's Information Request (Ref: OUT25/5907), dated 11 November 2025, in relation to the proposed hydrogen facility located at Euroa Circuit, Aldoga QLD 4694. The traffic engineering issues being addressed are stated below in *italics* with our response following each item.

IR Item 1 – Construction Traffic

Issue:

The Traffic Impact Assessment, prepared by L+R Engineers, Managers and Scientists, reference no. B25169TR001, Revision A, dated 14 October 2025 (TIA) assumes 80 workers during the construction phase, with 40 inbound and 40 outbound trips during peak hours. This assumption of evenly split traffic is considered unreasonable, as there is no logical basis for 40 outbound trips in the morning peak and 40 inbound trips in the afternoon peak from a construction site. The peak hour trip generation should be revised to reflect a more realistic and relevant distribution.

Proponent requested to:

Provide a reasonable split of construction traffic between inbound and outbound movements, including justification for the proposed distribution.

L+R Response

The anticipated peak hour directionality has been updated to reflect a reasonable split of construction traffic with majority of the trips entering the site in the AM peak and exiting the site in the PM peak, as shown below in Table 1.

Table 1: Proposed Development Traffic Generation and Directional Rates

SCENARIO	GENERATION RATE		DIRECTIONALITY (% IN / % OUT)	
	AM PEAK	PM PEAK	AM PEAK	PM PEAK
Construction Traffic	80 Trips	80 Trips	90% / 10%	10% / 90%

As such, based on the updated split above, the estimated construction traffic generated by the proposed development is documented in Table 2.

Table 2: Proposed Development Traffic Generation

SCENARIO	YIELD	AM (IN)	AM (OUT)	PM (IN)	PM (OUT)
Construction Traffic	80 Workers	72	8	8	72
Total Trips per Peak		80		80	

Results of the updated Background + Construction Traffic SIDRA assessment are provided in Table 3 with detailed SIDRA outputs enclosed within this letter. The opening year has also been updated to 2028 with 2026 as the background year.

Table 3 SIDRA Outputs- Gladstone Mt Larcom Road / Aldoga Road Intersection 2026 BG + Construction Traffic

Scenario	Approach	AM Peak				PM Peak			
		DoS	Avg Delay (s)	LoS	95% Back of Queue (m)	DoS	Avg Delay (s)	LoS	95% Back of Queue (m)
2026 Background + Construction Traffic	Gladstone Mt Larcom Road / Aldoga Road Intersection (North)								
	SE: Gladstone Mt Larcom Rd	0.081	0	NA	0	0.085	0	NA	0
	NW: Gladstone Mt Larcom Rd	0.073	0.7	NA	0.7	0.073	0.3	NA	0.2
	W: Aldoga Road	0.079	8.5	LOS A	2.6	0.143	7.7	LOS A	4.2
	Gladstone Mt Larcom Road / Aldoga Road Intersection (South)								
	E: Aldoga Road	0.044	3.9	NA	0	0.011	4.1	NA	0
	N: Aldoga Road	0.009	8.3	LOS A	0.2	0.003	8.6	LOS A	0.1

As illustrated above the Gladstone Mt-Larcom Road / Alodga Road intersection will theoretically operate well below the practical capacity ($DoS \leq 0.80$) for a priority-controlled intersection in both peak periods, with very minor increases in delay and queue lengths as a result of the construction traffic.

IR Item 2 – Road Intersection Layout

Issue:

The projected 2027 peak hour right-turn and through traffic volumes at the Gladstone Mount Larcom Road / Aldoga Road intersection require CHR(s) turn treatment, as per the Austroads Guide to Traffic Management Part 6: Intersections, Interchanges and Crossings. However, the TIA does not include a turn warrant assessment or propose any intersection upgrades.

Proponent requested to:

Provide detailed information to confirm the suitability of the current layout of the Gladstone Mount Larcom Road / Aldoga Road intersection for the proposed development. This should include but not limited to:

- A turn warrant assessment in line with the Austroads Guide to Traffic Management Part 6: Intersections, Interchanges and Crossings to verify the adequacy of the existing turn treatment
- Identification of any geometric constraints and details of necessary upgrade works
- Confirmation of the required upgrade works through a detailed swept path analysis, following the Austroads Design Vehicles and Turning Path Templates Guide 2013.

L+R Response

A turn lane warrant assessment has been undertaken at the Gladstone Mount Larcom Road / Aldoga Road intersection in accordance with DTMR's Road Planning and Design Manual (RPDM). The posted speed of Gladstone Mount Larcom Road is 100km/h and therefore the assessment has been based on the greater than or equal to 100km/h design speed graph. The result of the and 2028 operational traffic design scenario is shown below in Error! Reference source not found..

