

| No. | Permit Condition | Appendix | Ref. | Comment |
|-----------|--|----------|------|---|
| 1 | Before the use and/or development starts three copies of revised plans drawn to scale and dimensioned, must be submitted to and approved by the Responsible Authority. When approved the plans will be endorsed and will then form part of the permit. The plans must be generally in accordance with plans submitted with the permit application but modified to show to the satisfaction of the Responsible Authority: | A | | |
| 1(a) | (a) At a scale of 1:100 or 1:200: | A | 3.1 | |
| 1(a)(i) | The exact location of the wind turbines (including dimensions from adjoining property boundaries). No turbine shall be closer to the closest wall of any existing residence based on the measurements contained in the report prepared by Marshall Day Acoustics dated 10 October 2006, Table 1 at page 5. | A | 3.2 | |
| 1(a)(ii) | If the turbines are re-positioned from the locations identified in the report prepared by Marshall Day Acoustics dated 10 October 2006 Table 1 at page 5: 1. a report must be submitted setting out the results of subsurface testing by a qualified archaeologist that assesses the cultural heritage and archaeological sensitivity of the revised location of the turbines. 2. a revised shadow flicker assessment must be submitted. | A | 3.3 | |
| 1(a)(iii) | The location, layout and dimensions of all buildings and works, including (but not limited to) the grid connection monitoring and control booth, site office, hard stand areas, footing pads, all roads, tracks, underground cabling, car parking areas, construction lay-down areas and landscaping areas (including landscaping required by this permit). | A | 3.4 | Also refer to the onsite and offsite screening and landscaping plans for details. |
| 1(a)(iv) | The detailed design of the wind generators (inclusive of nacelles, blades and foundations) including dimensions and elevations. | A | 3.5 | |
| 1(a)(v) | A detailed schedule of materials, colours and finishes of the wind generators (inclusive of nacelles, blades and foundations) based on the description set out in the planning report accompanying the permit application including at page 26 of 68 "Reflectivity and Colour" unless an alternative is to the satisfaction of the Responsible Authority; | A | 3.6 | |
| 1(a)(vi) | A detailed schedule of materials, colours and finishes for all other structures, such as the grid connection booth and site office; | A | 3.7 | |

| No. | Permit Condition | Appendix | Ref. | Comment |
|-----------|--|----------|------|--|
| 1(a)(vii) | The location of services such as powerlines and gas pipeline; | A | 3.8 | |
| 1(b) | Details of any signage proposed to be displayed as part of the wind energy facility, which must be limited to: | A | 3.9 | |
| 1(b)(i) | one site identification sign not exceeding 2 metres by 2 metres, at the entrance to the site; | A | 3.9 | |
| 1(b)(ii) | a logo or company identification for the wind energy facility operator or wind generator manufacturer displayed on the wind turbines; | A | 3.9 | |
| 1(b)(iii) | necessary signs relating to site safety issues. | A | 3.9 | |
| 2 | Use and layout not altered The use and development as shown on the endorsed plans must not be altered or modified in any way without the written consent of the Responsible Authority. | - | - | The proposed use and layout has not been altered from the approved plan and as such no further consent under this condition is required. |
| 3 | Wind energy facility specifications The wind energy facility must be constructed in accordance with the following specifications to the satisfaction of the Responsible Authority: | A | - | |
| 3(a) | A total of not more than two (2) wind generators in the locations shown on the endorsed plans. | A | 3.2 | |
| 3(b) | Each wind generator must have an overall height of not more than 110 metres. | A | 3.5 | |
| 3(c) | The rotor on each wind generator must comprise no more than three (3) blades. | A | 3.5 | |
| 3(d) | The turbines must be Repower MM82 2MW or another model that is to the satisfaction of the Responsible Authority. | A | 3.5 | |
| 3(e) | The wind generators must not be artificially illuminated at night except for any safety lighting to warn low flying aircraft. | A | 3.5 | |
| 3(f) | No external lighting of infrastructure associated with the wind energy facility, other than low level security lighting where appropriate, may be installed or operated. | A | 3.4 | |
| 3(g) | All new electricity cabling associated with the collector network within the wind energy facility generator cluster must be placed under the ground. | A | 3.4 | |

| No. | Permit Condition | Appendix | Ref. | Comment |
|----------|--|----------|-----------|---------|
| 3(h) | Any transformer associated with each wind generator must be located beside each tower and be pad mounted, or be enclosed within the tower structure. | A | 3.4 | |
| 3(i) | The access track(s) within the site must be sited to minimise impacts on existing native trees on the site, and be constructed to the minimum standard practicable in order to ensure minimum impacts on the site, including impacts on overland flows. | A | 3.4 | |
| 4 | On-site landscape and visual screening plan Before the use or any development starts, a Landscaping and Visual Screening Plan must be submitted to the satisfaction of the Responsible Authority. When approved, the plan will be endorsed by the Responsible Authority. The Landscaping and Visual Screening Plan must include: | B | - | |
| 4(a) | Visual screening of hard stand areas and the grid control booth from the Ballan - Daylesford Road. | B | 2 - 2.2 | |
| 4(b) | Planting along the site's perimeter to provide visual screening to dwellings #2, #3, #11, #12 and #19 (dwelling numbers from Map 5 –Neighbouring Residences in the Proposed Hepburn Community Wind Park Landscape and Visual Assessment Study by J Cleary 2006 at page 41). | B | 3 - 3.1 | |
| 4(c) | Details of species proposed to be used for landscaping including details of the height and size of species at maturity. | B | 3.2 - 3.4 | |
| 4(d) | Details of fencing to protect new vegetation from stock impacts. | B | 4 | |
| 4(e) | A maintenance program. | B | 4 | |
| 4(f) | A timetable for the implementation of landscaping and visual screening works that includes planting being completed prior to any turbine being commissioned. | B | 5 | |
| 4 | The use and development must be carried out in accordance with the endorsed Landscaping and Visual Screening Plan to the satisfaction of the Responsible Authority. | B | - | |
| 5 | Off-site landscape and visual screening plan Before the development starts, a program of landscape mitigation works is to be made available to relevant landowners. As part of that program an Off-site Landscape Plan must be prepared and submitted to the satisfaction of the Responsible Authority. When approved, the plan will be endorsed by the Responsible Authority. The Off-site Landscaping Plan may be submitted in | C | - | |

| No. | Permit Condition | Appendix | Ref. | Comment |
|----------|--|----------|--------------------------|---------|
| | stages to the satisfaction of the Responsible Authority (so that not all stages are completed before the development starts) and must include (but may not be limited to) the following: | | | |
| 5(a) | A provision for landowners within a one kilometre radius of any wind turbine to have the opportunity to accept the offer to provide visual screen planting at any time up until six (6) months after the commissioning of the last wind generator; | C | 1.2 and 1.4 | |
| 5(b) | The process by which landowners within a one kilometre radius of any wind turbine will be informed of this offer and the process by which it can be accepted; | C | 1.4 – 1.6 and Appendix A | |
| 5(c) | Details of planting or other treatments that will be used to reduce the visual impact of the wind turbines at the dwellings of participating landowners; | C | 1.3 | |
| 5(d) | Details of species proposed to be used for the landscaping including details of height and size of species at maturity; | C | 1.3 | |
| 5(e) | A timetable for the implementation of the plan; | C | 1.4 and 1.7 | |
| 5(f) | A maintenance program. | C | 1.7 | |
| 5 | The use and development must be carried out in accordance with the endorsed Off-site Landscape Plan to the satisfaction of the Responsible Authority. | C | - | |
| 6 | Traffic management Before the development starts, a Traffic Management Plan must be prepared to the satisfaction of the Responsible Authority and VicRoads. When approved, the plan will be endorsed by the Responsible Authority. The plan must include (but is not limited to): | D | - | |
| 6(a) | Designation of vehicle access point(s). | D | 2.1 | |
| 6(b) | Details on whether the access location point to the proposed development meets the safe intersection sight distance requirements specified in Austroads Guide to Traffic Engineering Practice Part 5 – Intersections at Grade and, if not, details of any mitigating works required to meet the sight distance requirements. | D | 3.2.3 | |
| 6(c) | Details of any roadside pruning, vegetation removal and vegetation restoration. | D | 3.3 | |

| No. | Permit Condition | Appendix | Ref. | Comment |
|-----------|--|----------|----------------|---------|
| 6(d) | The designation of appropriate construction and transport vehicle routes to the wind energy facility. | D | 2.2 | |
| 6(e) | A traffic management plan for the Ballan-Daylesford Road during construction of the development including temporary speed signage and times of operation in accordance with VicRoads Roadworks Signing Code of Practice. | D | 5 | |
| 6(f) | Details of any works required along the Ballan-Daylesford Road during construction. | D | 3.2 | |
| 6(g) | The requirements for Over Dimensional Load permits and escorting of long or large loads along roads in the area. | D | 3.5 | |
| 6(h) | A timetable for implementation of any preconstruction works identified to be undertaken. | D | 4.1 | |
| 6 | The use and development must be carried out in accordance with the endorsed Traffic Management Plan to the satisfaction of the Responsible Authority and VicRoads and the cost of any works including maintenance is to be at the permit holders expense. | D | - | |
| 7 | Environmental management Before the development starts, an Environmental Management Plan must be prepared to the satisfaction of the Responsible Authority. When approved, the plan will be endorsed by the Responsible Authority. The Environmental Management Plan must include (but is not limited to): | E | - | |
| 7(a) | A construction and work site management plan. This plan must include: | E | 6 | |
| 7(a)(i) | Procedures for access, noise and pollution management. | E | 6.5.1 | |
| 7(a)(ii) | The identification of all potential contaminants, hazardous chemicals, liquids and similar materials to be stored on site. | E | 6.5.2 | |
| 7(a)(iii) | The identification of all construction and operational processes that could potentially lead to water contamination. | E | 6.5.3, 3 and 5 | |
| 7(a)(iv) | The identification of appropriate storage, construction and operational and spill control methods to control any identified contamination risks including any arising from the identification processes in Conditions 7(a)(ii) and (iii). | E | 6.5.4, 3 and 5 | |
| 7(a)(v) | Criteria for the siting of any temporary concrete batching plant associated and procedures for its removal and reinstatement of the site once its use finishes. The establishment and operation of any temporary concrete batching plant | E | 6.5.5 | |

| No. | Permit Condition | Appendix | Ref. | Comment |
|------------|---|----------|-------------|---------|
| | must be in accordance with the Environment Protection Authority's Environmental Guidelines for the Concrete Batching Industry, Publication No. 628. | | | |
| 7(a)(vi) | The identification of waste re-use recycling and disposal procedures. | E | 6.5.6 | |
| 7(a)(vii) | Procedures for the storage of any fuels, lubricants or waste oil to be stored in bunded areas and procedures for managing any spills. | E | 6.5.7 and 5 | |
| 7(a)(viii) | The removal of works buildings and staging area on completion of construction of the project and for the return of the site to its former condition. | E | 6.5.8 | |
| 7(b) | A wildfire prevention and response plan. | E | 4 | |
| 7(c) | A sediment and erosion management plan. This plan must include: | E | 3 | |
| 7(c)(i) | Procedures to ensure that silt from batters, cut-off drains, table drains and road works is retained on the work site during and after the construction stage of the project. All land disturbances must be confined to a minimum practical working area and to the vicinity of the identified work areas. Soil to be removed must be stockpiled and separate soil horizons must be retained in separate stockpiles and not mixed. Stockpiles must be located away from drainage lines. | E | 3.6 | |
| 7(c)(ii) | All track construction and maintenance equipment, earth moving equipment and associated machinery, must be made free of soil, seed and plant material before being taken to the works site and again before being removed from the works site on completion of the development. | E | 3.6 | |
| 7(c)(iii) | All road-making and maintenance material such as rock, gravel and sand required for the project must come from an area free of weeds. | E | 3.6 | |
| 7(c)(iv) | The installation of geotextile silt fences (with sedimentation basins where appropriate) on all drainage lines from the site which are likely to receive run-off from disturbed areas. | E | 3.6 | |
| 7(c)(v) | Procedures to contain any contaminated or turbid run-off during and after construction of the wind energy facility. | E | 3.6 and 5 | |
| 7(c)(vi) | Procedures to suppress dust arising from construction-related activities. Appropriate measures may include water sprays of roads and stockpiles, stabilising surfaces, temporary screening and/or wind fences, modifying construction activities during periods of heightened winds and revegetating exposed areas as soon as practicable. | E | 3.6 | |

| No. | Permit Condition | Appendix | Ref. | Comment |
|------------|---|----------|-------|---------|
| 7(c)(vii) | Procedures to ensure that steep batters are treated in accordance with Environmental Protection Authority recommendations detailed in the 'Construction Techniques for Sediment Pollution Control' No 275, May 1991. | E | 3.6 | |
| 7(c)(viii) | Procedures for waste water and discharge management to prevent adverse off-site impacts. | E | 3.6 | |
| 7 | The use and development must be carried out in accordance with the endorsed Environmental Management Plan to the satisfaction of the Responsible Authority. | E | - | |
| 8 | Bird, avifauna and bat management Prior to the development commencing, a bird and bat management plan must be prepared to the satisfaction of the Responsible Authority. When approved, the plan will be endorsed by the Responsible Authority. The bird and bat management plan must include (but is not limited to): | F | - | |
| 8(a) | A pre-construction monitoring program to monitor the presence and behaviour of bats on the site. The monitoring program is to be carried out by an independent fauna consultant. The program must specify that the following data be recorded and include provision for reporting of the data to the satisfaction of the Responsible Authority: | F | 3 | |
| 8(a)(i) | The frequency and height of bat movements across the site; | F | 3.2 | |
| 8(a)(ii) | Seasonal changes in bat movements; | F | 3.2 | |
| 8(a)(iii) | The species involved and whether the species is identified as significant or threatened under the Environment Protection and Biodiversity Conservation Act (1999) or the Flora and Fauna Guarantee Act (1988); and | F | 3.2 | |
| 8(b) | A strategy for managing and mitigating bird and bat strike arising from the wind energy facility operation. The strategy must include: | F | 4 | |
| 8(b)(i) | The areas required to be inspected. | F | 4.1.1 | |
| 8(b)(ii) | The frequency of monitoring and inspections. | F | 4.1.2 | |
| 8(b)(iii) | Scavenger management, for example, regular removal of carcasses likely to attract raptors to areas near generators and other measures to routinely control bird feed and prey. | F | 4.1.6 | |
| 8(b)(iv) | Recording and reporting requirements to the Responsible Authority. | F | 5 | |

| No. | Permit Condition | Appendix | Ref. | Comment |
|------|---|----------|------|---------|
| 8(c) | A procedure for addressing any significant impacts on bird and bat populations under the Environment Protection and Biodiversity Conservation Act (1999) or the Flora and Fauna Guarantee Act (1988) caused by the wind energy facility operation. This procedure must provide that the operator of the wind energy facility immediately investigates the possible causes of any significant impacts on bird and bat populations, and thereafter must design and implement measures to mitigate those impacts in consultation with the Responsible Authority. | F | 6 | |
| 8 | The use and development must be carried out in accordance with the endorsed bird and bat management plan to the satisfaction of the Responsible Authority. | F | - | |
| 9 | Heritage protection and management Prior to the development commencing, a management plan addressing heritage protection must be prepared to the satisfaction of the Responsible Authority. When approved, the plan will be endorsed by the Responsible Authority. The heritage protection management plan must include (but is not limited to): | G | - | |
| 9(a) | A qualified archaeologist must be on-site during initial excavation works to identify any archaeological artefacts, and initiate measures for interim protection and reporting of any such objects or sites. | G | 3 | |
| 9(b) | Protocols for the control of construction activities, including the activities by contractors, that have been identified to have potential effects on sites of cultural significance. | G | 3 | |
| 9(c) | Protocols for ongoing consultation with the relevant Aboriginal communities throughout the project, especially those relating to relating to the detailed on-surface and sub-surface archaeological investigations, including maintaining confidentiality (where considered appropriate) of the locations of Aboriginal archaeological sites. | G | 3 | |
| 9(d) | Prior to disturbing any identified archaeological site, place or object, procedures for seeking and obtaining written consent of any identified Aboriginal local aboriginal community, as nominated for the purposes of Part 11A of the Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Commonwealth). | G | 3 | |
| 9(e) | Procedures providing appropriate workshops and training courses with contractors to protect all known sites of Aboriginal cultural heritage value. | G | 3 | |

