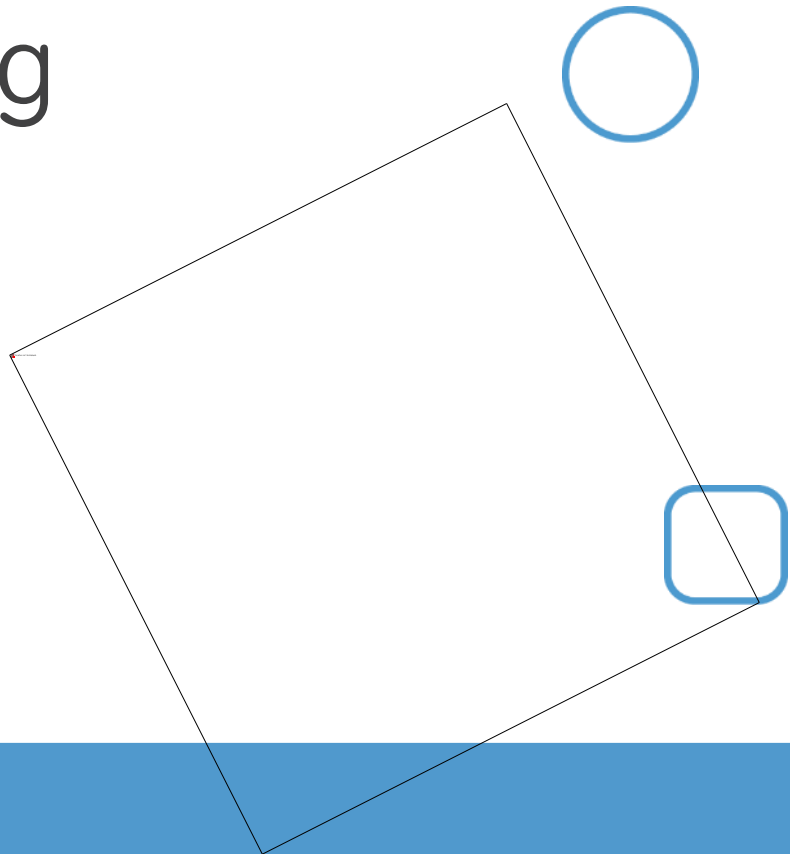


33°53'23"S
147°19'03"E

Wyalong Solar Farm: Newell Highway, West Wyalong



Traffic Management Plan for the Construction of Wyalong Solar Farm

18 January 2022
Prepared for METKA EGN

IMP210161TMP01F05.docx

Impact



Company Information

Impact Traffic Engineering Pty Ltd

Level 17, 31 Queen Street, Melbourne,
Victoria, 3000

ABN: 78 611 424 107

Email create@impactaustralia.com.au

Website www.impactaustralia.com.au

Document Information

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APPENDIX A	Wyalong Solar Farm Construction Traffic Movements
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APPENDIX C	Traffic Guidance Scheme

1 IMPACT[®] Snap Shot

Development Proposition

Location	33° 53' 23" S 147° 19' 03" E	1409 Newell Highway, Wyalong, New South Wales
Use	53 MW Solar Farm	
Access	Access to the site will be directly from Newell Highway.	
Car Parking	<p>A detailed car park design has yet to be determined, however it is assumed that:</p> <ul style="list-style-type: none"> — During construction, vehicles will be parked either at designated laydown areas, storage locations, or where construction activities are occurring; — During operations, operational and maintenance staff vehicles will be accommodated on-site within a vehicle parking area located adjacent to the site office 	

Statutory Controls

Access		
Access Design	<p>The site access will be able to cater for vehicles <u>of up to 26 metres</u> (B-double vehicles) into and out of the site.</p> <p>Vehicles over 26 metres in length will not be used for this development (excluding OD vehicles where required).</p> <p>It is anticipated that OD (over-dimensional) vehicles will be expected during the construction of this project and that an application will be put forward to the satisfaction of Council / NHVR as required.</p>	
Sight Distances	<p>A desktop assessment of sight distances along Newell Highway has been undertaken and indicates that sight distances greater than 450 metres should be available at the proposed site access. A physical sight distance assessment is to be undertaken prior to construction, and trees be trimmed if necessary.</p>	
Turn Warrants	<p>We are advised that a large majority of site traffic will enter the site from the south west, and a lesser number of traffic from the north east. The site therefore triggers a warrant for a Basic Left Turn treatment (BAL) and Basic Right Turn Treatment (BAR). It is recommended that a BAL and BAR treatment be provided along Newell Highway in accordance with the requirements outlined in AustRoads Guide to Road Design.</p>	
Traffic Generation		
Construction	<p>A total of 5,290 single trip vehicle movements (i.e. inbound or outbound) are estimated to be generated by the subject site.</p> <p>This translates to a peak of 46 single trip daily vehicle movements (comprising 22 light vehicles and 24 heavy vehicle / OD movements).</p>	
Operation	<p>It is estimated that the site will have up to two daily vehicle movements associated with routine maintenance during operations. There will also be, on occasion some additional movements associated with more thorough maintenance.</p>	
Impact	<p>Delivery and haulage routes are entirely contained within pre-approved General Mass Limit (GML) and Concessional Mass Limit (CML) roads which are expected to be able to adequately cater for construction traffic and operational traffic.</p>	

	Traffic movements during operations will be minimal with little to no impact on the surrounding local roads.
Traffic Management	
Construction Timing	<p>The construction period is largely expected to occur between April 2022 and up to November 2022.</p> <p>Construction hours will typically be between 7:00am - 6:00pm Monday - Friday and 8:00am - 1:00pm on Saturday.</p> <p>Traffic control devices will be put in place to manage vehicle access safely with advanced warning signage of potential construction vehicles provided during the construction periods.</p>
Site Access Treatments	The proposed haulage route is considered appropriate to cater to the proposed over-dimensional loads.
OD Deliveries	<p>All OD deliveries will be subject to load specific traffic management (pilot cars and escort vehicles).</p> <p>The extent of management required for each OD delivery will be determined when securing the relevant RMS permit.</p> <p>The proponent will liaise with the relevant authority to arrange any mitigation or reinstatement measures which are required to permit the passage of OD loads.</p>

Conclusion

- There are no traffic and transport grounds that should prohibit the issue of a permit

2 Introduction

2.1 Engagement

IMPACT[®] have been engaged by Accent Environmental on behalf of METKA EGN to prepare a Traffic Management Plan (TMP) for the proposed Wyalong Solar Farm (the project) located near West Wyalong, New South Wales.

The Traffic Management Plan (TMP) has been prepared in response to the Development Consent (Dated: 7/05/2019, Application Number: SSD 9564) and is reproduced below:

Transport

Over-Dimensional and Heavy Vehicle Restrictions

1. The Applicant must ensure that the:
 - a) development does not generate more than:
 - 25 heavy vehicle movements a day during construction, upgrading or decommissioning;
 - 10 over-dimensional vehicle movements during construction, upgrading and decommissioning; and
 - 2 heavy vehicle movements a day during operations;
 - b) length of any vehicles (excluding over-dimensional vehicles) used for the development does not exceed 26 metres, unless the Secretary agrees otherwise.
2. The Applicant must keep accurate records of the number of over-dimensional and heavy vehicles entering or leaving the site each day.

Designated Over-Dimensional and Heavy Vehicle Access Route

3. All over-dimensional and heavy vehicles associated with the development must travel to and from the site via the Newell Highway and use the approved site access point.

Road Upgrades and Site Access

4. Prior to commencing construction, the Applicant must:
 - a) Upgrade the intersection of the site access point and the Newell Highway, including providing a Basic Right Turn (BAR) and Basic Left Turn (BAL) intersection treatment to be able to cater for the latest vehicle accessing the site; and
 - b) Construct the site access point to be a minimum of 50 metres from its intersection with the Newell Highway, to a standard that allows two-way heavy vehicle traffic in all-weather conditions.

Operating Conditions

5. The Applicant must ensure:
 - a) the internal roads are constructed as all-weather roads;
 - b) there is sufficient parking on site for all vehicles, and no parking occurs on the public road network in the vicinity of the site;
 - c) the capacity of the existing roadside drainage network is not reduced;
 - d) all vehicles are loaded and unloaded on site, and enter and leave the site in a forward direction; and
 - e) development-related vehicles leaving the site are in a clean condition to minimise dirt being tracked onto the sealed public road network.

Traffic Management Plan

6. Prior to commencing construction, the Applicant must prepare a Traffic Management Plan for the development in consultation with RMS and Council, and to the satisfaction of the Secretary. This plan must include:
 - a) details of the transport route to be used for all development-related traffic;

- b) *details of the road upgrade and site access works required by condition 4 of Schedule 3 of this consent;*
- c) *details of the measures that would be implemented to minimise traffic impacts during construction, upgrading or decommissioning works, including;*
 - *temporary traffic controls, including detours and signage;*
 - *notifying the local community about project-related traffic impacts;*
 - *procedures for receiving and addressing complaints from the community about development-related traffic;*
 - *minimising potential for conflict with school buses and other motorists, as far as practicable;*
 - *scheduling of haulage vehicle movements to minimise convoy length or platoons;*
 - *responding to local climate conditions that may affect road safety such as fog, dust, wet weather;*
 - *responding to any emergency repair or maintenance requirements; and*
 - *a traffic management system for managing over-dimensional vehicles;*
- d) *a driver's code of conduct that addresses:*
 - *travelling speeds;*
 - *driver fatigue;*
 - *procedures to ensure that drivers adhere to the designated transport route/s; and*
 - *procedures to ensure that drivers implement safe driving practices; and*
- e) *a program to ensure drivers working on the development receive suitable training on the code of conduct and any other relevant obligations under the Traffic Management Plan.*

As mentioned, this Traffic Management Plan has been developed for the construction of the Wyalong Solar Farm only. The associated road works and access road construction will be delivered as part of the Civil Construction stage and is not covered in this report.

Furthermore, the primary purpose of this Traffic Management Plan is to satisfy Condition 6 of the Project Development Consent. Other conditions relating to Transport are also covered in this report.

Refer to the Table 1 for an indication of where the relevant permit conditions have been addressed.

