Premise

Scoping Report

MYRTLE CREEK SOLAR FARM

Report No: 221104/REP
Rev: 001D
23 December 2020

Document reference: O:\Synergy\Projects\221\221104\Out\Reports\221104_REP_001D_Myrtle.docx

DOCUMENT AUTHORISATION					
Revision	**Revision Date**	**Report Details**			
A	16/11/20	Draft for client review			
B	15/12/2020	Final for client review			
C	16/12/2020	Final			
D	23/12/2020	Updated to address DPIE comments			
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1. INTRODUCTION

1.1 Background

Terrain Solar is proposing to develop an approximately 100 Megawatt AC (MWac) solar farm, including a Battery Energy Storage System (BESS) with a potential capacity of up to 100 megawatt hours (MWhours), although noting a likely capacity of closer to 40 MWhours, on land near the village of Rappville. The proposal is located in NSW, approximately 26 kilometres south of the town of Casino.

The land is located within the Richmond Valley Local Government Area (LGA).

1.2 Report purpose and structure

The estimated capital investment value of the project exceeds $30 million (estimated CIV is $245 million) and the proposal entails the delivery of an electricity generating works with a yield of greater than 30 MW. The project therefore represents State Significant Development (SSD) and an Environmental Impact Statement (EIS) is required to support any development application.

This scoping report has been prepared to support a request to Department Planning, Industry and Environment (DPIE) for the Secretary's Environmental Assessment Requirements (SEARs). These will inform the preparation of an Environmental Impact Statement (EIS) in support of a state significant development application submitted under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

This report has been prepared by reference to the *Scoping an Environmental Impact Statement: Draft Environmental Impact Assessment Guidance Series June 2017.*

The report is structured as follows:

- **Section 2** provides details of the site and context
- **Section 3** provides details of the proposed development
- **Section 4** provides the strategic framework
- **Section 5** provides a summary of impacts
- **Section 6** provides a project justification
- **Section 7** provides details of proposed consultation; and
- **Section 8** provides a summary of the estimated capital investment value.

2. SITE DETAILS

2.1 Location and regional context

The subject site to host the proposed solar panel infrastructure consists of land described in **Table 1**.

Table 1 – Affected land

Lot	DP	Size (hectares)
2	540060	66.5
26	755607	47.8

Lot	DP	Size (hectares)
28	755607	214.9
27	755607	95.1
TOTAL		**424.3 hectares**

The site is located at 420 Avenue Road, Myrtle Creek and forms part of a larger land holding of approximately 1,859 hectares. The land parcels the subject of this SSD DA have a cumulative area of approximately 425 hectares, however with buffers and exclusion areas, the solar investigation area is approximately 325 hectares.

In addition a sub-station and overhead power line to connect to the nearby TransGrid overhead power lines (located to the north-west) would be developed within Lot 28 DP755607.

2.2 Site description

The subject land consists of generally cleared, fenced paddocks, currently in use for grazing purposes.

Main Camp Road, a local road connecting to Summerland Way in the west and Myall Creek Road in the east, bisects the southern extent of the site. It is noted that Main Camp Road appears to have been constructed on the subject site rather than within the gazetted road reserve, which is located further to the south. A Crown road is located in the centre of the site, linking to Main Camp Road.

The site is generally flat, with a gradual fall from a high point of 55 metres Average Height Datum (AHD) in the north-west to a low of 32 m AHD in the south-east of the site, adjacent to its frontage to Myrtle Creek.

The site features five small farm dams and a number of first and second order streams, draining generally southward towards Myrtle Creek. Myrtle Creek flows south-easterly towards Myall Creek.

330 kV and 132 kV powerlines run in an south-west – north-east alignment, approximately 1,200 metres to the west of the site.

The regional context of the site is depicted in **Figure 1** and a detailed site figure is provided in **Figure 2**.

Figure 1 – Regional Context

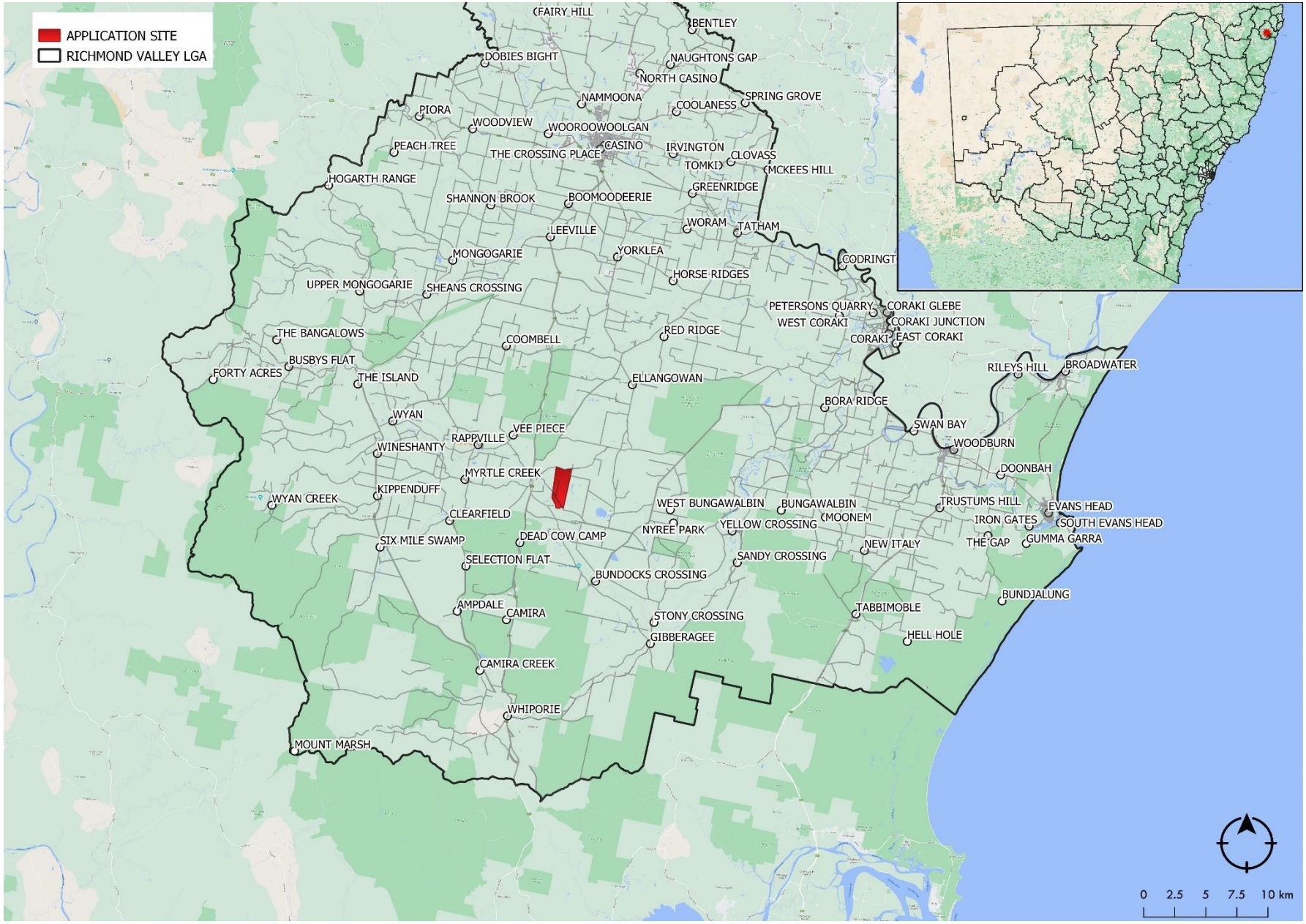
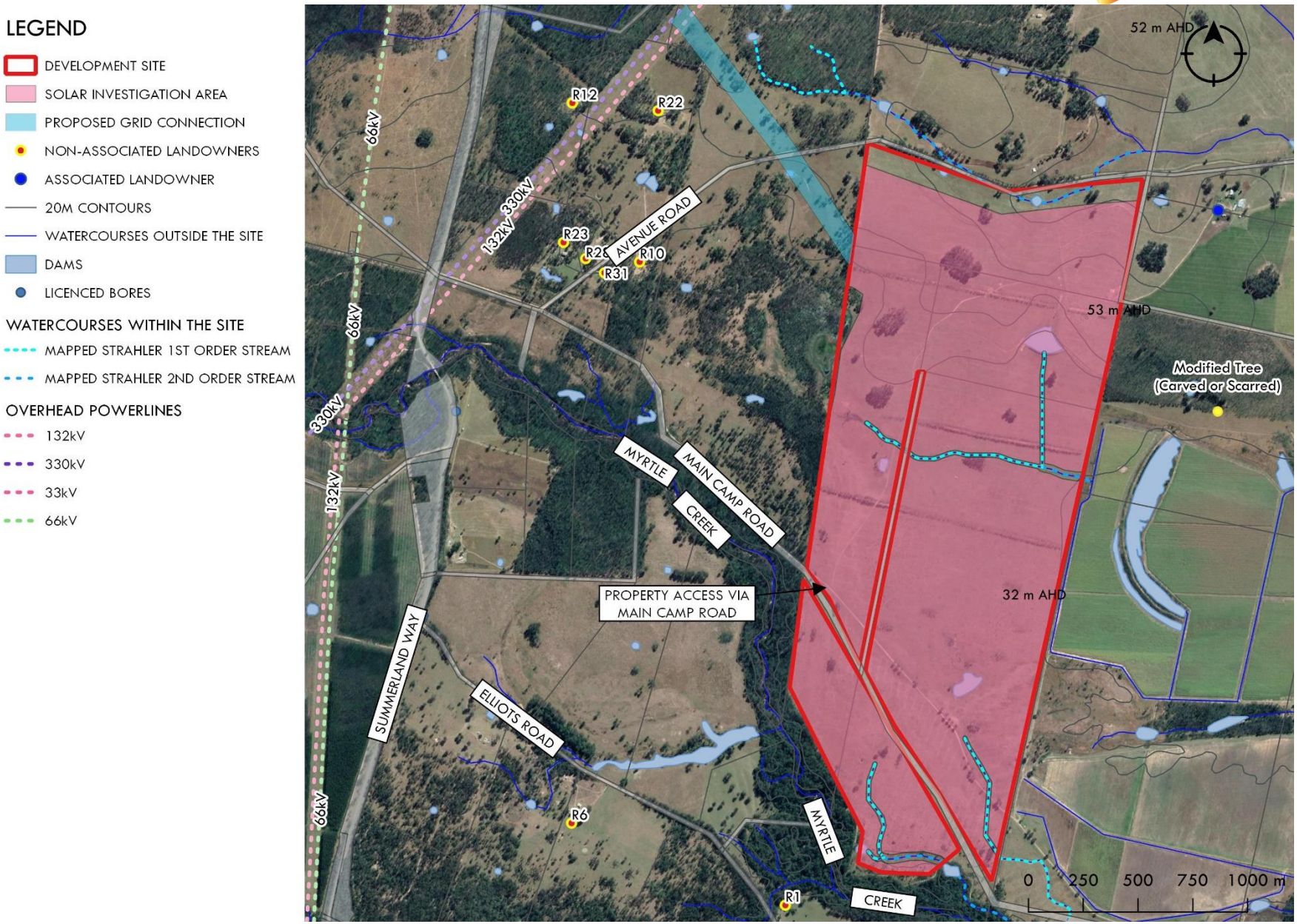


Figure 2 – Development Site



2.3 Surrounding development

2.3.1 LAND USE

The development site mostly consists of cleared land with some patches of vegetation and several isolated trees. The site is currently used for agricultural purposes, including cropping and grazing. There are no buildings on the site.