| No. | Permit Condition | Appendix | Ref. | Comment |
|-----------|---|----------|------|---|
| 9(f) | Protocols for protecting and reporting the discovery of any human remains in accordance with the requirements of the Victoria Police, the State Coroners Office and Aboriginal Affairs Victoria. | G | 3 | |
| 9 | The use and development must be carried out in accordance with the endorsed Heritage Protection Management Plan to the satisfaction of the Responsible Authority. | G | - | |
| 10 | Commissioning report and noise management The operation of the wind energy facility must comply with the New Zealand Standard 'Acoustics – The Assessment and Measurement of Sound from Wind Turbine Generators' (NZ 6806:1998) (the 'New Zealand Standard'), in relation to any dwelling existing at the date of approval of this permit, to the satisfaction of the Responsible Authority. | - | - | This condition is a post commissioning requirement and will be addressed within two months of the commissioning of any of the turbines. |
| 11 | Within two months of the commencement of operation of any turbine(s), an independent post-construction noise monitoring program must be undertaken by the proponent to the satisfaction of the Responsible Authority in accordance with the New Zealand Standard. The program must monitor noise levels at any dwelling within a one kilometre radius of any wind turbine that is not in the same ownership as the subject land. A report summarising the results of the program, and the data collected, must be forwarded to the Responsible Authority within 30 days of the end of the monitoring period. The results must be written in plain English and formatted for reading by lay people. Recommendations to address any non-compliance with NZS6808 must be included in the report and, on agreement by the Responsible Authority, measures to address non-compliance must be immediately implemented to the satisfaction of the Responsible Authority. | - | - | This condition is a post commissioning requirement and will be addressed within two months of the commissioning of any of the turbines. |
| 12 | Before the use commences, details of a noise complaint and evaluation process must be submitted to and approved by the Responsible Authority. This evaluation process should include, but not be limited to the following components: | - | - | This condition is a post commissioning requirement and will be addressed within two months of the commissioning of any of the turbines. |
| 12(a) | Details of validity requirements for noise complaints (that is, date, time, noise description and weather conditions at the receptor). | - | - | |
| 12(b) | Response protocol to valid noise complaints. | - | - | |
| 12(c) | A register of complaints, responses and rectifications which may be inspected | - | - | |

| No. | Permit Condition | Appendix | Ref. | Comment |
|-------|---|----------|------|--|
| | by the Responsible Authority. | | | |
| 12(d) | Provision for review of the complaint and evaluation process, including review of the process 12 months after commencement of the operation of the wind energy facility. | - | - | |
| 12 | The use and development must be carried out in accordance with the endorsed process to the satisfaction of the Responsible Authority. | - | - | |
| 13 | Blade shadow flicker The operator of the wind energy facility must ensure that no existing dwelling will experience over 30 hours blade shadow flicker per annum or undue blade glint to the satisfaction of the Responsible Authority. | - | - | The proposed layout has not been altered from the approved plan and as such no further shadow flicker assessment is required. |
| 14 | Electromagnetic interference Prior to the commencement of the development, a pre-construction qualitative survey of television and radio reception must be offered in writing to the owners and occupiers of all dwellings within a one kilometre radius of the approved turbines. | - | - | The Hepburn Shire Council has sent a letter of offer on behalf of Hepburn Wind. |
| 15 | A pre-construction survey of television and radio reception must be undertaken at any premises where the offer for such a survey has been accepted, to the satisfaction of the Responsible Authority. | - | - | Hepburn Wind will undertake a pre-construction television and radio reception survey for all offers that are accepted. |
| 16 | If any written complaint is received by the operator or the Responsible Authority as to interference with television or radio reception at residences within a one kilometre radius of the approved turbines who accepted a preconstruction survey, and a request is made for a post-construction survey to be undertaken, the operator of the wind energy facility must undertake a post-construction qualitative survey within three months of a request to do so. If the qualitative survey establishes any detrimental increase in interference to reception, measures must be taken to mitigate the interference to return the affected reception to pre-construction quality at the cost of the wind energy facility operator and to the satisfaction of the Responsible Authority. | - | - | This condition is a post commissioning requirement and will be addressed upon receipt of a complaint as outlined in the condition. |
| 17 | Decommissioning The wind energy facility operator must, within one month, notify the Responsible Authority in writing as soon as all wind energy facility generators have permanently ceased to generate electricity. Within 12 months of that date, the wind energy facility operator must undertake the following to the satisfaction of the Responsible Authority: | - | - | This condition is a post commissioning requirement and will be addressed prior to decommissioning of any wind turbine. |

| No. | Permit Condition | Appendix | Ref. | Comment |
|-----------|--|----------|------|---|
| 17(a) | remove all non-operational or downed equipment, structures and buildings; | - | - | |
| 17(b) | remove and clean up any residual spills; | - | - | |
| 17(c) | clean up and restore all storage, construction and other areas associated with the use, development and decommissioning of the wind energy facility; | - | - | |
| 17(d) | restore all access roads and any other area affected by the project closure or decommissioning, if not otherwise useful to the on-going management of the land; | - | - | |
| 17(e) | submit a post-decommissioning traffic management plan to the Responsible Authority and, when approved by the Responsible Authority, implement that plan; and | - | - | |
| 17(f) | submit a post-decommissioning revegetation management plan to the Responsible Authority and, when approved by the Responsible Authority, implement that plan. | - | - | |
| 18 | Following the endorsement of plans under Condition 1 of this Permit, and prior to the erection of any turbine, the operator must meet any requirements of the Civil Aviation Safety Authority including in relation to the reporting of tall structures under the requirements of the Civil Aviation Regulations 1988. | - | - | Following the endorsement of plans under condition 1 of this permit, consultation with the Civil Aviation Safety Authority will commence to ascertain any requirements for the lighting of the structures and notification of tall structures as per the Civil Aviation Regulations 1988. |
| 19 | This permit will expire if one of the following circumstances applies: | - | - | |
| 19(a) | The development and use is/are not started within four (4) years of the date of this permit. | - | - | It is anticipated that the proposed development will be commence in November / December 2010 and will comply with the requirement to commence construction by 27 July 2011. |
| 19(b) | The development is not completed within two (2) years of the date of the commencement of the works. | - | - | Development will be completed within two years of the commencement of works. |
| 19 | The Responsible Authority may extend the periods referred to if a request is made in writing before the permit expires or within three months afterwards. | - | - | |

HEPBURN COMMUNITY WIND FARM

EPC Project



Submission for Endorsement of Amended Plans

| | |
|---|--|
| Ref No: HEP_00.06_001_A03_PLN | CONFIDENTIAL DOCUMENT |
| REpower Australia Pty Ltd (on behalf of REpower Systems AG) Level 18, 535 Bourke Street Melbourne, Victoria 3000 (Australia) Tel: +61 3 8610 8800 Fax: +61 3 9614 8433 | Protection Notice DIN ISO 16016: The reproduction, distribution and utilization of this document as well as the communication of its contents to others without explicit authorization in writing of REpower Systems AG is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or design. |

Revision Details

| Version | Date | Revision Details |
|---------|----------------|---|
| A01 | 10-August-2010 | First release |
| A02 | 11-August-2010 | Second release (WT foundation general arrangement included) |
| A03 | 13-August-2010 | Third release (A3 Plans) |

References

| Ref. | Title | Document Number | Version | Date |
|------|---|-----------------|---------|--------------|
| [R1] | Planning Permit No: 2006/9231 | 4/0360/02700/P | N/A | 31 July 2007 |
| [R2] | Hepburn Community Wind Farm - On-site Landscape and Visual Screening Plan | N/A | N/A | N/A |

List of Definitions, Abbreviations and Units

| Term | Definition |
|---------------------|--|
| Amended Plans | Means the Amended Plans as described in condition 1 of the Planning Permit. |
| Hard Stand Areas | Area where the main crane and some WT's components will be located in order to lift the WT components during the WT's construction/installation. |
| HH | Hub Height |
| kV | Kilovolt |
| MW | Megawatt |
| Nacelle | Structure that contains the Wind Turbine generating components (gearbox, generator, etc) |
| Planning Permit | Means the Planning Permit for the Hepburn Community Wind Park Farm dated 31 July 2007 (Permit No: 2006/9231). |
| Step Up Transformer | Transformer that raises the generated voltage at the Wind Turbine from 690V to 22kV. |
| Switchyard | Fenced area that comprises the Control Booth, the Reactive Power Plant and the Auxiliary Power Supply of the Wind Farm. |
| Wind Turbine | Means Wind Turbine Generator, Wind Generator, Wind Energy Converter, etc. |
| WF | Means Wind Farm |
| WT, WTG and WEC | Means Wind Turbine |

CONTENTS

| | |
|---|-----------|
| 1. CONTENTS OF SUBMISSION | 4 |
| 2. CONDITIONS 1 & 3 OF THE PLANNING PERMIT – AMENDED PLANS | 4 |
| 3. SUBMISSION | 5 |
| 3.1 PLANS SCALE | 5 |
| 3.2 LOCATION OF THE WIND TURBINES | 6 |
| 3.3 WIND TURBINES POSITIONING | 7 |
| 3.4 LOCATION, LAYOUT AND DIMENSIONS OF ALL BUILDINGS AND WORKS | 7 |
| 3.5 DETAILED DESIGN OF THE WIND TURBINES | 9 |
| 3.6 DETAILED SCHEDULE OF MATERIALS, COLOURS AND FINISHES OF THE WIND TURBINES | 9 |
| 3.7 DETAILED SCHEDULE OF MATERIALS, COLOURS AND FINISHES OF OTHER STRUCTURES..... | 10 |
| 3.8 LOCATION OF SERVICES | 10 |
| 3.9 DETAILS OF THE PROPOSED SIGNAGE | 10 |
| 4. ATTACHMENTS..... | 12 |
| ATTACHMENT 1 - WTs LOCATIONS AND DISTANCES FROM EXISTING RESIDENTIAL SITES | 13 |
| ATTACHMENT 2 – WTs LOCATIONS AND DISTANCES FROM ADJOINING PROPERTY BOUNDARIES | 14 |
| ATTACHMENT 3 – SITE PLAN OVERVIEW AND BOUNDARIES | 15 |
| ATTACHMENT 4 – PRELIMINARY SITE PLAN, ACCESS ROADS AND CABLE ROUTES | 16 |
| ATTACHMENT 5 – CONCEPTUAL SWITCHYARD LAYOUT | 17 |
| ATTACHMENT 6 – HARDSTAND AREA..... | 18 |
| ATTACHMENT 7 – CROSS SECTION UNDERGROUND CABLING | 19 |
| ATTACHMENT 8 – TYPICAL CROSS SECTION OF WIND FARM ACCESS ROADS | 20 |
| ATTACHMENT 9A – MM82 HH69 WT, ELEVATION VIEW..... | 21 |
| ATTACHMENT 9B – MM82 HH69 WT, HEIGHTS & CONCEPTUAL FOUNDATION DESIGN | 22 |
| ATTACHMENT 10 – MM82 HH69 WT, FOUNDATION GENERAL ARRANGEMENT | 23 |
| ATTACHMENT 11 – MM82 HH69 WT, TOWERS SECTIONS WEIGHTS AND DIMENSIONS..... | 24 |
| ATTACHMENT 12 – MM82 HH69 WT, NACELLE WEIGHTS AND DIMENSIONS..... | 25 |
| ATTACHMENT 13 – MM82 HH69 WT, HUB WEIGHT AND DIMENSIONS | 26 |
| ATTACHMENT 14A – MM82 HH69 WT, LM BLADE WEIGHT AND DIMENSIONS | 27 |
| ATTACHMENT 14B – MM82 HH69 WT, RE BLADE WEIGHT AND DIMENSIONS | 28 |
| ATTACHMENT 15 – MM82 HH69 WT, PHOTOGRAPH..... | 29 |
| ATTACHMENT 16 – LETTER FROM TOWER MANUFACTURER REGARDING THE TOWER COLOURS..... | 30 |
| ATTACHMENT 17 – EXISTING OVERHEAD AND UNDERGROUND SERVICES WITHIN THE WF | 31 |
| ATTACHMENT 18 – SITE IDENTIFICATION SIGN | 32 |
| ATTACHMENT 19 – SAFETY SIGNAGE | 33 |

1. Contents of Submission

This document contains the *Amended Plans* for the Hepburn Community Wind Farm in response to condition 1 of the Planning Permit.

For your assistance this document includes and makes reference to the wording in condition 1 of the Planning Permit in order to address each one of the identified requirements in this condition of the Planning Permit. Refer to the attachments to this submission for more detailed information.

This document also contains condition 3 of the Planning Permit, along with the sections within this document that addresses each one of its requirements.

It is hoped that this will facilitate the endorsement process.

2. Conditions 1 & 3 of the Planning Permit – Amended Plans

Below is condition 1 of the Planning Permit, indicating which section of this document has addressed each requirement.

Table 1. Condition 1 of the Planning Permit cross reference summary.

| No. | Planning Permit Condition | How Addressed |
|-------------|---|---|
| 1 | Amended plans Before the use and/or development starts; three copies of revised plans drawn to scale and dimensioned, must be submitted to and approved by the Responsible Authority. When approved the plans will be endorsed and will then form part of the permit. The plans must be generally in accordance with plans submitted with the permit application but modified to show to the satisfaction of the Responsible Authority: | This document |
| 1 (a) | At a scale of 1:100 or 1:200: | Section 3.1 |
| 1 (a) (i) | The exact location of the wind turbines (including dimensions from adjoining property boundaries). No turbine shall be closer to the closest wall of any existing residence based on the measurements contained in the report prepared by Marshall Day Acoustics dated 10 October 2006, Table 1 at page 5. | Section 3.2 |
| 1 (a) (ii) | If the turbines are re-positioned from the locations identified in the report prepared by Marshall Day Acoustics dated 10 October 2006 Table 1 at page 5: 1. a report must be submitted setting out the results of subsurface testing by a qualified archaeologist that assesses the cultural heritage and archaeological sensitivity of the revised location of the turbines. 2. a revised shadow flicker assessment must be submitted. | Section 3.3 |
| 1 (a) (iii) | The location, layout and dimensions of all buildings and works, including (but not limited to) the grid connection monitoring and control booth, site office, hard stand areas, footing pads, all roads, tracks, underground cabling, car parking areas, construction lay-down areas and landscaping areas (including landscaping required by this permit). | Section 3.4 Refer to the On-Site and Off-Site landscape and visual plan for information about the project landscaping. |
| 1 (a) (iv) | The detailed design of the wind generators (inclusive of nacelles, blades and foundations) including dimensions and elevations. | Section 3.5 |
| 1 (a) (v) | A detailed schedule of materials, colours and finishes of the wind generators (inclusive of nacelles, blades and foundations) based on the description set out in the planning report accompanying the permit application including at page 26 of 68 "Reflectivity and Colour" unless an alternative is to the satisfaction of the Responsible Authority; | Section 3.6 |

| No. | Planning Permit Condition | How Addressed |
|-------------|---|---------------|
| 1 (a) (vi) | A detailed schedule of materials, colours and finishes for all other structures, such as the grid connection booth and site office; | Section 3.7 |
| 1 (a) (vii) | The location of services such as powerlines and gas pipeline; | Section 3.8 |
| 1 (b) | Details of any signage proposed to be displayed as part of the wind energy facility, which must be limited to: | Section 3.9 |
| 1 (b) (i) | one site identification sign not exceeding 2 metres by 2 metres, at the entrance to the site; | Section 3.9 |
| 1 (b) (ii) | a logo or company identification for the wind energy facility operator or wind generator manufacturer displayed on the wind turbines; | Section 3.9 |
| 1 (b) (iii) | necessary signs relating to site safety issues. | Section 3.9 |

Below is condition 3 of the Planning Permit, along with the sections within this document that addresses each one of its requirements.

