

Appendix 14 – Summary of Management and Mitigation Measures

Windlab will be responsible for implementing the management and mitigation measures identified in the Submissions Report. The management and mitigation measures will be implemented through a Construction Environmental Management Plan, Operational Environmental Management Plan and Decommissioning and Rehabilitation Plan. These plans will be prepared sequentially, prior to each stage of the Project by Windlab and the relevant contractor, and in consultation with relevant Government Agencies. The following table provides a consolidated list of the management and monitoring measures applicable to the Project and relevant timing for implementation.

To illustrate the changes to mitigation measures between the EIS and the Submissions Report, text that has been deleted is shown in ~~strike through~~ and new text is show in bold blue coloured text.

Issue	Management and/or Monitoring Measure	Timing
General	Prepare and implement a Construction Environmental Management Plan (CEMP) for the Project, incorporating all relevant management and mitigation measures outlined in the EIS.	Prior to construction
	Prepare and implement an Operation Environmental Management Plan (OEMP) for the Project, incorporating all relevant management and mitigation measures outlined in the EIS.	Prior to operation
	Prepare and implement a Decommissioning and Rehabilitation Plan for the Project, incorporating all relevant management and mitigation measures outlined in the EIS.	Prior to decommissioning
Landscape and Visual	Windlab continues to seek an agreement with the two non-associated landholders within 2.5 km of a Project WTG. Further mitigation measures incorporated into the design process in conjunction with landscape and visual screening (as discussed in Section 6.2.2.2 of the EIS) will have a positive effect on reducing any visual impact of the Project from the non-associated dwellings identified as having a moderate visual impact. Through the implementation of the mitigation methods described below, it will be possible to significantly reduce the visual impact to an acceptable level at all non-associated dwellings: turbines will have a matte white, non-reflective finish and consist of three blades with uniformity of colour, design, rotational speed, height and rotor diameter throughout	Prior to and during construction

Issue	Management and/or Monitoring Measure	Timing
	- unnecessary lighting, signage and logos will be avoided - appropriate mitigation will be applied to lighting (including sensors, directional lighting and shielding) to reduce any associated impact - supplementary screen planting implemented to the east of BALWF58, in following agreement and consultation with the landowner.	
Noise and Vibration	Operational Noise	
	In order to ensure that operational noise from the Project is appropriately managed, the following will be implemented: - the predicted operational wind turbine noise levels will be updated with final layout and sound power levels of the final wind turbine selected for the Project to verify compliance with the criteria in accordance with the NSW Noise Assessment Bulletin - the predicted operational ancillary infrastructure noise levels will be updated with the final design and sound power levels of the final equipment selection to verify compliance with the criteria in accordance with the NPfI - an Operational Noise Management Plan will be prepared to identify how compliance with the Project's operational noise limits will be demonstrated, including details of testing procedures and reporting time frames following commencement of operations - following construction, compliance monitoring will be conducted to satisfy the NSW Noise Assessment Bulletin including evaluation of special noise characteristics While assessments have shown that the Project is expected to satisfy all operational noise limits, consideration will be given to the following contingency strategies if required: - procurement contracts – the procurement contract for the supply of wind turbines will typically include specifications for allowable noise emissions, and in the event that these are exceeded the supplier will be required to implement measures to reduce noise levels to the contracted values through the use of appropriate control settings or by rectifying manufacturing defects - noise reduction management strategy – variable pitch wind turbines (as proposed for this Project) include control functions which enable the noise emissions of the wind turbines to be selectively controlled by adjusting the pitch of the	Prior to and during operation

Issue	Management and/or Monitoring Measure	Timing
	blades. In addition, where required, the wind turbines can be selectively shut down under relevant wind speeds and directions. These types of control measures can be used separately, or in combination, to achieve noise reductions for pre-determined wind speed ranges and directions.	
	Construction Noise The construction noise and vibration impact assessment conducted by MDA is preliminary only, and once more detailed schedules of plant and equipment, construction methods and work areas are known, a detailed Construction Noise and Vibration Management Plan (CNVMP) will be prepared. The CNVMP will include site and process specific noise management practices to mitigate the impact of construction noise (including traffic and blasting). This will include such measures as: • universal work practices, including employee training, and site management measures to minimise noise emissions • community consultation and notification prior to any construction activity outside standard work hours • plant and equipment selection, maintenance and inspection procedures • on-site controls (e.g., location of plant, alternatives to reversing alarms) • work scheduling during recommended standard hours where possible • transmission path and at-receiver considerations (e.g., acoustic screens or enclosures).	Prior to and during construction
Biodiversity	The following Management Plans will be prepared post-approval as part of the Biodiversity Management strategy: • CEMP • Biodiversity Management Plan • Bird and Bat Adaptive Management Plan.	During construction and operation Prior to construction
	The Construction Environmental Management Plan will include the development and implementation of biodiversity management measures which are likely to include: • salvage of biodiversity features, including habitat resources (e.g., hollow logs, tree hollows, fallen timber and rocks/boulders)	During construction

