Appendix F

Traffic Impact Assessments (West Mokoan Solar Farm & Kennedys Creek Solar Farm)

Prepared for
Lightsource bp
ABN: 00000000000

DRAFT

West Mokoan Solar Farm Planning Application

Traffic Impact Assessment

13-Jun-2025

D R A F T

West Mokoan Solar Farm Planning Application

Traffic Impact Assessment

Client: Lightsource bp

ABN: 00000000000

Prepared by

,

13-Jun-2025

Job No.: 60597809

AECOM in Australia and New Zealand is certified to ISO9001, ISO14001 and ISO45001.

D R A F T

Table of Contents

D R A F T

Appendix A
Concept Design A

Table of tables

Table of Figures

D R A F T

1.0 Introduction

AECOM Australia Pty Ltd (AECOM) have been commissioned to produce a Traffic Impact Assessment (TIA) for Lightsource Development Services Australia Pty Ltd (the Applicant), for the proposed West Mokoan Solar Farm Project, which is located on private land near Benalla-Yarrawonga Road, Benalla, Victoria. On 22 September 2021, ownership of the Project Applicant (433 Link Development Pty Ltd and 892 Yarrawonga Development Pty Ltd) was transferred from South Energy to Lightsource bp. South Energy retain ownership of the subject site and therefore an interest in the Project. Previous iterations of this report refer to South Energy, however all new information within this report refers to Lightsource bp to reflect current ownership of the Project Application.

Following the transfer of ownership of the Project, Lightsource bp resolved to develop the Kennedys Creek Solar Farm and the West Mokoan Solar Farm as a single Project (West Mokoan Solar Farm Project).

Lightsource bp subsequently proposed changes to the concept designs for the Project, therefore this TIA has been updated to support an application under Section 47 of the Planning and Environment Act 1987 (P&E Act) to:

- Combine the approved Planning Permit for West Mokoan Solar Farm (PA2000978) and approved Amended Planning Permit for Kennedys Creek Solar Farm (PA1900684-1) into a single Planning Permit
- Make the following design/project changes:
  - Include decentralised Battery Energy Storage System (BESS) (DC-coupled, sited with Power Conversion Systems (PCS)) across both solar farm sites, including partial noise walls around PCS /inverter locations across both sites
  - Include 81 Lake Mokoan Road as part of the West Mokoan Solar Farm site
  - Relocate the West Mokoan substation to the West Mokoan solar farm southern land parcel and connect to new transmission infrastructure from the Kennedys Creek Solar Farm site
  - Make minor updates and design changes as a result of the above.

The TIA will support a planning permit application for the use and development of a solar energy facilitity and utility installation and has been updated to reflect the latest application plans (identified as *'AUS_West Mokoan Solar Farm_LP3-BDL_06'* (Revision 06) prepared by Lightsource bp)

1.1 Scope

It is noted that this TIA assesses only the West Mokoan portion of the site despite the concept plans showing the combined solar farms. This TIA will review the existing road and transport network near the site, consider the site access and potential traffic impacts of the Solar Farm on the local road network and identify any required mitigation measures to safely facilitate construction and operational vehicle movements to and from the West Mokoan Solar Farm.

1.2 Summary of updates

This TIA has been updated to reflect the changes to the Project as follows:

- Overall report structure: updated to include the new transmission line and updated traffic generation based on information provided by Lightsource bp. Notable changes include Chapter 3.0 - Proposed project overview and Chapter 7.0– Construction impact assessment.
- Chapter 2.0 – Existing Conditions: updated to reflect potential changes to the local road network since the previous iteration of the report in 2019.
- Chapter 7.0– Cumulative impact assessment: this section has been included to consider the potential impact from the Kennedys Creek Solar Farm, owned by Lightsource bp and anticipated to be constructed and operated concurrently with West Mokoan Solar Farm.

D R A F T

1.3 Report structure

Following this introduction this TIA is structured as follows:

- Chapter 2.0 provides details of the existing road and transport network near the site
- Chapter 3.0 outlines the development proposal
- Chapter 4.0 outlines the construction impact assessment and includes potential traffic impacts on the local road network and required mitigation measures to safely facilitate the movements of vehicles to and from the development site
- Chapter 5.0 provides the operational impact assessment
- Chapter 6.0 provides the decommissioning impact assessment
- Chapter 7.0 Provides the cumulative impact assessment
- Chapter 8.0 concludes the TIA report and outline proposed mitigation measures for the Project.

1.4 References

The following reports and/or parties have been referenced or consulted in the preparation of this TIA report:

- Victoria Government Gazette – Road Management Act 2004, Code of Practice, Worksite Safety, Traffic Management 2010
- Road Management Act 2004
- Department of Transport (Regional Roads Victoria) – General Guidance
- Department of Transport (Regional Roads Victoria) Heavy Vehicle Network Maps in Victoria
- National Heavy Vehicle Regulator (NHVR) website / journey planner
- Benalla Rural Council Road Management Plan.

2.0 Existing conditions

This section of the report characterises and summarises the existing road network, traffic conditions and findings from the desktop review and site inspection in the study area to provide context for the remainder of the study. AECOM's site inspections were undertaken in February 2019 and November 2022.

2.1 Site location

The proposed West Mokoan Solar Farm site is located approximately 10 kilometres north-east of the town centre of Benalla and approximately 200 kilometres northeast of Melbourne's CBD. The Solar Farm is located on the eastern side of Benalla-Yarrawonga Road and has a frontage to Benalla-Yarrawonga Road and Lake Mokoan Road.

The West Mokoan Solar Farm development boundaries are shown in Figure 2-1, encompassing land within the Rural City of Benalla at the following addresses at 892 Yarrawonga Road, Goorambat, Benalla-Yarrawonga Road, Benalla, and 616 Benalla-Yarrawonga Road, Benalla.

D R A F T

AECOM

0 1 2 Km

WEST MOKOAN SOLAR FARM PROJECT AMENDMENT OVERVIEW PLAN

Legend

- West Mokoan Solar Farm Site Boundary
- Transmission Line Investigation Area
- Indicative Transmission Line Easement
- KC Indicative Substation Locations
- Indicative Transmission Line Centreline
- Indicative Transmission Line Pole Locations
- Property Boundaries

Figure 2-1 West Mokoan Solar Farm location

D R A F T

2.2 Local road network

2.2.1 Sydney Road

Sydney Road (see Figure 2-2) is an arterial road managed by Department of Transport and Planning (Regional Roads Victoria). This C-class road has two sealed lanes (approximately 7.4 metres wide) with unsealed shoulders of varying width (approximately 1 to 2.5 metres wide near the Hume Freeway interchange). For most of its length Sydney Road has a posted speed limit of 100 km/h, reducing to 80 km/h on approach to its crossroad priority intersection with the Hume Freeway.

Figure 2-2 Sydney Road looking towards the Hume Highway interchange

Source: AECOM – photo taken on Wednesday 20 February 2019

2.2.2 Benalla-Yarrawonga Road

Benalla-Yarrawonga Road is a C-class arterial road managed by Department of Transport and Planning (Regional Roads Victoria) with sealed lanes in each direction (approximately 6.6 to 7 metres wide) and unsealed shoulders (approximately 0.3 to 1 metre wide). The road is in good condition with line markings and signage present. The posted speed limit is 100km/h.

It should be noted that access to the southern part of the proposed West Mokoan Solar Farm is anticipated to be via Benalla-Yarrawonga Road, Goorambat, as shown in Figure 2-3.

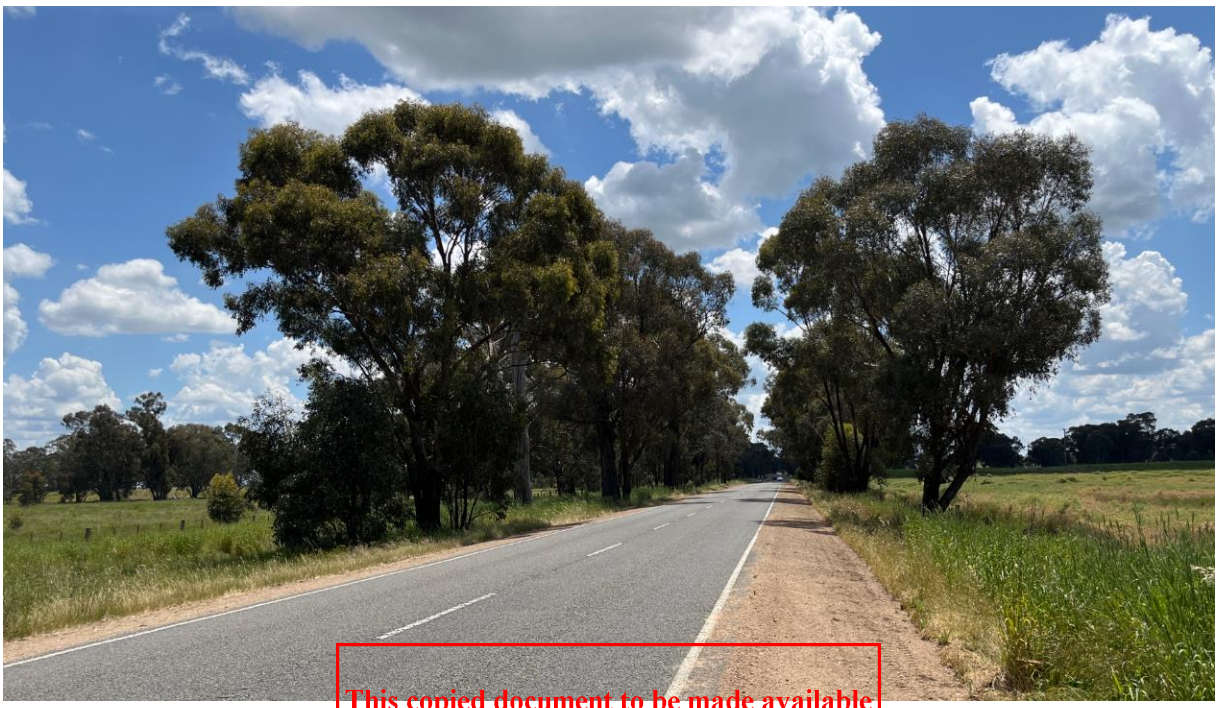


Figure 2-3 Benalla-Yarrawonga Road looking northbound near one of the proposed West Mokoan Solar Farm site entrances

Source: AECOM – photo taken on Wednesday 9 November 2022

2.2.3 Sydney Road, Benalla-Yarrawonga Road and Pearson Road priority intersection

Sydney Road forms a crossroad priority intersection with Benalla-Yarrawonga Road and Pearson Road, as shown in Figure 2-4.

All project traffic is anticipated to use this intersection to access the site via Benalla-Yarrawonga Road and Murray Road. Benalla-Yarrawonga was upgraded in the vicinity of its intersection with Sydney Road at the beginning of 2019. The posted speed limit on approach to the intersection with Benalla-Yarrawonga Road is 80 km/h. Several heavy vehicles were observed using the intersection during the site visit in November 2022.

Figure 2-4 Sydney Road, Benalla-Yarrawonga Road and Pearson Road priority intersection

Source: AECOM – photo taken on Wednesday 20 February 2019

2.2.4 Lake Mokoan Road

Lake Mokoan Road (see Figure 2-5) is a local road which provides access to farming land use in Goorambat. This sealed road runs through the middle of the northern section of the West Mokoan Solar Farm site. It is a two-way road with a total carriageway width of approximately 6 metres, with no shoulders along its length. Lake Mokoan Road has a default speed limit of 100 km/h.

A total of four site entry gates to the West Mokoan Solar Farm are to be located via Lake Mokoan Road.

Figure 2-5 Lake Mokoan Road looking westbound

Source: AECOM – photo taken on Wednesday 9 November 2022

2.2.5 Benalla-Yarrawonga Road and Lake Mokoan Road priority intersection

Lake Mokoan Road forms a priority intersection with Benalla-Yarrawonga Road (see Figure 2-6 to Figure 2-8).

Project related traffic travelling to the site access points on Lake Mokoan Road is assumed to primarily come from the Hume Freeway, therefore construction traffic will turn right from Benalla-Yarrawonga Road to Lake Mokoan Road, and undertake the reverse left out manoeuvre. The intersection allows for a large turning radius from Lake Mokoan Road into Benalla-Yarrawonga Road.

With a posted speed limit of 100 km/h on Benalla-Yarrawonga Road, the safe intersection sight distances (SISD) should be unrestricted for 248 metres in accordance with Austroads Guide to Road Design Part 4A: Unsignalised and Signalised Intersections design guide requirements (Table 3.2). This appears to be non-conforming northbound from a set-back distance of 3 metres (poor aerial imagery of the area has not allowed for certainty on achievable SISD). This seems to be due to the offset of the give-way line markings from the carriageway and existing heavy roadside vegetation in the northbound direction (see Figure 2-7). Based on a high-level review approximately 200 metres of SISD can be achieved in this direction. SISD in the southbound direction seems to be satisfactory based on site observations and desktop review against standards (see Figure 2-8).

Figure 2-6 Lake Mokoan Road looking westbound at its crossroad priority intersection with Benalla-Yarrawonga Road

Source: AECOM – photo taken on Wednesday 9 November 2022

Figure 2-7 Intersection of Lake Mokoan Road and Benalla-Yarrawonga Road looking northbound

Source: AECOM – photo taken on Wednesday 9 November 2022

Figure 2-8 Intersection of Lake Mokoan Road and Benalla-Yarrawonga Road looking southbound

Source: AECOM – photo taken on Wednesday 9 November 2022

2.3 Level crossing

The Albury to Melbourne train line (V/Line) traverses a level crossing (see Figure 2-9) located on Benalla-Yarrawonga Road approximately 800 metres southeast of Murray Road, connecting with the towns of Benalla and Wangaratta. This service operates at a frequency of three services per weekday in each direction.

Several V/Line coach routes connect with this train service at Benalla Station from Shepparton and Bright/Mount Beauty.

The at-grade level crossing at this location provides adequate sight distances and active controls such as roadside warning equipment with boom, audible warning devices and flashing lights therefore ensuring that this level-crossing is suitable for construction traffic movement.

Given that passenger trains traverse this level crossing approximately six times per day (both directions on two tracks), this will be considered further as part of the Transport Management Plan (TMP) as required under planning permit condition and prior to the commencement of construction.

Figure 2-9 Level crossing on Benalla-Yarrawonga Road

Source: AECOM – photo taken on Wednesday 9 November 2022

2.4 Existing sustainable modes of transport

2.4.1 Active transport

No shared pedestrian and cyclist paths are provided along most roads in the local area. However, Lake Mokoan Road is shared with cyclists as indicated by a sign near its priority intersection with Benalla-Yarrawonga Road.

Land use surrounding the proposed West Mokoan Solar Farm is generally agricultural in nature. However, there are some residential and farming dwellings within a two-kilometre radius of the site. As such, pedestrians and cyclists may interact with vehicles coming in and out of the site.

2.4.2 Public transport

The PTV Benalla bus network does not provide any bus services operating on the local road network discussed in Section 2.2.

V/Line provides a regional coach service that operates from Melbourne to Mulwala (NSW) via Benalla and Seymour. V/Line also provides coach services that operate from the town of Benalla to Wangaratta, as summarised below:

- Albury – Melbourne via Seymour (twice a day Monday to Friday)
- Albury – Bendigo via Shepparton and Wangaratta (operates approximately twice a day on a weekday and once a day during the weekend)
- Mount Beauty – Melbourne via Bright (operates mostly between Melbourne and Seymour Station approximately five times a day Monday to Friday)
- Sydney – Adelaide via Albury (operates once a day except Saturday)

These regional buses are anticipated to be utilising Sydney Road and will go past the intersection of Sydney Road and Benalla-Yarrawonga Road and near the Hume Freeway interchange.

Local school bus routes also operate in the area and will typically operate Monday to Friday during school drop off (8 am to 9am) and pick-up (3:30 pm) times. Public bus and school routes are expected to be confirmed prior to construction commencement during the development of the TMP with timetabling rechecked prior to recommencement of the school term to ensure that construction vehicles do not operate at the same time. The local school bus routes and stops are shown in Figure 2-10.

