

EPURON

**Rye Park Wind Farm  
Community Consultation Committee  
Meeting No 1  
27 June 2012**

## Meeting Agenda

1. **Epuron**
  - About us
2. **Rye Park Wind Farm**
  - Project overview and current development status
3. **Draft NSW Wind Farm Planning Guidelines**
  - Overview of Guidelines and current position
4. **Community Consultation Committee**
  - Purpose, objectives and general proceedings
5. **Project Consultation**
  - Overview of project consultation plan
6. **Project Information**
  - Location and layout
  - The likely impacts – Assessment of key issues
  - The likely benefits
  - Other reference documents
7. **Next Steps and Timing**

## Epuron – Background and History

- Founded 2003
- ~15 staff based in North Sydney
- 100% Australian-owned company
- In-house expertise in wind development; planning; grid; wind modelling; GIS; wind monitoring; instrumentation; solar PV design and construction
- Extensive wind monitoring network (>50 masts)

### Track record of NSW wind farm developments

Cullerin Range	Sold to Origin: Operating	30MW
Snowy Plains	Sold to Origin: Approved (lapsed)	30MW
Conroys Gap	Sold to Origin: Approved	30MW
Gullen Range	Sold to Goldwind: Approved	73 turbines
Yass Valley	Sold to Origin: seeking Approval	>100 turbines
Silverton	Sold to AGL	
	Stage 1 Approved	<430MW
	Stage 2 Concept Approved	600+MW
White Rock	Seeking approval	119 turbines
Eden	Seeking approval	7 turbines
Other	>10 sites under development	



*30MW Cullerin Range Wind Farm (Goulburn, NSW)*

- Developed by Epuron
- Constructed by Origin Energy in 2008/09
- Peak workforce of 100, 60 from local area
- 15 x Repower turbines = 30MW
  - net yield 47% Jul to Dec 2009 – in top 3 wind sites in Australia
  - Highest yielding wind farm in National Electricity Market, 2010
- Community fund established

## Epuron - Key Markets

- Large-scale wind (“Utility scale”)
  - 80-120 wind turbines, 150-360MW
  - power for 60,000 - 210,000 homes
  - investment \$350-\$750M each
  
- Small-scale wind (“Community scale”)
  - 7-15 wind turbines, 15-30MW
  - power for 8,000 -17,000 homes
  - investment \$30-\$60M each
  
- Solar photovoltaics (PV)
  - 1-10 megawatts off-grid (diesel grid)
    - e.g. TKLN Solar, 1MW supplying 3 remote communities in the NT
  - investment \$5-\$25M each



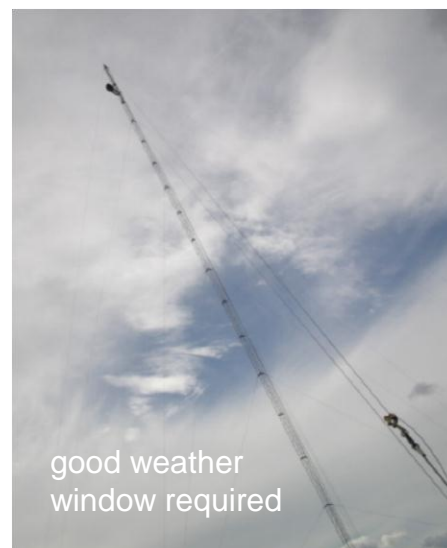
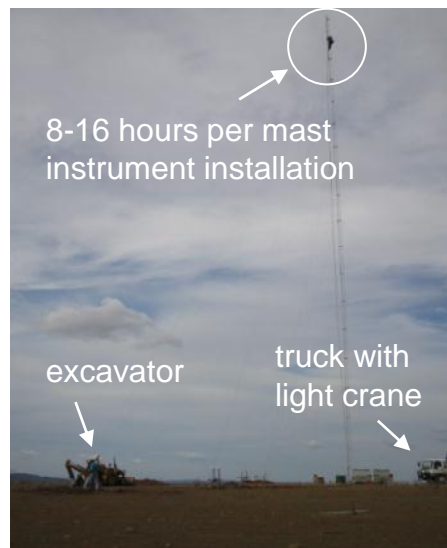
Eden Wind Farm - Photomontage



TKLN Solar Project Northern Territory

## Epuron – Wind Monitoring Technology

### Conventional approach – Met-mast



### New approach – SODAR Fulcrum 3D



- ▶ Australian designed and built SODAR
- ▶ Range to 150m in 10m height bins
- ▶ Full3D wind data analysis
- ▶ Can be towed by any car (~350kg)
- ▶ Tow to site; level; switch on
- ▶ No weather delays

## Rye Park Wind Farm – Project Overview

- Project located on freehold rural land north of Yass and East of Rye Park
- Layout (currently) consists of ~131 wind turbines and associated infrastructure
- Based on 3MW turbine would be 393MW project and approx \$750m-850m investment
- Three active wind monitoring masts across site with around 2 years of data (+1 soon)
- Predicted wind speed and energy yield at hub height supports feasible development
- Turbine design envelope accommodates Siemens SWT3.0-113 or Vestas V112-3.0
- Proposed maximum turbine tip height 156.5m (100m hub height and 113m rotor)
- Grid connection at existing Transgrid 330kV transmission line crossing south of site
- Project being assessed as Major Project under Part 3a of EP&A Act 1979
- Declared Critical Infrastructure Project under Section 75C of EP&A Act 1979
- Involved wind farm landowners secured under contract

## Rye Park Wind Farm – Current Development Status

- Revised turbine layout released in May 2012 newsletter – 131 turbines
- Spring/Summer environmental surveys completed in Oct-Nov 2011 and Mar-Apr 2012
- Archaeological field survey underway July 2012 – includes local indigenous reps
- Noise logging campaign underway at selected involved and uninvolved dwellings
- Visual photomontage public locations selected including neighbouring homes to 2km
- Traffic and Transport Study underway and will include consultation with councils
- Other studies including aviation, communications, shadow flicker etc underway
- Community Open Day planned to be held in Rye Park in July 2012
- Targeting EA lodgement with Department of Planning late Q3 early Q4 2012
- Project details available at website [www.epuron.com.au/projects/rye-park](http://www.epuron.com.au/projects/rye-park)

## Draft NSW Wind Farm Planning Guidelines – Overview

- Draft NSW Wind Farm Planning Guidelines exhibited 23 Dec 2011 to 14 Mar 2012
- Government intends finalising Guidelines by mid 2012 (still outstanding)
- Policy Statement released 18 April identifying interim arrangements for existing State Significant Developments and transitional Part 3a wind farms
- The transitional arrangements vary depending on the stage of an application in the assessment and determination process

Stage 1 - New applications for which DGRs have been issued

Stage 2- Applications for which DGRs have been issued but are yet to be exhibited

Rye Park  
Wind Farm



Stage 3 - Applications that have been exhibited but not yet determined

Stage 4 - Applications that have been approved



## Draft NSW Wind Farm Planning Guidelines – Stage 2 Transitional Arrangements

### **2. *Applications for which DGRs have been issued but are yet to be exhibited***

The guidelines will apply to the maximum extent possible to all wind farm applications for which the DGRs have been issued, but an environmental assessment has not yet been exhibited.

- Proponents are encouraged to adopt relevant provisions of the guideline relating to the construction and operation of wind farms in their environmental assessment, in particular relating to noise assessment, visual assessment, aviation safety, bushfire hazards, construction, decommissioning, monitoring and compliance programs. Please refer to the attached Checklist.
- Proponents should consult with all neighbours with dwellings within 2km of proposed wind turbines to identify any issues and potential approaches to mitigate any adverse impacts. Proponents should, where possible, seek the written agreement from neighbours with a dwelling within 2km of a proposed wind turbine.
- It is strongly recommended that proponents, if not done so already, immediately establish a Community Consultation Committee to provide for ongoing communication with the local community. Appendix C of the guidelines provides guidance on the establishment, membership and operation of the committee. The Department will assist proponents with the appointment of an independent committee chair and in the selection of members.

