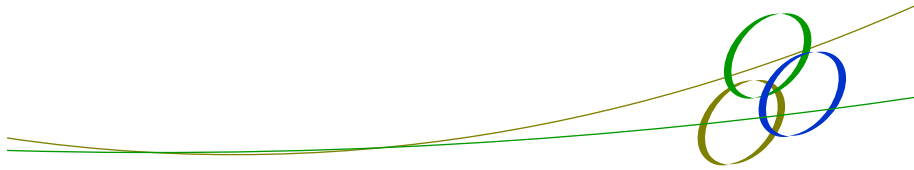


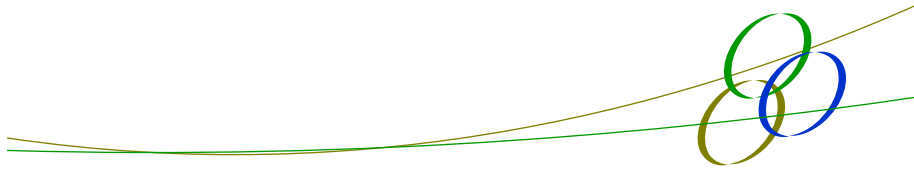
GLEN INNES WINDFARM CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

Prepared for Nexif

Prepared by Environmental Property Services



Contact Information and Declaration	
Declaration:	<p>The opinions and declarations in this CEMP are ascribed to Environmental Property Services (EPS) and are made in good faith and trust that such statements are neither false nor misleading.</p> <p>In preparing this CEMP, EPS has considered and relied upon information obtained from the public domain, supplemented by discussions between key EPS staff, representatives from governing agencies and independents, including Nexif.</p>
Prepared by:	<p>Shae Riley Lewis <i>Senior Environmental Consultant</i> Environmental Property Services PO Box 348 NELSON BAY NSW 2315 Ph: 02 4981 1600</p>
Subject land:	<p>Waterloo Range, Glen Innes</p>



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Client:	Nexif			
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V03	04.10.16	20161004_11262_CEMP_FINAL	S. Riley-Lewis, A. Tipper	M. Shelly
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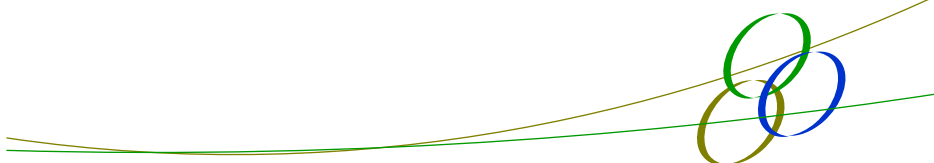
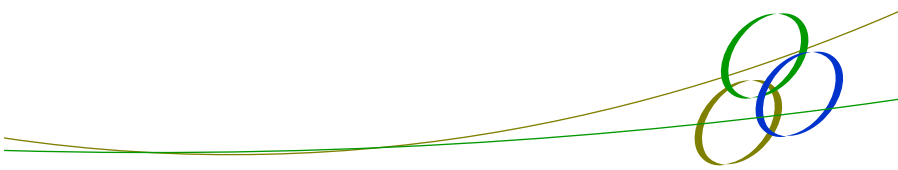


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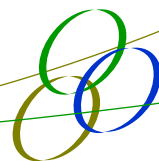
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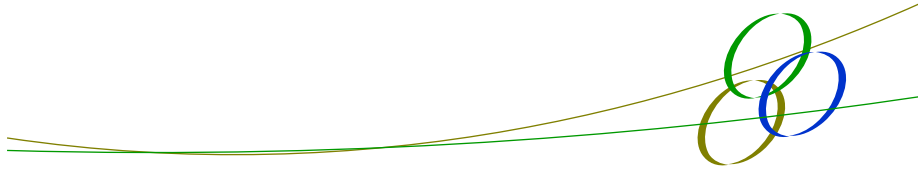
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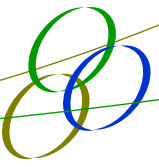
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Appendix 10 – Weeds Management Plan
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Appendix 13 – Green House Gas Management Plan
Appendix 14 – Erosion and Sediment Control Plan
Appendix 15 – Flora and Fauna Management Plan
Appendix 16 – Emergency Response Plan
Appendix 17 – Dangerous Goods and Hazardous Material Management Plan



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1 BACKGROUND

1.1 Introduction

This Construction Environmental Management Plan (CEMP) has been prepared to specify the environmental mitigation measures to be implemented during the construction of the Glen Innes Wind Farm (MP 07_0036), and to document the mechanisms for demonstrating compliance with relevant approvals.

1.2 Site Description

The Glen Innes Wind Farm is to be located on the Waterloo Range approximately 12km west of Glen Innes. The Waterloo Range rises approximately 150m above the surrounding valleys to an elevation of approximately 1150m. The topography includes a series of rolling hills which form a ridgeline orientated in a north-south direction. The total site extends over approximately 8.5km of the range, covering 2550ha. Land use around the site is mainly livestock grazing with some rural residences.

The project site is owned by five separate landowners, with whom the Proponent has entered into leases for the purpose of planning, construction and operation of the wind farm.

1.3 Project Description

The components of the wind farm project include:

- 25 wind turbines;
- A substation and auxiliary services buildings;
- 33kV underground electrical and control cables;
- Connection to the TransGrid 132kV overhead transmission line ;
- Access tracks to turbine sites and the substation;
- Temporary construction facilities including a site office, parking and materials storage areas;
- Permanent site office, operations and maintenance building, facilities and parking;
- Temporary and permanent meteorological masts; and
- Mobile concrete batch plant.

Table 1-1 provides the approximate areas of temporary and long-term disturbance that associated with each facility component.

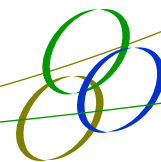


Table 1-1: Approximate Disturbance Footprint

Project component	Approximate dimensions	Estimated area (ha)	
		Long term	Temporary
Turbine footings (25)	18 x 18m each	0.9	0
Turbine assembly hard stand areas (pads)	50 x 35m each	5.7	0
Substation	80 x 50m	0.4	0
Facilities and auxiliary services building	80 x 50m	Included with substation.	
New access tracks	5.5m wide x 14km	11.2	1.5
33KV underground cables	1-2m wide x 20km	0	2.6
Underground connection	< 0.5km	0	0.1
Temporary construction facilities			
Site office	80 x 50m	0	0.4
Concrete batch plant	80 x 50m	0	0.4
Totals		18.2	5

1.3.1 Turbines and Towers

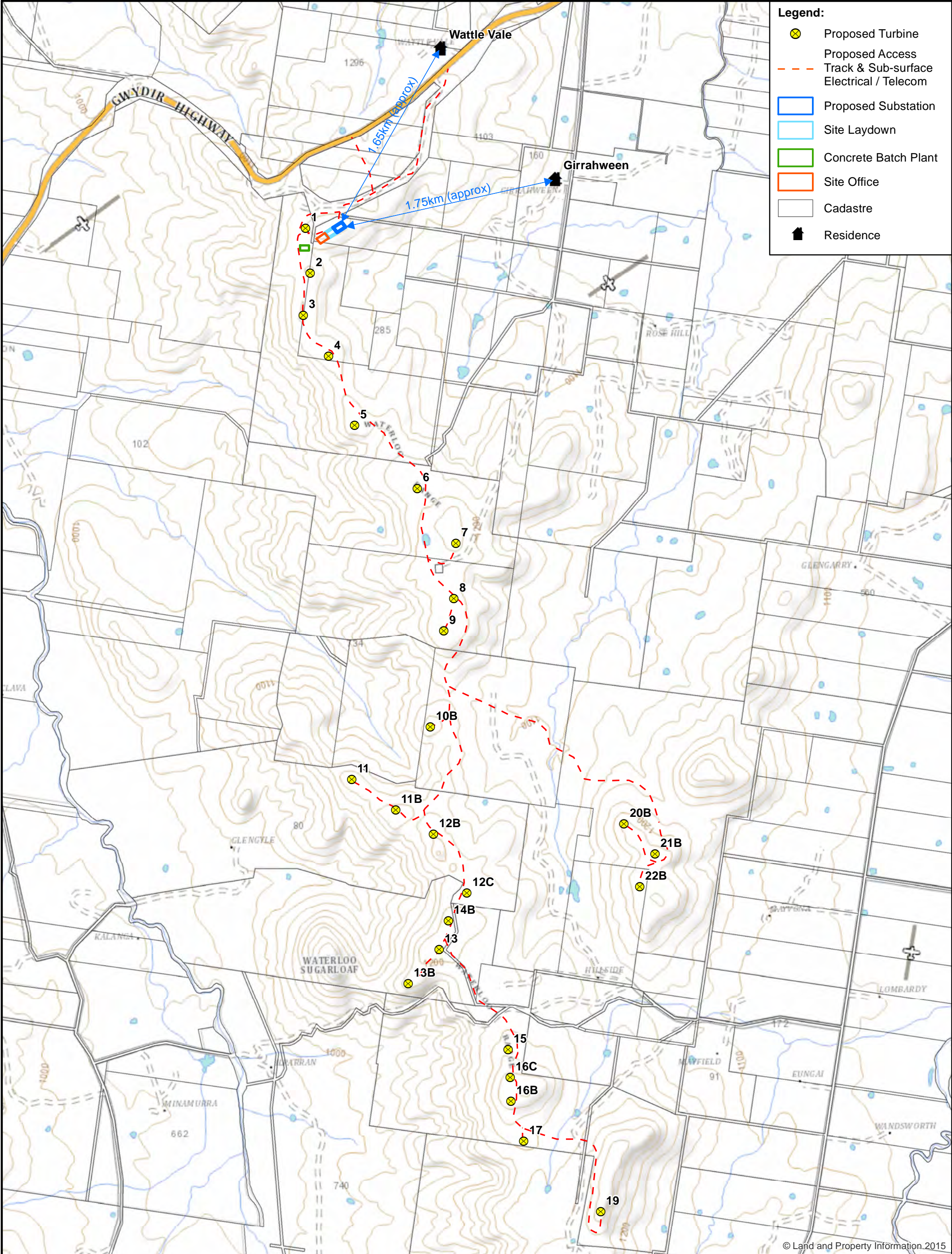
Twenty-five (25) three blade turbines with a tip height of 150m. Each turbine will be equipped with a dry-type transformer, located within at the rear of the turbine nacelle. The nominal oil capacity will be 1,000 – 1200 Litres.

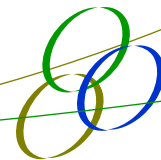
1.3.2 Electrical Connections and Substation

Each turbine will be connected by underground 33kV cable to a substation secured with anti-personal fences at the northern end of the site (see Figure 1). The substation footprint is approximately 0.4ha.

The substation output voltage will be 132kV and it will be connected to the National Electricity Market grid through the TransGrid network via a short section of overhead cabling.

The substation transformers will be oil cooled, with an oil capacity of nominally 25,000L, and will be provided with spill containment bunds in accordance with standard design practice and no less than 100% of the oil capacity of the transformer.





1.3.3 Ancillary Facilities

Ancillary infrastructure locations are shown in Figure 2.

Ancillary infrastructure includes:

- 2 x site compounds;
- Substation;
- Blade laydown area at each WTG location
- 2 x laydown/storage areas; and
- Concrete batching plant.

Additional ancillary infrastructure may be built and used if it satisfies the following criteria as per Condition 2.53 of the Project Approval:

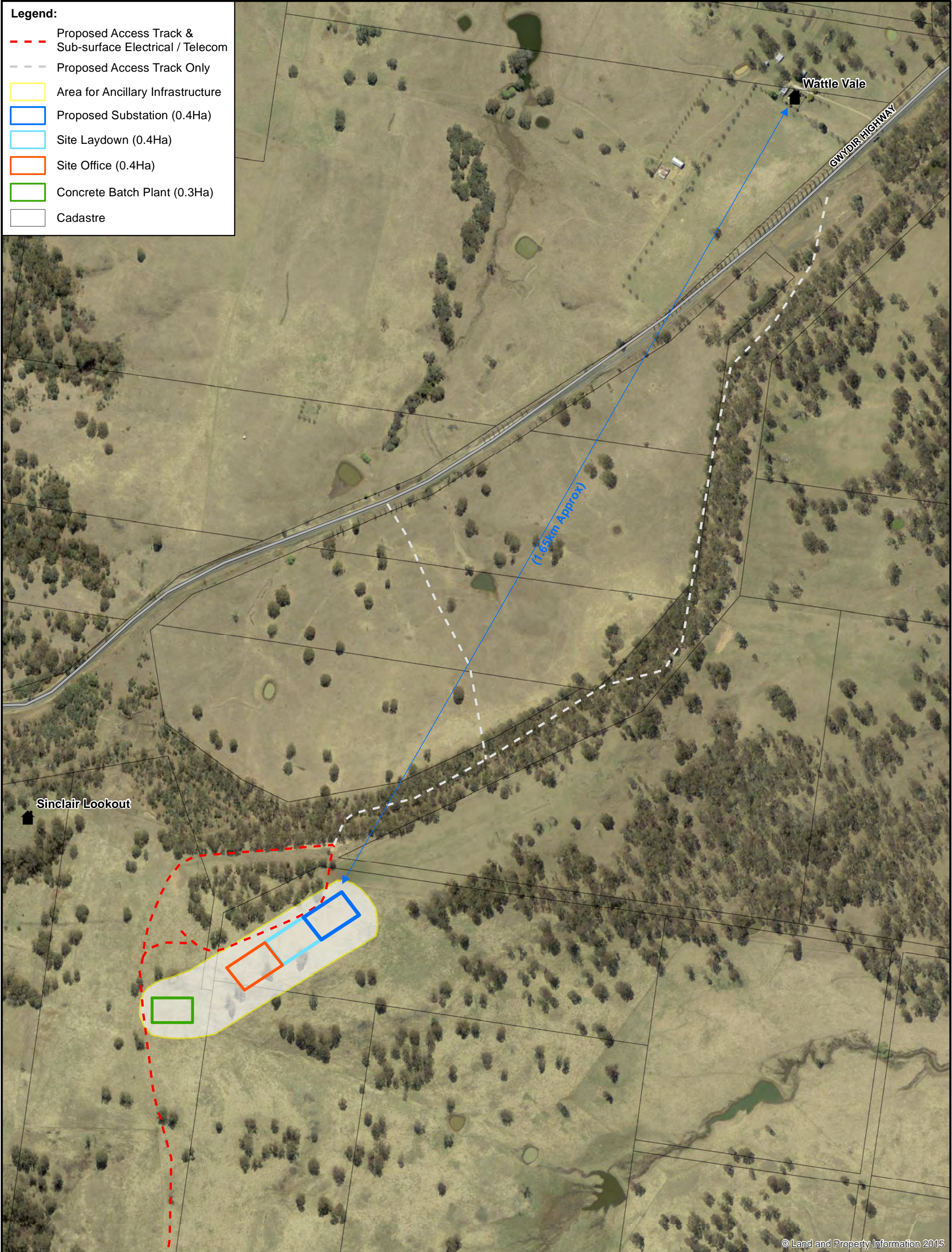
- a) Be located within the site;
- b) Have ready access to the road network;
- c) Be located to minimise the need for heavy vehicles to travel through residential areas;
- d) Be sited on relatively level land;
- e) Be separated from nearest residences by at least 200m (or at least 250m for a temporary batch plant) with the exception of the temporary site office location;
- f) Be located above the 20 ARI flood level unless a contingency plan to manage flooding is prepared and implemented;
- g) Not require vegetation clearing beyond that already required for the project; and
- h) Not adversely affect the land use of adjacent properties.

Assessment against Consent Condition 2.53 is provided in Appendix 2.

1.4 Construction Activities

The principal construction activities are as follows (generally in time sequence, with some activities being concurrent):

- Completion of permitting and consent compliance documentation;
- Selection of construction EPC contractor;
- Community notification;
- Site establishment (site sheds, laydown areas, concrete batching plant);
- Access road construction;
- Turbine tower footing excavation and concreting;
- Cable trenching;
- Tower and turbine installation;
- Cable and transformer installation;
- Substation installation and grid connection works; and
- Commissioning and site restoration.



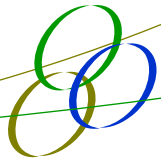
Author:	K. Lee	<div>Figure 2</div> <div>ANCILLARY INFRASTRUCTURE PLAN</div> <div>OneWind Wind Farm Glen Innes, NSW</div> <div>10 August 2016</div>	<div>EPS</div> <div>ENVIRONMENTAL PROPERTY SERVICES</div>
Reviewer:	M. Shelly		
A3 Scale:	1:6,000		
Job Ref:	11262		

N

0 62.5 125 250

Metres

Map Projection: GDA 1994 MGA Zone 56



1.4.1 Staffing and Hours

Staff numbers are likely to range between 10 to 80 during the construction phase.

Work would generally be undertaken during standard construction work hours as follows:

- 7am to 6pm Monday to Friday;
- 8am to 1pm Saturdays; and
- No work on Sundays and NSW Public Holidays

The following construction activities may be undertaken outside these hours without the approval of the Secretary of the Department of Planning and Environment:

- Activities that are inaudible at non-associated residences;
- The delivery of materials as requested by the NSW Police Force or other authorities for safety reasons; or
- Emergency work to avoid the loss of life, property and/or material harm to the environment.

Any work proposed to be conducted outside of the standard work hours would be undertaken in accordance with the out-of-hours procedures described in Section 3.3.

1.4.2 Construction Process

Construction activities include activities that cross over with pre-construction works and comprise site establishment, earth works for access roads, footings and crane hardstand areas, erection of 25 wind turbines, four permanent wind monitoring masts, a collector substation, above and below ground cabling, temporary site facilities and testing and commissioning of the facility.

Site Establishment and Temporary Infrastructure

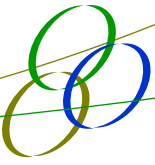
Site works will require the erection of temporary infrastructure such as a portable field office, toilet facilities, construction compound, ancillary facilities and parking bays. This infrastructure will be typical of that used at construction sites; however, it will not include full accommodation facilities.

On-site Concrete Batch Plant/Rock Crusher

Up to two concrete batching plants and a rock crushing facility will be constructed to supply concrete and gravel for the wind turbines foundations.

Road Works and Crane Hard Stands

Site access roads and crane hardstand/assembly areas require surfacing in order to cater for construction traffic and machinery. This involves the excavation of the roads and hardstand areas prior to the laying of a compacted gravel rubble base. A hardstand/crane assembly area will be



required at each turbine location. Site access roads surface will be constructed at a width of 5.5 m however, the actual disturbance area will be approximately 18 m to allow for shoulders, drainage, underground cabling and passing construction traffic, large mobile cranes, and other long and wide loads.

The crane hardstand and assembly areas will be sized at approximately 50 by 50 m. The following general activities are required: Upgrade and maintain existing site entry access, including vegetation removal and/or pruning, improving runoff and drainage, and improving the site access surface through pavement works.

Construct and maintain on-site access roads between turbines, hardstand areas and where required for construction of the overhead transmission line, cable routes and for access to erosion control sites. This would involve excavation (cut/fill), laying of pavement material, compaction and runoff and drainage construction. Widening existing gateways or inserting new gateways as necessary. Construct crane working pads, turn around areas and intersections, where required. This would require excavation including cut/fill, runoff and drainage works and construction of pavement.

Footings

One of the following two methods of foundation construction would be adopted:

1. *Gravity Foundations:* -

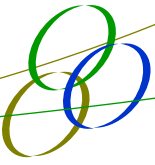
The construction of gravity foundations will involve the excavation of approximately 450 m³ ground material to a depth of approximately 2.5 m. Shuttering and steel reinforcement would then be put in place and concrete poured to form the base in-situ. The upper surface of each base would finish approximately 0.5 to 1 m below ground level with either a central reinforced concrete plinth to support the tower, or a base steel tower section set into the concrete.

2. *Rock Anchor Foundations:* -

The construction of rock anchor foundations will involve the excavation of approximately 100 m³ of ground material to a depth of approximately 2.5 m. The rock anchor cores are drilled into the bed rock prior to concrete pour, and are up to a depth of approximately 20 m. The rock anchor tendons are grouted into place, stressed and secured once the concrete has cured sufficiently. Steel forms shuttering and steel reinforcement will then be put in place and concrete poured to form the base in-situ. The upper surface of each base will finish at ground level with either a central reinforced concrete plinth to support the tower, or a base steel tower section set into the concrete.

On-site Electrical Reticulation

Either prior to or during turbine base construction, the underground site electrical system will be installed. This will involve the cutting or excavation of trenches to a depth of up to 1.2 m for the laying of the underground cabling that links the turbines. All trenches will be marked with warning tape and backfilled once the cables were in place.



The majority of the underground cabling will be located adjacent to the access roads. The general procedure for the laying of underground cables will be as follows:

- Preparation work, including installation of gates/temporary removal of fences as required;
- Use of an excavator or rock saw to dig a trench (0.45 m wide by 1.2 m deep);
- Material excavated is stored adjacent to the trench for subsequent back-filling;
- Laying of bundled cables within a bed of protective sand;
- Backfilling and compaction of previously excavated material in layers by use of a vibration plate compactor, all in accordance with Engineering Specifications;
- Placement of tape warning of the presence of electrical cables at the required depth.
- On completion the cable route may be marked with small marker posts and the surrounding vegetation will be allowed to regrow.

Collector Substation Compound

The total compound area will be in the order of 100 m by 100 m or one hectare. A 20 m Asset Protection Zone (APZ) area will extend from the boundary of the installed equipment. The yard will be surfaced with compacted quarry rubble to form a hardstand area. Reinforced concrete footings will then be constructed to support electrical infrastructure and buildings. Infrastructure required within the yard includes a 33/132 kV transformer, switchgear, power conditioning equipment and operation facilities building.

Turbine Erection

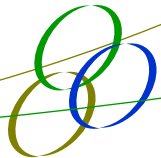
Turbine components will be delivered to the Project site on semi-trailers. The method of construction will involve the use of a small mobile crane (up to 100 tonne) for the ground assembly of turbine blades. A larger 600-1,000 tonne crane together with the small mobile crane, will be required to erect the turbines once ground assembly is complete. Depending on the configuration, the crane may require up to 2 days to disassemble and remobilise to a new site

1.4.3 Demobilisation

Temporary site facilities, environmental controls, all waste, construction equipment and construction signage will be removed post-construction. Access roads used only for this stage of the works will be re-instated back to 6 m or removed where required. The site will also be rehabilitated as detailed in the Landscape and Rehabilitation Management Plan (LRMP).

1.5 Indicative Timing and Scheduling

Construction activity is likely to occur over a period of approximately 18 months with restoration following the completion of works.



The complete project is expected to take 18 months to complete with site establishment occurring by April 2017 and completion of the project by May 2018. A break down is as follows:

- Road Construction 4.5 months;
- Substation Construction 10 months; and
- Turbine Installation 4 month.

1.6 Context

This CEMP has been prepared in response to the Condition 6.2 of Project Approval 07_0036.

This CEMP is consistent with:

- AS/NZS ISO 14001:2004 Environmental Management Systems - requirements and guidance for use;
- Department of Planning, 2004, Guidelines for Preparation of Environmental Management Plans;
- NSW Minister for Planning's Conditions of Approval;
- Environmental Assessment (EA);
- Statement of Commitments; and
- Submissions Report.

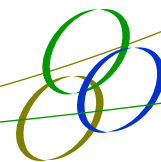
This CEMP is a working document to ensure all environmental requirements and commitments made in the EA, Statement of Commitments, Preliminary Project Report, Secretary's Conditions of Approval and other licences, approvals and agreements are accurately communicated and implemented by all staff.

This CEMP establishes a minimum standard for construction. The contractor will review and update this CEMP with construction specific details as required. Any amended version of the CEMP prepared by the contractor must specifically reflect applicable conditions of the Project Approval, and all other applicable approvals or agreements.

1.7 Objectives

The objectives of this CEMP are:

- To minimise and control the impact of construction on the environment;
- Ensure compliance with all relevant legislation and project approvals;
- Minimise disruption and inconvenience to the community during construction;
- Equip all project staff and contractors with the appropriate training, equipment and delegations to implement their environmental obligations under this CEMP; and
- Provide mechanisms for identifying and managing environmental impacts arising from changes to construction.



1.8 Environmental Policy

This CEMP is prepared and will be implemented in accordance with the Nexif Energy Pty Ltd Environmental Policy included in Appendix 4.

1.9 Consultation

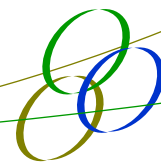
Relevant community and agency stakeholders were consulted during preparation of the EA. Relevant community and agency stakeholders consulted include:

- Landowners;
- Neighbours;
- Glen Innes local community;
- Glen Innes Local Aboriginal Land Council;
- Local media;
- Glen Innes – Severn Shire Council;
- Inverell Shire Council;
- Department of Planning and Environment;
- Department of Environment and Climate Change;
- TransGrid;
- Country Energy;
- Roads and Maritime Services;
- Department of Lands;
- Local Land Services;
- Rural Fire Service;
- Department of Water and Energy;
- Department of Primary Industries;
- Office of Renewable Energy;
- Civil Aviation Safety Authority;
- AirServices Australia;
- Department of Defence;
- Telstra; and
- Aerial Agriculture Association of Australia.

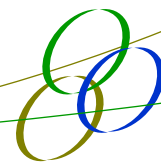
A summary of the issues raised by community and agency stakeholders during preparation of the EA is provided in Table 1-2.

Table 1-2: Stakeholder Issues Raised

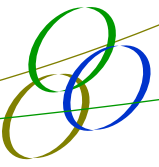
Stakeholder Group	Summary of Key Issues Raised	Nexif Response
Landowners	<ul style="list-style-type: none">• Lease arrangements, project design and impacts on use of their land, visual, noise, etc.	<ul style="list-style-type: none">• Land access agreements finalised.