D R A F T

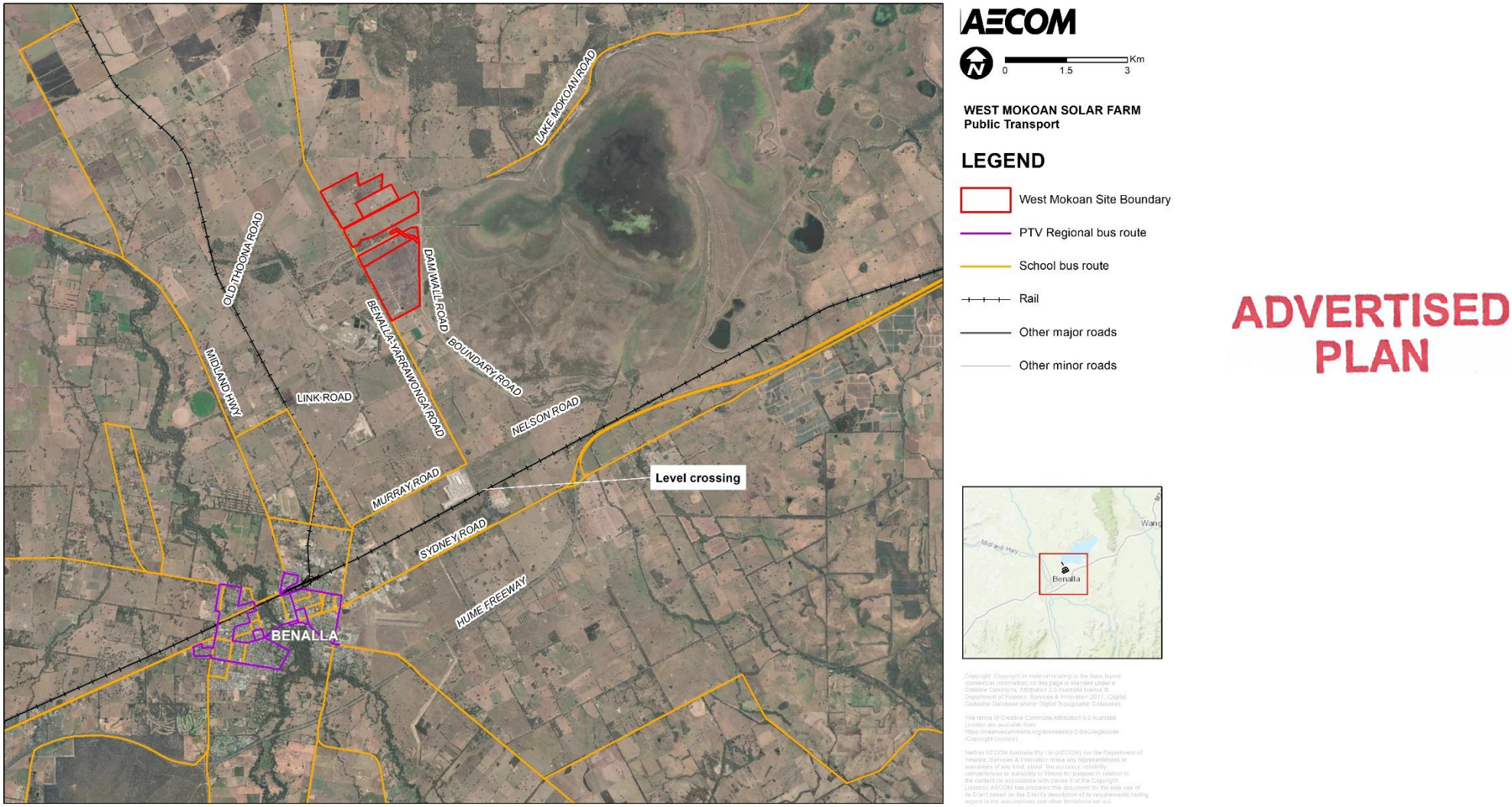


Figure 2-10 PTV and school bus routes near proposed West Mokoan Solar Farm

2.5 Traffic conditions

2.5.1 Sydney Road

The traffic growth pattern on Sydney Road (between the Hume Highway off-ramp and Benalla-Yarrawonga Road) was extracted from the Department of Transport (Regional Roads Victoria) Traffic Volume Data and Open Data Hub (prepared by Information Management and Technology), April 2018 and May 2021, and is provided in Table 2-1. It is noted that traffic volumes recorded in 2020 may be lower due to travel restrictions associated with COVID-19.

Table 2-1 Sydney Road traffic growth pattern

Sydney Road	Annual Average Daily Traffic Data (AADT)						
	2015	2016	% Change	2017	% Change	2020	% Change
Westbound	3,000 (350)	3,200 (380)	7% (8%)	3,300 (400)	3% (5%)	3,400 (395)	- 3% (-1.25%)
Eastbound (KML 2017)	-	-	-	3,200 (470)	-	-	-

Note: Numbers in brackets are Heavy Vehicle volumes.

As shown above, Sydney Road has experienced steady but relatively low traffic growth in recent years.

Assuming consistent low traffic growth, Sydney Road currently carries approximately 6,400 two-way vehicle trips per day, with approximately 790 of these being heavy vehicles, or 13 percent.

It is typically considered that a road's peak hour volume is around 10 percent of the AADT volume, accordingly Sydney Road can be estimated to have a peak hour traffic volume of approximately 640 two-way vehicle trips (or 320 one-way vehicle trips).

2.5.2 Benalla-Yarrawonga Road

The traffic growth pattern on Benalla-Yarrawonga Road has been extracted from the Department of Transport (Regional Roads Victoria) Traffic Volume Data and Open Data Hub (prepared by Information Management and Technology), April 2018 and May 2021, and is provided in Table 2-2. It is noted that traffic volumes recorded in 2020 may be lower due to travel restrictions associated with COVID-19.

Table 2-2 Benalla-Yarrawonga Road traffic growth pattern

Benalla-Yarrawonga Road	Annual Average Daily Traffic Data (AADT)						
	2015	2016	% Change	2017	% Change	2020	% Change
Northbound	420 (30)	460 (30)	10% (0%)	460 (30)	0% (0%)	471 (35)	3% (17%)
Southbound	410 (30)	440 (30)	0% (-33.5%)	440 (40)	0% (25%)	455 (39)	3.4% (56%)

Note: Numbers in brackets are Heavy Vehicle volumes.

As shown above, Benalla-Yarrawonga Road has experienced little or no traffic growth in recent years.

Assuming continuation of low traffic growth rates, Benalla-Yarrawonga Road currently carries approximately 926 two-way vehicle trips per day, with approximately 74 of these being heavy vehicles, or 7.5 percent.

It is typically considered that a road's peak hour volume is around 10 percent of the AADT volume, accordingly Benalla-Yarrawonga Road can be estimated to have a peak hour traffic volume of approximately 93 two-way vehicle trips (or 47 one-way vehicle trips).

2.5.3 Lake Mokoan Road

A site visit was conducted by AECOM on Tuesday 28 October 2019 at approximately midday. A second site visit was undertaken on Wednesday 9 November 2022 at approximately midday. Although not during the peak operational hours, Lake Mokoan Road was viewed to be lightly trafficked with approximately one vehicle every 10 minutes leaving Lake Mokoan Road onto Benalla-Yarrawonga Road. Based on these observations, it is assumed that Lake Mokoan Road Lake carries approximately only 10 vehicles per hour.

2.6 Local crash history

Victoria road crash data collated by the Department of Transport and Planning (DTP) has been analysed to assess the crash history of the local road network in the vicinity of the West Mokoan Solar Farm site over the last five years of available data (2019 – 2023). A detailed breakdown of the recorded crashes is provided in Table 2-3. In summary the following has been found:

- A total of 14 crashes were recorded in the area. These included nine serious injury crashes and five minor injury crashes. No fatal crash was recorded
- Of the nine serious injury crashes recorded, six were collisions with a fixed object. These included one crash on Benalla-Winton Road near the Hume highway on-ramp and five crashes along Benalla-Yarrawonga Road between Sydney Road and Old Thoona Road
- Of the five serious injury recorded along Benalla-Yarrawonga Road, two occurred due to a collision with a fixed object approximately 440 metres and one kilometre northwest of the Lake Mokoan Road and Benalla-Yarrawonga Road priority intersection. Another collision with a fixed object was recorded approximately 730 metres south of the Lake Mokoan Road and Benalla-Yarrawonga Road priority intersection
- One other injury crash was recorded approximately 10 metres west of the Benalla-Yarrawonga Road, Sydney Road and Pearson Road crossroad priority intersection resulting from a collision with another vehicle
- Two crashes resulting in serious injuries occurred in the vicinity of the Old Thoona Road and Benalla-Yarrawonga priority intersection which were classified as a collision with a fixed object and a collision with another vehicle respectively
- None of the crashes recorded in the area involved cyclists, pedestrians or motorcyclists
- None of these crashes occured in the immediate vicinity of the proposed site access via Lake Mokoan Road and Benalla-Yarrawonga Road.

The crash review reveals that there are no significant clusters of crashes on the roads in the vicinity of the proposed site. However, a number of serious injury crashes were recorded along Benalla-Yarrawonga Road where the speed limit is 100km/h, several of which were caused by a collision with a fixed object. The similarity of these incidents suggests that there may be underlying factors contributing to these crashes. High travelling speeds which are generally typical on rural roads may be a direct contributing factor to these serious injury crashes recorded in the area.

Table 2-3 Summary of crashes in the last five years (2019-2023)

Crash no.	Date	Time	Vehicle involved	Crash type	Speed limit	Severity
1	28/02/2019	Day	1 LV	Collision with a fixed object	100 km/hr	Serious injury accident
2	11/06/2019	Dark No street lights	1 LV	Collision with a fixed object	100 km/hr	Serious injury accident
3	4/08/2019	Dark No street lights	1 LV	Collision with a fixed object	100 km/hr	Other injury accident
4	24/09/2020	Day	1 LV	Collision with a fixed object	80 km/hr	Serious injury accident
5	29/12/2020	Dark No street lights	1 LV	Collision with a fixed object	100 km/hr	Other injury accident

Crash no.	Date	Time	Vehicle involved	Crash type	Speed limit	Severity
6	31/12/2020	Day	2 LV	Collision with vehicle	100 km/hr	Serious injury accident
7	7/01/2022	Day	1 LV	Collision with a fixed object	100 km/hr	Serious injury accident
8	6/06/2022	Dark No street lights	2 LV	Collision with vehicle	80 km/hr	Other injury accident
9	14/07/2022	Dark No street lights	1 LV	Collision with a fixed object	100 km/hr	Serious injury accident
10	20/08/2022	Dark Street lights on	1 LV	Collision with vehicle	100 km/hr	Serious injury accident
11	16/09/2022	Day	2 LV	Collision with vehicle	100 km/hr	Other injury accident
12	29/11/2022	Dusk/Dawn	2 LV	Collision with vehicle	80 km/hr	Other injury accident
13	24/06/2023	Dark No street lights	1 LV	Collision with a fixed object	100 km/hr	Serious injury accident
14	20/07/2023	Dark Street lights on	1 LV	Vehicle overturned (no collision)	80 km/hr	Serious injury accident

3.0 Proposed project

3.1 Overview

An overview layout of the proposed West Mokoan Solar Farm is provided in Appendix A.

The concept layout for the proposed Solar Farm solar modules and associated mounting structures, will be comprised of a Single Axis (see Figure 3-1) Tracking System. The final layout and component selection for the proposed West Mokoan Solar Farm would be subject to a detailed design process, which occurs after the planning application process is completed. The Project will be connected into the 220kV network via a new on-site substation. This new point of connection will also be shared by the Kennedys Creek project, which will be connection via a new overhead transmission line. An overview of the proposed development is shown in Figure 3-2.

Figure 3-1 Typical Single Axis Tracking System

In addition to the above the following would also be required:

- Power conversion units (PCUs)

D R A F T

- Cabling
- Grid connection
- Control room
- Laydown
- Switchyard
- Site access tracks
- Landscaping
- Native vegetation removal
- Security fencing
- CCTV and infra-red lighting
- Business identification signage.

D R A F T

Figure 3-2 West Mokoan Solar Farm development

D R A F T

3.2 Construction phase overview

3.2.1 Site access

There are proposed to be a total of six site accesses to the West Mokoan Solar Farm, which are outlined below and shown in Figure 3-2.

- Four access points are proposed via Lake Mokoan Road
- Two site access entries are proposed via Benalla-Yarrawonga Road to access the southern section of the West Mokoan Solar Farm.

3.2.2 Construction activities

Construction is anticipated to commence in late 2025 / early 2026 and over a 24-to-30-month period. Construction activities include:

- Preliminary site access for site set up and mobilisation to establish construction area
- Civil works, which may include clearing of the land, grading, compaction, stormwater drainage, sediment controls and dust suppression
- Installation of footings (final siting to be determined during detailed design)
- Installation of the solar panels onto mounting structures
- Installation and connection of the solar panels to solar farm infrastructure including electrical control cabinets
- Installation of the PCS
- Connection of site infrastructure, including the electrical control cabinets, PCS and underground cabling
- Construction of substation
- Construction of control building and Operation and Maintenance area.
- A decentralised BESS with a proposed capacity of:
  - Approximately 120 MW/480 MWh for Kennedys Creek project site, with approximately 24 PCSs (48 double inverters) across the site
  - Approximately up to 180 MW/720 MWh for West Mokoan project site, with approximately 32 PCSs (64 double inverters) across the site.
- Demolition of the dwellings located at 892 and 616 Benalla-Yarrawonga Road
- For the transmission line, each pole location will have an approximately 30 metre by 30 metre hardstand area

These activities would be undertaken during standard hours for building and works and will be managed through a CEMP as proposed by the PEMP. Construction access will be provided from each solar farm site and via Boundary Road. Ongoing communication with local residences would occur throughout the construction process.

3.3 Operation phase overview

The West Mokoan Solar Farm is anticipated to operate for up to 30 years. This estimated project life is based on the lifespan of the solar panels, which degrade over time.

A minimal number of personnel would be required for the operation and maintenance of West Mokoan Solar Farm. It is expected that the West Mokoan Solar Farm will employ up to five full-time employees, which would result in regular visits to the site. Daily operational activities are expected to be limited to remote monitoring of equipment, whilst full servicing of power conversion units and switchyard equipment would occur on a quarterly basis. It is anticipated that the cleaning of solar panels will also

occur as required based on weather and local conditions. There will be no storage of hazardous or dangerous goods or materials on site during the operation of the solar farm.

3.4 Decommissioning

Decommissioning of the Project will occur at the end of its operational life. A decommissioning plan for the Project and associated infrastructure will be prepared in advance of decommissioning in consultation with the relevant regulatory authorities and landholders. The basis of the plan will be that the Project and associated infrastructure are to be decommissioned in line with the applicable legislative requirements and best practice guidelines existing at that time. Should the Project be approved, the development approval for the Project will include standard conditions regarding the cessation of operations, decommissioning and rehabilitation of the Project Area.

Lightsource bp or its contractors will seek to recycle all dismantled and decommissioned infrastructure and equipment, where feasible and practicable. Lightsource bp has a partnership with Lotus Energy to manage the recycling of solar panels, through the life of the Project, if panels are damaged during construction or operations and in the decommissioning stage. Structures and equipment that cannot be recycled would be disposed of at an approved waste management facility in accordance with all statutory requirements.

Vehicle movements and personnel requirements during the decommissioning phase are expected to be similar or less than the construction phase of the Project.

Decommissioning of the project does not apply to the substation on Lot 2-5 on LP 206524H, its associated access road or any above or below ground electrical infrastructure connecting the substation to the existing Transmission Network as these items are required to be made available to connect any future Energy Generation Facility project on nearby land to the Transmission Network.

4.0 Construction phase impact assessment

Construction and operation of the Kennedys Creek Solar and transmission line is expected to take place concurrently with the West Mokoan Solar Farm and as such, there is potential for cumulative transport impacts. The following sections contain the impact assessment for the West Mokoan Solar Farm only. The cumulative impact analysis considering Kennedys Creek Solar and transmission line are contained in Section 7.0.

4.1 Construction traffic generation

4.1.1 Workforce

Daily two-way traffic generation during peak construction of the solar farm was determined based on estimates provided by Lightsource bp. During peak construction for such a size solar farm approximately 229 construction staff could be on-site at one time. The assessment focuses on workforce traffic generation during peak periods where maximum construction traffic generation is anticipated.

It is expected that 80% of workers will travel via bus shuttles and the remaining workers are expected to travel in single-occupancy vehicles to and from the site. Each bus shuttle is understood to have a 14 person capacity. Based on proposed construction shifts, peak trips could be expected to occur between 5:30am and 6:30 am, with around 59 vehicle arrivals, and 6:00pm to 7:00 pm with 59 vehicle departures from the site on a typical weekday. It is noted that this assessment focuses on the maximum anticipated workforce traffic generation which is expected to occur during the aforementioned peak periods. While some light vehicle movements might occur during the day, these would be relatively low.

A summary of daily workforce traffic generation is during construction peak is provided in Table 4-1.

Table 4-1 Anticipated two-way daily traffic generation during construction

Type	AM peak (5:30am – 6:30am)	Daytime (6:30am-6pm)	PM peak (6 - 7pm)
Light vehicles	46	0	46
Bus shuttles	13	0	13
Total	**59**	**0**	**59**

4.1.2 Heavy vehicles

Heavy vehicle movements are anticipated to be generated by the various construction activities which include:

- Site set up and demobilisation (semi-trailer and low loader)
- Road and hardstand material construction equipment delivery (truck, dog and low loader)
- General equipment delivery (low loader and semi-trailer)
- AC Cable installation (semi-trailer and low loader)
- Overhead line installation (semi-trailer, low loader and Restricted Access Vehicle (RAV))
- Switchyard construction (concrete agitator, low loader, semi-trailer, RAV and truck)
- Other employee movements, waste, consumables etc. (light vehicle, van and truck).

It is estimated that there will be 68 heavy vehicle movements to and from the subject site per day during construction to undertake the construction activities and account for deliveries for the solar farm.

The program and construction volumes would be confirmed once a contractor is hired for the project and a traffic management plan (TMP) is produced.

