

# Birriwa Solar Farm

## Independent Planning Commission Briefing

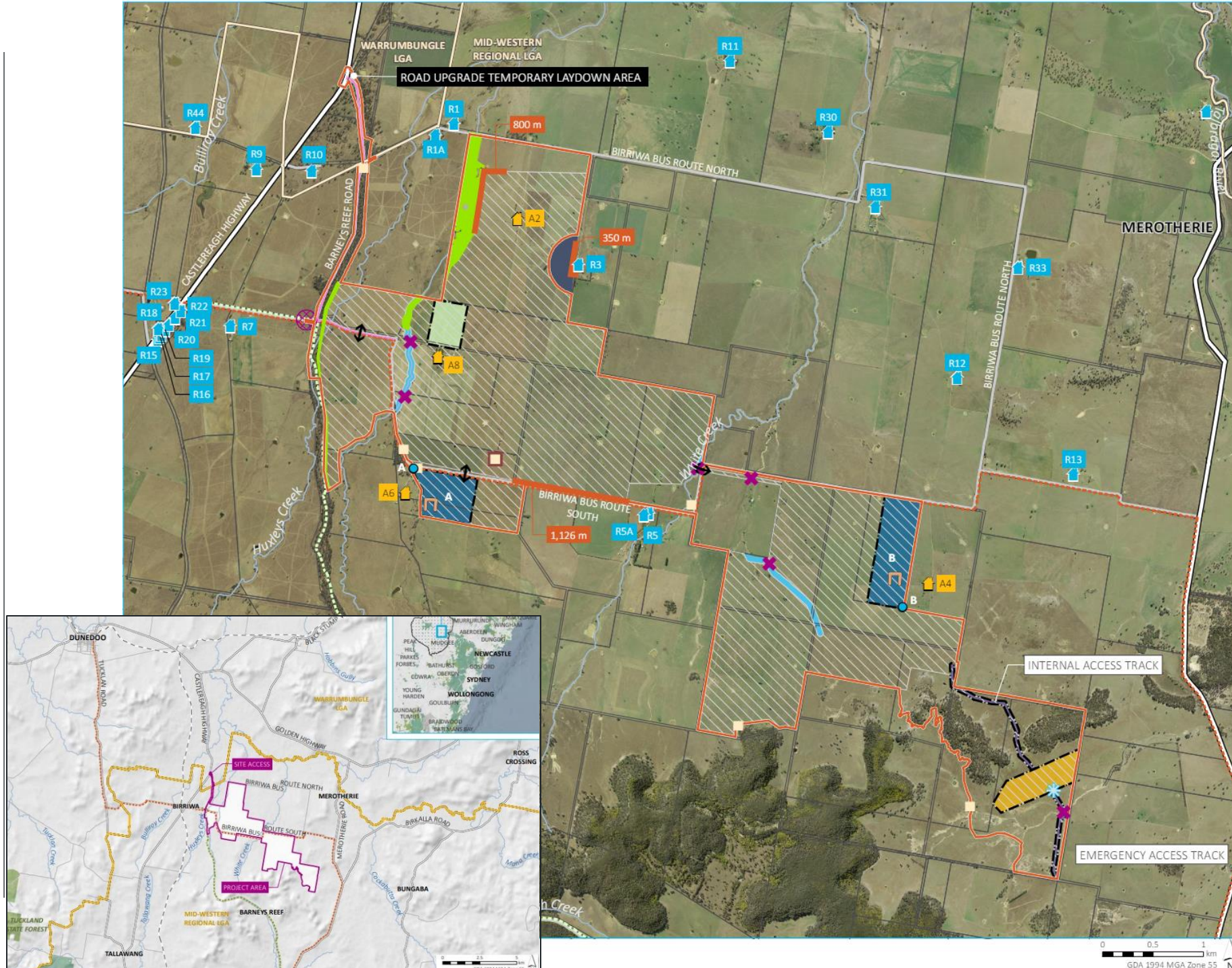
Iwan Davies  
Director, Energy Assessments

May 2024

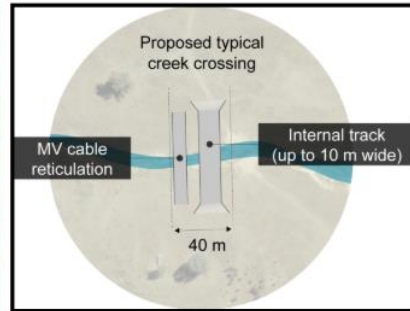
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- Context
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- Evaluation