Issue	Management and/or Monitoring Measure	Timing
	• pre-clearance and tree-felling procedures • non-inhibiting fauna fencing • traffic control • water management • weed management • fencing and access control • bushfire management • erosion and sediment control • workforce education and training.	
	A BMP will be implemented demonstrating adaptive management strategies to ensure key milestones are achieved including the following project commitments: • Protecting vegetation and fauna habitat outside the approved disturbance areas and managing the remaining remnant vegetation and fauna habitat within or surrounding the development site toward a benchmark state, minimising indirect impacts, especially to Pink Cockatoo and Regent Parrot (refer Table 69 of BDAR). • Fauna monitoring and management protocol including identification and reporting of fauna mortalities to the relevant CPHR office. • Collection of detailed baseline weed data and ensuring no increase of key emerging weeds or invasive pests. • Commit to ongoing consultation vertebrate pest control baiting programs working cooperatively with local landholders.	During construction and operation

Issue	Management and/or Monitoring Measure	Timing
	• Mapping and identification of individual tree hollows and stick nest and developing measures to minimise impacts to these features. • Pre-clearing protocols, including pre-clearing inspections, establishment of exclusion zones and on-ground identification of specific habitat features to be retained and/ or relocated. • Monitoring of soil and water controls to prevent indirect impacts associated with water pollution to all waterways. The BMP will also provide detail on survey requirements prior to micro-siting of infrastructure components within the development corridor and provide criteria that must be met to ensure there are no increase to biodiversity impacts as a result of micro-siting during detailed design.	
	Windlab will develop a Biodiversity Offset Strategy to ensure that the credit liability of the Project can be acquitted in accordance with the requirements of the Biodiversity Offset Scheme and the Bilateral Agreement and prior to the commencement of construction.	Prior to construction
Aboriginal Cultural Heritage	The Project will avoid all the heritage exclusion zones which are mapped within the Project Area. These heritage exclusion areas will be shown on all construction maps for the Project and if during construction works any ground disturbance activity is proposed within 50 m of any of the heritage exclusion zones then high visibility temporary fencing will be in place along the boundary of the heritage exclusion zone in proximity to the works prior to any ground disturbance and/or construction works commencing nearby to ensure there are no inadvertent impacts to the areas. Given the size of some of the heritage exclusion zones it is acceptable that only the portion of the heritage exclusion zones in proximity to works is demarcated.	Prior to and during construction
	The Project will avoid the 24 tree cultural sites recorded as Burrawong WF ST 01 to Burrawong WF ST 24. A minimum 20 m buffer must be in place from the trunk of each tree to prevent any inadvertent impacts to the canopy and/or root system of each recorded cultural site.	Prior to and during construction
	The Project will avoid the 15 previously registered AHIMS sites within the Project Area which are outside the proposed Development Corridor. The AHIMS sites to be avoided include: 47-60037, 47-6-0041, 47-6-0093, 47-6-0945, 47-6-0253, 47-6-0147, 47-6-0148, 47-6-0150, 47-6-0255, 47-60151, 47-6-0254, 47-6-0146, 47-6-0069, 47-6-0149 and 47-6-0068. No works or access tracks are proposed to be implemented during the Project within proximity (within 50 m) to any of these previously registered AHIMS sites within the Project Area, hence no demarcation of these sites is required as part of the	During construction

Issue	Management and/or Monitoring Measure	Timing
	Project.	
	If complete avoidance to any of the isolated finds and artefact scatters recorded within the proposed Development Corridor is not possible, a reasonable and feasible attempt, through the visual inspection of the site by an archaeologist with an Aboriginal community representative (as selected by the Windlab), will occur in an attempt to collect the surface stone artefacts within the Development Corridor at each of these recorded locations. This would occur following the issue of SSD development consent.	Prior to construction
	Due to ongoing farming practises in the wider Project Area and the potential for delays in the commencement of construction, To facilitate ongoing farming practices and repatriate cultural values to Traditional Owners as soon as practically possible, Windlab proposes to the ability to undertake the immediate surface collection salvage of artefacts within the Development Corridor (outside heritage exclusion areas). should be facilitated in any conditions of consent issued for the Project. This should will occur following the approval of the project's a Cultural Heritage Management Plan for the Project and in accordance with the development consent. The surface collection salvage would be undertaken by Traditional Owners (including Registered Aboriginal Parties) and archaeologists , in line with the methodology provided in Appendix D of the ACHA report.	Prior to construction
	A- The surface collection salvage programme will be attempted at each site with stone artefacts recorded that is approved for impacts prior to the proposed construction works commencing for each stage of works proposed within the Development Corridor. The surface collection programme may be staged, if required, to conform to the proposed staged approach of construction works or to reflect areas that are subject to ongoing farming practices.	Prior to construction
	The collection and relocation of the surface artefacts and any collected cultural material will be undertaken by an archaeologist with a representative/s of the registered Aboriginal parties, as selected by Windlab, and be consistent with Requirement 26 of the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales and/or the wishes of the Registered Aboriginal Parties.	Prior to and during construction
	All objects salvaged will have their long-term relocation details submitted to the AHIMS database. An Aboriginal Site Impact Recording Form will be completed and submitted to AHIMS following harm for each site collected or destroyed from salvage and/or construction works as approved in the development consent for the Project.	During construction