A summary of daily heavy vehicle traffic generation for the transmission line during construction peak is provided in Table 4-2.

Table 4-2 Anticipated two-way daily heavy vehicle traffic generation during construction

Type	AM peak (5:30am – 6:30am)	Daytime (7am-6pm)	PM Peak (6 - 7pm)
Heavy vehicles	0	68	0
Total	**0**	**68**	**0**

4.2 Construction traffic distribution

4.2.1 Workforce

Construction workers will be residing in townships located within a one-hour driving radius from the proposed solar farm. It is subsequently anticipated that workers would be originating from Shepparton, Benalla, Euroa and Wangaratta. Traffic distribution was based on the estimated population for each of the townships and is shown in Table 4-3.

Routes anticipated to be used by workers to the solar farm are outlined in Table 4-3 and shown in **Figure 4-1**. Workforce origins would be confirmed upon contractor award and TMP development for the project. During construction designated parking areas will be established on-site, with car park anticipated to be located near laydown areas.

Table 4-3 Anticipated workforce routes during construction

Origin	Anticipated route
Shepparton	Via Midland Hwy, Old Thoona Road, Benalla-Yarrawonga Road and Lake Mokoan Road
Benalla	Via Sydney Road and Benalla-Yarrawonga Road and Lake Mokoan Road
Euroa	Via Hume Fwy, Sydney Road and Benalla-Yarrawonga Road and Lake Mokoan Road
Wangaratta	Via Taminick Gap Road, Glenrowan-Boweya Road and Lake Mokoan Road

Table 4-4 Construction workforce traffic distribution based on origin

Origin	Light vehicles	Bus shuttles
Shepparton	23	7
Benalla	8	2
Euroa	2	1
Wangaratta	13	3
Total	**46**	**13**

4.2.2 Heavy vehicles

Materials and equipment to construct the solar farm are anticipated to be sourced locally where possible and could potentially come from the Ports of Melbourne which is located to the southwest of the site. The majority of heavy vehicles required for construction are expected to be semi-trailer and B-double vehicles, which generally range between 19 and 26 metres in length. It is noted that an over dimensional vehicle will be required to deliver the transformer at the proposed site. However, no other over-dimensional vehicles are expected to be required at this stage.

Heavy vehicles are expected to access the site from the Hume Freeway, before turning onto Sydney Road and Benalla-Yarrawonga Road which are B-Double approved roads. This route, shown in **Figure 4-1**, will therefore ensure through traffic impacts on the township Benalla are limited.

It is noted that Lake Mokoan Road is not B-Double approved and as such, approval will be required from the NHVR, DTP and Council. As this road was not designed to accommodate heavy vehicles, it is recommended that consultation with the NHVR, DTP and Benalla Rural Council is undertaken, prior to seeking approval, to agree on the following:

- Extent and form of dilapidation surveys that may be required prior to works commencing. This will provide a fair and accurate baseline of pavement conditions at the commencement of construction.
- Road maintenance methodology, which would typically involve a drive-over inspection at a minimum frequency of one inspection per month. The checking procedures would need to be agreed with, along with the intervention criteria, treatments and response timeframes based on the pavement distress type that may be identified (e.g. potholes, surface treatment, cleaning etc.).
- Post construction review and identification and hand-back protocols would need to be agreed and documented.

If impacts occur during the construction period, rectification should be implemented to reinstate road to an equivalent standard to existing condition or better in agreement with relevant road authority. Road condition and maintenance would be managed as part of a formal Traffic Management Plan (TMP) which will be developed for the project.

Another potential B-Double approved access route is also available via Hume Freeway before exiting onto Mansfield Road, Faithful Street, Goodwin Street, Midland Highway and then turning onto Link Road and Benalla-Yarrawonga Road.

D R A F T

Raw material sources have yet to be confirmed and would be confirmed when the Traffic Management Plan is produced. The proposed traffic routes would be confirmed when the hired contractor is in place and a formal Traffic Management Plan (TMP) has been produced.

D R A F T

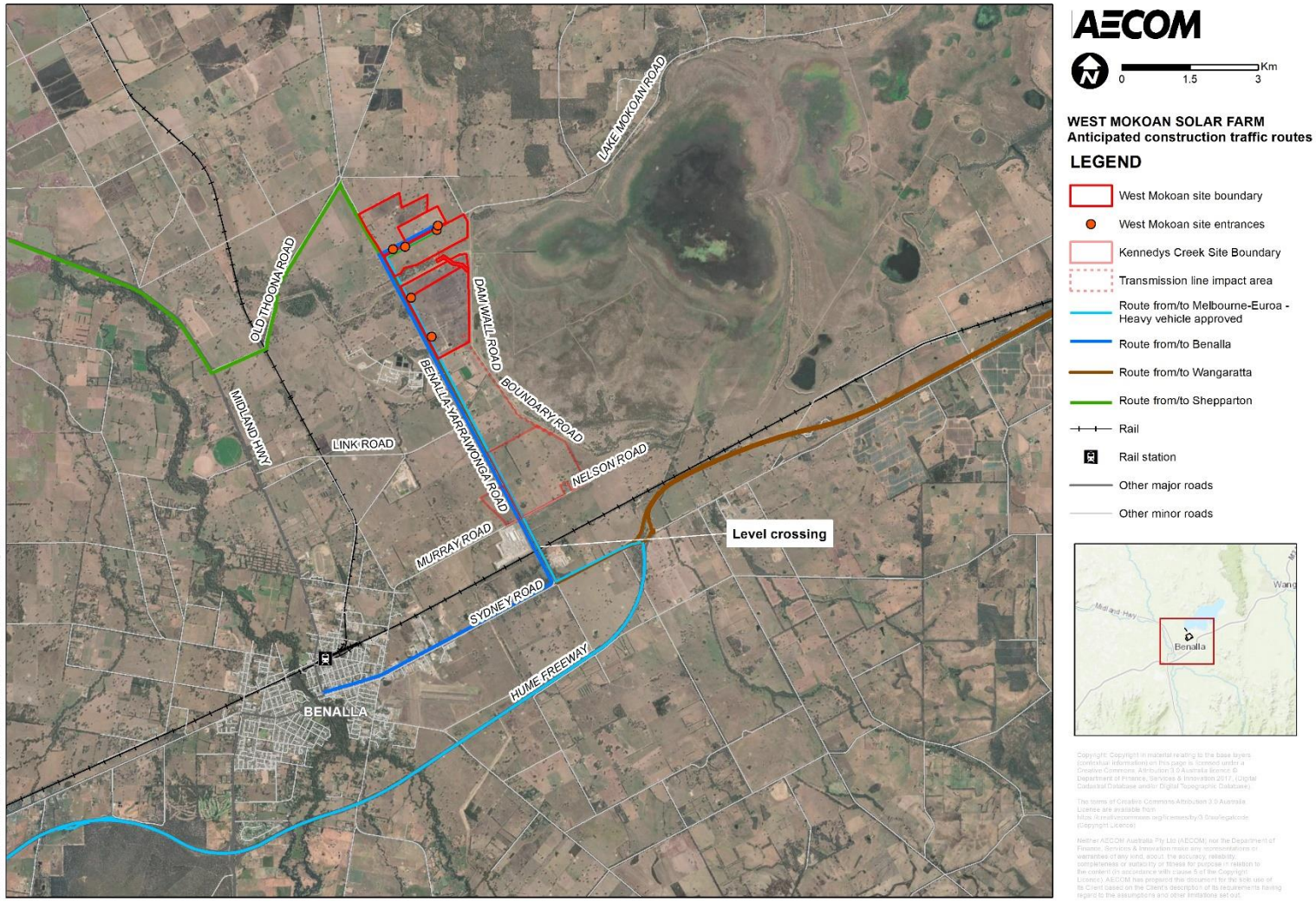


Figure 4-1 Anticipated routes for construction traffic

4.3 Network capacity

Peak hour traffic volumes on Sydney Road are estimated to be at approximately 640 two-way vehicle trips (or approximately 320 one-way vehicle trips). Benalla-Yarrawonga Road carries approximately 93 two-way vehicle trips (or approximately 47 one-way vehicle trips) during peak hour.

With construction personnel traffic volumes predicted to be at approximately 59 vehicles entering and exiting the site during morning and evening peak time periods, the combined traffic volumes can be accommodated, given that typical one-way capacity for a traffic lane is 900 vehicles per hour.

It is anticipated that the local road network has ample capacity to accommodate the construction traffic of the West Mokoan Solar Farm given negligible existing traffic volumes owing to the rural nature of the local road network.

4.4 Site access

4.4.1 Intersection of Lake Mokoan Road / Solar Farm Accesses

Construction vehicles are proposed to access the site via four access points (shown in Figure 4-1) located off Lake Mokoan Road. These access points are expected to be constructed or upgraded to accommodate construction vehicles. Lake Mokoan Road is predicted to carry only approximately 10 vehicles per hour. It is estimated that there will be a total of 68 construction vehicle movements to and from the subject site per day outside peak periods to undertake the construction activities and to account for deliveries. It is expected that some of these heavy vehicles would utilise site access points on Lake Mokoan Road.

The Austroads Guide to Traffic Management Part 6: Intersections, Interchanges and Crossings details the warrants for turning treatments on major roads at unsignalised intersections. These guidelines compare the number of turning vehicles into an intersecting road with the total number of vehicles on the major through road and provide a recommendation for basic left or right turn treatments (BAL / BAR), short channelised left or right turns (CHL(S)/CHR(S), shortened auxiliary left turns (AUL(S)), and full auxiliary or channelised turn treatments (AUL / CHL /CHR). The treatments are prescribed to separate through and turning traffic streams to improve safety while also minimising delay to through movements by queued turning vehicles.

Figure 4-2 outlines the turning requirements for a rural road for a design speed greater than 100 km/h. With reference to the turning requirements against the above estimated construction period traffic volumes would result in both intersections requiring BAR/BAL turning treatments.

Indicative swept paths have been completed of the anticipated worst-case construction vehicle (26 metre B-Double) to enter the site, shown in Figure 4-3, Figure 4-4, Figure 4-5 and Figure 4-6. As the proposed access points are located in the vicinity of roadside vegetation, it is expected that localised vegetation removal or pruning might be required.

Considering the relatively short-term construction period, the predicted low traffic volumes and the existing road conditions, Lake Mokoan Road is considered to be sufficient to accommodate construction traffic. However, the road width is relatively constrained for two-way heavy vehicles movements during construction peak. During detailed design and TMP development for the project, the option to permit two-way worst-case construction vehicle access or traffic management of two-way vehicle conflicts can be explored (given the low expected daily construction traffic generation as discussed previously in this TIA). This should be considered further at the development of the TMP for the project in consultation with Benalla Rural City Council and DTP.

Additionally, it is noted that Lake Mokoan Road is a two-way road (with no centre line road markings) with a total carriageway width of approximately 6 metres, no shoulders along its length and a 100 km/h speed limit, the default speed limit for rural roads in Victoria. Consideration should be given to reducing the speed of Lake Mokoan Road in the vicinity of the site access points to improve safer movement of construction vehicles, with associated construction truck entry signage also implemented. This should be reviewed in line with the expected traffic volumes and vehicle turning movements once verified during TMP development with stakeholder input.

D R A F T

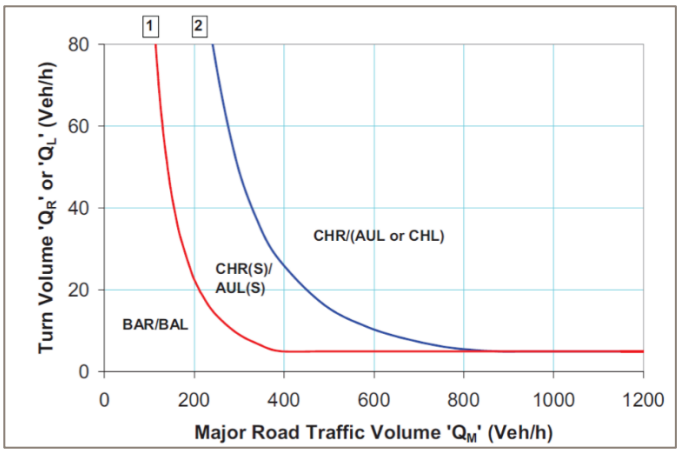


Figure 4-2 Austroads design guidelines for intersections (Design speeds > 100km/hr)

Source: Austroads Guide to Traffic Management Part 6

Figure 4-3 B- Double vehicle swept path on existing geometry of Lake Mokoan Road – Northwesternmost Access Point

Source: AECOM developed swept path analysis, Google Earth 2021

D R A F T

Figure 4-4 B-Double vehicle swept path on existing geometry of Lake Mokoan Road – Southwest Access Point

Source: AECOM developed swept path analysis, Google Earth 2021

Figure 4-5 B-Double vehicle swept path on existing geometry of Lake Mokoan Road – Southeast Access Point

Source: AECOM developed swept path analysis, Google Earth 2021

D R A F T

Figure 4-6 B-Double vehicle swept path on existing geometry of Lake Mokoan Road – Northeast Access Point

Source: AECOM developed swept path analysis, Google Earth 2024

4.4.2 Intersection of Benalla-Yarrawonga Road / Solar Farm Accesses

Two access points are also proposed to be located off Benalla-Yarrawonga Road, as shown previously in Figure 3-2. Benalla-Yarrawonga Road is a sealed two-way road (approximately 6.6 to 7 metres wide) and has unsealed shoulders (approximately 0.3 to 1 metre wide). The road has a 100 km/h speed limit though no formal speed surveys have been undertaken to verify actual operating speeds of the road at the proposed access locations.

Benalla-Yarrawonga Road is predicted to carry a peak hour traffic volume of approximately 93 two-way vehicle trips (or 47 one-way vehicle trips). It is estimated that there will be 68 construction heavy vehicle movements to and from the subject site per day to undertake the construction activities and to account for deliveries.

With reference to Figure 4-2 against the above estimated construction traffic volumes, would result in both intersections would require BAR/BAL turning treatments.

Indicative swept paths have been completed of the anticipated worst-case construction vehicle (26 metre B-Double) to enter via the construction site access points (shown in Figure 4-7 and Figure 4-8). During detailed design and TMP development for the project the option to permit two-way worst-case construction vehicle access or traffic management of two-way vehicle conflicts can be explored (given the low expected daily construction traffic generation as discussed previously in this TIA). Although the access intersections are identified to require the prescribed turning treatments, further agreement with relevant stakeholders should be undertaken to understand if such mitigation measures are necessary given short-term construction phases requirements and if other traffic management measures should be explored such as speed limit reductions. In addition, specific TMP or worksite traffic management may be explored by the relevant works contractor during the detailed design stage of the project.

Consideration should be given to reducing the speed of Benalla-Yarrawonga Road in the vicinity of the site access points to improve safer movement of construction vehicles, with associated construction truck entry signage also recommended to be implemented.

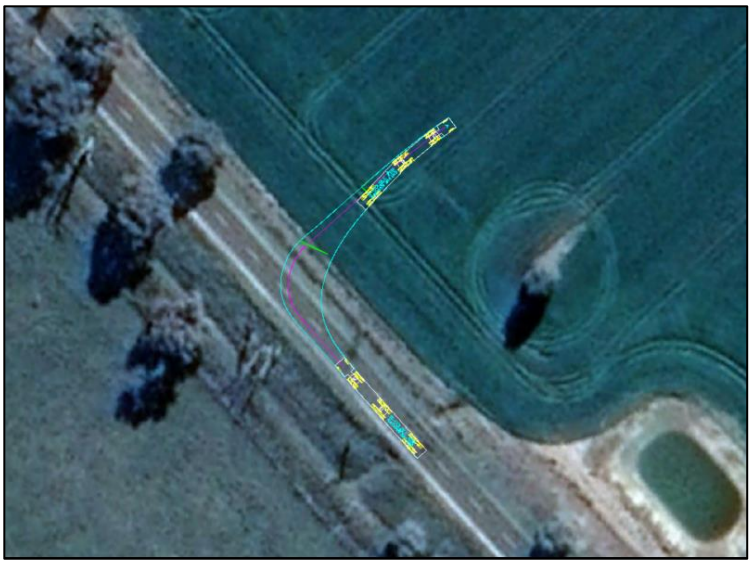


Figure 4-7 B-Double vehicle swept path analysis on existing geometry of Benalla-Yarrawonga Road – Northernmost Access Point

Source: AECOM developed swept path analysis, Google Earth 2020

Figure 4-8 B-Double vehicle swept path analysis on existing geometry of Benalla-Yarrawonga Road – Southernmost Access Point

Source: AECOM developed swept path analysis, Nearmap 2023

4.4.3 Benalla-Yarrawonga Road and Lake Mokoan Road priority intersection

Generally, the intersection allows for an adequate turning radius for construction vehicles (worst case 26 metre B-Double) during the construction phase of the Project as shown in Figure 4-9. However, while Benalla-Yarrawonga Road is a B-Double approved route, Lake Mokoan Road was not designed to accommodate such heavy vehicles. Accordingly, approval from relevant road authorities will be required and traffic management may also be required to ensure safe bidirectional movements should multiple heavy construction vehicles require access at the same time given that the width of Lake Mokoan Road is only 6 metres.