Table 1 **Schedule 3 Environmental Conditions - General Requirements**

Condition	Relevant Section:
1. Over-Dimensional and Heavy Vehicle Restrictions	Section 5.1 & Appendix C
3. Designated Over-Dimensional and Heavy Vehicle Access Route	Section 4.3 & Appendix C
4. Road Upgrades and Site Access	Section 4.5 & Appendix C
5. Operating Conditions	Section 4.3, Section 6 & Appendix C
6. Traffic Management Plan	Section 6 & Appendix C

Note: The following Traffic Management Plan (TMP) has been prepared for the construction of the proposed solar farm project. This TMP does not include management techniques or strategies for any external road upgrades, future project upgrades or the decommissioning stages of the project at the end of the project life. A separate TMP will be prepared for each of these (where required / applicable) and separately address any specific TMP techniques, commitments and strategies required for those elements when required.

2.2 Project Commitments

In addition to the consent conditions, a number of commitments were made in the EIS, and as the EIS was the basis for Development Consent, are commitments which must be adhered to. The commitments that pertain to traffic management are presented in

Table 2. The table identifies all the commitments relating to traffic impact and identifies where in the TMP individual requirements have been addressed.

Table 2 Commitments made for an TMP

Commitment No.	Commitment	Section in this TMP
T.1	Development of EMPs, including traffic management measures, will be put in place to mitigate any potential impacts	Section 6.3 & Appendix C
T.2	Development of a traffic management plan (in consultation with Bland Shire Council, RMS and any other relevant stakeholders, which will include:	
T.2.1	— confirmation of the project construction timeframe and work stages	Section 6.1 & Section 6.2
T.2.2	— confirmation of expected traffic volumes generated by the project for all work stages	Section 5.1
T.2.3	— identification of all heavy vehicle and over-dimensional vehicle haulage routes for all work stages	Section 4.1
T.2.4	— a mechanism to review identified haulage route road conditions prior to the commencement of works	Section 5.4
T.2.5	— any additional relevant mechanisms for over-dimensional vehicle permits and traffic management requirements	Section 3.3.2 & Section 6.4
T.2.6	— mechanisms/agreements (if deemed necessary) to maintain haulage route roads and road infrastructure, including local public roads used by site traffic, during construction works and to reinstate roads to at least pre-construction conditions	Section 5.4
T.2.7	— any additional requirements for specific work stage construction traffic management plans	-
T.2.8	— confirmation of the adequacy of available sight distances along the Newell Highway from the site access (trimming will be undertaken if required)	Section 4.3
T.2.9	— assessment of the need for 'trucks crossing' signs to be placed along Newell Highway in the vicinity of the site	Appendix C
T.3	Traffic-related impacts to amenity during construction (such as noise and dust) will be addressed in the EMP with management measures proposed to mitigate these	-

T.4	Traffic-related impacts to during operation (such as risks to road safety from operational traffic) are expected to be minimal but will be addressed in the EMP with management measures proposed to mitigate these	-
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2.3 METKA's Environmental Management Documentation

METKA has developed an Environmental Management Strategy (EMS) for the Project, which is the overarching document in METKA's environmental management system. The EMS includes a number of plans and strategies that has been put in place to manage environmental impacts that may arise from the construction and/or operation of the project - including this TMP. Figure 1 shows the TMP and the other associated management plans.

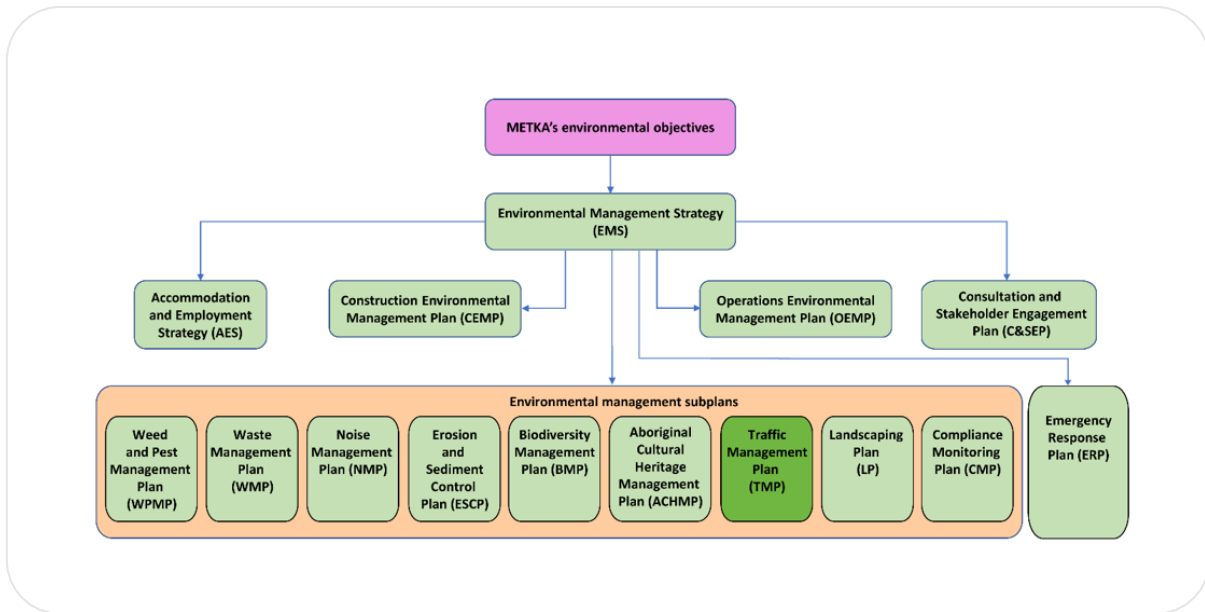


Figure 1 METKA Environmental Management Documentation Structure

3 Wyalong Solar Farm

3.1 Location

The Wyalong Solar Farm (the project) development site is located on the northern side of Newell Highway, approximately seven kilometres north-east of West Wyalong Township and is addressed as 1409 Newell Highway, Wyalong, as illustrated in Figure 2.

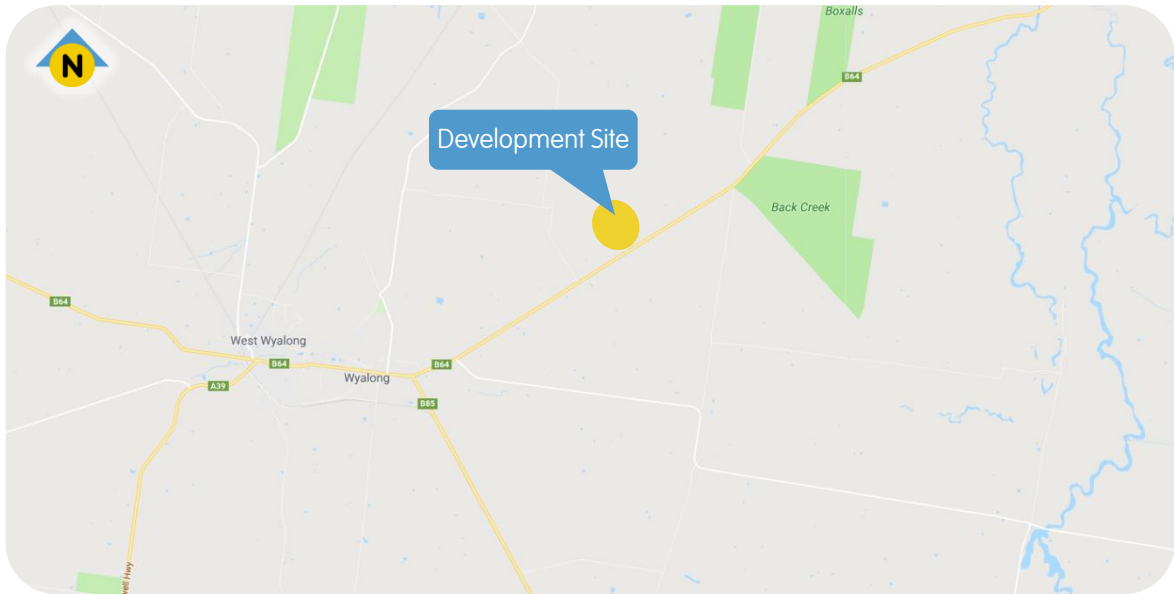


Figure 2 Location of Development Site

The project is expected to be a 53MW solar farm within a 256 ha disturbance footprint. Figure 3 shows the development site and relevant disturbance footprint.



Figure 3 Development Site Footprint

3.2 Site Context

The subject land is comprised mainly of flat-lying open paddocks, which have historically been used for cropping and grazing activities.

The site is bound by the Newell Highway to the south-east and is crossed by a 132 kV power line.

3.3 Existing Road Network

3.3.1 Newell Highway

Newell Highway is a State Arterial Road which is generally aligned in a north-south direction and extends between Goondiwindi in Queensland to Tocumwal in southern New South Wales.

In the vicinity of the site, Newell Highway has been constructed with a central seal in the order of 7.0 metres (two x 3.5 metre lanes) plus sealed shoulders measuring approximately 2.5 metres on each side; additional local widening has been provided at various points along Newell Highway (near the site) to provide for pull out areas for broken down vehicles.

The Newell Highway operates with a posted speed limit of 110 km/hr adjacent to the development site.

Figure 4 represents a typical section of Newell Highway near the subject site.



Figure 4 Views of Newell Highway Facing North-East Adjacent the Subject Site

3.3.1.1 Existing Traffic Volumes - Newell Highway East of Nicholson Lane¹

Data published by the Roads & Maritime Services (RMS), indicates that on average Newell Highway carries in the order of 2,250 vehicles per day in the vicinity of the subject site².

A further breakdown of the data reveals an approximate 50/50 northbound-southbound split, with 60% of vehicles classified as light vehicle traffic and 40% heavy vehicle traffic.

¹ Traffic Volume Data Sourced from RMS Traffic Volume Viewer: <https://www.rms.nsw.gov.au/about/corporate-publications/statistics/traffic-volumes/aadt-map/index.html#/?z=16&lat=-33.92508563661113&lon=147.2663964878011&yr=2018>

² Counters were located approximately 6 kilometres west of the site, however it is our view that they are representative of the volumes expected along the relevant section of Newell Highway

3.3.2 RMS Road Network Limits

The RMS General Mass Limits (GML) and Concessional Mass Limits (CML) network in the locality of the development site is reproduced as Figure 5 and the Higher Mass Limit (HML) network in the locality of the development site is shown in Figure 6.