Issue	Management and/or Monitoring Measure	Timing
	A minimum 5 m buffer will be observed around all stone artefact and hearth sites that are being avoided by the proposed development. If during any Project works any ground disturbance activity is proposed within 50 m of any recorded valid in-situ known Aboriginal sites then high visibility temporary fencing will be in place to demarcate a minimum 5 m buffer around the boundary of the site prior to any works commencing within proximity (within 50 m) of the site.	Prior to and during construction
	Unmitigated impacts can occur to the hearth sites Burrawong WF HTH 06, Burrawong WF HTH 09, Burrawong WF HTH 13 if they cannot be avoided by works.	During construction
	All works for the Project will stay within the area assessed for the Development Corridor and impact areas to ensure there are no inadvertent impacts to Aboriginal objects. For any proposed future impacts to the Aboriginal sites being avoided and outside the Development Corridor, further assessment and consideration of impacts on Aboriginal Heritage as determined by an archaeologist will occur. Additional Aboriginal consultation and further assessment which may include survey and/or subsurface testing may be required.	During construction
	Further archaeological assessment would be required if the Project and Development Corridor extend beyond the area assessed in the ACHAR. This would include consultation with the registered Aboriginal parties and may involve further field survey.	During construction
	Windlab will prepare a CHMP to address the potential for finding additional Aboriginal artefacts and objects during the construction of the Project and for the management of known sites within and in proximity to the Development Corridor which will be avoided. The CHMP will include the unexpected finds procedure to manage any objects suspected to be Aboriginal in origin during the construction, maintenance, operation and decommissioning works and will include requirements for heritage to be included as part of the site inductions and the monitoring of sites which will be avoided. Preparation of the CHMP will be undertaken in consultation with registered Aboriginal parties.	Prior to construction
	In the event that suspected human remains are discovered during the construction of the Project, all work will cease in the immediate vicinity. The appropriate heritage team within Heritage NSW and the local police will be notified. Further assessment will be undertaken to determine if the remains were ancestral Aboriginal remains or not. If the remains are deemed to be ancestral Aboriginal in origin Heritage NSW will be sought to advise Windlab on the appropriate actions required. An unexpected find protocol for suspected human remains will be included in the CHMP.	During construction

Issue	Management and/or Monitoring Measure	Timing
	Prior to any development consent being issued for the Project, the drafted conditions which relate to Aboriginal heritage will be reviewed by a qualified archaeologist to ensure all sites assessed for impacts and avoidance and the management recommendations, as noted in the ACHA, are clearly included and listed in any conditions of consent.	Prior to construction
Historical Heritage	To avoid accidental impact to potential archaeological remains, exclusion zones will be established and will be examined regularly during construction to ensure ongoing protection. If the proposed works footprint alters and impacts to the potential archaeological sites cannot be avoided, further assessment and investigation will be undertaken. This would be in the form of an Archaeological Research Design (ARD) and test excavation to determine the integrity, nature, and significance of any archaeological remains that may be present. Test excavation would be carried out by an appropriately qualified Excavation Director in accordance with the NSW Heritage Council's Excavation Director criteria.	Prior to and during construction
	A photographic archival recording of the remnant structures of 'Lynwood' 'Tyndale' and 'Oldham Park' will be prepared prior to construction. The archival recording will be in accordance with the Heritage NSW publication 'Photographic Recording of Heritage Items using Film or Digital Capture' (2006). A digital copy of the archival record will be provided to DPHI prior construction.	Prior to construction
	All Project team members and construction contractors will undergo a heritage-specific induction to support the use of the unexpected finds protocol prior to undertaking any activities within the Project Area.	Prior to construction
	An unexpected finds protocol (UFP) will be established and is to be followed in the event that any unexpected historical archaeological deposits, artefacts, or structures of potential heritage significance are identified. In the unlikely event that unexpected finds are encountered during the Project, all work in the area will cease and a suitably qualified archaeologist will be contacted to determine an appropriate course of action. Depending on the extent and/or significance of the finds encountered, consultation with Heritage NSW may also be required prior to the re-commencement of works.	Prior to and during construction
Transport	Construction Stage 1	
	Completion of works along the identified transport route to accommodate the swept paths of the OSOM turbine component transport vehicles, including the relocation of signage and road lighting infrastructure and construction of required temporary hardstand pavement areas as identified in the Transport Route Assessment for the Project. It is noted that the exact extents and scope of these works will be determined in subsequent detailed design phases of the Project once the turbine component and transport vehicle configurations are confirmed.	Prior to construction