As discussed previously in subsection 2.2.5, the Safe Intersection Sight Distance (SISD) from Lake Mokoan Road northbound to Benalla-Yarrawonga Road appears to be unsatisfactory. This should be further reviewed during the development of the TMP for the Project. Temporary traffic management measures such as truck warning signage, speed reduction or intersection control alterations (give-way to stop sign) could be considered to provide a safer arrangement during construction if SISD is confirmed to be non-conforming.

D R A F T

Figure 4-9 Two-way movement B-Double vehicle swept path on existing geometry of Benalla-Yarrawonga Road and Lake Mokoan Road intersection

Source: AECOM developed swept path analysis, Google Earth 2019

4.4.4 Sydney Road and Benalla-Yarrawonga Road priority intersection

Both Sydney Road and Benalla-Yarrawonga Road are B-Double approved roads and therefore typically cater for vehicles up to a B-Double in size. This was verified from site observations of the intersection. Consequently, no mitigation is anticipated to be required at this location.

4.4.5 Internal site vehicle access

Subject to the development of the TMP for the project, it is expected that the Project will provide a network of site access tracks to surround the proposed West Mokoan Solar Farm that will be in place to facilitate construction of the site and subsequent ongoing maintenance. Tracks are expected to be constructed of crushed gravel and will be approximately 3-4 metres wide to accommodate sufficiently for a light vehicle. The site is proposed to be accessed from four entry points located on Lake Mokoan Road and two entries on Benalla-Yarrawonga Road, south of Stockyard Creek. The access track layout and site access points are shown in Appendix A.

As the project will require the delivery of a transformer using an overdimensional vehicle, it should also be noted that permits are required from the Department of Transport and Planning (DTP) when any OD vehicles crossing a railway line are greater than 4.9 metres in height, 3.0 metres wide, or 26.0 metres in length. Given that construction traffic is anticipated to passage a level crossing, discussions with DTP are recommended prior the application of the permit.

4.5 Sustainable transport

4.5.1 Pedestrians and cyclists

While no pedestrian or cycle paths are noted to be present in the vicinity of the proposed solar farm, Lake Mokoan Road is shared with cyclists as indicated by a sign near its priority intersection with Benalla-Yarrawonga Road. Additionally, pedestrians and cyclists may interact with vehicles coming in and out of the site as there are some residential dwellings noted to be present within a two-kilometre radius of the site. As such, any interaction or conflict should therefore be considered as part of the TMP for the project (e.g. in the form of reduced speed limits and advanced warning signage for the movement of trucks associated with the construction of the Project).

4.5.2 Public transport

While several regional buses routes operate along Sydney Road, no impacts to regional bus services are expected from the construction of the solar farm.

Local school bus routes also operate in the area and will typically operate Monday to Friday during school drop off (8 am to 9am) and pick-up (3:30 pm) times. During preparation of the TMP, hours of construction traffic movements should aim to avoid these time periods and/or be suitably managed to minimise any impacts to school bus operations.

5.0 Operational phase impact assessment

As the West Mokoan Solar Farm enters its operational stage, the above access tracks described in this assessment would remain, providing maintenance access. The existing state of the intersection of Benalla-Yarrawonga Road and Lake Mokoan Road is expected to be sufficient for the operational stage of the West Mokoan Solar Farm.

It is understood that up to five plant operators are expected to attend site on weekdays between 6:00 AM and 4:00 PM and may occasionally need to attend site on weekends if necessary. Services to be carried out will be scheduled and unscheduled maintenances. Operational vehicles will likely be single cabin or dual cabin utility vehicle.

Given the traffic volumes generated during operations, the road network is subsequently expected to have ample capacity to accommodate the additional construction phase traffic volumes generated by the Project.

6.0 Decommissioning impact assessment

Decommissioning impacts are expected to be similar to the construction stage of the project. Given this stage would not occur until after the operational life cycle of the project, re-assessments would be required.

Potential impacts associated with decommissioning works of the project are expected to be the same or similar to those associated with the construction phase. However, the overall level of impact would be lower due to the nature of decommissioning activities. These impacts should also be managed with the implementation of the same mitigation measures as those proposed for construction impacts. With recommended mitigation measures in place, the potential for impacts on the local road network within the vicinity of the project from decommissioning of the project would be minor.

Given this phase would not occur for some time a reassessment would be required at the time to consider the current and future road conditions and infrastructure present.

7.0 Cumulative impact assessment

Construction and operation of the West Mokoan Solar Farm is expected to take place concurrently with the Kennedys Creek Solar Farm and its transmission line and as such, there is potential for cumulative transport impacts. At the time of this assessment, traffic generation estimations were based on information provided by Lightsource bp but may be subject to changes once contractor(s) are nominated. Where no information was available, assumptions were made and conservative estimates based on the West Mokoan Solar Farm construction traffic generation data were used.

7.1 Construction phase

The following should be noted with regards to the Kennedys Creek Solar Farm and its transmission alignment construction phase traffic generation:

- All construction traffic for both the solar farm and the transmission line would access the sites via the three proposed primary site access points located via Benalla-Yarrawonga Road. A fourth access point is also proposed on Benalla-Yarrawonga Road but is intended for emergency access only.

- 171 workers per day are anticipated to be required during construction peak of the solar farm and the transmission alignment
- Workers are assumed to travel to and from the construction area each day during construction. As for the West Mokoan Solar Farm, workers are expected to reside within a one hour driving radius from the Kennedys Creek Solar Farm. Workers are subsequently expected to be residing in Shepparton, Benalla, Euroa and Wangaratta
- 80% of workers are assumed to be travelling to and from the site via bus shuttles. Each shuttle is expected to have a 14-person capacity. The remaining workers are assumed to be travelling in single-occupancy vehicles.
- As shift hours for the workforce was unknown at the time of this assessment, it was assumed that the workforce traffic would arrive at the same time than the West Mokoan workers in the morning peak between 6:00 am and 7:00 am and depart in the evening peak between 6:00 pm and 7:00 pm.
- Onsite car parking is expected to be provided within the site compound, with no over-spill into other areas
- 50 heavy vehicle movements are anticipated to be generated during the peak of construction works for the Kennedys Creek Solar Farm and the transmission alignment construction. However, these are expected to occur during the daytime, outside of construction peak hour periods.
- Heavy vehicles are assumed to be coming from the west via Hume Freeway, Sydney Road and Benalla-Yarrawonga Road.

Table 7-1, Table 7-2 and Table 7-3 outline the estimated Kennedys Creek Solar Farm and its transmission line construction traffic distribution and generation on the local road network. Anticipated routes for construction traffic movements are shown in Figure 7-1.

Construction traffic volumes are predicted to be at approximately 57 vehicles entering / exiting the site during morning and evening peak time periods, generated by workforce movements. The local road network is subsequently expected to have ample capacity to accommodate the combined construction traffic volumes from both Kennedys Creek and West Mokoan Solar Farms, given that typical one-way capacity for a traffic lane is 900 vehicles per hour. Accordingly, it is anticipated that there will be insignificant impacts to the local road network due to the concurrent construction of the Kennedys Creek Solar Farm, transmission line and West Mokoan Solar Farm.

Table 7-1 Kennedys Creek Solar Farm construction workforce traffic distribution during peak period

Origin	Anticipated route
Shepparton	Via Midland Hwy, Link Rd, Benalla-Yarrawonga Rd
Benalla	Via Sydney Rd
Euroa	Via Hume Fwy and Sydney Rd
Wangaratta	Via Hume Fwy and Sydney Rd

Table 7-2 Kennedys Creek Solar Farm construction workforce traffic generation based on origin

Origin	Light vehicles	Bus shuttles
Shepparton	21	5
Benalla	8	3
Euroa	3	1
Wangaratta	13	4
Total	**44**	**13**

Table 7-3 Kennedys Creek Solar Farm overall construction traffic generation

Type	AM peak (6 - 7am)	Daytime (7am-6pm)	PM (6 - 7pm)
Light vehicles	44	0	44
Heavy vehicles	13*	50	13*
Total	**57**	**50**	**57**

**Bus shuttles*

D R A F T

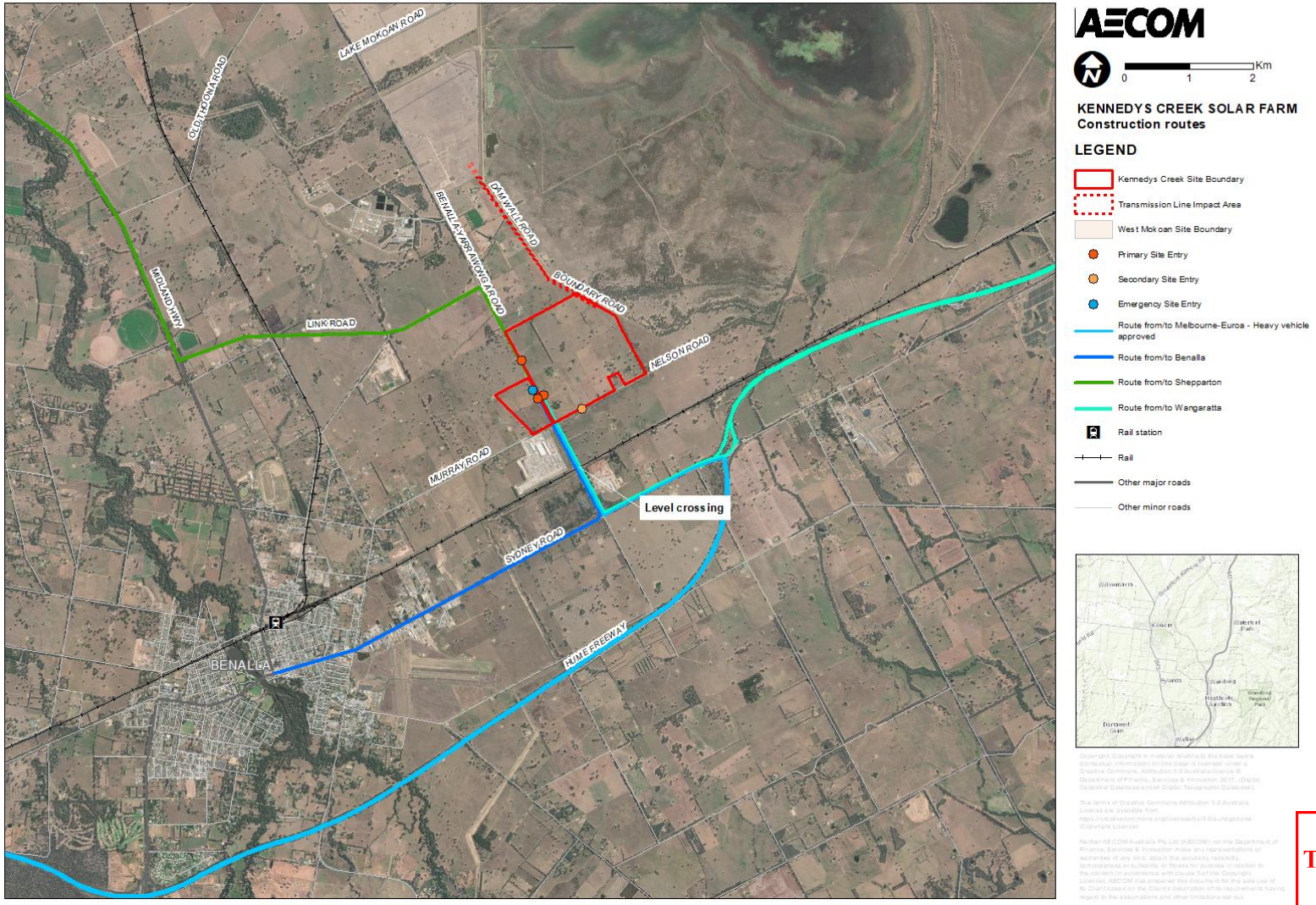


Figure 7-1 Anticipated routes for the Kennedys Creek Solar Farm construction traffic

7.2 Operation phase

Traffic generation during the operation of the Kennedys Creek Solar Farm and its transmission line is expected to be minimal. It is understood that the general operation and maintenance workforce will be shared across both solar farms as the plant will generate and be operated as one facility, with one point of connection to the grid. This signifies that there would be up to ten service vehicle movements per day for general operation and maintenance activities of the solar farm and the transmission line. Operational vehicles are likely to be single cabin or dual cabin utility vehicle.

Given the traffic volumes anticipated to be generated during operations, the road network is subsequently expected to have ample capacity to accommodate the additional construction phase traffic volumes generated by both solar farms.

8.0 Conclusion and TMP development

8.1 TIA findings

This TIA has shown that there is unlikely to be a material traffic impact on the local road network during the construction of the proposed West Mokoan Solar Farm.

This TIA has highlighted some potential mitigation measures that may be considered to facilitate safe vehicle access to the site, which can be further considered and finalised during the development of the TMP in consultation with key stakeholders.

8.2 TMP development

Typically, on wind and solar farm projects, following planning approval, a condition of the permit will be to produce a TMP for the project. The TMP would be developed when a contractor is commissioned, and may consider the following:

- Key stakeholder inputs and requirements. This includes consultation to obtain relevant approvals from Benalla Rural City Council, DTP and NVHR including:
  - Pre-road condition surveys and maintenance agreements with road authorities for Lake Mokoan Road as it is not a B-Double approved road
  - Final site access design including prescribed intersection treatment to facilitate the safe movement of vehicles to and from the site
  - Traffic management measures in the vicinity of the site access points such as temporary warning signage and speed reduction on Lake Mokoan Road and Benalla-Yarrawonga Road
  - Over dimensional load permit application for travel across railways
  - Confirmation of local school bus routes in the vicinity of the project
- Ongoing communication with local residences to inform them of the timing and duration of proposed activities, prior to the commencement of any works and any impacts to the local road network
- Confirmation of proposed construction program and traffic volumes
- Confirmation of materials and personnel origins and routes. Consideration should be given to avoid school drop-off and pick-up times time periods and/or be suitably managed to minimise any impacts to school bus operations
- Control measures including:
  - Roles and responsibilities
  - Training and site inductions
  - Vehicle access

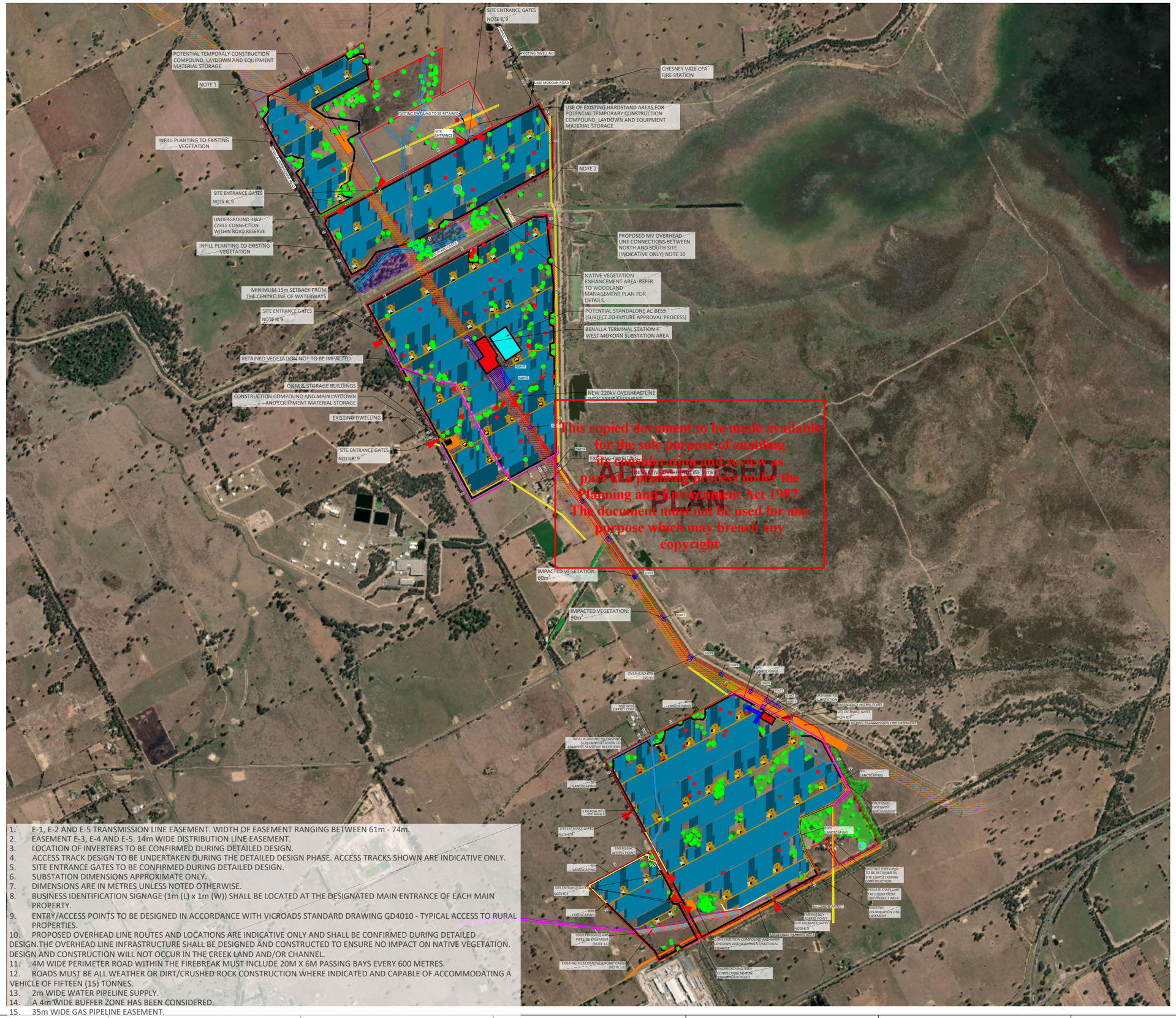
  - Operating and working hours
  - Environmental measures
- Monitoring, inspection and auditing of the TMP.