Figure 5 RMS General Mass Limits (GML) and Concessional Mass Limit (CML) Network

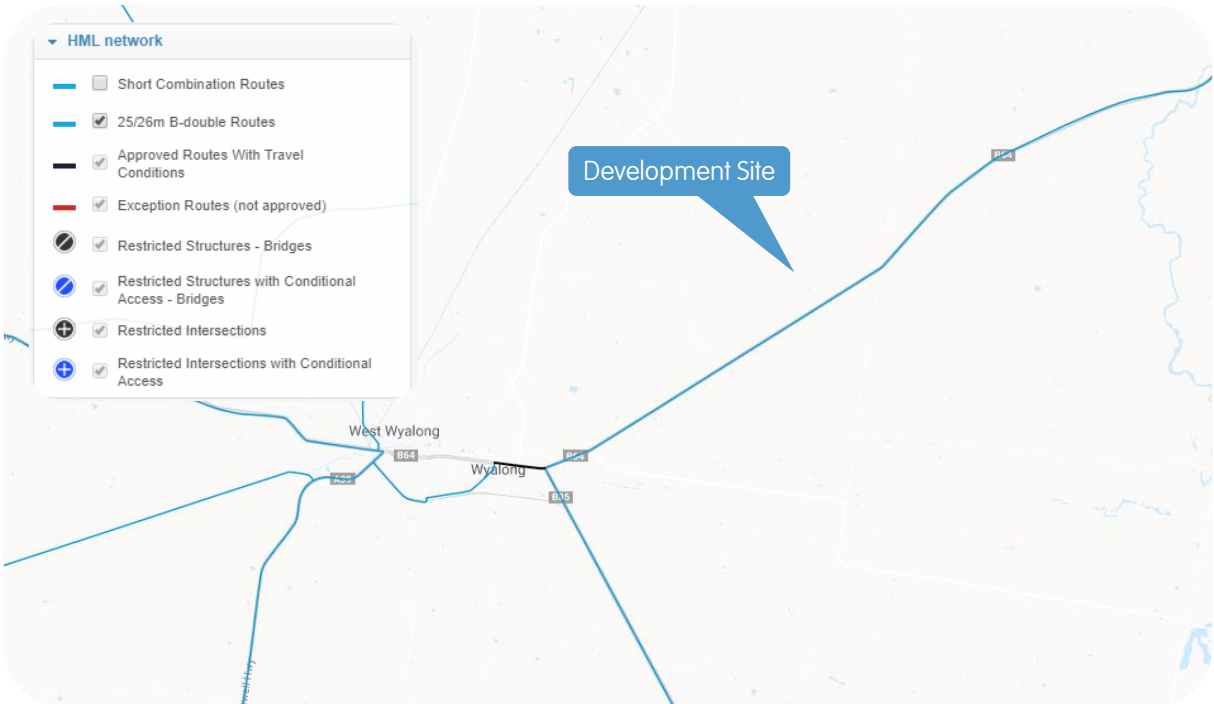


Figure 6 RMS Higher Mass Limits (HML) Network

The RMS network plans confirm that the Newell Highway in the vicinity of the site is approved for GML, CML and HML vehicles.

Furthermore, it is noted that routes approved for GML, CML and HML vehicles are available further afield to both the north-east and south-west.

3.4 Solar Farm Description

Development Consent (dated 7/05/2019, application number: SSD 9564) has been granted to develop the subject site as a Solar Farm Facility.

The proposed Solar Farm will comprise of approximately 350,000 solar panels (modules) and a capacity to generate up to 53MW.

An on-site substation will be constructed adjacent to and used to connect into the existing 132 kV power line which intersects the site from the north-east towards the south-west with access to the site afforded directly from Newell Highway.

Figure 7 shows the proposed development plan.

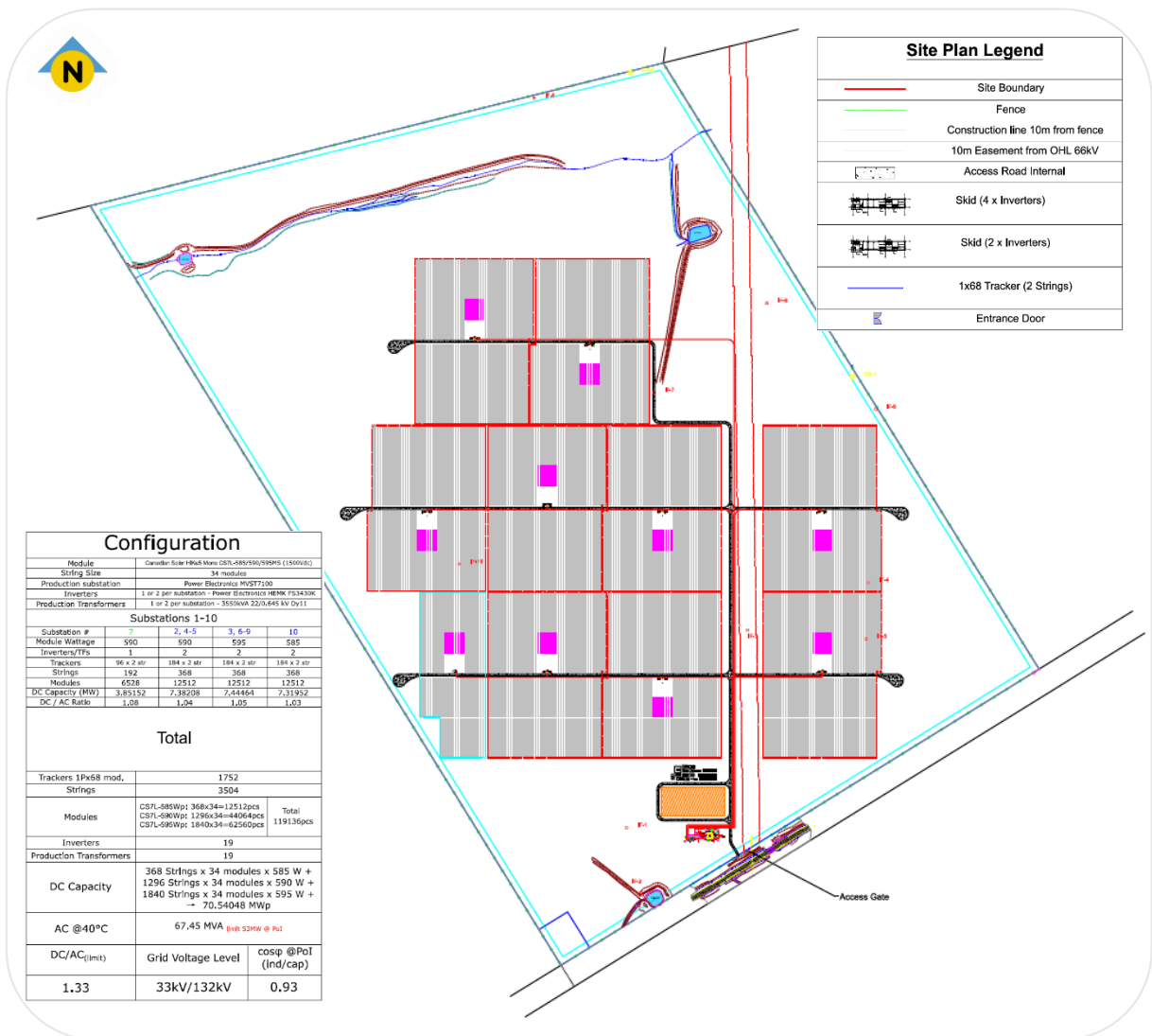


Figure 7 Proposed Development Footprint

4 Vehicle Access Routes

4.1 Access Routes

4.1.1 Coarse Aggregate and Fine Crushed Gravel

IMPACT[®] has been advised that both coarse and fine gravel for the construction of hardstand areas and access tracks will be sourced locally, and that access to the site by dump trucks will likely be via Newell Highway from the south-west.

We note that there are some quarries further afield to the north-east which could potentially be a source of aggregate for the project; should these be used, vehicles will approach along Newell Highway from the north-east.

4.1.2 Water Deliveries

We are advised that external water deliveries required for construction and dust suppression will be sourced locally and be via Newell Highway from the south-west.

4.1.3 Solar Module / Substation Components

IMPACT[®] have been advised that due to the specialised nature of the solar farm components, these materials are likely to be sourced from overseas.

Agility Project Logistics have prepared a route survey assessment for the delivery of solar module and substation components to the subject site.

It is advised that materials will be imported from Sydney and then transported to a staging facility located in Bathurst. The materials and components will be assembled within the facility and then transported to the subject site.

The anticipated route is as follows:

Sydney to Staging Area

Sydney - M4 Motorway (Western Motorway) - A32 Motorway (Great Western Highway) - Littlebourne Street - Lee Street - Staging Area

Staging Area to Subject Site

Staging Area - Lee Street - Littlebourne Street - A32 Motorway (Great Western Highway) - A41 Motorway (Mid-Western Highway) - Newell Highway - Subject Site

4.1.4 Construction Staff

During the delivery of the project, it is expected that a majority of staff will reside in Wyalong / West Wyalong. **IMPACT**[®] are advised that a majority of staff are to be bussed in from Wyalong, along Newell Highway.

4.1.5 Emergency Vehicle Access

Emergency vehicle access to/from the site will be via the Newell Highway. The site access will provide an appropriate ingress and egress point for emergency service vehicles.

Furthermore, vehicles accessing the site will not impact on emergency vehicles travelling along Newell Highway (see Section 4.5 below).

4.1.6 Haulage Route Mitigation

We understand that the applicant will liaise with contractors during the construction stages, particularly in relation to the haulage of civil materials (e.g. coarse and fine crushed gravel and water deliveries) to and from the site.

The intent of this is to minimise the use of local roads where possible and to ensure that any disruption is kept to a minimum.

Note: All haulage vehicles are to travel along this haulage route via Newell Highway via the approved access point. Any other route and access point is to be avoided, unless prior written consent is obtained from the department and relevant road authority as required.

4.2 Site Access

4.2.1 Access Corridor

Based on the foregoing, we understand that the main access corridor for construction vehicles will be via Newell Highway from the north-east (and right-turn into the site).

IMPACT[®] are advised that some vehicles may need to approach the site from the south-west (particularly if sourcing aggregate from this direction) and that access from this direction should not be precluded.

4.2.2 Internal Road Configuration

To minimise dust/debris from being tracked onto the Newell Highway, the internal road network will be constructed under an "all weather" road type pavement.