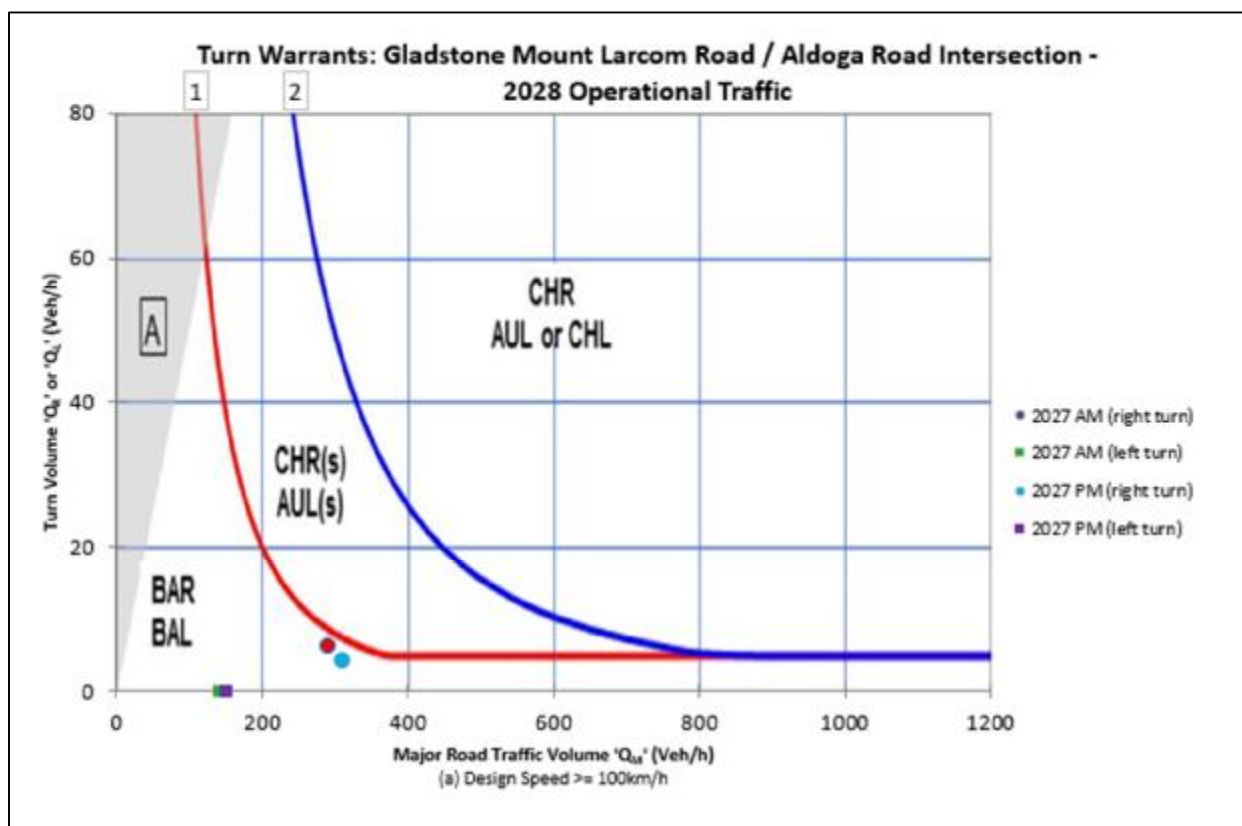


Figure 1: Turn Lane Warrant Assessment – 2028 Operational Traffic

The turn lane warrant assessment as shown in Error! Reference source not found. does not require any additional mitigation measures for the 2028 operational traffic scenario.

As construction conditions fall outside the normal network operations, the potential impacts of short-term construction traffic on the State-controlled intersection have been assessed against Extended Design Domain turn lane warrants, shown in Figure 2. This approach is considered appropriate, as it allows temporary construction conditions to be evaluated without inappropriately triggering long-term infrastructure upgrades.