Stakeholder Group	Summary of Key Issues Raised	Nexif Response
Neighbours	<ul style="list-style-type: none"> • Visual Impact – size of turbines, impact on views; • Noise impacts – potential for disturbance; • Potential for adverse impacts on land values; • Health and safety impacts; • Traffic effects, including avoidance of heavy truck movements during school bus hours; • Impacts on birds and bats; and • Inadequate consultation. 	<ul style="list-style-type: none"> • Setbacks increased where practicable. • Condition 2.1 requires specific visual impact amelioration; • Layout designed to comply with noise criteria; • Design and operation to mitigate impacts. Other sites indicate no discernible impact on values; • Controls implemented; • Thorough assessment and identification of controls; • Bird and bat monitoring programme in preparation; and • Notification and information sessions with EA exhibition.
Local Government	<ul style="list-style-type: none"> • Traffic and road safety; • Contributions to local infrastructure; • Impact on rural communities; and • Consultation. 	<ul style="list-style-type: none"> • Liaison with Council; • Negotiation with Council and contribution to Community Enhancement Programme; • Management controls identified; and • Ongoing consultation.
Dept. of Planning	<ul style="list-style-type: none"> • Adequacy of EA Consultation. 	<ul style="list-style-type: none"> • Ongoing consultation.
Dept. of Environment and Climate Change	<ul style="list-style-type: none"> • Flora and fauna assessment; • Archaeological assessment; and • Noise assessment. 	<ul style="list-style-type: none"> • Flora and Fauna Management Plan; • Heritage Sub-plan; and • Noise Management Plan.
TransGrid & Country Energy	<ul style="list-style-type: none"> • Project electrical design and impact on existing power system; and • Grid connection. 	<ul style="list-style-type: none"> • Liaison with TransGrid and Country Energy.
Dept. of Lands	<ul style="list-style-type: none"> • Impacts on Trig Stations and survey. 	<ul style="list-style-type: none"> • Trig stations avoided and Condition 2.51 requires compliance with Lands Dept. requirements during construction and operation.



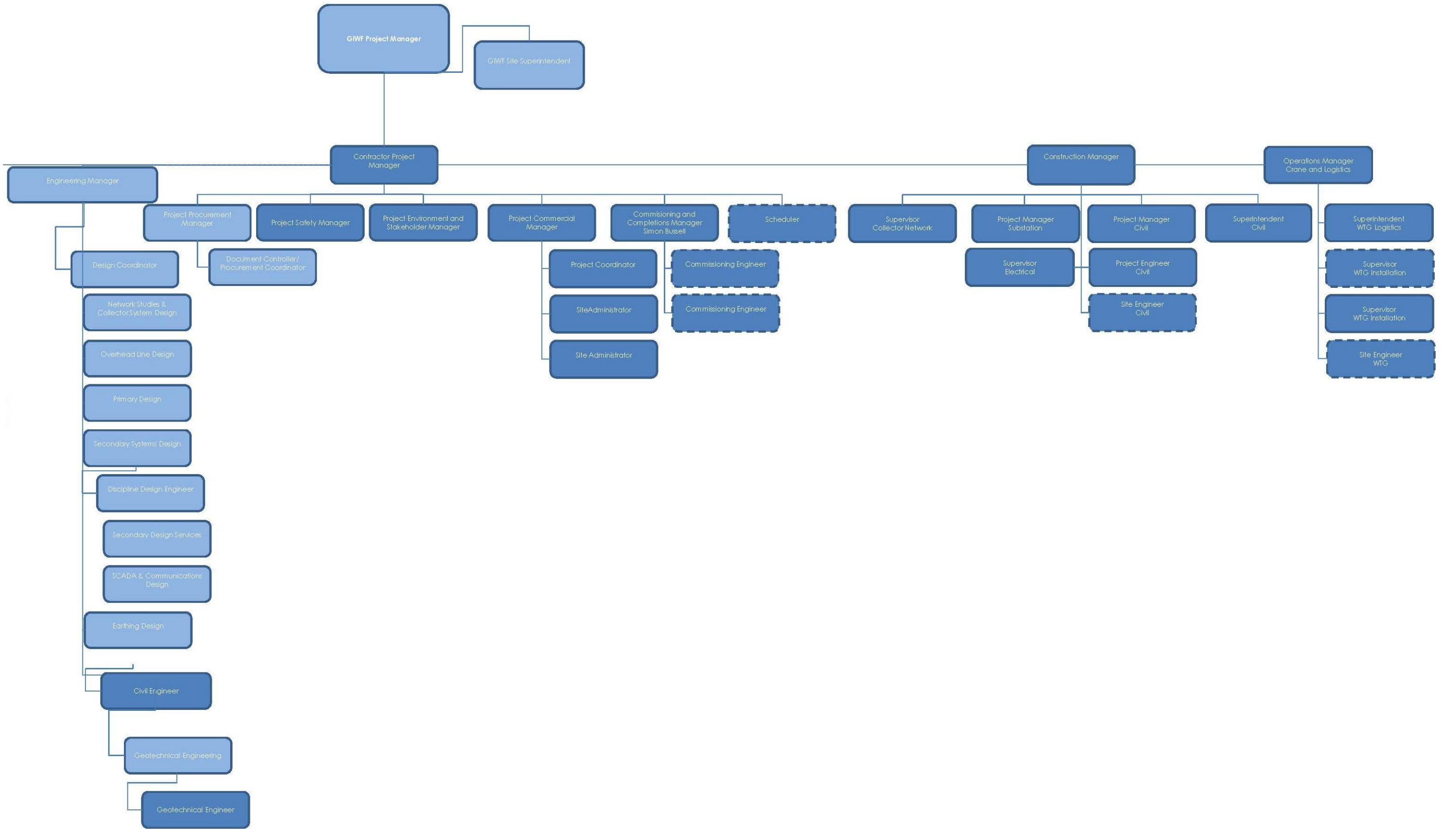
Stakeholder Group	Summary of Key Issues Raised	Nexif Response
NSW Agriculture	<ul style="list-style-type: none">• Impacts on agricultural activities.	<ul style="list-style-type: none">• Minimal impact.
Rural Fire Service	<ul style="list-style-type: none">• Bushfire risk and safety.	<ul style="list-style-type: none">• No residences as part of the development;• Bushfire Management Sub-plan.
Dept. of Water and Energy	<ul style="list-style-type: none">• Support for 'appropriate' renewable energy projects.	<ul style="list-style-type: none">• Liaison for information purposes.
Dept. of Mineral Resources	<ul style="list-style-type: none">• Details of Mineral Titles obtained;• Mineral resources recovery not restricted by development.	<ul style="list-style-type: none">• Confirmed that no conflict with mineral titles.
Dept. Environment, Water, Heritage and the Arts	<ul style="list-style-type: none">• Impacts on National Environmental Issues.	<ul style="list-style-type: none">• Specialist reviews undertaken.
Aboriginal Stakeholders	<ul style="list-style-type: none">• Impacts on heritage values of the locality.	<ul style="list-style-type: none">• Assessment involved Glen Innes Local Aboriginal Land Council.
Local Business	<ul style="list-style-type: none">• Opportunities for business growth.	<ul style="list-style-type: none">• Local updates will provide details of project status.

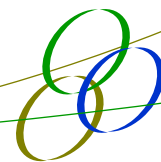


2 ENVIRONMENTAL MANAGEMENT STRUCTURES

2.1 Roles and Responsibilities

Figure 3 provides a copy of the contractor's organisation chart.

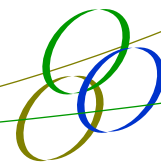




All staff and contractors have an obligation to implement the requirements of this CEMP. Specific responsibilities for administering, implementing, monitoring and reporting are detailed in Table 2-1.

Table 2-1: Roles and Responsibilities

Roles	Responsibilities
Construction Director	<ul style="list-style-type: none">• Ensure the CEMP accurately reflects the construction activities;• Issue non-conformance reports;• Ensure all project personnel attend site induction prior to commencing work; and• Hold regular project team meetings.
Environment Representative	<ul style="list-style-type: none">• Monitor the implementation and outcome of all environmental management plans and monitoring programs;• Advise the construction manager upon satisfactory achievement of environmental management plans/programmes;• Consider applicable obligations related to the conditions of approval, Statement of Commitments, permits and licences and to advise the construction manager on compliance;• Make recommendations to the construction manager on any reasonable steps to be taken to avoid or minimise unintended or adverse environmental impacts;• Authority to authorise actions to avoid or minimise potential environmental impacts, and failing the effectiveness of such steps, to direct cessation of specific activity.• In the event that a non-compliance is identified, the ER is to report the non-compliance incident to the construction manager immediately.• In the event that a non-compliance is left unresolved, the ER is to report the non-compliance to the Secretary and work with the authority and construction manager to rectify any incidents.
Construction Manager	<ul style="list-style-type: none">• Ensure site specific requirements of the CEMP are fulfilled;• Ensure sub-contractors and agents comply with this CEMP;• Undertake environmental auditing and reporting;• Obtain relevant licences, permits and approvals;• Respond to environmental incidents;• Prepare reports on compliance;• Prepare environmental induction training materials;• Provide input and advice on Safe Work Method Statements;• Implement the Community Information Plan;• Primary point of contact for community and regulatory authority liaison;• Ensure all staff and contractors are aware of the community consultation requirements and complaints protocols;• Liaise with stakeholder and government agencies;



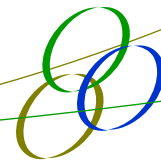
Roles	Responsibilities
	<ul style="list-style-type: none"> • Report on consultation actions and feedback; • Liaise with the Construction Director on construction progress to identify impending activities that require specific communications; • Attend regular project team meetings; and • Authority to authorise actions to avoid or minimise potential environmental impacts, and failing the effectiveness of such steps, to direct cessation of specific activity.
Other Employees and Contractors	<ul style="list-style-type: none"> • Complete site induction; • Attend all environmental training as required; • Comply with the requirements of this CEMP; • Undertake all activities in accordance with agreed procedures and work methods; and • Follow instructions of the Environment and Community Manager.

2.2 Approvals and Licensing

The Project must be undertaken in accordance with the relevant legislation and approvals as provided in Table 2-2. Any relevant changes in legislation arising during construction of the Project will be identified and relevant updates made to this CEMP.

Table 2-2: Relevant Legislation and Approvals

Legislation	Relevance to Project	Approval Body
<i>Roads Act 1993</i>	Approval for work within the road reserve of Gwydir Highway and local roads under Section 138 of the Act.	RMS and Council
<i>Roads Act 1993</i>	Approval for Restricted Access Vehicles (RAVs) traffic through the streets of Glen Innes and on any local roads approaching the wind farm site.	Council
<i>Water Act 1912</i>	If water is to be sourced from the river or groundwater not managed under the <i>Water Management Act 2000</i> .	NSW Office of Water
<i>Conveyancing Act 1919</i>	Creation of easements for utilities (water/electricity/telecoms) under Section 88B of the Act.	Department of Land and Property Information (LPI)
<i>Dangerous Goods (Road and Rail Transport) Act 2008</i>	Notice to store dangerous goods required.	WorkCover
<i>National Parks and Wildlife Act 1974</i>	Biodiversity offset agreement	Office of Environment and Heritage (OEH)
<i>Environment Planning and Assessment Act 1979</i>	Construction Certificate and certification of CEMP.	Department of Planning and Environment (DoP&E)



2.3 Other Agreements

Construction of the wind farm will require cooperation and agreement of additional third parties (refer Table 2-3). This CEMP shall be updated to incorporate any environmental mitigation measures arising from these agreements.

Table 2-3: Other Agreements

Agreement	Third Party
Works Authorisation Deed (WAD) for access from Gwydir Highway	RMS
Powerline installation and relocation	Ausgrid /TransGrid and/or Country Energy
Water source	NSW Office of Water
Biodiversity offset agreement	OEH
Visual screen planting	Private landowners
Design, construction and temporary use of the Travelling Stock Route 67474	Department of Lands and RMS
Landscape screening along public roads	RMS and Council

2.4 Secretary's Conditions of Approval

This CEMP is prepared in accordance with the Secretary's Conditions of Approval as summarised in Table 2-4.

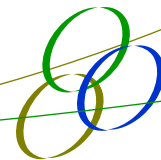
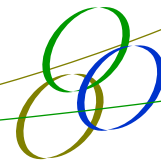
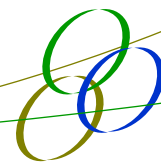


Table 2-4: Relevant Secretary's Conditions of Approval

No.	Secretary's Conditions of Approval	Where addressed
6.2	<p>The Proponent shall prepare and implement a Construction Environmental Management Plan in accordance with the <i>Guideline for the Preparation of Environmental Management Plans</i> (DUAP, 2004) or its latest revision. The Plan shall include but not be necessarily be limited to:</p> <ul style="list-style-type: none"> a) a description of all activities to be undertaken on the site during construction including an indication of stages of construction, where relevant; b) statutory and other obligations that the Proponent is required to fulfil during construction including all approvals, consultations and agreements required from authorities and other stakeholders, and key legislation and policies; c) details of how the environmental performance of the construction works will be monitored, and what actions will be taken to address identified adverse environmental impacts. In particular, the following environmental performance issues shall be addressed in the Plan: <ul style="list-style-type: none"> i. measures to monitor and minimise soil erosion on local black clay soils and the discharge of sediment and other pollutants to lands and/ or waters during construction activities, particularly during any construction works at or near drainage lines; ii. details of water sources to be used in consultation with DPI Water (including interactions with private landowner water entitlements where water is to be sourced from private property, volume of water to be used, and licensing and permit requirements); iii. details of the amount and source of spoil to be used during construction in consultation with Council; iv. measures to monitor and manage dust emissions; and v. measures to mitigate and manage bushfire hazards. d) a description of the roles and responsibilities for all relevant employees involved in the construction of the project; e) complaints handling procedures as identified in conditions 4.4 to 1.1; and f) the Management Plans listed under condition 6.3 of this approval. <p>The Plan shall be submitted for the approval of the Secretary no later than one month prior to the commencement of any construction works associated with the project, or within such period otherwise agreed by the Secretary. Construction works shall not commence until</p>	<p>Section 1.3, Section 1.4, Section 3.2, and Section 2.2.</p>



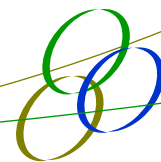
No.	Secretary's Conditions of Approval	Where addressed
	written approval has been received from the Secretary. Upon receipt of the Secretary's approval, the Proponent shall make the Plan publicly available as soon as practicable.	
6.3	<p>As part of the Construction Environmental Management Plan required under condition 6.2 of this approval, the Proponent shall prepare and implement the following Management Plans:</p> <ul style="list-style-type: none"> a) a Noise Management Plan to detail measures to minimise noise emissions associated with the construction of the project. The Plan shall include, but not necessarily be limited to: <ul style="list-style-type: none"> i. identification of all major sources of noise that may be emitted as a result of the construction of the project; ii. specification of the noise criteria as it applies to a particular activity; iii. identification and implementation of best practice management techniques for minimisation of noise and vibration emissions; iv. an assessment of how any proposed blasting will meet the blasting criteria in this Approval (Condition 2.11 and 2.12); v. procedures for the monitoring of noise emissions; and vi. description of the procedures to be undertaken if any non-compliance is detected. 	Section 3.2 and Appendix 5
6.3	<ul style="list-style-type: none"> b) a Traffic Management Plan to outline measures for the management and coordination of road works required under this approval and to minimise potential conflicts between different user groups. The Plan shall be prepared in consultation with the RMS and Council and shall include, but not necessarily be limited to: <ul style="list-style-type: none"> i. procedures for the construction and maintenance of the construction site entrance along the Gwydir Highway; ii. details of measures to minimise interactions between the project and other users of the roads such as the use of fencing, lights, barriers, traffic diversions etc.; iii. procedures for informing the public where any road access will be restricted as a result of the project; iv. procedures to inform vehicle drivers and Glen Innes business owners of the traffic routes to be used by heavy vehicles associated with the project; v. procedures to manage construction traffic to ensure the safety of livestock and to minimise disruption to 	Section 3.2 and Appendix 6



No.	Secretary's Conditions of Approval	Where addressed
	<p>livestock, and school children and limit disruption to school bus timetables;</p> <p>vi. speed limits to be observed along routes to and from the site and within the site;</p> <p>vii. minimum requirements for vehicle maintenance to address noise and exhaust emissions, particularly along roads in close proximity to residences; and</p> <p>viii. details of the expected behavioural requirements for vehicle drivers travelling to and from the site and within the site.</p>	
6.3	<p>c) a Flora and Fauna Management Plan to outline measures to protect and minimise loss of native vegetation and native fauna habitat as a result of construction of the project. The Plan shall include, but not necessarily be limited to:</p> <p>i. plans showing terrestrial vegetation communities; important flora and fauna habitat areas; locations where threatened species, have been recorded or are likely to occur;</p> <p>ii. areas to be cleared. The plans shall also identify vegetation adjoining the site where this contains important habitat areas and/or threatened species, populations or ecological communities;</p> <p>iii. methods to manage impacts on flora and fauna species and their habitat which may be directly or indirectly affected by the project, such as location of fencing, procedures for clearing of vegetation or soil and procedures for re-locating hollows or installing nesting boxes; and</p> <p>iv. rehabilitation details, and a program for reporting on the effectiveness of terrestrial flora and fauna management measures. Management methods shall be reviewed where found to be ineffective.</p>	Section 3.2 and Appendix 15

2.5 Statement of Commitments

Section 3.2 of this CEMP incorporates the Statement of Commitments made in the EA .



3 ENVIRONMENTAL IMPACTS AND CONTROLS

3.1 Environmental Risk Assessment

This section provides an assessment of the potential environmental risks associated with project construction. The purpose of the environmental risk assessment is to assign a semi-qualitative risk to each of the identified issues. Accordingly, this section considers:

- The potential environmental impacts associated with the Project including, where relevant, the environmental performance criteria and development standards; and
- The nature and extent of environmental impacts likely to remain after the implementation of mitigation and control measures.

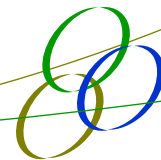
Risks have been identified in terms of hazard. To determine the level of risk from a hazard, the likelihood and consequence of such a hazard occurring must be analysed. Table 3-2 provides the risk categories used to guide the identification and application of an appropriate risk rating. The risk category is determined by both likelihood of an impact occurring and the consequences if it did.

Each environmental issue was initially rated based on potential unmitigated or uncontrolled impacts, ignoring current site mitigation and management practices. A residual risk rating was assigned based on consideration and implementation of proposed mitigation and control measures. A summary of the environmental risk analysis is provided in Table 3-3.

The following table (Table 3-1) provides a key to the categories defined in Table 3-2.

Table 3-1: Risk Level Rating Prioritisation Table

Rating	Details
Catastrophic 1 - 4	The proposed or identified task or process activity must be stopped immediately. Steps must be taken to lower the risk level to as low as reasonably practicable using the hierarchy of risk controls.
Major 5 - 9	The proposed or identified activity can only proceed, provided that: <ul style="list-style-type: none">• the risk level has been reduced to as low as reasonably practicable using the hierarchy of risk controls;• the risk controls must include those identified in legislation, Australian Standards, Codes of Practice etc.;• the risk assessment has been reviewed and approved by the Supervisor;• a Safe Working Procedure or Safe Work Method has been prepared; and• the supervisor must review and document the effectiveness of the implemented risk controls.
Moderate 10 -15	The proposed or identifies task or process can proceed, provided that:



	<ul style="list-style-type: none">• the risk level has been reduced to as low as reasonably practicable using the hierarchy of risk controls;• the risk assessment has been reviewed and approved by the Supervisor; and• a Safe Working Procedure or Safe Work Method has been prepared.
Minor 16 - 19	Managed by local documented routine procedures which must include application of the hierarchy of controls.
Insignificant / Positive 20 - 25	Managed by local documented routine procedures which must include application of the hierarchy of controls.

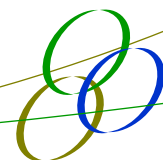


Table 3-2: Environmental Risk Assessment Categories

Rating	Consequence – Single impact and cumulative.							Likelihood				
								Certain	Probable	Possible	Remote	Negative risk or probable positive risk
								Common	Has happened	Could happen	Not likely	Practically impossible or positively probable
								Frequent Incidents	Regular incidents	Infrequent incidents	Unlikely to occur, very few recorded or known incidents	May occur in exceptional circumstances - almost no recorded incidents
	Economic		Social				Environmental	Within 3 months	Within 2 years	Within 5 years	Within 10 years	Negatively improbable or positively probable
	Impact to Annual Business	Business Disruption	Personal Injury	Occupational Health & Safety	Legal	Reputation	Environment	Every project	Every 2nd project	One project in five	One project in ten	Negatively or positively with frequency
Catastrophic	> \$5m	> 1 month	Multiple Fatalities	Exposure to a severe, adverse long-term health impact or life-threatening hazard	Litigation, heavy fines, criminal charge	Prolonged international media attention	Long term impairment habitats / ecosystem	1	2	5	7	11
Major	\$3m - \$5m	1 week to 1 month	Single Fatality	Exposure to a hazard that results in surgery or permanent disablement	Major breach / major litigation	International media attention	Long term effects on ecosystem	3	4	8	12	16
Moderate	\$0.5m - \$3m	1 day to 1 week	Serious / Disabling Injury	Exposure to a hazard that could cause injuries or health effects requiring treatment by a physician or hospitalisation	Serious breach of regulation - prosecution/ fine	National media attention	Serious medium term environmental effects	6	9	13	17	20
Minor	\$100k - \$0.5m	12 hrs to 1 day	Lost Time Injury	Exposure to a hazard that could cause injuries or adverse health effects requiring treatment by a qualified person	Non-compliance breaches in regulation	Adverse local public attention	Minor effects to biophysical environment	10	14	18	21	23
Insignificant / Positive	<\$100k or positive	< 12 hours or positive	First Aid	An injury or ailment that does not require medical treatment by a qualified professional.	Low level compliance issues	Minimal opposition or positive influence	Limited or no physical damage	15	19	22	24	25

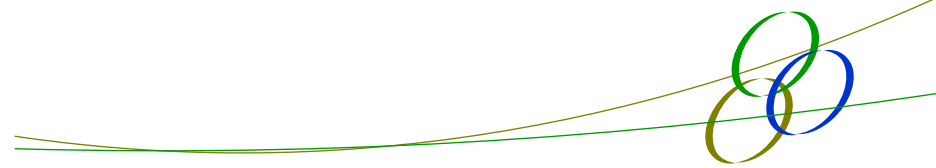
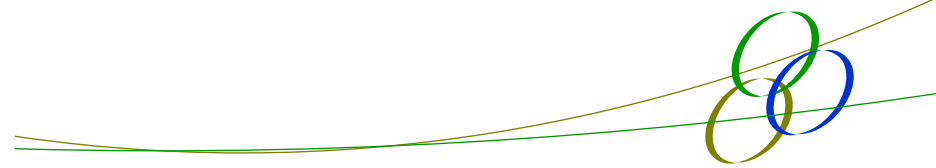
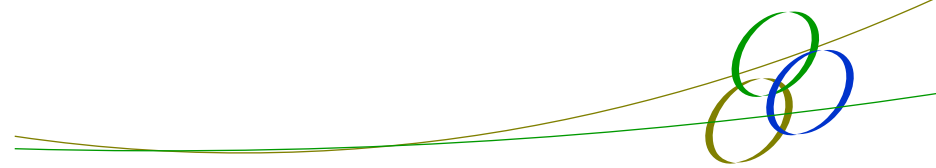


Table 3-3: Environmental Risk Assessment Due to Construction

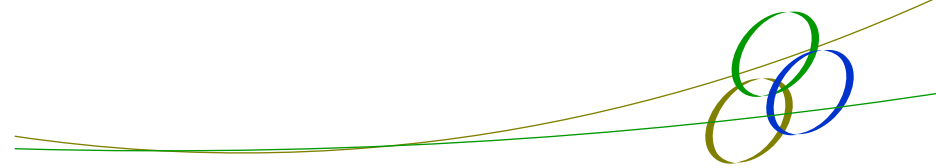
Issue	Potential Impacts	Initial Risk Rating	Control Measures	Residual Impacts	Residual Rating
Air Quality	<ul style="list-style-type: none"> Dust nuisance during construction; and Exhaust fumes from construction and delivery vehicles. 	10	<ul style="list-style-type: none"> Use water cart on unsealed roads; Minimal earthmoving; Visual monitoring of exhaust fumes; and Regular servicing of vehicles. 	No nuisance.	21
Aboriginal Heritage	<ul style="list-style-type: none"> Impacts to known Aboriginal heritage items (e.g. GIWF # 1); and Impacts to unknown Aboriginal heritage items. 	13	<ul style="list-style-type: none"> Develop and comply with Cultural Heritage Management Plan; No works will be undertaken in the vicinity of GIWF # 1; and Stop work in areas of the site in the event of unexpected finds. 	Low likelihood of impact.	17
Non-Aboriginal Heritage	<ul style="list-style-type: none"> Impacts to known non-Aboriginal Heritage items, (e.g. Ross Hill Trig Station); and Impacts to unknown non-Aboriginal heritage items. 	13	<ul style="list-style-type: none"> Develop and comply with European Heritage Management Plan; Stop work in areas of the site in the event of unexpected finds. 	Low likelihood of impact.	17



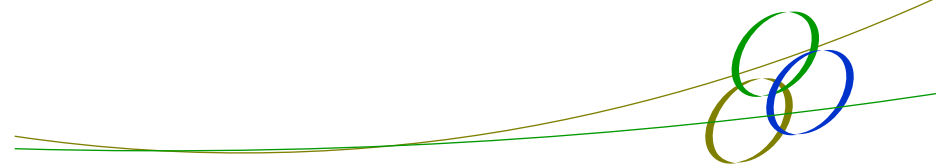
Issue	Potential Impacts	Initial Risk Rating	Control Measures	Residual Impacts	Residual Rating
Noise & Vibration	<ul style="list-style-type: none"> Construction noise disturbance to nearby residents; and Construction vibration impacts to nearby residents. 	10	<ul style="list-style-type: none"> Develop Construction Noise Management Plan; Construction within standard hours; and Notify nearby residences. 	May be some impact.	18
Visual Impact	<ul style="list-style-type: none"> Aesthetic impacts on nearby residents during construction; Aesthetic impacts on the Gwydir Highway during construction. 	6	<ul style="list-style-type: none"> Screening and signage to be installed in consultation with adjoining neighbours, Council and the RMS; Minimal earthmoving; Adequate disposal of waste material; and Maintaining a clean and tidy work site. 	Low likelihood of impact.	17
Biodiversity	<ul style="list-style-type: none"> Loss of habitat and vegetation for construction of turbines and access tracks; and Potential to harm or kill fauna. 	10	<ul style="list-style-type: none"> Implement mitigation measures and monitoring prescribed in the Bird and Bat Monitoring plan, FFMP, and Biodiversity Offsetting Plan. 	Low likelihood of impact.	12



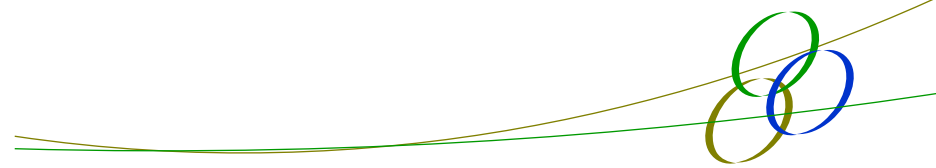
Issue	Potential Impacts	Initial Risk Rating	Control Measures	Residual Impacts	Residual Rating
Traffic & Access	<ul style="list-style-type: none">Traffic congestion impacts on the local network during construction; andTraffic accidents (e.g. pedestrians, delivery, site staff, community).	14	<ul style="list-style-type: none">Develop Traffic Management Plan;Consult with the community in regard to the timing of works; andSelect access design in consultation with Council and RMS.	Low likelihood of impact.	18
Soil & Water Quality	<ul style="list-style-type: none">Erosion and degradation of water quality and associated ecological impacts;Disturbances to creek from construction.	10	<ul style="list-style-type: none">Develop Erosion and Sediment Control Plan;Install appropriate erosion and sediment control measures generally in accordance with typical designs provided in Appendix 3; andVisually monitor water quality in creeks.	Low likelihood of impact.	21



Issue	Potential Impacts	Initial Risk Rating	Control Measures	Residual Impacts	Residual Rating
Contamination	<ul style="list-style-type: none"> Contamination of soil or water from spills of oil or other chemicals; Inappropriate identification, handling and disposal of on-site waste; Import of contaminated material; and Mobilisation of previously unknown contaminants. 	9	<ul style="list-style-type: none"> Have appropriate spill and contamination containment and management measures in place on site; Stop work in areas of the site if contaminated material is uncovered; and Develop and comply with a Waste Management Plan. 	Low likelihood of impact.	17
Bushfire	<ul style="list-style-type: none"> Damage to facility or nearby bushland and properties. 	8	<ul style="list-style-type: none"> APZ's and adequate fire safety management procedures to be implemented; and Consult with RFS. 	Low likelihood of impact.	12
Waste	<ul style="list-style-type: none"> Excessive waste generation; Excessive waste sent to landfill; and Hazardous waste incorrectly disposed of. 	13	<ul style="list-style-type: none"> Develop and comply with a Waste Management Plan. 	Low likelihood of impact.	20
GHG	<ul style="list-style-type: none"> Contribution to GHG emissions and subsequent global warming. 	10	<ul style="list-style-type: none"> Develop and comply with a GHG Management Plan; and Offset by operational contribution to minimising GHG. 	Low likelihood of impact.	18



Issue	Potential Impacts	Initial Risk Rating	Control Measures	Residual Impacts	Residual Rating
Community	<ul style="list-style-type: none">• Unacceptable disruption to private access;• Community complaint regarding noise, vibration and dust impacts; and• Utility interruptions.	14	<ul style="list-style-type: none">• Implement the Community Information Plan; and• Implement a Community Consultative Committee.	May be some impact during construction.	21
Compliance	<ul style="list-style-type: none">• Non-compliance with the CEMP, Project Approval, or other legislative requirements;• Failure to report environmental issues; and• Inadequate response to environmental emergencies.	9	<ul style="list-style-type: none">• Appoint Environmental Representative; and• Implement CEMP	Low likelihood of impact.	21

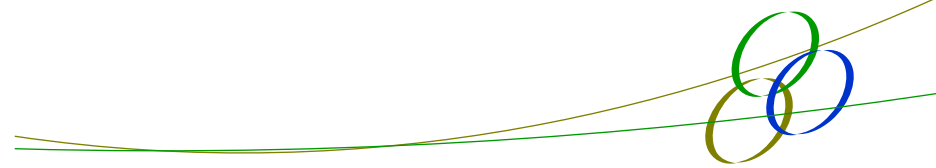


3.2 Environmental Control Measures

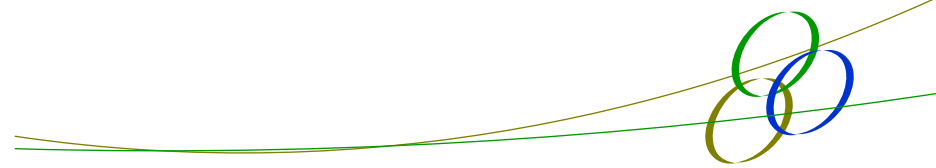
The responsibility for, and frequency of, environmental control measures are listed in Table 3-4.