Main Camp Road runs through the southern extent of the site.

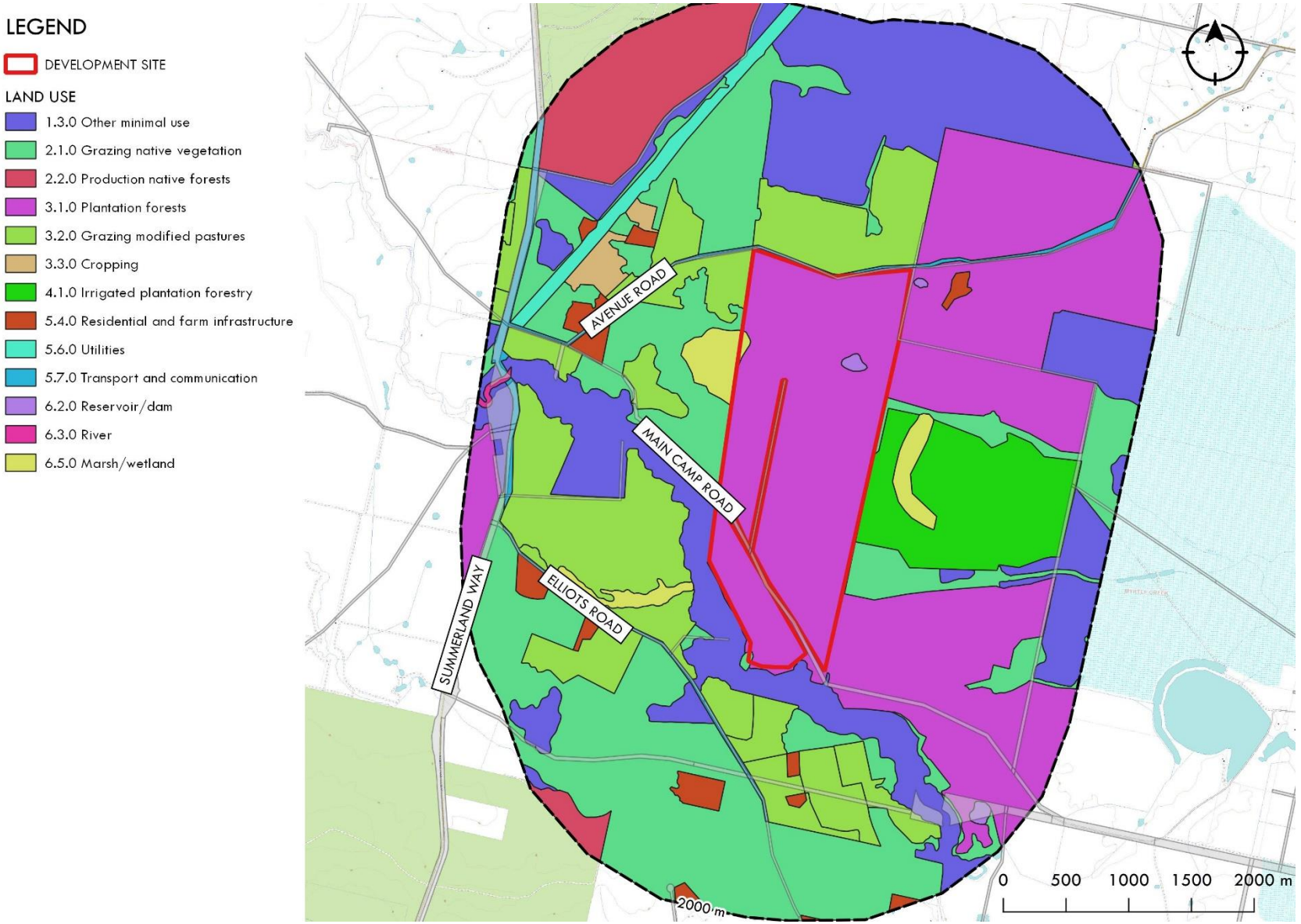
A breakdown of land uses within 2 km of the site is provided in **Table 2** and depicted in **Figure 3**.

It should be noted that GIS mapping data used to inform **Table 2** and **Figure 3** dates from 2017 and does not reflect lawful clearing carried out on the subject site in the last 12-18 months. It is considered that the current most representative land use for the development site is grazing modified pastures.

Table 2 – Land use summary within 2 km of the site

Land Use	Area (ha)	%
Other minimal use	620	19%
Grazing native vegetation	753	23%
Production native forests	145	4%
Plantation forests	981	30%
Grazing modified pastures	455	14%
Cropping	18	1%
Irrigated Plantation Forestry	153	5%
Residential and farm infrastructure	47	1%
Utilities	35	1%
Transport and communication	41	1%
Reservoir/dam	5	0%
River	2	0%
Marsh/wetland	47	1%
TOTAL	**3,302 hectares**	**100%**

Figure 3 – Land Use



2.3.2 POTENTIALLY AFFECTED LANDOWNERS

The subject site is located away from urban and built areas, with nearby non associated landowners limited to scattered dwellings.

The topography of the land provides an excellent visual and aural separation between the proposed footprint and non associated landowners in the locality.

Within 4 km of the subject site, there is one associated land owner and thirty eight (38) non associated landowners, as per **Figure 4**.

The closest non associated landowner to the project is R1, which is approximately 366 metres from the southern boundary of the proposed solar footprint. Notably, between this property and the subject site is Myrtle Creek, which is heavily vegetated and provides an excellent visual shield.

Non associated landowners R10, R12, R22, R23, R28 and R31 will have a partial views of the western and north western aspect of the subject site, however all are well shielded from direct views by intervening vegetation.

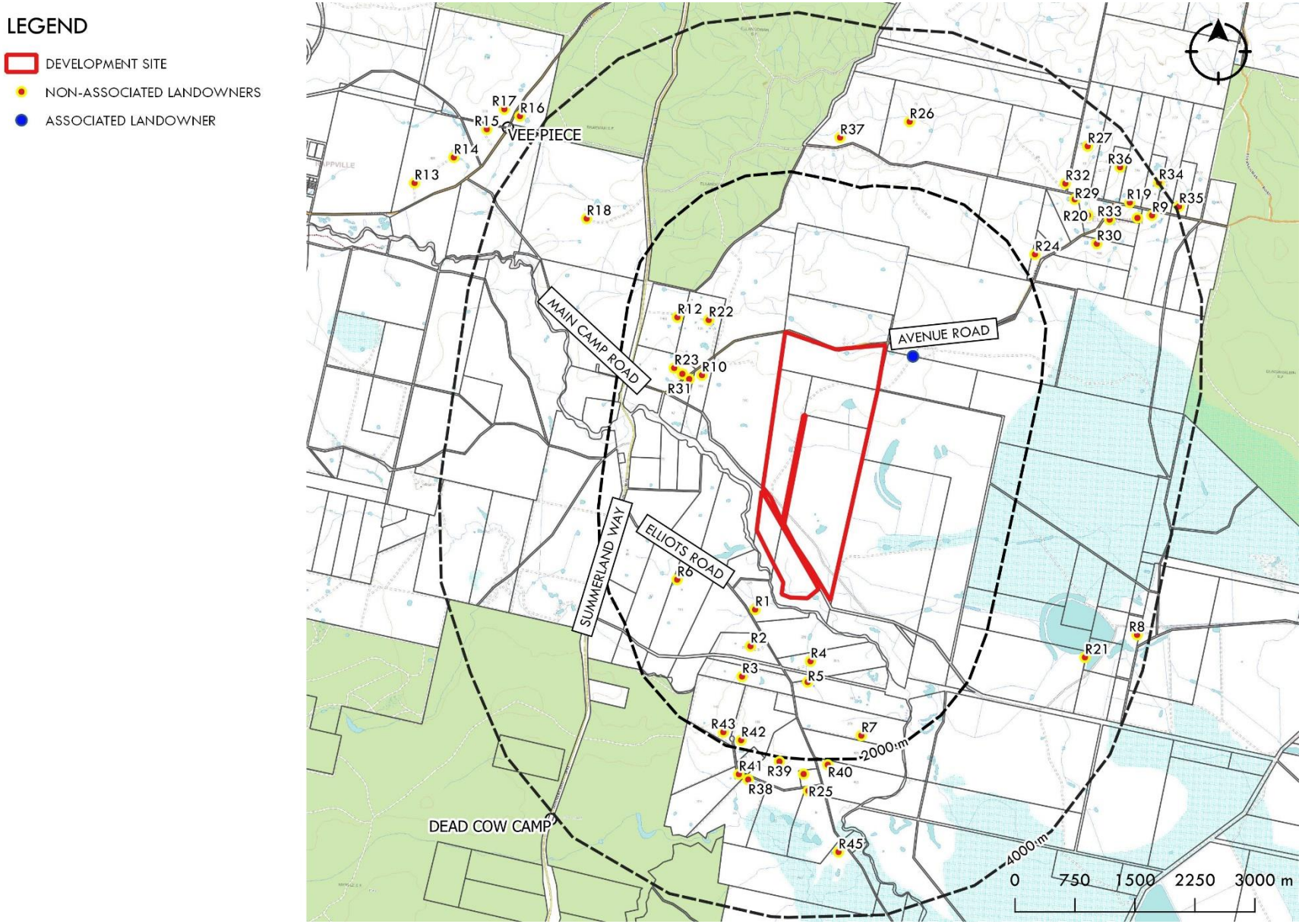
One associated land owner and 15 non associated landowners are located within 2 km of the solar farm. Nine (9) of the non associated landowners within this area are located to the south of Myrtle Creek (R1 to R7, and R42 and R43), whilst six of the non associated landowners are located to the west and north west (R10, R12, R22, R23, R28 and R31). The associated land owner is a farm manager living in a dwelling on the holding held in the same ownership as the subject site.

The remaining 23 non associated landowners within 4 km of the site surround the proposed development and are predominantly located to the north and north–east, with the remaining two non associated landowners (R8 and R21) located to the east. Non associated landowners to the north-east have some potential for views towards the solar farm, however the distance and intervening vegetation provides for a reduction in the extent of impacts.

R8 is well visually shielded from the site by vegetation. There is some potential for R21 to have a view to the southern aspect of the subject site.

A representative from Terrain Solar delivered engagement letters to non associated landowners within the locality to introduce the project, provide landowners with project details and provide a point of contact for any questions. This is discussed in more detail in **Section 7**.

Figure 4 – Nearby landowners



2.3.3 KEY INFRASTRUCTURE

The development site is bisected by Main Camp Road.

A number of overhead electricity transmission lines are located to the north-west of the site (refer **Figure 2**), including a 132 kV and a 330 kV.

2.4 Environmental Features

2.4.1 TOPOGRAPHY

The site is generally flat, with a gradual fall from a high point of 55 metres Average Height Datum (AHD) in the north-west to a low of 32 m AHD in the south-east of the site, adjacent to its frontage to Myrtle Creek.

2.4.2 VEGETATION

The approximately 325 ha development investigation site predominantly consists of cleared land with some patches of vegetation and isolated trees. The site does not appear to contain extensive connective stands of remnant native vegetation.

The site has been the subject of lawful clearing in the last 12-18 months.

It is noted that the majority of the development site is not mapped as sensitive terrestrial biodiversity via the Richmond Valley LEP. A number of small isolated mapped pockets of vegetation occur in the western extent of the site, as well as an area in the south extent associated with Myrtle Creek. No impact to the vegetation along Myrtle Creek is required or proposed. Via the available mapping, this vegetation does not encroach into the subject site. The small, mapped pockets of vegetation in the western extent have not been affected by the recent clearing – refer **Figure 5**.