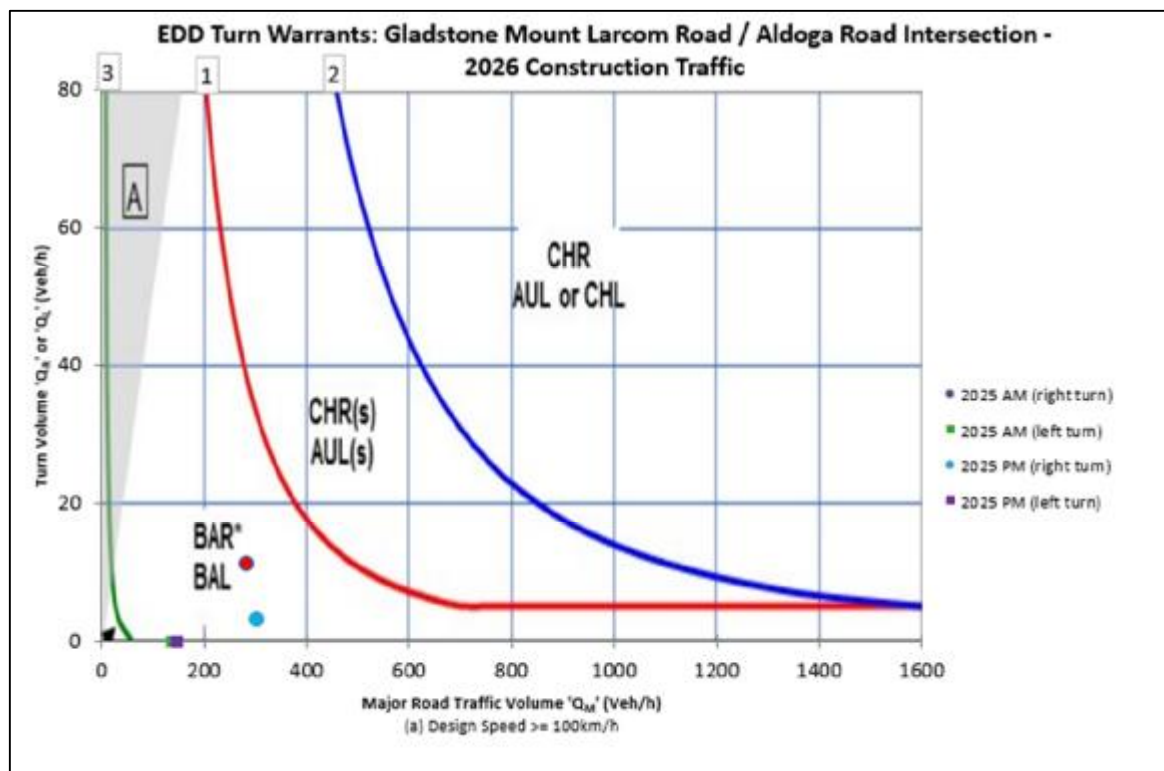


Figure 2: EDD Turn Lane Warrant Assessment – 2026 Construction Traffic

As shown in Figure 2 above, the EDD turn lane warrant assessment does not require any formal channelised turn lane treatments.

With respect to the SIDRA results and the EDD Turn Lane Warrant assessment above, the current form of the intersection is suitable for both construction and operational traffic in our view. Furthermore, there is adequate sight distance at the intersection for a vehicle travelling straight to see the right turning vehicle and merge into the additional through lane to continue travelling straight.

IR Item 3 – Traffic Impact Assessment

Issue:

The TIA does not appear to account for traffic generation from recently approved developments in the area. Section 2.5.2 of the Gladstone State Development Area Development Scheme (May 2022) requires that increased traffic arising from the development is able to be accommodated within the existing road network, or works are undertaken to minimise adverse impacts on existing and future uses and road networks.

Proponent requested to:

Provide an updated TIA, including traffic volumes and impacts from recently approved developments within the traffic catchment of the Gladstone Mount Larcom Road / Aldoga Road intersection.

Note: State Development Area Decision Notices can be found at

<http://www.statedevelopment.qld.gov.au/coordinatorgeneral/state-development-areas/decision-notice>

L+R Response

We understand that this Item no longer requires a response.

IR Item 4 – SIDRA Model

Issue:

Within the TIA, incorrect speed limits appear to have been modelled in the SIDRA analysis, particularly for Gladstone-Mount Larcom Road.

Proponent requested to:

- (a) Provide a revised SIDRA model and associated outputs in the TIA to reflect the correct speed limits*
- (b) Provide the updated electronic SIDRA model file.*

L+R Response

The SIDRA model has been updated to reflect the correct speed limits with the updated outputs enclosed within this letter. In all design scenarios, the Gladstone Mt-Larcom Road / Alodga Road intersection will theoretically operate well below the practical capacity ($DoS \leq 0.80$) for a priority-controlled intersection in both peak periods, with very minor increases in delay and queue lengths as a result of the construction and operational traffic.

The SIDRA model file can be found at the following link:

 [2026-01-13 - B25169 Updated SIDRA](#)

Yours faithfully,
For and on behalf of
Lambert & Rehbein (SEQ) PTY LTD



M.S. BOOTH BE(Civil), MIEAust
SENIOR TRAFFIC ENGINEER



A.W. GREEN BE(Civil & Construction) (Hons), RPEQ, CPEng
DIVISION MANAGER – TRAFFIC AND TRANSPORT