DRAFT

Appendix A

Concept Design

West Mokoan Solar Farm_LP3-BDL_14 (KC_BDL_04) Planning



1. E-1, E-2 AND E-5 TRANSMISSION LINE EASEMENT. WIDTH OF EASEMENT RANGING BETWEEN 61m - 74m.
2. EASEMENT E-3, E-4 AND E-5. 14m WIDE DISTRIBUTION LINE EASEMENT.
3. LOCATION OF INVERTERS TO BE CONFIRMED DURING DETAILED DESIGN.
4. ACCESS TRACK DESIGN TO BE UNDERTAKEN DURING THE DETAILED DESIGN PHASE. ACCESS TRACKS SHOWN ARE INDICATIVE ONLY.
5. SITE ENTRANCE GATES TO BE CONFIRMED DURING DETAILED DESIGN.
6. SUBSTATION DIMENSIONS APPROXIMATE ONLY.
7. DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
8. BUSINESS IDENTIFICATION SIGNAGE (1m (L) x 1m (W)) SHALL BE LOCATED AT THE DESIGNATED MAIN ENTRANCE OF EACH MAIN PROPERTY.
9. ENTRY/ACCESS POINTS TO BE DESIGNED IN ACCORDANCE WITH VICROADS STANDARD DRAWING GD4010 - TYPICAL ACCESS TO RURAL PROPERTIES.
10. PROPOSED OVERHEAD LINE ROUTES AND LOCATIONS ARE INDICATIVE ONLY AND SHALL BE CONFIRMED DURING DETAILED DESIGN.THE OVERHEAD LINE INFRASTRUCTURE SHALL BE DESIGNED AND CONSTRUCTED TO ENSURE NO IMPACT ON NATIVE VEGETATION. DESIGN AND CONSTRUCTION WILL NOT OCCUR IN THE CREEK LAND AND/OR CHANNEL.
11. 4M WIDE PERIMETER ROAD WITHIN THE FIREBREAK MUST INCLUDE 20M X 6M PASSING BAYS EVERY 600 METRES.
12. ROADS MUST BE ALL WEATHER OR DIRT/CRUSHED ROCK CONSTRUCTION WHERE INDICATED AND CAPABLE OF ACCOMMODATING A VEHICLE OF FIFTEEN (15) TONNES.
13. 2m WIDE WATER PIPELINE SUPPLY.
14. A 4m WIDE BUFFER ZONE HAS BEEN CONSIDERED.
15. 35m WIDE GAS PIPELINE EASEMENT.

Site Boundary
Site Access
Security Fence
Single Axis Tracker 80s 1
Single Axis Tracker 56 x 1
substation area
Potential Stand-alone AC BESS (Subject to Future Approval Process)
PCS - 2 inverters & DC coupled BESS
PCS - 2 inverters & DC coupled BESS & Noise Barrier option if required
PCS - 2 inverters & no DC coupled BESS
Construction easement
Construction laydown
O&M and storage buildings
Access Road (All Weathered)
Access Road (Dirt roads / crushed rock)
Existing vegetation and environmental values to be retained
Existing 66kV Overhead line indicative location
Existing 220kV Overhead Line Easement
Distribution Line Easement to be retained
Propose powerline Easement realignment
High pressure gas pipeline easement
60m Fire Break
Designated Waterway
Infill planting zone
10m wide screen planting zone
5m wide screen planting zone
50m Buffer scarred trees
Vegetation management area - project area
Vegetation management area - crown land
Native vegetation enhancement area - crown land
Native vegetation enhancement area - project area
'Site entrance' and 'danger' signage
Business identification signage
45,000 Water tanks
Fire Hydrant
Trees to be retained
Trees to be removed

PV SYSTEM SPECIFICATIONS	
Capacity - DC	375.90 MW_p
Export Capacity - AC	300 MW_{AC}
DC/AC Ratio	1.253
Modules	(616230) 610 W Bifacial
Mods. per string	30
Pitch	5.20 m
GCR	47.40 %
Mounting structure	(7663) NxT Mono-Line SAT
• Full (3 Strings)	5215
• Partial (2 Strings)	2448
• Half	
Inverters	(112) Central Inverter 3575 KVA
• Nominal Power	3575 KVA
Access roads	49545 m
Fenced area	(6273210 m^2) 1550 Ha
• Perimeter	23935 m

Revisions:

Rev	Date	Comments	Dwn	Chkd
09	12.11.24	Layout update (29mod. per string & 620W)DC		
08	15.07.24	Easement and legend update	EPG	
14	16.05.25	Updated Layout	DC	
13	16.05.25	Update Layout	DC	
12	03.04.24	Substation details added	AG	
11	24.03.25	Updated Layout with 28 Strings	DC	
10	27.11.24	Updated layout	JI	
00	27.11.23	Layout Updated	DC	

DRAWN	CHECKED	APPROVED	DATE
DC			27.11.2023

PROJECT NAME & ADDRESS:
Location: Benalla, Victoria
Australia

NOTES:
- 610 Wp Bifacial modules
-
-
-

Paper Size:	Scale:	Sheet:
A3	1:30	1

CAPACITY:
616230 Modules 375.90 MWp

DRAWING TITLE:
AUS_West Mokoan Solar Farm_LP3-BDL_14 (KC_BDL_04) Planning
Hybrid Project Layout

DRAWING NUMBER:	STATUS:
LP3-BDL	Preliminary

lightsource bp

Lightsource Development Limited,
7th Floor, 33 Holborn, London,EC1N 2HU
General: +44 (0) 333 200 0755
Web: www.lightsourcebp.com
info@lightsourcebp.com

ISO full bleed A3 (420.00 x 297.00 MM)-V.1.0

Prepared for
Lightsource bp
ABN: 30 626 633 369

DRAFT

Kennedys Creek Solar Farm - Traffic Impact Assessment

Traffic Impact Assessment

13-Jun-2025
Kennedys Creek Solar Farm
Doc No. Document No
Commercial-in-Confidence

D R A F T

Kennedys Creek Solar Farm - Traffic Impact Assessment

Traffic Impact Assessment

Client: Lightsource bp

ABN: 30 626 633 369

Prepared by

,

In association with

Prepared With

13-Jun-2025

Job No.: 60597929

AECOM in Australia and New Zealand is certified to ISO9001, ISO14001 and ISO45001.

D R A F T

Table of Contents

D R A F T

D R A F T

1.0 Introduction

In September 2019, AECOM Australia Pty Ltd (AECOM) was engaged by South Energy on behalf of 433 Link Development Pty Ltd to undertake a Traffic Impact Assessment (TIA) for the proposed Kennedys Creek Solar Farm (the Project). On 22 September 2021, ownership of the Project Applicant (433 Link Development Pty Ltd) was transferred from South Energy to Lightsource bp. Previous iterations of this report refer to South Energy, however all new information within this report refers to Lightsource bp to reflect current ownership of the Project Application.

Lightsource bp subsequently proposed changes to the concept designs for the Project, therefore this TIA has been updated to support an application under Section 72 of the *Planning and Environment Act 1987* (P&E Act) to amend the Planning Permit (PA1900684) for the Project (the amendment). The amendment seeks to:

- Rearrange the layout of Kennedys Creek Solar Farm to:
  - Connection to new transmission infrastructure
  - Make minor updates and design changes as a result of the above.
- Include a new transmission line from the Kennedys Creek Solar Farm to the network connection point at West Mokoan Solar Farm.

This TIA has been updated to reflect Revision 15 of the Concept Design and include additional land associated with the 1.2-kilometre transmission line connecting the West Mokoan and Kennedys Creek Solar Farms.

1.1 Scope

The proposed Kennedys Creek Solar Farm is located approximately four kilometres north-east of the town centre of Benalla and is located within the Rural City of Benalla (see Figure 1-1).

This TIA will assess and consider the existing road network, proposed development and its traffic impact and any required mitigation measures to provide access to the development.

1.2 Summary of updates

This TIA has been updated to reflect the changes to the Project as follows:

- Overall report structure: updated to include the new transmission line and updated traffic generation based on information provided by Lightsource bp. Notable changes include Chapter 3.0 - Proposed project overview and Chapter 4.0 – Construction impact assessment.
- Chapter 2.0 – Existing Conditions: updated to reflect potential changes to the local road network since the previous iteration of the report in 2019.
- Chapter 7.0 – Cumulative impact assessment: this section has been included to consider the potential impact from the West Mokoan Solar Farm, owned by Lightsource bp and anticipated to be constructed and operated concurrently with Kennedys Creek Solar Farm.

D R A F T

1.3 Report structure

Following this introduction this TIA is structured as follows:

- Chapter 2.0: Provides details of the existing road and transport conditions near the site
- Chapter 3.0: Outlines the development proposal
- Chapter 4.0: Outlines the construction impact assessment and includes potential traffic impacts on the local road network and required mitigation measures to safely facilitate the movements of vehicles to and from the development site
- Chapter 5.0: Provides the operational impact assessment
- Chapter 6.0: Provides the decommissioning impact assessment
- Chapter 7.0: Provides the cumulative impact assessment
- Chapter 8.0: Concludes the TIA report and outline proposed mitigation measures for the Project.

1.4 References

The following reports and/or parties have been referenced or consulted in the preparation of this TIA report:

- Victoria Government Gazette – Road Management Act 2004, Code of Practice, Worksite Safety, Traffic Management 2010.
- Road Management Act 2004.
- VicRoads – General Guidance.
- VicRoads Heavy Vehicle Network Maps in Victoria.
- National Heavy Vehicle Regulator (NHVR) website / journey planner.
- Benalla Road Management Plan 2021 - 2025.

D R A F T

Figure 1-1 Kennedys Creek Solar Farm location

D R A F T

2.0 Existing conditions

2.1 Site location

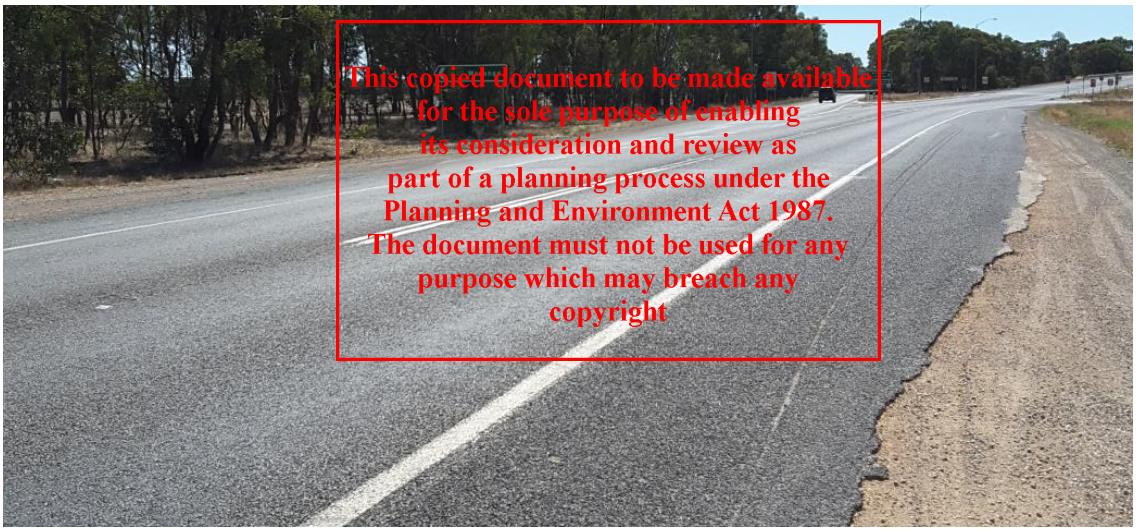
The proposed Kennedys Creek Solar Farm site is located approximately four kilometres north-east of the town centre of Benalla and is within the Rural City of Benalla. The proposed solar farm is located on Murray Road, Nelson Road and Benalla-Yarrawonga Road in Benalla. The site location is shown in Figure 1-1.

2.2 Local road network

2.2.1 Sydney Road

Sydney Road is an arterial road managed by the Department of Transport and Planning (DTP). Sydney Road has a sealed two-lane carriageway measuring approximately 7.4 metres wide with unsealed shoulders of varying width, as shown in Figure 2-1.

Sydney Road has a 100 kilometres per hour posted speed limit, with the posted speed limit reducing to 80 kilometres per hour on approach to its crossroad priority intersection with the Hume Freeway.



Source: AECOM – photo taken on Wednesday 20 February 2019

Figure 2-1 Sydney Road - looking towards the Hume highway interchange

2.2.2 Benalla-Yarrawonga Road

The proposed solar farm will be accessed via Benalla-Yarrawonga Road, Benalla which bisects the solar farm site.

Benalla-Yarrawonga Road is a B-Double approved road managed by DTP.

Benalla-Yarrawonga Road is an arterial road with an approximately sealed carriageway width of 7 metres with unsealed shoulders present either side of approximately 0.3 to 1 metre wide. The road is in good condition with appropriate line markings and signage.

Figure 2-2 shows Benalla-Yarrawonga Road looking southeast bound towards the proposed solar farm site.

Source: AECOM – photo taken on Wednesday 9 November 2022

Figure 2-2 Benalla-Yarrawonga Road - looking southeast in the vicinity of the proposed Solar Farm site

2.2.3 Intersection of Sydney Road and Benalla-Yarrawonga Road

Sydney Road forms a priority intersection with Benalla-Yarrawonga Road (shown in Figure 2-3).

Benalla-Yarrawonga was upgraded near its intersection with Sydney Road in 2019 and the road surface at the intersection was observed to be in good condition. The posted speed limit on approach to the intersection with Benalla-Yarrawonga Road is 80 km/h. Several heavy vehicles were observed using the intersection during the site visit in November 2022.

Source: AECOM – photo taken on Wednesday 20 February 2019

Figure 2-3 Intersection of Benalla-Yarrawonga Road and Sydney Road

2.2.4 Murray Road

Murray Road (see Figure 2-4) is a local road which provides access to farming land in Benalla and forms the southern boundary of the proposed solar farm site.

D R A F T

Murray Road is a sealed two-way road, with a carriageway width of approximately 5.5 metres with unsealed shoulders (approximately 1.0 metre wide). The road surface was observed to be generally good though some potholes were observed. Murray Road has a posted speed limit of 80 kilometres per hour.

Source: AECOM – photo taken on Wednesday 9 November 2022

Figure 2-4 Murrays Road - looking east

2.2.5 Nelson Road

Nelson Road is a local road managed by the Benalla Rural City Council (shown in Figure 2-5) which forms the south east boundary of the proposed solar farm site. This is an unsealed two-way one lane road, with a carriageway width of approximately 5 metres. The road is sealed on approach to the intersection with Benalla-Yarrawonga Road and Murrays Road. The road becomes a limited access road east of Kindilan Park, mostly providing access for fire access. The road condition generally allows traffic on these sections of Nelson Road in dry weather only.

Source: AECOM – photo taken on Wednesday 9 November 2022

Figure 2-5 Nelson Road - looking east

2.2.6 Snowy Lane

Snowy Lane is a local access road managed by the Benalla Rural City Council. This unsealed two-way one lane road has a carriageway width of approximately 4-5 metres. The road surface was observed to be uneven with potholes along some sections (see Figure 2-6). Located north of the solar farm, this road provides access to Boundary Road.

Source: AECOM – photo taken on Wednesday 9 November 2022

Figure 2-6 Snowy Lane – looking east

D R A F T

2.2.7 Boundary Road

Boundary Road is an unsealed local road that runs to the east of the solar farm and has a varying width of approximately 2.6 – 4m. The road condition varies along its length with the road surface transitioning from gravel in the northern sections to dirt tracks with heavy roadside vegetation in the southern sections of the road near the solar farm as shown in Figure 2-7. Access to this road is noted to be restricted and is understood to be used for utility maintenance and emergency access. The transmission line is proposed to run along the southern end of Boundary Road, between the two solar farms, and is expected to be used by the Project traffic during construction.

Source: AECOM – photo taken on Wednesday 9 November 2022

Figure 2-7 Boundary Road – looking southeast

2.2.8 Intersection of Benalla-Yarrawonga Road, Murray Road and Nelson Road

Benalla-Yarrawonga Road forms a crossroad priority intersection with Murray Road and Nelson Road (see Figure 2-8). Sight distances for vehicles exiting Murray Road appear to be conforming. However, sight distances from Nelson Road for vehicles turning left onto Benalla-Yarrawonga Road were observed to be restricted due to heavy roadside vegetation.