A full biodiversity impact assessment would be completed in conjunction with preparation of the EIS and sensitive areas would either be avoided/excluded from the development footprint or would be cleared lawfully via the provisions of the BC Act and subject to agreed offsetting. In either regard, the very small areas involved would be unlikely to affect the viability of the project.

The site is mapped as containing category 1 bushfire prone land, although, as above, we note the site has recently been lawfully cleared and the mapping does not appear to have been updated to reflect this. A bushfire assessment would be completed to support the EIS.

Figure 5 – Sensitive terrestrial biodiversity

2.4.3 WATER

2.4.3.1 Surface water

The site contains a number of 1st and 2nd Strahler order streams and a number of small farm dams. These waterways are ephemeral and unnamed. These creeks generally flow southward towards Myrtle Creek.

Myrtle Creek forms the southern boundary of the site and is mapped via the LEP as being a sensitive watercourse. Appropriate buffers would be provided to ensure impacts to the watercourse are maintained. It

is noted that the centre line of the creek (via spatial mapping) is over 100 metres from the property boundary. Encroachment into this area is not required nor anticipated.

Adjacent land to the east has been the subject of historic levelling and clearing, and berms are understood to have been installed during this process to manage surface water. A hydraulic analysis would be completed as part of the EIS preparation to ensure that impacts to this adjacent land is manageable.

2.4.3.2 Groundwater

There are no registered bores within the subject site.

Within 4 km of the subject site there are ten (10) registered bores. These are depicted in **Figure 2** and site details are summarised in **Table 3**.

Table 3 – Groundwater bore data

Site ID	Bore Depth (m)	Drilled Depth (m)	Drilled Date	Easting	Northing	Elevation	Class
GW300927	27.5	27.5	30/09/1995	505699	6779056	30.6	Irrigation
GW300917	27	27	23/09/1995	505569	6778450	29.65	Monitoring
GW300926	29	29	18/09/1995	504081	6779101	30.71	Irrigation
GW300924	18.3	18.3	12/08/1995	506182	6777948	28.54	Irrigation
GW306605	102	102	20/02/2010	506347	6782138	52.82	Water Supply
GW300911	10.5	10.5	25/09/1995	505535	6778805	30.91	Monitoring
GW306606	102	102	22/02/2010	506360	6782560	59.47	Water Supply
GW039169	15	18.3	01/05/1977	499968	6778719	36.2	Monitoring
GW039170	17.2	19.8	01/05/1977	500069	6779656	37.3	Monitoring
GW300919	6	6	22/09/1995	506122	6777512	30.93	Monitoring
GW300927	27.5	27.5	30/09/1995	505699	6779056	30.6	Irrigation

Given the drill depths and the nature of the proposed works, it is unlikely that groundwater would be intersected by the proposed development.

2.4.3.3 Flooding

The site is not mapped as being flood affected via the LEP.

There is no known flood study applying to the land.

A hydraulic analysis would be completed as a component of the proposed EIS to confirm the potential for any flood inundation over the land. Given the ground levels in the vicinity of Myrtle Creek, the likelihood of significant inundation is considered low.

3. DEVELOPMENT DESCRIPTION

3.1 Solar farm

The Myrtle Creek Solar Farm (MCSF) will use solar PV panels to convert sunlight into electrical current, with grid compliant energy delivered to the nearby aboveground TransGrid 132 kV Koolkhan to Lismore powerline. Electricity will be sold into the National Electricity Market (NEM) and Large Generation Certificates (LGC's) will be sold to liable entities under the *Renewable Energy Act 2000*.

The proposed output capacity of the proposed solar farm is approximately 100 MWac, noting that this is a function of optimisation of the amount of energy that can be generated within the site and subject to capacity constraints of the local electrical grid. The final capacity and footprint of the solar farm infrastructure will be refined through consideration of findings as a result of further site investigations and identification of constraints and opportunities mapped through the environmental impact assessment process. The intent, however, is to maximise the built footprint over the development site which, at this stage, includes an area of approximately 325 hectares (ha).

Solar PV technology will be either crystalline silicone or thin film. The solar PV modules will be connected together via a direct current (DC) collection system consisting of cables mounted on the module support structure. The support structure will be east-west tracking. A tracking system tracks the daily movement of the sun and a motorised system rotates the panels constantly towards the sun to maximise energy output performance.

Inverters and transformers will be located in an array within the footprint to convert the DC current to alternating current (AC). Inverter and transformer assemblies will be mounted on a steel platform or slab at ground level and generally covered. The AC collection system will consist of underground cabling at 22 kV or 33 kV to connect to each inverter assembly and deliver the electricity to the site substation. The site substation will consist of a transformer to increase voltage to 132 kV or 330 kV. The site substation will be enclosed securely and would be located on Lot 28 DP755607.

A connection from the site substation to the nearby overhead electricity powerlines will be made via overhead or underground high voltage cables. The route of this overhead power line is currently under investigation – refer **Figure 2** and **Section 3.2**.

Battery storage providing a capacity of up to 100 MWhours would form part of the application but a decision on the capacity and whether it would be installed would be made closer to the point of construction and commissioning, given the uncertainty around the cost of battery delivery. Storage would provide the capacity to deliver electricity to the transmission network on demand and more closely follow demand fluctuations. This will ensure the electricity is most valuable to the market. If battery storage is included at the development, site battery banks will be housed in containers or a shed. The structures will provide shelter and security and will incorporate services to control temperature etc. Concrete footings are likely to be laid to support the structures. The storage facility would be located near the site substation and will be connected via underground or overhead cables.

A control room with associated parking area will be located on the site. This will be a relatively small structure which will provide amenities for a limited number of site staff as well as facilities to enable monitoring of the performance of the solar farm and communications connections to the electricity market operator. Once operational the solar farm will require minimal site based maintenance. It will be monitored remotely and only attended to rectify faults and for occasional scheduled maintenance.

Construction of the solar farm is estimated to take between 12 - 18 months. The site is expected to require minimal preparation in advance of installing the PV panel system as it is generally flat with only minor undulations and is largely devoid of vegetation. A security fence will be installed on the site boundary and construction tracks will be laid down. Construction will require the use of bull dozers, water trucks, graders, flatbed trucks, skid steers, front end loaders, roller compactors, trenchers, backhoes, gravel trucks, water tankers, cranes, and aerial lifts. Deliveries of modules and other equipment will be made via flatbed trucks on the approved route and site entrance.

3.2 Grid connection

The transmission line that will connect MCSF to the nearby TransGrid transmission line would be owned by the operator of the MCSF.

The Infrastructure SEPP makes development for the purpose of an electricity transmission or distribution network permissible without consent when carried out by or on behalf of an electricity supply authority or a public authority. Such development may be assessed under Part 5 of the EP&A Act. Alternatively, transmission or distribution infrastructure may be considered a component of the project and assessed as a permitted activity via the Part 4 SSD process as a legitimately ancillary component of the solar farm development.

The power line connection route (as per **Figure 2**) will be subject to detailed assessment and land holder negotiation. An in-principle agreement with the affected landowner has been reached.

The power line connection route is zoned RU1 – Primary Production pursuant to the *Richmond Valley Local Environmental Plan 2012* (LEP).

The proposed overhead power line is permissible as an ancillary component of an electricity generating works, which is permitted with consent on the RU1 zoned land – refer **Section 4**.

The environmental impacts of transmission or distribution lines required for MCSF (a solar SSD project) will be considered in the assessment of the application for the development.

Consistent with DPIE's *Large Scale Solar Energy Guideline* (December 2018), Terrain Solar will provide information in the Environmental Impact Statement about the necessary transmission line, including the proposed location, timing of decision-making, interaction with the timelines of the solar energy project and relevant stakeholders, to assist in the consideration of all aspects of the project.

4. PERMISSIBILITY AND STRATEGIC PLANNING

4.1 Strategic planning documents

4.1.1 NSW 2021 PLAN AND RENEWABLE ENERGY ACTION PLAN

The NSW 2021 plan, released in 2011, sets state-wide priorities for action and also guides resource allocation. Goal 22 of this plan seeks to protect the natural environment and includes a specific target to increase renewable energy. The plan states:

> *We will contribute to the national renewable energy target by promoting energy security through a more diverse energy mix, reducing coal dependence, increasing energy efficiency and moving to lower emission energy sources.*

Specific initiatives include:

- Building the Moree solar power plant in partnership with the Commonwealth Government under the Solar Flagship Program
- Establishing a Joint Industry Government Taskforce to develop a Renewable Energy Action Plan for NSW to identify opportunities for investment in renewable energy sources.

Since release of the 2021 plan, the NSW Government has overseen the development of the NSW Renewable Energy Action Plan (REAP). The vision of the plan is a 'secure, affordable and clean future for NSW'. Goal 1 of the REAP is to attract renewable energy investment, including to 'support mid-scale solar PV to enable an uptake of solar technologies where they are most cost effective'.

The proposed MCSF sits comfortably with this state led objective and is consistent with the goal and intent of the REAP.

4.1.2 NORTH COAST REGIONAL PLAN 2036

The *North Coast Regional Plan 2036* (the Plan) is the NSW Government's strategy for guiding land use planning decisions for the North Coast Region for the next 20 years. At its heart is a core vision for the region supported by four supporting goals:

The vision of the Plan is:

> *The best region in Australia to live, work and play thanks to its spectacular environment and vibrant communities*

The supporting goals of the Plan are:

> • *The most stunning environment in NSW*
>
> • *A thriving, interconnected economy*
>
> • *Vibrant and engaged communities*
>
> • *Great housing choice and lifestyle options*

These goals are in turn supported by a range of local directions that provide context and detail to the overarching goals.

Of particular relevance to the development of this project are the following directions, discussed in the context of the project in **Table 4**.

Table 4 – North Coast Regional Plan

Direction	Assessment
Direction 1: Deliver environmentally sustainable growth	The project provides a significant investment into the local community and assists with the delivery of a renewable energy project, thus assisting to delivery sustainable growth.
Direction 3: Manage natural hazards and climate change	Through careful assessment, natural hazards are managed. This would be demonstrated in the EIS. Through supporting renewable energy, the reliance on traditional forms of energy

Direction	Assessment
	generation, such as the burning of fossil fuels, is reduced, thus assisting to reduce the impacts of climate change.
Direction 4: Promote renewable energy opportunities	The project is directly consistent with this direction through the delivery of a renewable energy resource
Direction 11: Protect and enhance productive agricultural lands	Through careful site selection the subject site has been chosen in part due to its lower land capability (classes 4 and 5), thus avoiding prime agricultural land.
Direction 13: Sustainably manage natural resources	Impacts to environmental assets would be adequately assessed within the EIS
Direction 15: Develop healthy, safe, socially engaged and well-connected communities	This is achieved through careful, considered and comprehensive engagement with the local community as discussed in **Section 7**
Direction 16: Collaborate and partner with Aboriginal communities	Critical engagement with the local Aboriginal community will occur as a component of the scoped Aboriginal Cultural Heritage Assessment (ACHA).
Direction 18: Respect and protect the North Coast's Aboriginal heritage	Appropriate assessment and review of potential impacts to heritage would be addressed within the EIS, including consultation with the Aboriginal community via the ACHA.
Direction 21: Coordinate local infrastructure delivery	Provision of infrastructure to benefit the region would be a key outcome of the project

On the basis of the above, it is concluded that the project is generally consistent with the vision of the Regional Plan.