Table 2. Condition 3 of the Planning Permit cross reference summary.

| No. | Planning Permit Condition | How Addressed |
|-------|---|---------------|
| 3 | Wind energy facility specifications The wind energy facility must be constructed in accordance with the following specifications to the satisfaction of the Responsible Authority: | This document |
| 3 (a) | A total of not more than two (2) wind generators in the locations shown on the endorsed plans. | Section 3.2 |
| 3 (b) | Each wind generator must have an overall height of not more than 110 metres. | Section 3.5 |
| 3 (c) | The rotor on each wind generator must comprise no more than three (3) blades. | Section 3.5 |
| 3 (d) | The turbines must be Repower MM82 2MW or another model that is to the satisfaction of the Responsible Authority. | Section 3.5 |
| 3 (e) | The wind generators must not be artificially illuminated at night except for any safety lighting to warn low flying aircraft. | Section 3.5 |
| 3 (f) | No external lighting of infrastructure associated with the wind energy facility, other than low level security lighting where appropriate, may be installed or operated. | Section 3.4 |
| 3 (g) | All new electricity cabling associated with the collector network within the wind energy facility generator cluster must be placed under the ground. | Section 3.4 |
| 3 (h) | Any transformer associated with each wind generator must be located beside each tower and be pad mounted, or be enclosed within the tower structure. | Section 3.4 |
| 3 (i) | The access track(s) within the site must be sited to minimise impacts on existing native trees on the site, and be constructed to the minimum standard practicable in order to ensure minimum impacts on the site, including impacts on overland flows. | Section 3.4 |

3. Submission

3.1 Plans Scale

Condition 1(a) of the Planning Permit states that the Amended Plans shall be drawn at a scale of 1:100 or 1:200.

In order for the plans to provide clear and detailed information in either A4 or A3 format, it was decided not to use the scales proposed in the Planning Permit but to:

- a) include a graphic bar scale;
- b) include longitude and latitude grid; and/or
- c) include dimensions; as required.

3.2 Location of the Wind Turbines

The Hepburn Community Wind Farm comprises two Wind Turbines sited adjacently.

The exact final location of the Wind Turbines will remain unchanged from the location of the Wind Turbines that was proposed in the “*application for planning permit*” and that was used in the “*noise assessment*” prepared by Marshall Day Acoustics dated 10 October 2010.

The above mentioned location for each Wind Turbines is:

Table 3. Wind Turbine Coordinate

| Wind Turbine Coordinates | | |
|--------------------------|--------------------------|---------------------------|
| Identifier | Easting MGA58 Zone 55 | Northing MGA58 Zone 55 |
| WT01 | 245250 | 5853900 |
| WT02 | 245457 | 5853817 |

Attachment 1 shows the distance between each one of the identified residential sites and the closest Wind Turbine. Since the locations of the Wind Turbines remain unchanged, the distances to the existing residences are as per the information contained in the report prepared by Marshall Day Acoustics dated 10 October 2010. The table below provides a summary of these distances:

Table 4. Distance from the nearest WT to each one of the identified residential sites

| Residential Site Reference | Easting MGA58 Zone55 | Northing MGA58 Zone55 | Distance to nearest WT (m) | Nearest WT |
|-------------------------------|-------------------------|--------------------------|-------------------------------|---------------|
| 1 | 245594 | 5853056 | 776 | WT02 |
| 2 | 245228 | 5853160 | 699 | WT02 |
| 3 | 245174 | 5853228 | 657 | WT02 |
| 4 | 244937 | 5853331 | 653 | WT01 |
| 5 | 244870 | 5853553 | 519 | WT01 |
| 6 | 244801 | 5854130 | 509 | WT01 |
| 7 | 244795 | 5854153 | 525 | WT01 |
| 8 | 244335 | 5853974 | 921 | WT01 |
| 9 | 244317 | 5854066 | 950 | WT01 |
| 10 | 244538 | 5854359 | 850 | WT01 |
| 11 | 244815 | 5854504 | 748 | WT01 |
| 12 | 244666 | 5854673 | 971 | WT01 |
| 13 | 244923 | 5854558 | 738 | WT01 |
| 14 | 245265 | 5854666 | 769 | WT01 |
| 15 | 245274 | 5854719 | 822 | WT01 |
| 16 | 245456 | 5854466 | 606 | WT01 |
| 17 | 245511 | 5854753 | 895 | WT01 |
| 18 | 245695 | 5854351 | 589 | WT02 |
| 19 | 244805 | 5854747 | 959 | WT01 |
| 20 | 244835 | 5854858 | 1046 | WT01 |

| Residential Site Reference | Easting MGA58 Zone55 | Northing MGA58 Zone55 | Distance to nearest WT (m) | Nearest WT |
|----------------------------|----------------------|-----------------------|----------------------------|------------|
| 21 | 245049 | 5855439 | 1554 | WT01 |
| 22 | 245041 | 5855470 | 1585 | WT01 |
| 23 | 245054 | 5855624 | 1736 | WT01 |
| 24 | 245157 | 5855432 | 1536 | WT01 |

Attachment 2 shows the distance between each one of the identified residential sites and the adjoining property boundaries.

3.3 Wind Turbines positioning

The Wind Turbines will not be re-positioned from the locations identified in the report prepared by Marshall Day Acoustics dated 10 October 2006, hence it is no required to prepare a new revision of the report and assessment identified in conditions 1(a)(ii)-1 and 1(a)(ii)-2 of the Planning Permit .

3.4 Location, layout and dimensions of all buildings and works

Attachment 3 shows an overview of the site and its boundaries and attachment 4 shows in more detail the proposed site layout including the proposed location of the:

- Wind Turbines;
- Switchyard;
- hard stand areas;
- Step Up Transformers;
- temporary site facilities;
- access roads;
- new 22kV overhead line pole;
- underground cabling; and
- temporary car parking area.

Switchyard

Attachment 5 shows the planned Switchyard layout including its planned dimensions. The Switchyard will be fenced and will comprise the Control Booth, the Reactive Power Plant and the Auxiliary Supply Transformer.

The planned dimensions of the equipment in the Switchyard are as follows:

- Control Booth
 - Length = 8500mm
 - Width = 3000mm
 - Height = 3829mm + 1200mm = 5029mm (will be elevated 1200mm from ground level)
- Reactive Power Plant
 - Length = 6060mm
 - Width = 2440mm
 - Height = 2900mm
- Auxiliary Supply Transformer
 - Length = 1240mm
 - Width = 1085mm
 - Height = 1200mm

Hard Stand areas

The Hard Stand areas have been designed to minimise impacts on existing native trees, on overland water flows and soil erosion.

No construction lay-down areas will be built for this project, however it is planned that the Wind Turbines' components will be either stored temporarily on the Hard Stand areas or their surrounding area.

Attachment 6 shows the planned dimensions of the Wind Turbines' Hard Stand areas.

Step Up Transformers

Next to each Wind Turbine there will be a Step Up Transformer. The planned dimensions of these Step Up Transformers are:

- o Length = 4284mm
- o Width = 2202mm
- o Height = 2279mm

Internal collector network

The internal connection network will be entirely underground. Trenches will be generally excavated to a depth of 900-1,000mm.

The internal collection network consists of power cabling for the transfer of the electrical energy generated from the Wind Turbines to the grid connection point. Fibre optic for the transfer of data and an earthing conductor will be laid next to the power cables in the trenches.

Attachment 7 shows the planned cross section of the underground cabling trenching.

Access roads

The access roads have been design to minimise impacts on existing native trees, on overland water flows and soil erosion. They generally follow the natural contours of land in order to minimise cut and fill earthworks required to build them.

Where practicable, spoil from on-site construction activities will be used for the construction of the access roads. Where this is not the case, the surface material of the access roads will be sourced from local quarries.

Attachment 8 shows the planned cross section of the site access roads.

Temporary site facilities

The location of the temporary site facilities is shown in Attachment 4. The site temporary facilities will consist of:

- project staff offices (3 or 4 x 20' site office);
- kitchen / mess room;
- toilets;
- first aid facilities;
- water tank; and
- diesel generator.

The temporary site facilities will be decommissioned once the wind farm construction, commissioning and testing are completed.

Temporary car parking area

There will be a temporary car parking area located in front of the temporary site facilities as shown in Attachment 4.

Lighting

There will be no external lighting of infrastructure associated with the wind energy facility, other than low level safety/security lighting in the switchyard and the Wind Turbines.

3.5 Detailed design of the Wind Turbines

The Wind Turbines chosen for the Hepburn Community Wind Farm are REpower MM82 HH69m 2.05MW. These Wind Turbines have nominal electrical of 2.05MW each and a hub height of 69m.

The nacelles will be mounted on 66.15m towers and the rotors will have a diameter of 82m. The maximum tip height of the Wind Turbines will be 110m above natural ground level as identified in condition 3 of the Planning Permit.

Each Wind Turbine will have three blades flange-mounted in the hub that will be attached to the nacelle. Next to each Wind Turbine there will be a Step Up Transformer to raise the voltage to 22kV.

The Wind Turbines will not be artificially illuminated except for a "safety light" that will be fitted above the door of each Wind Turbine. This light will only be illuminated when personnel are in attendance at the Wind Turbine to provide appropriate illumination during low light conditions. No aviation lights will be fitted in the Wind Turbines.

The Wind Turbines and their Step Up Transformers will be fenced as shown in Attachment 4, in order to protect them from the livestock.

Attachment 9A and 9B show dimensioned elevation drawings of the Wind Turbines.

Attachment 10 shows dimensioned drawings of the Wind Turbines' foundations.

Attachment 11 shows the dimensions of the Wind Turbines' tower sections or segments.

Attachment 12 shows the dimensions of the Wind Turbines' nacelles.

Attachment 13 shows the dimensions of the Wind Turbines' hubs.

Attachments 14A and 14B show the dimensions of the Wind Turbines blades from two different blade suppliers.

3.6 Detailed schedule of materials, colours and finishes of the Wind Turbines

Attachment 15 shows a photograph of a REpower MM82 HH69m 2.05MW Wind Turbine with the colour and finish chosen for use at the Hepburn Community Wind Farm. Please note that the Hepburn Community Wind Farm Wind Turbines will not have logos in the nacelle.

Foundations

The proposed Wind Turbines' foundations for this project are steel and concrete gravity foundations.

The Wind Turbines' foundations will be backfilled to the levels shown in Attachment 10. In order to promote the self revegetation of the existing grass type, the top layer of the Wind Turbines' foundations backfill will be the previously stripped topsoil.

Towers

The Wind Turbines' towers will consist of three conical/tubular steel tower sections or segments.

The colour of the Wind Turbines' towers will be RAL 7035 (light grey). RAL 7035 widely used in the Wind Power industry for Wind Turbine towers. Attachment 16 shows a letter from an Australian Wind Turbine tower manufacturer that is provided as supporting documentation for the tower's colour chosen for the Hepburn Community Wind Farm.

Towers access stairs

The Wind Turbines' tower access stairs are constructed of galvanised steel. These access stairs will not have any additional coating hence their colour will be the colour of galvanised steel.

Nacelle

The housing material of the Wind Turbines' nacelles is glass-fibre reinforced plastic, as this material offers a reliable protection and is also very light. The nacelle housing provides sound insulation and it helps to keep the nacelle within optimal operating temperatures.

The colour of the Wind Turbines' nacelle will be RAL 7035 (light grey), which is a standard pale colour that reduces reflection. RAL 7035 is the blade colour mentioned in section 3.2 (page 26 of 68) of the "application for planning permit".

Hub

The housing material of the Wind Turbines' hubs is glass-fibre reinforced plastic.

The colour of the Wind Turbines' nacelle will be RAL 7035 (light grey).

Blades

The material of the Wind Turbines blades is glass-fibre reinforced plastic.

The colour of the Wind Turbines' blades will be RAL 7035 (light grey) which is a standard pale colour that reduces reflection. RAL 7035 is the blade colour mentioned in section 3.2 (page 26 of 68) of the "application for planning permit".

3.7 Detailed schedule of materials, colours and finishes of other structures

Step Up Transformers (adjacent to the Wind Turbines)

The Step Up Transformers finishing material will be marine grade aluminium and the coating colour will be Storm Grey N42.

Control Booth (within the Switchyard)

The Control Booth finishing material will be Colorbond steel sheeting and the coating colour will be Woodland Grey® from the Colorbond colour chart.

Reactive Power Plant (within the Switchyard)

The Reactive Power Plant finishing material will be steel and the coating colour will be Woodland Grey® from the Colorbond colour chart.

Auxiliary Supply Transformer (within the Switchyard)

The Auxiliary Supply Transformer finishing material will be galvanised steel and the coating colour will be Storm Grey (N42) from the Australian Standard AS2700S colour chart.

3.8 Location of services

There are different overhead and underground services within the wind farm site; Attachment 17 shows all these services.

3.9 Details of the proposed signage

Site identification sign

The site identification sign will be located at the wind farm access point gate and will provide basic information about the project as well as contact details for enquiries about the project.

The proposed site identification sign is shown in Attachment 18. The exact details of this sign may change, but the total area of the sign will remain less than 2 metres by 2 metres.

Logo displayed in the Wind Turbines

There will be no logo or company identification of any kind displayed on the Wind Turbines.