D R A F T

Source: AECOM – photo taken on Wednesday 9 November 2022

Figure 2-8 Nelson Road facing Murray Road and intersecting with Benalla-Yarrawonga Road

2.3 Level-crossing

The Albury to Melbourne train line (V/Line) traverses a level crossing (shown in Figure 2-9) located on Benalla-Yarrawonga Road approximately 800 metres southeast of Murray Road, connecting with the towns of Benalla and Wangaratta. Train services operate at a frequency of three trips per weekday in each direction.

Several V/Line coach routes connect with this train service at Benalla Station from Shepparton and Bright/Mount Beauty.

The at-grade level crossing at this location provides adequate sight distances and active controls such as roadside warning equipment with boom, audible warning devices and flashing lights.

Given that passenger trains traverse this level crossing six times per day (both directions on two tracks) this will be considered further as part of the Traffic Management Plan (TMP) which will be prepared prior to the commencement of construction.

D R A F T

Source: AECOM – photo taken on Wednesday 9 November 2022

Figure 2-9 Level-crossing on Benalla-Yarrawonga Road

2.4 Sustainable transport

2.4.1 Pedestrians and cyclists

No pedestrian and cyclist paths are present along the local roads to the solar farm.

It should be noted that during both site visits, no pedestrian or cyclist movements were observed.

2.4.2 Public transport

The local V Line and school bus routes are shown on Figure 2-10 and discussed subsequently.

V-Line provides coach services that operate from the town of Benalla to Wangaratta, as outlined below:

- Albury – Melbourne via Seymour (twice a day Monday to Friday)
- Albury – Bendigo via Shepparton and Wangaratta (operates approximately twice a day on a weekday and once a day during the weekend)
- Mount Beauty – Melbourne via Bright (operates mostly between Melbourne and Seymour Station approximately five times a day Monday to Friday)
- Sydney – Adelaide via Albury (operates once a day except Saturday)

These regional buses utilise Sydney Road and will go past the intersection of Sydney Road and Benalla-Yarrawonga Road and near the Hume Freeway interchange.

Local school bus routes also operate in the area and will typically operate Monday to Friday during school drop off (8 am to 9am) and pick-up (3:30 pm) times. During preparation of the Worksite Traffic Management Plan, hours of construction traffic movements should aim to avoid these time periods and/or be suitably managed.

D R A F T

Figure 2-10 PTV and local school bus routes

2.5 Traffic conditions

2.5.1 Sydney Road

The traffic growth pattern on Sydney Road (between the Hume Highway off-ramp and Benalla-Yarrawonga Road) has been taken from the DTP Open Data Hub, May 2020, and is provided in Table 2-1.

Table 2-1 Sydney Road AADT and growth patterns

Sydney Road	Annual Average Daily Traffic Data (AADT)[1]						
	2015	2016	% Change	2017	% Change	2020	% Change
Westbound	3,000 (350)	3,200 (380)	7% (8%)	3,300 (400)	3% (5%)	3,200 (395)	- 3% (-1.25%)
Eastbound (KML 2017)	-	-	-	3,200 (470)	-	-	-

Note: numbers in brackets are Heavy Vehicles Volumes.

As shown from Table 2-1 Sydney Road has experienced steady but relatively low traffic growth in recent years.

Assuming traffic growth is similar to recent years, Sydney Road currently carries approximately 6,600 two-way vehicle trips per day, with approximately 800 of these being heavy vehicles, or 12%.

It is typically considered that a road peak hour volume is around 10% of the AADT volume, accordingly Sydney Road has a peak hour traffic volume of approximately 660 two-way vehicle trips (or 330 one-way vehicle trips).

2.5.2 Benalla-Yarrawonga Road

The traffic growth pattern on Benalla-Yarrawonga Road (between the Hume Highway off-ramp and Benalla-Yarrawonga Road) has been taken from the DTP Open Data Hub, May 2020, and is provided in Table 2-2.

Table 2-2 Benalla-Yarrawonga Road AADT and growth patterns

Benalla-Yarrawonga Road	Annual Average Daily Traffic Data (AADT)[2]						
	2015	2016	% Change	2017	% Change	2020	% Change
Northbound	420 (30)	460 (30)	10% (0%)	460 (30)	0% (0%)	471 (35)	3% (17%)
Southbound	410 (30)	440 (30)	0 (-33.5%)	440 (40)	0% (25%)	455 (39)	3.4% (56%)

As shown from Table 2-2 Benalla-Yarrawonga Road has experienced little or no traffic growth in recent years.

Assuming traffic growth is similar to recent years, Benalla-Yarrawonga Road currently carries approximately 920 two-way vehicle trips per day, with approximately 60 of these being heavy vehicles, or 7%.

It is typically considered that a road peak hour volume is around 10% of the AADT volume, accordingly Benalla-Yarrawonga Road has a peak hour traffic volume of approximately 92 two-way vehicle trips (or 46 one-way vehicle trips).

[1] VicRoads Traffic Volume Data are estimates only. Volume in brackets is number of HGV vehicles.
[2] VicRoads Traffic Volume Data are estimates only. Volume in brackets is number of HGV vehicles.

2.5.3 Murray Road

A site visit was conducted by AECOM on Wednesday 9 November 2022 at approximately midday. Although not during the peak operational hours, Murray Road was viewed to be lightly trafficked with only a single vehicle viewed approximately every 5 minutes leaving Murray Road onto Benalla-Yarrawonga Road.

2.5.4 Snowy Lane

Snowy Lane is a gravel urban access road which primarily provides direct access to abutting residential and farming properties. Snowy Lane typically has minimal to no through traffic. No traffic was observed during the site visit on Wednesday 9 November 2022.

2.5.5 Nelson Road

Nelson Road is a rural access road which provides access to abutting farmland along its length. There is typically minimal to no through traffic on Nelson Road. Nelson Road was observed to be lightly trafficked during the site visit on Wednesday 9 November 2022.

2.6 Local crash history

The DTP (formerly VicRoads) 'Crashstats' database was interrogated to assess the casualty crash history of the local road network in the vicinity of the site for the last five years of available data from 2017 to 2021. A detailed breakdown of the recorded crashes is provided in Table 2-3. In summary the following was found from the recorded data:

- A total of seven crashes have been recorded over the last five years on the local road network within approximately three kilometres of the solar farm site entrance
- Of the seven crashes, five were serious injury accidents and two other injury accident. None of these crashes were fatal.
- All serious injury accidents were collision with a fixed object
- Two serious crashes occurred on the Hume Highway on-ramp and Benalla-Winton Road near the on-ramp
- A serious injury accident was recorded on Nelson Road in the vicinity of its intersection with Benalla-Yarrawonga Road
- No crashes were recorded in the vicinity of the proposed entry points to the solar farm.

Table 2-3 Summary of crashes in the last five years

Crashes no.	Date	Time	Vehicles involved	Crash type	Speed limit	Severity
1	28/06/2017	Night	1 LV	Collision with a fixed object	100 km/hr	Serious injury accident
2	4/08/2019	Night	1 LV	Collision with a fixed object	100 km/hr	Other injury accident
3	11/06/2019	Dusk	1 LV	Collision with a fixed object	100 km/hr	Serious injury accident
4	24/10/2017	Day	1 LV	Collision with a fixed object	80 km/hr	Serious injury accident
5	26/03/2017	Night	1 LV	Collision with a fixed object	100 km/hr	Serious injury accident
6	2/07/2017	Day	2 LV	Collision with vehicle	80 km/hr	Serious injury accident

D R A F T

7	20/11/2017	Day	1 motorcycle	No collision and no object struck	40 km/hr	Other injury accident

3.0 Proposed project

3.1 Overview

An overview layout of the proposed Kennedys Creek Solar Farm is provided in Appendix A.

The application considers two potential layouts for the proposed Solar Farm solar modules and associated mounting structure, which will comprise Single Axis Tracking System (refer to **Figure 3-1** for example). The final layout and component selection for the proposed Solar Farm would be subject to a detailed design process, which occurs after the planning application process is completed.

Figure 3-1 Typical Single Axis Tracking System with two modules in portrait orientation

In addition to the above the following would also be required:

- Power conversion units (PCUs)
- Cabling
- Grid connection
- Control room
- Laydown
- Switchyard
- Site access tracks
- Landscaping
- Native vegetation removal
- Security fencing
- CCTV and infra-red lighting

- Business identification signage.

In addition, a new 220kV transmission line is proposed to connect the Kennedys Creek Solar Farm to the network connection point at West Mokoan Solar Farm, which will also be developed by Lightsource bp and is located north of Kennedys Creek Solar Farm. Construction and operation for both solar farms and the transmission alignment are planned to occur concurrently. An overview of the proposed development is shown in Figure 3-2.

D R A F T

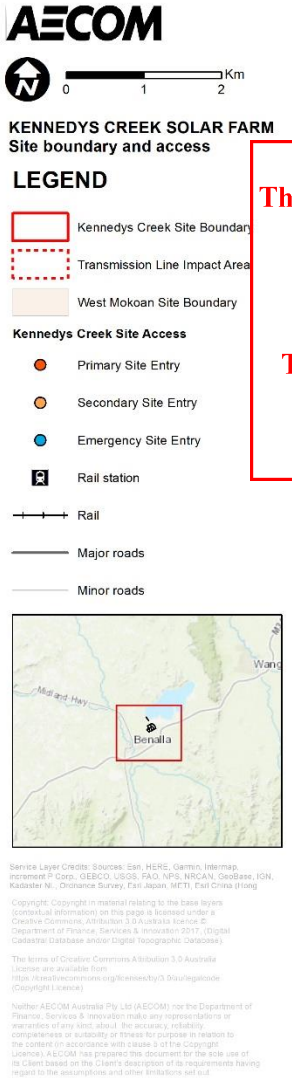


Figure 3-2 Kennedys Creek Solar Farm development

DRAFT

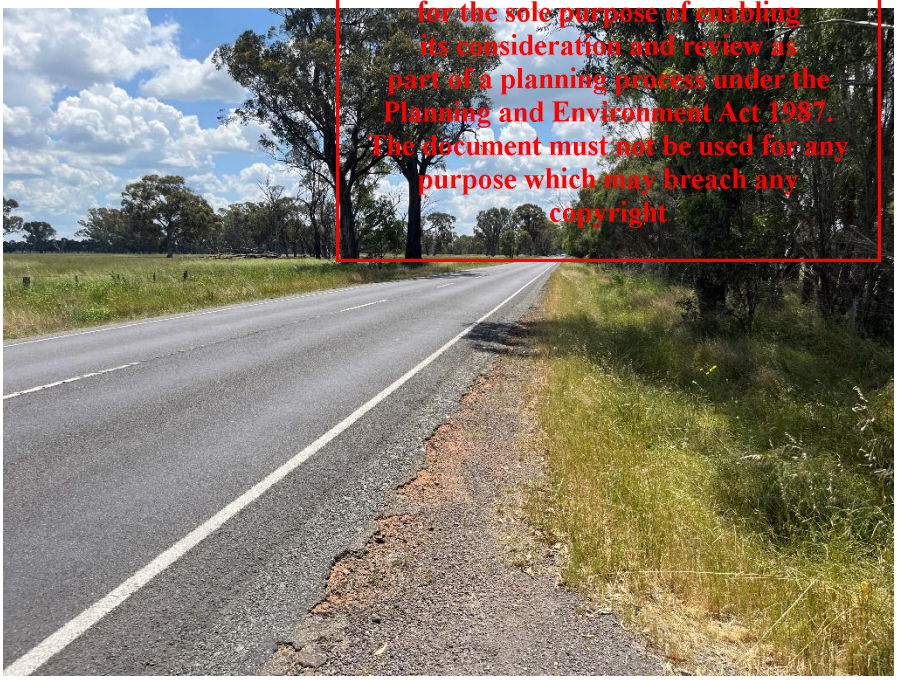
3.2 Construction phase overview

3.2.1 Site access

The solar farm is anticipated to have a total of five access points (shown in Figure 3-3). These include:

- Three primary access gates located on Benalla-Yarrawonga Road. The northernmost access point has an existing access gate providing access to the eastern section of the site. However, the other two access points will need to be formalised during development. An emergency access point will also be provided. As this location does not currently have an existing access gate, a formalised entry will need to be established. Benalla-Yarrawonga Road runs straight from north to south and therefore there are unrestricted sight distances from the proposed access points onto the road.
- One secondary access gate located on Nelson Road. While there is an existing gate entrance, this will also need to be formalised. This entrance is anticipated to be used as a secondary entry point. Sight distances were observed to be unrestricted along Nelson Road.

It is noted that temporary construction access will be provided from the solar farm using one of the primary access gates on Benalla-Yarrawonga Road to Boundary Road near the substation to facilitate construction of the transmission line. Alternatively, access to the transmission line on Boundary Road could be provided via Nelson Road. However, given its restricted access and current road condition, access via Benalla-Yarrawonga Road is recommended.



Source: AECOM – photo taken on Wednesday 9 November 2022

Figure 3-4 Proposed access location to Solar Farm site on Benalla-Yarrawonga Road

3.2.2 Construction activities

It is anticipated that construction activities would occur for both solar farms and the transmission line over an 24-to-30-month period (subject to obtaining required approvals). The construction process for the solar farm is anticipated to involve the following activities:

- Preliminary site access for site set up and mobilisation to establish construction area

- Civil works, which may include clearing of the land, grading, compaction, stormwater drainage, sediment controls and dust suppression
- Installation of footings (final siting to be determined during detailed design)
- Installation of the solar panels onto mounting structures
- Installation and connection of the solar panels to solar farm infrastructure including electrical control cabinets
- Installation of the PCUs
- Connection of site infrastructure, including the electrical control cabinets, PCUs and underground cabling
- Construction of a substation on both solar farm sites
- Construction of control building and operation and maintenance area.

Similarly, construction activity requirements for the transmission line are expected to be generally similar and will include:

- Mobilisation
- Hardstand and access track construction
- Pole foundations
- Pole stand up
- Cable stringing.

Project commencement will be subject to the outcome of the planning process and grid connection agreements. Construction activities would be undertaken during standard hours for building and works from 7:00 am to 6:00 pm Monday to Friday and 8:00 am to 1:00 pm on Saturdays. Construction activities are not expected be undertaken on Sundays or public holidays. Should this occur, appropriate approvals would be required. Ongoing communication with local residences would occur to inform them of the timing and duration of proposed activities, prior to the commencement of any works.

Construction will be managed through a Construction Environment Management Plan (CEMP) as proposed by the PEMP.

3.3 Operation phase overview

The solar farm and its transmission line are anticipated to operate for up to 30 years, though upgrades of the facility could extend the operational life beyond this. This estimated life is due to the degradation of solar panels over time, with solar panels currently having a lifespan of around 30 years before needing to be replaced. A minimal number of personnel would be required for the operation and maintenance of the solar farm, with up to five full-time equivalent jobs to be created for the operational phase on a long-term of permanent basis.

Monitoring is typically undertaken remotely. Cleaning of the modules will be required on an as needs basis and will be dependent on weather conditions (this may be required once every two years, or several times per year). Full servicing of PCUs and switchyard equipment will be undertaken on a quarterly basis. There will be no storage of hazardous or dangerous goods or materials on site during the operation of the solar farm.

3.4 Decommissioning

Decommissioning of the solar farm will include full rehabilitation of the site to ensure it can revert to its previous agricultural use. Alternatively, the site could be upgraded to continue to be used for renewable energy generation or redeveloped for other purposes, depending on the appropriate planning controls in place at the time of decommissioning.

4.0 Construction phase impact assessment

Construction and operation of the Kennedys Creek Solar and transmission line is expected to take place concurrently with the West Mokoan Solar Farm and as such, there is potential for cumulative transport impacts. The following section contains the impact assessment for Kennedys Creek and the transmission line only. The impact assessment for West Mokoan Solar Farm and cumulative impact analysis are contained in Section 7.0.

4.1 Construction traffic generation

4.1.1 Workforce

Daily two-way traffic generation during peak construction of the solar farm and transmission line was determined based on estimates provided by Lightsource bp. During peak construction for such a size solar farm approximately 171 construction staff could be on-site at one time. Peak construction of the solar farm is understood to coincide with the construction of the transmission line. During that time, it is anticipated that 50 construction workers would be required for the construction of the transmission line.

It is expected that 80% of workers will travel via bus shuttles and the remaining workers are expected to travel in single-occupancy vehicles to and from the site. Each bus shuttle is understood to have a 14 person capacity. Based on proposed construction shifts, peak trips could be expected to occur between 5:30am and 6:30 am with around 57 vehicle arrivals and 6:00pm to 7:00 pm with 57 vehicle departures from the site on a typical weekday.

A summary of daily workforce traffic generation is during construction peak is provided in Table 4-1.