19 January 2026
Our File Ref: B25169TL001_RevA
Contact: Mark Booth

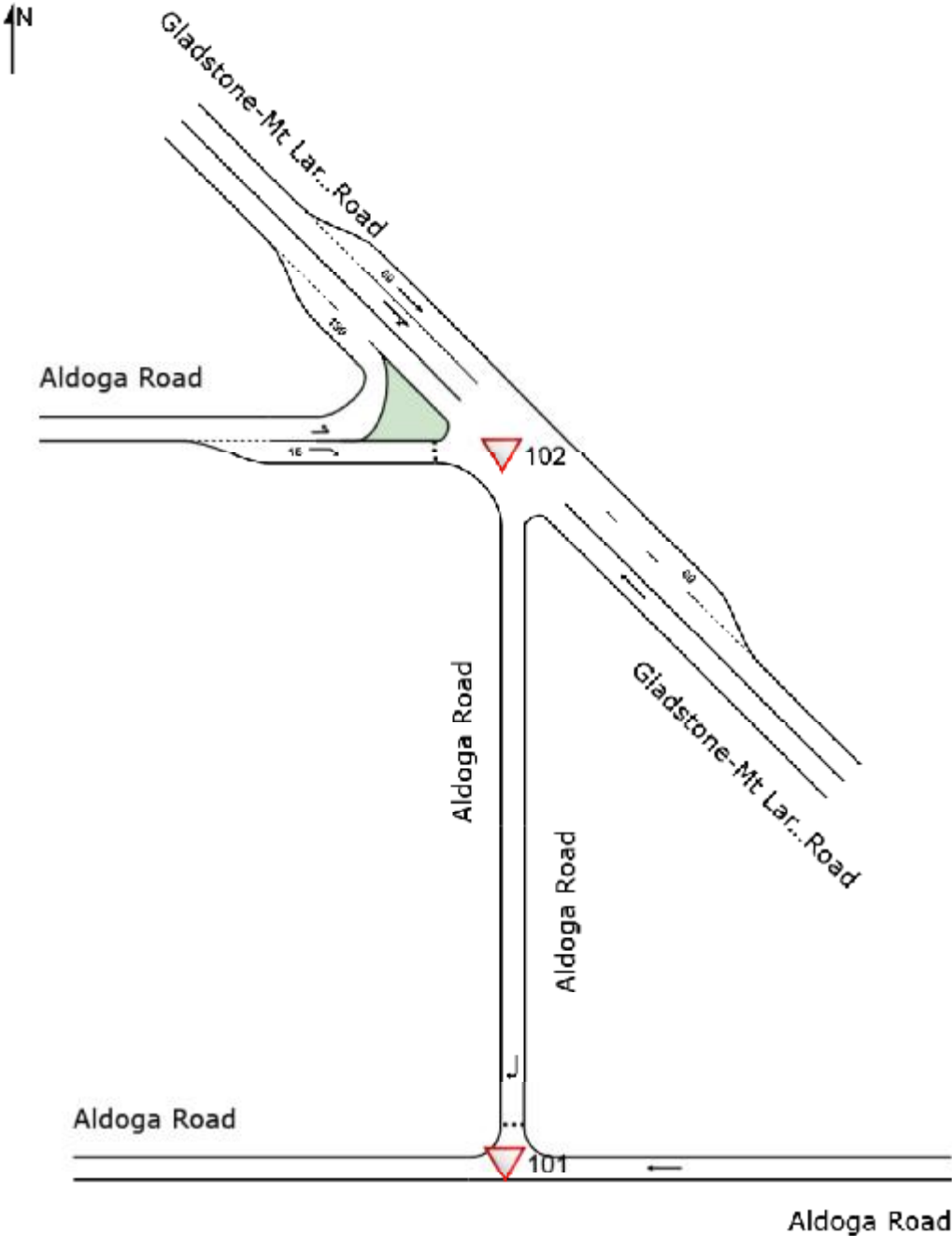
Enc:
SIDRA Results

NETWORK LAYOUT

■ Network: N101 [Gladstone-Mt Larcom Road-Aldoga Road
2026 BG AM Peak (Network Folder: 2026 BG)]

New Network
Network Category: (None)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



SITES IN NETWORK		
Site ID	CCG ID	Site Name
▽102	NA	Gladstone-Mt Larcom Road-Aldoga Road (North) 2026 BG AM Peak
▽101	NA	Gladstone-Mt Larcom Road-Aldoga Road (South) 2026 BG AM Peak

MOVEMENT SUMMARY

Site: 102 [Gladstone-Mt Larcom Road-Aldoga Road (North)
2026 BG AM Peak (Site Folder: 2026 BG)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [Gladstone-Mt Larcom Road-Aldoga Road
2026 BG AM Peak (Network Folder: 2026 BG)]

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	[Total HV]	[Veh. veh	Dist]									
			veh/h	%	veh/h	%	v/c	sec			m				km/h
SouthEast: Gladstone-Mt Larcom Road															
22	T1	All MCs	144	13.9	144	13.9	0.081	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	100.0
Approach			144	13.9	144	13.9	0.081	0.0	NA	0.0	0.0	0.00	0.00	0.00	100.0
NorthWest: Gladstone-Mt Larcom Road															
28	T1	All MCs	158	15.3	158	15.3	0.069	0.1	LOS A	0.0	0.3	0.02	0.02	0.02	99.4
29a	R1	All MCs	4	50.0	4	50.0	0.069	8.7	LOS A	0.0	0.3	0.03	0.03	0.03	98.4
Approach			162	16.2	162	16.2	0.069	0.3	NA	0.0	0.3	0.02	0.02	0.02	99.4
West: Aldoga Road															
10b	L3	All MCs	6	33.3	6	33.3	0.005	7.5	LOS A	0.0	0.0	0.00	0.55	0.00	51.6
12a	R1	All MCs	36	35.3	36	35.3	0.068	8.8	LOS A	0.2	2.3	0.48	0.66	0.48	51.7
Approach			42	35.0	42	35.0	0.068	8.6	LOS A	0.2	2.3	0.41	0.65	0.41	51.6
All Vehicles			348	17.5	348	17.5	0.081	1.2	NA	0.2	2.3	0.06	0.09	0.06	89.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 101 [Gladstone-Mt Larcom Road-Aldoga Road (South)
2026 BG AM Peak (Site Folder: 2026 BG)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [Gladstone-Mt Larcom Road-Aldoga Road
2026 BG AM Peak (Network Folder: 2026 BG)]

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV] veh/h	%	[Total HV] veh/h	%				[Veh. veh	Dist] m				
East: Aldoga Road															
5	T1	All MCs	15	28.6	15	28.6	0.009	4.1	LOS A	0.0	0.0	0.00	0.45	0.00	79.0
Approach			15	28.6	15	28.6	0.009	4.1	NA	0.0	0.0	0.00	0.45	0.00	79.0
North: Aldoga Road															
9	R2	All MCs	4	50.0	4	50.0	0.004	9.0	LOS A	0.0	0.1	0.06	0.67	0.06	58.2
Approach			4	50.0	4	50.0	0.004	9.0	LOS A	0.0	0.1	0.06	0.67	0.06	58.2
All Vehicles			19	33.3	19	33.3	0.009	5.2	NA	0.0	0.1	0.01	0.50	0.01	73.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 102 [Gladstone-Mt Larcom Road-Aldoga Road (North)
2026 BG PM Peak (Site Folder: 2026 BG)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [Gladstone-Mt Larcom Road-Aldoga Road
2026 BG PM Peak (Network Folder: 2026 BG)]