# Draft NSW Wind Farm Planning Guidelines – Transitional Check-List

**CHECK LIST**  
 Key aspects of the 'Draft NSW Planning Guidelines Wind Farms'  
 relevant to applications yet to be exhibited

Issue	Potential Issues for considerations
<b>Consultation</b>	<ul style="list-style-type: none"> <li>• Form a Community Consultation Committee.</li> <li>• Document the consultation process undertaken, including stakeholders consulted. Identify and tabulate issues raised by stakeholders during consultation. Describe how issues raised have been addressed.</li> <li>• Consult with all neighbours with dwellings within 2km of a proposed wind turbine. Identify the neighbours' issues and potential approaches to mitigate any adverse impacts.</li> <li>• Consider seeking agreement with neighbours with dwellings within 2km of a proposed wind turbine.</li> </ul>
<b>Landscape and visual amenity</b>	<ul style="list-style-type: none"> <li>• Provide photomontages from all non-host dwellings within 2km of a proposed wind turbine.</li> <li>• Identify the zone of visual influence of the wind farm (no less than 10km), and likely impacts on community and stakeholder values. Consider cumulative impacts on landscape and views.</li> <li>• Outline mitigation measures to avoid or manage impacts.</li> </ul>
<b>Noise</b>	<ul style="list-style-type: none"> <li>• Undertake assessment based on separate daytime (7am to 10pm) and night-time periods (10pm to 7am).</li> <li>• Predict noise levels at all dwellings within 2km of a proposed turbine.</li> <li>• Consider special audible characteristics, including tonality, amplitude modulation, and low frequency noise (apply penalties where relevant).</li> <li>• Outline measures to avoid, minimise, manage and monitor impacts.</li> </ul>
<b>Health</b>	<ul style="list-style-type: none"> <li>• Consider and document health issues, focusing on neighbours with dwellings within 2km of proposed wind turbines.</li> </ul>
<b>Ecological issues</b>	<ul style="list-style-type: none"> <li>• Consider potential impacts on birds and bats, particularly migratory species and outline the proposed monitoring and mitigation strategy</li> </ul>

# Draft NSW Wind Farm Planning Guidelines – Transitional Check-List

**CHECK LIST**  
 Key aspects of the 'Draft NSW Planning Guidelines Wind Farms'  
 relevant to applications yet to be exhibited

<b>Aviation safety</b>	<ul style="list-style-type: none"> <li>• Outline current agricultural aerial uses on neighbouring properties.</li> <li>• Consider the potential for the proposed wind farm to impact on aviation safety associated with agricultural aerial uses consistent with the draft guidelines.</li> </ul>
<b>Bushfire hazard</b>	<ul style="list-style-type: none"> <li>• Consider bush fire issues consistent with the draft guidelines, including the risks that a wind farm will cause bush fire and any potential impacts on the aerial fighting of bush fires.</li> </ul>
<b>Blade throw</b>	<ul style="list-style-type: none"> <li>• Assess blade throw risks consistent with the draft guidelines.</li> <li>• Outline measures to avoid, minimise, manage and monitor impacts.</li> </ul>
<b>Economic issues</b>	<ul style="list-style-type: none"> <li>• Consider whether the wind farm use is consistent with relevant local or regional land use planning strategies.</li> <li>• Consider potential to impact upon mining/petroleum leases and exploration licences.</li> <li>• Consider any potential impacts upon property values consistent with the draft guidelines, including properties within 2km.</li> </ul>
<b>Decommissioning</b>	<ul style="list-style-type: none"> <li>• Include a Decommissioning and Rehabilitation Plan in the EA, including proposed funding arrangements.</li> <li>• Confirm that the proponent not the landowner is responsible for decommissioning.</li> </ul>
<b>Monitoring and compliance program</b>	<ul style="list-style-type: none"> <li>• Outline program to monitor environment performance to ensure compliance including mechanisms for reporting outcomes and procedures to rectifying non-compliance – including any provisions for independent reviews.</li> </ul>
<b>Council planning controls</b>	<ul style="list-style-type: none"> <li>• Outline whether the proposal is consistent with any relevant provisions of the relevant council's Development Control Plan and list any variations.</li> </ul>

## Community Consultation Committee - Purpose and Objectives

- To enable Epuron to formally provide the local community with information about the proposal;
- To enable the community to express and for Epuron to understand any concerns regarding the potential impacts of the proposal;
- To enable Epuron to consider whether and how to incorporate any suggestions and feedback into the design of the proposal;
- To demonstrate how and where feedback has been incorporated and resulted in amendments to the proposal;
- To formally advise potential community benefits that can be integrated into the proposal; and,
- To establish and strengthen good working relationships between the proponent and the local community.

## Community Consultation Committee - Membership

- An independent chairperson;
  - Councillor David Needham (nominated by Yass Council to NSW DoP)
- A representative of the involved wind farm landowners;
  - Graham Privett
- A representative of the non involved neighbouring landowners;
  - Drew and Robyn Chapman
- A representative from a key local stakeholder group or association;
  - TBC
- A representative from each of the local councils; and
  - Mayor Wendy Tuckerman – Boorowa Council
  - Councillor James Wheelwright – Upper Lachlan Council
  - Councillor David Needham – Yass Council
- A representative from Epuron
  - Brian Hall – Senior Project Manager (others available as required)

## Community Consultation Committee – General Proceedings

- The Chairperson to set the agenda and convene and chair meetings
- The committee is not a decision-making body and it is not a requirement that consensus be reached on issues discussed
- Meeting proceedings should generally include;
  - Apologies
  - Declaration of pecuniary or other interests
  - Confirmation of the previous meeting minutes
  - Business arising from previous minutes
  - Correspondence
  - Proponent reports and overview of development activities
  - General business
  - Next meeting
- Minutes are to be kept of all meetings of the committee
- Committee to determine frequency of meetings – suggest every 4-6 weeks for now
- Meetings to be held at a convenient location – suggest local venue

## Project Consultation – The Plan

- Epuron is striving to ensure that the project is developed and built in a manner which recognises the importance of an ongoing, long term relationship with the community
- The Rye Park Wind Farm Project Consultation Plan;
  - guides community and stakeholder engagement activity for the project during the development phase (up to project approval)
  - reflects the corporate requirements set out in Epuron's Community Consultation Framework and the DGR's issued for the project by the NSW DoP
  - is dynamic and periodically updated as required during consultation activity
  - reflects the specific needs of the project and the key community stakeholders
  - has taken into consideration the NSW Draft Wind Farm Planning Guidelines. While these draft guidelines are not yet in force, there are transitional provisions in place.
- The Project Consultation Plan is available at [www.epuron.com.au/projects/rye-park](http://www.epuron.com.au/projects/rye-park)

## Project Consultation – Scope of the Plan

- Epuron's Consultation Framework identifies the following development phases for the project during its lifecycle:
  - Phase 1 – Project Awareness
  - Phase 2 – Project Investigations
  - Phase 3 – Project Development & Approvals
  - Phase 4 – Post Development Approval and Pre Construction
  - Phase 5 – Construction & Commissioning
  - Phase 6 – Operations & Decommissioning
- The Project Plan outlines those consultation activities proposed during the pre-approval development phases of the project which are phases 1 through 3.
- A further consultation plan will be developed as the project enters Phase 4 of its development.



## Project Consultation – Objectives of the Plan are to.....

- minimise undue community concern in relation to the proposal, particularly during the early stages when little information on the project was known;
- ensure the community and other stakeholders are fully informed and aware of the proposal, it's likely impacts, and its likely benefits;
- ensure that Epuron fully understands the local context for the proposal, including any local impacts that the proposal may have or opportunities that it could provide;
- incorporate the suggestions and feedback into the design of the wind farm where possible;
- explain where and how this feedback can be and has been incorporated; and,
- provide opportunities for dialogue to allow the community to receive information and provide feedback about the proposal.
- investigate how best to maximise the local and regional benefit of the development. Specifically, Epuron is looking for feedback as to how a Community Fund might be established for the project, and what kind of community support is required in the vicinity of the project.

## Project Consultation – Key Stakeholder Groups

- Residents and Landowners
  - Involved landowners
  - Uninvolved neighbours (within 2km from wind turbine)
  - Nearby neighbours (2 – 5km from wind turbine)
  - Distant neighbours (5 – 15km from wind turbine)
  - General public (>15km from wind turbine)
- Community Groups
  - eg. Landcare Groups, Guardians (BDLG), CWA, Rotary and Chamber of Commerce
- Local Media
  - eg. Yass Tribune, Boorowa News and Yass FM Radio
- Local Government
  - Yass, Boorowa and Upper Lachlan Councils
- State and Federal Government
  - State and Federal members and Ministers
  - Government agencies and authorities
- Other Stakeholders
  - eg. Aerial Agricultural Association of Australia and Telco Operators (Telstra etc)

## Consultation – Summary of Key Consultation Activity and Timetable

Activity	Timing	Objectives	Stakeholders	Status
Community information workshop	November 2008	Introduce Epuron and the proposal to landowners and community including preliminary layout	Involved landowners and selected stakeholders	Completed
Newsletter 1	December 2009	Inform community about project and initial information	Involved and uninvolved landowners (mail-out)	Completed
Newsletter 2	June 2010	Provide updated information and planning details including	Involved and uninvolved landowners (mail-out)	Completed
Newsletter 3	December 2011	Outline planning process and updated development progress	Involved and uninvolved landowners (mail-out)	Completed
Consult with neighbours within 2km	January / February 2012 (ongoing)	To discuss project and impacts with neighbours including feedback	Uninvolved neighbours within 2km of turbine	Completed (but ongoing)
Newsletter 4	March 2012	Advise consultation plans and release revised wind farm layout	Involved and uninvolved landowners (mail-out)	Completed
Establish Community Consultation Committee	April / May 2012	Establish formal mechanism for community participation	Invited members	Completed