- KEY**
- Project layout**
- Project area
  - Development footprint
  - Road upgrade corridor
  - Restricted development area
  - Vegetation to be retained
  - Potential public road crossing location
  - Potential creek crossing point (refer to inset below for indicative design)
  - Connection point (option A or B)
  - Indicative noise wall location
  - Solar panel setback
  - Landscape screen planting
  - Project access point
  - Project emergency access point
  - Proposed operational infrastructure area including substation, operational facility and BESS (option A or B)
  - Accommodation facility
  - Temporary construction compound
- Existing environment**
- Dwelling not associated with the project
  - Dwelling associated with the project
  - Aboriginal heritage site (to be salvaged)
  - Aboriginal heritage site (to be avoided)
  - Major road
  - Minor road
  - Named watercourse
  - Cadastral boundary
  - Local government area boundary
- Central West Cycle (CWC) Trail**
- CWC main route - Gulgong to Dunedoo
  - CWC alternate route - Slap Dash Creek side trail



Project Layout

Birriwa Solar and BESS Project

Figure 1.0



# Community Engagement & Public Submissions - EIS

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## EIS Public Exhibition:

- 14th October – 10th November 2022
- 85 Objections
- 4 Comments

## Amendment Report Exhibition:

- 6<sup>th</sup> October – 19<sup>th</sup> October 2023
- 45 Objections
- 0 Comments

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## Other Engagement:

- The Department engaged with 13 Government Agencies throughout the assessment process
- The Department engaged with both Mid-Western Council and Warrumbungle Council throughout the assessment process
- The Department inspected the site in December 2023 and met with nearby landowners

# Key Issues

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- Energy transition
- Land use compatibility (including impacts on agricultural land)
- Traffic and transport
- Visual amenity
- Social amenity/Accommodation
- Cumulative Impacts
- Decommissioning / Rehab

# Energy Transition

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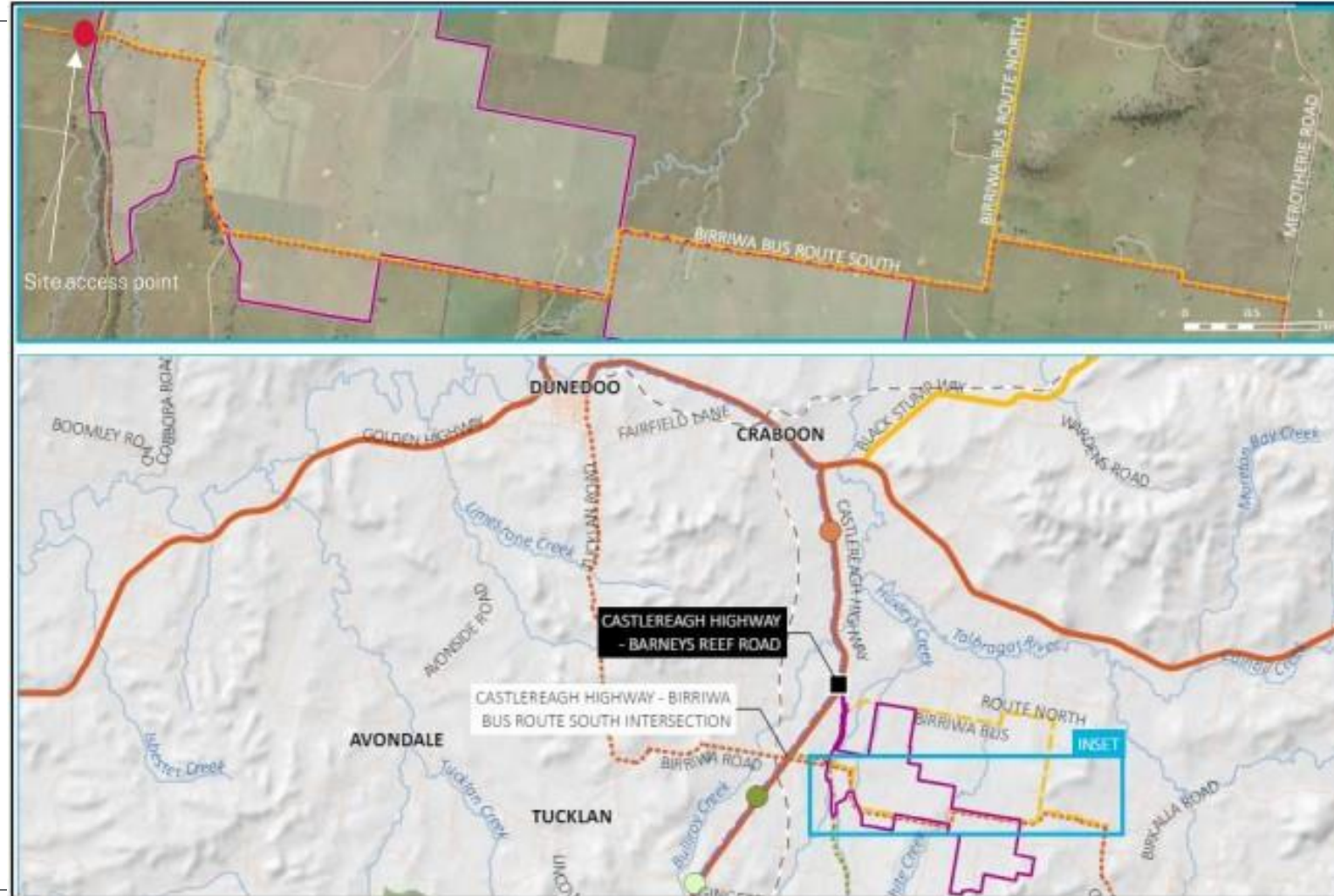
- 600 MW generating capacity that would power about 230,000 homes.
- Consistent with the NSW Climate Change Policy Framework of net zero emissions by 2050.
- Project is within the Central-West Orana Renewable Energy Zone, which has been identified for investment in new electricity infrastructure.
- Project would play an important role in:
  - Increasing renewable energy generation and capacity; and
  - Contributing to the transition to a cleaner energy system as coal fired generators retire.