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	[Total HV]	[Veh. veh	Dist]									
			veh/h	%	veh/h	%	v/c	sec							km/h
SouthEast: Gladstone-Mt Larcom Road															
22	T1	All MCs	156	9.5	156	9.5	0.085	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	100.0
Approach			156	9.5	156	9.5	0.085	0.0	NA	0.0	0.0	0.00	0.00	0.00	100.0
NorthWest: Gladstone-Mt Larcom Road															
28	T1	All MCs	167	17.0	167	17.0	0.073	0.1	LOS A	0.0	0.2	0.01	0.01	0.01	99.7
29a	R1	All MCs	2	50.0	2	50.0	0.073	8.5	LOS A	0.0	0.2	0.01	0.01	0.01	99.2
Approach			169	17.4	169	17.4	0.073	0.2	NA	0.0	0.2	0.01	0.01	0.01	99.7
West: Aldoga Road															
10b	L3	All MCs	2	50.0	2	50.0	0.002	7.7	LOS A	0.0	0.0	0.00	0.54	0.00	51.1
12a	R1	All MCs	23	22.7	23	22.7	0.041	8.3	LOS A	0.2	1.3	0.48	0.64	0.48	54.1
Approach			25	25.0	25	25.0	0.041	8.3	LOS A	0.2	1.3	0.44	0.63	0.44	53.9
All Vehicles			351	14.4	351	14.4	0.085	0.7	NA	0.2	1.3	0.04	0.05	0.04	94.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

▼ Site: 101 [Gladstone-Mt Larcom Road-Aldoga Road (South)
2026 BG PM Peak (Site Folder: 2026 BG)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

■ Network: N101 [Gladstone-Mt Larcom Road-Aldoga Road
2026 BG PM Peak (Network Folder: 2026 BG)]

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV] veh/h	%	[Total HV] veh/h	%	v/c	sec		[Veh. veh	Dist] m				km/h
East: Aldoga Road															
5	T1	All MCs	12	45.5	12	45.5	0.008	4.3	LOS A	0.0	0.0	0.00	0.44	0.00	76.1
Approach			12	45.5	12	45.5	0.008	4.3	NA	0.0	0.0	0.00	0.44	0.00	76.1
North: Aldoga Road															
9	R2	All MCs	2	50.0	2	50.0	0.002	9.0	LOS A	0.0	0.1	0.05	0.67	0.05	58.3
Approach			2	50.0	2	50.0	0.002	9.0	LOS A	0.0	0.1	0.05	0.67	0.05	58.3
All Vehicles			14	46.2	14	46.2	0.008	5.1	NA	0.0	0.1	0.01	0.47	0.01	72.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 102 [Gladstone-Mt Larcom Road-Aldoga Road (North)
2028 BG AM Peak (Site Folder: 2028 BG)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [Gladstone-Mt Larcom Road-Aldoga Road
2028 BG AM Peak (Network Folder: 2028 BG)]

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV] veh/h %	[Total HV] veh/h %	[Veh. veh	Dist] m									
SouthEast: Gladstone-Mt Larcom Road															
22	T1	All MCs	147	14.3	147	14.3	0.083	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	100.0
Approach			147	14.3	147	14.3	0.083	0.0	NA	0.0	0.0	0.00	0.00	0.00	100.0
NorthWest: Gladstone-Mt Larcom Road															
28	T1	All MCs	161	15.7	161	15.7	0.071	0.1	LOS A	0.0	0.4	0.02	0.03	0.02	99.5
29a	R1	All MCs	4	75.0	4	75.0	0.071	9.6	LOS A	0.0	0.4	0.03	0.04	0.03	98.7
Approach			165	17.2	165	17.2	0.071	0.4	NA	0.0	0.4	0.02	0.03	0.02	99.5
West: Aldoga Road															
10b	L3	All MCs	6	50.0	6	50.0	0.005	7.7	LOS A	0.0	0.0	0.00	0.54	0.00	51.1
12a	R1	All MCs	36	38.2	36	38.2	0.070	9.1	LOS A	0.3	2.4	0.49	0.67	0.49	51.0
Approach			42	40.0	42	40.0	0.070	8.9	LOS A	0.3	2.4	0.42	0.65	0.42	51.0
All Vehicles			355	18.7	355	18.7	0.083	1.2	NA	0.3	2.4	0.06	0.09	0.06	89.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 101 [Gladstone-Mt Larcom Road-Aldoga Road (South)
2028 BG AM Peak (Site Folder: 2028 BG)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [Gladstone-Mt Larcom Road-Aldoga Road
2028 BG AM Peak (Network Folder: 2028 BG)]

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV] veh/h	%	[Total HV] veh/h	%				[Veh. veh	Dist] m				
East: Aldoga Road															
5	T1	All MCs	15	35.7	15	35.7	0.009	4.2	LOS A	0.0	0.0	0.00	0.44	0.00	77.7
Approach			15	35.7	15	35.7	0.009	4.2	NA	0.0	0.0	0.00	0.44	0.00	77.7
North: Aldoga Road															
9	R2	All MCs	4	75.0	4	75.0	0.004	9.8	LOS A	0.0	0.1	0.07	0.67	0.07	56.8
Approach			4	75.0	4	75.0	0.004	9.8	LOS A	0.0	0.1	0.07	0.67	0.07	56.8
All Vehicles			19	44.4	19	44.4	0.009	5.5	NA	0.0	0.1	0.01	0.49	0.01	71.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 102 [Gladstone-Mt Larcom Road-Aldoga Road (North)
2028 BG PM Peak (Site Folder: 2028 BG)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [Gladstone-Mt Larcom Road-Aldoga Road
2028 BG PM Peak (Network Folder: 2028 BG)]