Issue	Management and/or Monitoring Measure	Timing
	Further consultation with the relevant local government road authorities will be required to establish infrastructure or maintenance agreements to cover any required works to offset the potential pavement impacts of the OSOM vehicle movements for the Project on the lower order, local government controlled road links along the identified OSOM transport routes.	Prior to construction
	Pre and post dilapidation inspections to be undertaken on the sections of the local government roads used by Project traffic, with these inspections to be completed by representatives of Windlab and the appropriate council. These inspections are required to identify and document the current condition of the roads (pre-construction) and establish the required maintenance and/or rehabilitation works deemed necessary to reinstate the roads to their documented condition prior to the introduction of Project traffic at the completion of their use.	Prior to construction and post construction
	Provision of upgrade works to the Yanga Way / Balranald-Moulamein Road intersection to provide basic right (BAR) and basic left (BAL) turn treatments, generally in accordance with Figure 8.2 of Part 4A (rural BAL) and Figure A6 of Part 4 (rural BAR) of Austroads Guide to Road Design (2021). Also provision of additional hardstand area required to accommodate OSOM turn movements (as per Rex J Andrews Route Assessment).	Prior to construction
	Provision of upgrade works to the section of Balranald-Moulamein Road between Yanga Way and Site Access 5 (Site Access 5–approximately 11.095km). These upgrade works are proposed to include road grading and resheeting works to provide a suitable unsealed (gravel) road surface up to 8m minimum in width (to match the current minimum road width on this link).	Prior to construction
	Provision of suitable site access configurations at Site Access 2, 3 and 5 on Balranald-Moulamein Road, with provision for additional hardstand areas as required to accommodate OSOM heavy vehicle movements. It is proposed that These site access points are to be provided generally in accordance with the site access arrangement/configuration outlined in Figure 7.4 of Austroads Guide to Road Design Part 4: Intersections and Crossings – General (2021).	Prior to construction
	Installation of advisory “truck turning” signage be installed on the approaches to the Yanga Way / Balranald-Moulamein Road intersection, to highlight to motorists the potential for turning heavy vehicles to/from the side road.	Prior to construction
	Preparation of a Traffic Management Plan for Stage 1 of the Project outlining proposed management measures and processes to minimise the impact of Project traffic (including OSOM turbine component transport vehicles) on the external road network.	Prior to construction

Issue	Management and/or Monitoring Measure	Timing
	Construction Stage 2	
	Completion of identified route upgrade works as identified in the Transport Route Assessment, if previous route works have been remediated upon completion of Stage 1 OSOM haulage operations.	Prior to construction
	Provision of basic right (BAR) and basic left (BAL) turn treatments, as well as additional hardstand area required to accommodate OSOM turn movements (as per Rex Andrews Route Assessment), at the proposed Yanga Way / Site Access 1 intersection.	Prior to construction
	Provision of upgrade works to the Balranald-Moulamein Road / Arundel Road intersection to provide basic right (BAR) and basic left (BAL) turn treatments, generally in accordance with Figure 8.2 of Part 4A (rural BAL) and Figure A6 of Part 4 (rural BAR) of Austroads Guide to Road Design (2021).	Prior to construction
	Provision of upgrade works to the section of Balranald-Moulamein Road between Site Access 5 and Site Access 8. These upgrade works are proposed to include road grading and resheeting works to provide a suitable unsealed (gravel) road surface up to 8m minimum in width.	Prior to construction
	Provision of upgrade works to the section of Arundel Road between Balranald-Moulamein Road and Site Access 4. These upgrade works are proposed to include road grading and resheeting works to provide a suitable unsealed (gravel) road surface up to minimum 7m width (on 9m formation).	Prior to construction
	Pre and post construction phase dilapidation surveys will be required to be undertaken on the relevant sections of Balranald-Moulamein Road (Yanga Way to Site Access 8) and Arundel Road (Balranald-Moulamein Road to Site Access 4). The pre construction inspection is to be undertaken upon the completion of the proposed regrading / resheeting works and is to establish the pre-construction road condition, with the post construction dilapidation survey then used to identify rehabilitation works required to be completed by the Project to bring road conditions / standards on this section of Balranald-Moulamein Road back to the recorded pre construction condition.	Prior to construction and post construction
	Provision of suitable site access configurations at Site Access 6,7 and 8 on Balranald-Moulamein Road and Site Access 4 of Arundel Road, with provision for additional hardstand areas as required to accommodate OSOM heavy vehicle movements. It is proposed that These site access points are to be provided generally in accordance with the site access arrangement/configuration outlined in Figure 7.4 of Austroads Guide to Road Design Part 4: Intersections and Crossings –	Prior to construction

Issue	Management and/or Monitoring Measure	Timing
	General (2021).	
	Installation of advisory “truck turning” signage be installed on the approaches to the Yanga Way / Balranald-Moulamein Road and Balranald-Moulamein Road / Arundel Road intersections, to highlight to motorists the potential for turning heavy vehicles to/from the side roads.	Prior to construction
	Preparation of Traffic Management Plan for Stage 2 of the Project outlining proposed management measures and processes to minimise the impact of Project traffic (including OSOM turbine component transport vehicles) on the external road network.	Prior to construction
	Over-size over-mass (OSOM) haulage	
	Avoid peak travel periods on road network with OSOM movements to minimise impact to other road users.	During construction
	Movement of OSOM vehicles to be scheduled to reduce OSOM interactions with other vulnerable users; the Project’s Traffic and Transport Assessment includes analysis of vulnerable road users including local bus routes.	During construction
	Multiple route options considered for OSOM components (excluding blades) to assist in mitigating disruptions to other road users as required.	During construction
	Development Traffic Management Plan (TMP) with relevant details (including schedule and location/s of transport) to be shared with key stakeholders including other major road users and locals. TMP to include key safety initiatives: 1. Driver Code of Conduct 2. OSOM vehicle operating protocols (including use of UHF while transporting to notify road users ahead) 3. Key information relating to road safety to be provided to all staff 4. Consultation with road stakeholders and local authorities regarding delivery of OSOM 5. Suitable signage provided to advise road users	Prior to construction
	Communication of TMP, notably the transport schedule and locations, may include: 1. Online via website	Prior to construction