Safety Signage

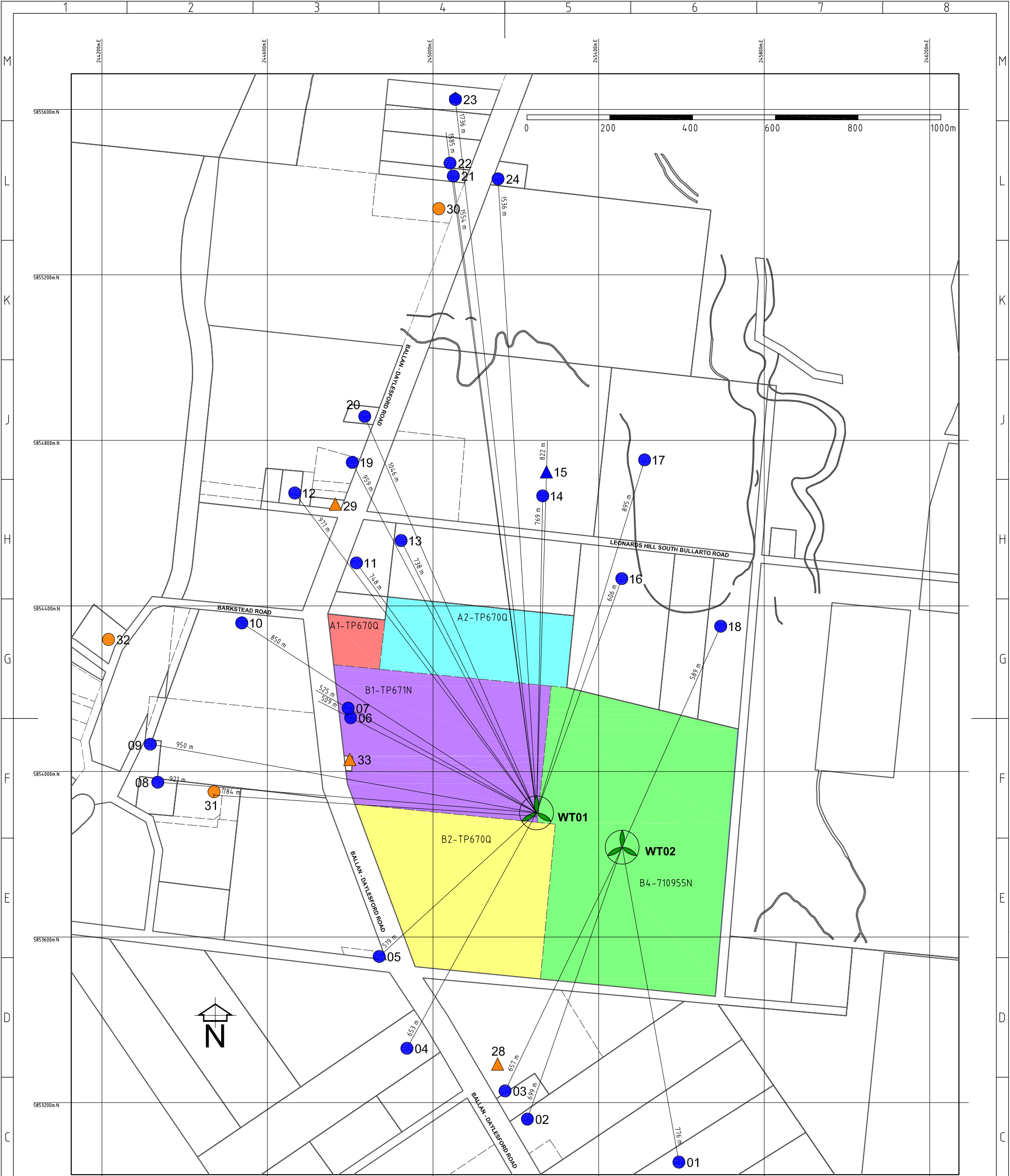
Various safety external signs will be posted at the site during the construction and operation of the wind farm. There will be safety signs inside the plant and equipment on site but since these signs will not be visible from outside they have not been included in this document.

These safety and informational signs are generally 450mm by 300mm but in some instances some of them may need to be larger.

Attachment 19 shows the proposed safety signage for the project.

4. Attachments

Attachment 1 - WTs Locations and distances from existing residential sites



LEGEND

PROPERTY BOUNDARIES

PARCEL BOUNDARIES

RESIDENTIAL SITE

OTHER STRUCTURES

RESIDENTIAL SITE (APPROXIMATE LOCATION)

OTHER STRUCTURES (APPROXIMATE LOCATION)

WIND TURBINE (WT)

LEASED LAND (A1-TP670Q)

LEASED LAND (A2-TP670Q)

LEASED LAND (B1-TP671N)

LEASED LAND (B2-TP670Q)

LEASED LAND (B4-710955N)

NOTE:

Any coordinates in this document are just for information purposes and will have to be checked by a certified surveyor.

Coordinates WTs

WGA94 Zone 55

WT01

245250, 5853900

WT02

245457, 5853817

DIN ISO 13715

DIN ISO 2768-miH

Tolerance DIN ISO 8015

Datum/date

Name/name

gezeichnet / drawn:

22-07-10

E. URRUCHI

geprüft / checked:

22-07-10

E. URRUCHI

freigegeben/released:

22-07-10

E. URRUCHI

Stückzahl pro Anlage / No. of Pieces per Turbine

N/A

Schutzvermerk

DIN ISO 16016

Protection Mark

DIN ISO 16016

SAP-No.

N/A

Pos.-Nr.

N/A

EDP NO.

N/A

Maßstab / Scale:

NOT TO SCALE

REpower Systems

REpower Systems AG

- Entwicklungszentrum -

Hollesienstraße 15

D-24768 Rendsburg

Phone: +49 - 4331 - 131390

Fax. No. +49 - 4331 - 1319999

Angegebene Spezifikation ist zwingend zu beachten!

Indicated Specification has to be strictly observed!

Werkstoff / Material:

N/A

Benennung / title

HEPBURN COMMUNITY WIND FARM

DISTANCES RESIDENTIAL SITES

Unterbenennung / subtitle

WTs LOCATIONS AND DISTANCES FROM EXISTING RESIDENTIAL SITES

Zeichnungsnummer / Drawing Number

HEP-4.01-DRG-05

Spezifikationsnummer / Specification Number

N/A

(Ers.f. / repl.for.)

N/A

(Ers.d. / repl.by)

N/A

Gewicht / Weight:

N/A

Version / revision

A00-03

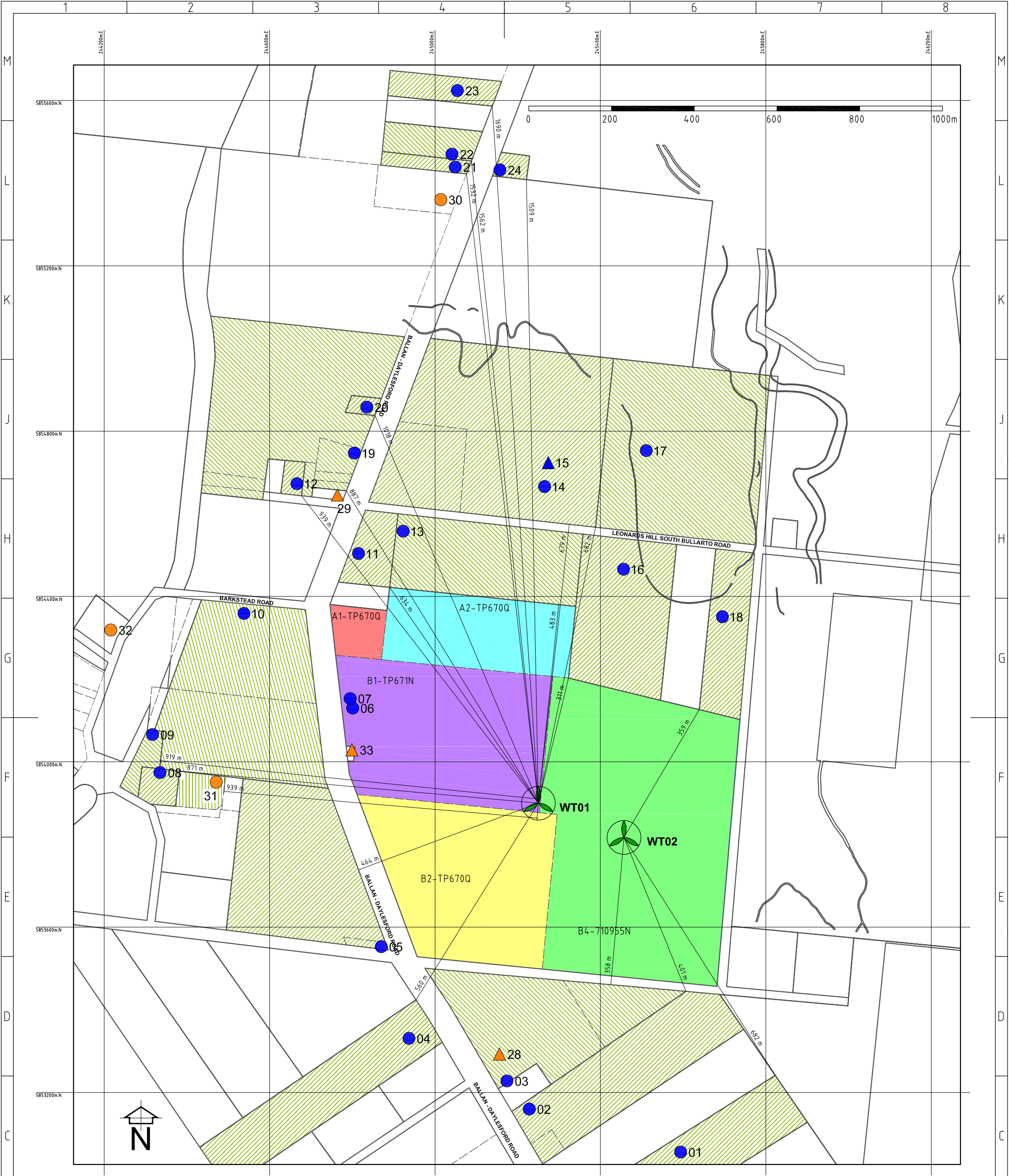
Blatt/Sheet

1/1

DIN-Blatt/DIN-Sheet

A3

Attachment 2 – WTs locations and distances from adjoining property boundaries



LEGEND

- PROPERTY BOUNDARIES
- PARCEL BOUNDARIES
- XX RESIDENTIAL SITE
- XX OTHER STRUCTURES
- XX RESIDENTIAL SITE (APPROXIMATE LOCATION)
- XX OTHER STRUCTURES (APPROXIMATE LOCATION)
- WIND TURBINE (WT)
- PROPERTY WITH RESIDENCE

- LEASED LAND (A1-TP670Q)
- LEASED LAND (A2-TP670Q)
- LEASED LAND (B1-TP671N)
- LEASED LAND (B2-TP670Q)
- LEASED LAND (B4-710955N)

| Coordinates WTs | |
|-----------------|-----------------|
| WGA94 Zone 55 | |
| WT01 | 245250, 5853900 |
| WT02 | 245457, 5853817 |

NOTE:
Any coordinates in this document are just for information purposes and will have to be checked by a certified surveyor.

Weitergabe sowie Vervielfältigung dieses Dokuments, Verwertung und Mitteilung seines Inhalts sind verboten, soweit nicht ausdrücklich gestattet. Zuwiderhandlungen verpflichten zu Schadenersatz. Alle Rechte für den Fall der Patent-, Gebrauchsmuster- oder Geschmacksmustereintragung vorbehalten.

The reproduction, distribution and utilization of this document as well as the communication of its contents to others without explicit authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or design.

| | | | |
|---|---------------|---|-----------------|
| | DIN ISO 13715 | | DIN ISO 2768-mH |
| | Datum/date | | Name/name |
| gezeichnet / drawn: | 22-07-10 | E. URRUCHI | |
| geprüft / checked: | 22-07-10 | E. URRUCHI | |
| freigegeben/released: | 22-07-10 | E. URRUCHI | |
| Stückzahl pro Anlage / No. of Pieces per Turbine: | N/A | Schutzvermerk Protection Mark DIN ISO 16016 | DIN ISO 16016 |
| SAP-No.: | N/A | Pos.-Nr.: | N/A |
| EDP NO. | N/A | | |

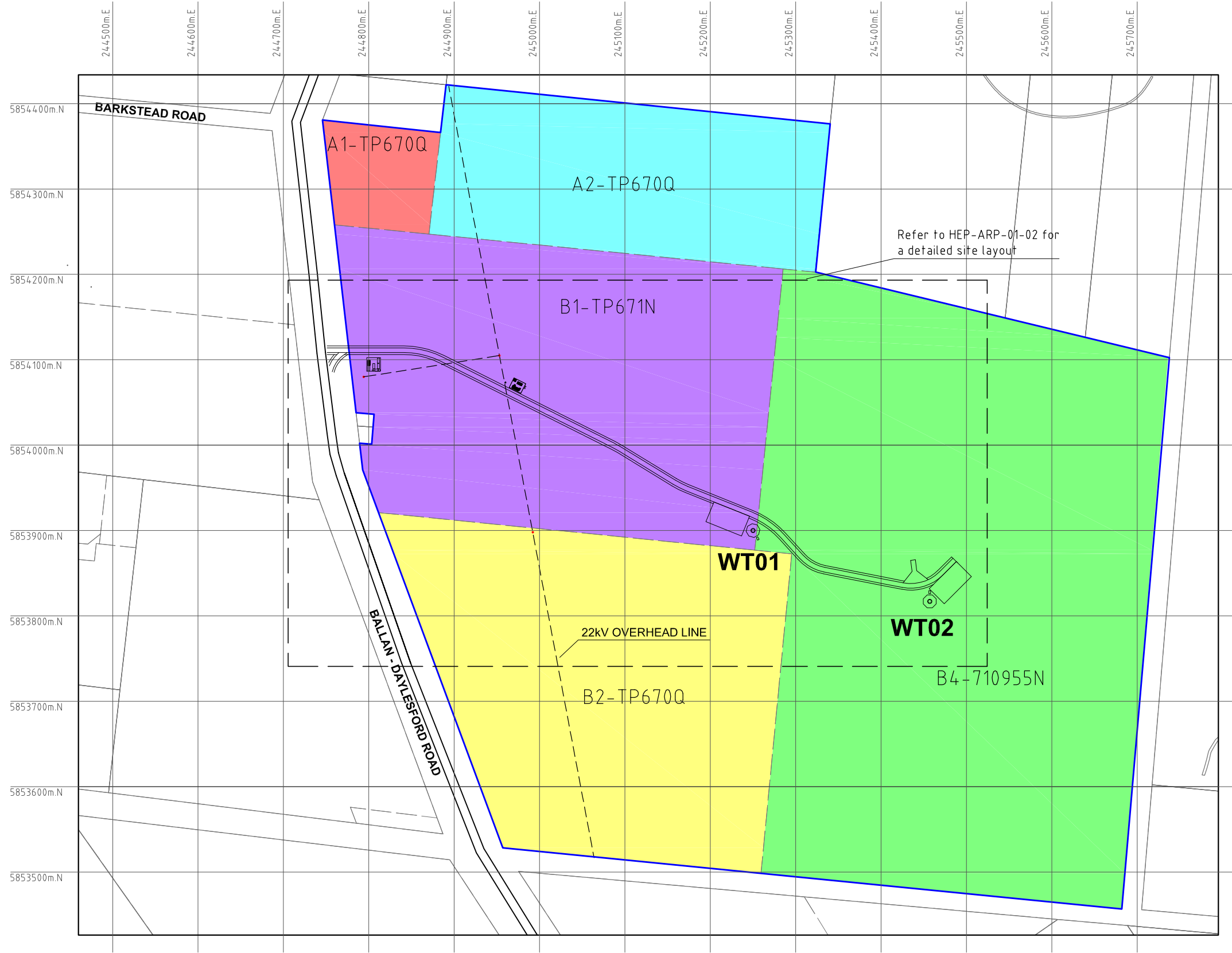
Maßstab / Scale:
NOT TO SCALE

REpower Systems AG
- Entwicklungszentrum -
Hollesienstraße 15
D-24768 Rendsburg
Phone: +49 - 4331 - 131390
Fax: No. +49 - 4331 - 13139999

Angegebene Spezifikation ist zwingend zu beachten!
Indicated Specification has to be strictly observed!

| | | | |
|--|-----|------------------------------|-----|
| Werkstoff / Material: | N/A | Gewicht / Weight: | N/A |
| Benennung / title HEPBURN COMMUNITY WIND FARM DISTANCES BOUNDARIES | | | |
| Unterbenennung / subtitle WTs LOCATIONS AND DISTANCES FROM ADJOINING PROPERTY BOUNDARIES | | | |
| Zeichnungsnummer / Drawing Number HEP-4.01-DRG-04 | | Version / revision A00-04 | |
| Spezifikationsnummer / Specification Number N/A | | Blatt/Sheet 1/1 | |
| (Ers.f. / repl.for): N/A | | (Ers.d. / repl.by): N/A | |

Attachment 3 – Site plan overview and boundaries



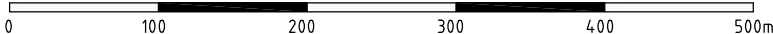
FOR INFORMATION ONLY

| Coordinates WTs | |
|-----------------|-----------------|
| MGA 94 Zone 55 | |
| WT01 | 245250, 5853900 |
| WT02 | 245457, 5853817 |