Table 3-4: Environmental Control Measures

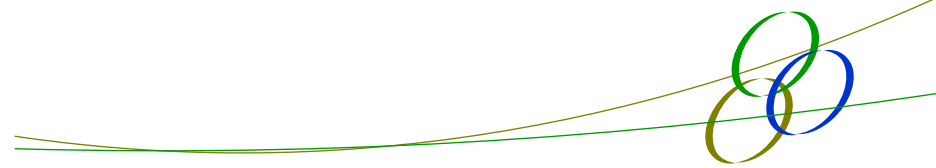
Environmental Control Measures	Responsibility	Timing/Frequency	Completed [Initials/Date]
Training & Induction			
All staff to be inducted prior to commencement of work onsite. Induction to review the requirements and responsibilities of this CEMP.	Construction Manager	Daily / as required	
All induction and training activities as required to be documented in detail. Records of training and induction must be kept on site and available for inspection upon request.	Construction Manager	Daily / as required	
Regular, targeted education is to be provided to supervisors, operators and sub-contractors on requirements of the CEMP relevant to the construction stage through toolbox meetings and on-site coaching. Sub-plans attached to this CEMP will be used as reference material.	Construction Manager	Daily / as required	
Employees are to be appropriately trained in use of equipment.	Construction Manager	Daily / as required	
Pre-construction			
A Community Enhancement Program shall be submitted to the Secretary, with the aim of funding (\$75,000/pa) community enhancement measures to the benefit of the local community, in particular in the immediate vicinity of the project. The program shall be developed in Consultation with the Council and the local Community (incl. the Glen Innes Landscape Guardians).	Nexif	Prior to commencement of construction	



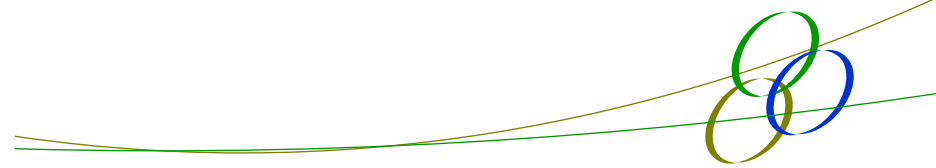
Environmental Control Measures	Responsibility	Timing/Frequency	Completed [Initials/Date]
Noise & Vibration			
Construction equipment shall be selected, operated and maintained to minimise noise impacts and, where possible, fitted with mufflers, silencers and 'smart' reversing alarms.	Construction Manager	Daily	
Neighbours will be informed of the construction works, the nature and duration of components of the construction phase, the potential impacts and contact details for registering complaints or enquiries.	Construction Manager	Prior to commencement of construction	
Visual			
Notify in writing the owners within 4km of any wind turbine that they have the right to request implementation of visual impact mitigation measures at their residence if the wind turbines will be visible from the residence. Figure 4 depicts residences within 4km of a wind turbine.	Construction Manager	Prior to commencement of construction	
Should a written request be received, measures (such as landscaping treatments or vegetative screens) shall be implemented in consultation with the landowner, within 12 months of receipt of the request. Any disputes are to be referred to the Secretary.	Construction Manager	Within 12 months of receipt of request	
Local native species should be used for screen planting, where possible.	Construction Manager	Prior to commencement of construction	
Council and RMS are to be consulted in relation to the need to provide landscaping screening measures along public road reserves including but not limited to the Gwydir Highway. Outcomes are to be reported to the Secretary.	Construction Manager	Prior to commencement of construction	
The potential for a wind farm viewing site, interpretative signage and associated facilities is to be investigated in consultation with RMS and Council. If required by Council or RMS, it shall be installed and maintained by the proponent (or as agreed with Council and the RMS).	Nexif	After consultation with Council, the viewing site will no longer be built.	



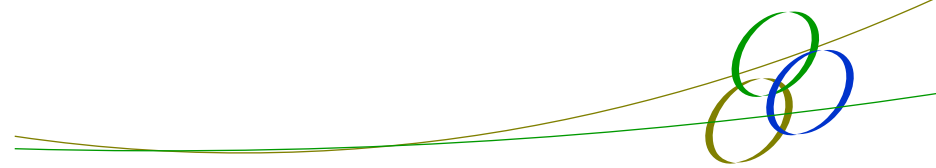
Environmental Control Measures	Responsibility	Timing/Frequency	Completed [Initials/Date]
As far as possible, the location of access tracks will be chosen to minimise visual impact from the surrounding countryside.	Construction Manager	Prior to commencement of construction	
The design and location of ancillary infrastructure will incorporate measures to reduce visual impacts.	Construction Manager	Prior to commencement of construction	
Biodiversity			
A compensatory habitat package shall be developed in consultation with the OEH to the satisfaction of the Secretary.	Nexif	Prior to commencement of construction	
A suitably qualified ecologist will delineate the limits of clearing for turbine hardstand areas and access roads.	Construction Manager	Prior to commencement of construction	
Work areas, including access trails, shall be clearly defined using a combination of posts, fencing or markers, and suitably marked-up maps. All onsite movements are to be restricted to these areas.	Construction Manager	Prior to commencement of construction	
All works and structures shall be located to avoid abutting forest and woodland remnants protected under the Project Approval.	Construction Manager	Prior to commencement of construction	
A Bird and Bat Adaptive Management Program will be developed by a suitably qualified person and approved by the Secretary.	Nexif	Prior to commencement of construction	
Implement the control measures detailed in the Flora and Fauna Management Plan (refer Appendix 14)	Nexif	Prior to commencement of construction	



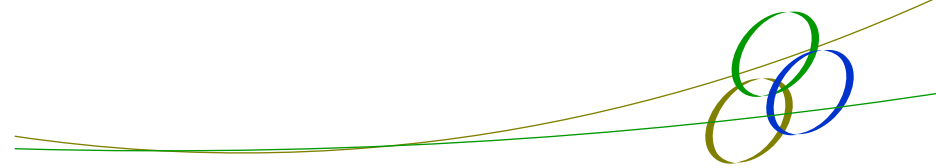
Environmental Control Measures	Responsibility	Timing/Frequency	Completed [Initials/Date]
Traffic & Access			
Road access from the Gwydir Highway (through Travelling Stock Route 67474) shall be designed and constructed in accordance with AUSTROADS Rural Access Standards and to the satisfaction of the RMS and LLS.	Nexif	Prior to commencement of construction	
Dilapidation reports of the haulage routes shall be undertaken.	Nexif	Prior to commencement of construction	
A Traffic Management Plan shall be prepared to minimise the conflict between construction traffic and existing road users (Appendix 6).	Nexif	Prior to commencement of construction	
Measures detailed in the Traffic Management Plan (Appendix 6) shall be implemented.	Construction Manager	Prior to commencement of construction	
Heritage			
Should final wind farm design require works in the vicinity of Site GIWF # 1, a management and mitigation strategy will be developed for the site, in consultation with the Glen Innes Aboriginal Lands Council and OEH.	Nexif	Turbine deleted from approval, so no works required.	
A photographic record of the section of the former highway to be used as access to the wind farm shall be prepared in accordance with the OEH guideline.	Nexif	Prior to commencement of construction	
Soil & Water Quality			
All necessary sediment and erosion control measures will be in place prior to any earthworks commencing.	Construction Manager	Prior to commencement of construction	



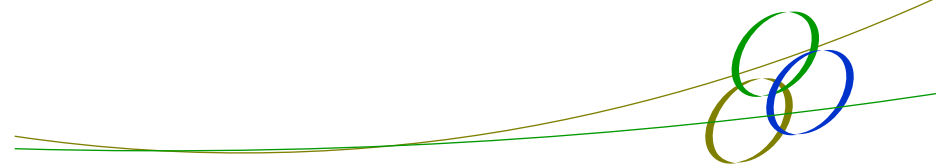
Environmental Control Measures	Responsibility	Timing/Frequency	Completed [Initials/Date]
Contamination			
Appropriate spill kits will be made available onsite.	Construction Manager	Prior to commencement of construction	
The substation will be established on bunded hardstand to contain any oil spillage or leakage from the transformer(s) including secondary containment.	Construction Manager	Prior to commencement of construction	
During Construction			
Noise & Vibration			
Noise generated by any construction is to be managed in accordance with the best practice requirements outlined in the <i>Interim Construction Noise Guideline</i> (DECC, 2009), or its latest version.	Construction Manager	Daily	
Construction shall be limited to the following operation hours: a) 7 am to 6 pm Monday to Friday; b) 8 am to 1 pm Saturdays; and c) at no time on Sundays and NSW public holidays.	Construction Manager	Daily	
All blasting shall be undertaken between 9 am and 5 pm Monday to Saturday inclusive. No blasting is to occur on Sundays or public holidays.	Construction Manager	As required	
Blasting must not exceed the following at any non-associated residence: <ul style="list-style-type: none"> Air blast overpressure 120dB(L in Peak) and ground vibration 10mm/s; and Air blast overpressure 115dB(L in Peak) and ground vibration 5mm/s [allowable exceedance 5% of the total number of blasts or events over a period of 12 months]. 	Construction Manager	As required	



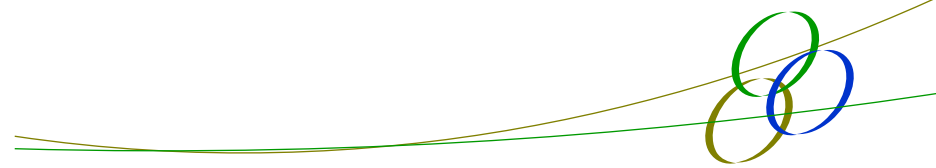
Environmental Control Measures	Responsibility	Timing/Frequency	Completed [Initials/Date]
In the event of community complaint regarding noise or vibration, monitoring will be undertaken and additional mitigation measures implemented where practicable.	Construction Manager	As required	
Construction works required to be undertaken outside of the standard construction hours are only to be undertaken in accordance with the Out of Hours Work protocol specified in Section 3.3.	Construction Manager	As required	
High noise impact activities must be carried out reasonably in accordance with <i>Interim Construction Noise Guideline</i> (DECC, 2009) and the <i>Australian Standard 2436-1981 'Guide to noise control on construction, maintenance and demolition sites'</i> .	Construction Manager	Daily	
Bored piles or vibrated piles will be used instead of impact or percussion piling where possible.	Construction Manager	As required	
Where reasonable and feasible, noisy equipment will be sited behind structures that act as barriers or at the greatest distance from the noise-sensitive areas.	Construction Manager	Daily	
Continuous high noise activities must not exceed three hour blocks, each with a minimum respite from those activities and works of not less than one hour between each block.	Construction Manager	Daily	
Regularly grade access roads to reduce noise from rattling trucks.	Construction Manager	Monthly / as required	
Where possible, locate construction equipment in a position that provides the most acoustic shielding from buildings and topography.	Construction Manager	As required	
Equipment will be switched off when not in use (including during breaks and down times of more than 30 minutes).	Construction Manager	Ongoing	
Clustering of noise generating plant is to be avoided to minimise cumulative impacts of multiple noise sources.	Construction Manager	Daily	



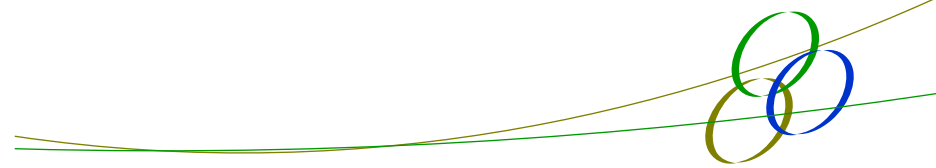
Environmental Control Measures	Responsibility	Timing/Frequency	Completed [Initials/Date]
Equipment will be oriented away from nearby receivers to minimise noise impacts, where practicable.	Construction Manager	As required	
Ensure traffic movement is kept to a minimum, e.g. ensure trucks are fully loaded so that the volume of each delivery is maximised.	Construction Manager	As required	
Noise complaints will be investigated and where practicable additional measures implemented to reduce the impact.	Construction Manager	As required	
Visual			
Clearing of vegetation will not exceed identified limits and be minimized wherever practicable.	Construction Manager	Daily	
Cable trenches will be backfilled as soon as practicable so that once restore, and rehabilitation has occurred, they will have no visual impact.	Construction Manager	As required	
Ancillary infrastructure will be located to minimize visual exposure.	Construction Manager	Establishment of facilities	
No third party promotional material is to be displayed on any fencing/barrier to the site. Any such material shall be recorded and removed immediately. No promotional material of any kind will be placed on the turbines.	Construction Manager	Ongoing	
Biodiversity			
Imported fill will not introduce weeds that are not currently present at the locations where the fill is to be used.	Construction Manager	Daily	
Access should be restricted to designated tracks and areas.	Construction Manager	Daily	
Appropriate care should be taken when moving along all access tracks, particularly at dawn or dusk to avoid potential collisions with wildlife.	Construction Manager	Ongoing	



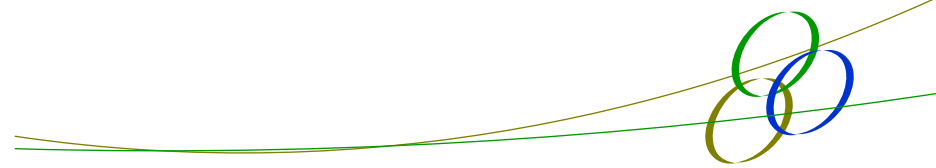
Environmental Control Measures	Responsibility	Timing/Frequency	Completed [Initials/Date]
Conditions specified in the project Flora and Fauna Management Plan shall be implemented.	Construction Manager	Daily	
Placing stockpiles under the driplines of trees shall be avoided to minimise compaction of the root zone.	Construction Manager	Daily	
Any injury or death of native wildlife caused by the construction activity will be reported.	Construction Manager	As required	
Should native fauna enter the site during the construction phase, works that will affect the fauna will cease until the fauna has exited the site.	Construction Manager	As required	
Excavated areas/trenches shall be inspected daily and any fauna that has fallen in removed, to avoid harm to fauna that have become trapped overnight.	Construction Manager	Daily	
A neat and tidy work place shall be maintained (i.e. all food waste shall be appropriately disposed of) to avoid attracting native or pest fauna to the site.	Construction Manager	Daily	
Traffic & Access			
All vehicles and equipment movement should be restricted to the designated access tracks.	Construction Manager	Daily	
All heavy vehicles should use the designated access point off the Gwydir Highway to access the project site.	Construction Manager	Daily	
All vehicles delivering equipment, materials and personnel to the site during the construction phase should be registered vehicles that are required to maintain the necessary emission controls.	Construction Manager	Daily	
Internal traffic movements shall be restricted to 40km/hr, or as sign-posted.	Construction Manager	Daily	



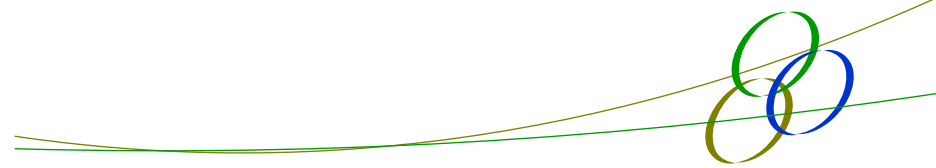
Environmental Control Measures	Responsibility	Timing/Frequency	Completed [Initials/Date]
Heritage			
In the event of discovery of any previously unidentified Aboriginal object(s), all work likely to affect the object(s) shall cease immediately and the OEH informed in accordance with the <i>National Parks and Wildlife Act 1974</i> , as well as the Glen Innes Aboriginal Land Council. Works shall not recommence until written authorisation from OEH is received.	Construction Manager	During construction	
Creek lines will be avoided where possible, but where creek crossings are necessary for access tracks and/or trenches for underground cables the zone impact will be minimised.	Construction Manager	During construction	
The proposed access tracks and cabling corridors will, as far as possible, follow existing vehicle tracks to minimise disturbance to the landscape and reduce the potential for disturbance of any sensitive archaeological and cultural zones.	Construction Manager	During construction	
Should the need arise to use the Ross Hill Trig Station any time during construction / operation, all works shall comply with the requirements of the Lands Department.	Construction Manager	During construction	
The Ross Hill Trig Station site and its associated reference marks will be protected by fencing prior to any works. The fencing will be maintained for the duration of construction works. Such fencing would be at least 5 metres in each direction from the Trig Station or any reference marks in its vicinity and no construction activities will occur within the fenced area.	Construction Manager	During construction	
The former highway alignment will not be subject to excavation or disturbance other than minor maintenance to ensure the safe use by vehicles to reach the windfarm site and suitable drainage.	Construction Manager	During construction	



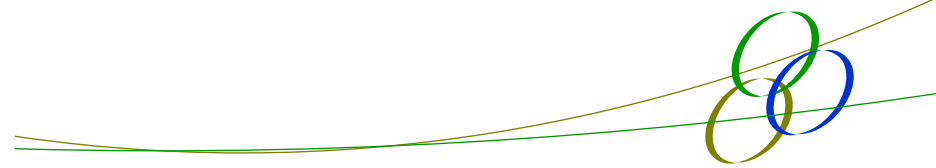
Environmental Control Measures	Responsibility	Timing/Frequency	Completed [Initials/Date]
The trees along each side of the former highway will be maintained apart from minor lopping of any overhanging branches and removal of a few smaller trees at a single location to gain access to the gate providing entry to the northern end of the wind farm site.	Construction Manager	During construction	
Soil and Water Quality			
Erosion and sediment controls shall be implemented in accordance with Landcom's <i>Managing Urban Stormwater: Soils and Conservation</i> .	Construction Manager	During construction	
Sediment control devices will be installed parallel with contours, immediately down slope of any areas where the natural ground surface will be disturbed. Additional control devices will be installed upslope of areas of disturbance where there is a probability of clean surface water flows flowing across the surface and exacerbating surface erosion.	Construction Manager	During construction	
All erosion and sediment control devices will be maintained in a satisfactory working order until such time as the disturbed areas have been stabilised.	Construction Manager	During construction	
Erosion and sediment devices will be inspected regularly after each rain period and during periods of prolonged heavy rain and any defects rectified promptly.	Construction Manager	During construction	



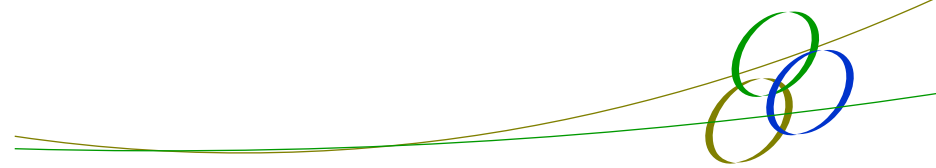
Environmental Control Measures	Responsibility	Timing/Frequency	Completed [Initials/Date]
<p>Disturbed areas will be stabilised in accordance with the following principles:</p> <ul style="list-style-type: none"> • Temporary vegetation, mulch, or other stabiliser will be applied to all disturbed areas, including stockpiles that remain exposed for a period of 30 days or more; • All temporary earth diversion banks and sediment basin embankments will be seeded and fertilised as soon as practicable after construction and take into account the growing seasons; and • Stabilisation of all batters will be commenced within ten days of completion of formation, weather permitting. 	Construction Manager	During construction	
All temporary control measures will be removed when revegetation has established on formerly disturbed areas and will be disposed of in a satisfactory manner.	Construction Manager	During construction	
Wheel washing and sweeping of public roads will be undertaken as necessary.	Construction Manager	During construction	
Stockpile sites will be managed to minimise erosion and loss of topsoil.	Construction Manager	During construction	
Undertake inspections of temporary and permanent erosion and sedimentation control devices and ensure that the most appropriate controls are being implemented.	Construction Manager	During construction	
All imported fill will be Virgin Excavated Natural Material as defined in the Environment Protection Authority's guideline <i>Assessment, Classification and Management of Liquid and Non-Liquid Wastes</i> , or the Resource Recovery Exemption under Part 9, Clause 91 and 92 of the <i>Protection of the Environment Operations (Waste) Regulation 2014</i> .	Construction Manager	During construction	



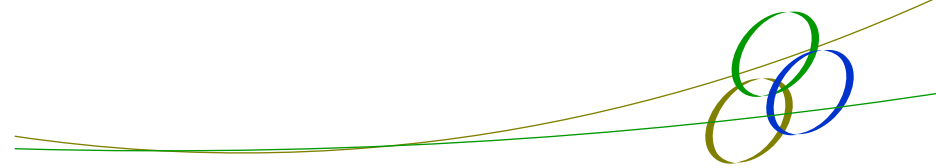
Environmental Control Measures	Responsibility	Timing/Frequency	Completed [Initials/Date]
Access tracks should be located to achieve suitable grades on stable slopes and designed so that they will not exacerbate erosion at the site, where practicable.	Construction Manager	During construction	
Earth batters on any tracks that are benched into slopes will be re-vegetated to prevent erosion and to reduce visibility of the constructed track.	Construction Manager	During construction	
Where cable trenches or drainage lines are oriented down slopes, measures will be implemented to slow stormwater flows and prevent scouring of the open trench, drainage line or disturbed ground prior to re-establishment of grass cover or stabilisation.	Construction Manager	During construction	
Rolling and possibly wetting of access tracks with water may be necessary to compact loose soil exposed during initial track formation.	Construction Manager	During construction	
Application of approved wetting agent to exposed soil during dry and windy periods may be implemented, if necessary.	Construction Manager	During construction	
Contamination			
Trucks and machinery will be checked for leaks on arrival to site and appropriate spill kits will be available at all times.	Construction Manager	During construction	
In the event of a spill the Emergency Response Plan will be enacted (Appendix 15).	Construction Manager	During construction	
All materials stored within the site will be checked regularly for containment integrity, quantity stored and security of storage.	Construction Manager	During construction	
Waste			
No waste generated outside the site shall be received at the site for storage, treatment, processing, re-processing or disposal.	Construction Manager	During construction	



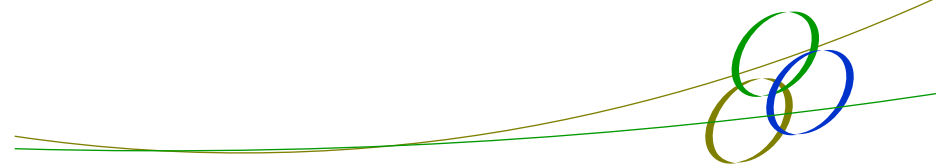
Environmental Control Measures	Responsibility	Timing/Frequency	Completed [Initials/Date]
No waste generated on-site is to be disposed of on-site except as expressly permitted by a license under the <i>Protection of the Environment Operations Act 1997</i> .	Construction Manager	During construction	
All liquid and / or non-liquid waste generated and / or stored on the site shall be assessed and classified in accordance with <i>Waste Classification Guidelines Part 1: Classifying Waste</i> (DECC, 2014).	Construction Manager	During construction	
Contaminated materials, glass, metals, plastics, hydrocarbons (lubricants and fuels) and sanitary wastes should be transported offsite by appropriate licenced contractors to disposal facilities approved to receive that type of waste. Cleared vegetation will remain on site, un-mulched, as fallen timber.	Construction Manager	During construction	
Surplus topsoil will be spread on the site to blend in with the natural landform and will be revegetated.	Construction Manager	During construction	
Surplus excavated material will be disposed of on the relevant property at one or more locations as agreed with the property owner. Disposal sites will be finished with topsoil and revegetated. Where feasible, existing erosion areas will be selected for backfill and treatment.	Construction Manager	During construction	
Where feasible, recyclable items such as metals, glass or timber will be separated and directed to an appropriate local facility.	Construction Manager	During construction	
Any putrescible general waste material will be stored in sealed containers until it is removed from site.	Construction Manager	During construction	
During construction, portable toilet facilities shall be installed on site and emptied periodically by an approved and appropriately licenced contractor.	Construction Manager	During construction	
Disposal of sillage from any of the toilet facilities will be to the local Glen Innes Treatment Plant or other suitable facility, as agreed with Council.	Construction Manager	During construction	