Issue	Management and/or Monitoring Measure	Timing
	2. Shared directly with transport companies, road stakeholders and emergency services 3. Shared directly (and/or Face-to-Face consultation) with involved hosts, neighbours and local community 4. Informing via media (newspaper and online), emails, letterbox drops/newsletters 5. Provide contact details including out of hours contact information to key stakeholder (residents, schools, public activities and businesses)	
	OSOM traffic travelling in opposite directions will be managed via UHF communication and pilots/escorts, the OSOM convoys are able to communicate and identify opportunities to pass.	During construction
	Vehicles travelling behind OSOM are managed with the use of pilot or police vehicles that will clear traffic at regular intervals (for example, every 15kms) to ensure traffic is able to pass safely.	During construction
Water and Soils	Flooding	
	An Emergency Response Plan (ERP) to will be prepared in accordance with the NSW Government's Flood Risk Management Toolkit. The ERP is to will include consideration of emergency site access/egress specifically under flood conditions, noting the Site Access 1 may not be trafficable in certain flood conditions.	Prior to construction
	Flood emergency management procedures and training should be will be provided for staff working at the Project including a formal induction, annual testing of ERP procedures including review and update.	Prior to construction
	Operations staff will have access to the following facilities for early severe weather warnings: The Bureau of Meteorology's "MetEye" and The Bureau of Meteorology's "RSS feeds". Radio and Bureau of Meteorology information will be reviewed frequently for potential major weather events. Facility members and visitors can be notified of potential flooding, road and facility closure.	Prior to construction and operation
	If sheltering in place is the selected response action stocking of food and medications is undertaken by occupants according to the maximum possible duration of isolation.	Prior to construction and operation
	Evacuation routes will be designed during the detailed design phase and will take into account zones of flood hazard. The Project Area is free from regional riverine flooding from the Murrumbidgee and Murray Rivers, and flood risks are from flash	Prior to construction

Issue	Management and/or Monitoring Measure	Timing
	flooding of the local creeks.	
	Project infrastructure, such as inverters and battery storage, will be located with a minimum 300 mm freeboard above the maximum 1% AEP flood level. Given the shallow depths across the Project Area, the minor raising of a sensitive location within the Project with a small fill pads is unlikely to result in any adverse impacts offsite.	Prior to construction
	Foundations for the wind turbines and transmission lines will be located away from areas that exceed both flood depths of 0.3 m and flow velocities greater than 1.5 m/s. Detailed design of the Project will consider the results of the flood models, in particular the 1% AEP scenario.	Prior to construction
	Surface Water	
	No sensitive infrastructure (e.g., substations) will be placed within 20 m of any Strahler 3 or above order stream.	Prior to construction
	All waterway crossings will be designed and constructed in accordance with the Department of Primary Industries, Office of Water, Guidelines for riparian corridors on waterfront land and guidelines for watercourse crossings on waterfront land	Prior to construction
	Water sources would be confirmed during detailed design phase and in consultation with suppliers and landholders and be subject to availability. A water sourcing strategy will be developed so that water used during the construction phase does not impact on the availability of water to nearby/downstream landowners water users.	Prior to construction
	Any water supplied to the Project from existing water sources will be sourced under agreement with relevant landholders while ensuring WALs, works approvals and water use approvals required under the WM Act (2000) are in place.	Prior to construction
	The on-site wastewater management system will be designed by an appropriately qualified and experienced specialist in accordance with any local government standards and guidelines. Site specific soil testing will be undertaken to confirm the suitability and size of the effluent application area.	Prior to construction
	A Construction Soil and Water Management Plan (CSWMP) will be prepared in consultation with NSW Water Group to outline measures to manage soil and water impacts associated with the construction and decommissioning works. The CSWMP will provide:	Prior to construction

Issue	Management and/or Monitoring Measure	Timing
	- Measures to minimise/manage erosion and sediment transport both within the construction footprint and offsite including requirements for the preparation of erosion and sediment control plans (ESCP) for all progressive stages of construction. - Measures to manage waste including the classification and handling of spoil. - Procedures to manage unexpected finds of contaminated soils. - Measures to manage stockpiles of topsoil and spoil including locations, separation of materials and erosion and sediment control measures. - Hazardous material storage requirements and measures to manage accidental spills including the requirement to maintain materials such as spill kits. - Specific control measures for works on waterfront land which may include timing restrictions and wet weather protocols. - Design standards for drainage, erosion and sediment controls. - Detailed requirements for rehabilitation of disturbed areas to minimise the risk of ongoing erosion post construction. - Erosion and sediment control measures will be implemented and maintained at all work sites in accordance with the principles and requirements in Managing Urban Stormwater - Soils and Construction, Volume 1 (Landcom 2004) and Volume 2D (NSW Department of Environment, Climate Change and Water 2008b), commonly referred to as the “Blue Book”.	
	An Operational Environmental Management Plan (OEMP) will be developed for the Project, including measures to address potentially adverse impacts on the receiving environment surface water quality during the operational phase. This will include the development and appropriate maintenance of suitable ground cover around wind turbines, and grassed table drains near access tracks to minimise the potential for erosion and export of sediment. Additional measures for the treatment of Project Area stormwater runoff are not considered necessary.	Prior to operation
	All hazardous materials and chemicals will be stored in accordance with relevant Australian standards and other state and local guidelines including the NSW EPA’s Storing and Handling Liquids: Environmental Protection – Participants Handbook.	Prior to construction
Air Quality	The CEMP would will be developed during the detailed design and pre-construction phases and would include management measures to limit dust generation and the potential for off-site dust impacts. Specific measures in the CEMP to address air	Prior to construction