## Consultation – Summary of Key Consultation Activity and Timetable

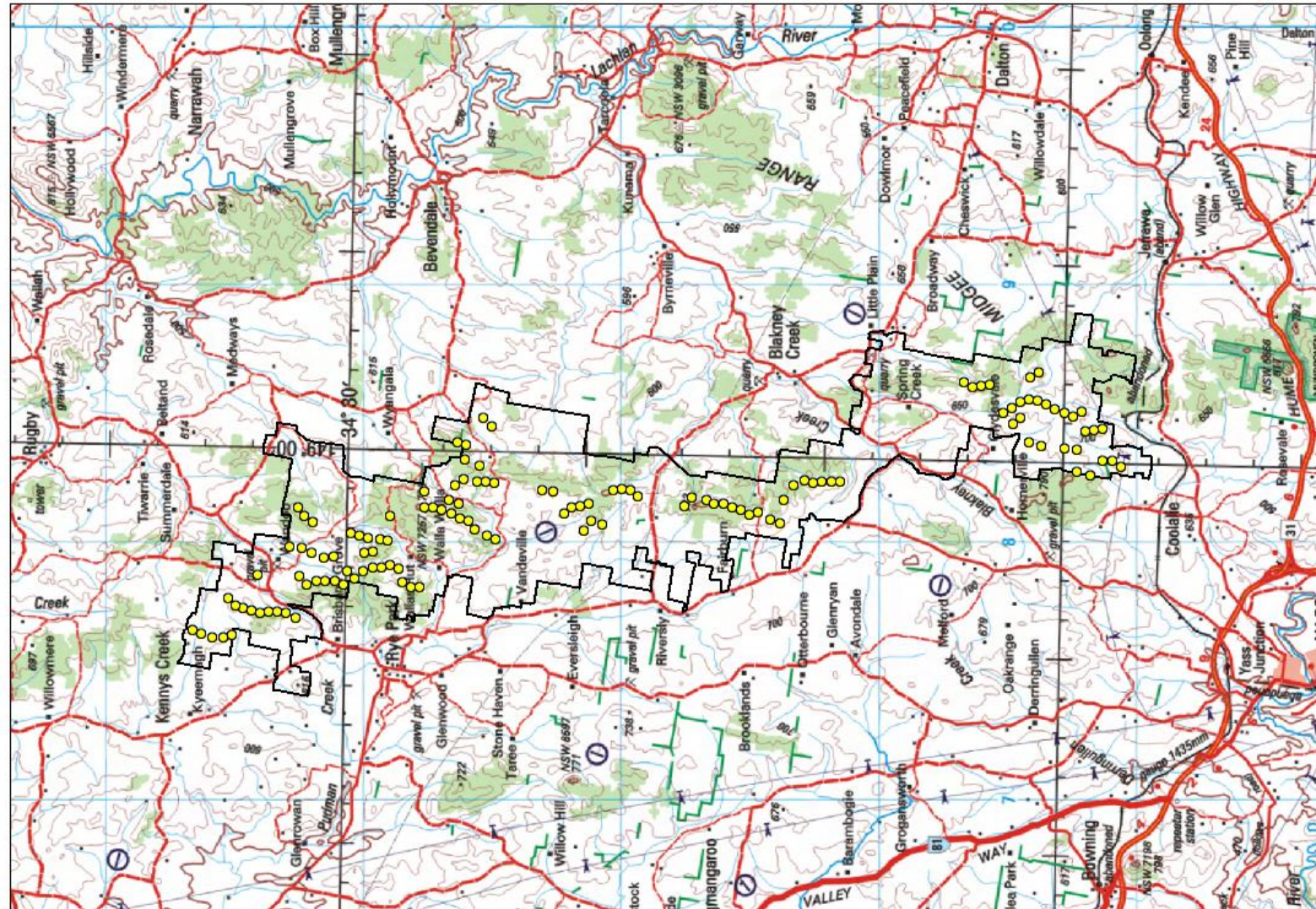
Activity	Timing	Objectives	Stakeholders	Status
CCC Meeting 1	May / June 2012	Provide project information and seek feedback	Invited members	To be held 27 June 2012
Newsletter 5 and Community Open House 1	June / July 2012	Update on studies and consultation and layout	Involved and uninvolved landowners (mail-out)	pending
CCC Meeting 2	July / August 2012	Provide updated information and consider feedback including release of draft final layout	Invited members	TBC – Thursday 2 August 2012
Newsletter 6 and Community Open House 2	September / October 2012	Update on studies and consultation feedback contributing to draft final layout	Involved and uninvolved landowners (mail-out)	pending
CCC Meeting 3	September / October 2012	Provide draft final documentation for review and feedback	Invited members	TBC – Monday 17 September 2012
Pre DA submission follow up	September / October 2012	Consider feedback and any final amendments required prior to lodging application	Involved and uninvolved landowners, CCC and consultants	pending

## Consultation – Communication and Feedback

- Consultation is a two-way-street and we're always listening
- Feedback and suggestions are important to us
- Available communication channels include;
  - Epuron corporate website: [www.epuron.com.au](http://www.epuron.com.au)
  - Rye Park project website: [www.ryeparkwindfarm.com.au](http://www.ryeparkwindfarm.com.au)
  - Mailing address: Rye Park Wind Farm  
Level 11, 75 Miller Street  
North Sydney...NSW...2060
  - Phone: 02 8456 7400
  - Fax: 02 9922 6645
  - Email: [RyePark@epuron.com.au](mailto:RyePark@epuron.com.au)
  - Senior Project Manager: Brian Hall  
[b.hall@epuron.com.au](mailto:b.hall@epuron.com.au)
  - Meetings Arranged by appointment

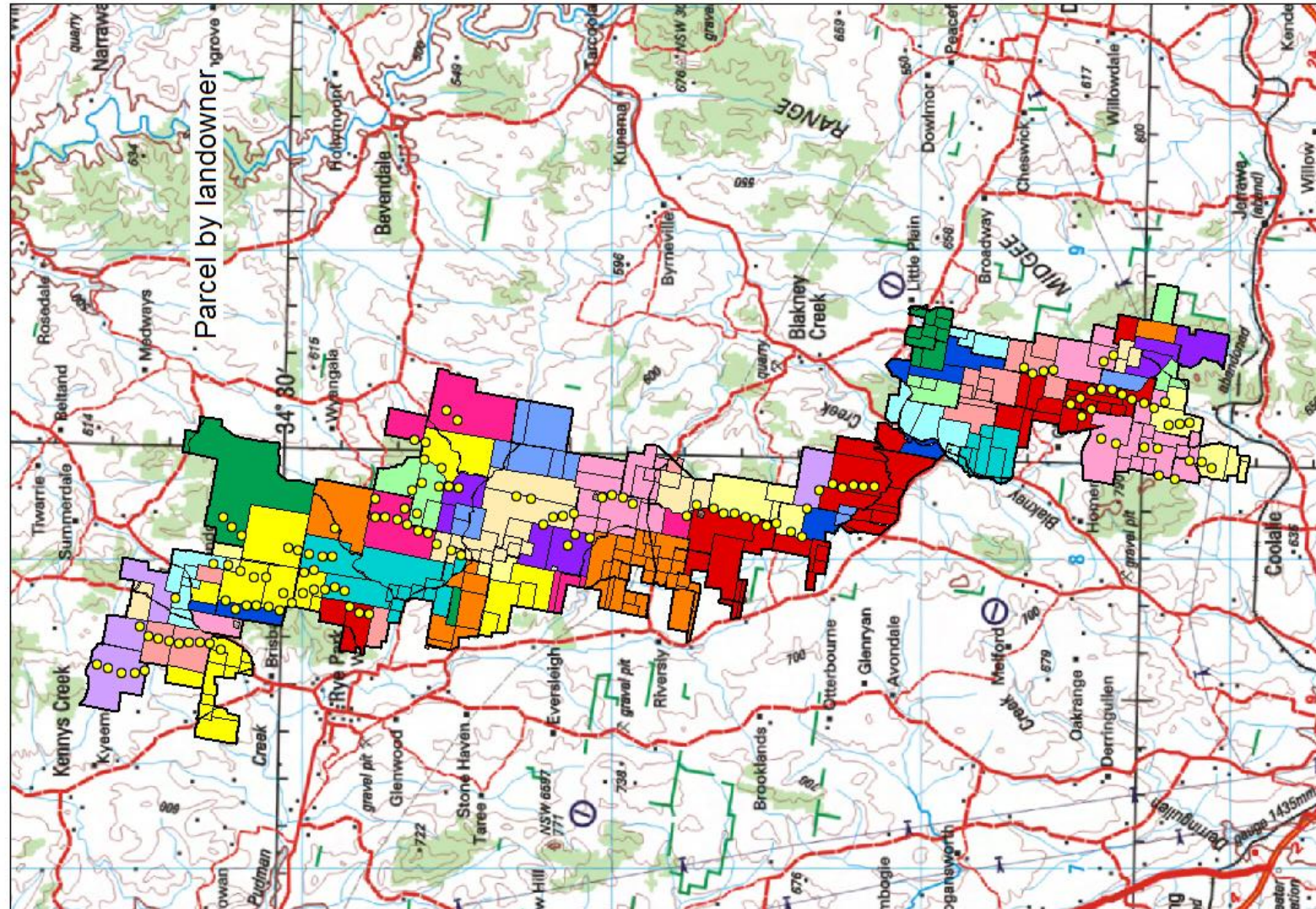
## Project Information - Regional Location and Site Boundary