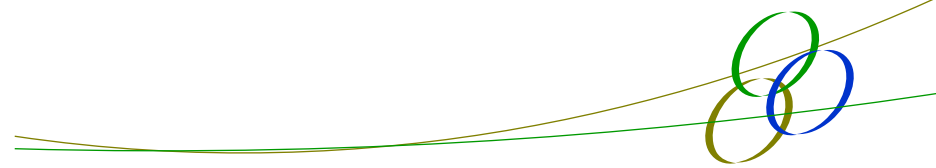
Environmental Control Measures	Responsibility	Timing/Frequency	Completed [Initials/Date]
Any waste oil arising from equipment servicing will be stored in sealed containers in a covered and bunded area until it can be removed off site to a suitable waste oil facility.	Construction Manager	During construction	
Bins will be provided at the site amenities for the separation of waste streams.	Construction Manager	During construction	
All loads of waste transported to and from site will be covered to prevent spillage.	Construction Manager	During construction	
Burning or incineration of green waste or any other wastes is strictly prohibited.	Construction Manager	During construction	
Documents and records of the transport and destination of all materials removed from site will be kept and submitted to the Construction Manager as proof of correct disposal and for environmental auditing purposes.	Construction Manager	During construction	
Hazards & Risk			
Appropriate fire-fighting equipment shall be available on site and fitted to heavy plant.	Construction Manager	During construction	
An 'Inner Protection Area' shall be created on the land around any structure associated with the project to distance of 10 metres or to the property boundary.	Construction Manager	During construction	
Where necessary access tracks and work sites will be slashed to remove vegetation in excess of 100mm high.	Construction Manager	During construction	
All heavy construction vehicles should use diesel fuel.	Construction Manager	During construction	
A mobile, 1,000 litre water tanker unit complete with motor-driven pump, hose and nozzle will remain at the site during construction work.	Construction Manager	During construction	



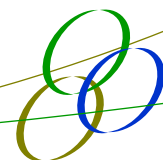
Environmental Control Measures	Responsibility	Timing/Frequency	Completed [Initials/Date]
Knapsack sprays and McLeod tools will be kept on hand at each actual work site.	Construction Manager	During construction	
In the event of welding, flame cutting or grinding being carried out in the open during periods of fire danger, an observer equip with a knapsack spray will be on hand.	Construction Manager	During construction	
The exhaust systems of all vehicles on-site will be maintained in sound condition and inspected to avoid any build-up of dry vegetation under vehicles.	Construction Manager	During construction	
The use of explosives will not be allowed during periods of high bushfire risk.	Construction Manager	During construction	
<p>All dangerous goods (as defined by the Australian Dangerous Goods Code) and combustible liquids shall be stored and handled in accordance with:</p> <ul style="list-style-type: none"> • All relevant Australian Standards; • A minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; and • The EPA's Environment Protection Manual Technical Bulletin <i>Bunding and Spill Management</i>. 	Environment and Community Manager	During construction	
All chemical containers will be clearly labelled to identify their contents and their management requirements – including reference to any Material Safety Data Sheets.	Environment and Community Manager	During construction	
If oil filled generator transformers are used, containment measures will be incorporated to prevent any oil loss reaching local watercourses.	Construction Manager	During construction	
In the case of oil or fuel storage on-site, sufficient containment shall be provided to contain any spillage that may occur at the location.	Construction Manager	During construction	



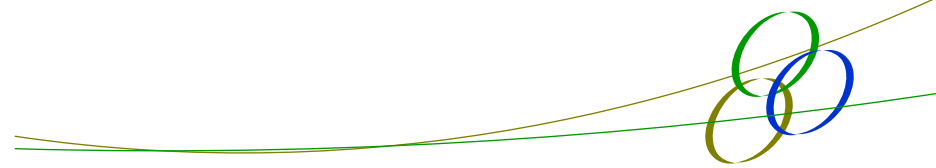
Environmental Control Measures	Responsibility	Timing/Frequency	Completed [Initials/Date]
Air Quality			
All work areas and stockpiles will be monitored for dust generation.	Environment and Community Manager	During construction	
All vehicle exhaust systems will be properly maintained and monitored for visible emissions.	Site Logistics Manager	During construction	
A water cart will be used for dust suppression.	Environment and Community Manager	During construction	
All vehicles will operate within a 40km/h speed limit on unsealed tracks to reduce dust.	Environment and Community Manager	During construction	
Trucks transporting material will be covered when entering or leaving the site.	Environment and Community Manager	During construction	
Burning or incineration of green waste or any other wastes is strictly prohibited.	Environment and Community Manager	During construction	
High risk activities shall be restricted on days of extreme weather events (e.g. high winds during hot, dry periods) to limit the potential for impacts.	Environment and Community Manager	During construction	
Radio Communication			
In the event that any disruptions to radio communication service links (installed before construction of the project) arise as a result of the project, consultation with the operator shall occur to determine appropriate remedial measures to rectify any issues as reasonably possible.	Construction Manager	During – Post-construction	



Environmental Control Measures	Responsibility	Timing/Frequency	Completed [Initials/Date]
Post Construction			
Earthworks shall be restored as soon as possible following construction.	Construction Manager, Environment and Community Manager	Post-construction	
All temporary tracks and areas disturbed by construction work including cable routes and hardstand areas surrounding the wind turbines should be reinstated and revegetated.	Construction Manager, Environment and Community Manager	Post-construction	
Follow up maintenance will be undertaken until the areas are satisfactorily stabilised and restored.	Construction Manager, Environment and Community Manager	Post-construction	
Consultation and Complaints Handling			
Regular consultation shall occur with the local RFS to ensure familiarity with the project, including the construction timetable, and final location of all infrastructure on site.	Environment and Community Manager	Prior to construction commencing, during construction, during operation	



Environmental Control Measures	Responsibility	Timing/Frequency	Completed [Initials/Date]
<p>The following information shall be provided to the Civil Aviation Safety Authority, Royal Australian Air Force - Aeronautical Information Service and Air Services Australia as well as all known users of privately owned local airfields prior to construction:</p> <ul style="list-style-type: none"> • “as constructed” coordinates in latitude and longitude of each wind turbine generator; • final height of each wind turbine generator in Australian Height Datum; and • ground level at the base of each wind turbine generator in Australian Height Datum. 	Environment and Community Manager	Prior to commencement of construction	
Consultation shall be undertaken with the NSW Government Telecommunications Authority and other registered communications licensees (including emergency services) to ensure risks to these services are minimised as far as feasible and reasonable.	Environment and Community Manager	Prior to commencement of construction	
The proponent shall make all documents required under the Project Approval available for public inspection, upon request.	Construction Manager, Environment and Community Manager	Upon request	
A dedicated website shall be established, or the provision of dedicated pages to the existing Nexif website shall be established to share up-to-date electronic information specific to the project.	Environment and Community Manager	Prior to commencement of construction	
A Community Consultative Committee shall be established for the development to the satisfaction of the Secretary. The Community Consultative Committee shall comprise representation from the proponent, Council and the local community.	Construction Manager, Environment and Community Manager	Prior to commencement of construction	

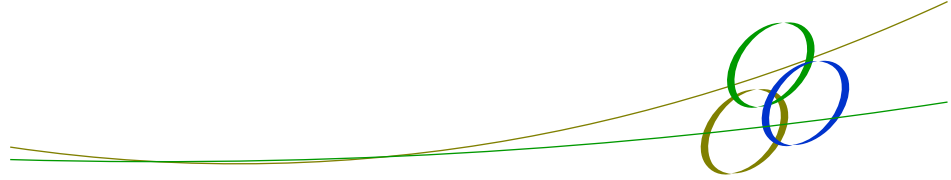


Environmental Control Measures	Responsibility	Timing/Frequency	Completed [Initials/Date]
The measures detailed in the Community Information Plan shall be implemented.	Environment and Community Manager	During construction	
<p>The following shall be made available for the life of the project:</p> <ul style="list-style-type: none"> • 24-hour telephone number on which complaints about construction and operational activities at the site may be registered; • A postal address to which written complaints may be sent; and • An email address to which electronic complaints may be transmitted. • These details will be advertised in a local newspaper at least once prior to the commencement of construction and on six monthly intervals for two years following commencement of operation. Details will also be made available on the project website and displayed on a sign near the entrance of the construction site. 	Environment and Community Manager	Established prior to construction, advertisement at six month intervals	
All complaints received shall be recorded in a Complaints Register.	Environment and Community Manager	As required	
The Proponent shall respond to all complaints within 48 hours of receipt. Responses shall be recorded in the Complaints Register.	Environment and Community Manager	As required	
The Secretary, relevant government departments and Council will be notified, prior to commencement of Construction and Operation phases of the project.	Environment and Community Manager	Four weeks prior to commencement of relevant phase	



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Author:	K. Lee	<div><div><div><div><div></div><div></div></div><div><div></div><div></div></div></div><div>N</div><div><div>03757501,500</div><div><div></div><div></div><div></div><div></div><div></div><div></div></div><div>Metres</div></div><div>Map Projection: GDA 1994 MGA Zone 56</div></div></div> <td><div>Figure 4</div><div>RESIDENCES WITHIN 4KM OF TURBINES</div></td> <td rowspan="4"><div><div>EPS</div><div><div><div></div><div></div><div></div><div></div></div></div><div>ENVIRONMENTAL PROPERTY SERVICES</div></div></td>	<div>Figure 4</div> <div>RESIDENCES WITHIN 4KM OF TURBINES</div>	<div><div>EPS</div><div><div><div></div><div></div><div></div><div></div></div></div><div>ENVIRONMENTAL PROPERTY SERVICES</div></div>
Reviewer:	M. Shelly		<div>OneWind Wind Farm Glen Innes, NSW</div> <div>17 August 2016</div>	
A3 Scale:	1:45,000			
Job Ref:	11262			



3.3 Out of Hours Work Protocol

Certain construction activities may need to be undertaken out of standard work hours for improved safety, access and/or to minimise inconvenience to the community.

Construction out of the standard working hours are only to be undertaken in circumstance described in Table 3-5.

Table 3-5: Out of Hours Work Activities

Construction Activity	Justification
Erection of turbine structures	To take advantage of low wind conditions to ensure the safety of the turbine erection operation. Due to the high wind at the site and the substantial cost and demands on the equipment used for the turbine construction it is necessary to utilise times of suitable wind speeds as they arise.
Pouring concrete footings	The pouring of a concrete footing for a turbine site can take up to 10 hours and needs to be completed within a single operation. The ability to do this is impacted by the number concrete delivery trucks available, return travel times from the batch plant to turbine site and any incidents occurring during the pour that may delay the completion.
Delivery of wind farm components by oversize or over-mass vehicles as directed by Police, Council or RMS	The large or heavy items of the turbine structures will be delivered by Restricted Access Vehicles. To avoid conflict from these vehicle movements with normal traffic flows relevant agencies, Police, RTA or Council may direct movement of these vehicles outside the normal construction hours.
Where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm.	

In order to undertake work outside the standard working hours, the following protocols in Table 3-6 must be followed.

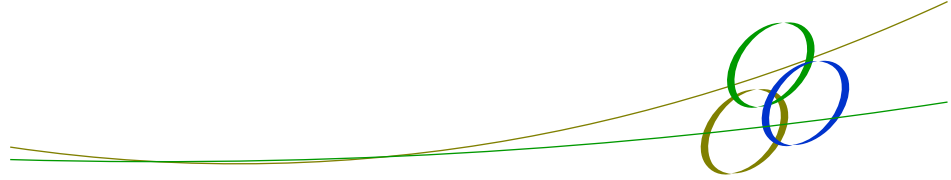
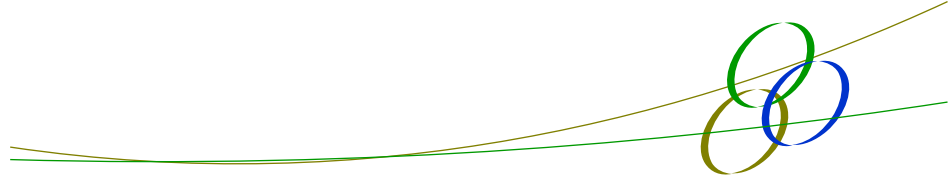


Table 3-6: Out of Work Hours Protocol

Step	Protocol
Step 1	Construction Manager to discuss with the Environment and Community Manager as soon as possible prior to the activity. The issues discussed must include description of the activity, equipment used, duration of work proposed, location and reason. Specify the timing of works, proposed mitigation measures, justify why the work needs to be undertaken after hours.
Step 2	The Environment and Community Manager will qualitatively assess the likely impacts to sensitive receivers.
Step 3	If impacts are deemed acceptable, the Environment and Community Manager will approve the work and specify the required mitigation and/or monitoring. If the Environment and Community Manager deems it unacceptable, it will be referred to the Department of Planning for assessment and recommendation.
Step 4	If approved, the Environment and Community Manager will notify relevant receivers of the timing, duration and need for the work.



4 COMPLIANCE TRACKING PROGRAM

4.1 CEMP Amendments

This CEMP will be reviewed regularly and updated to reflect changes to construction methodology or requirements as per Section 1.4.2.

Minor amendments that do not have a detrimental effect on the environment or increase the risk profile can be made with approval by the Environmental and Community Manager. Major changes to the CEMP will be forwarded to the Secretary for approval.

4.2 Monitoring

Environmental monitoring checklists will be developed by the construction contractor and will include daily, weekly and monthly monitoring. A template checklist is provided in Appendix 3.

Daily environmental inspections will include as a minimum, inspection and reporting of:

- Erosion and sediment controls;
- Integrity of 'no go' fencing;
- Access track conditions;
- Wind conditions;
- Traffic flow and congestion; and
- Materials storage.

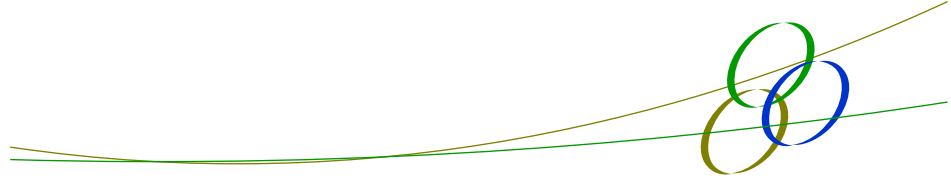
Additional monitoring requirements are detailed in the Bird and Bat Adaptive Management Program, Flora and Fauna Management Plan and the Biodiversity Offset Package Report.

4.3 Complaints Procedure and Register

Community inquiries and complaints will be recorded in a Complaints Register and responded to within 48 hours.

Nexif will establish a 24-hour telephone number, postal address and email address to receive complaints.

The Complaints Register will record:



- a) Date and time of complaint/enquiry;
- b) Type of communication (telephone, mail, meeting, email etc.);
- c) Name, address, contact telephone number of complainant/enquirer (if possible);
- d) Nature of the complaint and enquiry;
- e) Actions taken in response including timeframes for implementing the action;
- f) If no action was taken, the reasons why no action was taken; and
- g) When and how the complainant was notified of the enquiry outcome.

Complaints will be responded to within 48 hours either via actions taken to resolve the complaint or a holding statement while the complaint is being investigated.

The Complaints Register will be made available to the public and the Secretary on request. Any unresolved disputes will be referred to the Environmental Representative and the Secretary, if required.

4.4 Auditing

Auditing will be undertaken within two years of commencement of operations in accordance with consent condition 3.2. An independent auditor will prepare an audit program in accordance with *AS/NZ ISO 19011:2003 – Guidelines for Quality and/or Environmental Management Systems Auditing*.

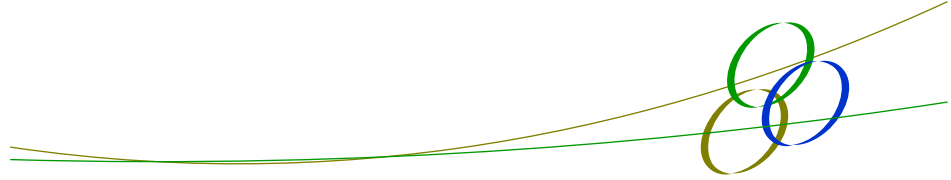
4.5 Training and Awareness

4.5.1 Site Induction

All staff and contractors will be required to undertake a site induction prior to commencing work on the site. Inductions will address the requirements of this CEMP and highlight the relevant roles and responsibilities.

4.5.2 Environmental Training

Targeted environmental training will be conducted for key construction tasks or work areas that are considered particularly sensitive.



4.5.3 Toolbox Talks

Daily toolbox talks will identify the environmental risks, mitigation measures and responsibilities relevant to the day's activities.

4.5.4 Records

Records of all training will be kept and include:

- Who was trained;
- When;
- Name of the trainer; and
- Description of training content.

4.6 Environmental Non-conformance, Preventative and Corrective Action System

Non-conformance with any controls contained within this CEMP will be recorded by the Environment and Community Manager and reported to the Environmental Representative.

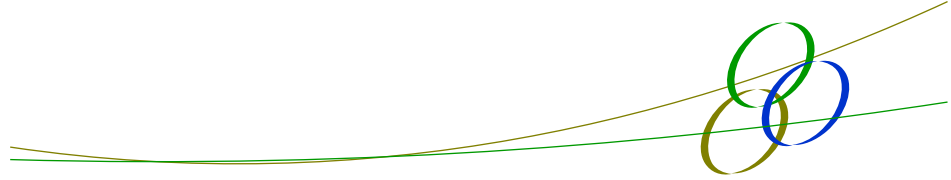
A non-conformance may be identified by community complaint, site monitoring or agency inspection. In the event of a non-compliance, the event will be investigated by the Environment and Community Manager with a view to identifying the source, reason and implications of the incident. Remedial actions will be developed in consultation with the relevant staff and may include:

- Amendment of the CEMP;
- Additional control actions;
- Staff training;
- Amended procedures; and
- Disciplinary actions.

The Environment and Community Manager will review the CEMP at least every six months from commencement of construction. The review will ensure the controls reflect any changes in legislation or work procedures.

The review will consider if any changes to the CEMP are required based on:

- Environmental monitoring results;
- Complaints;



- Incident reports;
- Non-conformances;
- Relevant legislative changes; and
- Changes in construction methodology.

Minor amendments that do not have a detrimental effect on the environmental risks or impacts are permitted. Major changes to the CEMP will require approval of the Secretary.

Continual improvement through adaptive management of the CEMP will be achieved by ongoing compliance reviews and reporting. Environment and Community Manager involvement in regular management meetings and tool-box talks will identify opportunities for improved environmental management in response to work procedures, complaints and non-conformances.

4.7 Notification and Reporting

4.7.1 Notification

Key stakeholders will be notified of the construction and project contact details prior to the commencement of construction.

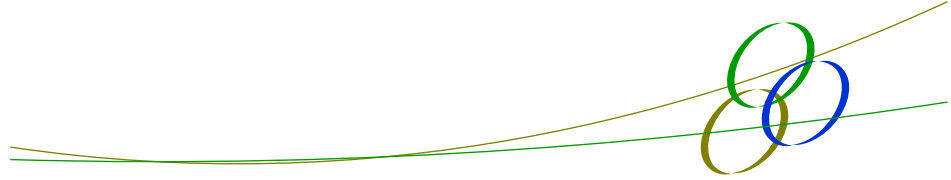
4.7.2 Events / Incidents

All environmental incidents will be reported to the Environment and Community Manager immediately. The Environment and Community Manager will direct immediate remedial actions in consultation with the Environmental Representative.

The Environment and Community Manager will determine if any external agencies need to be notified (e.g. EPA, OEH, DP&E, Council, RMS).

All environmental incidents and responsive actions will be recorded on an Environmental Improvement Notice and reported at the Project Management Meetings. The Notice will record:

- Name of role of employee;
- Date and time of incident;
- Location of incident;
- Size and type of land area affected (e.g. creek, vegetation, road etc.);
- Type of incident (e.g. spill, fire etc.);
- Details of any offsite impacts;
- Immediate responses and further actions; and



- Adaptive management changes to avoid repeat of an incident.

The Environment and Community Manager will notify the Environmental Representative of any incident with significant off-site impacts on people or the environment within 24 hours of coming aware of the incident.

All events/incidents must be addressed as soon as practicable, with any non-conformance report will be completed for any incident.

4.7.3 Emergency

An Emergency Response Plan is provided in Appendix 15.

4.7.4 Reporting

Compliance against the Statement of Commitments and the Conditions of Approval is provided in Appendix 1.

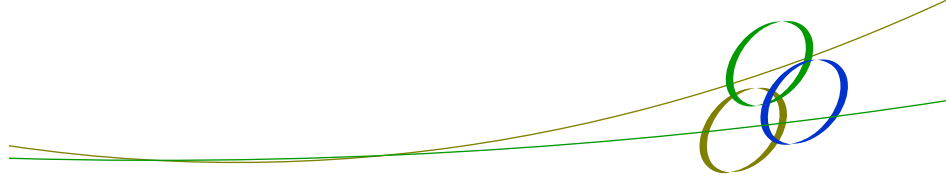
Environmental reporting will form part of the monthly Project Management Reporting and include:

- Status of compliance with Conditions of Approval;
- Summary of any non-conformance;
- Summary of any incident/event;
- Summary of inquiries/complaints;
- Status of responses to non-conformances;
- Environmental monitoring results; and
- Adaptive management changes to avoid repeat of an incident.

Compliance against the Statement of Commitments will be reported to the Secretary:

- Prior to the commencement of construction;
- Prior to commencement of operation; and
- Within two years of operational commencement.

Appendix 1
Compliance Tracking



Secretary's Conditions of Approval

No.	Secretary's Conditions of Approval	Timing	Responsibility	Reference Document	Status	Closeout Date
1.6	The Proponent shall ensure that all licences, permits and approvals are obtained and maintained as required throughout the life of the project. No condition of this approval removes the obligation for the Proponent to obtain, renew or comply with such licences, permits or approvals. The Proponent shall ensure that a copy of this approval and all relevant environmental approvals are available on the site at all times during the project.	Pre-construction/ construction				
1.11	The Proponent shall not use any part of Travelling Stock Route 67474 for a temporary construction site office for the project without the prior approval of the LLS.	Pre-construction/ construction				
2.1	Prior to the commencement of construction, the Proponent shall notify in writing the owner/s of non- associated residences within 4 kilometres of any wind turbine that they have the right to request implementation of visual impact mitigation measures at their residence if the wind turbines will be visible from the residence (including its curtilage).	Pre-construction				
2.1A	<p>If following the commencement of construction, the Proponent receives a written request from the owner of any residence referred to in Condition 2.1 above for the implementation of visual impact mitigation measures, then the Proponent shall implement measures such as landscaping treatments or vegetation screens at the residence (including its curtilage) in consultation with the landowner.</p> <p>These mitigation measures must be reasonable and feasible, directed towards reducing the visual impacts of the wind turbines on the residence (including its curtilage), and commensurate with the level of visual impact.</p> <p>The mitigation measures must be implemented within 12 months of receiving the written request, unless the Secretary agrees otherwise.</p>	Construction				

No.	Secretary's Conditions of Approval	Timing	Responsibility	Reference Document	Status	Closeout Date
	If the Proponent and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.					
2.2	Prior to the commencement of operation, the Proponent shall consult with Council and the RMS in relation to the need to provide landscaping screening measures along public road reserves including but not limited to the Gwydir Highway and shall report to the Secretary on the outcomes of this consultation. The Proponent shall implement landscaping screening measures in accordance with the Secretary's requirements.	Pre-construction/ construction				
2.3	Wind turbine generators shall be painted matt off-white/grey. The blades shall be finished with a surface treatment that minimises any potential for glare or reflection.	Pre-construction/ construction				
2.4	No advertising, signs or logos shall be mounted on the turbines, except where required for safety purposes. A corporate logo may be placed on the turbines provided it is not distinguishable by the naked eye from any publicly accessible location or from any, properties not associated with the project.	Pre-construction/ construction				
2.5	No external lighting other than low intensity security night lighting of infrastructure associated with the project, including wind turbine generators is permitted on site unless otherwise agreed or directed by the Secretary.	Pre-construction/ construction				
2.7	Prior to the commencement of construction, the Proponent shall in consultation with Council and/or the RMS, investigate the potential for a wind farm viewing site, interpretive signage and associated facilities to be installed and maintained in the locality. If required by Council and/or the RMS, the Proponent shall install a viewing site, signage and associated facilities. Responsibilities for maintenance of the viewing site shall be agreed to between the Proponent and Council and/or the RMS.	Pre-construction/ construction				
2.8	The Proponent shall implement all reasonable and feasible measures to minimise the construction noise of the development, including any associated traffic noise.	Pre-construction/ construction				

No.	Secretary's Conditions of Approval	Timing	Responsibility	Reference Document	Status	Closeout Date
2.9	The Proponent shall ensure that the noise generated by any construction activities is managed in accordance with the best practice requirements outlined in the <i>Interim Construction Noise Guideline</i> (DECC, 2009), or its latest version.	Pre-construction/ construction				
2.10	<p>Unless the Secretary agrees otherwise, the Proponent shall only undertake construction activities between:</p> <ul style="list-style-type: none"> a) 7 am to 6 pm Monday to Friday; b) 8 am to 1 pm Saturdays; and c) at no time on Sundays and NSW public holidays. <p>The following construction activities may be undertaken outside these hours without the approval of the Secretary:</p> <ul style="list-style-type: none"> • activities that are inaudible at non-associated residences; • the delivery of materials as requested by the NSW Police Force or other authorities for safety reasons; or • emergency work to avoid the loss of life, property and/or material harm to the environment. 	Pre-construction/ construction				
2.11	The Proponent shall only carry out blasting on site between 9 am and 5 pm Monday to Saturday inclusive. No blasting is allowed on Sundays or public holidays.	Pre-construction/ construction				
2.12	The Proponent shall ensure that any blasting carried out during construction of the development does not exceed the criteria in Table 1 of Secretary's conditions of approval.	Pre-construction/ construction				
2.27	<p>Prior to the commencement of construction of the project, the Proponent shall, in consultation with OEH, develop (and following approval, implement) a compensatory habitat package to offset in perpetuity the value of habitat lost as a result of the project, to the satisfaction of the Secretary. The package shall:</p> <ul style="list-style-type: none"> a) develop a methodology to quantify the offset of vegetation communities based on an improve or maintain outcome; and 	Pre-construction/ construction				