Issue	Management and/or Monitoring Measure	Timing
	quality impacts will include: • minimise the area exposed by construction at any one time by minimising clearing and ground disturbance to the minimum necessary and progressively rehabilitating disturbed areas as construction is completed in each area • minimise dust emissions from areas exposed by construction through the application of water and/or dust suppressants using a water cart (as required) • locate, shape and seed longer-term topsoil stockpiles in a strategic manner to minimise dust erosion from exposed surfaces • implement and enforce speed limits for construction vehicles and equipment on unsealed access tracks and hardstand areas • limit construction activities during unfavourable (windy) weather conditions • dust controls (such as water sprays or dust capture systems) for the construction phase concrete batching plants • dust controls (such as water sprays or dust capture systems) for the construction phase crushing and screening plants • regular inspections/audits to ensure appropriate air quality controls are being implemented during construction activities.	
	Air quality emissions during the operations phase would be limited. The OEMP, to be developed during the detailed design phase will include on-site management measures to limit off-site air quality emissions. Specific measures in the OEMP to address air quality impacts would include: • implement and enforce speed limits for operations vehicles and equipment on unsealed access tracks and hardstand areas • minimise dust emissions from exposed areas through the application of water and/or dust suppressants using a water cart (as required) • limit operational maintenance activities during unfavourable (windy) weather conditions • regular inspections/audits to ensure appropriate air quality controls are being implemented during operations and	Prior to operation

Issue	Management and/or Monitoring Measure	Timing
	maintenance activities.	
Land	Key land use conflict risks include those associated with traffic (during construction and decommissioning), private aviation operations, bush fire and visual amenity. These issues have been subject to assessment as part of the EIS and appropriate management and mitigation measures have been identified throughout this appendix.	
	Should decommissioning be required, When the Project is decommissioned all above ground structures not required for the ongoing agricultural use of the land, including the WTGs and associated facilities will be removed and the land rehabilitated so that the areas occupied by the Project can return to agricultural use.	Prior to decommissioning
	Potential land use impacts will be managed through the establishment and implementation of the following management plans: • Construction Environmental Management Plan. • Operational Environmental Management Plan. The following standalone subplans would be incorporated into the CEMP and OEMP: • Biodiversity Management Plan (Aquatic and Terrestrial Ecology). • Emergency Response Plan. • Heritage Management Plan (Aboriginal and Historic Cultural Heritage). • Traffic Management Plan. • Construction Soil and Water Management Plan (including Erosion and Sediment Control Plans). • Waste Management Plan. • Decommissioning and Rehabilitation Management Plan.	Prior to construction, prior to operation, and prior to decommissioning

Issue	Management and/or Monitoring Measure	Timing
Aviation Safety	Final design details of WGTs, temporary calibration meteorological masts and permanent power performance masts exceeding 100 m AGL will be reported to CASA as soon as practicable. after forming the intention to construct or erect the proposed object or structure.	Prior to construction
	Final design details of WGT, temporary calibration meteorological mast and permanent power performance mast coordinates and elevation will be provided to Airservices Australia.	Prior to construction
	Any obstacles above 100 m AGL (including temporary construction equipment) will be reported to Airservices Australia NOTAM office until they are incorporated in published operational documents.	Prior to construction
	Details of the wind farm will be provided to Swan Hill Aerodrome local and regional aircraft operators prior to construction in order for them to consider the potential impact of the wind farm on their operations.	Prior to construction
	To facilitate the flight planning of aerial application operators, details of the Project, including the 'as constructed' location and height information of WGTs, temporary calibration meteorological masts, permanent power performance masts and overhead transmission lines will be provided to host landowners, adjoining landowners and owners of ALAs identified within 3 nm of the Project so that, when asked for hazard information on their property, the landowner may provide the aerial application pilot with all relevant information.	Prior to construction
	Windlab will engage with any local aerial agricultural operators, NPWS and aerial firefighting operators in developing procedures for such aircraft operations in the vicinity of the Project.	Prior to operation
	Windlab will notify landowners of the identified landing grounds within 3 nm of the Project Area to determine any impacts from the WGT proximity and potential wake turbulence effects.	Prior to construction
	The rotor blades, nacelle and the mast supporting the WGTs will be painted white, typical of most WGTs operational in Australia. No additional marking measures are required for WGTs.	Prior to and during construction
	Consideration will be given to marking temporary calibration meteorological masts and permanent power performance masts in accordance with relevant standards.	Prior to construction