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%				[Veh. veh	Dist]				
v/c															

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 101 [Gladstone-Mt Larcom Road-Aldoga Road (South)
2028 BG PM Peak (Site Folder: 2028 BG)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [Gladstone-Mt Larcom Road-Aldoga Road
2028 BG PM Peak (Network Folder: 2028 BG)]

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV] veh/h	%	[Total HV] veh/h	%	v/c	sec		[Veh. veh	Dist] m				km/h
East: Aldoga Road															
5	T1	All MCs	12 54.5		12 54.5		0.008	4.4	LOS A	0.0	0.0	0.00	0.43	0.00	74.6
Approach			12 54.5		12 54.5		0.008	4.4	NA	0.0	0.0	0.00	0.43	0.00	74.6
North: Aldoga Road															
9	R2	All MCs	2 100.0		2 100.0		0.002	10.5	LOS B	0.0	0.1	0.06	0.68	0.06	53.1
Approach			2 100.0		2 100.0		0.002	10.5	LOS B	0.0	0.1	0.06	0.68	0.06	53.1
All Vehicles			14 61.5		14 61.5		0.008	5.4	NA	0.0	0.1	0.01	0.47	0.01	70.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

▼ Site: 102 [Gladstone-Mt Larcom Road-Aldoga Road (North)
2026 BG + Cons AM Peak (Site Folder: 2026 BG + Construction)]

■ Network: N101 [Gladstone-Mt Larcom Road-Aldoga Road
2026 BG + Construct AM Peak
(Network Folder: 2026 BG + Construction)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	[Total HV]	[Veh. veh	Dist]									
			veh/h	%	veh/h	%	v/c	sec			m				km/h
SouthEast: Gladstone-Mt Larcom Road															
22	T1	All MCs	144	13.9	144	13.9	0.081	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	100.0
Approach			144	13.9	144	13.9	0.081	0.0	NA	0.0	0.0	0.00	0.00	0.00	100.0
NorthWest: Gladstone-Mt Larcom Road															
28	T1	All MCs	158	15.3	158	15.3	0.073	0.1	LOS A	0.1	0.7	0.04	0.06	0.04	98.2
29a	R1	All MCs	12	18.2	12	18.2	0.073	8.0	LOS A	0.1	0.7	0.06	0.08	0.06	95.1
Approach			169	15.5	169	15.5	0.073	0.7	NA	0.1	0.7	0.05	0.06	0.05	98.0
West: Aldoga Road															
10b	L3	All MCs	7	28.6	7	28.6	0.005	7.4	LOS A	0.0	0.0	0.00	0.55	0.00	51.7
12a	R1	All MCs	43	29.3	43	29.3	0.079	8.7	LOS A	0.3	2.6	0.49	0.67	0.49	52.8
Approach			51	29.2	51	29.2	0.079	8.5	LOS A	0.3	2.6	0.42	0.65	0.42	52.6
All Vehicles			364	16.8	364	16.8	0.081	1.5	NA	0.3	2.6	0.08	0.12	0.08	87.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

▼ Site: 101 [Gladstone-Mt Larcom Road-Aldoga Road (South)
2026 BG + Cons AM Peak (Site Folder: 2026 BG +
Construction)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

■ Network: N101 [Gladstone-
Mt Larcom Road-Aldoga Road
2026 BG + Construct AM Peak
(Network Folder: 2026 BG +
Construction)]

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]		[Total HV]					[Veh. veh	Dist]			
			veh/h	%	veh/h	%	v/c	sec			m			km/h
East: Aldoga Road														
5	T1	All MCs	83	5.1	83	5.1	0.044	3.9	LOS A	0.0	0.0	0.00	0.46	83.3
Approach			83	5.1	83	5.1	0.044	3.9	NA	0.0	0.0	0.00	0.46	83.3
North: Aldoga Road														
9	R2	All MCs	12	18.2	12	18.2	0.009	8.3	LOS A	0.0	0.2	0.15	0.65	59.8
Approach			12	18.2	12	18.2	0.009	8.3	LOS A	0.0	0.2	0.15	0.65	59.8
All Vehicles			95	6.7	95	6.7	0.044	4.4	NA	0.0	0.2	0.02	0.48	79.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

▼ Site: 102 [Gladstone-Mt Larcom Road-Aldoga Road (North)
2026 BG + Cons PM Peak (Site Folder: 2026 BG + Construction)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

■ Network: N101 [Gladstone-Mt Larcom Road-Aldoga Road
2026 BG + Construct PM Peak
(Network Folder: 2026 BG + Construction)]

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	Mov Class	Demand Flows [Total HV] veh/h %		Arrival Flows [Total HV] veh/h %		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh Dist] veh m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
SouthEast: Gladstone-Mt Larcom Road														
22	T1	All MCs	156	9.5	156	9.5	0.085	0.0	LOS A	0.0	0.0	0.00	0.00	100.0
Approach			156	9.5	156	9.5	0.085	0.0	NA	0.0	0.0	0.00	0.00	100.0
NorthWest: Gladstone-Mt Larcom Road														
28	T1	All MCs	167	17.0	167	17.0	0.073	0.1	LOS A	0.0	0.2	0.01	0.01	99.5
29a	R1	All MCs	3	33.3	3	33.3	0.073	8.1	LOS A	0.0	0.2	0.02	0.02	98.7
Approach			171	17.3	171	17.3	0.073	0.3	NA	0.0	0.2	0.01	0.01	99.5
West: Aldoga Road														
10b	L3	All MCs	9	11.1	9	11.1	0.006	7.2	LOS A	0.0	0.0	0.00	0.57	52.3
12a	R1	All MCs	92	5.7	92	5.7	0.143	7.8	LOS A	0.6	4.2	0.49	0.68	57.8
Approach			101	6.3	101	6.2	0.143	7.7	LOS A	0.6	4.2	0.44	0.67	57.2
All Vehicles			427	11.8	427	11.8	0.143	1.9	NA	0.6	4.2	0.11	0.16	84.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