No.	Secretary's Conditions of Approval	Timing	Responsibility	Reference Document	Status	Closeout Date
	<p>b) demonstrate reasonable timeframes for implementation and describe how the offset shall be guaranteed and monitored in perpetuity.</p> <p>Prior to the commencement of construction, clearly defined work areas (including access trails) shall be established using a combination of posts, fencing or markers, and suitably marked up maps as appropriate. All on-site construction movements are to be restricted to these areas, to prevent uncontrolled or inadvertent access by vehicles or construction personnel to vegetation and fauna habitat to be protected under this approval.</p> <p>All works and structures shall be located to avoid abutting forest and woodland remnants protected under this approval. The Proponent shall engage a suitably qualified ecologist to advise on the limits of clearing for turbine hardstand areas and access roads.</p>					
2.28	The Proponent shall only use the former Gwydir Highway Alignment (within Travelling Stock Route 67474) for temporary access to the site during the construction phase of the project. The former Gwydir Highway Alignment is not to be used during the operational phase of the project without the prior consent of the LLS.	Pre-construction/ construction				
2.29	The Proponent shall ensure that all heavy construction vehicles use the Gwydir Highway to access the project.	Pre-construction/ construction				
2.30	The Proponent shall design and construct the road access from the Gwydir Highway (through the Travelling Stock Route 67474) to the site in accordance with the AUSTRIA'S Rural Access Standards and to the satisfaction of the RMS and the LLS. The Proponent shall obtain approval of the road access design from the RMS, prior to construction of the road access to the site.	Pre-construction/ construction				
2.33	Should road access via the former Gwydir Highway Alignment not be permitted by the LLS for the operational phase of the project, the Proponent (and its	Pre-construction/ construction				

No.	Secretary's Conditions of Approval	Timing	Responsibility	Reference Document	Status	Closeout Date
	<p>contractors) shall only use Rose Hill Road for operational access to the site. Other roads are not permitted to be used by the Proponent for site access, except in the case of emergencies or site evacuation. Should Rose Hill Road be used for the operation of the project, the Proponent shall seal the section of Rose Hill Road from its junction with the Gwydir Highway up to the private residences in consultation with the Council, prior to the commencement of operation of the project.</p>					
2.34	<p>Upon determining the haulage route(s) for the construction phase of the project, the Proponent shall:</p> <ul style="list-style-type: none"> a) commission a qualified person to undertake a Road Dilapidation Report of all roads proposed to be used for construction activities excluding the Gwydir Highway in consultation with relevant road authorities. The Report shall assess the current condition of the relevant roads; and b) following completion of construction, a subsequent Road Dilapidation Report shall be prepared by a qualified person and in consultation with relevant road authorities to assess any damage that may have resulted due to traffic and transport related to the construction of the project. <p>Any damage identified in the subsequent Road Dilapidation Report or recommended by the relevant road authorities after review of the subsequent Report shall be restored to a state, described in the original Road Dilapidation report at the Proponent's cost. Such work shall be undertaken at a time as agreed upon between the Proponent and the relevant road authorities. In the event of a dispute between the parties with respect to the extent of restorative work that may be required under this condition, any party may refer the matter to the Secretary for resolution. The Secretary's determination of any such dispute shall be final and binding on the parties.</p>	Pre-construction/ construction				

No.	Secretary's Conditions of Approval	Timing	Responsibility	Reference Document	Status	Closeout Date
2.35	Throughout the life of the project, the Proponent shall regularly consult with the local RFS to ensure its familiarity with the project, including the construction timetable and the final location of all infrastructure on the site. The Proponent shall comply with any reasonable request of the local RFS to reduce the risk of bushfire and to enable fast access in emergencies.	Pre-construction/ construction				
2.36	The Proponent shall: <ul style="list-style-type: none"> a) ensure there is appropriate fire-fighting equipment held on site to respond to any fires that may occur at the site during construction of the project; and b) assist the RFS and emergency services as much as possible if there is a fire on-site during the project. 	Pre-construction/ construction				
2.37	The Proponent shall manage as an "Inner Protection Area" the land around any structure associated with the project to a distance of 10 metres or to the property boundary, as outlined within the "Planning for Bush Fire Protection 2006" and the RFS Document "Standards for Asset Protection Zones."	Pre-construction/ construction				
2.38	Prior to the commencement of construction, the Proponent shall provide the following information to the Civil Aviation Safety Authority, Royal Australian Air Force- Aeronautical Information Service and Air services Australia as well as all known users of privately owned local airfields: <ul style="list-style-type: none"> a) "as constructed" coordinates in latitude and longitude of each wind turbine generator; b) final height of each wind turbine generator in Australian Height Datum; and c) ground level at the base of each wind turbine generator in Australian Height Datum. 	Pre-construction/ construction				
2.39	The Proponent shall store and handle all dangerous goods (as defined by the Australian Dangerous Goods Code) and combustible liquids, strictly in accordance with: <ul style="list-style-type: none"> a) all relevant Australian Standards; 	Pre-construction/ construction				

No.	Secretary's Conditions of Approval	Timing	Responsibility	Reference Document	Status	Closeout Date
	<p>b) a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; and</p> <p>c) the EPA's Environment Protection Manual Technical Bulletin Bunding and Spill Management.</p> <p>In the event of an inconsistency between requirements listed from a) to c) above, the most stringent requirement shall prevail to the extent of the inconsistency.</p>					
2.40	<p>At least two months prior to the commencement of commissioning, the Proponent shall prepare a report outlining a comprehensive Safety Management System, covering all on-site systems related to ensuring the safe operation of the project. The report shall clearly specify all safety related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to the procedures. Records shall be kept at the site and shall be available for inspection by the Department upon request. The Safety Management System shall be developed in accordance with the Department's Hazardous Industry Planning Advisory Paper No. 9, 'Safety Management', and should include:</p> <p>a) procedures and programs for the maintenance and testing of the safety related equipment to ensure its integrity over the life of the project; and</p> <p>b) an outline of a documented procedure for the management of change.</p>	Pre-construction/ construction				
2.43A	<p>Prior to the commencement of construction, the Proponent shall consult with the NSW Government Telecommunications Authority and other registered communications licensees (including emergency services) to ensure that risks to these services are minimised as far as feasible and reasonable. This may include the installation of additional radio sites or services to ensure coverage of radio communications are not degraded.</p>	Pre-construction/ construction				

No.	Secretary's Conditions of Approval	Timing	Responsibility	Reference Document	Status	Closeout Date
2.44	Except as may be expressively provided by an Environment Protection Licence for the project, the Proponent shall comply with section 120 of the <i>Protection of the Environment Operations Act 1997</i> which prohibits the pollution of waters.	Pre-construction/ construction				
2.45	Soil and water management controls shall be employed to minimise soil erosion and the discharge of sediment and other pollutants to lands and/or waters during construction activities, in accordance with Landcom's <i>Managing Urban Stormwater: Soils and Conservation</i> .	Pre-construction/ construction				
2.46	Should the final wind farm design require works in the vicinity of Site GIWF No. 1, the Proponent shall, prior to the commencement of construction in that area, develop a management and mitigation strategy for the site in consultation with the Glen Innes Aboriginal Land Council and OEH.	Pre-construction/ construction				
2.47	If during the course of construction, the Proponent becomes aware of any previously unidentified Aboriginal object(s), all work likely to affect the object(s) shall cease immediately and the OEH informed in accordance with the <i>National Parks and Wildlife Act 1974</i> as well as the Glen Innes Aboriginal Land Council. Works shall not recommence until written authorisation from OEH is received by the Proponent.	Pre-construction/ construction				
2.48	If during the course of construction, the Proponent becomes aware of any unexpected historical relic(s), all work likely to affect the relic(s) shall cease immediately and the Heritage Office notified in accordance with the <i>Heritage Act 1977</i> . Works shall not recommence until the Proponent receives written authorisation from the Heritage Office.	Pre-construction/ construction				
2.49	The Proponent shall not cause, permit or allow any waste generated outside the site to be received at the site for storage, treatment, processing, reprocessing, or disposal or any waste generated on site to be disposed of at the site, except as expressly permitted by a licence under the <i>Protection of the Environment Operations Act 1997</i> , if such a licence is required in relation to that waste.	Pre-construction/ construction				
2.50	The Proponent shall ensure that all liquid and / or non-liquid waste generated and / or stored on the site is assessed and classified in accordance with <i>Waste</i>	Pre-construction/ construction				

No.	Secretary's Conditions of Approval	Timing	Responsibility	Reference Document	Status	Closeout Date
	<i>Classification Guidelines Part 1: Classifying Waste</i> (DECC, 2008), or any future guideline that may supersede that document.					
2.51	The Proponent shall comply with the requirements of the Department of Lands should it need to utilise the Ross Trig Station at any time during construction of the Project.	Pre-construction/ construction				
2.53	<p>The sites for ancillary facilities shall satisfy the following criteria unless otherwise approved through the Construction Environmental Management Plan(s) for the project (refer to condition 6.2):</p> <ul style="list-style-type: none"> a) be located within the site; b) have ready access to the road network; c) be located to minimise the need for heavy vehicles to travel through residential areas; d) be sited on relatively level land; e) be separated from nearest residences by at least 200 metres (or at least 250 metres for a temporary batch plant) with the exception of the temporary site office location; f) be located above the 20 ARI flood level unless a contingency plan to manage flooding is prepared and implemented; g) not require vegetation clearing beyond that already required for the project; and h) not adversely affect the land use of adjacent properties. <p>The location of the Ancillary Facilities shall be identified in the Construction Environmental Management Plan(s) and shall include an analysis against the above criteria. Where these criteria cannot be met, the Construction Environmental Management Plan(s) shall demonstrate there will be no adverse impacts from the Ancillary Facility's construction or operation.</p>	Pre-construction/ construction				

No.	Secretary's Conditions of Approval	Timing	Responsibility	Reference Document	Status	Closeout Date
3.1	<p>Prior to the commencement of construction, the Proponent shall prepare and submit for the approval of the Secretary a Bird and Bat Adaptive Management Program, which takes account of bird/ bat monitoring methods identified in the current editions of Alsea <i>Best Practice Guidelines for the Implementation of Wind Energy Projects in Australia</i> and <i>Wind Farm and Birds: Interim Standards for Risk Assessment</i>. The Program shall be prepared and implemented by a suitably qualified expert, approved by the Secretary. The Program shall incorporate Monitoring, and a Decision Matrix that clearly sets out how the Proponent will respond to the outcomes of monitoring. It shall:</p> <ul style="list-style-type: none"> a) incorporate an ongoing role for the suitably qualified expert; b) set out monitoring requirements in order to assess the impact of the project on bird and bat populations, including details on survey locations, parameters to be measured, frequency of surveys and analyses and reporting. The monitoring program shall be capable of detecting any changes to the population of birds and/ or bats that can reasonably be attributed to the operation of the project, that is, data may be required to be collected prior to the commencement of construction; c) incorporate a decision making framework that sets out specific actions and when they may be required to be implemented to reduce any impacts on bird and bat populations that have been identified as a result of the monitoring; d) identify 'at risk' bird and bat groups and include monthly mortality assessments and periodic local population censuses and bird utilisation surveys; e) identify potential mitigation measures and implementation strategies in order to reduce impacts on birds and bats such as minimising the availability of raptor perches, swift carcass removal, pest control including rabbits, use of deterrents, and sector management including 	Pre-construction/ construction				

No.	Secretary's Conditions of Approval	Timing	Responsibility	Reference Document	Status	Closeout Date
	switching off turbines that are predicted to or have had an unacceptable impact on bird/ bat mortality at certain times; and f) identify matters to be addressed in periodic reports in relation to the outcomes of monitoring, the application of the decision making framework, the need for mitigation measures, progress with implementation of such measures, and their success. The Proponent is required to implement reasonable and feasible mitigation measures as identified under part e) where the need for further action is identified through the Bird and Bat Adaptive Management Program, or as otherwise agreed with the Secretary.					
4.1	Subject to confidentiality, the Proponent shall make all documents required under this approval (including all reports required to be produced or procured during the commissioning, operation and decommissioning phases of the project) available for public inspection on request.	Pre-construction/ Construction, Operation, Decommissioning				
4.2	Prior to the commencement of construction of the project, the Proponent shall establish a dedicated website or maintain dedicated pages within its existing website for the provision of electronic information associated with the project subject to confidentiality. The Proponent shall publish and maintain up-to-date information on this website or dedicated pages including, but not necessarily limited to: a) the current implementation status of the project; b) a copy of this approval and any future modification to this approval; c) a copy of each relevant environmental approval, licence or permit required and obtained in relation to the project; d) a copy of each plan, report, or required monitoring program under this approval; and e) details of the outcomes of compliance reviews and audits of the project	Pre-construction/ Construction				
4.2A	The proponent shall establish and operate a community consultative committee (CCC) for the development to the satisfaction of the Secretary. This	Pre-construction/ construction				

No.	Secretary's Conditions of Approval	Timing	Responsibility	Reference Document	Status	Closeout Date
	<p>CCC must be established and operated in accordance with any applicable CCC guideline.</p> <p>Notes:</p> <ul style="list-style-type: none"> <i>The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Proponent complies with the consent.</i> <i>The CCC should be comprised of an independent chair and appropriate representation from the Proponent, Council and the local community.</i> 					
4.3	<p>Prior to the commencement of construction, the Proponent shall prepare and implement a Community Information Plan which sets out the community communications and consultation processes to be undertaken during construction and operation of the project. Hard copies are to be made available to dwellings within 3km of the Project upon request (otherwise on Proponent's web-site). The Plan shall include but not be limited to:</p> <ol style="list-style-type: none"> procedures to inform the local community of planned investigations and Construction activities, including blasting works; procedures to inform the relevant community of Construction traffic routes and any potential disruptions to traffic flows and amenity impacts; procedures to consult with local landowners with regard to Construction traffic to ensure the safety of livestock and to limit disruption to livestock movements; procedures to inform the community where work has been approved to be undertaken outside the normal Construction hours, in particular noisy activities; procedures to inform and consult with those landowners who are eligible for landscaping on their property as determined under condition 2.1 of this approval; 	Pre-construction/ construction				

No.	Secretary's Conditions of Approval	Timing	Responsibility	Reference Document	Status	Closeout Date
	<ul style="list-style-type: none"> f) procedures to notify relevant landowners of the process available to review potential impacts on radio and television transmission; and g) procedures to notify relevant landowners of the process available to review potential impacts on aerial spraying. 					
4.4	<p>Prior to the commencement of construction of the project, the Proponent shall ensure that the following are available for community complaints for the life of the project (including construction and operation):</p> <ul style="list-style-type: none"> a) a 24-hour telephone number on which complaints about construction and operational activities at the site may be registered; b) a postal address to which written complaints may be sent; and c) an email address to which electronic complaints may be transmitted. <p>The telephone number, the postal address and the e-mail address shall be advertised in a newspaper circulating in the locality on at least one occasion prior to the commencement of construction and at six-monthly intervals for two years following commencement of operation of the project. These details shall also be provided on the Proponent's internet site. The telephone number, the postal address and the email address shall be displayed on a sign near the entrance to the site, in a position that is clearly visible to the public.</p>	Pre-construction/ construction				
4.5	<p>The Proponent shall record details of all complaints received through the means listed under condition 4.4 of this approval in an up-to-date Complaints Register. The Register shall record, but not necessarily be limited to:</p> <ul style="list-style-type: none"> a) the date and time, where relevant, of the complaint; b) the means by which the complaint was made (telephone, mail or email); c) any personal details of the complainant that were provided, or if no details were provided, a note to that effect; d) the nature of the complaint; e) any actions taken by the Proponent in relation to the complaint, including timeframes for implementing the action; 	Pre-construction/ Construction, operation				

No.	Secretary's Conditions of Approval	Timing	Responsibility	Reference Document	Status	Closeout Date
	<p>f) if no action was taken by the Proponent in relation to the complaint, the reason(s) why no action was taken; and</p> <p>g) the Complaints Register is to be made available to the public on request. Any unresolved dispute is to be referred to the Secretary for determination.</p> <p>The complaints Register shall be made available for inspection by the Secretary upon request.</p>					
4.6	The Proponent shall provide an initial response to any complaints made in relation to the project during construction or operation within 48 hours of the complaint being made. The response and any subsequent action taken shall be recorded in accordance with condition 4.5.	Pre-construction/ Construction, operation				
4.7	<p>Prior to the commencement of construction of the project, the Proponent shall prepare and submit for the approval of the Secretary, a Community Enhancement Program with the aim of funding community enhancement measures to the benefit of the local community, in particular in the immediate vicinity of the project.</p> <p>50% of the annual contribution specified by this condition will be allocated to enhancement measures identified within 5km of the Project and the other 50% will be allocated to the remainder of the Glen Innes Community.</p> <p>The Community Enhancement Program shall be developed in consultation with the Council and the local community, including the Glen Innes Landscape Guardians Inc., and provide details of:</p> <p>a) the process by which the program's fund would be administered, including mechanisms for accounting and reporting;</p>	Pre-construction/ Construction, operation				

No.	Secretary's Conditions of Approval	Timing	Responsibility	Reference Document	Status	Closeout Date
	<p>b) how measures and initiatives to be funded by the program would be identified, assessed, prioritised and implemented over the life of the project;</p> <p>c) any other terms agreed to by the parties.</p> <p>The Proponent shall each year contribute the sum of \$75,000 to the Community Enhancement Program, commencing upon commissioning of the project until the end of its life. The contribution shall be adjusted annually to take account of any increase in the Consumer Price Index (All Groups Index for Sydney) over time, commencing at the September 2010 quarter.</p> <p>If the Proponent and council cannot agree on the terms of administration or implementation of the community enhancement program, either party may refer the matter to the Secretary's determination for resolution at any time. The Secretary's determination of the matter will be final and binding on the parties.</p>					
5.1	<p>Prior to the commencement of construction, the Proponent shall develop and implement a Compliance Tracking Program for the project, to track compliance with the requirements of this approval during the construction and operation of the project and shall include, but not necessarily limited to:</p> <p>a) provisions for periodic reporting of the compliance status to the Secretary including at least prior to the commencement of construction of the project, prior to the commencement of operation of the project and within two years of operational commencement;</p> <p>b) a program for independent environmental auditing in accordance with <i>AS/NZ ISO 19011:2003 - Guidelines for Quality and/or Environmental Management Systems Auditing</i>;</p> <p>c) procedures for rectifying any non-compliance identified during environmental auditing or review of compliance;</p> <p>d) mechanisms for recording environmental incidents and actions taken in response to those incidents;</p>	Pre-construction/ construction				

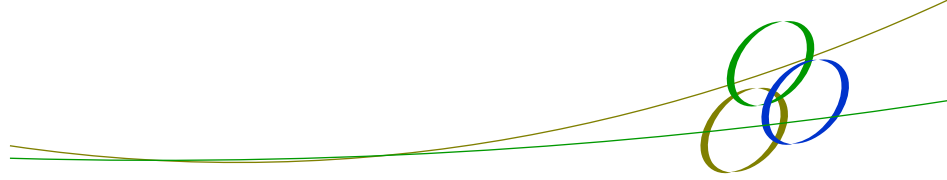
No.	Secretary's Conditions of Approval	Timing	Responsibility	Reference Document	Status	Closeout Date
	<ul style="list-style-type: none"> e) provisions for reporting environmental incidents to the secretary during construction and operation; and f) provisions for ensuring all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this approval relevant to their respective activities. 					
6.1	Prior to the commencement of any construction or operational activities, or as otherwise agreed by the Secretary, the Proponent shall nominate for the approval of the Secretary a suitably qualified and experienced Environmental Representative(s) independent of the design, construction and operation personnel. The Proponent shall engage the Environmental Representative(s) during any construction activities, and throughout the life of the project, or as otherwise agreed by the secretary.	Pre-construction				
6.2	<p>The Proponent shall prepare and implement a Construction Environmental Management Plan in accordance with the <i>Guideline for the Preparation of Environmental Management Plans</i> (DUAP, 2004) or its latest revision. The Plan shall include but not be necessarily be limited to:</p> <ul style="list-style-type: none"> a) a description of all activities to be undertaken on the site during construction including an indication of stages of construction, where relevant; b) statutory and other obligations that the Proponent is required to fulfil during construction including all approvals, consultations and agreements required from authorities and other stakeholders, and key legislation and policies; c) details of how the environmental performance of the construction works will be monitored, and what actions will be taken to address identified adverse environmental impacts. In particular, the following environmental performance issues shall be addressed in the Plan; 	Pre-construction				

No.	Secretary's Conditions of Approval	Timing	Responsibility	Reference Document	Status	Closeout Date
	<ul style="list-style-type: none"> i) measures to monitor and minimise soil erosion on local black clay soils and the discharge of sediment and other pollutants to lands and/or waters during construction activities; ii) particularly during any construction works at or near drainage lines; iii) details of water sources to be used in consultation with DPI Water (including interactions with private landowner water entitlements where water is to be sourced from private property, volume of water to be used, and licensing and permit requirements); iv) details of the amount and source of spoil to be used during construction in consultation with Council; v) measures to monitor and manage dust emissions; and vi) measures to mitigate and manage bushfire hazards. <p>d) a description of the roles and responsibilities for all relevant employees involved in the construction of the project;</p> <p>e) complaints handling procedures as identified in conditions 4.4 to 1.1; and</p> <p>f) the Management Plans listed under condition 6.3 of this approval.</p> <p>The Plan shall be submitted for the approval of the Secretary no later than one month prior to the commencement of any construction works associated with the project, or within such period otherwise agreed by the Secretary. Construction works shall not commence until written approval has been received from the Secretary. Upon receipt of the Secretary's approval, the Proponent shall make the Plan publicly available as soon as practicable.</p>					
6.3	As part of the Construction Environmental Management Plan required under Condition 6.2 of this approval, the Proponent shall prepare and implement the following Management Plans:	Pre-construction/ construction				

No.	Secretary's Conditions of Approval	Timing	Responsibility	Reference Document	Status	Closeout Date
	<p>a) a Noise Management Plan to detail measures to minimise noise emissions associated with the construction of the project. The Plan shall include, but not necessarily be limited to:</p> <ul style="list-style-type: none"> i) identification of all major sources of noise that may be emitted as a result of the construction of the project; ii) specification of the noise criteria as it applies to a particular activity; iii) identification and implementation of best practice management techniques for minimisation of noise and vibration emissions; iv) an assessment of how any proposed blasting will meet the blasting criteria in this Approval (Condition 2.11 and 2.12); v) procedures for the monitoring of noise emissions; and vi) description of the procedures to be undertaken if any non-compliance is detected. <p>b) a Traffic Management Plan to outline measures for the management and coordination of road works required under this approval and to minimise potential conflicts between different user groups. The Plan shall be prepared in consultation with the RMS and Council and shall include, but not necessarily be limited to:</p> <ul style="list-style-type: none"> i) procedures for the construction and maintenance of the construction site entrance along the Gwydir Highway; ii) details of measures to minimise interactions between the project and other users of the roads such as the use of fencing, lights, barriers, traffic diversions etc.; iii) procedures for informing the public where any road access will be restricted as a result of the project; 					

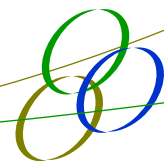
No.	Secretary's Conditions of Approval	Timing	Responsibility	Reference Document	Status	Closeout Date
	<ul style="list-style-type: none"> iv) procedures to inform vehicle drivers and Glen Innes business owners of the traffic routes to be used by heavy vehicles associated with the project; v) procedures to manage construction traffic to ensure the safety of livestock and to minimise disruption to livestock, and school children and limit disruption to school bus timetables; vi) speed limits to be observed along routes to and from the site and within the site; vii) minimum requirements for vehicle maintenance to address noise and exhaust emissions, particularly along roads in close proximity to residences; and viii) details of the expected behavioural requirements for vehicle drivers travelling to and from the site and within the site. <p>c) a Flora and Fauna Management Plan to outline measures to protect and minimise loss of native vegetation and native fauna habitat as a result of construction of the project. The Plan shall include, but not necessarily be limited to:</p> <ul style="list-style-type: none"> i) plans showing terrestrial vegetation communities; important flora and fauna habitat areas; ii) locations where threatened species, have been recorded or are likely to occur; and areas to be cleared. The plans shall also identify vegetation adjoining the site where this contains important habitat areas and/or threatened species, populations or ecological communities; iii) methods to manage impacts on flora and fauna species and their habitat which may be directly or indirectly affected by the project, such as location of fencing, procedures for clearing of vegetation or soil and 					

No.	Secretary's Conditions of Approval	Timing	Responsibility	Reference Document	Status	Closeout Date
	<p>procedures for re-locating hollows or installing nesting boxes; and</p> <p>iv) rehabilitation details, and a program for reporting on the effectiveness of terrestrial flora and fauna management measures. Management methods shall be reviewed where found to be ineffective.</p>					
7.1	The Proponent shall notify the Secretary and any relevant Government authority of any incident with actual or potential significant off-site impacts on people or the biophysical environment as soon as practicable after the occurrence of the incident. The Proponent shall provide written details of the incident to the Secretary within seven days of the date on which the incident occurred.	Pre-construction/ construction				
7.2	The Proponent shall meet the requirements of the Secretary to address the cause or impact of any incident, as it relates to this approval, reported in accordance with Condition 7.1 of this approval, within such period as the Secretary may require.	Pre-construction/ construction				



Appendix 2

Ancillary Infrastructure Assessment



Ancillary Construction Infrastructure Criteria Assessment

Site Reference	Site Office	Laydown Area	Batching Plant	Substation	Access Tracks
a) be located within the site	Yes	Yes	Yes	Yes	Yes
b) have ready access to the road network	Yes	Yes	Yes	Yes	Yes
c) be located to minimise the need for heavy vehicles to travel through residential areas	Yes. Facilities clustered to minimise truck movements				
d) be sited on relatively level land	Yes. Site relatively flat.	Yes. Site relatively flat.	Yes. Site relatively flat.	Yes. Site relatively flat.	Yes. Tracks follow ridgelines where possible.
e) separated from nearest residences by at least 200m (or at least 250m for a temporary batch plant) with the exception of the temporary site office location	Yes. Nearest residence is approx. 1.65 km northwest.				N/A
f) be located above the 20 ARI flood level unless a contingency plan to manage flooding is prepared and implemented	Yes. Given the elevation of the facilities and distance to the nearest water body, flooding is unlikely.				
g) not require vegetation clearing	Yes. Facilities will be located to avoid any tree clearing.				No. Minor clearing is required for some tracks.
h) not adversely affect the land use of adjacent properties	Yes. No offsite impacts will be generated.				Yes. Access tracks will not sever any private property or impede any private access.