Issue	Management and/or Monitoring Measure	Timing
	Consideration will be given to lighting temporary calibration meteorological masts and permanent power performance masts installed prior to WTG installation and masts that are greater than 900 m from a WTG with medium intensity steady red obstacle lighting at the top of the mast.	Prior to construction
	Overhead transmission lines and/or supporting poles that are located where they could adversely affect aerial application operations will be identified in consultation with local aerial application operators and marked in accordance with relevant standards.	Prior to construction
Telecommunications	Windlab will continue to undertake consultation with link operators, the Bureau of Meteorology and mobile service providers to confirm any required clearances and potential impacts to their services.	Prior to construction
	All electrical equipment will be installed and maintained in line with Australian Standards.	During construction and operations
Bush fire	A Bushfire Emergency Management Plan will be developed for the Project in accordance with PBP 2019 and in consultation with the RFS (including any requirements in relation to aerial firefighting).	Prior to construction
	Consultation will also be undertaken with NPWS in relation to the adjoining Yanga National Park and associated bush fire management strategy.	Prior to construction
	The Bushfire Emergency Management Plan will identify all relevant bush/grass fire risks and mitigation measures associated with the construction and operation of the Project, including: - detailed measures to prevent or mitigate fires igniting, outlining: - APZ locations and management requirements - any specific construction management requirements - access locations, passing bays and any alternate emergency access - management requirements in relation to aerial firefighting - water supply and location and any other bush fire suppression systems (including any drenching systems, static water supply, natural water sources)	Prior to construction

Issue	Management and/or Monitoring Measure	Timing
	○ construction work that should not be carried out during total fire bans ○ availability of fire-suppression equipment ○ storage and maintenance of fuels and other flammable materials. ● notification of the local NSW RFS Fire Control Centre for any works that have the potential to ignite surrounding vegetation, proposed to be carried out during a bush-fire fire danger period to ensure weather conditions are appropriate ● appropriate bush fire emergency management and evacuation plan.	
Preliminary Hazard Analysis	A standard test method for evaluating thermal runaway fire propagation in BESS (UL9540A report) shall be conducted and its findings submitted to the relevant authority prior to installation.	During construction
	Testing to demonstrate clearances required to prevent propagation of fires between separated units.	During construction
	BESS to be installed in accordance with manufacturer and UL9540A report recommended clearances based on testing.	During construction
	BESS to be installed with fire protection systems specified by the manufacturer and UL9540A report.	During construction
	Before construction, detailed design to validate the system can be installed in the Project area whilst meeting the recommended clearances.	Prior to construction
	UL testing information shall be made available to the certifying authority. It is noted that a confidentiality agreement may be required.	During construction
	The vent covers of the BESS shall be constructed of non-combustible material.	During construction
	The vents shall not be located above battery packs within the BESS container.	During construction
Blade Throw	Windlab will design and implement on-site monitoring and maintenance programs that will allow the Project to be remotely monitored and may assist in the early detection of potential WTG faults, reducing the risk of serious or dangerous problems developing.	During operation
Social	Develop and implement a Stakeholder Engagement Plan (SEP) covering construction and operation phases. SEP to include:	Prior to construction

Issue	Management and/or Monitoring Measure	Timing
	- regular Project updates provided across a variety of platforms (e.g. electronic and hard-copy communication materials) - information around local impacts arising from construction related activities for Host Landowners, Immediate Neighbours, Secondary Neighbours, and the Local Communities and Community Groups.	
	Implement the Voluntary Planning Agreement with Balranald Shire Council and Murray River Council.	Prior to construction
	Develop and implement the Community Benefit Fund and First Nations Fund , consulting with key stakeholders and potential partners.	Prior to construction, during construction and during operation
	Work with local communities and community groups in the delivery of the Community Benefit Fund, First Nations Fund and associated initiatives.	Prior to construction, during construction and during operation
	Ensure the application and merit-based assessment process for the Community Benefit Fund and First Nations Fund is published publicly to instil a sense of transparency and trust in the process for Project stakeholders.	Prior to construction
	Publish collateral associated with the Community Benefit Fund and First Nations Fund to the communities within the Social Locality via various communication methods/channels as per the operation phase SEP.	Prior to construction, during construction and during operation
	Develop and implement a Construction Workforce Accommodation Strategy (CWAS) for the Project. The CWAS is to include measures to encourage and set targets for local employment for the EPC Contractor.	Prior to construction
	Establish and implement a First Nations Participation Plan.	Prior to construction
	Apply construction phase mitigation measures to reduce the impacts that could further exacerbate implications for community cohesion.	Prior to construction and during construction
	Use varied and/or alternative engagement methods to reduce the potential for stakeholder fatigue and enable the ongoing engagement of stakeholders for the duration of the construction phase.	Prior to construction and during construction
	Develop and implement a grievance mechanism to ensure that concerns / complaints are identified and acted upon.	Prior to construction