Table 4-1 Anticipated two-way daily traffic generation during construction

Type	AM peak (5:30am – 6:30am)	Daytime (6:30am-6pm)	PM (6 - 7pm)
Light vehicles	44	0	44
Bus shuttles	13	0	13
Total	**57**	**0**	**57**

4.1.2 Heavy vehicles

Heavy vehicle movements are anticipated to be generated by the various construction activities which include:

- Site set up and mobilisation (semi-trailer and low loader trucks)
- Road and hardstand material construction equipment delivery (truck, dog and low loader trucks)
- General equipment delivery (low loader and semi-trailer trucks)
- Substation equipment delivery (B-Doubles and OSOM trucks)
- AC Cable installation (semi-trailer and low loader trucks)
- Overhead line installation (semi-trailer, low loader trucks and Restricted Access Vehicles (RAV))
- Transmission line pipe transportation (semi-trailer trucks)
- Spoil and concrete transport (B-Double trucks)
- Switchyard construction (concrete agitator, low loader, semi-trailers, RAV and trucks).

Overall, it is estimated that there would be approximately 50 truck movements during the day, noting that these include truck movements associated with the construction of the transmission line. A summary of daily heavy vehicle traffic generation for the transmission line during construction peak is provided in Table 4-2.

Table 4-2 Anticipated two-way daily heavy vehicle traffic generation during construction

Type	AM peak (5:30am – 6:30am)	Daytime (7am-6pm)	PM (6 - 7pm)
Light vehicles	0	0	0
Heavy vehicles	0	50	0
Total	**0**	**50**	**0**

4.2 Construction traffic distribution

4.2.1 Workforce

It is expected that construction workers will be residing in townships located within a one-hour driving radius from the proposed solar farm. It is subsequently anticipated that workers would be originating from Shepparton, Benalla, Euroa and Wangaratta. Traffic distribution was based on the estimated population for each of the townships and is shown in Table 4-4.

An overview of routes anticipated to be used by workers to the solar farm is provided in Table 4-3 and shown in Figure 4-1. Workforce origins would be confirmed upon contractor award and TMP development for the project. During construction designated parking areas will be established on-site, with car park anticipated to be located south of laydown areas.

Table 4-3 Anticipated workforce routes during construction

Origin	Anticipated route
Shepparton	Via Midland Hwy, Link Rd, Benalla-Yarrawonga Rd
Benalla	Via Sydney Rd
Euroa	Via Hume Fwy and Sydney Rd
Wangaratta	Via Hume Fwy and Sydney Rd

Table 4-4 construction workforce traffic distribution based on origin

Origin	Light vehicles	Bus shuttles
Shepparton	21	5
Benalla	8	3
Euroa	3	1
Wangaratta	13	4
Total	**44**	**13**

4.2.2 Heavy vehicles

Materials and equipment to construct the solar farm will be sourced locally where possible and could potentially come from the Ports of Melbourne which is located to the southwest of the site. Therefore, heavy vehicles would ultimately access the site from the Hume Freeway, before turning onto Sydney Road, Benalla-Yarrawonga Road which are all B-Double and OSOM approved roads. This route, shown in Figure 4-2, will therefore ensure through traffic impacts on Benalla are limited.

Site entry points on Benalla-Yarrawonga Road are expected to be utilised as the main access to the Kennedys Creek Solar Farm. All construction vehicles are anticipated to utilise the primary accesses on Benalla-Yarrawonga Road to enter the solar farm.

Raw material sources have yet to be confirmed and would be confirmed when the Traffic Management Plan is produced. The proposed traffic routes would be confirmed when the hired contractor is in place

D R A F T

and a formal Traffic Management Plan (TMP) has been produced, it can be difficult to predict at the early planning stages of the project.

D R A F T

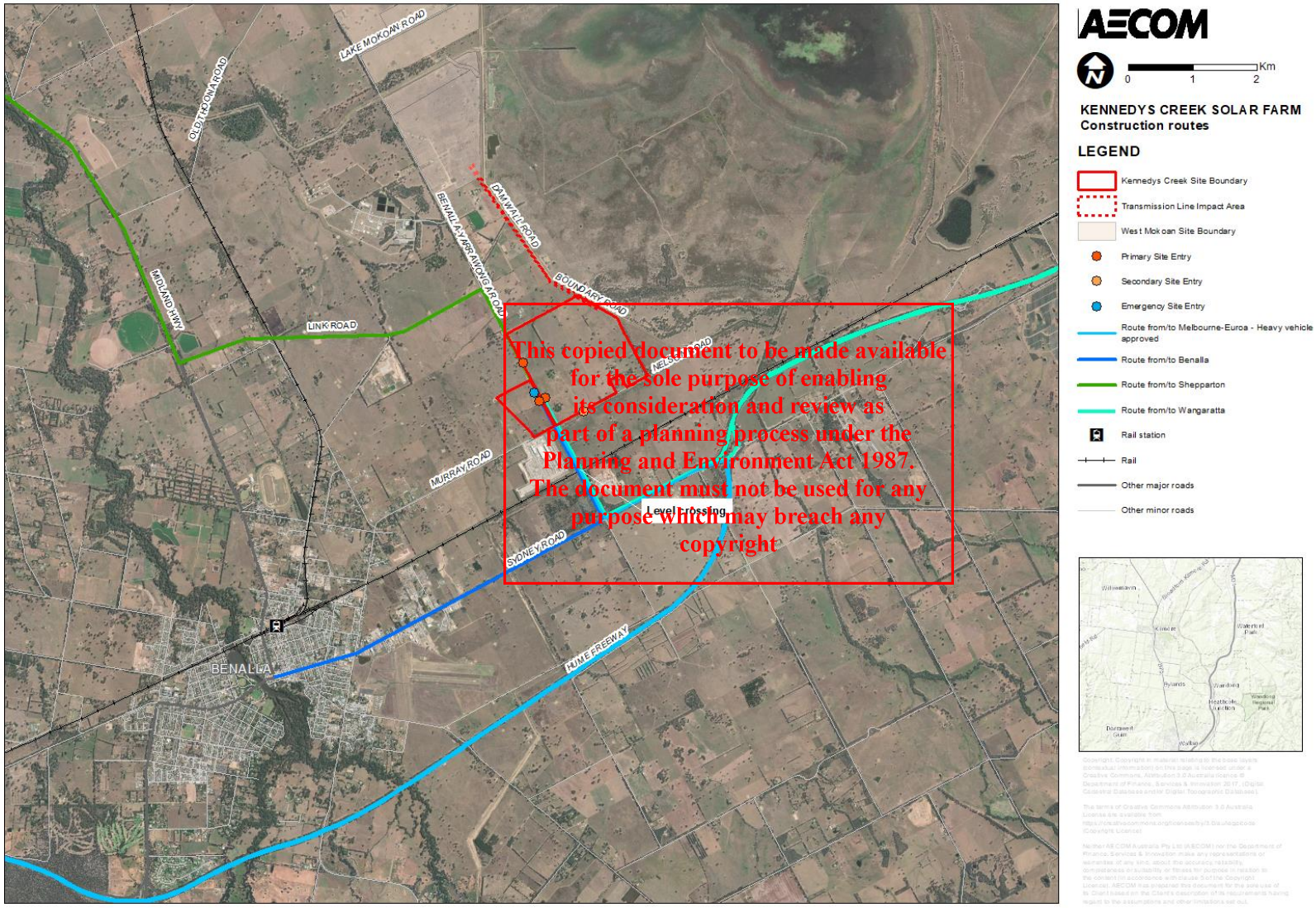


Figure 4-3 Anticipated route for construction traffic

D R A F T

4.3 Network capacity

Sydney Road carries approximately 640 two-way vehicle trips (or approximately 330 one-way vehicle trips) during peak hour. In comparison, Benalla-Yarrawonga Road carries approximately 93 two-way vehicle trips (or approximately 46 one-way vehicle trips) during peak hour.

With construction personnel traffic volumes predicted to be at approximately 57 vehicles entering / exiting the site during morning and evening peak time periods, the combined traffic volumes can be accommodated, given that typical one-way capacity for a traffic lane is 900 vehicles per hour.

Accordingly, it is anticipated that there will be insignificant impacts to the local road network due to the construction of the Kennedys Creek Solar Farm and its transmission line. The program and construction volumes would be confirmed once a contractor is hired for the project and the associated Traffic Management Plan (TMP) is produced.

4.4 Site access

4.4.1 Intersection of Sydney Road / Benalla-Yarrawonga Road

Both roads are B-Double approved and therefore typically cater for B-Double and OSOM vehicles. Therefore, it is assumed this intersection allows for an adequate turning radius for construction vehicles that may require access during the construction phase of the project.

4.4.2 Intersection of Benalla-Yarrawonga Road / Solar Farm Accesses

Considering the relatively short-term construction period, the predicted low traffic volumes and the classification of the Benalla-Yarrawonga Road, the existing one-lane two-way road is considered wide enough to accommodate construction and operation traffic.

During further design development, it is recommended widened site accesses are provided to ensure two-way B-Double movements can be accommodated. Figure 4-4 shows the B-Double vehicle swept path entering the northernmost access on Benalla-Yarrawonga Road. The footprint of the proposed accesses may need to be reviewed during the detailed design process and preparation of the TMP to ensure that two-way movements of heavy construction vehicles can be catered.

Traffic management would also be an alternative option for managing two-way vehicle conflicts. This should be considered further at the development of the TMP for the project in consultation with Benalla Rural City Council and DTP.

D R A F T

Figure 4-4 B-Double vehicle swept path on existing geometry of northernmost access located on Benalla-Yarrawonga Road

Source: AECOM developed swept path analysis, Google Earth 2019

4.4.3 Intersection of Benalla-Yarrawonga Road / Murray Road / Nelson Road

Considering the relatively short construction period, the predicted low traffic volumes and the classification of the Benalla-Yarrawonga Road, the existing intersection is considered wide enough to accommodate construction and operation traffic.

Though the sight distances are good in all directions, the widths of these roads are relatively constrained particularly for two-way heavy vehicles movements on Nelson Road during construction peak.

This intersection's footprint should be reviewed during the preparation of a TMP, when greater certainty of the project construction vehicle requirements are known to ensure that construction and local traffic can safely access and egress the site entries, particularly on Nelson Road. Temporary traffic management measures such as portable traffic signals, minor localised grass clearing and widening are expected to satisfy cross section design requirements.

4.4.4 Nelson Road

Although the primary site accesses will be located on Benalla-Yarrawonga Road, some construction vehicles may utilise Nelson Road. Figure 4-5 shows the B-Double swept paths entering and egressing Nelson Road. To ensure that construction and local traffic can safely use Nelson Road, its width near the intersection with the proposed entrance should be reviewed during the preparation of a TMP, when greater certainty of the project construction vehicle requirements are known. Access to this site entry may require temporary traffic management controls as discussed above to satisfy cross section and road limitations due to limiting width of the road as shown in Figure 4-5.

D R A F T

Figure 4-5 B-Double vehicle swept paths on existing geometry

Source: AECOM developed swept path analysis; Google Earth 2019

4.4.5 Internal access

Subject to the development of the TMP for the project, it is expected that the project will provide a network of internal site access tracks within the development footprint of the proposed Kennedys Creek Solar Farm that will be in place to facilitate construction of the site and then ongoing maintenance. Tracks are expected to be constructed of crushed gravel and will be approximately 4 metres wide. A 4 metre-wide perimeter road will also be built in accordance with the specifications set out in the Country Fire Authority (CFA) guidelines, with passing bays every 600m which will each be 6 metres wide and 20 metres long. The access track layout and site access points are shown in Appendix A.

It should also be noted that permits are required from the Department of Transport and Planning (DTP) (previously Department of Transport) should there be any over dimensional (OD) vehicles crossing a railway line are greater than 4.9 metres in height, 3.0 metres wide or 26.0 metres in length. Given that construction traffic is anticipated to passage a level-crossing, discussions with DTP are recommended.

4.5 Road upgrades

4.5.1 Boundary Road

As the transmission line is proposed to be built along Boundary Road, it is expected that the road will need to be upgraded to safely accommodate construction movements along the right-of-way of the transmission line.

As the road has restricted access, construction works along Boundary Road are not expected to impact road users and property access. However, it is noted that this road is used as a fire access track. Consultation with relevant road authorities would be undertaken to ensure road upgrade works are to the satisfaction of relevant road authorities. Additionally, engagement with emergency services is recommended to be undertaken to ensure that emergency access is maintained during construction. This would be undertaken as part of the TMP which will be developed for the Project. Upgrade works will be captured in the Project's TMP.

D R A F T

4.5.2 Snowy Lane

Potential road upgrade works may be required on Snowy Lane, should this road be utilised to provide an alternative access to the transmission line during construction.

Snowy Lane currently provides access to several local properties and farmland. It also provides restricted access to Boundary Road. Upgrade works to Snowy Lane would be required to ensure construction movements can safely be accommodated as its current width and road condition are inadequate to accommodate anticipated vehicle types and movements. However, at the time of this assessment, access to the transmission line is expected to occur via the proposed entry points off Benalla-Yarrawonga Road. Confirmation of construction vehicle access to both the solar farm and transmission line are subject to additional design development following consultation with relevant authorities. It is expected that road upgrade works will be captured in the Project's TMP.

4.6 Sustainable transport

4.6.1 Pedestrians and cyclists

As no pedestrian or cycle paths are present in the vicinity of the solar farm, no impacts to pedestrians or cyclists are expected from the construction of the solar farm.

4.6.2 Public transport

While several regional buses routes operate along Sydney Road, no impacts to regional bus services are expected from the construction of the solar farm.

Local school bus routes also operate in the area and will typically operate Monday to Friday during school drop off (8 am to 9am) and pick-up (3:30 pm) times. During preparation of the TMP, hours of construction traffic movements should aim to avoid these time periods and/or be suitably managed.

D R A F T

5.0 Operational phase impact assessment

During operation, the solar farm is anticipated to generate approximately ten service vehicle movements per day to account for general operation and maintenance activities. As the Kennedys Creek Solar Farm transitions to the operational stage, the previously discussed access tracks would remain, providing maintenance access.

It is understood that up to five plant operators are expected to attend site on weekdays between 6:00 AM and 4:00 PM and may occasionally need to attend site on weekends if necessary. Services to be carried out will be scheduled and unscheduled maintenances. Operational vehicles will likely be single cabin or dual cabin utility vehicle.

Given the traffic volumes generated during operations, the road network is subsequently expected to have ample capacity to accommodate the additional construction phase traffic volumes generated by the Project.

6.0 Decommissioning impact assessments

Decommissioning impacts are expected to be similar to the construction stage of the project. Given this stage would not occur until after the operational life cycle of the project, re-assessments would be required.

Potential impacts associated with decommissioning works of the project are expected to be the same or similar to those associated with the construction phase. However, the overall level of impact would be lower due to the nature of decommissioning activities. These impacts should also be managed with the implementation of the same mitigation measures as those proposed for construction impacts as part of a Decommissioning Management Plan. With recommended mitigation measures in place, the potential for impacts on the local road network within the vicinity of the project from decommissioning of the project would be minor.

Given this phase would not occur for some time a reassessment would be required at the time to consider the current and future road conditions and infrastructure present.

D R A F T

7.0 Cumulative impact assessment

Construction and operation of the Kennedys Creek Solar and its transmission line is expected to take place concurrently with the West Mokoan Solar Farm and as such, there is potential for cumulative transport impacts. At the time of this assessment, traffic generation estimations were based on information provided by Lightsource bp but may be subject to changes once contractor(s) are nominated. Where no information was available, assumptions were made and conservative estimates based on the West Mokoan Solar Farm construction traffic generation data were used.

7.1 Construction phase

The following should be noted with regards to the West Mokoan Solar Farm construction phase traffic generation:

- All construction traffic would access the solar farm site via the five proposed site access points located via Lake Mokoan Road and Benalla-Yarrawonga Road
- 229 workers per day are anticipated to be required during construction peak
- Workers are assumed to travel to and from the construction area each day during construction. As for the Kennedys Creek Solar Farm, workers are expected to reside within a one hour driving radius from the West Mokoan Solar Farm. Workers are subsequently expected to be residing in Shepparton, Benalla, Euroa and Wangaratta.
- 80% of workers are assumed to be travelling to and from the site via bus shuttles. Each shuttle is expected to have a 14-person capacity. The remaining workers are assumed to be travelling in single-occupancy vehicles.
- As shift hours for the workforce was unknown at the time of this assessment, it was assumed that the workforce traffic would arrive at the same time than the Kennedys Creek workers in the morning peak between 5:30 am and 6:30 am and depart in the evening peak between 6:00 pm and 7:00 pm.
- Onsite car parking is expected to be provided within the site compound, with no over-spill into other areas
- 68 heavy vehicle movements are anticipated to be generated during the peak of construction works. However, these are expected to occur outside of construction peak hour periods during the daytime.
- Heavy vehicles are assumed to be coming from the west via Hume Freeway, Sydney Road and Benalla-Yarrawonga Road.

Table 7-1, Table 7-2 and Table 7-3 outline the estimated West Mokoan Project construction traffic distribution and generation on the local road network. Anticipated routes for construction traffic movements are shown in Figure 7-1.

Construction traffic volumes are predicted to be at approximately 59 vehicles entering / exiting the site during morning and evening peak time periods, generated by workforce movements. Subsequently, the local road network is expected to have ample capacity to accommodate the combined construction traffic volumes from both Kennedys Creek and West Mokoan Solar Farms, given that typical one-way capacity for a traffic lane is 900 vehicles per hour. Accordingly, it is anticipated that there will be insignificant impacts to the local road network due to the concurrent construction of the Kennedys Creek Solar Farm, transmission line and West Mokoan Solar Farm.