LEGEND

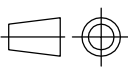

- POWERCOR - OVERHEAD POWERLINE
- SITE BOUNDARY
- PROPERTY BOUNDARIES
- PARCEL BOUNDARIES

- LEASED LAND (A1-TP670Q)
- LEASED LAND (A2-TP670Q)
- LEASED LAND (B1-TP671N)
- LEASED LAND (B2-TP670Q)
- LEASED LAND (B4-710955N)

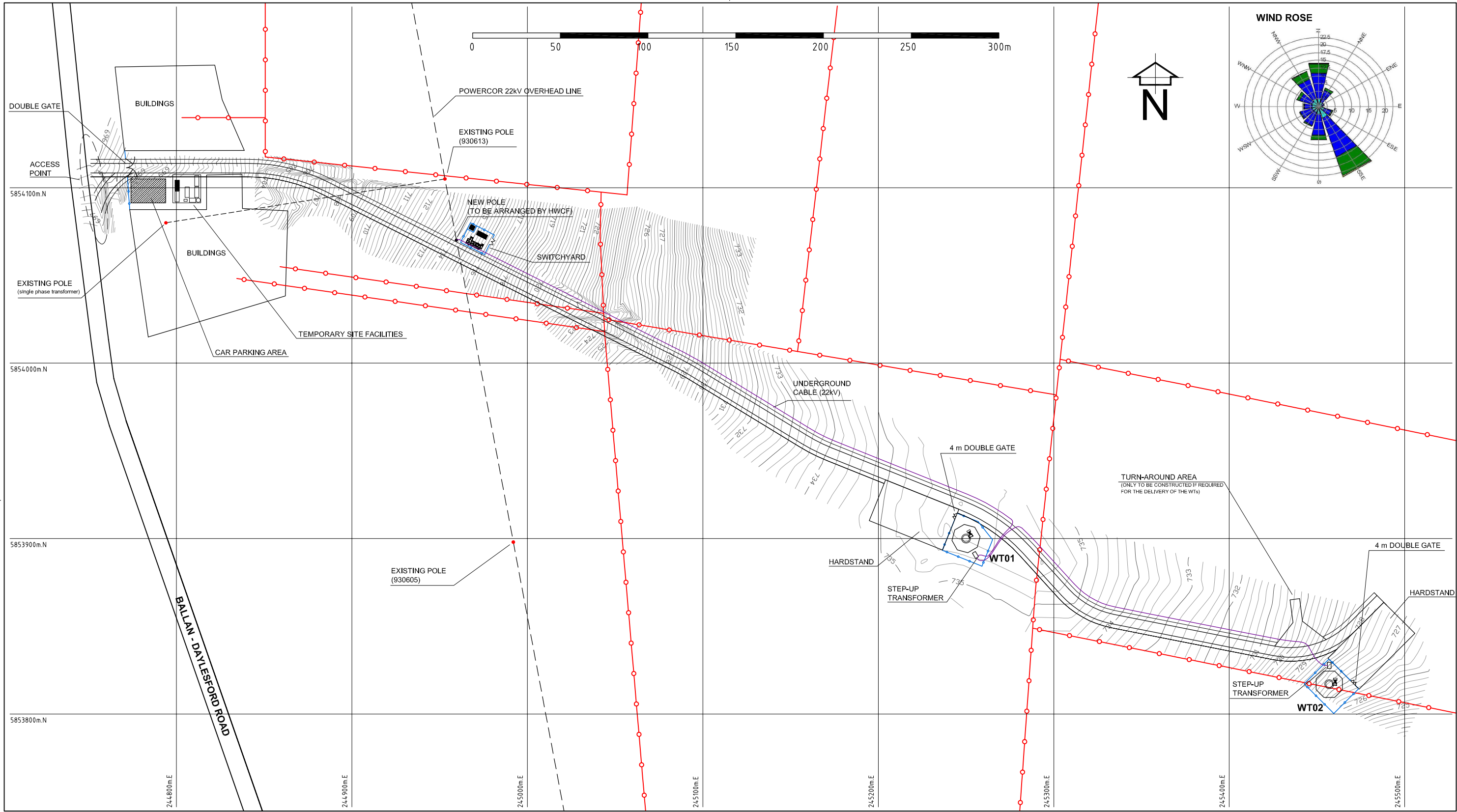


NOTE:

Any coordinates in this document are just for information purposes and will have to be checked by a certified surveyor.

| | | | | | | | |
|--|---|---|--|---|--|--------------------------|---|
| Weitergabe sowie Vervielfältigung dieses Dokuments, Verwertung und Mitteilung seines Inhalts sind verboten, soweit nicht ausdrücklich gestattet. Zuwiderhandlungen verpflichten zu Schadenersatz. Alle Rechte für den Fall der Patent-, Gebrauchsmuster- oder Geschmacksustereintragung vorbehalten. The reproduction, distribution and utilization of this document as well as the communication of its contents to others without explicit authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or design. |  | DIN ISO 13715 | DIN ISO 2768-mH Tolerance DIN ISO 8015 | Maßstab / Scale: NOT TO SCALE | Werkstoff / Material: N/A | Gewicht / Weight: N/A | |
| | | Datum / date | Name / name |  REpower Systems AG - Entwicklungszentrum - Hollensenstraße 15 D-24768 Rendsburg Phone: +49 - 4331 - 131390 Fax: No. +49 - 4331 - 13139999 | Benennung / title HEPBURN COMMUNITY WIND FARM | | |
| | gezeichnet / drawn: | 10-08-10 | E. URRUCHI | | Unterbenennung / subtitle SITE PLAN OVERVIEW AND BOUNDARIES | | |
| | geprüft / checked: | 10-08-10 | E. URRUCHI | | Zeichnungsnummer / Drawing Number HEP-ARP-01-05 | | Version / revision A00-01 |
| freigegeben / released: | 10-08-10 | E. URRUCHI | Angegebene Spezifikation ist zwingend zu beachten! Indicated Specification has to be strictly observed! | | Spezifikationsnummer / Specification Number N/A | | Blatt/Sheet 1/1 DW-Blatt/DW-Sheet A3 |
| Stückzahl pro Anlage / No. of Pieces per Turbine: SAP-No.: N/A EDP No. N/A | | Schutzvermerk DIN ISO 16016 Protection Mark DIN ISO 16016 Pos.-Nr.: N/A | | [Ers.f. / repl.for:] N/A | | [Ers.d. / repl.by:] N/A | |

Attachment 4 – Preliminary site plan, access roads and cable routes



| Coordinates WTs | |
|-----------------|-----------------|
| MGA 94 Zone 55 | |
| WT01 | 245250, 5853900 |
| WT02 | 245457, 5853817 |

| LEGEND | |
|--------|---------------------|
| | EXISTING FENCELINE |
| | NEW FENCELINE |
| | UNDERGROUND CABLING |

NOTE:
Any coordinates in this document are just for information purposes and will have to be checked by a certified surveyor before construction.

FOR INFORMATION ONLY

| | | | | | | | |
|--|-----------------------|---|--|---|--|---|---------------------------|
| <div>Weitergabe sowie Vervielfältigung dieses Dokuments, Verwertung und Mitteilung seines Inhalts sind verboten, soweit nicht ausdrücklich gestattet. Zuwiderhandlungen verpflichten zu Schadenersatz. Alle Rechte für den Fall der Patent-, Gebrauchsmuster- oder Geschmacksmustereintragung vorbehalten.</div> <div>The reproduction, distribution and utilization of this document as well as the communication of its contents to others without explicit authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or design.</div> | | DIN ISO 13715 | DIN ISO 2768-mH Tolerance DIN ISO 8015 | Maßstab / Scale: NOT TO SCALE | | Werkstoff / Material: N/A | Gewicht / Weight: N/A |
| | gezeichnet / drawn: | 09-08-10 | E. URRUCHI | <div>REpower Systems AG - Entwicklungszentrum - Hollensenstraße 15 D-24768 Rendsburg Phone: +49 - 4331 - 131990 Fax: +49 - 4331 - 1319999</div> | | Benennung / title HEPBURN COMMUNITY WIND FARM | |
| | geprüft / checked: | 09-08-10 | E. URRUCHI | | | Unterbenennung / subtitle PRELIMINARY SITE PLAN ACCESS ROADS & CABLE ROUTES | |
| | freigegeben/released: | 09-08-10 | E. URRUCHI | | | Zeichnungsnummer / Drawing Number HEP-ARP-01-02 | |
| Stückzahl pro Anlage / No. of Pieces per Turbine: SAP-No.: N/A | | Schutzvermerk DIN ISO 16016 Protection Mark DIN ISO 16016 Pos.-Nr.: N/A | | Angegebene Spezifikation ist zwingend zu beachten! Indicated Specification has to be strictly observed! | | Version / revision A-0 | Blatt/Sheet 1/1 |
| EDP NO. N/A | | | | | | Spezifikationsnummer / Specification Number N/A | DIN-Blatt/DIN-Sheet A3 |
| | | | | | | (Ers.f. / repl.for:) N/A | (Ers.d. / repl.by:) N/A |

Attachment 5 – Conceptual Switchyard layout

AUXILIARY SUPPLY TRANSFORMER

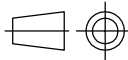

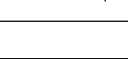

REACTIVE POWER PLANT

CONTROL BOOTH

Note 1: all the dimensions in this preliminary drawing are just for information purposes and will vary during the design stage of the project.

Note 2: all the dimensions are in meters.

DRAFT VERSION
for information only

| | | | | | | | |
|--|---|--|--|--|--|--|------------------------------|
| Weitergabe sowie Vervielfältigung dieses Dokuments, Verwertung und Mitfteilung seines Inhalts sind verboten, soweit nicht ausdrücklich gestattet. Zuwiderhandlungen verpflichten zu Schadenersatz. Alle Rechte für den Fall der Patent-, Gebrauchsmuster- oder Geschmacksmustereintragung vorbehalten. |  | DIN ISO 13715 | DIN ISO 2768-mH | Maßstab / Scale: NOT TO SCALE | Werkstoff / Material: N/A | Gewicht / Weight: N/A | |
| |  | Tolerance DIN ISO 8015 | | | | | |
| | gezeichnet / drawn: | 30-07-10 | E. URRUCHI | | | | |
| | geprüft / checked: | 30-07-10 | E. URRUCHI | | | | |
| The reproduction, distribution and utilization of this document as well as the communication of its contents to others without explicit authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or design. |  | Datum/date | Name/name |  REpower Systems AG - Entwicklungszentrum - Hollesenstraße 15 D-24768 Rendsburg Phone: +49 - 4331 - 131990 Fax: No. +49 - 4331 - 13199999 | Benennung / title HEPBURN COMMUNITY WIND FARM SWITCHYARD Unterbenennung / subtitle CONCEPTUAL SWITCHYARD LAYOUT | | |
| | frei gegeben/released: | 30-07-10 | E. URRUCHI | | Zeichnungsnummer / Drawing Number HEP-ARP-01-11 | | Version / revision A00-04 |
| | Stückzahl pro Anlage / No. of Pieces per Turbine: N/A | Schutzvermerk DIN ISO 16016 Protection Mark DIN ISO 16016 | Angegebene Spezifikation ist zwingend zu beachten! Indicated Specification has to be strictly observed! | | Spezifikationsnummer / Specification Number N/A | Blatt/Sheet 1/1 DIN-Blatt/EN-Sheet A3 | |
| | SAP-No.: N/A | Pos.-Nr.: N/A | | | Ers.f. / repl.for: N/A | Ers.d. / repl.by: N/A | |
| EDP NO. N/A | | | | | | | |

Attachment 6 – Hardstand area

AUXILIARY SUPPLY TRANSFORMER

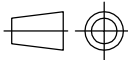
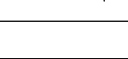
REACTIVE POWER PLANT

CONTROL BOOTH

Note 1: all the dimensions in this preliminary drawing are just for information purposes and will vary during the design stage of the project.

Note 2: all the dimensions are in meters.

DRAFT VERSION
for information only

| | | | | | | | | |
|--|---|---------------|--|--|--|------------------------------|--|---|
| Weitergabe sowie Vervielfältigung dieses Dokuments, Verwertung und Mitteilung seines Inhalts sind verboten, soweit nicht ausdrücklich gestattet. Zuwiderhandlungen verpflichten zu Schadenersatz. Alle Rechte für den Fall der Patent-, Gebrauchsmuster- oder Geschmacksmustereintragung vorbehalten. |  | DIN ISO 13715 | DIN ISO 2768-mH | Maßstab / Scale: NOT TO SCALE | Werkstoff / Material: N/A | Gewicht / Weight: N/A | | |
| |  | DIN ISO 13715 | Tolerance DIN ISO 8015 | | | | | |
| | gezeichnet / drawn: | 30-07-10 | E. URRUCHI | | | | | |
| | geprüft / checked: | 30-07-10 | E. URRUCHI | | | | | |
| | freigegeben/released: | 30-07-10 | E. URRUCHI | | | | | |
| The reproduction, distribution and utilization of this document as well as the communication of its contents to others without explicit authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or design. | Stückzahl pro Anlage / No. of Pieces per Turbine: | N/A | Schutzvermerk DIN ISO 16016 Protection Mark DIN ISO 16016 | Angegebene Spezifikation ist zwingend zu beachten! Indicated Specification has to be strictly observed! | Benennung / title HEPBURN COMMUNITY WIND FARM SWITCHYARD Unterbenennung / subtitle CONCEPTUAL SWITCHYARD LAYOUT | Version / revision A00-04 | | |
| | SAP-No.: | N/A | Pos.-Nr.: | | | | N/A | |
| | EDP No.: | N/A | | | | | | |
| | Zeichnungsnummer / Drawing Number HEP-ARP-01-11 | | | | | | Spezifikationsnummer / Specification Number N/A | Blatt/Sheet 1/1 DIN-Blatt/DIN-Sheet A3 |
| | [Ers.f. / repl.for:] N/A | | | | | | [Ers.d. / repl.by:] N/A | |

AUXILIARY SUPPLY TRANSFORMER

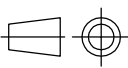

REACTIVE POWER PLANT

CONTROL BOOTH

Note 1: all the dimensions in this preliminary drawing are just for information purposes and will vary during the design stage of the project.

Note 2: all the dimensions are in meters.