- Approx distance from local town to nearest turbine
  - ~3km east of Rye Park
  - ~17km south east of Boorowa
  - ~10km north east of Yass
  - ~4km west of Blakney Creek



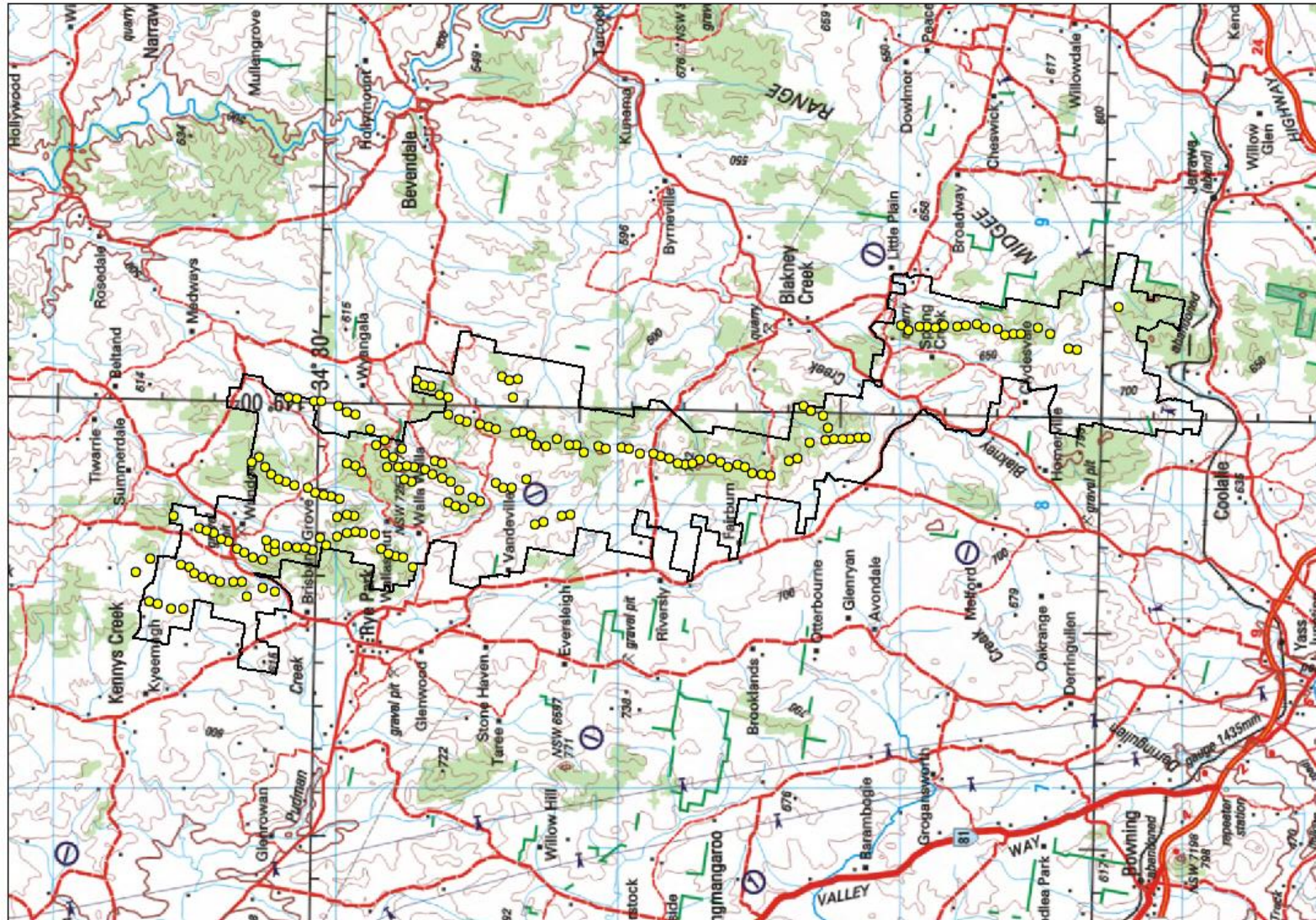
## Project Information – Landowners within Site Boundary

- Approx ~45 landowners signed to be involved in wind farm project



## Project Information – Preliminary Layout

- Preliminary layout developed 2009-10
- Approx 180 wind turbines
- Based on initial desktop analysis, 6-12 months of wind data, land and landowner assessment





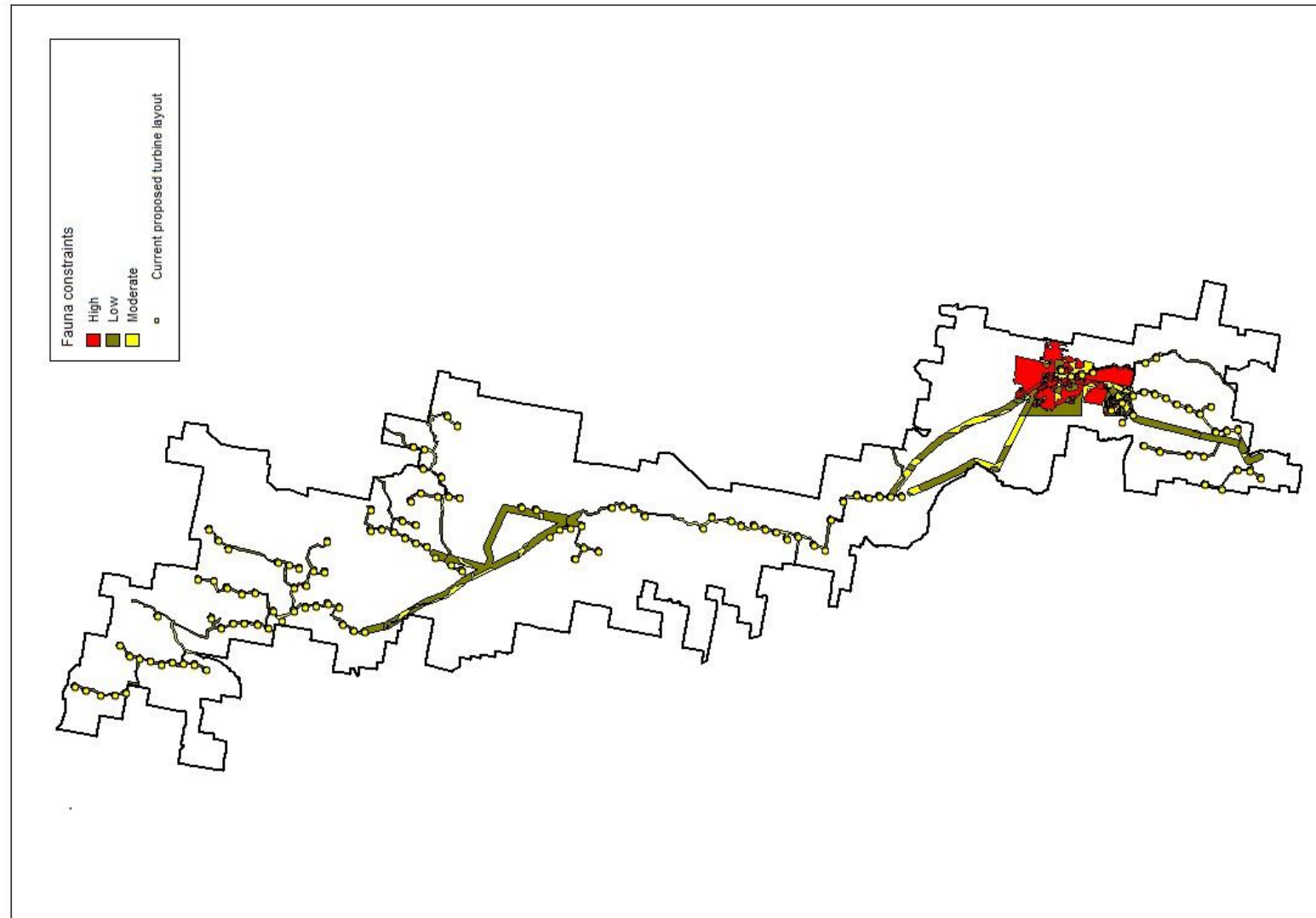


## Project Information – Environmental Assessment

- Assessment of key issues;
  - Ecology (Environmental Flora and Fauna)
  - Noise (Operational and Construction)
  - Visual Amenity
  - Archaeology (Aboriginal and European Heritage)
- Other project assessments include;
  - Aviation
  - Communications
  - Electromagnetic Fields
  - Shadow Flicker
  - Fire and Bushfire Risks
- General environmental assessments include;
  - Drainage and Hydrology, Soils and Landforms, Climate and Air Quality, Mineral Exploration, Economic, Resource Impacts, Traffic and Transport