This aligns with the *Operating Conditions - Section 5a* of the Development Consent (dated 7/05/2019, application number: SSD 9564).

4.2.3 Pre-Approved Heavy Vehicle Routes

As highlighted in Section 3.3.2 Newell Highway, Showground Road, Compton Road and Central Road are all approved for use by GML and HML vehicles, thus no approvals will be required to use any of these roads to be used as part of the heavy vehicle delivery route.

We also expect that these intersections will be able to physically cater for any proposed oversized vehicles used by the site. These vehicles will require adequate traffic management (including escort vehicles and pilot cars) to the satisfaction of the relevant authority; the extent of the escort will be determined when securing the relevant RMS OD permits.

As OD (over-dimensional) vehicles will be expected during the construction of this project an application / permit will be required to the satisfaction of Council / NHVR.

4.3 Sight Distance Assessment

4.3.1 Sight Distance requirements

A desktop assessment of the sight distance available from the site access point has been undertaken using aerial imagery, Google Street View and images provided by the applicant. We note that an on-site assessment should be undertaken to validate the following sight distance review prior to construction.

AustRoads Guide to Road Design - Part 4A: Unsignalised Intersections sets out the sight distance requirements for unsignalised intersections, including:

- Approach Sight Distance;
- Safe Intersection Sight Distances (SISD); and
- Minimum Gap Sight Distance.

The guide recommends that Safe Intersection Sight Distance (SISD) is the minimum distances that should be provided on the Major Road at any intersection.

SISD is measured as shown in Figure 8.

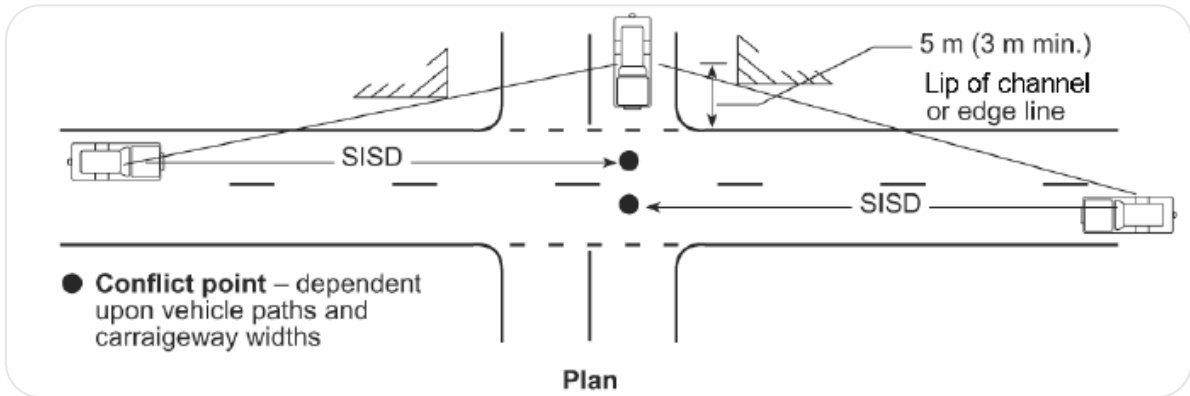


Figure 8 Guide to Measuring SISD for Unsignalised Intersections

The Austroads Guide provides SISD values for commuter vehicles at varying design speeds. For heavy vehicles the SISD values are calculated using the following formulae.

$$SISD = \frac{D_T \times V}{3.6} + \frac{V^2}{254 \times (d + 0.01 \times a)}$$

where:

- SISD = safe intersection sight distance (m)
- DT = decision time (s) = observation time (3 s) + reaction time (s): refer to the Guide to Road Design – Part 3: Geometric Design (Austroads 2009a) for a guide to values
- V = operating (85th percentile) speed (km/h)
- d = coefficient of deceleration – refer to Table 3.2 and the Guide to Road Design – Part 3: Geometric Design (Austroads 2009a) for a guide to values
- a = longitudinal grade in % (in direction of travel: positive for uphill grade, negative for downhill grade).

Based on the above formula and adoption of an operating 85th percentile speed of 120km/h, a minimum SISD of 420 meters is required.

4.3.2 Assessed Site Access Sight Distance

Newell Highway in the vicinity of the site is generally very straight and flat, the trees along the verge of the highway are setback at least 5 - 5.5 metres from the carriageway to the north-east and 6-7 metres in the south west, as generally illustrated in the image below.



Figure 9 Newell Highway Facing North-East Adjacent the Subject Site

The SISD measurement is taken from a location 5.0 metres from the edge of the through lane to the middle of the through lanes for approaching vehicles.

Thus, with trees setback approximately 5-7 metres from the through lanes, sight distance at this intersection to the north-east and south-west are expected to comfortably exceed the minimum requirement, as illustrated in Figure 10.



Figure 10 Sight Distance Assessment - Proposed Site Access

Based on the above, sight distances available along Newell Highway are more than sufficient to meet the minimum SISD requirements (assessed sight distances exceeding 450 metres in both directions).

Prior to construction, an on-site assessment will be undertaken to confirm that there is no vegetation impeding on the integrity of the available SISD's (minor trimming to be undertaken as required).

Furthermore, supplementary 'trucks crossing' signs could also be used to provide advanced warning for vehicles travelling along Newell Highway if desired. For further details, refer to Appendix C for the Traffic Control Plans.

4.4 Turning Lane Assessment

Reference has been made to AustRoads Guide to Traffic Management Part 6: Intersections, Interchanges and Crossings³ (AGTM Part 6). This document provides guidance on the warrants for various turn treatments at unsignalised intersections, these warrants are reproduced as Figure 11 overleaf.

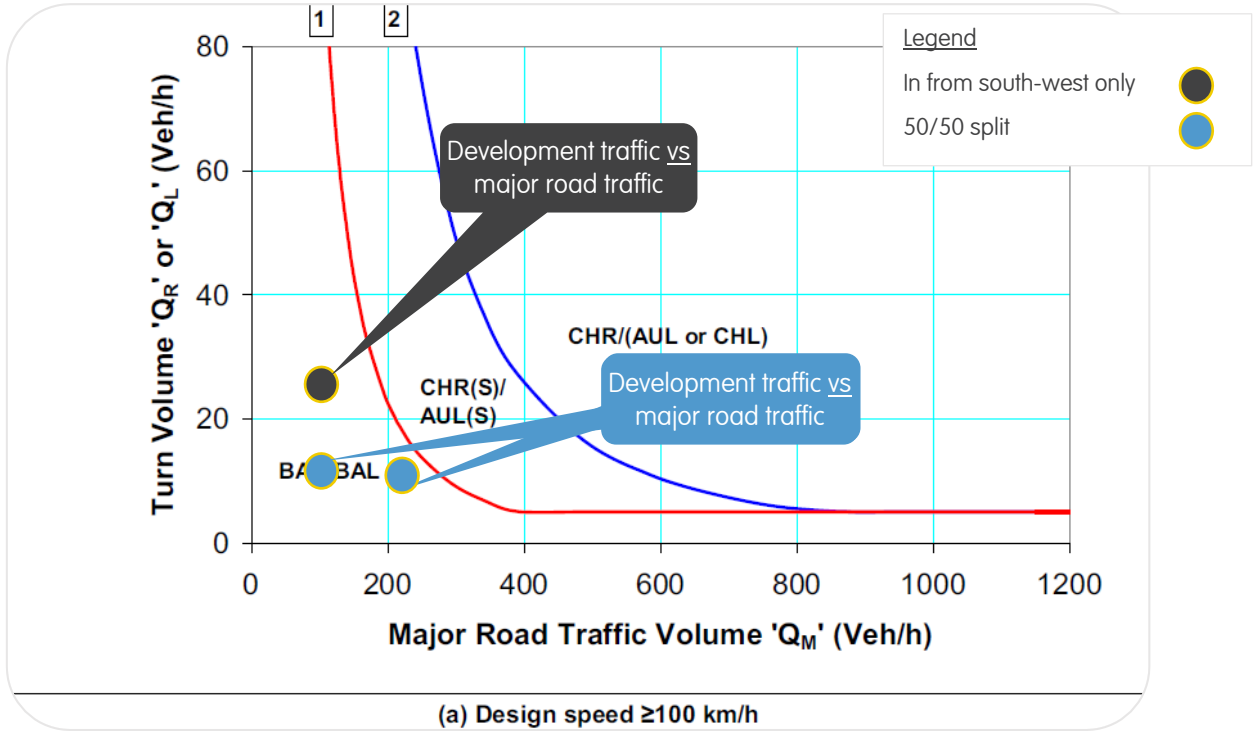


Figure 11 Warrants for Turn Treatments at Unsignalised Intersections

Note: Q_m (or major road traffic volume) is calculated using the method outlined in Figure 2.27 of the AGTM Part 6, which has been replicated below as Figure 12.

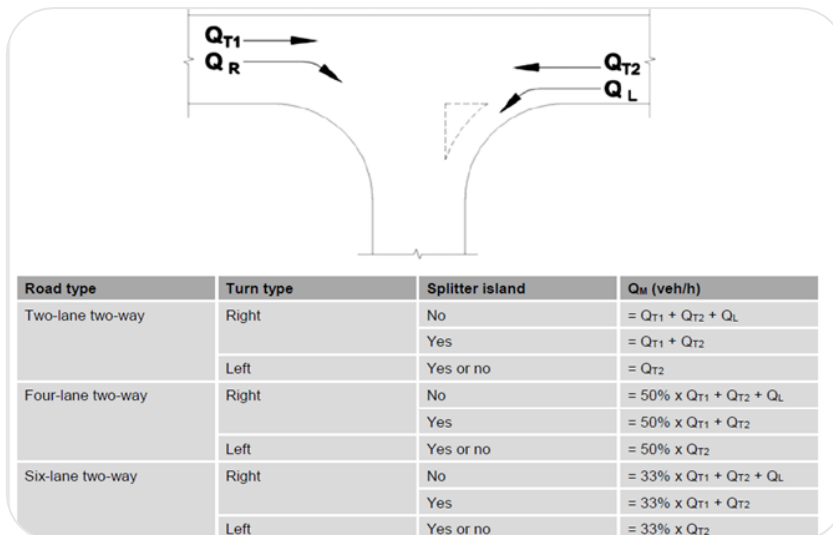


Figure 12 Calculation of The Major Road Traffic Volume Q_m

³ AustRoads Guide to Traffic Management Part 6: Intersections, Interchanges and Crossings, AustRoads 2017 Edition)

These warrants provide guidance on where a full-length deceleration lane must be used and where a shorter lane, designated Auxiliary Left Turn Lane (AUL) and Channelised Right Turn (CHR), may be acceptable based on traffic volumes.