DRAFT VERSION
for information only

| | | | | | | | | |
|--|---|---------------------------|--|--|--|------------------------------|--|---|
| Weitergabe sowie Vervielfältigung dieses Dokuments, Verwertung und Mitteilung seines Inhalts sind verboten, soweit nicht ausdrücklich gestattet. Zuwiderhandlungen verpflichten zu Schadenersatz. Alle Rechte für den Fall der Patent-, Gebrauchsmuster- oder Geschmacksmustereintragung vorbehalten. |  | DIN ISO 13715 | DIN ISO 2768-mH | Maßstab / Scale: NOT TO SCALE | Werkstoff / Material: N/A | Gewicht / Weight: N/A | | |
| |  | Tolerance DIN ISO 8015 | Name/name | | | | | |
| | gezeichnet / drawn: | 30-07-10 | E. URRUCHI | | | | | |
| | geprüft / checked: | 30-07-10 | E. URRUCHI | | | | | |
| | freigegeben/released: | 30-07-10 | E. URRUCHI | | | | | |
| The reproduction, distribution and utilization of this document as well as the communication of its contents to others without explicit authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or design. | Stückzahl pro Anlage / No. of Pieces per Turbine: | N/A | Schutzvermerk DIN ISO 16016 Protection Mark DIN ISO 16016 | Angegebene Spezifikation ist zwingend zu beachten! Indicated Specification has to be strictly observed! | Zeichnungsnummer / Drawing Number HEP-ARP-01-11 | Version / revision A00-04 | | |
| | SAP-No.: | N/A | Pos.-Nr.: | | | | N/A | |
| | EDP No. N/A | | | | | | Spezifikationsnummer / Specification Number N/A | Blatt/Sheet 1/1 DIN-Blatt/DIN-Sheet A3 |
| | | | | | | | (Ers.f. / repl.for:) N/A | (Ers.d. / repl.by:) N/A |



Leonards Hill Wind Operations Pty Ltd
Hepburn Community Wind Farm

On-site Landscape and Visual Screening Plan

12 August 2010

Prepared by Future Energy Pty Ltd
On behalf of Hepburn Wind

| | |
|------------------------|--|
| Use and Development: | Hepburn Community Wind Farm |
| Address: | 2040 Ballan-Daylesford Road, Leonards Hill CA'S B1 & B4, SEC Y, LOT 1 TP000671N, CA B2, CA A1 & A2, SEC 3B |
| Planning Permit No: | 2006/9231 |
| Responsible Authority: | Hepburn Shire Council |
| Submitted for: | Leonards Hill Wind Operations Pty Ltd |
| Prepared by: | Hepburn Wind |
| Version date: | 12 August 2010 Revision 3 - FINAL |

Table of Contents

| | | |
|-----|---|----|
| 1 | Background Information..... | 4 |
| 1.1 | Purpose..... | 4 |
| 1.2 | Activity Description..... | 4 |
| 2 | Screening of Control Booth and Hard Stand Areas | 5 |
| 2.1 | Location of Screening Trees | 5 |
| 2.2 | Species..... | 6 |
| 3 | Screening of Views from Dwellings | 9 |
| 3.1 | Location of Screening Trees | 9 |
| 3.2 | Tree Height Requirement | 13 |
| 3.3 | Impact of Existing Trees..... | 13 |
| 3.4 | Species..... | 14 |
| 4 | Protection and Maintenance..... | 14 |
| 5 | Implementation..... | 14 |

1 Background Information

1.1 Purpose

This On-site Landscape and Visual Screening Plan details the process by which Leonards Hill Wind Operations Pty Ltd (LHWO) will ensure the Hepburn Community Wind Farm satisfies Permit Condition No. 4 a) through f) of the Development Approval No. 2006/9231 issued on 31 July 2007 by Hepburn Shire Council [signatory Christine Halstead, Team Leader Planning].

The condition is as follows:

Permit Condition No. 4 On-site landscape and visual screening plan:

Before the use or any development starts, a Landscape and Visual Screening Plan must be submitted to the satisfaction of the Responsible Authority. When approved, the plan will be endorsed by the Responsible Authority. The Landscaping and Visual Screening Plan must include:

- a) Visual screening of hard stand areas and the grid control booth from the Ballan-Daylesford Road.
- b) Planting along the site's perimeter to provide screening to dwellings #2, #3, #11, #12 and #19 (dwelling numbers from Map 5 – Neighbouring Residences in the Proposed Hepburn Community Wind Park Landscape and Visual Assessment Study by J Cleary 2006 at page 41)
- c) Details of species proposed to be used for landscaping including details of the height and size of species at maturity.
- d) Details of fencing to protect new vegetation from stock impacts.
- e) A maintenance program.
- f) A timetable for the implementation of landscaping and visual screening works that includes planting being completed prior to any turbine being commissioned.

The use and development must be carried out in accordance with the endorsed Landscaping and Visual Screening Plan to the satisfaction of the Responsible Authority.

1.2 Activity Description

The wind farm will be constructed, owned and operated by Leonards Hill Wind Operations Pty Ltd (LWHO). It will be situated on open, cleared grazing and cropping land situated 10 km south of Daylesford. The subject land is designated Farming Zone (FZ) under the Hepburn Shire Planning Scheme. The address of the subject land is 2040 Ballan – Daylesford Road, Leonards Hill and is owned by one landowner, R & N Liversidge Pty Ltd, as trustee for the R & N Liversidge Family Trust. [See Figure 1]

The land is described by the following legal titles:

- 1. Certificate of Title Volume 9845 Folio 484
- 2. Certificate of Title Volume 10172 Folio 201
- 3. Certificate of Title Volume 10172 Folio 202
- 4. Certificate of Title Volume 10172 Folio 203

The Wind Farm will consist of two Repower MM82 wind turbine generators. Each wind turbine generator will be mounted atop towers with a height of 68m and consist of three blades measuring 41m. The towers will have a diameter at the base of between approximately 4 and 5 metres and will taper to the top.

As shown in Figure 1 an access track will be constructed from the site entrance on the Ballan–Daylesford Road to the turbines. The track will be approximately 5m wide. This track will be used during the construction period and thereafter for maintenance vehicles to access each wind turbine. The turbines will be connected to the local electricity grid via underground 22 kV cable. This underground cable will follow the route of the access track. The trench for the cables will measure approximately 300 mm wide and 600 mm deep and be dug alongside the access track. The layout of the access tracks can be seen in Figure 1.

Hard standing areas next to the base of each wind turbine will be used for turbine assembly during the construction of the Wind Park and will measure approximately 20 m by 40 m. A small enclosed area housing metering and grid control equipment as well as maintenance facilities will be located alongside the point of connection into the electricity grid. This control booth or switchyard is shown in Figure 1.

2 Screening of Control Booth and Hard Stand Areas

According to the Planning Permit condition, the On-site Landscape and Visual Screening Plan must provide for the screening of hard stand areas and the grid control booth/switchyard, as seen from Ballan-Daylesford Rd. These features of the development are shown in Figure 1 below. Because the hard stand areas are located either on or over the crest of Leonards Hill, the surface elevation of the landscape ensures they are not visible from Ballan-Daylesford Rd. The hard stand areas are therefore naturally fully screened from Ballan-Daylesford Road. Consequently, it is not necessary to plant screening vegetation around them. However, the switchyard will be visible from Ballan-Daylesford Rd and, as such, its screening is detailed in this plan.

2.1 Location of Screening Trees

In order to screen views to the switchyard the screening vegetation needs to interrupt the line of sight between Ballan-Daylesford Rd and the switchyard. Figure 2 shows the site lines between the switchyard and Ballan-Daylesford Rd, and indicates where screening will be located.

The vegetation will be positioned to achieve effective screening (when mature). Exact positioning may change and will be subject to the preparation of a detailed design taking into account:

- final switchyard dimensions and exact siting
- clearances from switchyard and power lines as required by statute and best practice
- landowner preferences
- road and fence layout

2.2 Species

LHWO propose to utilise the tree species, *Banksia Marginata* for the purposes of providing the necessary screening around the switchyard. *Banksia Marginata*, or Silver Banksia¹, will reach a height of approximately 4m at maturity and will provide ample screening of views of the switchyard from Ballan-Daylesford Road. This screening will also provide screening of views of the switchyard from nearby dwellings.

¹ Alternative species with equally or more effective attributes may be selected subject to availability, further expert advice and consultation. The Responsible Authority will be consulted as part of any required change of species



Figure 2: Switchyard Viewshed

3 Screening of Views from Dwellings

This On-site Landscape and Visual Screening Plan is also designed to provide for the screening of views from dwellings 2, 3, 11, 12 and 19 via on-site planting. These dwellings are highlighted in Figure 3 below, together with their site lines to the wind farm and the boundary of the wind farm site. The details of these dwellings are summarised in Table 1 below.

Table 1: Dwelling Details

| Dwelling No | Address | Distance to Nearest Turbine (m) |
|-------------|-----------------------------|---------------------------------|
| 2 | 1914 Ballan-Daylesford Road | 696 |
| 3 | 1881 Ballan-Daylesford Road | 654 |
| 11 | 2084 Ballan-Daylesford Road | 745 |
| 12 | 2095 Ballan-Daylesford Road | 968 |
| 19 | 2101 Ballan-Daylesford Road | 957 |

3.1 Location of Screening Trees

Because the height requirement of a screening tree increases as the distance between it and the relevant house increases, the most effective location for on-site screening is the perimeter of the site. Clearly the screening tree also has to be located within the sight line of the dwelling. Hence screening trees need to be located at the intersection of the sight lines and the site boundary as they are shown in Figure 3. Alternatively, screening trees can be placed off-site for those residences where an on-site screening solution would lead to an impractical solution or non- timely solution.

A closer inspection of this area of intersection is provided by Figure 4 and Figure 5. In all figures the area of fence line requiring trees for screening is highlighted in red.

These two tree lines follow the line plotted by points shown in Table 2. Tree Line 1 amounts to approximately 270 m of fence line requiring planting, and Tree Line 2 amounts to approximately 200 m of fence line requiring planting.

Table 2: Tree Line Locations

| | Tree Line 1 | Tree Line 2 |
|---|----------------|----------------|
| 1 | 244865/5854365 | 245177/5853509 |
| 2 | 244888/5854363 | 245375/5853490 |
| 3 | 244894/5854418 | |
| 4 | 245081/5854400 | |



Figure 3: Dwelling Site Lines



Figure 4: Tree Line 1

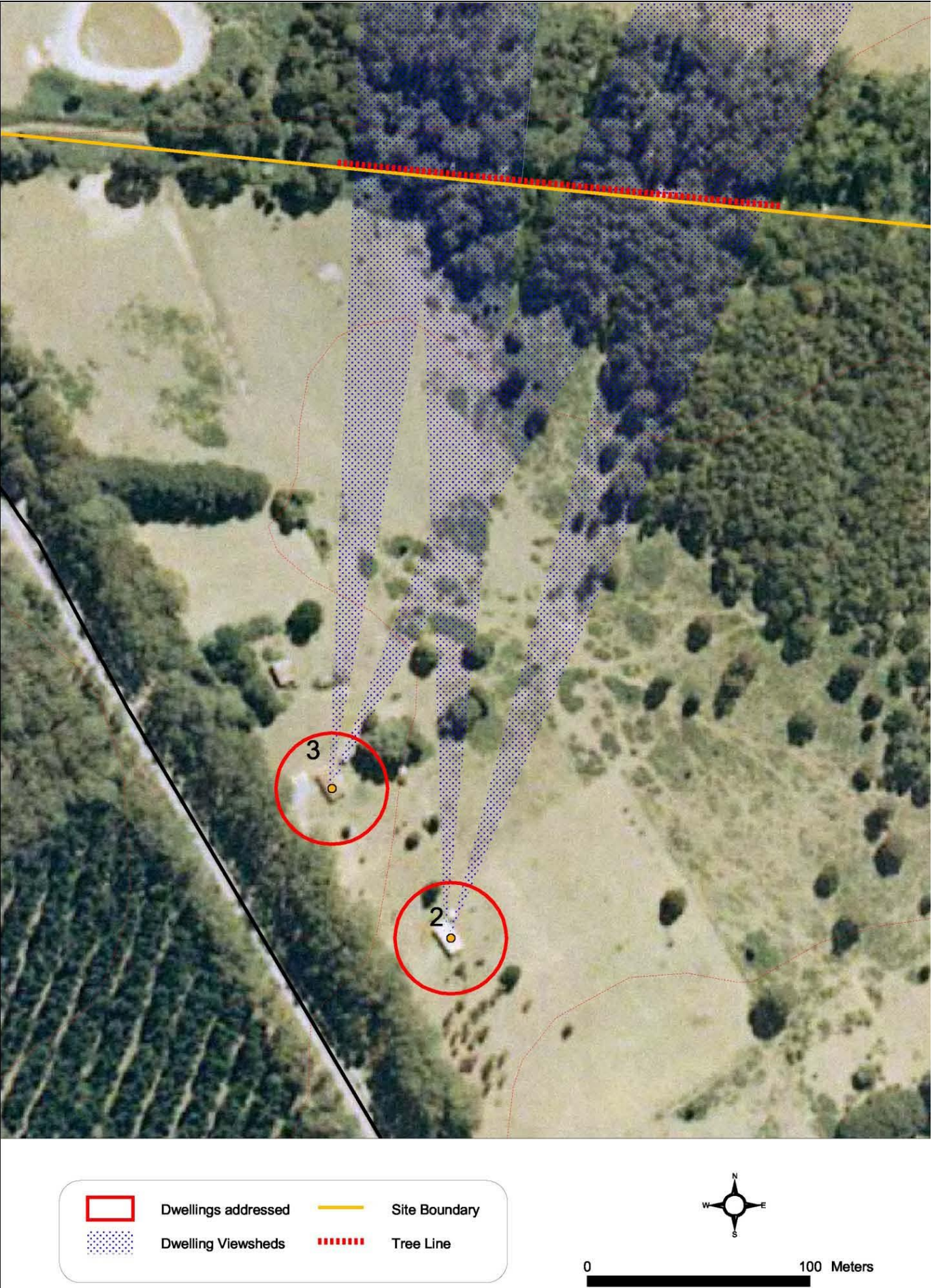


Figure 5: Tree Line 2

3.2 Tree Height Requirement

Screening trees also need to be of a minimum height in order to be effective. This height can be determined via simple geometrical equations, as the sight line from a house to a particular turbine is a straight line. The calculations used in this plan are based on the following points:

- The elevation of each dwelling at ground level;
- The elevation of the tip of each turbine blade, at its highest point;
- The shortest distance between a dwelling and a turbine;
- The distance between a dwelling and the site boundary; and
- The elevation at the point the site line crosses the site boundary.

All distances and elevations were determined using GIS software and current Vicmap datasets. The results of these calculations are summarised in Table 3 below. From these calculations it is apparent that Tree Line 1 would be required to have a height ranging from 8–33 m, and Tree Line 2 a height ranging from 56–61 m. These heights are quite specific however, and also only represent a minimum requirement. As a result it is more appropriate to consider the height requirements of the two tree lines as 10–35 m and 55–65 m respectively. Given the heights considered however, it may be more appropriate to rely on the offsite screening to mitigate these effects.

Table 3: Screening Tree Height Requirements

| Dwelling No. | Elevation (m) | Distance to Nearest Turbine (m) | Turbine Elevation (m) | Distance to Boundary (m) | Total Elevation Requirement at Boundary (m) | Elevation at Boundary (m) | Final Tree Height Requirement (m) |
|--------------|---------------|---------------------------------|-----------------------|--------------------------|---|---------------------------|-----------------------------------|
| 2 | 696 | 696 | 730 | 340 | 766 (+70) | 707–709 | 59–61 |
| 3 | 708 | 654 | 730 | 278 | 763 (+56) | 707–709 | 56–58 |
| 11 | 682 | 745 | 730 | 112 | 706 (+24) | 692–698 | 8–14 |
| 12 | 673 | 968 | 730 | 303 | 725 (+52) | 692–698 | 27–33 |
| 19 | 673 | 957 | 730 | 336 | 731 (+58) | 700–720 | 11–31 |

3.3 Impact of Existing Trees

The figures above reveal that the sight lines from dwellings 2 and 3 are interrupted by mature forest. According to local knowledge and site inspections, this forest has a total height of approximately 30 m. While this height is insufficient to meet the requirements of dwellings 2 and 3, it should be noted that it is unlikely that newly planted trees will surpass the height of this established forest in the 25 year lifetime of the wind farm. Planting new trees along the site boundary would also require clearing of this mature forest, which is an extension of Wombat State Forest and is therefore of relatively high ecological value. Therefore Tree Line 2 is unlikely to be effective, is likely to be difficult from a planning perspective, and would also involve environmental disbenefits. As a result, this On-site Landscape and Visual Screening Plan implements Tree Line 1 solely. The screening of any remaining views from dwellings 2 and 3 will be catered for via the Off-site Landscape and Visual Screening Plan.