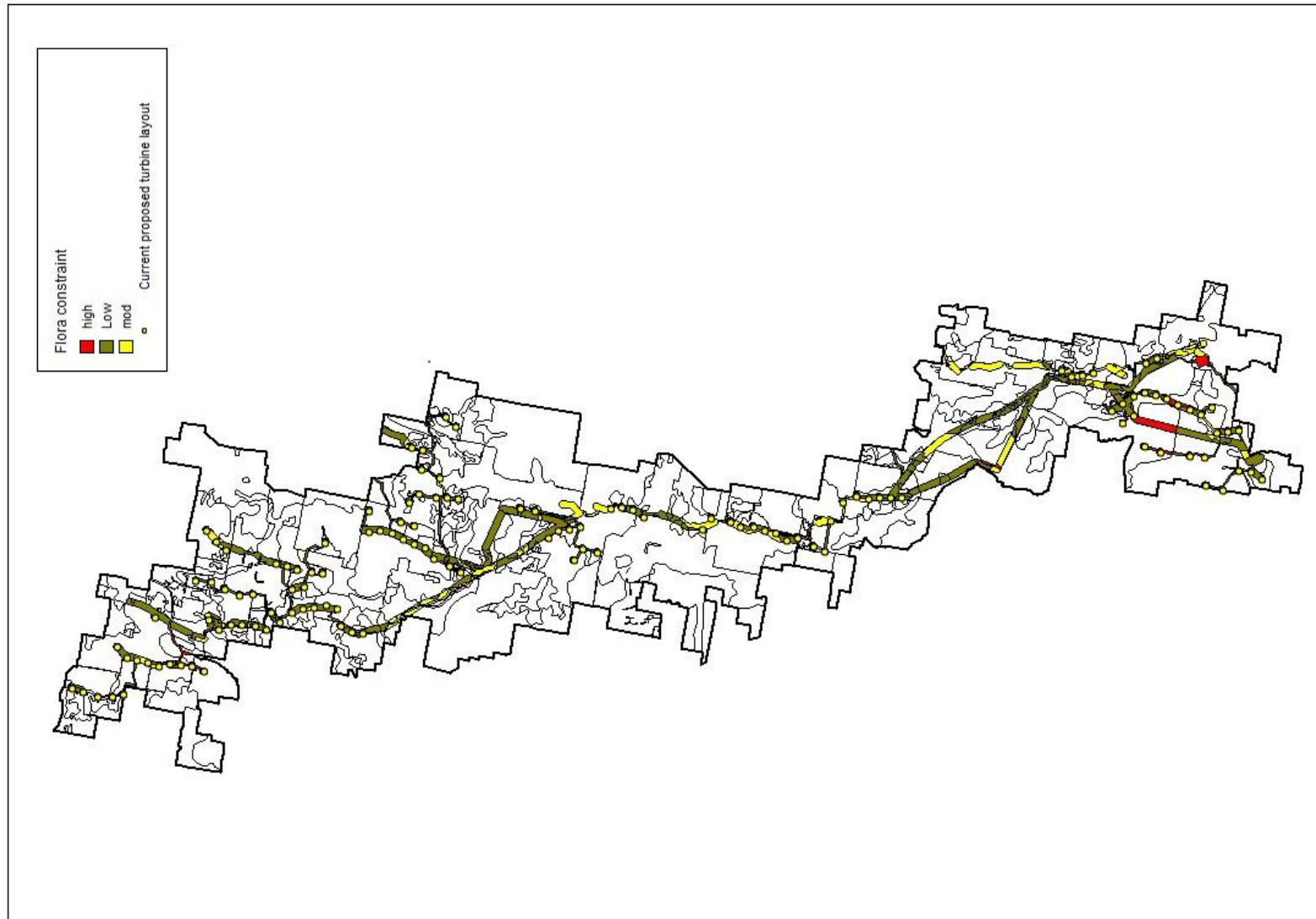
## Project Information – Environmental Constraints - Fauna

- Two annual seasonal surveys completed
- Fauna habitat constraints are based on whether proposed clearing could adversely impact habitat
  - Patch size and integrity
  - Connectivity
  - Key features such as rocky outcrops or hollow bearing trees



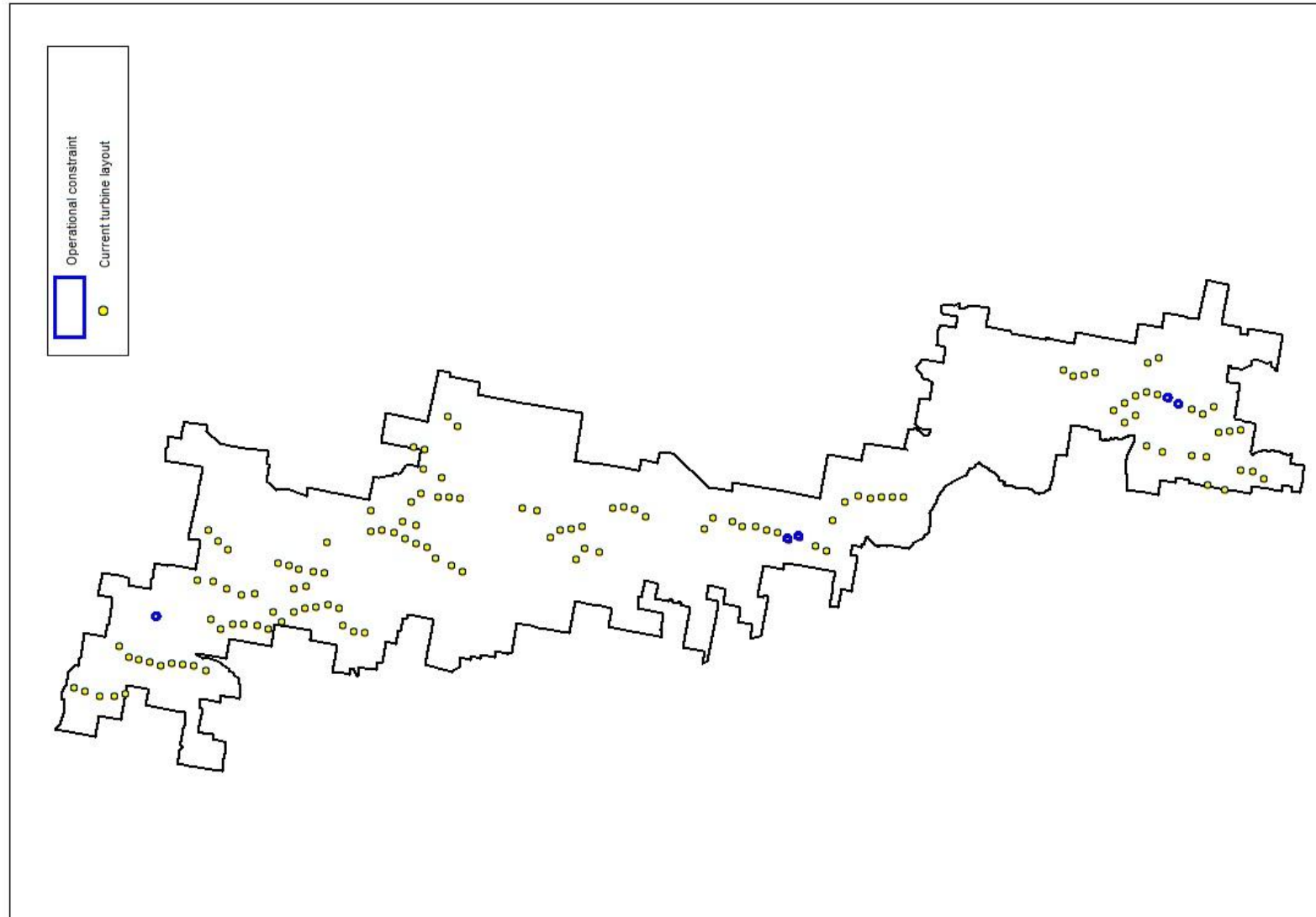
## Project Information – Environmental Constraints - Flora

- Two annual seasonal surveys completed
- Majority of turbines are in low and moderate flora constraint areas
- Some turbines microsited away from high constraint areas