The warrants apply to turning movements from the major road only, with the applicable traffic flows being peak hour flows. It has conservatively been assumed that peak site traffic will coincide with peak traffic along Newell Highway.

As discussed in Section 3.3.1.1, traffic counts undertaken by the RMS indicate that Newell Highway carries in the order of 2,200 vehicles per day on average. It is a 'rule of thumb' that peak hour traffic flows are approximately 10% of daily traffic volumes. Accordingly, about 220 vehicles (combined north and south) are expected during peak hours on average, with approximately 110 in each direction.

The proposal is projected to generate in the order of 92 daily vehicle movements during the peak construction period, of which 46 are expected to be inbound vehicle movements. (see Section 5.1 below). It is conservatively assumed that 50% of these movements will occur during the peak period, equating to approximately 23 vehicles going into the site.

As discussed above, we expect a majority of traffic will approach from the south west (as advised), however the warrants for traffic split evenly between north and south has also been shown (i.e. 12 in from each direction).

Consideration of these volumes against the warrants reveals that the following turn treatments are triggered:

- Basic Left-Turn treatment (BAL)
- Basic Right-Turn treatment (BAR)

It is noted that Condition 4a of the Development Consent (Dated: 7/05/2019, Application Number: SSD 9564), specifies that a Basic Left Turn (BAL) treatment and a Basic Right Turn (BAR) treatment be provided at the site access point to Newell Highway. Accordingly, the assessment undertaken verifies the appropriateness of these treatments and is therefore satisfactory.

Accordingly, detailed Functional Plans have been prepared (in accordance with Condition 4a) for the proposed site access point and is reproduced as Figure 13.

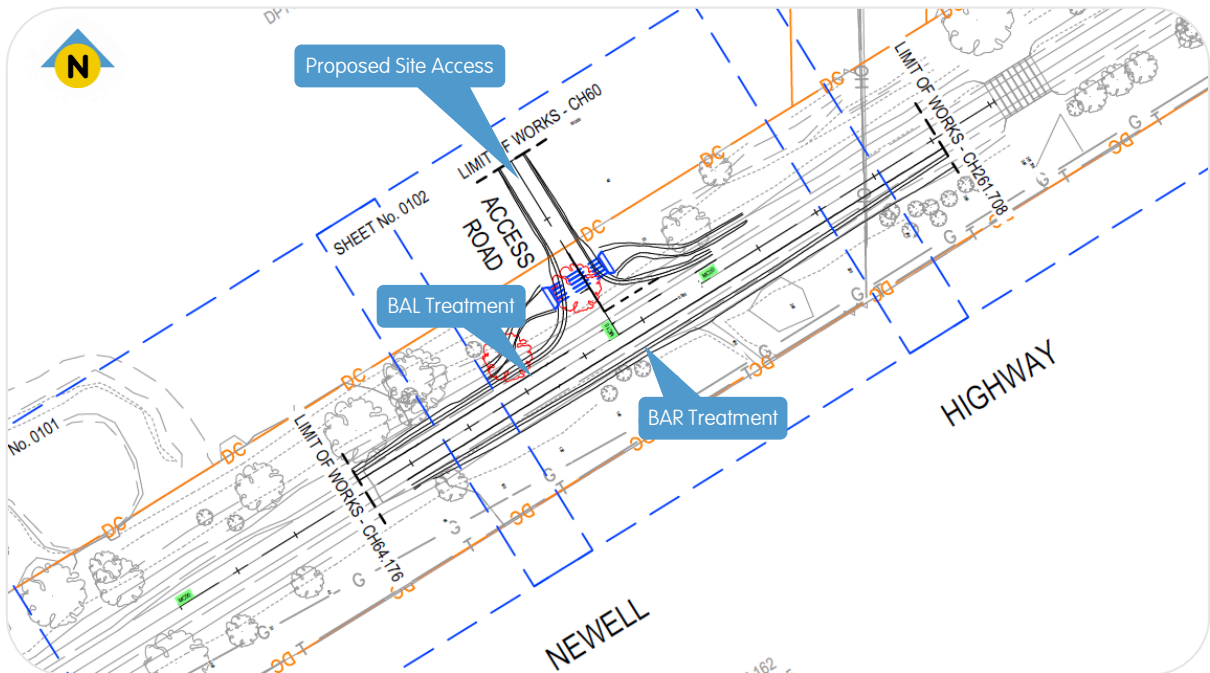


Figure 13 Proposed Detailed Functional Plan

5 Traffic Considerations

5.1 Traffic Generation

5.1.1 Construction Traffic

Construction is expected to occur for a total of approximately nine months, with estimated project traffic and peak daily traffic summarised in Table 3, the full traffic volume estimations are shown attached as Appendix A.

Table 3 Estimated One-Way Construction Traffic

Type of Vehicle	Total Vehicle Movements	Peak Daily Movements
Heavy Vehicles	Approximately 2,320 total HV movements	Peak of 24 daily HV* movements
Light Vehicles	Approximately 2,970 total LV movements	Peak of 22 daily LV* movements
Total	5,290 total movements	Peak of 46 daily movements

*Vehicle classes in accordance with AustRoads94 vehicle classification scheme.

LV = Light Vehicles for classes 1 and 2

HV = Heavy Vehicles for classes 3 to 12

It is noted that heavy vehicle movements to and from the subject site will be monitored on a daily basis to ensure that no more than 25 daily heavy vehicle movements occur. This aligns with Condition 1a of the Development Consent (Dated: 7/05/2019, Application Number: SSD 9564).

5.1.2 Operation and Maintenance Traffic

For the majority of the time, solar farms operate with limited staff and generate minimal traffic movements.

Accordingly, apart from the initial construction phase, the proposal is anticipated to have a negligible impact upon traffic on the local road network. Details of likely traffic generation during the operation are estimated as follows:

- Daily routine maintenance to be carried out by one to two people. It is assumed that the daily traffic generation will not exceed two vehicle movements per day to the local road network, with all other movements being internal to the site.
- Occasional maintenance will occur when components of the development need to be replaced, such as replacing solar panels or tracker systems. This is expected to occur only very occasionally and will have no discernible impact on the external road network.
- Visitors to the site such as office based staff and courier deliveries etc.
- No more than two (2) heavy vehicle movements per day will be expected during general operation and maintenance periods.

In the context of the solar farm construction traffic and background traffic along Newell Highway, operating traffic will be minimal.

Note: Anticipated traffic during operation and maintenance does not include traffic generated by any future possible upgrades (which are not known at this stage). It is expected that the traffic implications for any possible future upgrades will be addressed in a future application once detail about the upgrade is known.

5.2 Traffic Impact

The proposed development will generate up to 46 daily vehicle movements (comprising 22 light vehicles and 24 heavy / OD vehicles) during the peak construction periods and about two vehicle movements per day during operation.

This traffic will be entirely accommodated along Newell Highway. The impact of this additional traffic is expected to be minimal, as discussed below.

5.2.1 Newell Highway Impacts

As discussed in Section 3.3.2, the proposal seeks to utilise the existing RMS approved GML, CML and HML heavy vehicle routes which have been designed to cater for such vehicles as proposed.

Data provided by the RMS indicates that the Newell Highway generally carries in the order of 2,200 vehicles per day in the locality of the subject site.

Traffic during the peak construction periods equates to an approximate increase of 5% when compared against the existing traffic along Newell Highway. It is expected that these volumes will be comfortably absorbed on Newell Highway with no detrimental impacts to performance.

BAR and BAL treatments will be constructed in accordance with the Development Consent (Dated: 7/05/2019, Application Number: SSD 9564) at the site access point to ensure that inbound movements do not compromise performance and safety along Newell Highway.

5.3 Other Impacts

5.3.1 Visual Amenity / Glare

Consideration of the visual amenity implications of the solar farm are provided within the visual impact assessment which has been prepared by Accent Environmental Pty Ltd.

5.3.2 Nearby Mineral Extraction

IMPACT[®] are advised that there are a number of quarries and mineral extraction sites which have been identified within 20 kilometres of the subject site; a list of these quarries is provided attached as Appendix B. In addition, the Cowal Gold Mine is located slightly further afield approximately 30 kilometres north of the development site.

Given the proposed construction vehicle routes (as discussed in Section 4.1) it is possible that a portion of construction traffic will drive past some of these quarries / pits on their way to and from the development site.

We do not expect that construction traffic will have any significant impact on the operation of these pits, particularly given the relatively low number of total vehicle movements; 92 trips are expected across an entire day conservatively assuming all construction traffic passes a particular pit.

5.3.3 Civil Materials - Haulage Delivery Schedules

We understand that the Contractors will schedule in appropriate haulage delivery times. It is expected that the haulage schedule will be developed outside of commuter peak hour traffic and school peak times during the construction stages with the intent of causing minimal disruptions to the overall road network.

5.4 Road Maintenance

5.4.1 Declared Roads

Given the short construction period (and relatively low construction traffic volumes) we expect that RMS will retain maintenance responsibilities for these roads.

5.4.2 Condition Surveys

The following programme of condition surveys is proposed:

- Condition surveying will be conducted along:
 - Newell Highway (between Spauls Lane and Site Access)
- The condition surveying will consist of a video-based survey of the entirety of the sections of road listed above, together with a targeted photographic survey concerning patches showing existing damage at the time of survey; and
- Condition surveying will be conducted three times, once prior to the commencement of construction, once following the delivery of the solar module / substation and once following the completion of construction.