3.4 Species

LHWO propose to utilise a combination of two species to provide the screening discussed earlier. These species will be Acacia Melanoxylon and Eucalyptus Dives². The Acacia Melanoxylon, or Blackwood, is a tall bushy tree reaching heights of approximately 25m at maturity. The Eucalyptus Dives, or Broad-leaved Peppermint, will reach heights of over 30m at maturity.

4 Protection and Maintenance

The planting will be designed, planned, implemented and managed by experienced landscaping professionals. Plantings will be scheduled and co-ordinated having regard to the most advantageous seasons. Trees will have appropriate protection against the potentially negative effects of the elements and interference from livestock. This will incorporate protection for individual trees as well as specific fencing as appropriate.

Trees will be inspected on a regular basis to assess their ongoing health and requirements. According to the determinations of these assessments LHWO will ensure the necessary requirements of the trees are administered in a timely fashion to ensure the continuing health of the trees.

5 Implementation

The design and implementation of the vegetation planting will be based on professional advice to ensure it is timed according to the most appropriate times of the year. Additionally, the schedule will be designed not to conflict with the construction works taking place on site.

The broad timetable for the implementation of the landscaping and screening works is as follows:

| | Approximate Dates | |
|--------------------|--------------------|----------------------|
| Phase | Boundary screening | Switchyard screening |
| Design | September 2010 | September 2010 |
| Planting | October 2010 | February 2010 |
| Protection/Fencing | November 2010 | April 2010 |

² Alternative species with equally or more effective attributes may be selected subject to availability, further expert advice and consultation. The Responsible Authority will be consulted as part of any required change of species



Hydro Tasmania
Consulting

Hepburn Community Wind Farm Transport Management Plan

10 August 2010

Prepared by
Hydro-Electric Corporation
ARBN: 072 377 158
ABN: 48 072 377 158
t/a **Hydro Tasmania Consulting**
Level 25, 500 Collins Street, Melbourne
Victoria, Australia





LEADERS IN CONSULTABILITY

Document information

| | |
|---------------------|-----------------------------|
| Title | Hepburn Community Wind Farm |
| | Transport Management Plan |
| Client organisation | REpower Systems AG |
| Client contact | Emilio Urruchi |
| Document number | E300628-TMP |
| Project manager | Chris Blanksby |
| Project reference | E300628 |

Revision history

Revision 0

| | | | |
|----------------------|--------------------------|--|---------------------|
| Revision description | Original | | |
| Prepared by | Chris Blanksby |  | 10/8/2010 |
| Reviewed by | David Gerke | | 10/8/2010 |
| Approved by | Julien Gaschingnard |  | 10/8/2010 |
| | (name) | (signature) | (date) |
| Distributed to | Emilio Urruchi (name) | REpower Australia Pty Ltd (organisation) | 10/8/2010 (date) |

The concepts and information contained in this document are the property of Hydro Tasmania Consulting. This document may only be used for the purposes, and upon the conditions, for which the report is supplied. Use or copying of this document in whole or in part for any other purpose without the written permission of Hydro Tasmania Consulting constitutes an infringement of copyright.

Contents

| | |
|--|-----------|
| 1. Introduction | 1 |
| 1.1 Structure of this report | 1 |
| 2. Existing conditions | 2 |
| 2.1 Site location | 2 |
| 2.2 Road Network | 2 |
| 2.3 Local Road Conditions | 4 |
| 3. Proposed Over-Dimensional Vehicle Access | 6 |
| 3.1 Number of Over-Dimensional Trips | 6 |
| 3.2 Road and Intersection Upgrades | 6 |
| 3.2.1 Roads | 6 |
| 3.2.2 Intersections | 6 |
| 3.2.3 Site entry | 7 |
| 3.3 Impacts on Roadside Vegetation | 11 |
| 3.4 Overhead Power Lines | 12 |
| 3.5 Over-Mass Trips | 12 |
| 3.6 Over Dimensional Load Permits | 12 |
| 4. Construction Traffic | 14 |
| 4.1 Construction Timeframe | 14 |
| 4.2 Development Generated Trips | 14 |
| 4.3 Batch Plants | 15 |
| 4.4 Construction Vehicle Access and Car Parking | 15 |
| 4.5 Restrictions on Operation | 15 |
| 5. Traffic management plan | 16 |
| 5.1 Traffic management plan for civil works to construct the site entry and access track | 16 |
| 5.2 Traffic management plan for heavy vehicle entry to site | 16 |

List of figures

| | |
|--|----|
| Figure 2-1 Approximate site location and entry | 2 |
| Figure 2-2 Site Location and Proposed Transport Routes | 3 |
| Figure 3-1 Schematic of Western Freeway exits to Ballan-Daylesford Road including estimated vehicle swept path | 7 |
| Figure 3-2 Approximate area of works required at site entry (hatched area indicates load, tail and nose swing / overhang – tyres are not expected to traverse this area) | 8 |
| Figure 3-3 Approximate sight distances to the site entry on the Ballan-Daylesford Road | 9 |
| Figure 3-4 Approximate area of grass removal at Site entry | 12 |
| Figure 5-1 Indicative Traffic Management Plan for Site Entry Construction – Overview | 17 |
| Figure 5-2 Indicative Traffic Management Plan for Site Entry Construction – Detail | 18 |

| | |
|---|----|
| Figure 5-3 Indicative Traffic Management Plan for Construction during Heavy Vehicle Entry | 19 |
|---|----|

List of tables

| | |
|--|----|
| Table 1-1 Permit conditions addressed in this TMP | 1 |
| Table 2-1 List of roads used on route from port to site | 3 |
| Table 3-1 Estimated number of over-dimensional vehicle trips | 6 |
| Table 3-2 Required escort and pilot vehicles | 13 |
| Table 4-1 Estimated number of development trips required | 15 |

1. Introduction

A Planning Permit has been granted by the Hepburn Shire Council (Permit number 2006/9231, 31 July, 2007¹) for the construction of a wind farm consisting of two REpower MM82 turbines, at Leonard's Hill near Daylesford in Victoria. The planning permit requires the development of a Traffic Management Plan, prepared to the satisfaction of the Responsible Authority and VicRoads, prior to commencement of Transport operations.

Hydro Tasmania Consulting has prepared this Transport Management Plan (TMP) to satisfy the requirements of the planning permit. In preparing this TMP, Hydro Tasmania Consulting has discussed the relevant requirements with VicRoads and the Hepburn Shire Council.

1.1 Structure of this report

The conditions in the planning permit that need to be addressed under the TMP, along with the section of this report where they are addressed, are set out in Table 1-1.

Table 1-1
Permit conditions addressed in this TMP

| Condition | Relevant Section |
|---|------------------|
| Designation of vehicle access point(s). | Section 2.1 |
| Details on whether the access location point to the proposed development meets the safe intersection sight distance requirements specified in Austroads Guide to Traffic Engineering Practice Part 5 – Intersections at Grade ² and, if not, details of any mitigating works required to meet the sight distance requirements. | Section 3.2.3 |
| Details of any roadside pruning, vegetation removal and vegetation restoration. | Section 3.3 |
| The designation of appropriate construction and transport vehicle routes to the wind energy facility. | Section 2.2 |
| A traffic management plan for the Ballan-Daylesford Road during construction of the development including temporary speed signage and times of operation in accordance with VicRoads Roadworks Signing Code of Practice. | Section 5 |
| Details of any works required along the Ballan-Daylesford Road during construction. | Section 3.2 |
| The requirements for Over Dimensional Load permits and escorting of long or large loads along roads in the area. | Section 3.5 |
| A timetable for implementation of any preconstruction works identified to be undertaken | Section 4.1 |

In addition to these sections, a range of supporting documentation and assessment is provided.

¹ Construction must begin within four years of the date of issue.

² Note that Austroads Guide to Traffic Engineering Practice Part 5 – Intersections at Grade was replaced by Guide to Traffic Management Part 6: Intersections, Interchanges and Crossings (AGTM06/07) and Guide to Road Design Part 4: Intersections and Crossings. These new standards have been addressed in this TMP.

2. Existing conditions

2.1 Site location

The proposed wind farm site is at Leonard's Hill, approximately 10 km south of Daylesford in Victoria. The site will be accessed directly from the Ballan-Daylesford Road, via an existing farm driveway, which will be upgraded for the purpose. The approximate site location and entry point are shown in Figure 2-1. The coordinates of the site entry are approximately 5854108N 244748E (UTM WGS84 Zone 55).

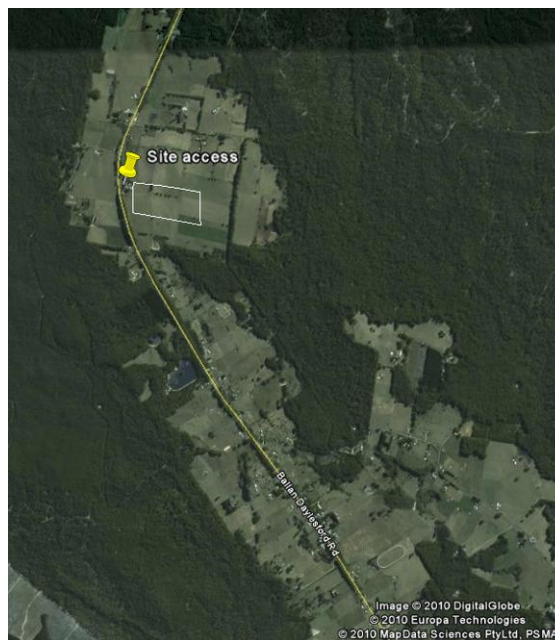


Figure 2-1
Approximate site location and entry

2.2 Road Network

There are three options proposed for transport of wind turbine equipment (oversized loads) to site; one from the Portland Port and two from the Geelong Port. These routes are both shown in Figure 2-2. In all cases, access to site is directly off the Ballan-Daylesford Road, off the Western Freeway. All roads on the routes are VicRoads declared roads, with the exception of the Eurambeen – Streatham Road, which is under the jurisdiction of the Pyrameneese Shire Council. Use of the Eurambeen – Streatham Road was recommended by VicRoads. Discussions with Phil Diprose of the Pyrameneese Shire Council indicated that it was unlikely that there would be any issues with the use of this route, however, Council permission will need to be formally obtained when applying for a permit.

Two routes are included from Geelong to site. Route A is preferred as it is a more direct route and avoids the metropolitan roads. However, there are some significant grades midway between Geelong

and Ballan that would need to be assessed by the transport operator for suitability prior to its selection. Route B can be used as an alternative if Route A is deemed unsuitable.

The routes to site are described in Table 2-1 and Figure 2-2.

Table 2-1
List of roads used on route from port to site

| Portland Route (approx. distance 320 km) | Geelong Route A (approx. distance 70 km) | Geelong Route B (approx. distance 150 km) |
|---|---|--|
| Henty Hwy | Corio Quay Rd | Corio Quay Rd |
| Left turn onto Princes Hwy | Straight onto Princes Hwy | Straight onto Princes Hwy |
| Straight onto Henty Hwy | Turn left onto Midland Hwy | Turn left onto Midland Hwy |
| Straight onto Hamilton Rd | Turn right onto Geelong Ballan Rd | Right onto Geelong Ring Rd |
| Straight onto Glenelg Hwy | Straight onto Ballan Daylesford Rd | Left onto Princes Fwy |
| Left onto Eurambeen – Streatham Rd | | Left onto Western Ring Rd |
| Right onto Western Fwy | | Left onto Western Fwy |
| Left Ballan Daylesford Rd | | Right onto Ballan Daylesford Rd |

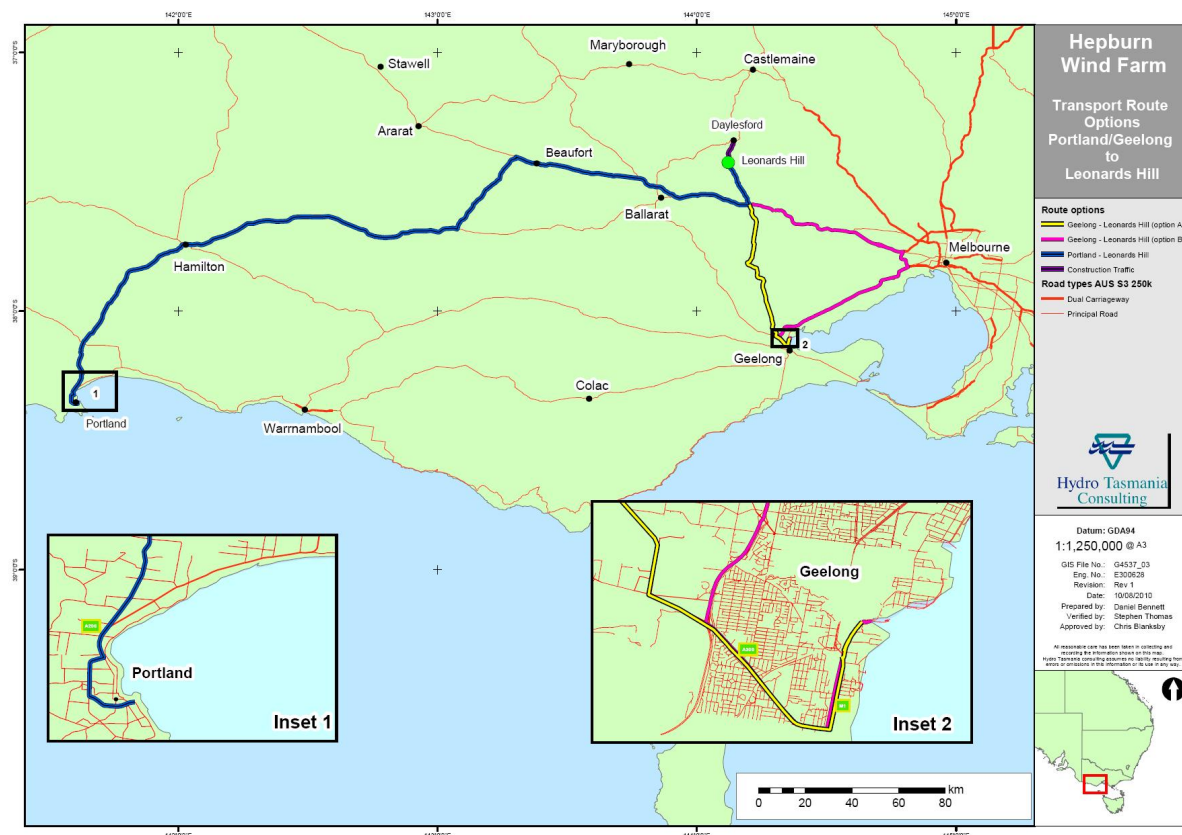


Figure 2-2
Site Location and Proposed Transport Routes

In addition to these routes, construction traffic (not oversize) may come via other routes, including directly from Daylesford, as shown in Figure 2-2.

2.3 Local Road Conditions

Communications with VicRoads Oversize and Overmass Permits office (Wednesday 21 July, 2010) indicate there are likely to be no issues with the route from either port on to the Western Freeway, however, the suitability of conditions on the Ballan-Daylesford Road requires assessment (as presented in this report).

On July 6, 2010 (approximately 10:30am – 1:30pm), Hydro Tasmania Consulting conducted a basic assessment of the Ballan-Daylesford Road between the Western Freeway and site. The following observations were made (photographs taken during the assessment are included in Appendix A):

- The road is zoned as 100 km/h, except for a built-up area near Korweinguboorra, where the speed is reduced to 80 km/h
- The road is a two-lane, two-directional Arterial (other) road
- The road is consistent in its design and environment
- Pavement width is approximately 8 m
- Edge and centreline delineation is present
- Gravel shoulders are approximately 1 m in width on both sides of the road
- Dense vegetation and trees occur frequently, set back approximately 3-4 m from the shoulders
- Low grades are typical, with no steep grades
- No bridges or large culverts were observed
- Overhead clearance to trees is typically 8-10 m with occasional branches down to approximately 5 – 6 m
- At least three overhead powerlines had overhead clearance of approximately 5 – 6 m
- There were no small radius bends observed
- Pavement condition was generally reasonable, with minor bleeding, rutting, patching and crumbling at the shoulder pavement interface; there was no obvious potholes or cracking
- Low traffic volumes were observed.