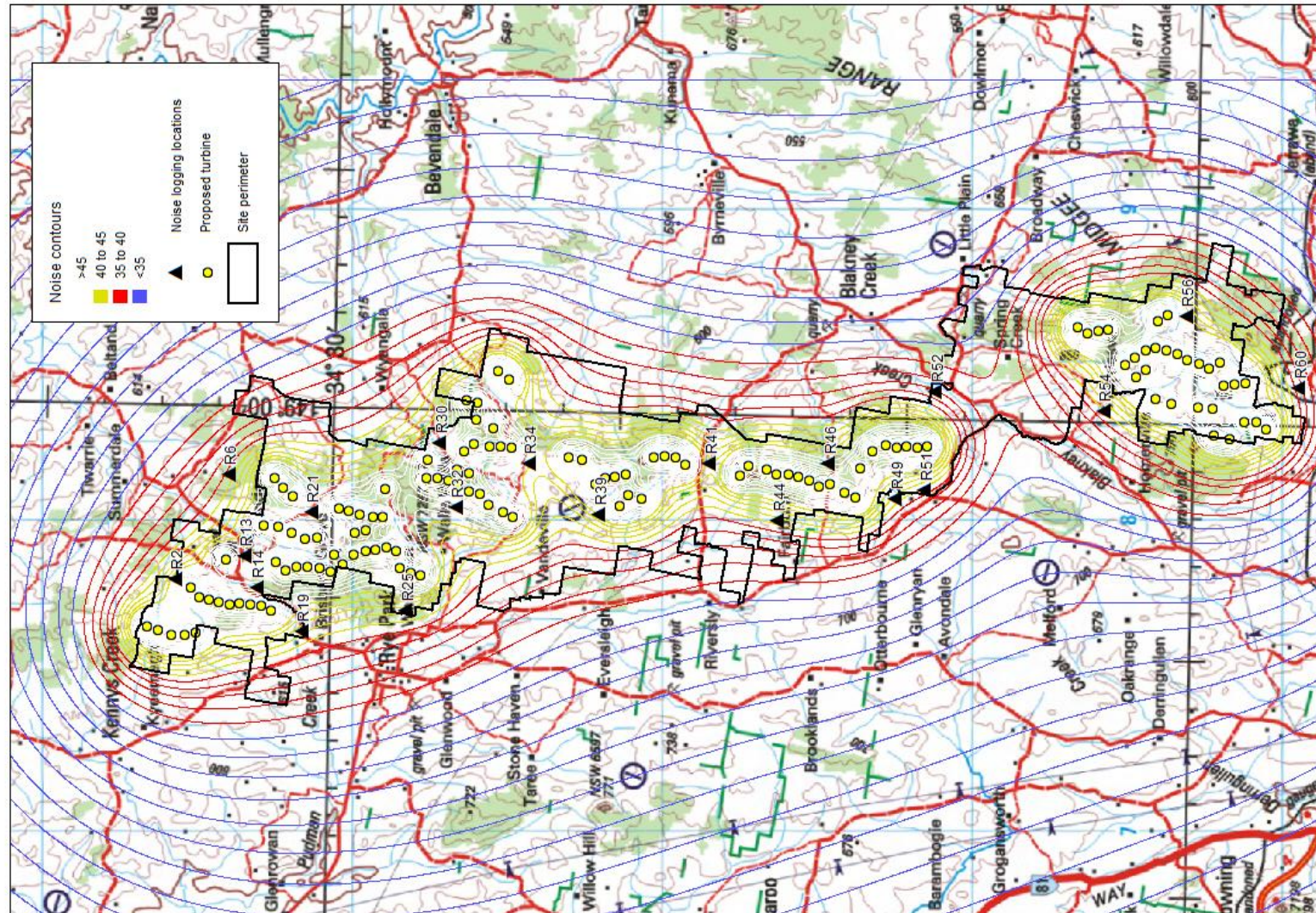
## Project Information – Environmental Constraints - Operational

- Constraint assessed on potential for
  - Isolated turbines
  - Landscape position – near to heads of valleys or escarpments
  - Increased distance to nests
- Five turbines removed or relocated away from operational constraint areas



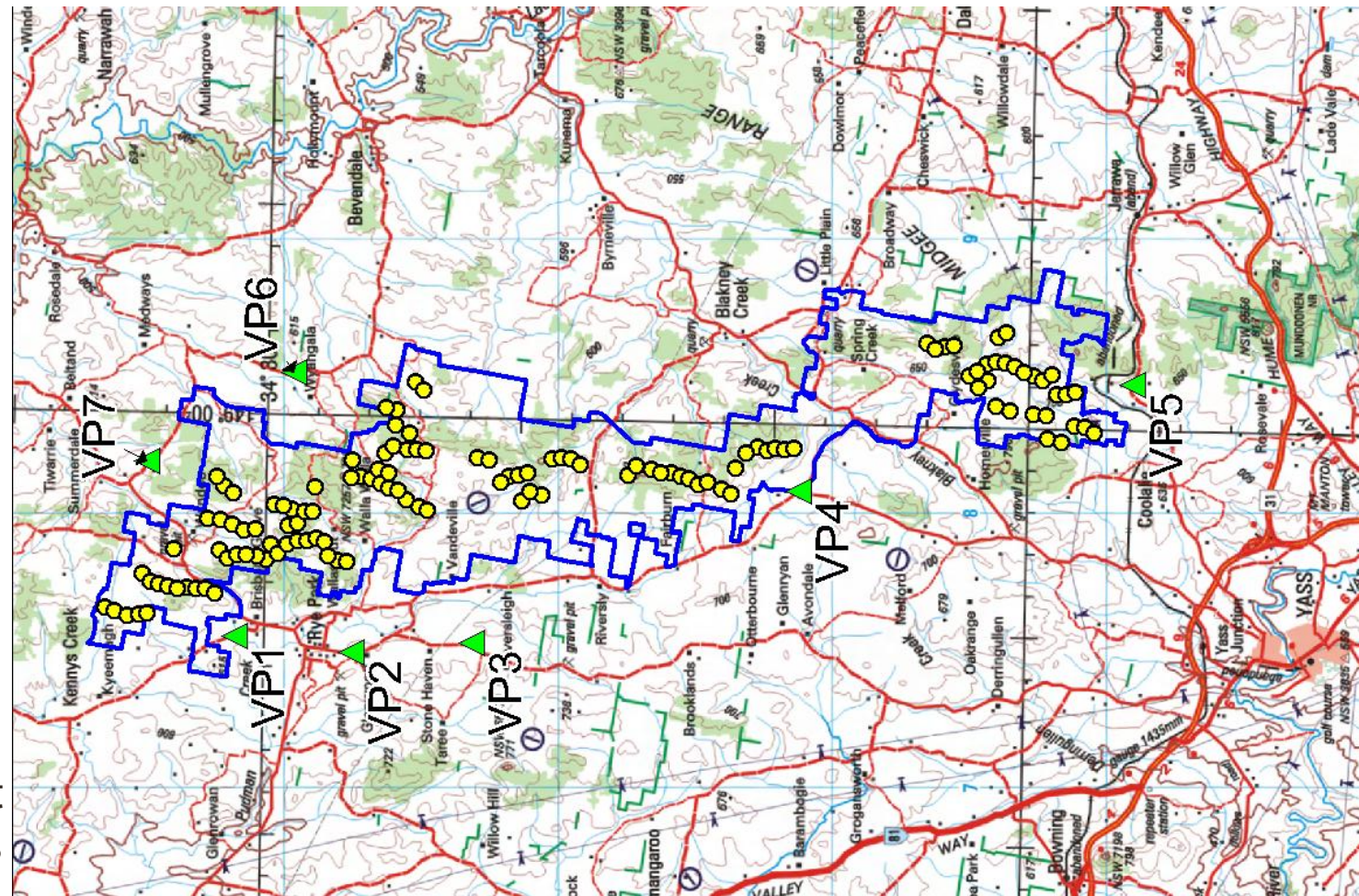
## Project Information – Noise

- Preliminary noise modelling complete
- Background noise logging program underway at identified locations
- Final noise modelling to be completed when layout finalised
- Uninvolved noise limit greater of 35dBA or background plus 5dBA with separate day time and night time periods



## Project Information – Visual

- Preliminary photomontages for selected public view points VP1, VP3, VP4 and VP5 have been prepared for consultation purposes
- Final photomontages for public viewpoints including VP2, VP6 and VP7 will be prepared when layout is finalised
- Epuron arranging to take photomontages at neighbouring dwellings within 2km of a wind turbine



# Project Information – Visual (Preliminary Photomontages)



**Viewpoint VP1 – Little Plains Road**

Rye Park Wind Farm  
Photomontage 1, Little Plains Road  
Horizontal Field of View: 165°  
Bearing: 95° (East)



**Viewpoint VP3 – Wargeila Road**

Rye Park Wind Farm  
Photomontage 3, Wargeila Road  
Horizontal Field of View: 145°  
Bearing: 90° (East)