4.1.3 RICHMOND VALLEY COMMUNITY STRATEGIC PLAN

The vision of the *Richmond Valley Community Strategic Plan* (CSP) is:

A great community with a relaxed lifestyle, beautiful environment and vibrant economy

The CSP community values are:

Leadership

Accessibility

Transparency

Good services

Sustainability

Innovation

The CSP community priorities are:

Connecting people and places

Growing our economy

Looking after our environment

Making Council great

The CSP community objectives are:

Fresh & Vibrant Community | Getting Around | Working Together

Driving Economic Growth | Building on our Strengths

Managing our Waste and Water | Promoting the Protection of the Environment

Leading and Advocating for our Community | Great Support

The project delivers a form of sustainable and renewable energy generation, which reduces reliance on traditional forms of energy protection, such as the burning of fossil fuels. This provides for diversity in the region and supports the local community. On balance, the project is not inconsistent with the vision and objectives of the CSP.

4.1.4 RICHMOND VALLEY LOCAL STRATEGIC PLANNING STATEMENT

The Richmond Valley *Local Strategic Planning Statement* (LSPS) is a 20 year planning vision for the Richmond Valley Local Government Area.

The vision of the LSPS is to:

A collaborative community working together to advance a resilient and robust economy which reflects a strong sense of community, successful businesses and a healthy environment.

The vision of the LSPS is delivered via adherence to three key themes, being:

1. *Our community*
2. *Our environment*
3. *Our economy*

The LSPS contains an environment charter which sets out the intent of the LSPS with respect to the principles of sustainability and regenerative practises, including:

Uptake of new and alternate technology opportunities such as renewable energy options, where they are shown to be economically viable into the future and compatible with this charter.

The proposal provides an investment in the local community and delivery of a sustainable renewable energy project, which has the potential to provide power for up to 24,000 homes.

The proposal is considered to be consistent with the vision and intent of the LSPS.

4.2 Environmental Planning Framework

4.2.1 COMMONWEALTH LEGISLATION

4.2.1.1 Environment Protection and Biodiversity Conservation 1999

A search of the online Protected Matters Search Tool (PMST) did not identify matters of national environmental significance or other matters protected by the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) as likely to occur at or near the area.

4.2.1.2 Native Title Act 1993

A review of National Native Title Tribunal's Native Title Register did not identify any Native Title claims or applications, or Indigenous Land Use Agreements at or near the site.

4.2.2 NSW LEGISLATION

4.2.2.1 Environmental Planning and Assessment Act 1979

The proposed MCSF would be assessed under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

4.2.2.2 Biodiversity Conservation Act 2016

The potential impacts to threatened species listed under the *Biodiversity Conservation Act 2016* will be considered in the EIS.

4.2.2.3 Roads Act 1993

The development would utilise the existing local road network and access would be provided from Main Camp Road. Therefore, consent from Transport for NSW (TfNSW) is not required under section 138 of the *Roads Act 1993*.

4.2.2.4 National Parks and Wildlife Act 1974

The potential impacts to Aboriginal heritage pursuant to the *National Parks and Wildlife Act 1974* will be considered in the EIS. This is discussed in more detail in **Section 5.2.3**.

4.2.2.5 Heritage Act 1977

There are no known items of historic heritage significance at or near the site.

4.2.2.6 Water Management Act 2000

The development may require consideration of impacts to waterfront land, as defined in the WM Act. This will be addressed in the EIS. At this time, buffers to waterways have been provided via the solar site investigation footprint to avoid the need to impact waterfront land.

Pursuant to Section 4.41(1)(g) an activity approval required under the WM Act, other than an aquifer interference approval, is not required for SSD. Aquifer interference is not anticipated in relation to this site.

4.2.2.7 Fisheries Management Act 1994

The development site does not contain watercourses mapped as key fish habitat.

Details assessment of potential impacts to fish habitat is therefore not expected to be required. This will nonetheless be addressed in the ecology report supporting the EIS.

4.2.3 ENVIRONMENTAL PLANNING INSTRUMENTS

4.2.3.1 State Environmental Planning Policy

4.2.3.1.1 State Environmental Planning Policy (State and Regional Development) 2011

Clause 8 of the *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP) provides that development is declared to be State Significant Development (SSD) for the purposes of the EP&A Act if:

> *(a) the development on the land concerned is, by the operation of an environmental planning instrument, not permissible without development consent under Part 4 of the Act, and*
>
> *(b) the development is specified in Schedule 1 or 2.*

Clause 20 of Schedule 1 of the SRD SEPP provides:

> *Development for the purpose of electricity generating works or heat or their co-generation (using any energy source, including gas, coal, biofuel, distillate, waste, hydro, wave, solar or wind power) that—*
>
> *(a) has a capital investment value of more than $30 million, or*
>
> *(b) has a capital investment value of more than $10 million and is located in an environmentally sensitive area of State significance.*

The proposed development is not located in an environmentally sensitive area of State Significance, but does have a capital investment value in excess of $30 million (estimated CIV is $245 million) – refer **Section 7**.

Accordingly, the proposed solar development is declared to be SSD for the purposes of the EP&A Act.

4.2.3.1.2 State Environmental Planning Policy (Infrastructure) 2007

By virtue of Clause 34 of Division 4 of Part 3 of the *State Environmental Planning Policy (Infrastructure) 2007* (ISEPP) the development of electricity generating works are permitted on prescribed rural, industrial or special use zone. An electricity generating works is defined by the standard instrument as:

> *electricity generating works means a building or place used for the purpose of—*
>
> *(a) making or generating electricity, or*
>
> *(b) electricity storage.*

The RU1 zone is a prescribed rural zone and the project entails the carrying out of electricity generating works; therefore development in relation to this portion of the site is permitted with consent via clause 34 of the ISEPP.

The portion of the site zoned E2 would be excluded from the development footprint.

By reference to Schedule 3 or the ISEPP, the development is not a traffic generating development and therefore does not require referral to Roads and Maritime Services.

4.2.3.1.3 State Environmental Planning Policy No 55 – Remediation of Land

A review of the NSW EPA Contaminated Land Record and List of NSW contaminated sites notified to the EPA as of the 22 October 2020 confirms there are no known contaminated sites at or near the site.

Based on the historical agricultural use of the site, it is unlikely that significant contamination exists at the site. Assessment of contamination risk will be undertaken as part of the EIS.

Construction and operation of the proposal is unlikely to pose a significant contamination risk. A CEMP would address management of contamination if identified during construction.

4.2.3.1.4 State Environmental Planning Policy (Koala Habitat Protection) 2020

State Environmental Planning Policy (Koala Habitat Protection) 2020 applies to the Richmond Valley LGA, and therefore an assessment of core koala habitat at the site is required. This would be addressed by an appropriate ecological assessment sufficient to satisfy the requirements of the *Biodiversity Conservation Act 2016*.

4.2.3.2 Local Environmental Plan

4.2.3.2.1 Richmond Valley Local Environmental Plan 2012

The aims of the *Richmond Valley Local Environmental Plan 2012* (LEP) are to:

> *(1) This Plan aims to make local environmental planning provisions for land in Richmond Valley in accordance with the relevant standard environmental planning instrument under section 3.20 of the Act.*
>
> *(2) The particular aims of this Plan are as follows—*
>
> *(a) to encourage the proper management, development and conservation of natural and man-made resources,*
>
> *(b) to support and encourage social and economic benefits within Richmond Valley,*
>
> *(c) to ensure that suitable land for beneficial and appropriate uses is made available as required,*
>
> *(d) to manage appropriate and essential public services, infrastructure and amenities for Richmond Valley,*
>
> *(e) to minimise the risk of harm to the community through the appropriate management of development and land use.*

The subject site is located within the Richmond Valley LGA and is therefore subject to the provisions of the LEP. The site is located on land zoned a mixture of RU1 – Primary Production and E2 – Environmental Conservation. The E2 zoned land would not be affected by the proposed development.

The objectives of the RU1 zone are:

- *To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.*
- *To encourage diversity in primary industry enterprises and systems appropriate for the area.*
- *To minimise the fragmentation and alienation of resource lands.*
- *To minimise conflict between land uses within this zone and land uses within adjoining zones.*
- *To ensure that development does not unreasonably increase the demand for public services or public facilities.*

Within the RU1 zone electricity generating works are prohibited, on the basis that they are not listed within Part 3 of the RU1 Land Use Table. Anything not listed in Parts 2 or 3 of the Land Use Table is prohibited by reference to Part 4.

However, by virtue of clause 34 of the ISEPP, electricity generating works are permitted within a prescribed rural zone. The RU1 zone is a prescribed rural zone. Pursuant to clause 8 of the ISEPP, the ISEPP prevails to the extent of any inconsistency with any other environmental planning instrument. Thus electricity generating works are permitted with consent in the RU1 zone within the Richmond Valley LGA.

The proposal provides for the diversification of primary industry enterprises, is capable of being designed to minimise conflict, would not lead to fragmentation or alienation of resource lands and would not increase demand on public services or facilities. On this basis, the project is not antipathetic to the zone objectives.

5. IMPACT IDENTIFICATION AND ASSESSMENT

5.1 PRELIMINARY RISK ASSESSMENT

A preliminary risk assessment based on a desk-top review of available data, an initial site inspection, and review of SEARs issued by the Department for other solar farms, have all been considered to identify potential impacts associated with the development.

It is noted, however, that these impacts are identified and prioritised on the basis of preliminary research alone and their significance (or otherwise) will ultimately be determined following completion of further specialist studies, investigation and assessment.

5.2 KEY ISSUES

5.2.1 CUMULATIVE IMPACT

There are no known state significant solar or wind development within 50 km of the subject site, nor any other large scale (ie, state significant) construction projects. As such, the likelihood of significant cumulative impacts from major developments is not anticipated.

5.2.2 BIODIVERSITY IMPACTS

The development may involve clearing of native vegetation, likely to be primarily limited to ground cover. Whilst the extent of the proposed clearing has yet to be determined, there are known occurrences of Endangered Ecological Communities in the locality and existing records of threatened species sightings near the site (as recorded in the NSW Atlas of Wildlife). There is also the potential for species and ecological

communities listed under the *Environment Protection and Biodiversity Conservation Act 1999* to occur at or near the site, notwithstanding that a search of the site using the Department of Environment's online Protected Matters Search Tool (PMST) did not reveal any matters of significance.

A search of the Bionet Atlas of NSW Wildlife within a 2 km radius of the subject site identified ten (10) threatened fauna species (seven (7) birds, four (4) mammals and one (1) amphibia) and four (4) threatened flora species – refer **Table 5**.

Table 5 – Bionet search results within 2 km

Species	Common name	Kingdom	NSW Status	EPBC Act Status
Rhodomyrtus psidioides	Native guava	Flora	Endangered	Not listed
Eucalyptus glaucina	Slaty red gum	Flora	Vulnerable	Vulnerable
Ephippiorhynchus asiaticus	Black-necked Stork	Fauna	Endangered	Not listed
Dromaius novaehollandiae	Emu	Fauna	Endangered	Not listed
Pteropus poliocephalus	Grey-headed Flying-fox	Fauna	Vulnerable	Vulnerable
Circus assimilis	Spotted Harrier	Fauna	Vulnerable	Not listed
Litoria brevipalmata	Green-thighed Frog	Fauna	Vulnerable	Not listed
Petaurus norfolcensis	Squirrel Glider	Fauna	Vulnerable	Not listed
Stagonopleura guttata	Diamond Firetail	Fauna	Vulnerable	Not listed
Chthonicola sagittata	Speckled Warbler	Fauna	Vulnerable	Not listed
Pomatostomus temporalis	Grey-crowned Babbler (eastern subspecies)	Fauna	Vulnerable	Not listed
Calyptorhynchus lathami	Glossy Black-Cockatoo	Fauna	Vulnerable	Not listed
Ninox connivens	Barking Owl	Fauna	Vulnerable	Not listed

A review of the Bureau of Meteorology (BOM) National Atlas of Groundwater Dependent Ecosystems (GDE) confirms that there are no GDEs (surface or subsurface dependent) within the development site.