The plates attached depict the proposed location of ancillary infrastructure.



PLATE 1




PLATE 2

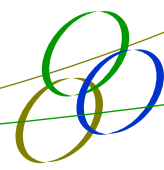


PLATE 3



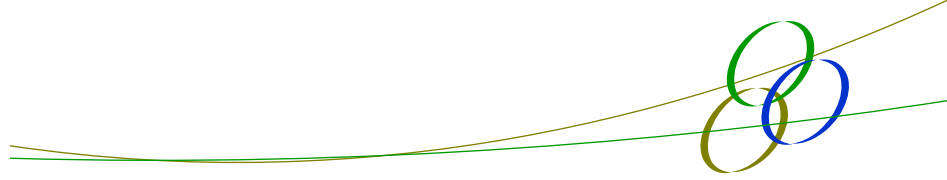
PLATE 4

Author:	K. Lee		Figure 4 SITE OF ANCILLARY INFRASTRUCTURE	 ENVIRONMENTAL PROPERTY SERVICES
Reviewer:	A. Tipper			
A3 Scale:	N/A		OneWind Wind Farm Glen Innes, NSW, Australia 17 August 2016	
Job Ref:	11262			

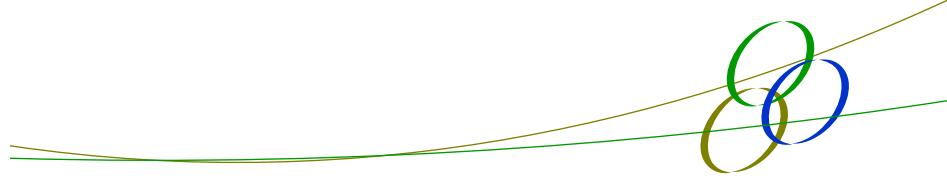


Appendix 3

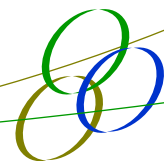
Template Site Inspection Checklist



Site Inspection Checklist			
Inspection completed by [NAME]:			Date:
Inspection completed by [SIGNATURE]:			
Item #	Inspection Item	Compliant Y/N	Comments / Actions
General			
1	Site is in a generally neat and tidy condition.		
2	All works are contained within the site boundary.		
3	Records are being kept up-to-date.		
4	All site staff have been inducted into the site.		
Noise and Vibration			
5	Noise and vibration are being generated within acceptable limits.		
6	Vehicles are being maintained, orientated and operated in a manner that reduces noise impacts.		
7	Records of complaints related to noise and vibration are being kept and actioned.		
Visual Impact			
8	Rubbish is being appropriately handled on-site.		
9	Vehicles are not tracking large volumes of mud onto public roads.		
10	Records of complaints related to visual impact are being kept and actioned.		
Biodiversity			
11	Vegetation clearing limits are being adhered to.		



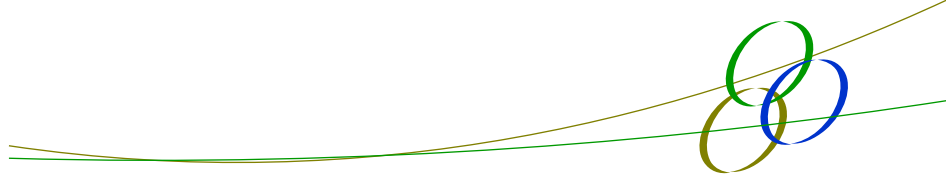
12	There is no evidence of introduction of weeds associated with the project.		
13	Unnecessary access to vegetated areas is being avoided.		
14	No stockpiles are placed in the driplines of trees.		
15	Any injury or death of fauna has been recorded, and records of complaints related to flora and fauna are being kept and actioned.		
Traffic and Access			
16	Appropriate access points are being used.		
17	Vehicles are moving at signposted speeds.		
18	Vehicles are being operated in a safe manner.		
19	Records of complaints or incidents related to traffic are being kept and actioned.		
Heritage			
20	Heritage objects and sites are being appropriately protected.		
21	Unexpected finds have been recorded and reported to the relevant authorities.		
Soil and Water Quality			
22	Appropriate erosion and sediment controls have been installed, as per the CEMP.		
23	Controls are being cleaned out/maintained as appropriate (i.e. following heavy rain events).		
24	Creeklines are visibly clear from project related sediment.		
25	Records of complaints or incidents related to soil and		



	water quality are being kept and actioned.		
Contamination			
26	No fluids are leaking from vehicles onto site.		
27	Re-fuelling of vehicles is not resulting in contamination on site.		
28	No contaminated material has been imported or discovered on site.		
29	Appropriate spill kits are available on-site.		
30	Records of complaints or incidents related to contamination are being kept and actioned.		
Hazards and Risk			
31	Appropriate fire-fighting equipment is available on-site.		
32	Records of complaints or incidents related to fire are being kept and actioned.		
Air Quality			
33	There are no signs of visible dust nuisance being generated on-site affecting neighbouring landowners.		
34	Any dust generated is being appropriately (e.g. via water cart).		
35	Records of complaints or incidents related to dust are being kept and actioned.		

Appendix 4

Nexif Environmental Policy





ENVIRONMENTAL POLICY

Nexif Energy ('Nexif') is an Australian wind energy developer, owner and operator delivering utility scale wind energy projects across the whole of the continent. Nexif is committed to environmental sustainability, awareness and preservation. Nexif promotes environmental responsibility and compliance with relevant environmental regulations throughout all levels of operation.

Primary Goal:

It is Nexif's policy to establish and maintain practices in accordance with the principles of 'Ecologically Sustainable Development'.

Objectives:

Nexif's strong commitment to environmental sustainability is reflected through the following objectives:

- Conduct all work in an environmentally sustainable manner;
- Identify and manage environmental risks or activities that have the potential to negatively impact on the environment;
- Apply best practice environmental principles;
- Comply with all environmental legal, regulatory and other requirements and standards in order to promote environmental sustainability and best practice;
- Report environmental performance openly and transparently;
- Continually improve performance through training, management review, research and development and consultation with communities;
- Ensure employees and relevant stakeholders are aware of their personal duty of care for the environment;
- Engage with workers, clients and other stakeholders to communicate this policy, and provide opportunities for feedback and betterment; and
- Conduct our business in a manner which allows us to be a role model for others to follow.

This policy will be reviewed every two years to ensure relevance and effectiveness is maintained.

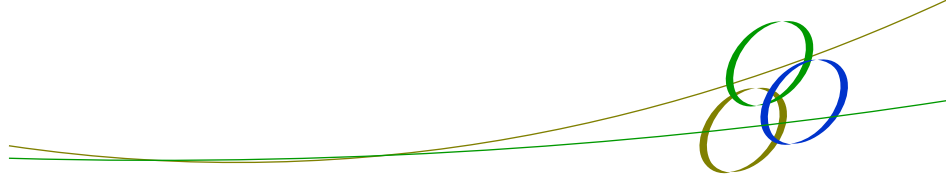
Publication: August, 2016

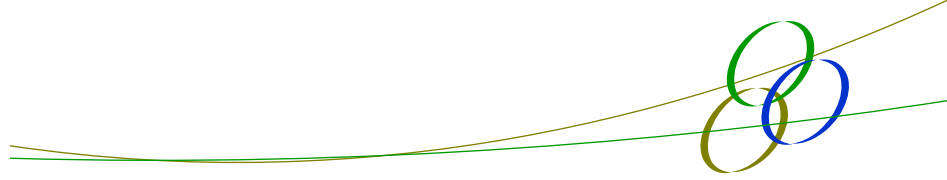
Review: August, 2018

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Signed Nexif Upper Mgmt

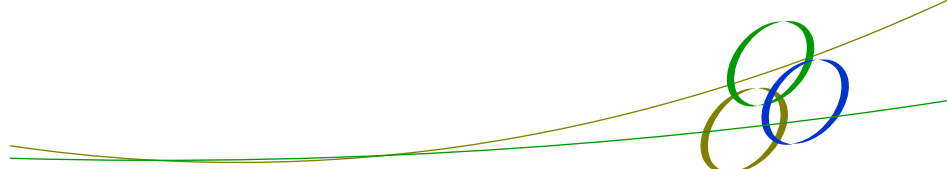
Appendix 5
Noise Management Plan





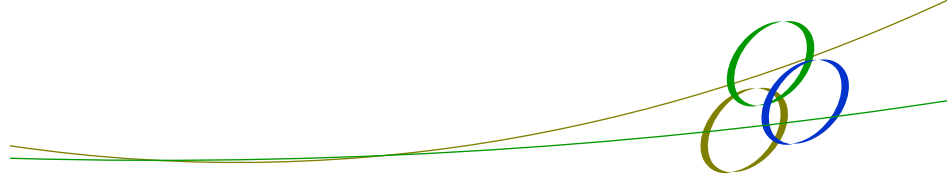
Noise Management Plan

Objective	To comply with construction standards for noise control. To minimise noise due to construction.
Target	To minimise noise generated during the construction phase.
KPI	Target = no exceedences of noise goals or complaints related to noise received from nearby receivers.
Responsibilities	Project Manager
Key Approval Requirements	2.8, 2.9, 2.10, 2.11, 2.12, 2.16, 2.21, 2.22, 2.23.
Key Legislative and Regulatory Requirements	<i>Protection of the Environment Operations Act 1997</i> <i>Protection of the Environment Operations (General) Regulation 1998</i> <i>Protection of the Environment Operations (Noise Control) Regulation 2000</i> <i>NSW Industrial Noise Policy, DEC, 2000</i> <i>Environmental Criteria for Road Traffic, DEC, 1999</i>
Potential Noise Sources	<ul style="list-style-type: none">• Construction equipment.• Vehicles travelling to and from site.• Blasting.• Communication between staff members.
Mitigation Measures	<ul style="list-style-type: none">• Noise generated by any construction is to be managed in accordance with the best practice requirements outlined in the <i>Interim Construction Noise Guideline</i> (DECC, 2009), or its latest version.• Construction shall be limited to the following operation hours unless approved as out of hours works:<ul style="list-style-type: none">a) 7 am to 6 pm Monday to Friday;b) 8 am to 1 pm Saturdays; andc) at no time on Sundays and NSW public holidays.• All blasting shall be undertaken between 9 am and 5 pm Monday to Saturday inclusive. No blasting is to occur on Sundays or public holidays.• Blasting must not exceed the following at any non-associated residence:<ul style="list-style-type: none">○ Air blast overpressure 120dB(L in Peak) and ground vibration 10mm/s; and○ Air blast overpressure 115dB(L in Peak) and ground vibration 5mm/s [allowable exceedance 5% of the total number of blasts or events over a period of 12 months].• In the event of community complaint regarding noise or vibration, monitoring will be undertaken and additional mitigation measures implemented where practicable.• Construction works required to be undertaken outside of the standard construction hours are only to be undertaken in accordance with the Out of Hours Work protocol in Section 3.3 of the CEMP.



Noise Management Plan

	<ul style="list-style-type: none">• High noise impact activities must be carried out reasonably in accordance with <i>Interim Construction Noise Guideline</i> (DECC, 2009) and the <i>Australian Standard 2436-1981 'Guide to noise control on construction, maintenance and demolition sites'</i>.• Bored piles or vibrated piles will be used instead of impact or percussion piling where possible – if required for excavation works.• One to two days prior to blasting and other high noise activities, surrounding residents shall be notified through media and/or other communication options of the intended works in accordance with the Community Information Plan.• Where reasonable and feasible, noisy equipment will be sited behind structures that act as barriers or at the greatest distance from the noise-sensitive areas.• Continuous high noise activities must not exceed three hour blocks, each with a minimum respite from those activities and works of not less than one hour between each block.• Regularly grade access roads to reduce noise from rattling trucks.• Where possible, locate construction equipment in a position that provides the most acoustic shielding from buildings and topography.• Equipment will be switched off when not in use (including during breaks and down times of more than 30 minutes).• Clustering of noise generating plant is to be avoided to minimise cumulative impacts of multiple noise sources.• Equipment will be oriented away from nearby receivers where feasible to minimise noise impacts.• Ensure traffic movement is kept to a minimum, e.g. ensure trucks are fully loaded so that the volume of each delivery is maximised.• Noise complaints will be investigated and where practicable additional measures implemented to reduce the impact.
Monitoring	<ul style="list-style-type: none">• The first three rounds of blasting will include noise monitoring to assess compliance with noise control levels. Where exceedance of approved noise levels occurs or noise complaints are received relating to blasting, ongoing monitoring of blasting will be required until noise levels comply, plus amendment to blasting routine and size of charge to mitigate noise impacts will be required.• Routine inspections will be used to proactively anticipate noise issues, instigate resolution and to ensure that previously identified control measures continue to be implemented.• Should any noise related complaints (separate from blasting related complaints) be received noise levels will be monitored and any exceedences from noise goals will be rectified. Monitoring of works will be required until noise levels can be demonstrated to comply.

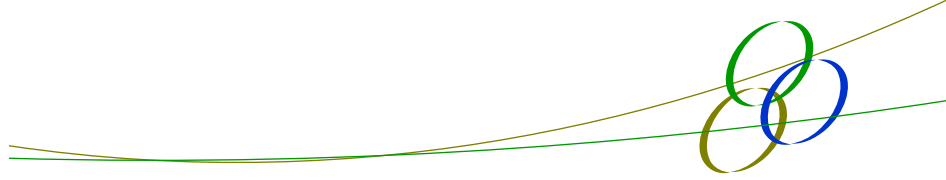


Noise Management Plan

	<ul style="list-style-type: none">Regularly inspect and maintain on site equipment in good working order so as to generate less noise. This includes ensuring all noise reduction devices such as mufflers and silencers are fitted correctly and operative.
Reporting	Any complaints shall reported as in the Incidents and Complaints Register.
Records	Records of training and induction. Records of routine inspections. Records of any reports of incidents.
Associated Documents	Community Information Plan Emergency Response Plan

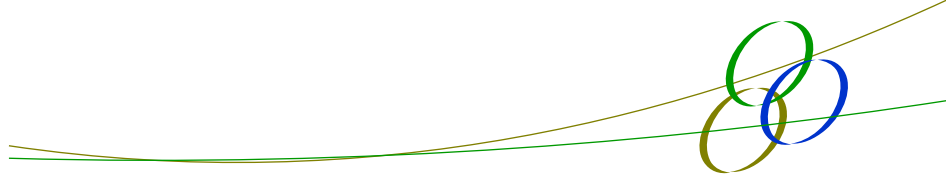
Appendix 6

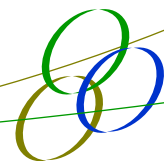
Traffic Management Plan



Appendix 7

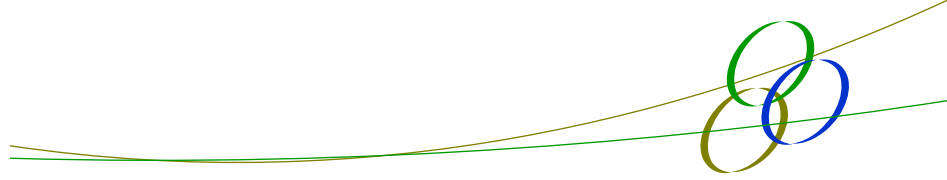
Spoil and Fill Management Plan





Spoil and Fill Management Plan

Objective	To avoid pollution through the use of non-VENM fill materials (including sand and aggregates) or the incorrect placement and handling of site or off site sourced spoil.
Target	No use of non-VENM fill. No sediment loss from spoil placement. What is included within the definition of VENM is prescribed in the EPA note attached to this sub-plan.
KPI	Zero incidences of contamination or sedimentation from fill use.
Responsibilities	Environment and Community Manager
Key Approval Requirements	<ul style="list-style-type: none"> • Conditions of Approval number 6.2 (x) <i>details of the amount and source of spoil to be used during construction in consultation with Council;</i> • The Statement of Commitments notes that any imported fill “<i>will be Virgin Excavated Natural Material as defined in the Environment Protection Authority’s guideline Assessment, Classification and Management of Liquid and Non-Liquid Wastes.</i>”
Key Legislative and Regulatory Requirements	<p><i>Protection of the Environment Operations Act 1997</i></p> <p>Environment Protection Authority’s guideline Assessment, Classification and Management of Liquid and Non-Liquid Wastes.</p>
Potential Pollution Sources	<ul style="list-style-type: none"> • VENM is described as: “<i>natural material (such as clay, gravel, sand, soil or rock fines) that has been excavated or quarried from areas that are not contaminated with manufactured chemicals, or with process residues, as a result of industrial, commercial, mining or agricultural activities and (b) that does not contain any sulfidic ores or soils or any other waste.</i>” • Non-VENM fill can introduce a range of unknown contaminants. • The incorrect handling and disposal of fill or on-site sourced spoil can lead to erosion and sediment loss into local streams.
Mitigation Measures	<ul style="list-style-type: none"> • All imported fill must have VENM certification from the source. • Any VENM fill stockpiles must be placed away from watercourses and if necessary encircled by silt fencing. • Any VENM used in creek crossing or other construction works must be handled in accordance with normal soil conservation practices or in accordance with the Soil and Water Management Plan. • Spoil generated in construction of turbine construction pads will be spread across the pad site and capped with VENM fill if required. • Spoil generated in construction of other works such as access roads will generally be used in associated fill batters. If surplus remains, in liaison with the relevant landholder, and with the approval of the Environmental Representative, the contractor will arrange to transport such surplus within the site for the landholder’s purposes. • Following detailed design, the contractor will provide spoil volume details to Council as required by Consent Condition 6.2 (x).
Monitoring	The Environment and Community Manager will ensure that all incoming loads are certified as VENM. Daily site inspections will include observations of spoil and fill handling.



Spoil and Fill Management Plan

Reporting	Any accidental importation of fill not certified as VENM will immediately be reported to the Environmental Representative for resolution. Any such stockpiles will be immediately quarantined and encircled by silt fencing until a resolution is determined.
Records	Site records will include VENM certification.
Associated Documents	Soil and Water Management Plan.



Resource Recovery Exemption under Part 9, Clauses 91 and 92 of the Protection of the Environment Operations (Waste) Regulation 2014

The excavated natural material exemption 2014

Introduction

This exemption:

- is issued by the Environment Protection Authority (EPA) under clauses 91 and 92 of the Protection of the Environment Operations (Waste) Regulation 2014 (Waste Regulation); and
- exempts a consumer of excavated natural material from certain requirements under the *Protection of the Environment Operations Act 1997* (POEO Act) and the Waste Regulation in relation to the application of that waste to land, provided the consumer complies with the conditions of this exemption.

This exemption should be read in conjunction with 'the excavated natural material order 2014'.

1. Waste to which this exemption applies

- 1.1. This exemption applies to excavated natural material that is, or is intended to be, applied to land as engineering fill or for use in earthworks.
- 1.2. Excavated natural material is naturally occurring rock and soil (including but not limited to materials such as sandstone, shale, clay and soil) that has:
 - a) been excavated from the ground, and
 - b) contains at least 98% (by weight) natural material, and
 - c) does not meet the definition of Virgin Excavated Natural Material in the Act.

Excavated natural material does not include material located in a hotspot; that has been processed; or that contains asbestos, Acid Sulfate Soils (ASS), Potential Acid Sulfate soils (PASS) or sulfidic ores.

2. Persons to whom this exemption applies

- 2.1. This exemption applies to any person who applies or intends to apply excavated natural material to land as set out in 1.1.

3. Duration

- 3.1. This exemption commences on 24 November 2014 and is valid until revoked by the EPA by notice published in the Government Gazette.

4. Premises to which this exemption applies

- 4.1. This exemption applies to the premises at which the consumer's actual or intended application of excavated natural material is carried out.

5. Revocation

- 5.1. 'The excavated natural material exemption 2012' which commenced 19 October 2012 is revoked from 24 November 2014.

6. Exemption

- 6.1. Subject to the conditions of this exemption, the EPA exempts each consumer from the following provisions of the POEO Act and the Waste Regulation in relation to the consumer's actual or intended application of excavated natural material to land as engineering fill or for use in earthworks at the premises:
- section 48 of the POEO Act in respect of the scheduled activities described in clauses 39 of Schedule 1 of the POEO Act;
 - Part 4 of the Waste Regulation;
 - section 88 of the POEO Act; and
 - clause 109 and 110 of the Waste Regulation.
- 6.2. The exemption does not apply in circumstances where excavated natural material is received at the premises for which the consumer holds a licence under the POEO Act that authorises the carrying out of the scheduled activities on the premises under clause 39 'waste disposal (application to land)' or clause 40 'waste disposal' (thermal treatment) of Schedule 1 of the POEO Act.

7. Conditions of exemption

The exemption is subject to the following conditions:

- 7.1. At the time the excavated natural material is received at the premises, the material must meet all chemical and other material requirements for excavated natural material which are required on or before the supply of excavated natural material under 'the excavated natural material order 2014'.
- 7.2. The excavated natural material can only be applied to land as engineering fill or for use in earthworks.
- 7.3. The consumer must keep a written record of the following for a period of six years:
- the quantity of any excavated natural material received; and
 - the name and address of the supplier of the excavated natural material received.
- 7.4. The consumer must make any records required to be kept under this exemption available to authorised officers of the EPA on request.
- 7.5. The consumer must ensure that any application of excavated natural material to land must occur within a reasonable period of time after its receipt.

8. Definitions

In this exemption:

application or apply to land means applying to land by:

- spraying, spreading or depositing on the land; or
- ploughing, injecting or mixing into the land; or
- filling, raising, reclaiming or contouring the land.

consumer means a person who applies, or intends to apply excavated natural material to land.

**Manager Waste Strategy and Innovation
Environment Protection Authority
(by delegation)**

Notes

The EPA may amend or revoke this exemption at any time. It is the responsibility of the consumer to ensure they comply with all relevant requirements of the most current exemption. The current version of this exemption will be available on www.epa.nsw.gov.au

In gazetting or otherwise issuing this exemption, the EPA is not in any way endorsing the use of this substance or guaranteeing that the substance will confer benefit.

The conditions set out in this exemption are designed to minimise the risk of potential harm to the environment, human health or agriculture, although neither this exemption nor the accompanying order guarantee that the environment, human health or agriculture will not be harmed.

The consumer should assess whether or not the excavated natural material is fit for the purpose the material is proposed to be used for, and whether this use will cause harm. The consumer may need to seek expert engineering or technical advice.

Regardless of any exemption provided by the EPA, the person who causes or permits the application of the substance to land must ensure that the action is lawful and consistent with any other legislative requirements including, if applicable, any development consent(s) for managing operations on the site(s).

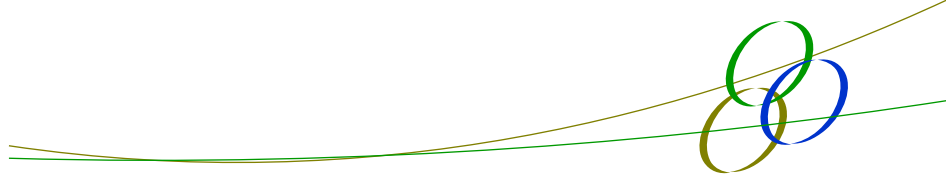
The receipt of excavated natural material remains subject to other relevant environmental regulations in the POEO Act and the Waste Regulation. For example, a person who pollutes land (s. 142A) or water (s. 120), or causes air pollution through the emission of odours (s. 126), or does not meet the special requirements for asbestos waste (Part 7 of the Waste Regulation), regardless of having an exemption, is guilty of an offence and subject to prosecution.

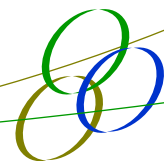
This exemption does not alter the requirements of any other relevant legislation that must be met in utilising this material, including for example, the need to prepare a Safety Data Sheet (SDS).

Failure to comply with the conditions of this exemption constitutes an offence under clause 91 of the Waste Regulation.

Appendix 8

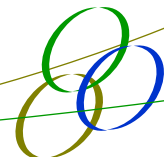
Bushfire Risk Management Plan





Bushfire Risk Management Plan

Objective	To prevent the occurrence of bushfire.
Target	To prevent ignition of bushfire. To protect construction from damage by bushfire. To mitigate against the impacts of bushfire.
KPI	Target = zero incidents of fire.
Responsibilities	Construction Manager, Environmental Manager
Key Approval Requirements	<p><u>PA 2.35</u></p> <p>Throughout the life of the project, the Proponent shall regularly consult with the local RFS to ensure its familiarity with the project, including the construction timetable and the final location of all infrastructure on the site. The Proponent shall comply with any reasonable request of the local RFS to reduce the risk of bushfire and to enable fast access in emergencies.</p> <p><u>PA 2.36</u></p> <p>The Proponent shall:</p> <ul style="list-style-type: none">a) ensure there is appropriate fire-fighting equipment held on site to respond to any fires that may occur at the site during construction and operation of the project; andb) assist the RFS and emergency services as much as possible if there is a fire on-site during the project. <p><u>PA 2.37</u></p> <p>The Proponent shall manage as an “Inner Protection Area” the land around any structure associated with the project to a distance of 10 metres or to the property boundary, as outlined within the “Planning for Bush Fire Protection 2006” and the RFS Document “Standards for Asset Protection Zones.”</p>
Key Legislative and Regulatory Requirements	<p><i>Rural Fires Act 1997</i></p> <p><i>Rural Fires Regulation 2013</i></p>
Potential Fire Emission Sources	<ul style="list-style-type: none">• Bush or grass fire originating from external sources;• Hot works or other construction works; or• Personnel lit fires (i.e. cigarettes).
Mitigation Measures	<ul style="list-style-type: none">• Appropriate fire-fighting equipment shall be available on site and fitted to heavy plant.• An ‘Inner Protection Area’ shall be created on the land around any structure associated with the project to distance of 10 metres or to the property boundary.• A mobile, 1,000 litre water tanker unit complete with motor-driven pump, hose and nozzle will remain at the site during construction work.