▼ Site: 101 [Gladstone-Mt Larcom Road-Aldoga Road (South)
2026 BG + Cons PM Peak (Site Folder: 2026 BG + Construction)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

■ Network: N101 [Gladstone-Mt Larcom Road-Aldoga Road
2026 BG + Construct PM Peak
(Network Folder: 2026 BG + Construction)]

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance													
Mov ID	Turn	Mov Class	Demand Flows [Total HV] veh/h %	Arrival Flows [Total HV] veh/h %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh Dist] veh m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h	
East: Aldoga Road													
5	T1	All MCs	19 27.8	19 27.8	0.011	4.1	LOS A	0.0 0.0	0.00	0.45	0.00	79.1	
Approach			19 27.8	19 27.8	0.011	4.1	NA	0.0 0.0	0.00	0.45	0.00	79.1	
North: Aldoga Road													
9	R2	All MCs	3 33.3	3 33.3	0.003	8.6	LOS A	0.0 0.1	0.07	0.67	0.07	59.2	
Approach			3 33.3	3 33.3	0.003	8.6	LOS A	0.0 0.1	0.07	0.67	0.07	59.2	
All Vehicles			22 28.6	22 28.6	0.011	4.8	NA	0.0 0.1	0.01	0.48	0.01	75.5	

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

▼ Site: 102 [Gladstone-Mt Larcom Road-Aldoga Road (North)
2028 BG + Operational AM Peak (Site Folder: 2028 BG +
Operational)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

■ Network: N101 [Gladstone-
Mt Larcom Road-Aldoga Road
2028 BG + Operational AM Peak
(Network Folder: 2028 BG +
Operational)]

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows [Total HV] veh/h %		Arrival Flows [Total HV] veh/h %		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh Dist] veh m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h	
SouthEast: Gladstone-Mt Larcom Road															
22	T1	All MCs	147	3.6	147	3.6	0.077	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	100.0
Approach			147	3.6	147	3.6	0.077	0.0	NA	0.0	0.0	0.00	0.00	0.00	100.0
NorthWest: Gladstone-Mt Larcom Road															
28	T1	All MCs	161	2.0	161	2.0	0.066	0.1	LOS A	0.0	0.3	0.03	0.03	0.03	99.0
29a	R1	All MCs	6	16.7	6	16.7	0.066	7.8	LOS A	0.0	0.3	0.04	0.04	0.04	97.4
Approach			167	2.5	167	2.5	0.066	0.4	NA	0.0	0.3	0.03	0.03	0.03	99.0
West: Aldoga Road															
10b	L3	All MCs	8	25.0	8	25.0	0.006	7.4	LOS A	0.0	0.0	0.00	0.56	0.00	51.8
12a	R1	All MCs	55	15.4	55	15.4	0.088	7.8	LOS A	0.3	2.7	0.46	0.65	0.46	56.0
Approach			63	16.7	63	16.7	0.088	7.7	LOS A	0.3	2.7	0.40	0.64	0.40	55.4
All Vehicles			378	5.3	378	5.3	0.088	1.5	NA	0.3	2.7	0.08	0.12	0.08	87.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

▼ Site: 101 [Gladstone-Mt Larcom Road-Aldoga Road (South)
2028 BG + Operational AM Peak (Site Folder: 2028 BG +
Operational)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

■ Network: N101 [Gladstone-
Mt Larcom Road-Aldoga Road
2028 BG + Operational AM Peak
(Network Folder: 2028 BG +
Operational)]

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	[Total HV]	[Veh. veh	Dist]									
			veh/h	%	veh/h	%	v/c	sec							km/h
East: Aldoga Road															
5	T1	All MCs	34	6.3	34	6.3	0.018	3.9	LOS A	0.0	0.0	0.00	0.46	0.00	83.1
Approach			34	6.3	34	6.3	0.018	3.9	NA	0.0	0.0	0.00	0.46	0.00	83.1
North: Aldoga Road															
9	R2	All MCs	6	16.7	6	16.7	0.005	8.1	LOS A	0.0	0.1	0.09	0.66	0.09	60.1
Approach			6	16.7	6	16.7	0.005	8.1	LOS A	0.0	0.1	0.09	0.66	0.09	60.1
All Vehicles			40	7.9	40	7.9	0.018	4.6	NA	0.0	0.1	0.01	0.49	0.01	78.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

▼ Site: 102 [Gladstone-Mt Larcom Road-Aldoga Road (North)
2028 BG + Operational PM Peak (Site Folder: 2028 BG +
Operational)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

■ Network: N101 [Gladstone-
Mt Larcom Road-Aldoga Road
2028 BG + Operational PM Peak
(Network Folder: 2028 BG +
Operational)]