A Biodiversity Development Assessment Report would be prepared to support the EIS and discharge the assessment obligations of the BC Act.

5.2.3 ABORIGINAL HERITAGE

An extensive search of the online Aboriginal Heritage Information Management System (AHIMS) on the 28 October 2020 identified 6 Aboriginal sites or places within a 10km radius of the proposed works area. No Aboriginal sites or places are recorded within the development area. The nearest site is located approximately 550 m to the east and has been recorded as a Modified Tree (Carved or Scarred).

Potential impacts of the proposal may include disturbance of unknown Aboriginal heritage sites. It is proposed that as part of the EIS a specialist Aboriginal Heritage Assessment would be undertaken to identify potential impacts, and necessary management and mitigation measures.

5.2.4 CONSTRUCTION NOISE

Noise impacts would mostly be associated with construction activities and include noise generated by preparatory earthworks, delivery and assembly of the solar panel infrastructure, grid connection, and operation of vehicles.

Operational noise impacts may include the operation of a solar tracking system, transformer station and switchgear, and maintenance works. Operational noise impacts are expected to be negligible. It is proposed that as part of the EIS a specialist Construction and Operational Noise and Vibration Assessment would be undertaken to identify potential impacts, and necessary management and mitigation measures.

5.2.5 VISUAL IMPACTS

The site is located approximately 7 km east of the village of Rappville and 25 km south of Casino.

The locality features a number of quasi-rural residential developments as well as scattered rural residential dwellings.

As per **Section 2.3.2**, there is one associated land owner and thirty eight (38) non associated landowners within 4 km of the site (refer **Figure 4**).

A preliminary analysis of elevation data from the Geoscience Australia's Elevation Information System (ELVIS) confirms that the vast majority of these non-associated residential receptors are shielded from direct views of the solar development by the prevailing topography. Stands of vegetation restrict views towards the site from most receptors. However, views may be possible from neighbouring properties without intervening topography or vegetation. Visual impact has the potential to be a key issue for local landowners and residents.

Potential impacts to surrounding sensitive receptors may include changes to existing rural views and solar glint and glare from the solar panels. It is proposed that as part of the EIS a Visual Impact Assessment would be undertaken to identify potential impacts, and necessary management and mitigation measures.

5.2.6 ACCESS AND TRAFFIC

The site is currently accessed from Main Camp Road, and it is intended that construction and future operational access would utilise this existing access, subject to any necessary upgrades.

Materials for construction would be expected to primarily arrive at the Port of Brisbane and would be transported to site by heavy vehicles up to b-double in size.

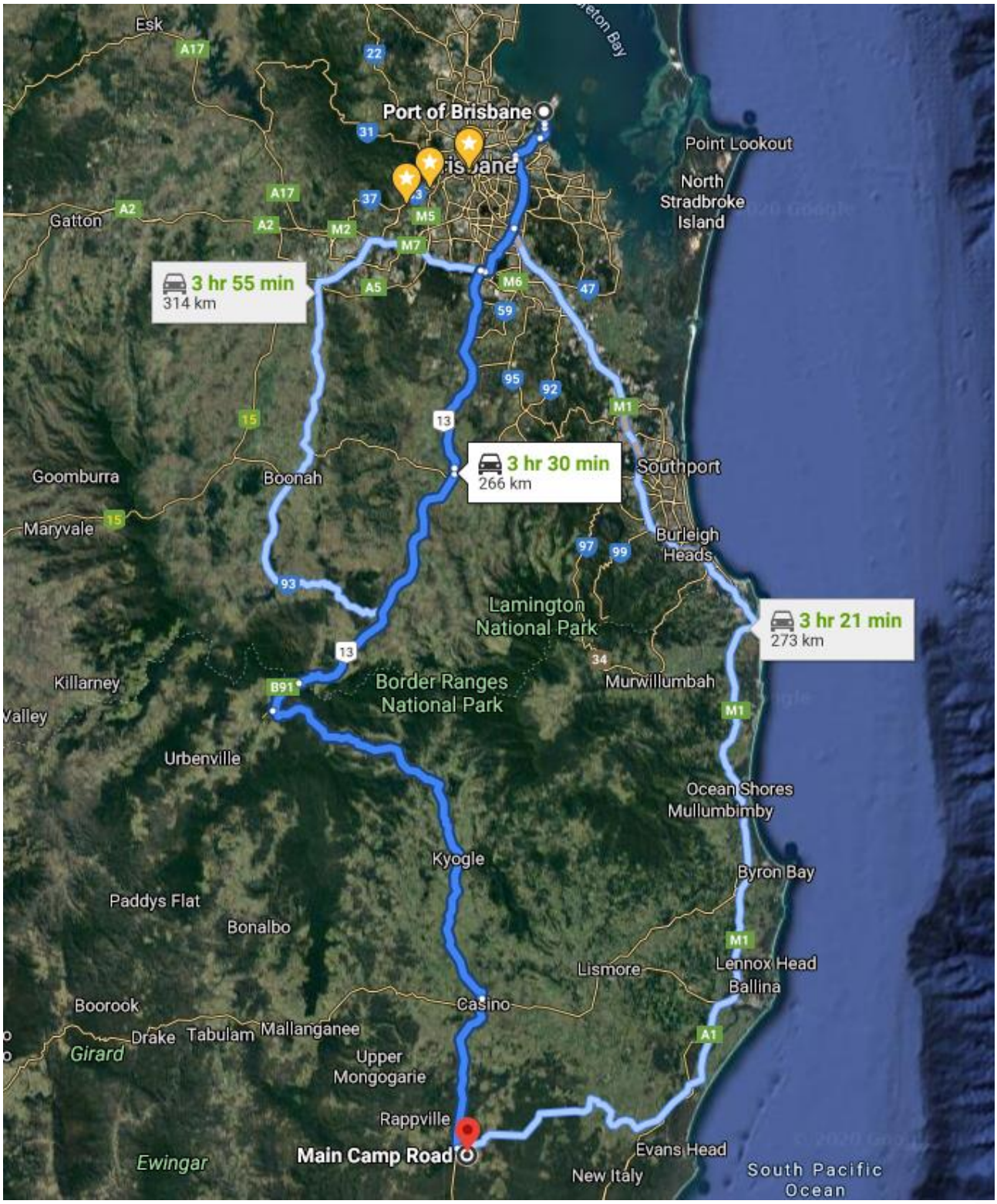
The expected route for vehicles would be via the Mount Lindesay Highway/Summerland Way via Casino (refer **Figure 6**). This is an authorised b-double route for vehicles up to 26 metres in length.

Vehicles would then access the site via Main Camp Road.

As a component of preparation of the EIS continued consultation with Richmond Valley Council would occur together with consultation with Trasnport for NSW.

A traffic impact assessment would be prepared to support the EIS and traffic impacts would be addressed in a Construction Environmental Management Plan (CEMP).

Figure 6 – Anticipated construction traffic route



5.2.7 OTHER ENVIRONMENTAL ISSUES

Other environmental issues that they considered less likely to affect the project are identified in Table 4.1. These issues are considered to be manageable due to the availability of appropriate management and mitigation measures.

Table 6 – Other environmental issues

Issue	Potential Impacts	Strategies
Air quality	Potential impacts during construction may result from dust generation and vehicle emissions.	Air quality impacts would be assessed in the EIS. Management of air quality impacts would be addressed in a CEMP.
Bushfire risk	The land is mapped as category 1 bushfire prone land, however this does not appear to have been reviewed since lawful clearing of the site occurred. There are a number of small patches of significant woodland vegetation within the site and a connective stand along Myrtle Creek to the south.	Potential bushfire risk and appropriate management/mitigation measures would be addressed in the EIS. Bushfire risk management would be addressed in a CEMP.
EMF hazard and risk	Impacts from an electromagnetic field (EMF) may be generated by transmission lines and underground cables. EMF risks are expected to be below the International Commission on Non-Ionizing Radiation Protection (ICNIRP) guidelines (adopted by the Australian Radiation Protection and Nuclear Safety Agency, ARPANSA).	Potential EMF hazards and risks will be assessed in the EIS, including calculation of EMF levels associated with proposed infrastructure.
Groundwater	Impacts to groundwater are considered unlikely due to the depth of groundwater bearing zones.	The existing groundwater environment and potential impacts would be addressed in the EIS.
Land use	The development would result in a change in land use from primary production to electricity generation (noting there is good separation to nearby dwellings).	Impacts to land use will be assessed in the EIS.
Loss of resources	The site is zoned and in use for traditional primary production purposes. The approval of the use of the land for the purposes of a solar farm including ancillary extensive agriculture supports the ongoing agricultural use of the land. The soil capability is predominantly classes 4 (moderate) and 6 (Low), with a narrow band of class 3 (high capability) in the centre of the site.	Impacts to existing land resources would be assessed in the EIS. This extent of class 3 land is very low. Ground truthing of the land capability would be completed via soil assessment as a component of the EIS.

Issue	Potential Impacts	Strategies
	The proposal also has the potential to affect exploration and future mining of potential mineral resources. The site is not currently impacted by any mining titles or exploration licences.	
Social and economic	Construction is expected to generate positive economic impacts by creating employment opportunities. Increased employment opportunities may attract more people to Casino and the surrounding area, increasing pressure on accommodation and services.	Impacts to the social and economic environment would be assessed in the EIS.
Soils and water	Potential impacts to soils and surface water may occur during construction, such as erosion and sedimentation. Impacts are expected to be minimal and manageable.	Impacts to soil and water would be assessed in the EIS. Management of soil and water impacts would be addressed in a CEMP.
Geology	The site is not mapped as being likely to contain naturally occurring asbestos.	Geotechnical investigations will be completed and reported in the EIS.
Historic Heritage	A search of the NSW Planning Portal (Heritage), inclusive of items listed under the Richmond Valley LEP, the NSW Office of Environment and Heritage State Heritage Register and Department of the Environment Australian Heritage Database indicates that there are no known heritage items at or near the site.	Impacts to historic heritage would be assessed in the EIS.
Waste management	Potential impacts may include generation of waste during construction. Operation of the project is not expected to generate waste.	Potential wastes generated by the proposal would be addressed in the EIS. Waste management would be addressed in a CEMP.

6. JUSTIFICATION

6.1 Development Suitability

Benefits from this project will contribute to the Richmond Valley region, the state and the nation.

MCSF will particularly benefit the Casino region given it provides a good solar resource, suitable land use and good network connection opportunities. Casino is a growing regional centre with a number of growth prospects. New clean energy generation will be an ideal complement to these growth prospects and contribute to the sustainability of the town.

Local economic benefits include employment, particularly during construction, together with the provision of services and components and training of local contractors. The project will introduce new capabilities to the region which will benefit later projects. Local companies will be able to win project work around the country as the solar industry grows. The project benefits the state because it ensures that renewable energy which is

consumed in NSW is also generated here. Without local renewable generation projects in NSW, NSW electricity consumers will have to import renewable generation from projects in other states.

The annual carbon emissions avoided through generation of clean energy will be significant. Solar projects are a relatively new development in Australia despite being well established in overseas markets. MCSF will contribute to reducing the cost of large scale solar in Australia by adding to the experience base of the local supply chain.