# Project Information – Visual (Preliminary Photomontages)



**Viewpoint VP4 – Corner of Cooks Hill Road and Dalton Road**

Rye Park Wind Farm  
 Photomontage 4, Corner of Cooks Hill Road and Dalton Road  
 Horizontal Field of View: 160°  
 Bearing: 33° (North-East)

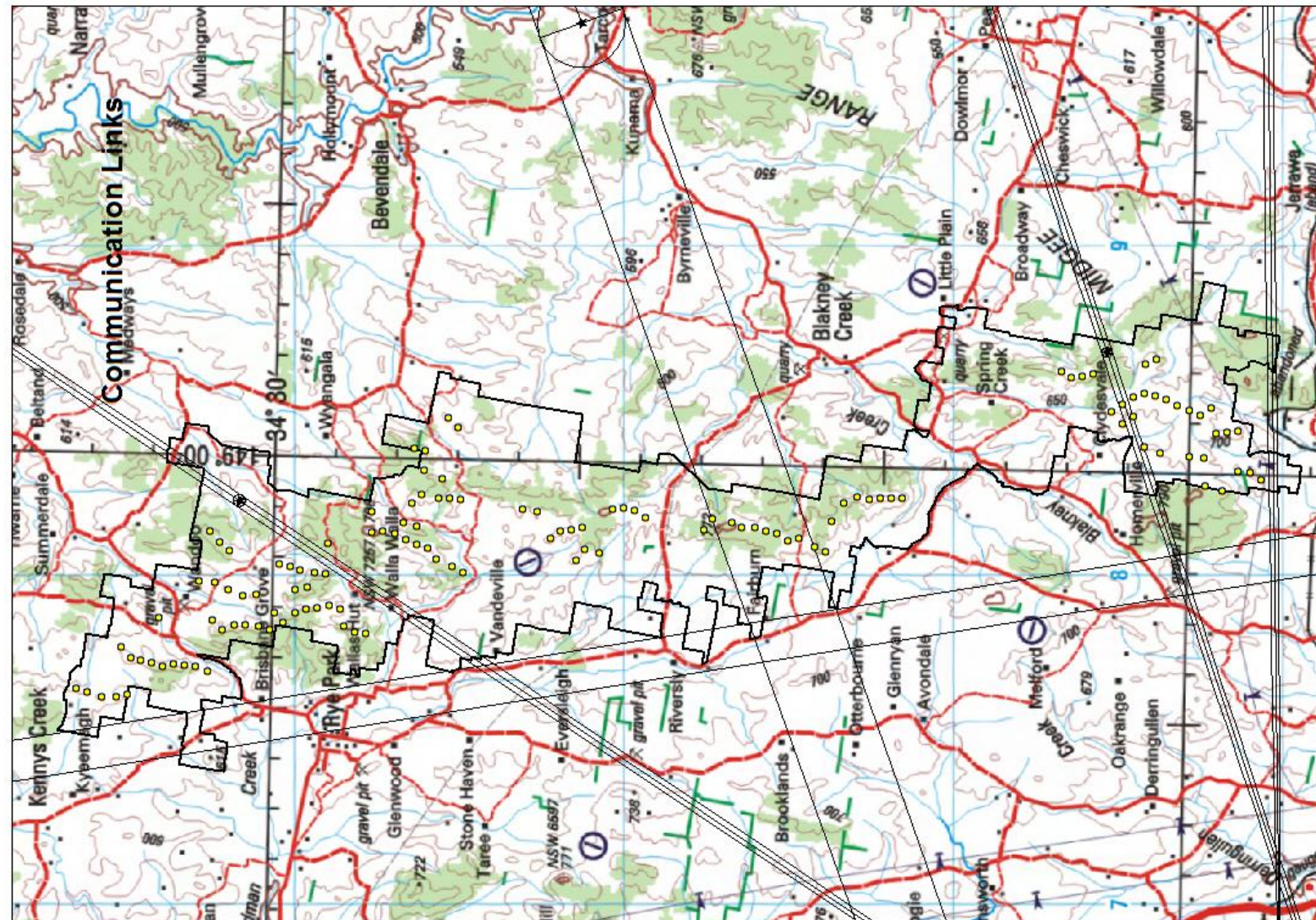


**Viewpoint VP5 – Coolalie Road**

Rye Park Wind Farm  
 Photomontage 5, Coolalie Road  
 Horizontal Field of View: 125°  
 Bearing: 5° (North)

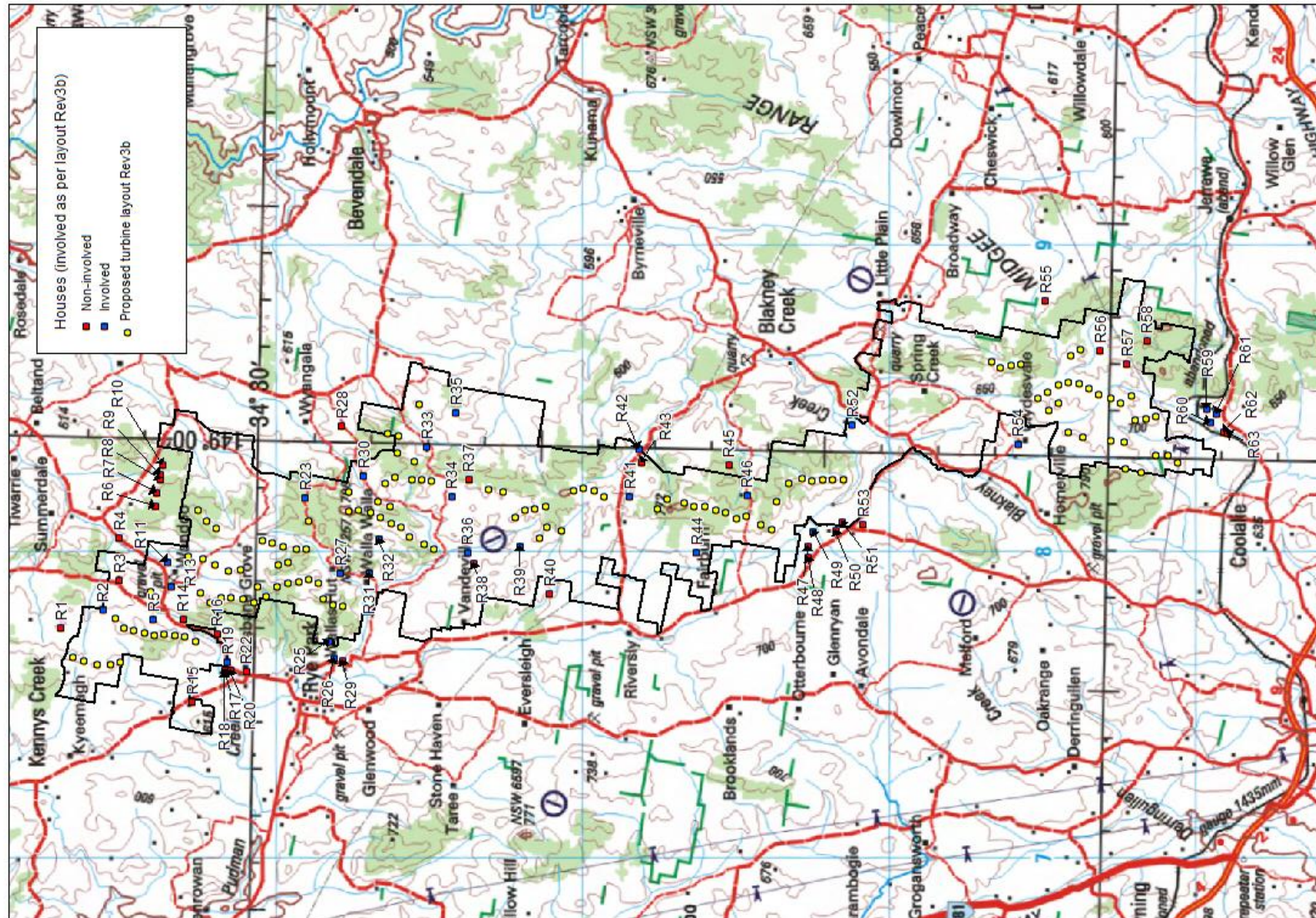
## Project Information – Communication Constraints

- Existing communications infrastructure assessed
- Telcos such as Telstra consulted
- Impacts vary depending on height, location, frequency, band and type of signal