5.4.3 Repair and Maintenance Obligations

As stated in Chapter 5.4.2, Wyalong Solar Farm proposes to undertake three (3) surveys of Newell Highway located near the site access before, during and after construction of the Solar Farm. Following the first (pre-construction) survey, Wyalong Solar Farm and RMS will within 14 days review the survey and confirm that it accurately reflects the condition of the access roads at the that time. Following the second and third surveys, it is proposed that:

- A copy of the survey data and report including details of any remedial action that may be required will be provided to RMS within seven (7) days of the survey being completed;
- RMS will provide any feedback to Wyalong Solar Farm within a further seven (7) days and if no damage is apparent, RMS will confirm this in writing.
- In the event that RMS considers that damage has occurred to the access road specifically as a result of the transportation of solar farm materials and components, and was not evident prior to the commencement of site works, the parties will in good faith discuss and agree the nature and timing of any work required to investigate and/or rehabilitate any damage to road infrastructure; and
- The agreed works will be carried out in accordance with the procedures below

In addition, Wyalong Solar Farm and its contractors will be responsible for the transportation of the solar module / substation to the site, most of which will involve OD vehicles. Prior to transportation, and in order to obtain the necessary permits from RMS/Council, a detailed Route Study will be carried out. To facilitate the Route Study:

- The Council will be required to provide in advance information about the design and construction of certain features on the route such as a bridge in a timely manner;
- The contractor will provide the Route Study to Wyalong Solar Farm and RMS as soon as possible after it has been completed; and
- Subject to good faith discussion between parties, the Council will within 14 days of receiving the Route Study, specify any additional measures necessary before transportation occurs, confirm its agreement to proposals for temporary road closures and/or removal/reinstatement of roadside furniture, and if satisfied issue the necessary permit(s).

In addition to the above, Wyalong Solar Farm understands and acknowledges that authorised RMS officers, acting reasonably, may at any time:

- Inspect the roads, vehicles, and procedures being used by Wyalong Solar Farm or its contractors, and
- Subject to good faith discussions between the parties, require procedures to be changed or remedial or mitigation work (resulting directly from Wyalong Solar Farm construction activity) to be carried out by Wyalong Solar Farm with a specified time frame.

5.4.4 Repair and Maintenance of Declared Roads

Wyalong Solar Farm acknowledges that where remedial and/or maintenance work is required, the work must be carried out in compliance with RMS requirements, as appropriate.

Where any of the road assessment and evaluation processes described in Section 5.4.3 result in a requirement for remedial or maintenance work to be carried out which is not of any emergency nature, the following arrangements will apply:

- Within 28 days of confirming the nature and extent of the required works, Wyalong Solar Farm will provide RMS with detailed engineering plans and specifications (including timing, construction standards and materials), for approval;
- Wyalong Solar Farm will in good faith incorporate any modifications to the plan reasonably required by the relevant authority, and the plan will then be approved;
- Within a further 14 days after reaching agreement, the relevant authority will provide any necessary authorisations or permits for the works to proceed; and
- The relevant authority may at any time inspect the works in progress to ensure compliance with the approved plan, and will be required to confirm in writing the completed works have been carried out to their satisfaction and that no further obligation exist with respect to these works.

In the event that damage caused by Wyalong Solar Farm or any of its contractors is considered by the relevant authority to require immediate remedial action, Wyalong Solar Farm must undertake the necessary works to the satisfaction of the relevant authority, in a timely manner.

6 Traffic Management Plan

To mitigate the traffic impact the site will have on the local traffic network and the surrounding residents, a traffic management strategy should be developed for the project critical areas / activities.

An example of such a strategy is outlined below:

6.1 Construction Stages

A high-level schedule has been summarised in Table 4.

Table 4 Indicative Works Schedule

Wyalong Solar Farm - High Level Works Schedule					
Equipment Delivery	April 2022	May 2022	July 2022	September 2022	November 2022
Site Setup	■				
Civil Construction		■	■	■	
Deliveries	■	■			
Mechanical Construction		■	■		
Electrical Construction	■	■	■	■	
Fence Construction	■				
HP & Testing				■	■
Finish Construction					■

Note: At least 10 working days prior to any works commencing within a declared main road, Wyalong Solar Farm will contact Lesley Duncan (Bland Shire Council) and Maurice Morgan (RMS) to discuss construction methods and traffic management issues, in accordance with Condition 6.

6.2 Hours of Operation

The hours of operation for the site and the corresponding noise criteria have been detailed in Table 5.

Table 5 Hours of Operation

Working Hours	House	Noise Criteria
Normal Working Hours	7:00am - 6:00pm Monday to Friday 8:00am - 1:00pm Saturday	No noise criteria specified

6.3 Site Access Treatments

Traffic Management

As previously described, we expect construction traffic will arrive along Newell Highway from the west.

The desktop sight distance assessment reveals a minimum Safe Intersection Sight Distance (SISD) in the order of 450 metres for vehicles entering / exiting the site. This is sufficient and satisfies the minimum sight distance requirements for a design speed of 120 km/hr (posted speed limit along Newell Highway).

In addition to the Functional Plans (refer Figure 13), a Traffic Guidance Scheme (TGS) for the site access has been developed and is attached as Appendix C.

The TGS shows advanced warning signage of potential construction vehicle movements will be provided during the construction periods. Specifically, the TGS shows that 'trucks' ahead signs will be provided on approach to the site access, with one provided 100m in advance and 200m in advance on each approach.

We note that all external traffic management devices are to be removed outside of construction hours.

Site Access Design

In addition to the above, the site access point / crossover is to be constructed to a standard that is at least in accordance with relevant RMS / Australian Standards for rural crossovers.

Notwithstanding, we expect each crossover (noting the anticipated Over-Dimensional vehicle deliveries) will be constructed to a standard and dimension that exceeds the minimum requirements outlined in RMS / Australian Standards.

Note: The site access point shall be constructed to ensure that the capacity of the existing roadside drainage is not impacted or reduced (i.e. net zero impact on roadside drainage). This also applies to any other area where the project area interfaces with the external public areas (as relevant).

6.4 Over-Dimensional Deliveries

As discussed above, the proposed haulage route has previously been assessed and is considered appropriate to accommodate the solar module / substation component delivery, subject to various minor mitigation measures.

Vehicles will require adequate traffic management (including escort vehicles and pilot cars) to the satisfaction of the relevant authority with the extent of the escort to be determined when securing the relevant OD permits.

In the locations where the OD vehicles will need to encroach onto the opposing carriageway, the pilot cars and/or a spotter will stop and hold the traffic so that the vehicle can safely undertake this manoeuvre.

It is understood that the pilot vehicles / spotters will attempt to minimise the delay to local traffic where possible, however the safety of both the OD vehicle and public vehicles will be the utmost priority.

The proponent will liaise with the relevant controlling road and rail authorities to arrange any required reinstatement (i.e. removal of material, reinstatement of signage, nature strips etc.) where installation of hardstand materials or other modifications has been undertaken to permit passage of the over-dimensional loads.

6.5 Communication Strategy

6.5.1 Community Consultation

Metka EGN will consult with and notify the surrounding property owners and any affected businesses of the proposed works and the proposed traffic management strategy.

A project specific communication strategy will be developed to determine the most effective way of notifying all affected parties. Where required, consultation will also be undertaken with the responsible road authority to determine suitable communication methods.

Communication methods that will be utilised are as follows:

- Mail drop to local residents
- Email lists
- Variable Message Signage
- Noticeboard/Poster signage
- Media advertisement (radio/newspaper)
- Website

6.5.2 Authority Liaison

The proponent will be responsible for engaging and consulting with DPIE prior to commencing the construction, operation, upgrading or decommissioning of the development or the cessation of operations.

The proponent will be responsible for notifying the Department in writing of the date of commencement, or cessation, of the relevant phase.

If any of the phases of the development are to be staged, then the Applicant must notify the Department in writing prior to the commencement of the relevant stage, and clearly identify the development that would be carried out during the relevant stage.

6.5.3 Community Feedback, Incident Reporting & Compliance Records

MYT commits making plans (including the TMP) publicly available on the project website and commits to ensuring the TMP is up to date. The project website is: <https://app-613ee9d2c1ac189674c132e2.closte.com/>

- This project website will provide the following information:
- Environmental Impact Statement (EIS) and response to submissions
- The final layout plans for the development
- Information about the approvals for the development
- Assessment report and development consent
- Approved strategies, plans or programs required under the conditions of this consent as listed below
- The proposed plans for staging of the construction, operations or decommissioning of the development
- How to make complaints
- A register of previous complaints
- Compliance reports
- Any independent environmental audit, and the Mytilneos' response to the recommendations in those audits
- Any other matter required by the Secretary of the NSW Department of Planning, Industry and Environment.

This information will be kept up-to-date as relevant to the stage of the development, and as the progress progresses through the construction and into operation phases.

Within 6 months of construction commencing an environmental audit plan is to be prepared in accordance with Schedule 4, Condition 7.

In addition, all information as outlined within Schedule 4, Condition 8 will be made available on the project website as relevant. This information is to be kept up to date as relevant / required.

6.5.3.1 Addressing Community Complaints

As above, the project website will be kept up to date, and includes various different information that is relevant and can be utilised by the community.

Specifically, we note that people will be able to register / submit a complaint via the 'contact us' section. This section allows users to compose a message and provide their contact details for return correspondence.

The proponent will be responsible for monitoring these complaints and where prudent, responding directly to the plaintiff (if required).

Issues / complaints are to be monitored / responded to at least once per week.

A log of complaints / issues is to be kept, and where common / regular complaints are received, a response is to be prepared and included within the webpage (through the use of a 'Community' newsletter, or 'Frequently Asked Question').

6.6 Vehicle Scheduling

6.6.1 School Buses

Before the development starts, local and regional schools will be consulted for current bus timetables on the relevant construction traffic haulage routes. Suitable windows of inactivity (curfew times) will be arranged in agreement with the relevant schools and Bland Shire (or other relevant LGA where applicable), which applies to both Heavy Vehicles and Over-dimensional deliveries.

School bus route will be reviewed at the beginning of each school term in consultation with the local and regional schools and relevant authority, where applicable updated windows of inactivity (curfew times) will be arranged.

Note: All construction related vehicle traffic will be advised of the above school timetables, and recommended to avoid travelling during these times. We note however that light vehicles will have minimal impact on the operation of any school bus traffic, and thus are not explicitly excluded from travelling during these times.

6.6.2 Vehicle Convoys

In order to minimise the risk of convoying / platooning along the Newell Highway to the site access point, the component deliveries (solar module / substation) and other material deliveries (such as aggregates, water etc.) will be scheduled as part of the pre-construction process.

Specifically, all deliveries will be organised to occur at times which are offset or staggered from one another, minimising the likelihood of convoying occurring. All departures from the subject site will also be staggered.

6.7 Internal Management

An internal management strategy will be established within the subject site. This strategy will form part of the sites induction that will be undertaken by all personnel on-site.