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	[Total HV]	[Veh. veh	Dist] m									
			veh/h	%	veh/h	%	v/c	sec							km/h
SouthEast: Gladstone-Mt Larcom Road															
22	T1	All MCs	159	4.0	159	4.0	0.084	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	100.0
Approach			159	4.0	159	4.0	0.084	0.0	NA	0.0	0.0	0.00	0.00	0.00	100.0
NorthWest: Gladstone-Mt Larcom Road															
28	T1	All MCs	171	1.2	171	1.2	0.068	0.1	LOS A	0.0	0.3	0.02	0.02	0.02	99.4
29a	R1	All MCs	4	25.0	4	25.0	0.068	8.0	LOS A	0.0	0.3	0.03	0.03	0.03	98.3
Approach			175	1.8	175	1.8	0.068	0.3	NA	0.0	0.3	0.02	0.02	0.02	99.4
West: Aldoga Road															
10b	L3	All MCs	4	25.0	4	25.0	0.003	7.4	LOS A	0.0	0.0	0.00	0.56	0.00	51.8
12a	R1	All MCs	42	5.0	42	5.0	0.064	7.4	LOS A	0.2	1.8	0.46	0.64	0.46	58.3
Approach			46	6.8	46	6.8	0.064	7.4	LOS A	0.2	1.8	0.42	0.63	0.42	57.7
All Vehicles			380	3.3	380	3.3	0.084	1.0	NA	0.2	1.8	0.06	0.09	0.06	91.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

▼ Site: 101 [Gladstone-Mt Larcom Road-Aldoga Road (South)
2028 BG + Operational PM Peak (Site Folder: 2028 BG +
Operational)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

■ Network: N101 [Gladstone-
Mt Larcom Road-Aldoga Road
2028 BG + Operational PM Peak
(Network Folder: 2028 BG +
Operational)]

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	[Total HV]	[Veh. veh	Dist]									
			veh/h	%	veh/h	%	v/c	sec							km/h
East: Aldoga Road															
5	T1	All MCs	31	6.9	31	6.9	0.016	3.9	LOS A	0.0	0.0	0.00	0.46	0.00	82.9
Approach			31	6.9	31	6.9	0.016	3.9	NA	0.0	0.0	0.00	0.46	0.00	82.9
North: Aldoga Road															
9	R2	All MCs	4	25.0	4	25.0	0.003	8.4	LOS A	0.0	0.1	0.08	0.66	0.08	59.6
Approach			4	25.0	4	25.0	0.003	8.4	LOS A	0.0	0.1	0.08	0.66	0.08	59.6
All Vehicles			35	9.1	35	9.1	0.016	4.4	NA	0.0	0.1	0.01	0.48	0.01	79.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Appendix B Email correspondence from OCG



Re: [Ext] Correspondence from the Assistant Coordinator-General – Our ref: OUT25/5907

From Maddison Granzin <Maddison.Granzin@coordinatorgeneral.qld.gov.au>

Date Tue 18-Nov-25 9:16 AM

To Mark Carter <mark.carter@venaenergy.com>

Hi Mark,

Thanks for your email and my apologies for the delay in responding.

Confirming agreement with the position outlined in your email below.

Looking forward to receiving your response.

Thanks!

Kind Regards,

Maddison Granzin

Senior Planner, Planning Services

Office of the Coordinator-General

Department of State Development, Infrastructure and Planning

P +61 7 3452 7562

Level 14, 1 William Street, Brisbane QLD 4000

PO Box 15517, City East QLD 4002



From: Mark Carter <mark.carter@venaenergy.com>

Sent: Wednesday, November 12, 2025 10:45 AM

To: Maddison Granzin <Maddison.Granzin@coordinatorgeneral.qld.gov.au>

Subject: Fw: [Ext] Correspondence from the Assistant Coordinator-General – Our ref: OUT25/5907

Hi Madison,

We received the attached referral entity information request. I note the item 3 seeks our TIA to contemplate the recently approved developments. From my review of the SDA Decision Notices, the only development that have been recently approved (ie last 2 years) are Fortescue's 2 projects on land fronting Euroa Circuit being their 40MW Hydrogen test unit project and their electrolyser manufacturing plant. Would the OCG agree these are the only other project to consider that would impact the intersection in question?

It is public knowledge that Fortescue has elected to not proceed with these projects, therefore we ask if it is relevant for these projects to be considered in our TIA?

Cheers

Mark Carter

Senior Manager Development & Stakeholders, Vena Energy

M: +61 408 883 228 **E:** mark.carter@venaenergy.com



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From: OCG - Business Support Officer <OCGBusinessSupportOfficer@coordinatorgeneral.qld.gov.au>

Sent: Tuesday, 11 November 2025 5:39 PM

To: Mark Carter <mark.carter@venaenergy.com>

Subject: [Ext] Correspondence from the Assistant Coordinator-General – Our ref: OUT25/5907

Good afternoon Mr Carter

Please find attached correspondence from the A/Assistant Coordinator-General, Steffen Poetzsch regarding the AP2023/015 – SDA application for a material change of use of premises for special industry (50MW hydrogen production facility), substation and major electricity infrastructure in the Gladstone State Development Area.

Should you have any queries regarding this matter, please contact Maddison Granzin, Senior Planner, Office of the Coordinator-General on (07) 3452 7562.

Please send any responses to the contact listed in the attached letter.

Kind regards

Shelley Fletcher

Business Support Officer

Office of the Coordinator-General

Department of State Development, Infrastructure and Planning

P (07) 3452 7496

1 William Street, Brisbane Qld 4000
PO Box 15517, City East Qld 4002
www.statedevelopment.qld.gov.au



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