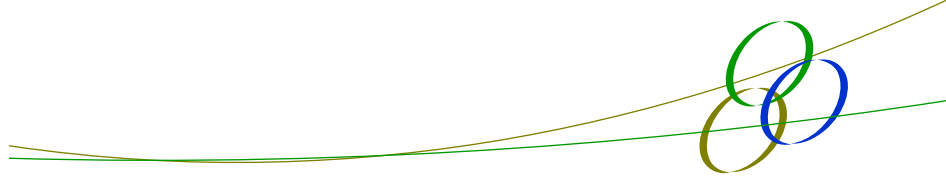


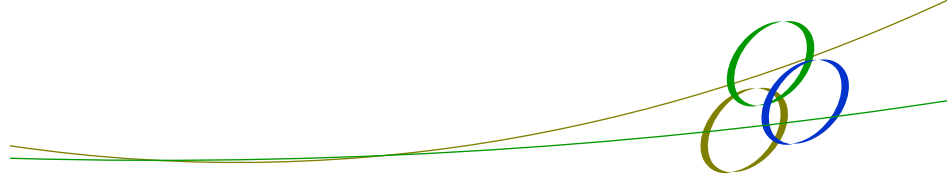
Bushfire Risk Management Plan

	<ul style="list-style-type: none">• Knapsack sprays and McLeod tools will be kept on hand at each actual work site.• All hot works or blasting will be undertaken in accordance with an Environmental Representative approved hot work method statement.• The exhaust systems of all vehicles on-site will be maintained in sound condition and to avoid any build-up of dry vegetation under vehicles.
Monitoring	Local weather warnings and bushfire warnings will be monitored daily. Announcements made by RFS will be monitored daily at the NSW Rural Fire Service Information Line: http://www.rfs.nsw.gov.au/ 1800 NSW RFS (1800 679 737)
Reporting	Any fires that occur onsite must be reported as an incident.
Records	Records of complaints related to fire. Records of any reports to authorities relating to fire incidents causing or threatening to harm the environment.
Associated Documents	Emergency Response Plan

Appendix 9

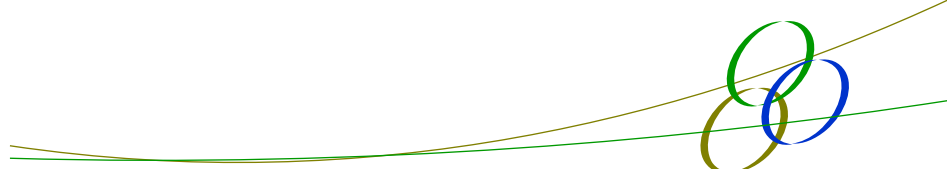
Waste Management Plan





Waste Management Plan

Objective	To minimise waste creation and disposal, and maximise reuse or recycling.
Target	<p>To reduce the volume of waste created as a result of the project construction activities.</p> <p>To promote avoidance of waste, re-use of materials and recycling, wherever practicable.</p> <p>Prevent the storage and handling of waste resulting in contamination of the site.</p>
KPI	<p>Target = Waste disposal and recycling records are accurately maintained.</p> <p>Target = Zero non-conformances related to waste management.</p>
Responsibilities	Construction Manager, Environmental Manager
Key Approval Requirements	<p><u>PA 2.49</u></p> <p>The Proponent shall not cause, permit or allow any waste generated outside the site to be received at the site for storage, treatment, processing, reprocessing, or disposal or any waste generated on site to be disposed of at the site, except as expressly permitted by a licence under the Protection of the Environment Operations Act 1997, if such a licence is required in relation to that waste.</p> <p><u>PA 2.50</u></p> <p>The Proponent shall ensure that all liquid and / or non-liquid waste generated and / or stored on the site is assessed and classified in accordance with Waste Classification Guidelines Part 1: Classifying Waste (DECC, 2008), or any future guideline that may supersede that document.</p>
Key Legislative and Regulatory Requirements	<i>Protection of the Environment Operations Act 1997 (POEO)</i>
Potential Waste Sources	<p>Potential sources of the waste include the following:</p> <ul style="list-style-type: none">• Packaging;• Excess construction materials;• Excavated material (refer to Spoil and Fill sub-plan);• Cleared vegetative material.
Mitigation Measures	<ul style="list-style-type: none">• No waste generated outside the site shall be received at the site for storage, treatment, processing, re-processing or disposal.• No waste generated on-site is to be disposed of on-site except as expressly permitted by a license under the <i>Protection of the Environment Operations Act 1997</i>.• All liquid and / or non-liquid waste generated and / or stored on the site shall be assessed and classified in accordance with <i>Waste Classification Guidelines Part 1: Classifying Waste</i> (DECC, 2014).• Contaminated materials, glass, metals, plastics, hydrocarbons (lubricants and fuels) and sanitary wastes] will be transported offsite by appropriate licenced contractors to disposal facilities approved to receive that type of waste. Cleared vegetation will be left on site.

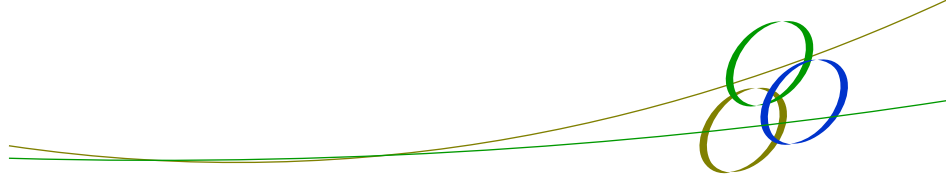


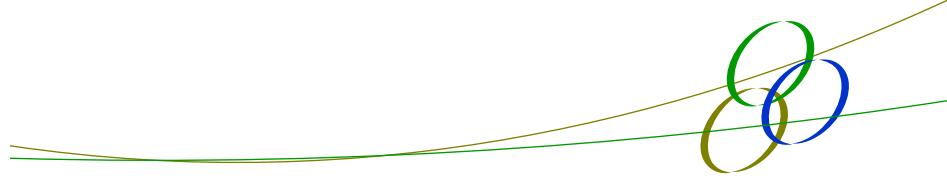
Waste Management Plan

	<ul style="list-style-type: none">• Surplus topsoil will be spread on the site to blend in with the natural landform and will be revegetated.• Surplus excavated material will be disposed of on the relevant property at one or more locations as agreed with the property owner. Disposal sites will be finished with topsoil and revegetated. Where feasible, existing erosion areas will be selected for backfill and treatment.• Where feasible, recyclable items such as metals, glass or timber will be separated and directed to an appropriate local facility.• Any putrescible general waste material will be stored in sealed containers until it is removed from site.• During construction, portable toilet facilities shall be installed on site and emptied periodically by an approved and appropriately licenced contractor.• Disposal of sillage from any of the pump out toilet facilities will be to the local Glen Innes Treatment Plant or other suitable facility as agreed with Council.• Any waste oil arising from equipment servicing will be stored in sealed containers in a covered and bunded area until it can be removed off site to a suitable waste oil facility.• Bins will be provided at the site amenities for the separation of waste streams.• All loads of waste transported to and from site will be covered to prevent spillage.• Burning or incineration of green waste or any other wastes is strictly prohibited.• Documents and records of the transport and destination of all materials removed from site will be kept and submitted to the Construction Manager as proof of correct disposal and for environmental auditing purposes.
Monitoring	Site will be regularly inspected for appropriate waste management. Waste audits will be completed as part of the independent audit.
Reporting	N/A
Records	<ul style="list-style-type: none">• Records of complaints related to waste management.• Records/receipts of waste disposal will be kept.
Associated Documents	Emergency Response Plan, Spoil and Fill Sub-plan

Appendix 10

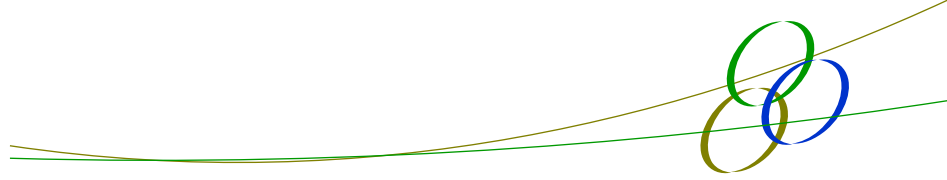
Weeds Management Plan





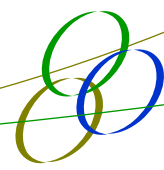
Weed Management Plan

Objective	To manage declared weeds.
Target	To introduce no new declared weeds to the Project site. To prevent spread of existing declared weeds within the project site.
KPI	Target = zero incidents or complaints from landholders, Local Land Services or other stakeholders.
Responsibilities	Environment and Community Manager
Key Approval Requirements	Nil
Key Legislative and Regulatory Requirements	<p><i>Noxious Weeds Act 1993</i></p> <p>Noxious Weeds (Weed Control) Order 2104 details weeds declared noxious in New South Wales, Australia, under the Noxious Weeds Act 1993. The Order lists the weed names, the control class and the control requirements for each species declared in a Local Control Authority area. The Order itself describes the legal requirements for any weed. Declared weeds are classified according to the environmental and agricultural risks that they pose, and these risks in turn denote the landholder's legislative control requirements as follows:</p> <p>Class 1: State Prohibited Weed. The plant must be eradicated from the land and that land must be kept free of the plant.</p> <p>Class 2: Regionally Prohibited Weed. The plant must be eradicated from the land and that land must be kept free of the plant.</p> <p>Class 3: Regionally Controlled Weed. The plant must be fully and continuously suppressed and destroyed and the plant must not be sold, propagated or knowingly distributed.</p> <p>Class 4: Locally Controlled Weed. The plant must not be sold, propagated or knowingly distributed.</p> <p>Class 5: Restricted Plant. The requirements in the <i>Noxious Weeds Act 1993</i> for a notifiable weed must be complied with.</p> <p>The New England Weeds Authority (NEWA) has been delegated with authority to exercise all of Council's functions, powers and responsibilities under the <i>Noxious Weeds Act 1993</i> and regulations (http://www.newa.com.au/).</p>
Potential Sources	There are a range of noxious weeds existing on the site, which are controlled to varying degrees by respective landholders. New weeds can be introduced in material deliveries, machinery, packaging and earthmoving equipment.
Mitigation Measures	<p>Weed management consist of avoidance, monitoring and control.</p> <p>Key avoidance measures for new weeds are ensuring that any bulk materials (sand, aggregate, fill etc.) is sourced from suppliers who can demonstrate weed-free status. No hay bales are to be used in erosion control works to reduce weed seed importation. Additional and important measures include ensuring that all earthmoving plant and trucks that come to site are clean of mud and soil, both of which can harbour new weeds.</p> <p>The key avoidance measures for reducing the risk of spreading existing weeds across property and paddock boundaries is to stage construction from clean paddock to</p>



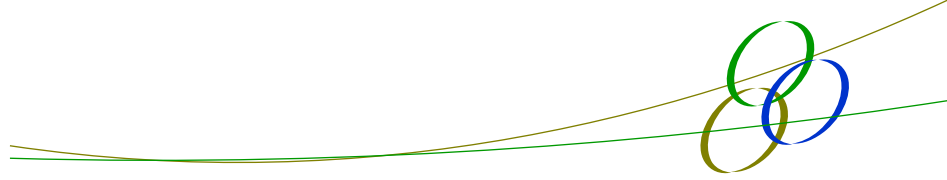
Weed Management Plan

	<p>infested, and to wash down equipment used for topsoil disturbance prior to internal transport across property boundaries.</p> <p>Monitoring will be part of daily inspections, but given that young weeds are often hard for untrained staff to recognise, regular consultation with landholders and lessees will be important for early identification.</p> <p>The final aspect of weed management is control, most commonly through herbicide spraying or hand removal.</p> <p>Various weeds have specific Council- endorsed management plans, and where available these plans will be implemented on the site. The current specific weed management plans can be found at http://www.gisc.nsw.gov.au/environment/noxious-weed-and-pest-control/class-4-weeds-management-plan-booklet.</p> <p>Where specific weed management plans have not been prepared, Nexif in liaison with landowners will control weeds as required by the <i>Noxious Weeds Act 1993</i>. In some cases, this will involve grazing controls, herbicide, physical removal, or a combination of the three. Herbicides will be used in accordance with the relevant labels and NSW WorkCover Code of Practice for the Safe Use and Storage of Chemicals (Including Pesticides and Herbicides) in Agriculture.</p>
Monitoring	Monitoring will be on a regular basis
Reporting	New occurrences of declared weeds will be reported to New England Weeds Authority.
Records	Weed observations and control attempts will be recorded.
Associated Documents	http://www.gisc.nsw.gov.au/environment/noxious-weed-and-pest-control/class-4-weeds-management-plan-booklet http://www.northwestweeds.com.au/sample-page/



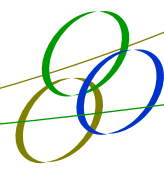
Appendix 11

Cultural Heritage Management Plan



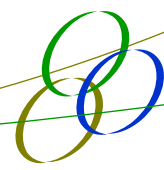
Cultural Heritage Management Plan

Objective	To protect and preserve Aboriginal cultural heritage.
Target	To adequately protect Aboriginal cultural heritage sites and values. To implement an effective consultation program with traditional landowners, community groups, regulatory authorities, and other relevant stakeholders.
KPI	Target = no unauthorised damage to heritage sites as a result of activities
Responsibilities	Environment and Community Manager
Key Approval Requirements	<u>Conditions of Approval numbers 2.46, 2.47, 2.48.</u>
Key Legislative and Regulatory Requirements	<i>National Parks and Wildlife Act 1974</i> Clause 86 <i>A person must not harm or desecrate an object that the person knows is an Aboriginal object.</i>
Mitigation Measures	<p>There are three basic levels of management options in order of preference:</p> <p>Avoidance;</p> <p>Preservation through ongoing management; and</p> <p>Salvage and interpretation.</p> <p><u>Avoidance</u></p> <p>The single known artefact on the site, a ground axe head GIWF1 near the proposed turbine site 10 has been avoided by excluding this turbine from the approval</p> <p>All vehicles are to travel along designated access tracks only.</p> <p>The Induction will address Aboriginal heritage.</p> <p>If an unrecorded heritage artefact item is found, <u>work in that area must stop immediately</u> and must be reported promptly to the Environment and Community Manager and until the potential artefact is assessed and recorded by a qualified archaeologist</p> <p><u>Discovery of Human Remains</u></p> <p>If during construction, suspected human remains are uncovered, the following procedure should be followed:</p> <p>Inform Environment and Community Manager of the find and cease all works within the vicinity of the remains. Do not further disturb or remove any of the remains.</p> <p>Inform the Local Police and OEH.</p> <p>If the remains are determined to be Aboriginal then the Aboriginal stakeholders, following OEH advice should be informed of their discovery. The handling of the remains will be dealt with following the development of a management strategy in which the Aboriginal stakeholder groups will be involved.</p>
Monitoring	N/A
Reporting	N/A
Records	Records of complaints and incidents related to Aboriginal heritage. Records of Site Specific Inductions and Toolbox meetings. Inspection checklists, where applicable.



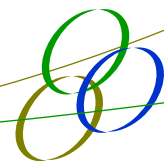
Cultural Heritage Management Plan

Associated Documents	Specific Aboriginal Heritage information will be provided as part of inductions.
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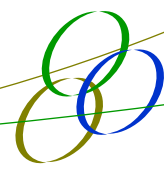
Appendix 12

European Heritage Management Plan



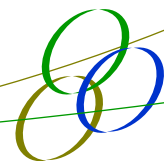
European Heritage Management Plan

Objective	To protect and preserve European heritage.
Target	To adequately protect European heritage objects and sites.
KPI	Target = no unauthorised damage to heritage sites as a result of activities.
Responsibilities	Environment and Community Manager
Key Approval Requirements	<u>Conditions of Approval Numbers 2.48, Statement of Commitments 15.1</u>
Key Legislative and Regulatory Requirements	<i>Heritage Act 1977</i>
Mitigation Measures	<ul style="list-style-type: none"> • A photographic record of the section of the former highway to be used as access to the wind farm shall be prepared in accordance with the OEH guideline. • Should the need arise to use the Ross Hill Trig Station any time during construction / operation, all works shall comply with the requirements of the Department of Lands. • The proposed access tracks and cabling corridors will, as far as possible, follow existing vehicle tracks to minimise disturbance to the landscape and reduce the potential for disturbance of any sensitive archaeological and cultural zones. • The Ross Hill Trig Station site and its associated reference marks will be protected by fencing prior to any works. The fencing will be maintained for the duration of construction works. Such fencing would be at least 5 metres in each direction from the Trig Station or any reference marks in its vicinity and no construction activities will occur within the fenced area. • The former highway alignment will not be subject to excavation or disturbance other than minor maintenance to ensure the safe use by vehicles to reach the windfarm site and suitable drainage. • The trees along each side of the former highway will be maintained apart from minor lopping of any overhanging branches and removal of a few smaller trees at a single location to gain access to the gate providing entry to the northern end of the wind farm site
Monitoring	N/A
Reporting	N/A
Records	<p>Records of complaints and incidents related to European heritage.</p> <p>Records of Site Specific Inductions and Toolbox meetings.</p> <p>Inspection checklists, where applicable.</p>
Associated Documents	Specific European cultural heritage information will be provided as part of inductions.



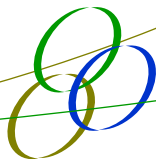
Appendix 13

Greenhouse Gas Management Plan



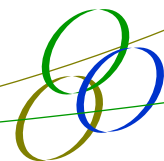
Greenhouse Gas Management Plan

Objective	Minimal greenhouse gas emissions.
Target	To control the quality and quantity of vehicle exhaust emissions. To control the emission of greenhouse gases.
KPI	Target = minimal greenhouse gas emissions.
Responsibilities	Construction Manager, Environmental Officer
Key Approval Requirements	N/A
Key Legislative and Regulatory Requirements	<i>Protection of the Environment Operations Act 1997</i>
Potential GHG Emission Sources	Vehicle emissions during construction, production testing and rehabilitation; and Concrete production.
Mitigation Measures	<ul style="list-style-type: none">• All vehicle exhaust systems will be properly maintained and monitored for visible emissions.• All vehicles will operate within a 40km/h speed limit.• Burning or incineration of green waste or any other wastes is strictly prohibited.
Monitoring	Monitoring will be on a regular basis during construction in accordance with the CEMP.
Reporting	N/A
Records	Records of complaints related to greenhouse gas emissions. Inspection checklists for vehicles and machinery. Records of any reports to authorities relating to incidents causing or threatening to harm the environment as a result of greenhouse gas emissions.
Associated Documents	Emergency Response Plan




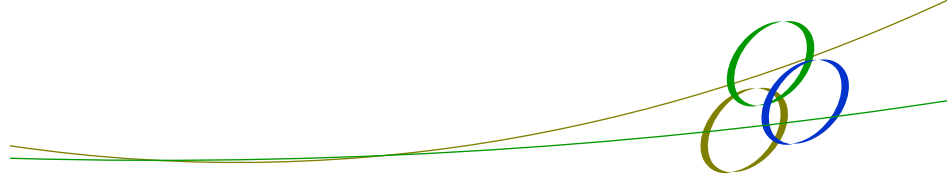
Appendix 14

Erosion and Sediment Control Plan



Erosion and Sediment Control Management Plan

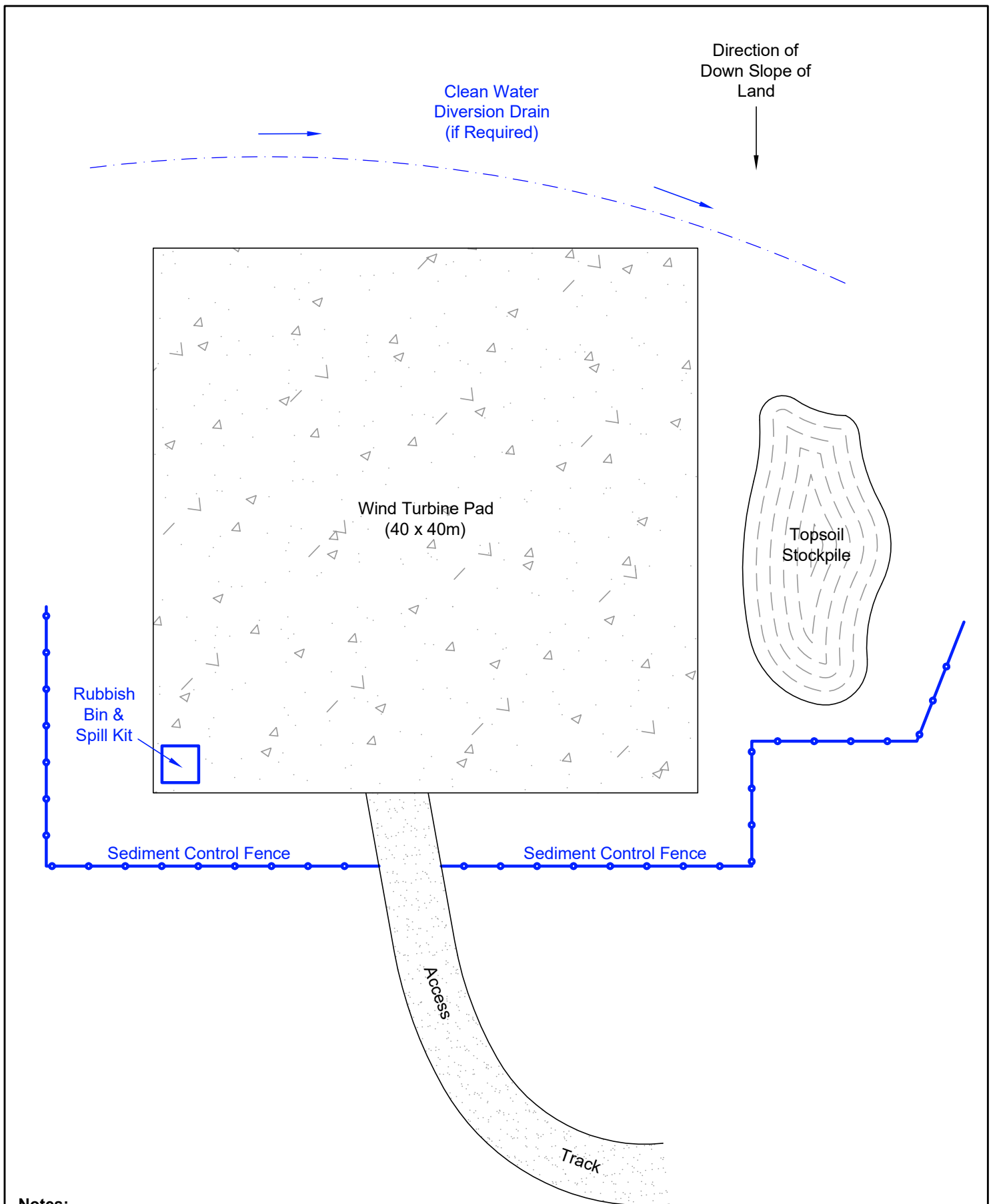
Objective	To reduce erosion and sediment loss off-site.
Target	To not increase erosion or sediment movement.
KPI	Target = zero incidents or complaints from landholders, Local Land Services or other stakeholders. Zero non-compliances of daily and weekly checks.
Responsibilities	Environment and Community Manager
Key Approval Requirements	Nil.
Key Legislative and Regulatory Requirements	<i>Soil Conservation Act 1938</i>
Potential Sources	Erosion and subsequent sediment transport is primarily due to poor water management practices such as concentrating water or the removal of natural ground cover.
Mitigation Measures	<p>Progressive Erosion and Sediment Control Plans will be prepared by the contractor to consider the following:</p> <p>The Landcom Blue Book;</p> <p>The Typical Designs attached to this sub-plan (Specific application of each Typical Design is provided in the body of the CEMP).</p> <p>A sediment and erosion control measure guide is attached to this plan.</p>
Monitoring	Monitoring will be on a regular basis.
Reporting	Site inspection checklists will be completed which include sediment and erosion control measures. Any incidents involving severe erosion or sediment escape will be recorded as an incident.
Records	Observations and rectification works will be recorded.
Associated Documents	 BlueBookVol1.pdf.cdownload




The following table describes typical applications for the standard design measures included in the figures attached.

Table A14-1: Standard Measures

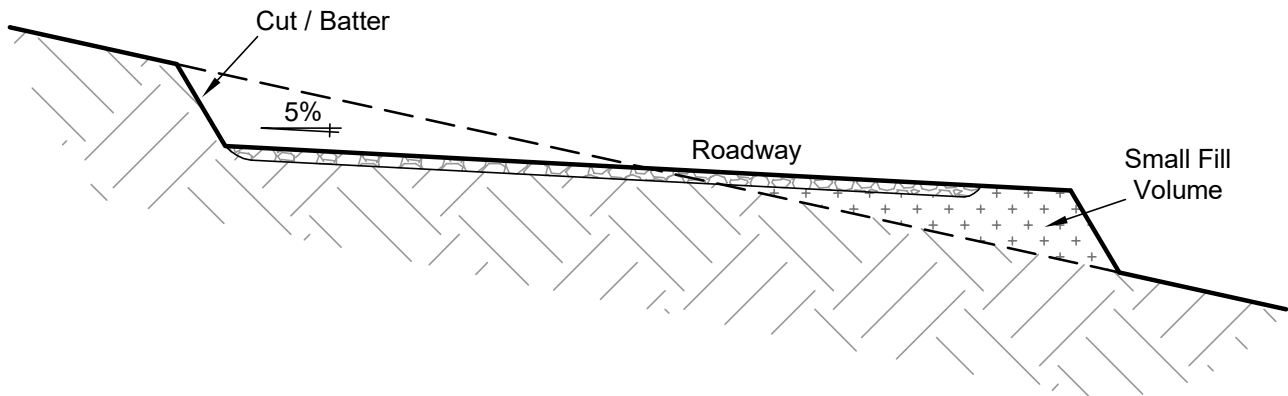
Typical Design	Application	Notes
Controls on Pad Site	Prior to and during pad formation and works at each turbine site.	The requirement for topsoil stockpiles, diversion banks and controls generally will be adjusted according to site slope and soils with the approval of the Environment and Community Manager.
Rock Check Dams	In gullies or long road drains.	All dimensions and material are nominal and can be modified with the approval of the Environment and Community Manager.
Causeway	When vehicular crossing of a watercourse is required.	All dimensions and material are nominal and can be modified with engineering design and the approval of the Environment and Community Manager.
Tracks with outfall drainage	To be used where the natural side slope of the track location requires cutting to provide safe vehicular access.	Dimensions can be modified with engineering design and the approval of the Environment and Community Manager.
Tracks with In-fall drainage	To be used where the natural side slope of the track location requires cutting to provide safe vehicular access, but where outfall drainage is not feasible.	Dimensions can be modified with engineering design and the approval of the Environment and Community Manager. Table drain dimensions are nominal, but require flat, top soiled, channels. Table drains must be drained via pipes, cross banks or mitre drains at nominal 80 m intervals.
Table Drain	To drain in-fall tracks.	All dimensions are nominal and can be modified with engineering design and the approval of the Environment and Community Manager. Table drains must be drained via pipes, cross banks or mitre drains at nominal 80 m intervals.
Cross Bank	To divert water from tracks.	All dimensions are nominal, but flatter batters provide higher transit speeds for vehicles, although do require additional earth for construction. Providing sufficient grade in the trafficked channel is key to avoiding ponding that will lead to bogging and track damage. All outlets must be surveyed.
Pipe Culvert	To divert water from table drains or to provide watercourse crossings.	All dimensions are nominal and can be modified with engineering design and the approval of the Environment and Community Manager. Setting the invert level to natural ground level is key to preventing initiation of gully erosion. Provision of well-placed and compacted rip rap on the outlet end is key to preventing scouring and undercutting of the pipe.