The following key items are to be implemented:

- 20 km/hr speed limit on internal roads;
- Traffic management techniques and strategies in place for external roads;
- Radio communication between construction vehicles available at all times;
- Flashing lights to be fitted and utilised by construction vehicles where possible;
- All loads to be correctly restrained;
- Induction/training for drivers and staff; and
- Warning signage to be provided at critical points.

On-site parking will be provided within the construction compound, to provide a dedicated safe area where personnel can access their vehicles. Sufficient area will be set aside within this area to ensure that no construction related vehicle will need to park within the public road reservation area external to the subject site. The proponent will be responsible for managing the construction of the parking area, and ensuring that all construction vehicles park on-site.

6.8 Drivers Code of Conduct

6.8.1 General

The drivers Code of Conduct is to ensure that drivers adhere to the designated transport routes, and procedures to ensure that drivers implement safe driving practices.

All employees and contractors are made aware that responsible driving and adhering to the code is a condition of employment on the Wyalong Solar Farm Project with all drivers to be trained during the site induction of the Code of Conduct.

Any drivers reported or found to be acting in a manner contrary to the Code could be subject to disciplinary action (See Section 6.8.5).

All drivers conducting activities for the Wyalong Solar Farm Project must:

- Have undertaken a site induction;
- Hold a valid driver's licence for the class of vehicle that they operate;
- Operate the vehicle in a safe manner within and external to the project site;
 - By extension, regular maintenance and vehicle checks are to be undertaken of all project construction vehicles, to ensure (as much as possible) that vehicles are able to operate safely.
- Attend and receive designated training for the Code of Conduct;
- Adhere to the designated transport routes; and
- Comply with the direction of authorised site personnel when within the site.

Note: Drivers will be trained / inducted prior to beginning their tenure at the construction site. Due to the length of the construction (less than 12 months) retraining is not expected to be required. Notwithstanding, recertification / refresher inductions will be held every 12 months (if required).

6.8.2 Vehicle Speed

There are two (2) main types of speeding behaviours within the site:

- Where a vehicle travels faster than the posted speed limit; and
- Where a driver travels within the speed limit but because of road conditions (e.g. rain) this speed is inappropriate.

All vehicle drivers operating by or for the Wyalong Solar Farm Project are to observe the posted speed limits, with speed adjusted appropriate to suit the road environment and prevailing weather conditions, to comply with the Australian Road Rules. This vehicle speed must be appropriate to ensure the safe movements of vehicles based on the vehicle configuration.

Note: Requirements, demerits and examples will be provided during employee induction to encourage drivers to observe safe operating speeds as required. The proponent will be responsible for monitoring and encouraging the safe operation in accordance with these practices.

6.8.3 Vehicle Compliance Measures & Monitoring

6.8.3.1 Site Access Roads and Public Roads

Visual inspections of the site access roads, site entry and public road traffic routes will be undertaken on a frequent basis. Observations will be recorded and where necessary action will be taken.

6.8.3.2 Heavy Vehicle Site Access

Data of daily heavy vehicle movements into Site will be recorded and monitored to ensure alignment with the Development Approval.

In addition, data for over-dimensional movements into the subject site (over the construction period) will also be recorded as required.

All data / monitoring will be undertaken and recorded daily.

6.8.4 Safe Driving Practices

6.8.4.1 Journey Management

A risk assessment will be conducted for site based personnel undertaking RDO travel exceed 300 km radius from the project. Timely travel will be planned to ensure fatigue is managed within the 12 hour work-day and where possible travel within daylight hours will be scheduled.

6.8.4.2 Weather and Safe Driving Condition Assessment

In the event of substantial weather events, contact with contractors, sub-contractors, staff and site personnel will be made to ensure safe travel to work is maintained. Close monitoring of proposed road works and traffic alerts will be undertaken by the Contractor and communicated to all Site based parties travelling on the effected routes.

6.8.4.3 Fatigue Management

The heavy vehicle driver fatigue law commenced in NSW in February 2016 and applies to trucks and truck combinations over 12 tonne GVM. Under the NSW law, industry has the choice of operating under three fatigue management schemes:

- Standard Hours of Operation
- Basic Fatigue Management (BFM)
- Advanced Fatigue Management (AFM)

All heavy vehicle drivers operating by or for the Wyalong Solar Farm Project are to be aware of their adopted fatigue management scheme and operate within its requirements. Vehicle Management

All vehicles will enter and exit the site in a forward direction, no vehicles are to reverse out of the subject site at any time or under any circumstance.

In addition, all vehicles when exiting the subject site, should be inspected (and cleaned as required) to reduce the amount of dirt transferred from the subject site onto the external road network.

A cleaning station is to be provided proximate to the external site access point, so that vehicles are able to conveniently remove excess debris as required.

This procedure for vehicles exiting the property (and entering) should be addressed within the employee / driver on-boarding (induction). In addition, monitoring is to be undertaken intermittently to ensure that drivers are complying with the requirement to ensure that vehicles are cleaned of excess debris before departing.

6.8.5 Disciplinary Actions

Any drivers found not to be complying with the above code of conducts, including (but not limited to):

- Complying with vehicle speed requirements; or
- Driving during weather periods which are not considered safe by the proponent; or
- Driving longer or outside of periods than permitted; or
- Not adhering to the designated transport route as described above.

Will be reprimanded accordingly. A demerit / punishment system is to be put in place that provides punishments (as appropriate) for each breach of conduct. Should the breach be sufficient (or breaches continue to occur) the employee contract will be terminated.

6.8.6 Responsibility

The construction contractor (Mytilineos-RSD Australia MYT) is responsible for overseeing and ensuring that safe driving practices are being followed.

Compliance will be checked through a number of risk management processes, including:

- Pre-mobilisation checklist (to identify all hazards);
- Hazard in Construction (HazCON) workshops (risk assessment and control);
- HSE Risk Registers (documents hazards, risks, controls and how to review);
- All contractors will be pre-qualified to ensure that they have suitable HSE systems in place before being engaged;
- MYT will be responsible for ensuring all staff are trained, inducted and competent enough to do the work assigned;
- JSEA and SWMS are to be put in place for all tasks on-site and will be accepted once meeting MYT standards and deemed suitable;
- Compliance inspections will be completed by MYT representatives throughout the duration of the project
 - Inspections and reviews of Driver Compliance to be undertaken at least once per month

- Any non-conformances are entered in to HammerTech (the MYT HSE Platform);
 - Disciplinary action (refer above) will also be undertaken during this stage as required;

7 Environmental Management

In response to Schedule 4 of the Conditions of Consent, we note that the proponent will commit to complying with the conditions contained within (reproduced below).

Table 6 Schedule 4 Environmental Management

Condition No.	Condition
Condition 2	<p>The applicant must:</p> <ol style="list-style-type: none"> Update the strategies, plans or programs required under this consent to the satisfaction of the Secretary prior to carrying out any upgrading or decommissioning activities on site; and Review and, if necessary, revise the strategies, plans or programs required under this consent to the satisfaction of the Secretary within 1 month of the: <ul style="list-style-type: none"> Submission of an incident report under condition 4 of Schedule 4; Submission of an audit report under Condition 7 of Schedule 4; Any modification to the conditions of this consent
Condition 3	<p>With the approval of the Secretary, the Applicant may submit any strategy, plan or program required by this consent on a progressive basis.</p> <p>To ensure the strategies, plans or programs under the conditions of this consent are updated on a regular basis, the Applicant may at any time submit revised strategies, plans or programs to the Secretary for approval.</p> <p>With the agreement of the Secretary, the Applicant may prepare any revised strategy, plan or program without undertaking consultation with all the parties referred to under the relevant condition of this consent.</p> <p><i>Notes:</i></p> <ul style="list-style-type: none"> While any strategy, plan or program may be submitted on a progressive basis, the Applicant must ensure that all development being carried out on site is covered by suitable strategies, plans or programs at all times. If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.
Condition 4	<p>The Department must be notified in writing to compliance@planning.nsw.gov.au immediately after the Applicant becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one), and set out the location and nature of the incident.</p>
Condition 5	<p>The Department must be notified in writing to compliance@planning.nsw.gov.au within 7 days after the Applicant becomes aware of any non-compliance with the conditions of this consent. The notification must identify the development and the application number for it, set out the condition of consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been done, or will be, undertaken to address the non-compliance.</p>
Condition 6	<p>Prior to commencing the construction, upgrading and decommissioning of the development, the Applicant must submit a compliance report to the Department in accordance with the relevant <i>Compliance Reporting Post Approval Requirements</i> (DPE 2018), or its latest version.</p>

Condition No.	Condition
Condition 7	<p>Within 6 months of commencing construction, or as directed by the Secretary, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. The audit must:</p> <ol style="list-style-type: none">be prepared in accordance with the relevant <i>Independent Audit Post Approval</i> requirements (DPE 2018);be led and conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;be carried out in consultation with the relevant agencies;assess whether the development complies with the relevant requirements in this consent, and any strategy, plan or program required under this consent; andrecommend appropriate measures or actions to improve the environmental performance of the development and any strategy, plan or program required under this consent. <p>Within 3 months of commencing an Independent Environmental Audit, or unless otherwise agreed by the Secretary, a copy of the audit report must be submitted to the Secretary, and any other NSW agency that requests it, together with a response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations.</p> <p>The recommendations of the Independent Environmental Audit must be implemented to the satisfaction of the Secretary.</p> <p>Note: Also see Section 6.5.3</p>

APPENDIX A

Wyalong Solar Farm Construction Traffic Movements

Indicative Traffic Movements Provided by ESCO

H-Tracking System		
Expected MWp		130
Expected MVA		125
PCU	Schneider CS2400	
Material Delivery	MWp per load	Movements
Modules (40' Container)	0.21	619
Inverter Stations (40' Container)	4.40	28
Tracking System (40' Container)	0.40	325
Piles (40' container)	0.46	283
33kV Switchgear + O&M Facilities (Oversized)	130.00	3
220kV Transformer (Oversized)	130.00	1
Balance of System (40' Container)	1.00	130
Civil Construction (Semi-trailer)	0.15	867
Constuction Plants (Semi-trailer)		64
Total Heavy Vehicle Movements		2,320

Construction Labour	
Daily on Site Labour	150
Mini Bus Capacity	15
Daily Mini Bus Activity	10
Construction Period (work days)	198
Total Mini Bus Movements	1,980
Additional Daily Cars	5