# Land Use Compatibility

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- The proposed development is permitted with consent as the relevant land zonings under each respective LEP (RU1 and SP2) are nominated non-residential zones for which electricity-generating development is permissible via the Transport and Infrastructure SEPP.
  - Consistent with the Mid-Western LEP, the Warrumbungle LEP and the *Central West and Orana Regional Plan 2041*.
  - Development footprint comprises of 1,197 ha of Class 5 and 7 land, which has limited agricultural capabilities.
  - Land subject to development would be capable of returning to usable agricultural land following decommissioning.
  - The cumulative impacts which the development footprint would have on regional productivity would be negligible.

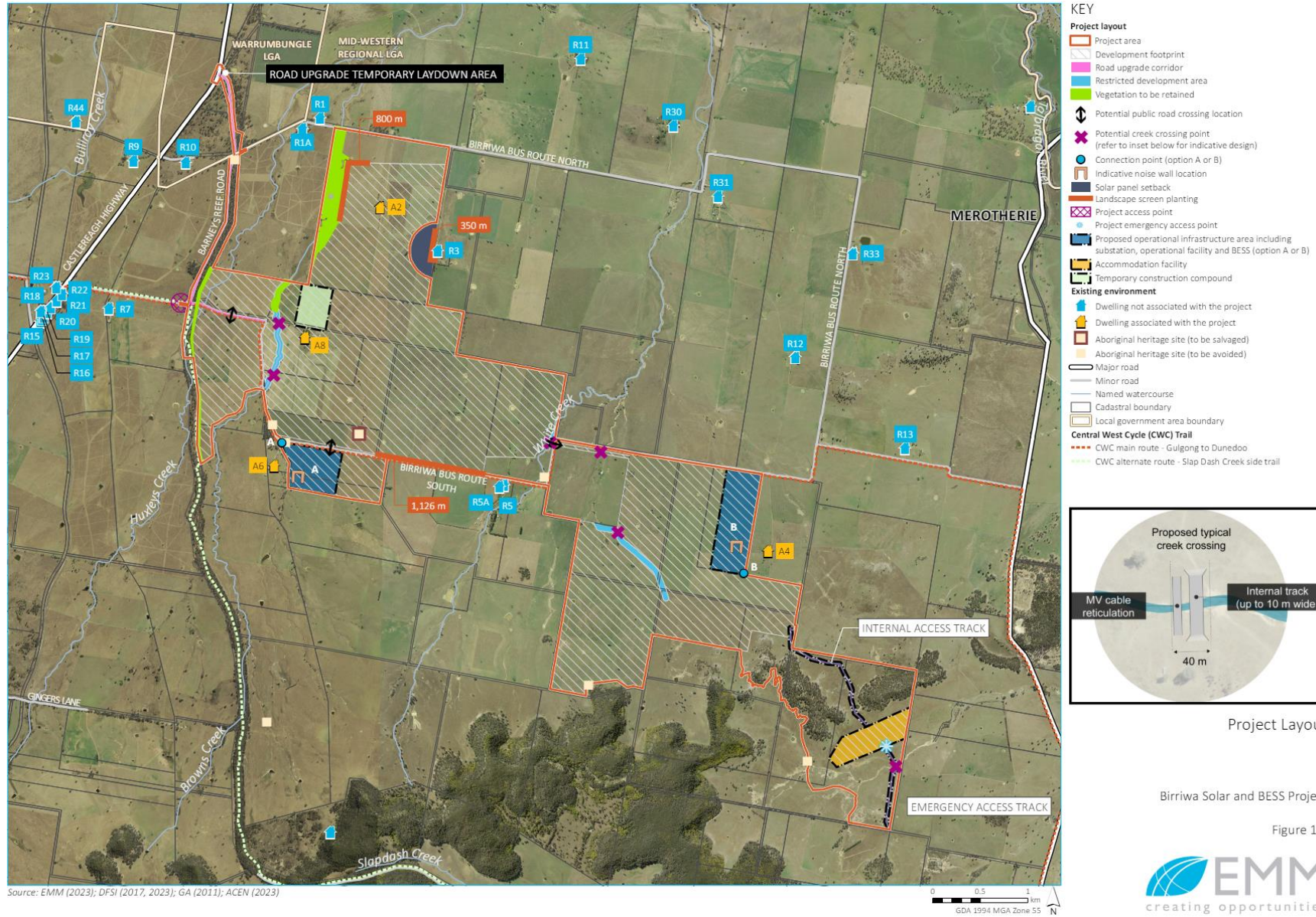
# Traffic & Transport

- The haulage route for the project is via the Castlereagh Hwy, Barneys Reef Rd, and Birriwa Bus Route Sth
- Daily (Peak) - 120 heavy vehicles and 50 light vehicles
- 6 Heavy Vehicle Movements Requiring Escort
- Accommodation Camp reduces light vehicle movements from 360 per day to 50 per day.
- Roadworks included within the proposed project includes road widening along Barneys Reef Rd and Birriwa Bus Route Sth, resurfacing, and two intersection upgrades (Barneys Reef Road / Castlereagh Highway and Barneys Reef Rd / Birriwa Bus Route Sth)