6.2 Site Suitability

Terrain Solar identified the MCSF site during a thorough screening program to identify suitable large scale solar sites in New South Wales. The site was selected after a number of alternatives were discarded due to sub-optimal performance against screening criteria. The proposed site has good connectivity to a strong high voltage transmission network with significant available capacity to connect. The solar resource is good. The land is zoned a mix of RU1 and E2. Within the RU1 zone, electricity generation works are permissible with consent pursuant the ISEPP. The solar development would exclude the very small area of E2 zoned land within the site.

The development site is largely devoid of significant biodiversity constraints and the generally flat nature of the land means that the project would not require significant civil works to facilitate construction. Further, whilst the land is currently used for farming and grazing the site is not located on or near any Biophysical Strategical Agricultural Land (BSAL). The site landowner is interested and has committed to supporting the project. The site has good overall fundamental parameters that will generate electricity at a competitive rate.

6.3 Justification for preferred arrangement

The proposed site is ideally suited for a solar PV facility. Its proximity to the nearby transmission network minimises the connection infrastructure required and minimises the associated cost burden. The nearby transmission network has been assessed to have spare capacity to accept the connection. The facility has the capability to be highly efficient and operate at a high capacity factor. The site terrain is ideally suited as it is relatively flat and generally devoid of native vegetation. Therefore, very little site preparation will be required prior to installing the facility. There is minimal flooding risk. Site access is also excellent from the adjacent local roads.

7. CONSULTATION

7.1 Introduction

Terrain Solar engaged Elton's Consulting to prepare an engagement strategy to guide the carrying out of consultation for the proposed MCSF. A SEARs engagement overview document is provided at **Appendix A**.

7.2 Scoping Report Consultation

A community notification letter was issued to 29 non associated landowners located in proximity to the proposed development site (17 within 4 km and the remainder on land parcels to the north-west).

This notification introduced the project, outlined the planning process and provided contact details for the community infoline, mailbox and website.

As a result of the notification, two phone calls and 1 email were received between the 4 and 10 December 2020.

Feedback from these enquiries focused on:

- Local sub-contracting opportunities
- The capacity for additional solar sites in Myrtle Creek.

Elton's note that: *Overall feedback was supportive of future solar development in the local area. The dedicated project website, info-line and email address will remain active and open to the public throughout the project, and the team will continue to respond to enquiries and questions as they arise.*

Initial discussions have also occurred with Richmond Valley Council (**Appendix B**) and TransGrid (**Appendix C**). No in principle objections to the project have been raised by either party.

Initial consultation has commenced with NSW Department of Industry - Crown Lands & Water Division to initiate the process of closing the Crown road, which is located within the subject. No in-principle objections to this closure have been raised.

7.3 EIS Consultation

Consultation to inform the EIS preparation will be undertaken in accordance with the following guidelines:

- *Large-Scale Solar Energy Guideline for State Significant Development* (DP&E, 2018).
- *Community and Stakeholder Engagement Draft Environmental Impact Assessment Guidance Series* (DP&E, 2017)
- *Community Consultative Committee Guidelines State Significant Projects* (DP&E, 2019) – if a Community Consultative Committee is required.

Richmond Valley Shire Council

Richmond Valley Shire Council will continue to be informed of the proposal and further face to face meetings will be scheduled with the planning officers and elected officials. Initial discussions have not identified any objections to the project – refer **Appendix B**.

Neighbours

Neighbours will continue to be consulted through information posted directly and face to face meetings as requested to inform them of project details and progress and to obtain their input. This will continue through the development approval process and construction.

Community

The community will be informed of the project through notices in the local newspaper and through Richmond Valley Shire Council. Consultation will be considered depending on the amount of local interest for an information day. Contact numbers and an email address will be provided for people who wish for more details.

Special Interest Groups

Special interest groups will be informed of the project to the extent they are affected by the project. The process of identifying affected groups has not commenced. As the development progresses and the construction schedule becomes clearer, local businesses will be advised via notices and media and will be invited to provide proposals for construction equipment, goods and services.

State and Federal Government

State and Federal government authorities will be informed of the project to the extent they are affected. The NSW Department of Industry and Regional Development Australia will be advised to ensure any opportunities to coordinate with the proposed infrastructure developments in relation to the MCSF are captured. Elected representatives, State and federal elected members and the relevant ministers for Energy, Environment and Regional Development will be advised of the project as it progresses to ensure it is recognised for its contribution to state and federal clean energy development targets.

Other

Consultation will also be undertaken with the following stakeholders:

- Members of the local Aboriginal community;
- Organisations representing local, regional, State, national and international interests regarding business, community, indigenous and environmental issues; and
- Affected utility providers.

7.4 Post Approval Consultation

If approved, the following consultation would be undertaken:

- Ongoing consultation with affected landholders and the community to manage issues regarding construction noise and disturbance; and
- Comply with any requirements to publish performance results.

8. CAPITAL INVESTMENT VALUE

Table 7 provides a preliminary breakdown of the capital cost of the project.

The overall cost of equipment and construction will be approximately $245 million assuming the final capacity is 100.0 MWac plus an optional battery energy storage system with a potential capacity of up to 100 MWhours, although noting a likely capacity of closer to 40 MWhours.

Table 7 – Estimated Capital Investment Value

Project component	$ (millions)
Solar PV module equipment, mounting structure equipment, inverters and LV transformer, civil works (piling, foundations, tracks, site entrance, fencing, compound, control room, site preparation) and electrical and communications cabling and equipment, including installation and commissioning	$170 million
BESS	$65 million
TOTAL	**$245 million**

9. REFERENCES

Table 8 – References

References
Australian Government Department of the Environment (DoE). (n.d.). *Australian Heritage Database*. Retrieved from: http://www.environment.gov.au/topics/heritage/publications-and-resources/australian-heritage-database
NSW Department of Planning and Environment (DP&E). (2016). *Community Consultative Committee Guidelines*.
NSW Department of Planning and Environment (DP&E). (2017). *North Coast Regional Plan 2036.* Retrieved from: https://www.planning.nsw.gov.au/-/media/Files/DPE/Plans-and-policies/north-coast-2036-regional-plan-2017.pdf
NSW Department of Planning and Environment (DP&E). (2018). *Large-Scale Solar Energy Guideline for State Significant Development*. Retrieved from: https://www.planning.nsw.gov.au/-/media/Files/DPE/Guidelines/large-scale-solar-energy-guideline-2018-12-11.pdf?la=en
NSW Department of Planning and Environment (DP&E). (2017). *Guideline for Engaging Stakeholders*.
NSW EPA. (n.d.). *Contaminated Land Record.* Retrieved from: https://apps.epa.nsw.gov.au/prclmapp/searchregister.aspx
NSW EPA. (n.d.). *List of NSW contaminated sites notified to EPA.* Retrieved from: https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/clm/site-list/contaminated-sites-list-pdf-october-2020.pdf?la=en&hash=EB6E9B830133B6A4187C81847B58BFCDBF5753AF
NSW Office of Environment and Heritage (OEH). (n.d). *Aboriginal Heritage Information Management System (AHIMS)* Retrieved from: http://www.environment.nsw.gov.au/licences/AboriginalHeritageInformationManagementSystem .htm. [Accessed 4 November 2020].
NSW Office of Environment and Heritage (OEH). (n.d.). *State Heritage Register.* Retrieved from: http://www.environment.nsw.gov.au/heritageapp/heritagesearch.aspx#amapsearch [Accessed 16 November 2020].
Richmond Valley Council *et al.* (2020). *Richmond Valley Local Strategic Planning Statement: Beyond 20-20 Vision*. Retrieved from: https://richmondvalley.nsw.gov.au/wp-content/uploads/2020/06/Richmond-Valley-Council-Local-Strategic-Planning-Statement-2020-Vision-May-2020.pdf
Richmond Valley Council *et al.* (2017). *Richmond Valley Made 2030 Community Strategic Plan*. Retrieved from: https://richmondvalley.nsw.gov.au/wp-content/uploads/2018/09/Richmond-Valley-Made-2030-Community-Strategic-Plan-Adopted-by-Council-on-27-June-2017.3.pdf

APPENDIX A

ENGAGEMENT STRATEGY

Myrtle Creek Large Scale Solar Project

SEARS Preliminary Engagement Overview

Client: Terrain
Date: 09 December 2020

Contact:

Caroline Anthony
Caroline.anthony@elton.com.au

SYDNEY

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ABN 56 003 853 101

Prepared by	Anna Collins
Reviewed by	Caroline Anthony
Date	10 December 2020
Version	FINAL

Contents

Appendices

1 Project Purpose

Terrain Solar is seeking approval to build a large-scale solar energy project at 420 Avenue Rd, Myrtle Creek in Northern NSW. The proposed solar project will produce roughly 120 MW of energy over a 200-hectare site.

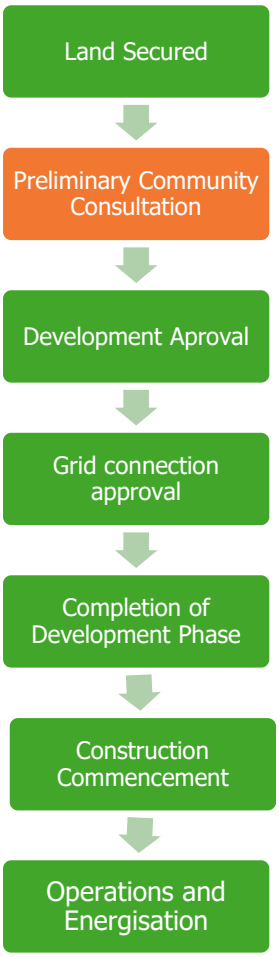
Once the site is fully operational it will export clean, renewable energy to the national energy market powering 34,000 average homes.

Prior to lodging the scoping report for the SEARS, Terrain Solar carried out preliminary engagement with adjacent landowners at Myrtle Creek.

The purpose of preliminary engagement was to:

- Build awareness of the of the proposed project with neighbouring residents.
- Create a positive perception of the project and Terrain Solar within the local community.
- Be prepared to manage any negative responses from the local community and media.
- Establish channels for local community to ask questions and give their feedback.

The following report outlines the engagement carried out, feedback received and next steps in the engagement process.



Engagement principles:

- **No surprises**: provide timely, relevant, clear and transparent information to the local community about the proposed large-scale solar project and the required approval process
- **Accessible:** make the planning and approvals process clear and understandable for a non-technical audience
- **Accountable:** provide a clear and accurate account of engagement activities to inform the planning approval process
- **Collaborative:** establish a positive relationship with the local community, as a trusted member of that community
- **Responsive:** respond to community questions and concerns openly and honestly
- **Adaptable:** deliver an engagement program that is safe and effective in the changing COVID environment

2 Community Engagement

A preliminary engagement program was developed to introduce the project to adjacent landowners, establishing communication channels and relationships with key stakeholders ahead of SEARS lodgement.

The purpose of this engagement was to inform and engage sensitive receivers surrounding the proposed site at **420 Avenue Road, Myrtle Creek.**

The following engagement channels were implemented:

 Community notification	 Community info-line and inbox	 Project website

Community notification

A community notification was issued to **29** sensitive receivers across:

» Elliots Road

» Rappville Road

» Main Camp Road

» Summerland Way

» Myrtle Forest Road

» Avenue Road

The notification introduced the project, outlined the planning process and provided contact details for the community infoline, mailbox and website. All stakeholders received the community notification via letterbox drop on Friday 4 December 2020. A copy of the notification is provided in **Appendix A**.