D R A F T

Table 7-1 West Mokoan Solar Farm construction workforce traffic distribution during peak period

Origin	Distribution
Shepparton	Via Midland Highway, Old Thoona Road, Benalla-Yarrawonga Road and Lake Mokoan Road
Benalla	Via Sydney Road and Benalla-Yarrawonga Road
Euroa	Via Hume Freeway, Sydney Road and Benalla-Yarrawonga Road
Wangaratta	Via Taminick Gap Road, Glenrowan-Boweya Road and Lake Mokoan Road

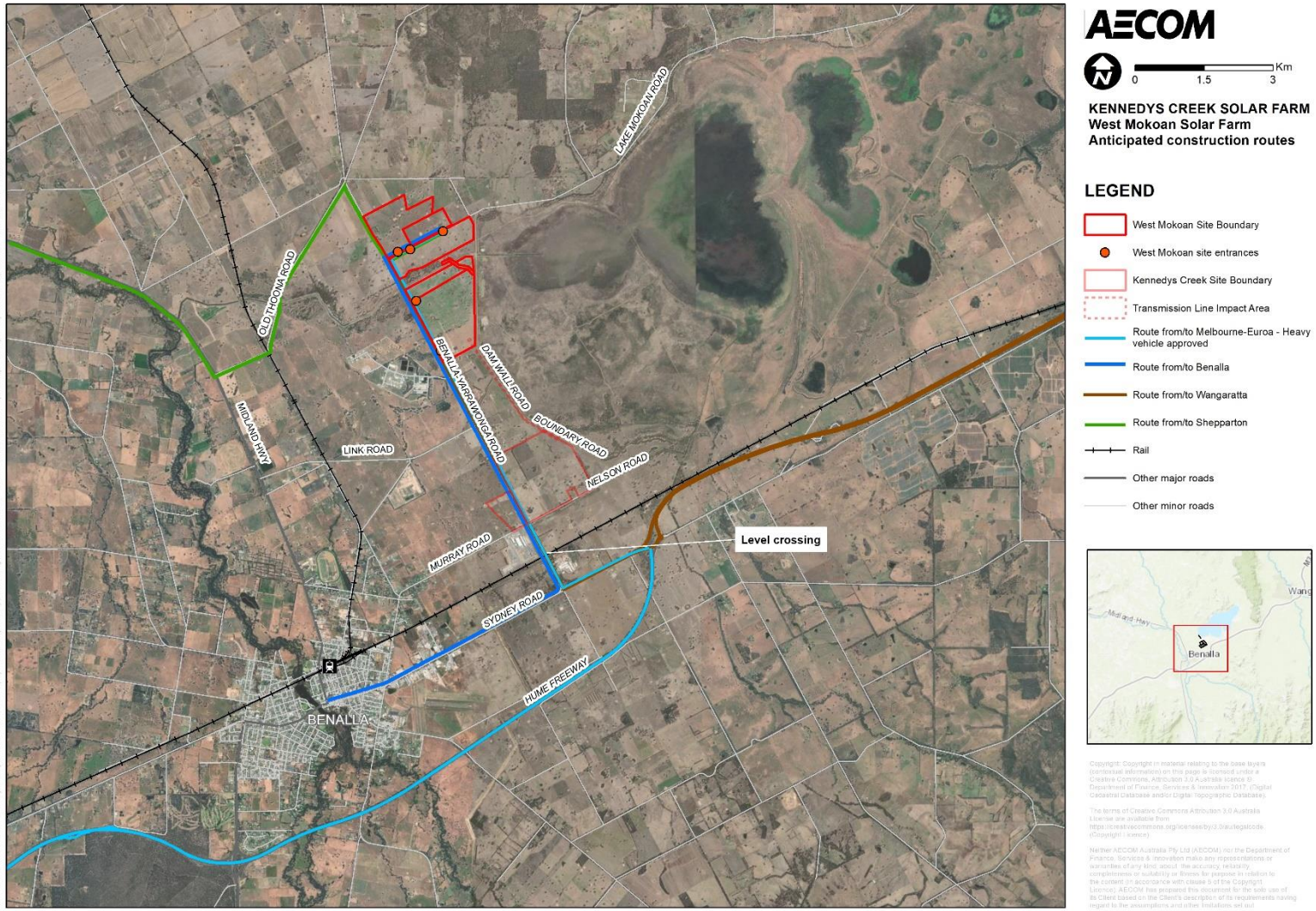
Table 7-2 West Mokoan Solar Farm construction workforce traffic generation based on origin

Origin	Light vehicles	Shuttle buses
Shepparton	22	6
Benalla	8	2
Euroa	2	1
Wangaratta	14	4
Total	**46**	**13**

Table 7-3 West Mokoan Solar Farm overall construction traffic generation

Type	AM peak (6 - 7am)	Daytime (7am-6pm)	PM (6 - 7pm)
Light vehicles	46	0	46
Heavy vehicles	13	68	13
Total	**59**	**68**	**59**

D R A F T



AECOM

0 1.5 3 Km

KENNEDYS CREEK SOLAR FARM
West Mokoan Solar Farm
Anticipated construction routes

LEGEND

- West Mokoan Site Boundary
- West Mokoan site entrances
- Kennedys Creek Site Boundary
- Transmission Line Impact Area
- Route from/to Melbourne-Euroa - Heavy vehicle approved
- Route from/to Benalla
- Route from/to Wangaratta
- Route from/to Shepparton
- Rail
- Other major roads
- Other minor roads

Figure 7-1 Anticipated route for the West Mokoan Solar Farm construction traffic

D R A F T

7.2 Operational phase

Traffic generation during the operation of the West Mokoan Solar Farm is expected to be minimal. It is understood that the general operation and maintenance workforce will be shared across both solar farms as the plant will generate and be operated as one facility, with one point of connection to the grid. This signifies that there would be up to ten service vehicle movements per day for general operation and maintenance activities of the West Mokoan Solar Farm. Operational vehicles are likely to be single cabin or dual cabin utility vehicle.

Given the traffic volumes generated during operations, the road network is subsequently expected to have ample capacity to accommodate the additional construction phase traffic volumes generated by both solar farms.

D R A F T

8.0 Conclusion and TMP development

8.1 Conclusion

This Traffic Impact Assessment concludes that there is unlikely to be a material traffic impact on the local road network during the construction of the proposed Kennedys Creek Solar Farm.

The Traffic Impact Assessment has highlighted some potential mitigation measures that may be considered to facilitate safe vehicle access to the site, which can be further considered and finalised at the development of the TMP for the project in consultation with key stakeholders.

8.2 TMP Development

Typically, on wind and solar farm projects, following planning approval, a condition of the permit will be to produce a TMP for the project. The TMP would be developed when a contractor is commissioned and may consider the following:

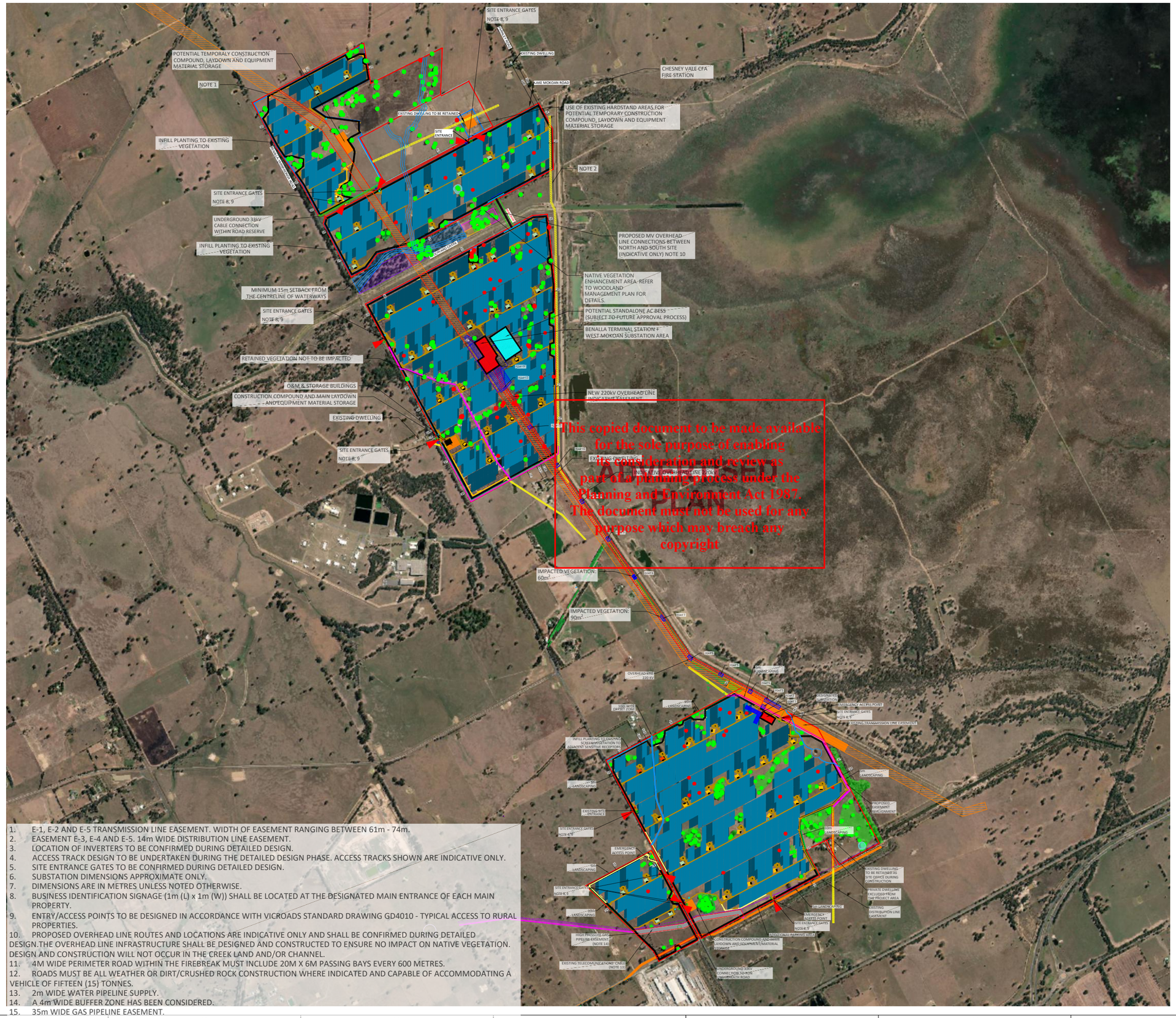
- Key stakeholder inputs and requirements. This includes consultation to obtain relevant approvals from Benalla Rural City Council and DPT.
- Ongoing communication with local residences to inform them of the timing and duration of proposed activities, prior to the commencement of any works and any impacts to the local road network
- Confirmation of proposed construction program and traffic volumes
- Confirmation of materials and personnel origins and routes
- Final site access design and traffic management measures (speeds and signage) to facilitate the safe movement of vehicles to and from the site
- Pre-road condition surveys and maintenance agreements with relevant road authorities
- Management of road upgrade works and associated impacts to local road users and residents
- Over dimensional load permit application for travel across railways
- Control measures including:
  - Roles and responsibilities
  - Training and site inductions
  - Vehicle access to the solar farm and the transmission line sites
  - Operating and working hours; where possible consideration should be made to ensure construction traffic movements avoid school bus time periods
  - Environmental measures.
- Outline monitoring, inspection and auditing of the TMP.

D R A F T

Appendix A

Concept Design

West Mokoan Solar Farm_LP3-BDL_14 (KC_BDL_04) Planning



1. E-1, E-2 AND E-5 TRANSMISSION LINE EASEMENT. WIDTH OF EASEMENT RANGING BETWEEN 61m - 74m.
2. EASEMENT E-3, E-4 AND E-5. 14m WIDE DISTRIBUTION LINE EASEMENT.
3. LOCATION OF INVERTERS TO BE CONFIRMED DURING DETAILED DESIGN.
4. ACCESS TRACK DESIGN TO BE UNDERTAKEN DURING THE DETAILED DESIGN PHASE. ACCESS TRACKS SHOWN ARE INDICATIVE ONLY.
5. SITE ENTRANCE GATES TO BE CONFIRMED DURING DETAILED DESIGN.
6. SUBSTATION DIMENSIONS APPROXIMATE ONLY.
7. DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
8. BUSINESS IDENTIFICATION SIGNAGE (1m (L) x 1m (W)) SHALL BE LOCATED AT THE DESIGNATED MAIN ENTRANCE OF EACH MAIN PROPERTY.
9. ENTRY/ACCESS POINTS TO BE DESIGNED IN ACCORDANCE WITH VICROADS STANDARD DRAWING GD4010 - TYPICAL ACCESS TO RURAL PROPERTIES.
10. PROPOSED OVERHEAD LINE ROUTES AND LOCATIONS ARE INDICATIVE ONLY AND SHALL BE CONFIRMED DURING DETAILED DESIGN.THE OVERHEAD LINE INFRASTRUCTURE SHALL BE DESIGNED AND CONSTRUCTED TO ENSURE NO IMPACT ON NATIVE VEGETATION. DESIGN AND CONSTRUCTION WILL NOT OCCUR IN THE CREEK LAND AND/OR CHANNEL.
11. 4M WIDE PERIMETER ROAD WITHIN THE FIREBREAK MUST INCLUDE 20M X 6M PASSING BAYS EVERY 600 METRES.
12. ROADS MUST BE ALL WEATHER OR DIRT/CRUSHED ROCK CONSTRUCTION WHERE INDICATED AND CAPABLE OF ACCOMMODATING A VEHICLE OF FIFTEEN (15) TONNES.
13. 2m WIDE WATER PIPELINE SUPPLY.
14. A 4m WIDE BUFFER ZONE HAS BEEN CONSIDERED.
15. 35m WIDE GAS PIPELINE EASEMENT.

Site Boundary
Site Access
Security Fence
Single Axis Tracker 80s 1
Single Axis Tracker 56 x 1
substation area
Potential Stand-alone AC BESS (Subject to Future Approval Process)
PCS - 2 inverters & DC coupled BESS
PCS - 2 inverters & DC coupled BESS & Noise Barrier option if required
PCS - 2 inverters & no DC coupled BESS
Construction easement
Construction laydown
O&M and storage buildings
Access Road (All Weathered)
Access Road (Dirt roads / crushed rock)
Existing vegetation and environmental values to be retained
Existing 66kV Overhead line indicative location
Existing 220kV Overhead Line Easement
Distribution Line Easement to be retained
Propose powerline Easement realignment
High pressure gas pipeline easement
60m Fire Break
Designated Waterway
Infill planting zone
10m wide screen planting zone
5m wide screen planting zone
50m Buffer scarred trees
Vegetation management area - project area
Vegetation management area - crown land
Native vegetation enhancement area - crown land
Native vegetation enhancement area - project area
'Site entrance' and 'danger' signage
Business identification signage
45,000 Water tanks
Fire Hydrant
Trees to be retained
Trees to be removed

PV SYSTEM SPECIFICATIONS	
Capacity - DC	375.90 MW_p
Export Capacity - AC	300 MW_{AC}
DC/AC Ratio	1.253
Modules	(616230) 610 W Bifacial
Mods. per string	30
Pitch	5.20 m
GCR	47.40 %
Mounting structure	(7663) NxT Mono-Line SAT
• Full (3 Strings)	5215
• Partial (2 Strings)	2448
• Half	
Inverters	(112) Central Inverter 3575 KVA
• Nominal Power	3575 KVA
Access roads	49545 m
Fenced area	(6273210 m^2) 1550 Ha
• Perimeter	23935 m

Revisions:

Rev	Date	Comments	Dwn	Chkd
09	12.11.24	Layout update (29mod. per string & 620W)DC		
08	15.07.24	Easement and legend update	EPG	
14	16.05.25	Updated Layout	DC	
13	16.05.25	Update Layout	DC	
12	03.04.24	Substation details added	AG	
11	24.03.25	Updated Layout with 28 Strings	DC	
10	27.11.24	Updated layout	JI	
00	27.11.23	Layout Updated	DC	

DRAWN	CHECKED	APPROVED	DATE
DC			27.11.2023

PROJECT NAME & ADDRESS:
Location: Benalla, Victoria
Australia

NOTES:
- 610 Wp Bifacial modules
-
-
-

Paper Size:	Scale:	Sheet:
A3	1:30	1

CAPACITY:
616230 Modules 375.90 MWp

DRAWING TITLE:
AUS_West Mokoan Solar Farm_LP3-BDL_14 (KC_BDL_04) Planning
Hybrid Project Layout

DRAWING NUMBER:	STATUS:
LP3-BDL	Preliminary

lightsource bp

Lightsource Development Limited,
7th Floor, 33 Holborn, London,EC1N 2HU
General: +44 (0) 333 200 0755
Web: www.lightsourcebp.com
info@lightsourcebp.com

ISO full bleed A3 (420.00 x 297.00 MM)-V.1.0