# Visual Impacts



Project Layout

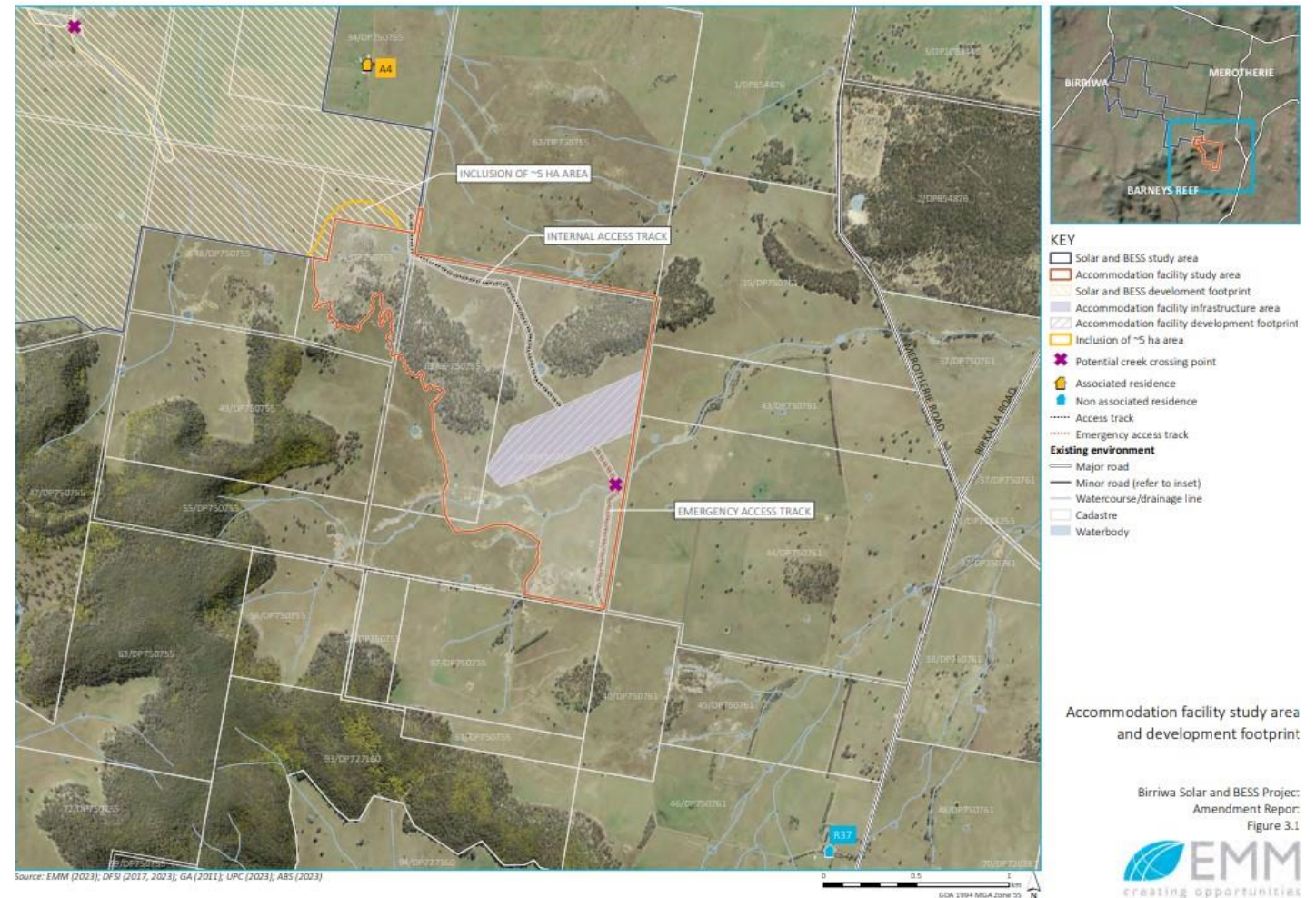
Birriwa Solar and BESS Project

Figure 1.0



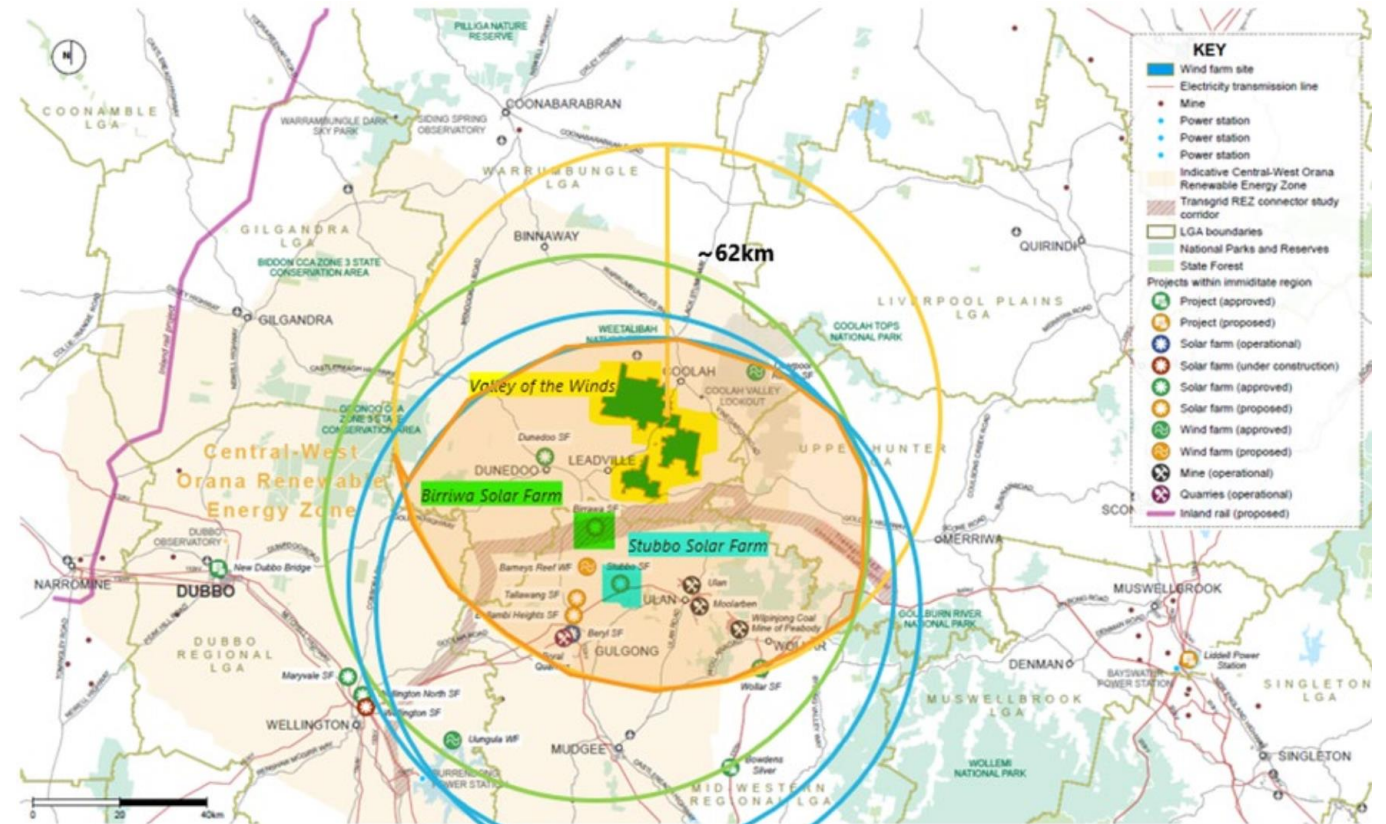
# Social Amenity/ Accommodation

- Both the EIS exhibition and Amendment exhibition received 15 submissions which raised concerns relating to social impacts.
- An accommodation camp was proposed through the amendment report to reduce impacts to social amenities including roads and accommodation.
- Access to the camp is through main site access and camp will be provided with medical services including on-site nurse and security
- The Department is satisfied that the proposed accommodation camp is capable of being effectively serviced.



# Cumulative Impacts

- In accordance with the SSD Guidelines, potential cumulative impacts have been identified with five nearby projects:
- Merotherie Energy Hub (under assessment)
- Stubbo Solar Farm (construction)
  - Generation capacity: 400 MW
- Tallawang Solar Farm (RTS received)
  - Generation capacity: 500 MW
- Barneys Reef Wind Farm (proposed)
  - Generation capacity: 300 MW
- Valley of the Winds Wind Farm (proposed)
  - Generation capacity: 800 MW
- Key cumulative impacts considered:
  - loss of agricultural land;
  - traffic; and
  - visual impacts



# Decommissioning and Rehabilitation

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- Operational life is likely to be up to 40 years.
- The *Large-Scale Solar Energy Guideline* identifies four key decommissioning and rehabilitation principles:
  1. Return land to pre-existing use
  2. Remove project infrastructure