Project infoline and email address

The dedicated 1800 line and project email address were established for community members to provide their feedback and comments on the project, and to ask questions of the project team.

2 phone calls and **1** email were received between Friday 4 December to Thursday 10 December.

Feedback from these enquiries focused on:

» Local sub-contracting opportunities

» The capacity for additional solar sites in Myrtle Creek

Overall feedback was supportive of future solar development in the local area. The dedicated project website, info-line and email address will remain active and open to the public throughout the project, and the team will continue to respond to enquiries and questions as they arise.

3 Future engagement & next steps

Terrain Solar is committed to ongoing engagement with stakeholders. As planning progresses, engagement will continue to be accessible, transparent and collaborative.

Future engagement with the key stakeholders will include:

» Doorknocks and one-on-one meetings (where requested)

» Website updates

» Community notifications

» Briefings with local members & council

» Information sessions for the broader community

The 1800 info line and project email address will remain open to all interested stakeholders during the project life span. These channels will remain critical points of contact between stakeholders and the Terrain stakeholder engagement and community relations team.

Further to this, in preparation of the EIS, the project team will hold information sessions for a broad range of local stakeholders. This will be an opportunity for the local community to learn more about the project and speak to members of the project team directly.

A Community Notification

December 2020

Dear resident

A solar energy proposal for Myrtle Creek

We are writing to tell you about a proposal for a new solar energy project in your local area.

Terrain Solar is an Australian owned and operated business delivering large scale solar energy projects to regional Australia that benefit the community, the environment and the economy.

Terrain Solar is proposing to build a solar energy project in Myrtle Creek on land located at 420 Avenue Road. The proposed solar project will produce around 120 megawatts of energy which will be used to send power into the local energy grid.

The proposal is in the early stages and we want to work closely with the community as we develop this important project. As we progress through each stage of local and state government approval processes we will provide more detailed information about the project and invite you to ask questions and provide feedback on the proposal.

We will soon be making a request to the Department of Planning, Industry and Environment for the Secretary's Environmental Assessment Requirements (SEARs), which specify what approvals are required for this proposal. The Department will publish the SEARs on their website once they have reviewed our request.

When the SEARs have been received, we will hold information sessions for the local community where you will be able to talk to members of our team, ask questions and provide your feedback.

In the meantime, you can contact us on **1800 749 232**, by email at **info@myrtlecreeksolarfarm.com.au** or visit our website at **www.myrtlecreeksolarfarm.com.au**

We understand the importance of keeping the local community informed and we look forward to talking to you more about this exciting project.

Yours sincerely

Tom Allen
Project Development Manager

ABOUT TERRAIN SOLAR

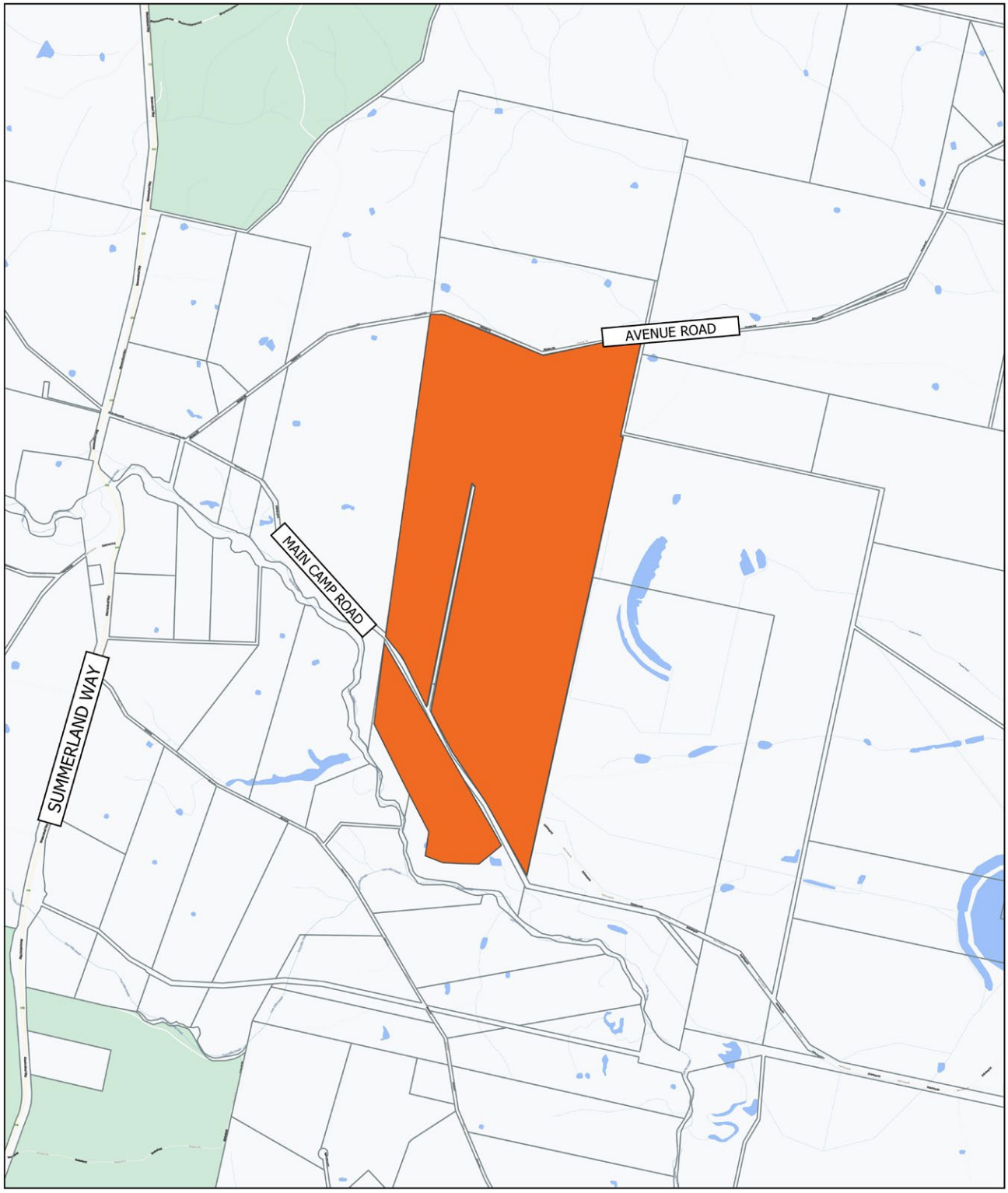
We are an Australian owned and operated business that is developing innovative and strategically located solar farms across regional Australia.

Terrain Solar recently worked in collaboration with Queensland University to complete a project in Warwick in Queensland's Southern downs region.

We currently have projects under construction in a variety of locations including Corowa, Wagga Wagga and Junee.

We are proud of what we do – creating clean energy and investment in regional NSW.

We are committed to working closely with local communities to deliver better outcomes for everyone.



Solar Farm Site Invesitigation Area

The exact location of solar infrastructure on the site is under investigation and has not yet been determined. We will keep the community informed as plans develop

B Key messages

Myrtle Creek Key Messages

Key messages were used to guide and inform all stakeholder interactions and collateral, these are outlined below.

About the project

» Terrain Solar is proposing to build a large-scale solar energy project at 420 Avenue Rd, Myrtle Creek.

» This proposed solar project will produce around 120 megawatts of energy over 200-hectare site (once fully operational).

» The Myrtle Creek large scale solar project will generate enough renewable energy to power approximately 34,000 average NSW homes.

» This large-scale solar energy project will be used to send clean renewable sourced power into the NSW electricity grid to serve the needs of both the local community, and the broader NSW community.

» During the peak of construction there will be roughly 200 workers on site, drawing in skilled local contractors and sub-contractors.

Planning process

» Right now, we're in the early stages of a rigorous planning process that involves extensive local and state government approvals that we expect to take around a year to complete.

» We'll be working closely with the local community through each stage of this planning process, so they can understand what we're proposing, ask questions and give us their feedback.

» Very shortly, we'll be making a request to the Department of Planning, Environment and Planning for the Secretary's Environmental Assessment Requirements (SEARs), which will clarify the specific approval requirements for this proposal.

» If approved, we expect construction will start around late 2021 and take around about 8-12 months to complete.

Consultation

» The project team will be letterboxing houses in the Myrtle Creek to let residents know what's happening and to offer an initial opportunity to ask questions.

» We understand that not everyone will available to talk at this time, but don't worry - this will be the first of many opportunities you will have to talk with us.

» In preparation of the EIS, we'll be holding information sessions where the local community can learn more and ask questions of the project team.

» In the meantime, you can find out more by calling us on **1800 749 232**, email at info@myrtlecreeksolarfarm.com.au or go to our website at www.myrtlecreeksolarfarm.com.au

About Terrain Solar

» Terrain Solar is an Australian owned and operated business that has a track record of successfully developing solar projects across regional Australia, including at Wagga Wagga, Junee, Corowa, Warwick, and Moama, and we have a number of large-scale solar farms actively in development.

» Terrain Solar brings has a strong track record in working with local communities the development of large-scale renewable energy projects across regional QLD & NSW.

elton consulting

www.elton.com.au

APPENDIX B

COUNCIL CONSULTATION

David Walker

From: Tom <tom@terrainsolar.com>
Sent: Monday, 21 December 2020 11:31 AM
To: David Walker
Subject: Fwd: Terrain Solar Proposal - Myrtle Creek
Attachments: Clear Zones.pdf; Clearances to Utility Services.pdf

---------- Forwarded message ---------
From: **Mike Perkins** <Mike.Perkins@richmondvalley.nsw.gov.au>
Date: Thu, Aug 27, 2020 at 11:29 AM
Subject: RE: Terrain Solar Proposal - Myrtle Creek
To: Tom Allen <tom@terrainsolar.com>
Cc: Graeme Robertson <Graeme.Robertson@richmondvalley.nsw.gov.au>, Matt Kinkead <matt.kinkead@richmondvalley.nsw.gov.au>, Brian Eggins <brian.eggins@richmondvalley.nsw.gov.au>, Nathan Bourne <Nathan.Bourne@richmondvalley.nsw.gov.au>

Hi Tom

I was waiting on one last response but not expecting to much more in way of comments so have sent through what I have. If there is anything else I will send it through.

What I received is summarised below:

- Preferably if the road reserve alignment were to be corrected it should be extended to point where the road is back in the correct alignment and not just the bit that is identified in this request.
- What increase in traffic and what kind of traffic movement would this project generate, will Main Camp road need to be improved to accommodate traffic increase? We discussed this previously that it would be covered as part of DA assessment process.
- Poles to be located so as they don't impact on future road and drainage maintenance or usage of the road
- Poles to be positioned with appropriate clear zones and clearance. Attached are two documents the we use in response to electrical proposals
- Will the poles be private poles? If so the poles should be marked as "Private Pole with contact details" or the like, so in the case of any damage, the correct owner can be contacted.
- I private infrastructure mapping of the location of the poles should be provided so we can include it in our GIS (like the Essential Energy electrical layer we currently have)

Subject to addressing the above the proposal for locating services within the road reserve and creation of an easement was considered to be acceptable.

Regards

Mike Perkins
Manager Property & Economic Projects
Richmond Valley Council | Locked Bag 10, CASINO NSW 2470

T: 02 6660 0326 | F: 02 6660 1300 | M: 0417 218 521
E: mike.perkins@richmondvalley.nsw.gov.au | http://richmondvalley.nsw.gov.au

From: Tom Allen <tom@terrainsolar.com>
Sent: Thursday, 27 August 2020 10:47 AM
To: Mike Perkins <Mike.Perkins@richmondvalley.nsw.gov.au>
Subject: Re: Terrain Solar Proposal - Myrtle Creek

Hi Mike

I trust you are well. Just following up to see if there were any comments on the email I sent to you?