West Wyalong- Indicative Construction Traffic Movements

Monthly Construction Traffic - Heavy Vehicles

Material Delivery	Month									Total	
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9		
Modules (40' Container)				124	124	124	124	124			619
Inverter Stations (40' Container)						9		9			28
Tracking System (40' Container)			81	81	81	81					325
Piles (40' container)		94	94	94							283
33kV Switchgear + O&M Facilities (Oversized)						3					3
220kV Transformer (Oversized)							1				1
Balance of System (40' Container)				43	43	43					130
Civil Construction (Semi-trailer)	173	173	173	173	173						867
Constuction Plants (Semi-trailer)	7	7	7	7	7	7	7	7	7	7	64
Total Heavy Vehicle Movements	181	275	356	523	429	268	141	140	7	7	2,320
Daily Average Heavy Vehicle Movements	9	13	17	24	20	13	7	7	1	1	

Monthly Construction Traffic - Light Vehicles

Construction Labour	Month									Total	
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9		
Total Light Vehicle Movements	193	223	373	478	448	415	340	310	193	193	2,970
Daily Average Light Vehicle Movements	9	10	17	22	20	19	15	14	9	9	

APPENDIX B

Mineral Resources

Quarry / Pit Locations (provided by Accent Environmental)

Quarry name	Identification number	Status	Distance and direction from site	Material quarried
Blacks Pit	217210	Operating - intermittent	1.3 km north-west	Siltstone
Unnamed	103930	Not operating	5.7 km south-west	Unprocessed construction materials
Blandview Pit	217198	Operating - intermittent	5.8 km north-east	Manna Conglomerate
Markeith Pit	217196	Operating - intermittent	6.1 km north-east	Manna Conglomerate
Lows Pit	217195	Operating - intermittent	7.1 km south-east	Manna Conglomerate
Unnamed	109065	Not operating	7.3 km south-west	Construction material
Unnamed	109066	Not operating	7.3 km south-west	Construction material
Unnamed	109067	Not operating	7.3 km south-west	Construction material
Millers Pit	216102	Not known	8.5 km west	Narragudgi Volcanics
Barbers Pit	217197	Operating - intermittent	8.6 km north-east	Manna Conglomerate
Unnamed	103931	Not operating	8.6 km north-east	Not known
Millers Quarry	104013	Operating - continuous	9.6 km south-west	Coarse aggregate quarry in Bland Diorite
Yiddah South Road Pit	216064	Not operating	10.4 km south	Yiddah Formation
Narragudgil Trig Pit	216062	Operating - intermittent	10.5 km south	Manna Conglomerate
Unnamed	104028	Not operating	10.6 km north-west	Not known
Unnamed	104027	Not operating	10.7 km north-west	Unprocessed construction materials
Unnamed	104026	Not operating	11.9 km north-west	Unprocessed construction materials
Unnamed	103929	Not operating	12.4 km south-west	Not known
Unnamed	108988	Not operating	14.0 km south-west	Not known
Unnamed	103928	Not operating	14.7 km south-west	Not known
Unnamed	216074	Not known	16.7 km west	Ungarie Granite
Rodmere Pit	217208	Operating - intermittent	17.4 km west	Humbug Sandstone
Wyalong South Pit	217181	Operating - intermittent	18.7 km west	Not known

APPENDIX C

Traffic Guidance Scheme

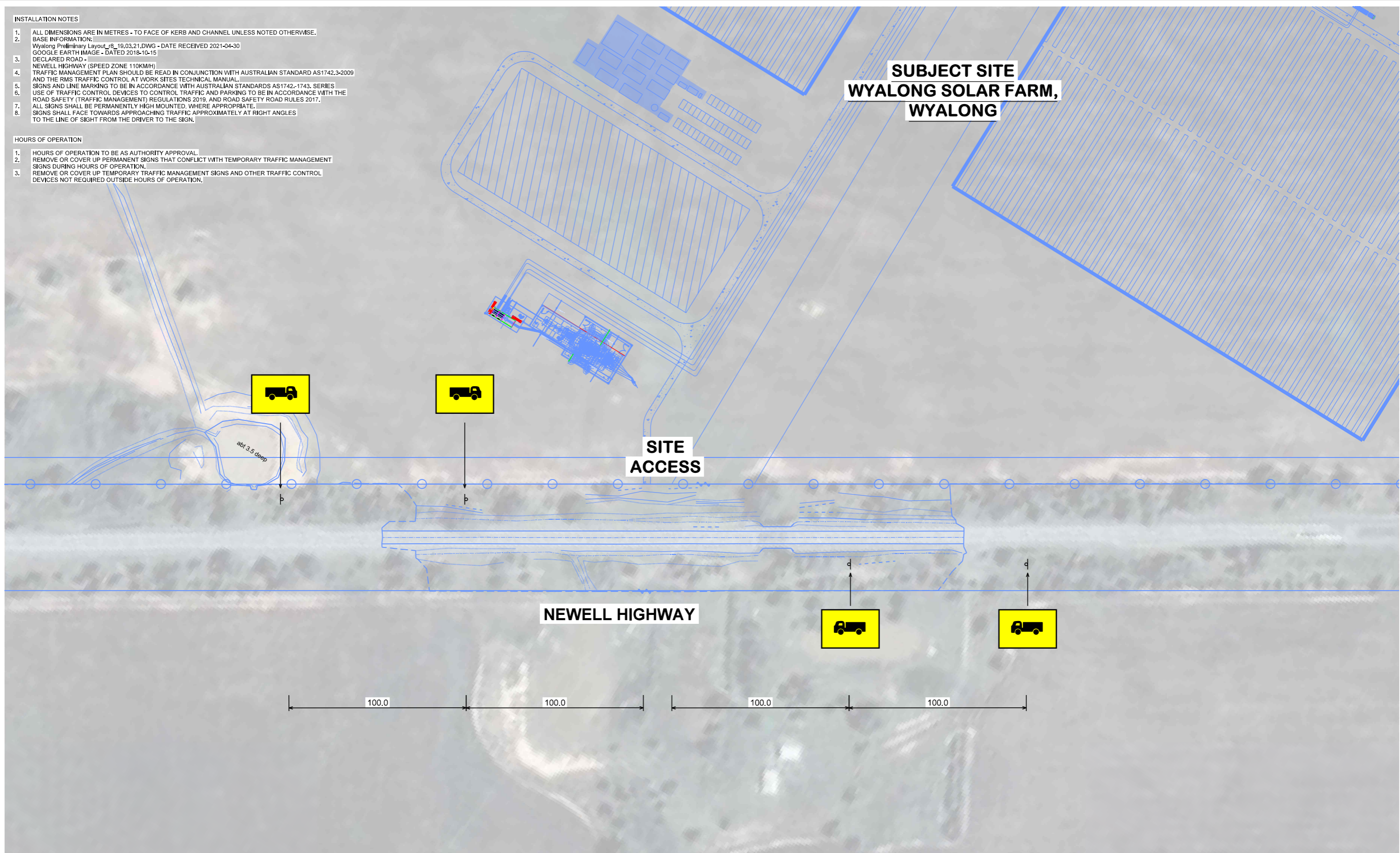
Traffic Control Plan: IMP210161-DG-01-A

INSTALLATION NOTES

1. ALL DIMENSIONS ARE IN METRES - TO FACE OF KERB AND CHANNEL UNLESS NOTED OTHERWISE.
2. BASE INFORMATION:
Wyalong Preliminary Layout_r8_19.03.21.DWG - DATE RECEIVED 2021-04-30
GOOGLE EARTH IMAGE - DATED 2018-10-15
3. DECLARED ROAD -
NEWELL HIGHWAY (SPEED ZONE 110KM/H)
4. TRAFFIC MANAGEMENT PLAN SHOULD BE READ IN CONJUNCTION WITH AUSTRALIAN STANDARD AS1742.3-2009 AND THE RMS TRAFFIC CONTROL AT WORK SITES TECHNICAL MANUAL.
5. SIGNS AND LINE MARKING TO BE IN ACCORDANCE WITH AUSTRALIAN STANDARDS AS1742.-1743, SERIES
6. USE OF TRAFFIC CONTROL DEVICES TO CONTROL TRAFFIC AND PARKING TO BE IN ACCORDANCE WITH THE ROAD SAFETY (TRAFFIC MANAGEMENT) REGULATIONS 2019, AND ROAD SAFETY ROAD RULES 2017.
7. ALL SIGNS SHALL BE PERMANENTLY HIGH MOUNTED, WHERE APPROPRIATE.
8. SIGNS SHALL FACE TOWARDS APPROACHING TRAFFIC APPROXIMATELY AT RIGHT ANGLES TO THE LINE OF SIGHT FROM THE DRIVER TO THE SIGN.

HOURS OF OPERATION

1. HOURS OF OPERATION TO BE AS AUTHORITY APPROVAL.
2. REMOVE OR COVER UP PERMANENT SIGNS THAT CONFLICT WITH TEMPORARY TRAFFIC MANAGEMENT SIGNS DURING HOURS OF OPERATION.
3. REMOVE OR COVER UP TEMPORARY TRAFFIC MANAGEMENT SIGNS AND OTHER TRAFFIC CONTROL DEVICES NOT REQUIRED OUTSIDE HOURS OF OPERATION.



LEGEND
 ULTIMATE BUILDING FOOTPRINT

7/05/2021 1:50:56 PM

ACCENT ENVIRONMENTAL

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Impact

IMPACT TRAFFIC ENGINEERING PTY LTD
 ABN 78 611 424 107
 LEVEL 17, 31 QUEEN STREET, MELBOURNE VIC 3000
 create@impactaustralia.com.au
 impactaustralia.com.au

MELWAY ONLINE REF: MAP X916 H3

SCALE
1:2000 @ A3

Client
ACCENT ENVIRONMENTAL

Project
**WYALONG SOLAR FARM
 NEWELL HIGHWAY, WYALONG
 CITY OF BLAND SHIRE**

Date
2021-05-07

Drawn / Approved
KD / BR

Drawing Number
IMP210161 - DG-01-01

Title
**TRAFFIC CONTROL PLAN
 CONSTRUCTION SITE ACCESS
 SITE LAYOUT**

Status
PRELIMINARY

Revision Description
ISSUED FOR INFORMATION

Revision
A