  3. Rehabilitate and return land to its pre-existing use (including LSC Class)
  4. The owner/operator should be responsible for the decommissioning and rehabilitation
- Solar farm would be suitably decommissioned and rehabilitated at the end of the project life, or within 18 months if operations cease unexpectedly.
- Accommodation camp to be decommissioned within 12 months of operation of the solar farm.



# Other Issues

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- Department also conducted detailed assessment of the following:
  - Biodiversity
  - Heritage
  - Erosion and sediment control
  - Water
  - Dust
  - Waste
  - Noise
  - Hazards and risks
  - Subdivision
  - Community benefit
  - Land value

- The Department has assessed the application, documents, submissions and advice, as per the requirements of the EP&A Act.
- The Department acknowledges that some members of the community remain strongly opposed to the project, and that the project would result in residual environmental and amenity impacts.
- Changes made to the project through the assessment process have significantly reduced the residual impacts of the project.
- With the implementation of the recommended conditions, the Department considers that the environmental and amenity impacts of the project can be managed to achieve acceptable outcomes.
- The project would:
  - provide significant economic and social benefits to the region
  - contribute to the transition of the NSW economy away from a reliance on fossil fuels
  - maximise the efficiency of the solar resource while minimising the potential impacts on surrounding land uses, local residents, and the environment.