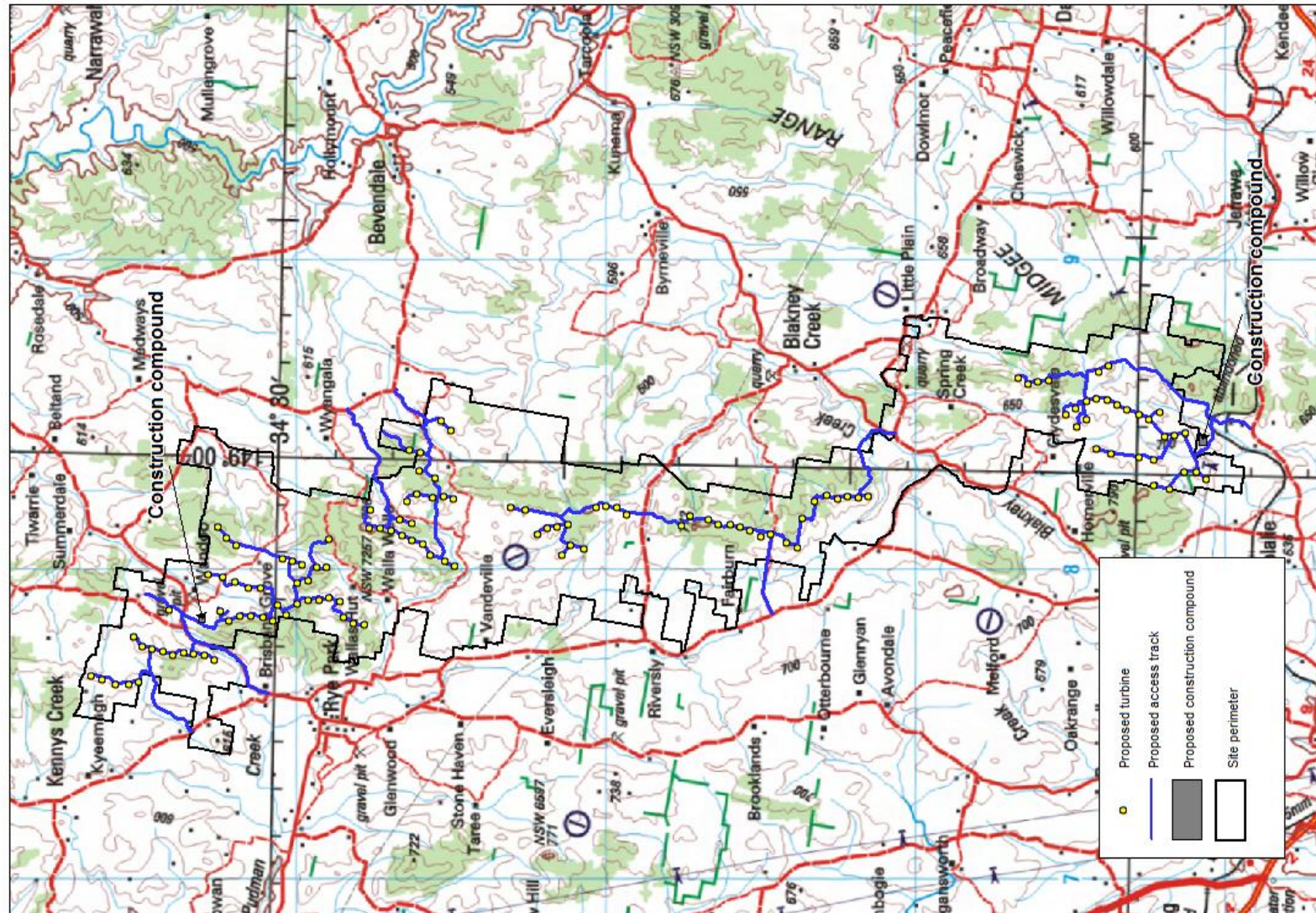
## Project Information – Houses

- 27 involved landowner houses within 2km of wind turbine
- 33 uninvolved landowner houses within 2km of wind turbine



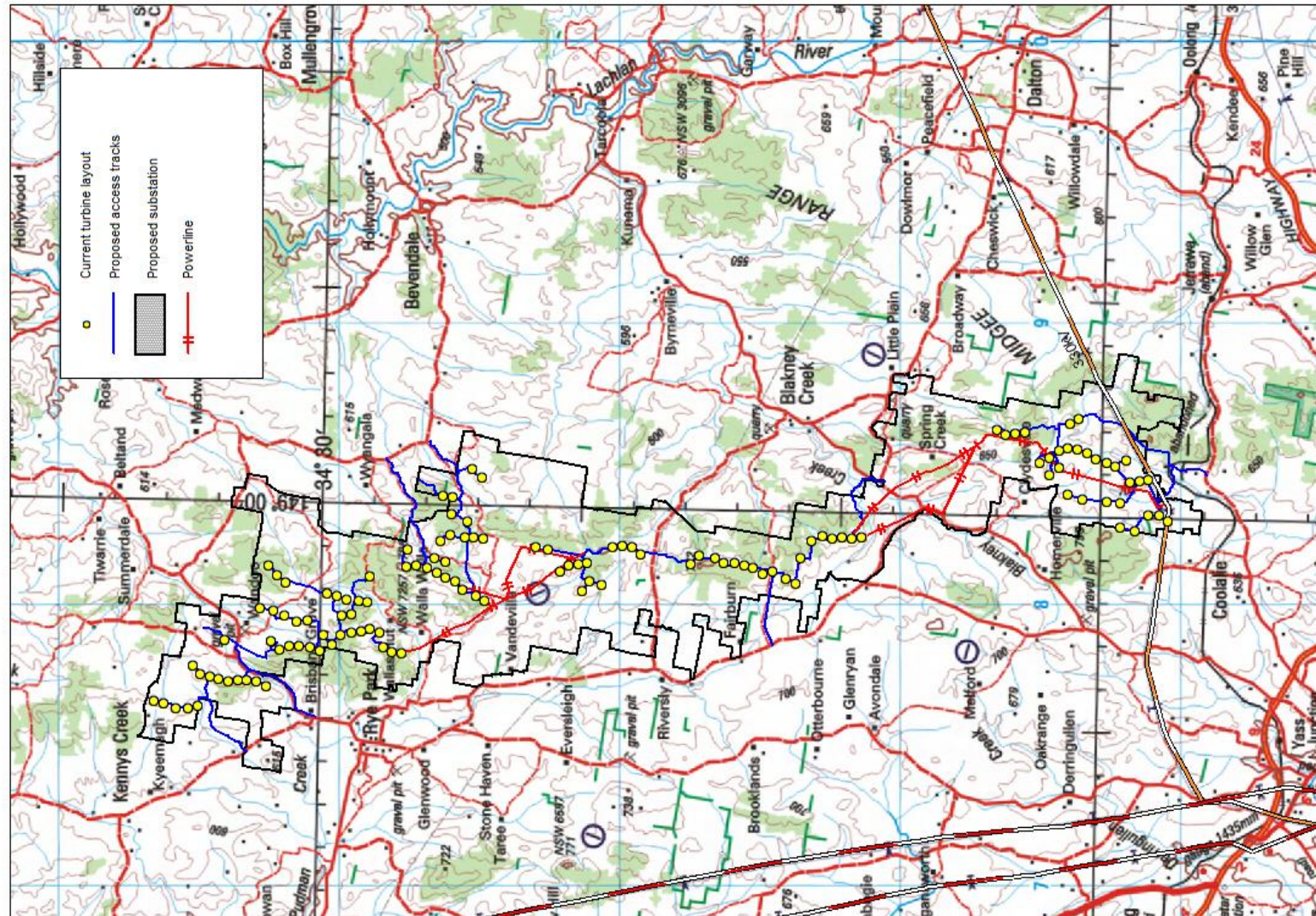
## Project Information – Access Tracks and Construction Compounds

- Proposed access roads to site identified and study underway
- Construction compound locations identified



## Project Information – Wind Farm Powerlines and Grid Connection

- Overhead powerlines required to link wind farm site
- On site grid connection substation land identified
- Existing Transgrid 330kV transmission line crosses south of site



## Project Information – Likely Benefits (Preliminary Estimates)

- Project Investment Value \$750m-\$850m based on 393MW project (131x3MW)
  - 65% Wind Turbines = \$488m-\$552m
  - 35% Design and Construction = \$262m-\$298m
- Direct regional investment from construction – \$200m
- Direct regional investment from operations - \$15m per annum for 25 years
- Direct jobs during construction – approx 250 to 350
- Direct jobs during operations – approx 20 to 30
- Regional/state/national flow on effects, jobs and expenditure multipliers – TBC
- Carbon emissions abatement - TBC
- Community Fund – TBC (considered as part of consultation process)

## Other Reference Documents

- NSW Draft Wind Farm Planning Guidelines - December 2011
- NHMRC (National Health & Medical Research Council) Review of Wind Turbines & Health - July 2010
- NSW Valuer General - Impact of Wind Farms on Property Values – August 2009
- DECCW (NSW Department of Environment, Climate Change & Water - Community Survey: “Community Attitudes to Wind Farms” – December 2010
- Clean Energy Council - Wind Farm Investment, Employment and Carbon Abatement in Australia (SKM) – June 2012

## Next Steps and Timing

- Update layout & design July 2012
- Newsletter No 5 End July 2012
- Community Open Day End July 2012
- CCC Meeting No 2 TBC - 3pm Thursday 2 August 2012



## Thank You



### EPURON Pty Ltd

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