Cheers Tom

Sent from my iPhone

> On 20 Aug 2020, at 10:38 am, Tom <tom@terrainsolar.com> wrote:
>
> Hi Mike,
>
> Happy for you to circulate based on the relevant queries I had. Obviously confidentiality is key for this please.
>
> Regards
>
> Tom

Tom Allen
Planning & Project Manager
Terrain Solar Pty Ltd

M: +61 (0) 400 079 641
E: tom@terrainsolar.com

On Mon, Aug 17, 2020 at 1:40 PM Mike Perkins <Mike.Perkins@richmondvalley.nsw.gov.au> wrote:

Hi Tom

As there are a number of sections of Council, particularly Planning, Assets and Roads that would have a say in addressing the below request what I would suggest is that I circulate your email to the relevant staff member within those sections of Council and request feedback. Whilst I will make the confidential nature of your email enquiry clear I just wanted to check you are ok with me disseminating information of your proposal to a wider group within Council before I do so. If you could please confirm you are ok with this.

Regards

Mike

From: Tom <tom@terrainsolar.com>
Sent: Monday, 17 August 2020 12:39 PM
To: Mike Perkins <Mike.Perkins@richmondvalley.nsw.gov.au>
Subject: Terrain Solar Proposal - Myrtle Creek

Hi Mike

It was great to meet you a couple of weeks ago and it would be great to keep the dialogue open between Council and Terrain Solar as we develop this project. Apologies for the delay in emailing you I have been caught up on the road with some other projects.

I just want to recap our discussion on a couple of points. I've attached the plan for reference also.

Firstly, I just wanted to confirm that Council would be supportive if required for us to use the road reserve easement. If this is the case, are there any initial factors to take into consideration if we do use this?

The second issue that was raised was around Main Camp Road and potentially realigning this. The picture below shows where the road is currently constructed whilst the cadastral boundary (in red)

is a fair way off the mark. If, after a detailed site survey, would Council be receptive in allowing us to realign this on paper to reflect where the road has actually been built?

<image001.png>

Feel free to give me a call regarding any of this.

Regards

Tom

Tom Allen
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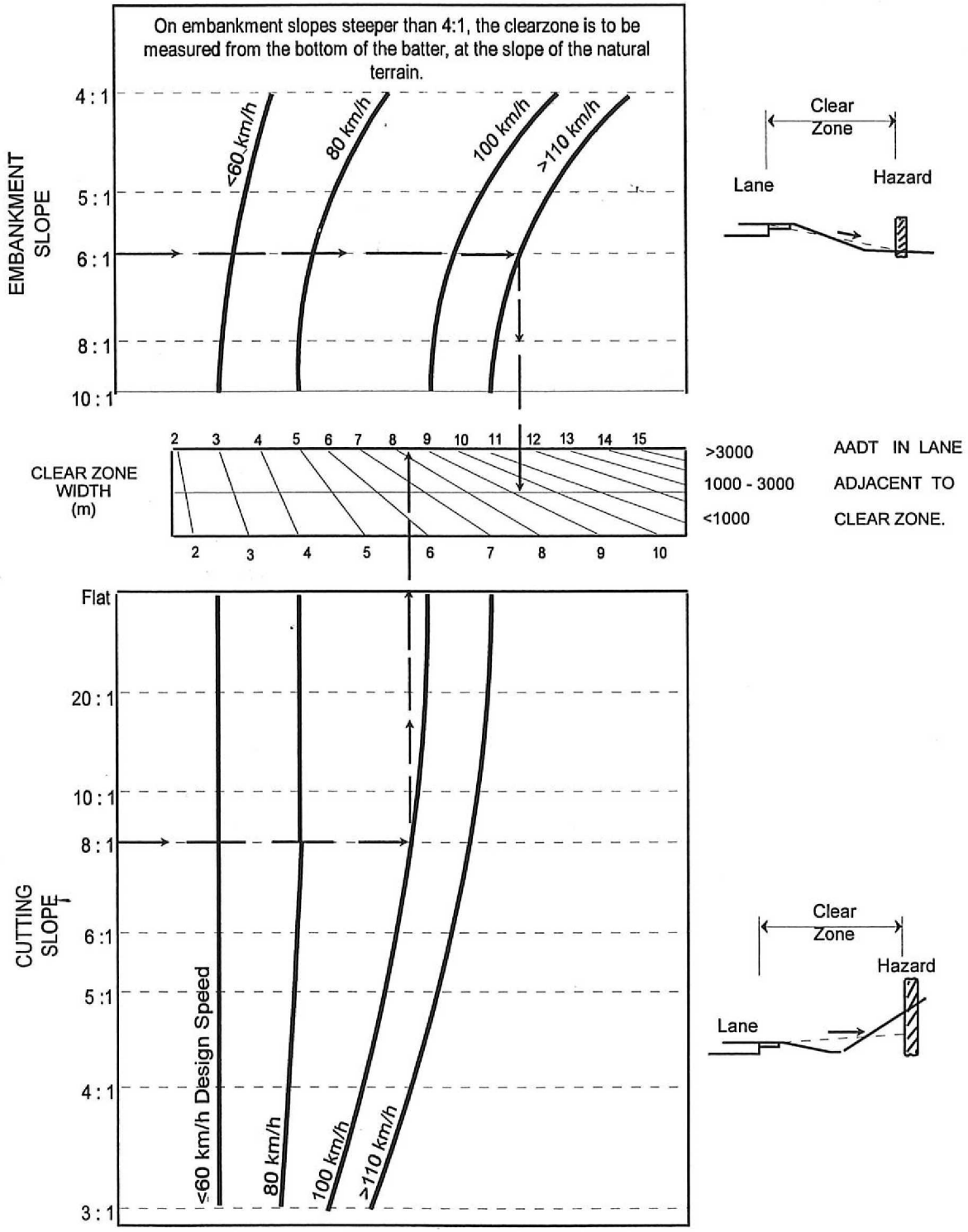

NOTE: 1. These distances (*) are the Weighted Average Distance when used on complex batter arrangements.
2. Design Speeds shown are the 85th percentile value, measured (or predicted) for the site being considered.

Figure 3.7-1 Clear Zone Nomograph

TABLE 3.6-2 Nominal Depth of Cover for Various Utilities

Cover	Electricity		Gas		Communications		Water	
	Footway	Roadway	Footway	Roadway	Footway	Roadway	Footway	Roadway
300	Communication cables in shared trench							
450		Communication cables in shared trench	Urban	Urban 500kPa	Local network cables and conduits Phone/pay TV	Local network cables and conduits Phone/pay TV		
500			Rural				100mm pipe Intermediate sizes for DICL	
600	LV cables	LV cables	500kPa		Other network cables and conduits	Other network cables and conduits	750mm pipe Intermediate sizes for UPVC and GRP	100mm pipe Intermediate sizes for DICL
700								750mm pipe
750	HV cables to 22kV	HV cables to 22kV	1000kPa	Rural 500kPa				100mm pipe Intermediate sizes for UPVC and GRP
900	HV cables to 33kV and above	HV cables to 33kV and above		1000kPa			750mm pipe	
1000								750mm pipe
1200			3500kPa	3500kPa				

NOTE: DICL Ductile Iron Gement Lined UPVC Unplasticised Poly Vinyl Chloride
GRP Glass Reinforced Plastic

WARNING

This Table shows nominal laying depths of services by various Authorities and is for information only.
EXISTING SERVICES MAY BE LAID AT DEPTHS AND LOCATIONS OTHER THAN THOSE MENTIONED
It is important that consultation be made with the respective utility Authorities for an indication of the presence of a service.
Hand excavation to determine the exact utility location is advised prior to using any mechanical equipment.

TABLE 3.6-3 Minimum Overhead Clearance to Various Utilities

Clearance Above Specific Features "worst case" condition	Electricity					Communications	
	≤650V	650V to 33kV	33kV to 66kV	66kV to 132kV	>132kV	Telephone	Cable Television
Ground							
1. Roadway	5.5	6.7	6.7	6.7	7.6	4.9	4.6
2. Driveway across a footpath	5.5	5.5	6.7	6.7	7.6	3.7	3.7
3. Land un-traversable by vehicles	4.6	4.6	5.5	5.5	6.7	2.4	2.4
4. Rural land	4.9	4.9	6.7	6.7	7.6		
Buildings and structures							
1. Roofs - accessible by people							
Horizontal	1.5	2.1	3.0	3.0	3.0		
Vertical	3.7	4.6	5.5	5.5	5.5		
2. Roofs not accessible by people							
Horizontal	0.6	1.5	3.0	3.0	3.0		
Vertical	2.7	3.7	4.6	4.6	4.6		
Fixed advertising signs							
Horizontal	0.6	1.5	3.0	3.0	3.0		
Vertical	2.7	3.7	4.6	4.6	4.6		
Traffic Signals	0.6	1.5	2.1	3.0	n/a		
Street Lighting							
When on same pole		0.9	0.9	1.5	n/a		
Not on same pole		1.5	2.1	3.0	n/a		

APPENDIX C

TRANSGRID CONSULTATION

Preliminary Technical Advice

Multiple project sites (100 MW Solar Farm) – Terrain Solar

PTA Reference Number - 055			Date
Author	Shane Slattery	Senior Network Planning Engineer	22 May 2020

1. Purpose and Scope

The purpose of this brief is to respond to a pre-feasibility enquiry for a proposed 100 MW solar farm connection to the following locations:

A. Koolkhan – Lismore 132 kV – Line 967

It should be noted that the scope of this brief is limited to a desktop assessment only, no modelling or network studies have been conducted. Customer Planning, in their best endeavours, provide this Preliminary Technical Advice based on network knowledge and anticipated developments in the area which the network connection is requested.

As there are many variables which affect the viability of connections, final determination cannot be arrived at until detailed network connection studies are completed.

TransGrid is not obliged under the current version (v 139) of the National Electricity Rules to provide Preliminary Technical Advice to Connection Applicants and Customer Planning offers this assessment to aid Customer Relations in the early stages of engagement with potential customers.

2. Desktop Assessment

2.1 Determination

A desktop assessment of the proposed generator connection was completed to assess the power transfer capability at the proposed connection point. The scope included the identification of potential network capacity limitations.

A. Koolkhan – Lismore 132 kV – Line 967

- Connection to this location may not require augmentation to the shared network. During unfavourable network conditions, generation at this location may be subject to output limitation. There may also be system strength concerns during weak network conditions.

3. Conclusions

Given the assumptions above:

- The intention to pursue a connection to the network locations identified should be confirmed with TransGrid's Customer Team.
- Detailed network studies will be required to determine the connection conditions.
- There are other interests and developments in the area, which, if they proceed to become committed network developments may invalidate the findings of this report and/or exacerbate the potential for network congestion.

4. Disclaimer

This brief is provided in good faith but strictly on a no-reliance and no liability basis. It does not create any binding obligation on TransGrid. You must form your own views about the content of the brief and TransGrid recommends you seek your own independent advice.

In particular, the information in this brief is subject to multiple variable factors which are subject to change. This includes (but is not limited to) possible new connections which may or may not be committed before any connection offer is made in respect of your project. Any connection offer will be subject to the connection application process in the National Electricity Rules.

The provision of this information does not in any way confer any priority to the Customer over any other existing or potential connection applicants.

Premise