Issue	Management and/or Monitoring Measure	Timing
	Create awareness amongst the community, in partnership with the Murray River Council, Balranald Shire Council, and Swan Hill Rural City Council, and other partner organisations to foster a better understanding of the ways prospective workers may be able to take part in the Project. This awareness is to be generated using a Project specific website and existing communication channels within the Murray River, Balranald, and Rural City of Swan Hill LGAs.	Prior to construction and during construction
	Work with the EPC Project contractors during the construction phase to maximise local employment.	Prior to construction and during construction
	Work with the Murray River Council, Balranald Shire Council, Swan Hill Rural City Council, and the NSW State Government to identify opportunities to support and/or contribute to TAFE courses (or similar) in order to promote the development of complementary skillsets for renewable energy projects within the Social Locality and wider region.	Prior to construction and during construction
	Work with the EPC Project contractors during the construction phase to track and report on the local content used for the Project to demonstrate the extent to which local content is being accessed.	Prior to construction and during construction
	Assist respective local/regional Commercial Businesses/Groups/Organisations in becoming 'job ready'.	Prior to construction and during construction
	Monitor for skills shortages within the region and take this into consideration with EPC Project contractors recruitment objectives.	Prior to construction and during construction
	Continue to engage with Immediate Neighbours to ensure that suitable landscaping solutions are implemented to minimise visual impacts, where required.	Prior to construction
	Develop and implement an Environmental Management System (EMS) that will include specific mitigations for construction phase impacts.	Prior to construction
	Develop and implement a construction phase Traffic Management Plan (TMP) which draws on the Project Traffic and Transport Impact Assessment (TTIA).	Prior to construction
	Continue to engage with relevant stakeholders to ensure that matters raised in relation to traffic concerns, particularly those that relate to harvest period traffic movements are appropriately considered and incorporated into construction management	Prior to construction and during construction

Issue	Management and/or Monitoring Measure	Timing
	processes and procedures.	
	Continue to engage with the Murray River Council, Balranald Shire Council, and Swan Hill City Council, to understand pressures experienced by the Social Locality in relation to worker influx and accommodation.	Prior to construction and during construction
	Develop and implement a Worker Code of Conduct to mitigate the potential for increased anti-social behaviour or crime that may potential arise from an increased number of FIFO/DIDO workers.	Prior to construction
	Ongoing engagement with relevant health (e.g. hospitals, medical clinics, etc.) and emergency services (e.g. ambulance, police, RFS, SES, etc.).	Prior to construction and during construction
	Communicate the outcomes of relevant assessments and associated technical management/mitigation measures (if required).	Prior to construction and during construction
	Develop and implement local content initiatives which include local employment goals for the operation phase. These initiatives are to be aimed at livelihoods, including people's capacity to sustain themselves through employment.	Prior to construction
	Work with the Consent Authority to ensure that a workable outcome is achieved via conditions to approval to facilitate continued long-term use of the land for agricultural purposes.	Prior to construction and during construction
	Ongoing consultation with Immediate Neighbours to provide screen planning to manage the visual impact of the Project. This may include completion of a localised visual impact assessment where merited.	Prior to construction and during construction
	Work with local/regional Commercial Businesses/Groups/Organisations and Local Communities and Community Groups to supply, plant, and maintain (for an initial establishment period) landscape screening, where required.	Prior to construction and during construction
	Develop and Implement a Cultural Heritage Management Plan.	Prior to construction
	Engage with the proponents of the identified projects with the potential for traffic and transport related cumulative impacts to ascertain an understanding as any particular periods of intense road use by transport vehicles and/or OSOM vehicles. This information can then be disseminated to Project stakeholders as considered relevant.	Prior to construction
Economic	Windlab will develop and implement a Construction Workforce and Accommodation Strategy (CWAS) in consultation with	Prior to construction

Issue	Management and/or Monitoring Measure	Timing
	relevant stakeholders (including Balranald and Murray River Councils). The CWAS will include: • measures to ensure there is sufficient accommodation for the workforce associated with the construction phase of the Project (including utilisation of the Balranald TWC facility) • measures to addresses cumulative impacts arising associated with other development projects • measures to prioritise the employment of local workers and the procurement of local businesses • a program to monitor and review the effectiveness of the CWAS including regular monitoring and review during the construction phase.	
Waste	As part of the detailed design and construction phase a Waste Management Plan will be prepared which will include a detailed breakdown of waste types and quantities in accordance with relevant legislation and guidelines. The Waste Management Plan will outline the measures and strategies to be implemented on site to manage, reuse, recycle and safely dispose of waste including: • separation and storage of recyclable and non-recyclable materials • reuse and collection/transportation of waste • procedures for tracking waste storage and disposal.	Prior to construction
	On-site waste management will include the appropriate separation and storage of waste streams to enable recycling and reuse wherever possible to reduce associated environmental impacts and impact to the capacity of local waste management facilities.	During operation
	A Decommissioning and Rehabilitation Plan will be developed for the Project prior to closure which will include a detailed review of the associated waste streams and recycling/disposal options available at the time.	Prior to decommissioning
	At the end of the operational life of the Project, all above ground infrastructure will be dismantled and removed from the Project Site and recycled in accordance with best practice at the time. Some components will be left in-situ such as the WTG tower bases. WTG tower bases would be cut back to below ground level allowing ploughing over or topsoil to be built up over the footing to achieve a similar result. The land will be returned to near prior condition. Underground cables (inert and stable) at a depth greater than 500 mm would be left in-situ to avoid unnecessary ground disturbance. Essential connection	During decommissioning

Issue	Management and/or Monitoring Measure	Timing
	infrastructure will also be retained.	