- Notes:**
- Locate topsoil stockpile away from areas of concentrated flow
 - Locate sediment control fence downslope of wind turbine pad

Author:	K. Lee	GENERIC ENVIRONMENTAL CONTROLS ON PAD SITES OneWind Wind Farm Glen Innes, NSW 10 August 2016	 ENVIRONMENTAL PROPERTY SERVICES
Reviewer:	M. Shelly		
A4 Scale:	N/A		
Job Ref:	11262		

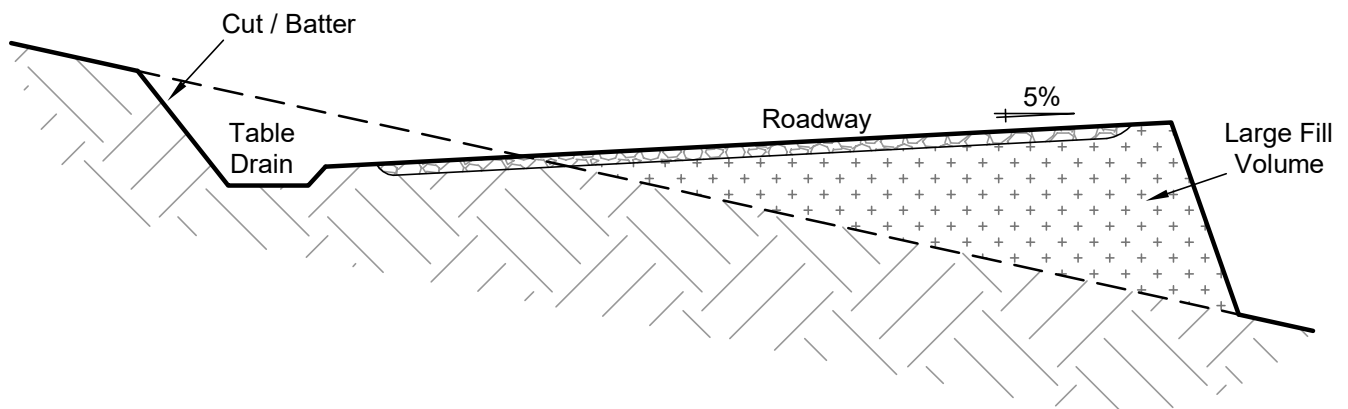
TYPICAL ACCESS TRACK (OUTFALL DRAINAGE)



Access Track (Outfall Drainage) Notes:

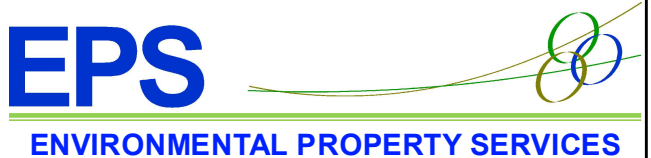
- Remove any grading windrows on downhill edge of track
- Where possible topsoil cut and fill batters
- Outfall crossgrade 5%

TYPICAL ACCESS TRACK (INFALL DRAINAGE)

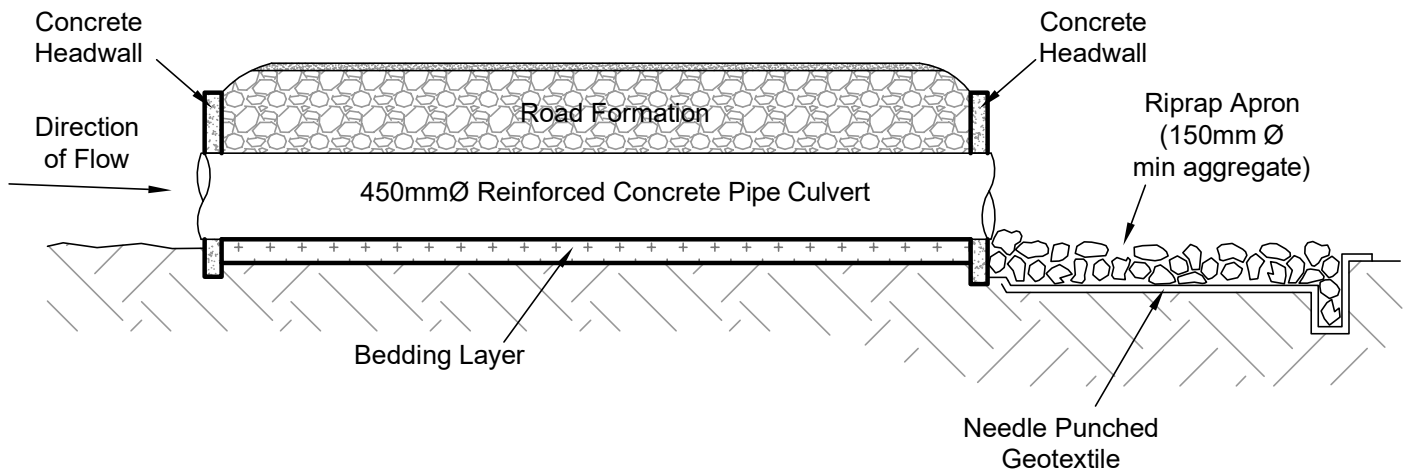


Access Track (Infall Drainage) Notes:

- Build table drains as per drawing
- Infall crossgrade 5%
- Topsoil fill batters and table drain channel base

Author:	K. Lee	TYPICAL ROAD & DRAINAGE DESIGNS OneWind Wind Farm Glen Innes, NSW 10 August 2016	
Reviewer:	M. Shelly		
A4 Scale:	N/A		
Job Ref:	11262		

TYPICAL PIPE CULVERT

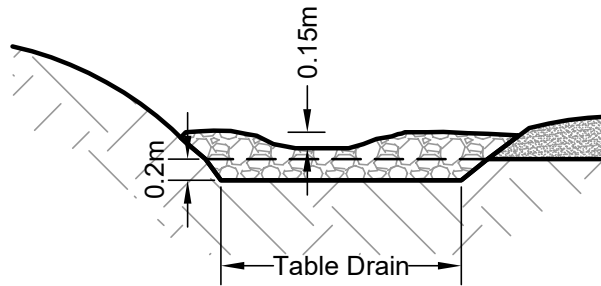


Pipe Culvert Notes:

- All pipes be 450mmØ minimum to comply with AS4058, 300mmØ on cross drains
- All pipes to be placed according to manufacturer instructions
- Pipes to be placed with minimum 1% grade to drain crossings
- Bedding and backfilling material to be placed and compacted in layers not exceeding 150mm and track rolled
- Concrete headwalls to be fixed to the inlet and outlet of pipe culverts
- Headwalls at inlets to be constructed with sufficient height and width, placed to ensure flows in drains do not bypass or overtop the inlet headwall
- Sufficient scour protection and energy dissipation at outlet, including riprap apron of nominal 150mm minimum aggregate at least 300mm deep, underlain by needle-punched geotextile and keyed into ground
- Outlet structures to extend beyond tow of any embankment and discharge onto a stable area. Level spreading to achieve sheet flow is desirable

Author:	K. Lee	TYPICAL ROAD & DRAINAGE DESIGNS OneWind Wind Farm Glen Innes, NSW 10 August 2016	 ENVIRONMENTAL PROPERTY SERVICES
Reviewer:	M. Shelly		
A4 Scale:	N/A		
Job Ref:	11262		

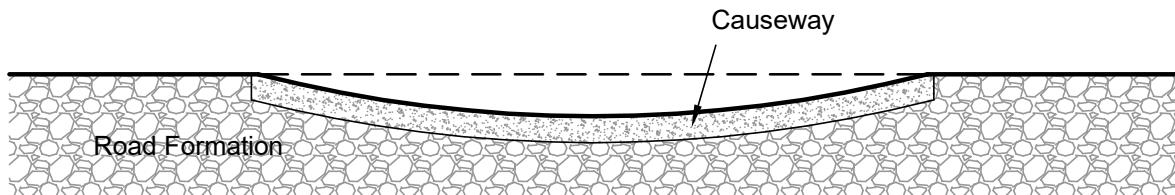
TYPICAL ROCK CHECK DAM



Rock Check Dam Notes:


- Use broken rock or concrete, nominal 100-150mm Ø
- In series application, the base of the uphill check dam can be no higher than the spillway height of the next check dam downstream
- Trench into base and sides of gully approximately 200mm

TYPICAL CAUSEWAY



Causeway Notes:

- All construction materials to be used in accordance with manufacturer recommendations
- Entry ramp batters 1V:25H grade, finished to match adjoining road formation
- 2% crossfall to drain downstream
- Curved profile for trafficability
- Sufficient scour protection and/or energy dissipation downstream of causeway e.g. riprap apron
- Must not pond water either on, upstream, or downstream of causeway
- Causeway material not specified but can include broken rock, concrete, stabilized base etc
- Sizing by design

Author:	K. Lee	TYPICAL ROAD & DRAINAGE DESIGNS OneWind Wind Farm Glen Innes, NSW 10 August 2016	 ENVIRONMENTAL PROPERTY SERVICES
Reviewer:	M. Shelly		
A4 Scale:	N/A		
Job Ref:	11262		

TYPICAL TABLE DRAIN

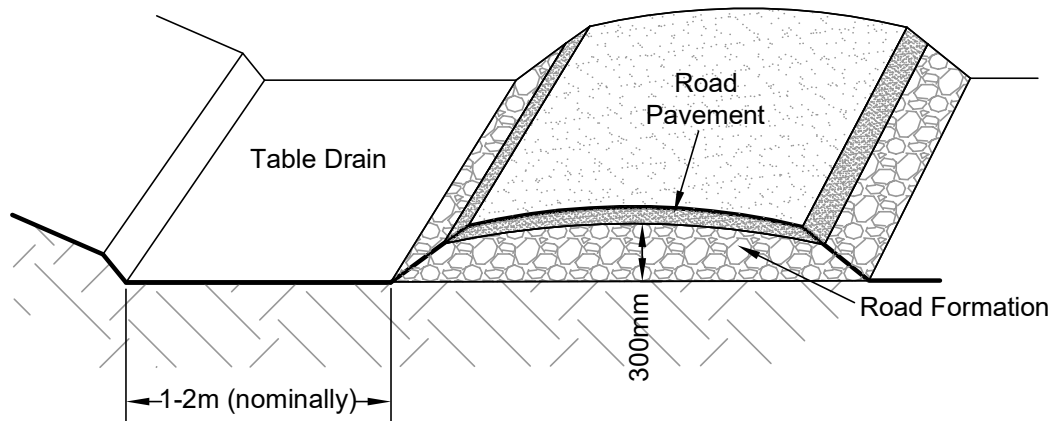
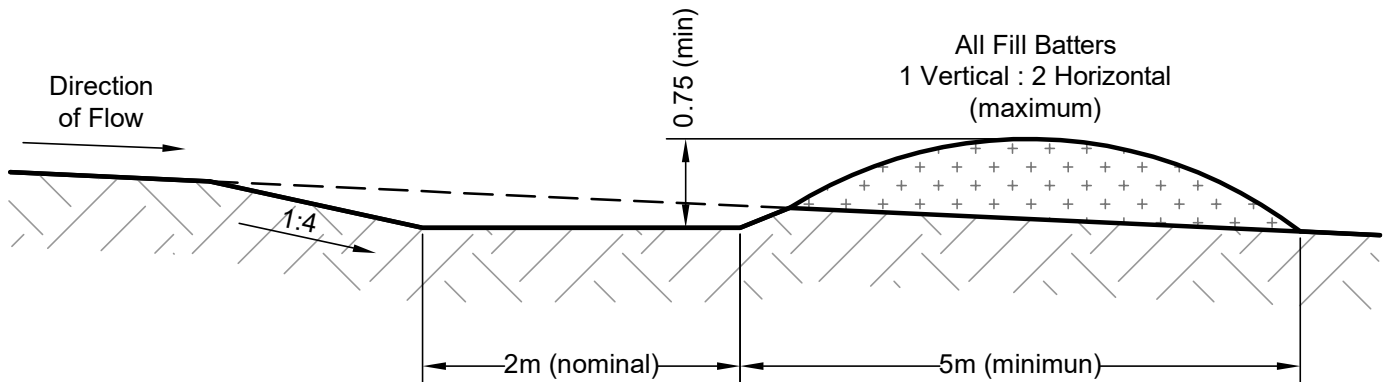


Table Drain Notes:

- Construct table drain nominally 300mm below edge of road pavement
- Table drain length not to exceed 90m between outlets
- Channel dependant on plant and available room, nominally 1-2m wide
- Channels to be flat bottomed rather than V-drains
- Avoid on slopes greater than 10%
- Topsoil channel where possible
- In-channel sediment control may be necessary e.g. rock check dams
- Remove windrows on sides of roads following construction or maintenance

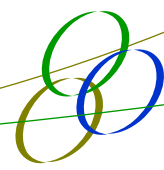
TYPICAL CROSS BANK



Cross Bank Notes:

- Channel grade 5%
- No water to pond in trafficked area
- Cut and fill batters to suit vehicles
- Channels to be flat bottomed, approx 2m wide (according to plant)
- Crest of bank 0.75m minimum above channel invert
- Level outlet to be surveyed and must discharge onto well grassed or other stable area free of obstructions
- Track roll bank for compaction
- Maximum lateral spacing 50 to 70m.

Author:	K. Lee	TYPICAL ROAD & DRAINAGE DESIGNS OneWind Wind Farm Glen Innes, NSW 10 August 2016	 ENVIRONMENTAL PROPERTY SERVICES
Reviewer:	M. Shelly		
A4 Scale:	N/A		
Job Ref:	11262		

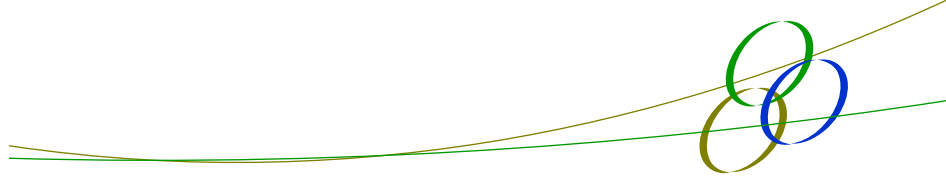


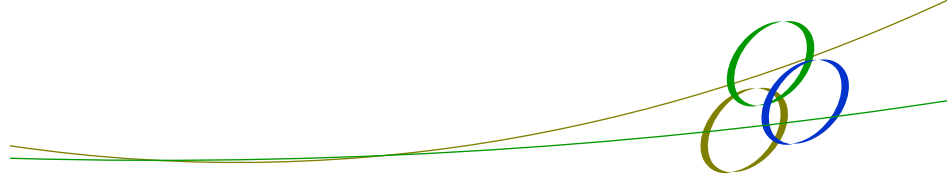
Appendix 15

Flora and Fauna Management Plan

Appendix 16

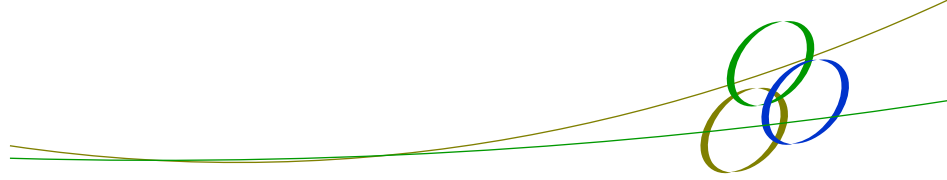
Emergency Response Plan





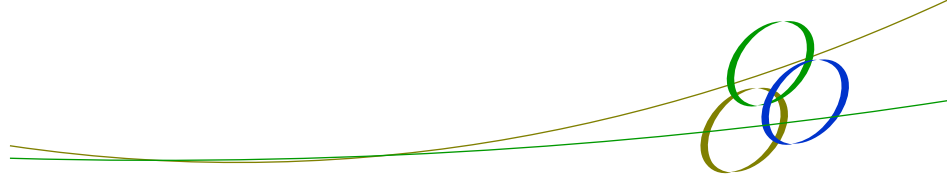
Emergency Response Plan

Objective	To guide appropriate actions in the event of an emergency.	
Target	To reduce the severity of emergencies through planning and management.	
KPI	Target = zero incidents or complaints received.	
Responsibilities	Construction Manager	
Key Approval Requirements	N/A	
Key Legislative and Regulatory Requirements	<i>Protection of the Environment Operations Act 1997</i> <i>Rural Fires Act 1997</i> <i>Work Health and Safety Act 2011</i>	
Potential Emergency Sources	<ul style="list-style-type: none"> • Fire originating on or off-site. • Extreme weather events (i.e. wind, storms, flood). • Injury or death of personnel. • Terrorism, violent protests or burglary. 	
Mitigation Measures	<ul style="list-style-type: none"> • An Emergency Evacuation Plan will be developed. • Evacuation to a pre-determined evacuation point shall occur in the event of an emergency. • Site induction will include information on the emergency evacuation point and maps of the emergency evacuation point will be located at the site office and other relevant locations. • Emergency service organisations shall be notified of an emergency at the earliest opportunity. • Medical treatment and assistance will be administered where necessary. A first-aid kit and a trained first-aid administer will be on-site at all times. • Spills will be managed by spill-kits available at each turbine site. • Emergency procedures will be effectively communicated amongst personnel on a regular basis. • Emergency procedures shall be regularly tested. 	
Emergency Contacts	Authority	Contact Details
	EPA	Environment Line: 131555
	WorkCover	13 10 50
	Glen Innes Severn Council	Switchboard (02) 6730 2300 After Hours Emergency Contacts: Roads and Drainage: 0409 817 242 Rangers: 0417 890 889 Water and Waste Water: 0418 162 794
	Emergency Services	000
	Rural Fire Service	Local: (02) 6732 7046
	Police	Local: (02) 6732 9799
	Dept. of Planning and Environment	(02) 9228 6333



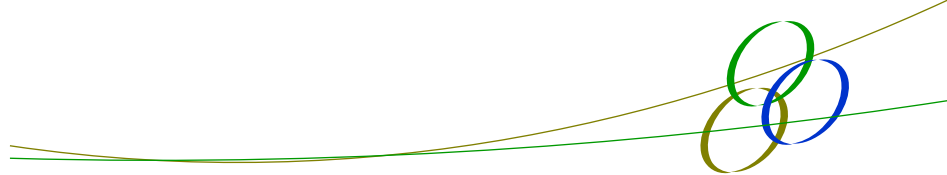
Emergency Response Plan

	State Emergency Services	Local: (02) 67302250
	Office of Environment and Heritage	Local: (02) 6739 0700
Monitoring	Monitoring will be on a regular basis during construction.	
Reporting	Any emergency shall be documented in as an incident in an Incident and Complaints Form.	
Records	Records of training and induction. Records of routine testing. Records of any reports to emergency services or incidents.	
Associated Documents	N/A	



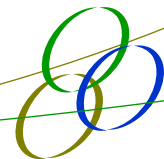
Appendix 17

Dangerous Goods and Hazardous Material Management Plan



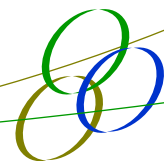
Dangerous Goods and Hazardous Materials Management Plan

Objective	To manage the purchasing, storage, transport, handling and disposal of Dangerous Goods and Hazardous Materials (including waste Dangerous Goods and Hazardous Materials) so as not to cause pollution of the environment.
Target	Zero incidents resulting in Dangerous Goods or Hazardous Materials entering the environment or causing harm or injury to personnel.
KPI	Target = zero incidents resulting in Dangerous Goods or hazardous materials entering the environment or causing harm or injury to personnel.
Responsibilities	Environment and Community Manager
Key Approval Requirements	<u>Conditions of approval numbers 2.39 and 2.50.</u>
Key Legislative and Regulatory Requirements	<p><u>Protection of the Environment Operations Act 1997</u></p> <p>It is an offence wilfully or negligently to cause any substance to leak, spill or otherwise escape (whether or not from a container) in a manner that harms or is likely to harm the environment.</p> <p>It is an offence to pollute waters.</p> <p>Pollution incidents causing or threatening material harm to be notified to the OEH (EPA).</p> <p>Waste must be stored in an environmentally safe manner.</p> <p><u>Contaminated Land Management Act 1997</u></p> <p>Clause 60 Duty to Report Contamination - A person who becomes aware that the person's activities in, on or under land have contaminated the land in such a way as to present a significant risk of harm must, immediately after becoming so aware, notify the EPA in writing that the land has been so contaminated.</p> <p><u>Dangerous Goods (Road and Rail Transport) Act 2008 and Occupational Health & Safety (Dangerous Goods) Regulation 2005</u></p> <p>An occupier must consider how to control a risk associated with the storage and handling of dangerous goods where it is not reasonably practicable to eliminate risk.</p> <p>In each area where dangerous goods are stored or handled provision must be made for containment of spills.</p> <p>An occupier must ensure packaged dangerous goods are labelled in accordance with the Australian Dangerous Goods code.</p> <p>An employer must ensure that a register of all Dangerous Goods is kept and maintained (including Material Safety Data Sheets and risk assessments) and is readily accessible to all employees.</p> <p>An occupier must ensure, so far as reasonably practicable, that dangerous goods at the premises do not inadvertently become unstable, decompose or change to create a different hazard or increase the risk associated with the dangerous goods.</p> <p>Dangerous goods are required to be placarded when stored above 'placarding' quantities, and quantities notified to WorkCover NSW when stored above 'Manifest' levels (refer to Table 3 below).</p> <p><u>Key Australian Standards / Codes</u></p> <p>The Australian Dangerous Goods Code.</p>



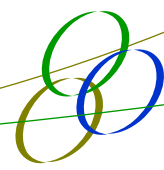
Dangerous Goods and Hazardous Materials Management Plan

	<p>AS1216: Class Labels for Dangerous Goods.</p> <p>AS1940: The Storage and Handling of Flammable and Combustible Liquids.</p> <p>AS2507: The Storage and Handling of Pesticides.</p> <p>AS3833: The Storage and Handling of mixed classes of Dangerous Goods in packages and Intermediate Bulk Containers.</p>
Definitions	<p>Dangerous Goods - "Dangerous goods is defined in the <i>NSW OHS Act 2000</i> as: "(a) substances or articles subject to a national standard declared by the NOHSC; and (b) any other substances or articles of risk to public safety."</p> <p>Hazardous Materials - Hazardous materials are defined as 'anything that, when produced, stored, moved, used or otherwise dealt with without adequate safeguards to prevent it from escaping, may cause injury or death or damage to life, property or the environment' (<i>NSW Fire Brigades Act 1989</i>).</p>
Areas of Storage	Machinery fuels and lubricants, herbicides.
Mitigation Measures	<p><u>Purchasing</u></p> <p>All Dangerous Goods / Hazardous Materials stored on site shall be entered on the Chemical Manifest (including a register, risk assessments and material safety data sheets - MSDS).</p> <p><u>Storage, use and transport</u></p> <p>All Dangerous Goods / Hazardous Materials shall be stored and where practicable handled within containment facilities (for example, bunded areas, leak proof trays) designed to prevent the release of spilt substances to the environment.</p> <p>The storage, handling and transport of Dangerous Goods / Hazardous Materials shall comply with legislation and Australian standards, including but not limited to containment, placarding and segregation from incompatible materials.</p> <p>All storage and handling equipment (including transfer hoses) shall be kept in a well maintained condition.</p> <p>Where it is necessary to refuel heavy equipment onsite, adequate spill prevention and containment measures (for example, drip trays) shall be implemented.</p> <p>Equipment shall not to be refuelled within 50 metres of any water body, water course or drainage line.</p> <p>Transport of Dangerous Goods to be undertaken under appropriate licence.</p> <p><u>Risk Assessment</u></p> <p>Job safety and environment analysis shall incorporate storage and handling of Dangerous Goods / Hazardous Materials and reference the relevant Material Safety Data Sheets (MSDS).</p> <p>Prior to commencing construction, operations or maintenance, the planned arrangement of all Dangerous Goods / Hazardous Materials storage areas should be reviewed to eliminate potentially hazardous conditions.</p> <p><u>Labelling</u></p> <p>All Dangerous Goods / Hazardous Materials should be stored in approved containers and properly labelled.</p> <p>All packaged dangerous goods must be labelled in accordance with the Australian Dangerous Goods code.</p> <p><u>Training</u></p>



Dangerous Goods and Hazardous Materials Management Plan

	<p>The induction program shall inform site personnel of the required chemical storage and handling procedures and the required spill prevention and response procedures. The MSDS must be read prior to using any substance and available during storage and use of Dangerous Goods / Hazardous Materials.</p> <p>Training records are to be maintained.</p> <p><u>Decanting</u></p> <p>Any Dangerous Goods / Hazardous Materials decanted into a second container must be clearly labelled with name and safety risk phrases (for example flammable or toxic).</p> <p><u>Disposal</u></p> <p>Waste Dangerous Goods / Hazardous Materials, including empty drums and containers, must be stored in assigned storage areas until they are disposed of in accordance with the MSDS.</p> <p>Waste Dangerous Goods / Hazardous Materials shall be managed and disposed in accordance with the requirements of relevant legislation and industry standards.</p> <p><u>Spill Response</u></p> <p>In the event of a spill or leak of Dangerous Goods / Hazardous Materials the safety of personnel and third parties shall be protected as the first priority.</p> <p>All spills of Dangerous Goods / Hazardous Materials shall be addressed promptly and stopped at source as soon as practicable and contained to the smallest possible area.</p> <p>During activities, appropriate strategies and equipment shall be in place to deal with a spill of all types and volumes of Dangerous Goods / Hazardous Materials to be used on-site.</p> <p>Containment and recovery equipment shall include, but not be limited to absorbent materials (for example, pads and straw bales), shovels and sand bag sacks and protective clothing (for example, gloves, overalls, and boots).</p> <p>Pollution incidents causing or threatening material harm to be notified to the Environment and Community Manager immediately.</p> <p>Spilt material shall be recovered as soon as possible and disposed of to appropriately licensed facilities or sub-contractors.</p>
Monitoring	<p>Inspections will be conducted to monitor compliance with this Environmental Management Plan, with implementation of recommendations and corrective actions.</p>
Reporting	<p>Dangerous goods are required to be notified to WorkCover NSW when stored above 'Manifest' quantities.</p> <p>Pollution incidents causing or threatening material harm to be notified to the OEH (EPA).</p> <p>A person who becomes aware that the person's activities in, on or under land have contaminated the land in such a way as to present a significant risk of harm must, immediately after becoming so aware, notify the OEH (EPA) in writing that the land has been so contaminated.</p>
Records	<p>Records of incidents and near misses.</p> <p>Records of Site Specific Inductions and toolbox meetings.</p> <p>Inspection checklists, where applicable.</p>



Dangerous Goods and Hazardous Materials Management Plan

Associated Documents	Emergency Response Plan
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