Further observations specifically related to the entry and exit points are listed below:

- Exits from the Western Freeway to the Ballan-Daylesford Road (both routes) appear suitable for oversize vehicle (see vehicle templates in Appendix B).
- The entry point to the Site appears suitable, with upgrades, for oversize vehicles.
- In the northbound direction on the Ballan-Daylesford Road, sight distance to the entry point to Site is limited to approximately 180 m due to a prior crest and bend. In the southbound direction, sight distance to the entry point to Site is approximately 250 m.
- Visibility from the Site exit in both directions is good (up to the distances in the previous point).
- Vegetation at the entry point consisted of pasture grass that had been disturbed by various vehicle tracks and a stormwater drain.
- There is a slight downgrade (estimated at approximately 5%) approaching the site entry in the north bound direction on the Ballan-Daylesford Road.
- The direct line of sight for vehicles leaving Site and approaching the Ballan-Daylesford Road is at least 80 m.

Subsequent assessment using GIS data showed the following:

- The minimum radius bend between the Western Freeway and Site is approximately 300 m
- The gradient in the approach to the Ballan-Daylesford Road from Site at the entry / exit point is on average 6% downgrade over the last 50 m. Over the last 80 m, the average downgrade is 7%.

3. Proposed Over-Dimensional Vehicle Access

3.1 Number of Over-Dimensional Trips

Table 3-1 shows the estimated number of over-dimensional trips required during construction of the wind farm. Details of the proposed transport vehicles are included in Appendix B.

Table 3-1
Estimated number of over-dimensional vehicle trips

| Transport | Drawing reference number (see Appendix B) | Estimated number of loaded trips* |
|----------------------------------|--|--------------------------------------|
| Top tower section | REPOW01A | 2 |
| Mid tower section | REPOW01B | 2 |
| Base tower section | REPOW01C | 2 |
| Hub | REPOW01D | 2 |
| Nacelle | REPOW01E | 2 |
| Blade | REPOW01F | 6 |
| Mobilise crane and other plant | N/A | 2 |
| Demobilise crane and other plant | N/A | 2 |
| Total | | 20 |

* For each loaded trip there will also be one unloaded (return) trip, where the transport vehicle will be collapsed to regulation dimensions

3.2 Road and Intersection Upgrades

3.2.1 Roads

Given the grade, pavement width and bend radius observed on the Ballan-Daylesford Road between the Western Freeway and Site, no upgrades to the road are required to accommodate the over-dimensional loads. At times, over-dimensional vehicles may require use of both lanes, however, this will be addressed by the pilot and escort vehicles required under permit conditions (see Section 3.5).

3.2.2 Intersections

This assessment only considers upgrades required from the Western Freeway to Site. This is based on discussions with VicRoads (Wednesday 21 July, 2010 and Wednesday 28 July, 2010), indicating that the rest of the route is currently suitable for the proposed vehicles. To accommodate the proposed vehicles, minor works will be required at the exit from the Western Freeway.

At the exit from the Western Freeway, minor works will include removal of signs (see Appendix A) (both exits) and some Armco type barrier (westbound exit). Figure 3-1 shows the approximate (conservative) swept path of the worst case proposed oversize vehicle (blade transport). This indicates that some use of road shoulders and cross over of traffic islands may be necessary (hence the removal of signs), however, otherwise, both exits are suitable for proposed vehicles.

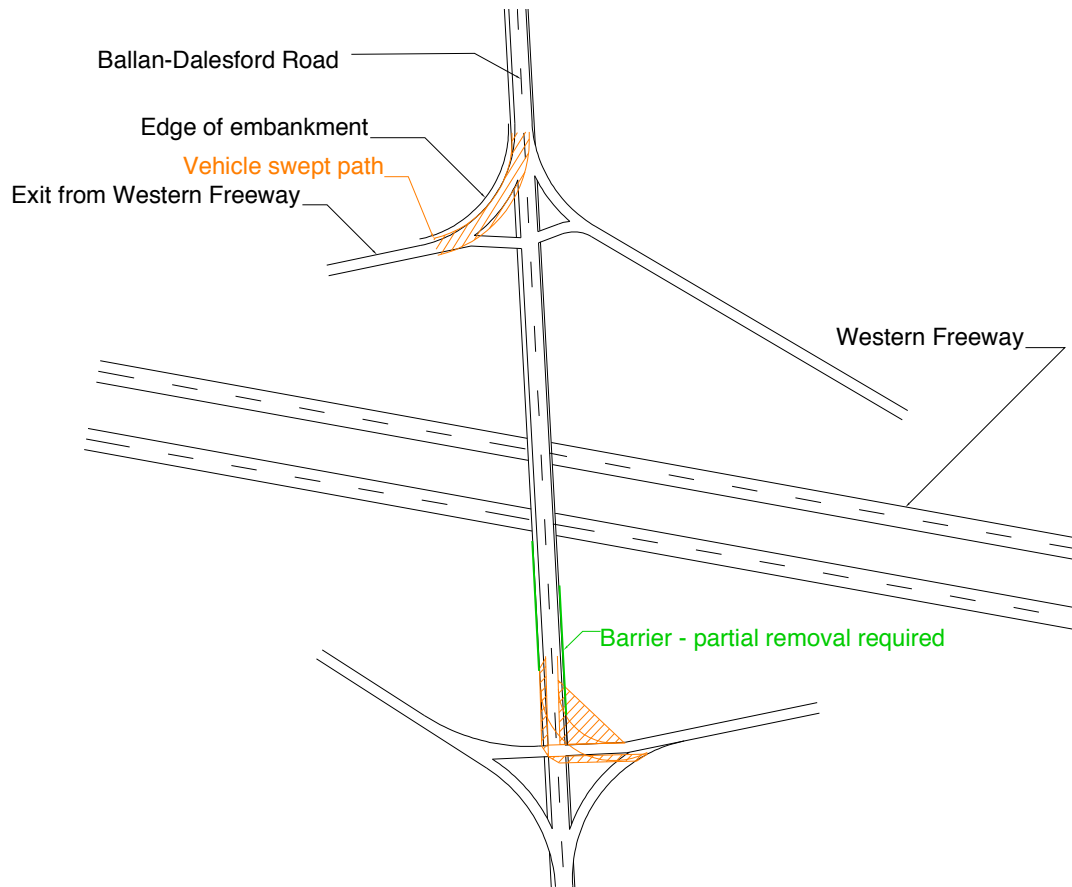


Figure 3-1
Schematic of Western Freeway exits to Ballan-Dalesford Road including estimated vehicle swept path

3.2.3 Site entry

At the entry to site, road works will be required to upgrade the existing track / driveway, and provide sufficient width at the entry point for oversize vehicles to enter. For the purpose of this TMP, the site entry is treated as an unsignalised intersection for the duration of construction and is checked for compliance against AUSTROADS Guide to Traffic Management Part 6: Intersections, Interchanges and Crossings (AGTM06/07) and AUSTROADS Guide to Road Design Part 4: Intersections and Crossings, which replace AUSTROADS Guide to Traffic Engineering Practice Part 5 – Intersections at Grade.

A template for the vehicle swept path, indicating the approximate extent of upgrades at the site entry, is shown in Figure 3-2. This template is also shown in Appendix C.

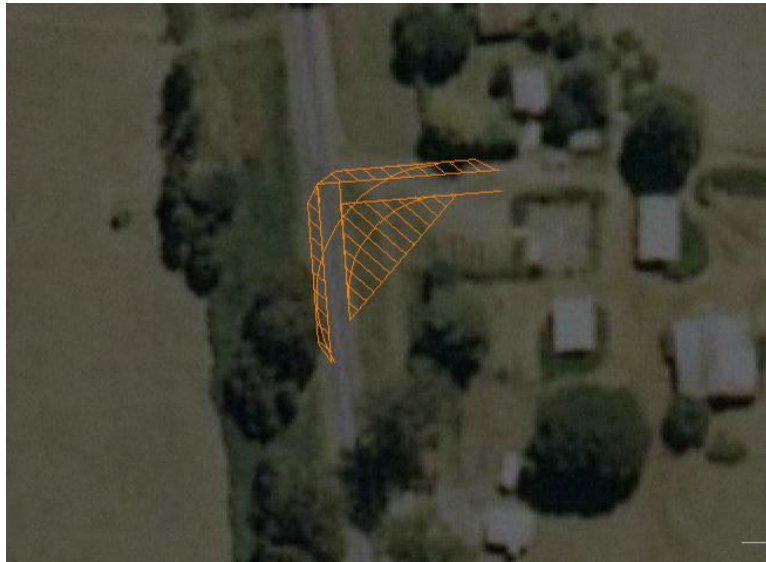


Figure 3-2

Approximate area of works required at site entry (hatched area indicates load, tail and nose swing / overhang – tyres are not expected to traverse this area)

3.2.3.1 Permits

The development work associated with the driveway is covered by the existing planning permit. However, prior to undertaking any works on the Site entry, it is necessary for the party undertaking the works to submit an application for working within the road reserve (available from the VicRoads website, a fee is payable)

3.2.3.2 Geometric considerations

AUSTROADS³ (2009), Section 2.2.2, states that the gradient on the approach from the side road (Site entry) should not exceed a maximum of 5% to allow for stopping distances of heavy vehicles. If the grade exceeds this, alternative measures including high friction surfaces and increased sight distance are required. As per Section 2.3, the down grade on the approach to the Ballan-Daylesford Road from Site is 6-7%. In order to comply with AUSTROADS (2009), it is recommended that the speed of heavy vehicles exiting the site be limited to not more than 40 km/h over at least the last 100 m. This is based on sight distance considerations in the following section.

AUSTROADS (2009) also recommends that the junction between a side road and through road be close to 90°. This is achieved by the proposed design, which is a slight realignment of the existing driveway.

³ Austroads (2009) Guide to Road Design Part 4: Intersections and Crossings, Austroads, Sydney, NSW

The layout of the Site entrance must include a curve for entry of left turning vehicles, in addition to the turn template for over dimensional right turning vehicles, as per Figure 3-2 and Appendix C. The geometry for this will be specified by VicRoads will be specified by VicRoads on submission of an application for working within the road reserve, which is required prior to works on the Site entry.

3.2.3.3 Sight distance

AUSTROADS (2009), Section 3.2.1, sets standards for Approach Site Distance (ASD) for trucks approaching intersections from a side road. Application of the formula provided for ASD, using a 2.0 s reaction time, 7% downgrade, deceleration rate of 0.2 g (conservatively assumed for unsealed surface), and a 40 km/h speed limit gives an ASD of 70 m, which is well within the actual sight distance estimated during the site visit to be at least 80 m.

AUSTROADS (2009), Section 3.2.2, sets standards for Safe Intersection Sight Distance (SSID) for vehicles on the through road approaching an intersection with a side road. Given the existing 100 km/h speed zone, it is not possible to achieve the required SSID for the specified Site entry due to bends on the Ballan-Daylesford Road in both directions (See Figure 3-3). It is thus recommended that for the duration of construction (during times of operation), the speed limit in the vicinity of the Site entry be reduced to satisfy the SSID requirements.



Figure 3-3
Approximate sight distances to the site entry on the Ballan-Daylesford Road

The lesser available sight distance, (Figure 3-3) is approximately 220 m (this was measured on-site with VicRoads). Based on the formula provided by AUSTROADS (2009), Section 3.2.2, with decision time of 5 s, deceleration of 0.24 g (trucks), approach speed of 60 km/h, and a 5% downgrade, the required SISD is 158 m, which is within the available sight distance in both directions. Thus, it is recommended that for the duration of construction, the speed limit in the vicinity of the Site entry be reduced to 60 km/h.

This is a relatively conservative approach, however, reducing the speed zone to 60 km/h also enables the AUSTROADS⁴, 2009a safe stopping distance (SSD) requirements to be met. The SSD for a 60 km/h speed zone (deceleration of 0.22 g, 5% downgrade, 2 s reaction time) is 117 m for trucks or 78 m for cars.

To achieve the 60 km/h speed zone, an 80 km/h buffer zone should be applied. For consistency with proposed traffic management during road-side construction activities, it is recommended that the length of the 60 km/h and 80 km/h speed zones be as described in Section 5. Note that in accordance with recommendations in Section 4.5, construction and heavy vehicle access will only be in progress during daylight hours.

Restricted speed zones signage should be removed (or covered) outside these hours.

AUSTROADS (2009), Section 3.2.3, sets standards for Minimum Gap Sight Distance (MGSD), allowing entry to the through road for vehicles on the side road. From AUSTROADS (2009) Table 3.4 and 3.5, for a left or right turn from the Site exit on to the Ballan-Daylesford Road, the acceptance time is 5 s or 83 m (with the reduced 60 km/h speed zone). This is well within the available sight distance in both directions from the Site exit.

AUSTROADS (2009a)⁵ Section 3 describes traffic control measures for unsignalised intersections. Based on the above MGSD, installation of a 'Give Way' sign at the Site exit is recommended.

3.2.3.4 Turn Treatments

AUSTROADS (2009) Section 7 and 8 describes treatments for left and right hand turns. Treatments should take into account traffic volume and speed zone. Given the low traffic volumes on the through road (Ballan-Daylesford Road) and the very low traffic volumes entering Site, along with the reduced speed zone recommended (60 km/h), no treatments are considered necessary. With the specified SSD described above, there is at least 100 m of queuing available behind a vehicle executing a right hand

⁴ Austroads (2009a), *Guide to road design: part 3: geometric design*, Austroads, Sydney, NSW.

⁵ Austroads (2009b) *Guide to Traffic Management Part 6: Intersections, Interchanges and Crossings* (AGTM06/07) , Austroads, Sydney, NSW.

turn into Site. Given the relatively low volumes of traffic, and that Pilot / Escorts and additional traffic control measures will be introduced for oversize vehicles (see Section 5), this is likely to be sufficient.

However, VicRoads may require implementation of a Basic Rural Right Turn Treatment (AUSTROADS (2009) Section 7), including specification of the required geometry. If such a turn treatment is required, it is likely to require widening of the seal by approximately 2 m on the western side of the Ballan – Daylesford Road, for approximately 30 m either side of the Site entry. As the direction of construction traffic is as yet unknown, VicRoads will base its determination on the worst case scenario (all vehicles travelling north to Site). Thus, if a requirement for a turn treatment is made, this may be able to be removed once details of construction traffic movements are available. If it is required, additional traffic management will be necessary for the construction of a turn treatment.

Arrangements for traffic management for road works during construction and entry of oversize vehicles are dealt with specifically under the Traffic Management Plan in Section 5.

3.2.3.5 Pavement

Prior to undertaking any works on the Site entry, it is necessary for the party undertaking the works to submit an application for working within the road reserve. In its response to this, VicRoads will likely impose the following conditions:

- the driveway must be sealed between the existing pavement seal and the edge of the road reserve
- the existing seal must be covered with 40 mm of asphalt for 20 m either side of the Site entry, so as to prevent damage to the existing seal associated with scrubbing forces from turning truck tyres.

3.3 Impacts on Roadside Vegetation

As identified in Section 2.3, there is relatively little overhanging vegetation on the Ballan-Daylesford Road and only minor trimming will be required. An example is shown in Appendix A.

As per Section 3.2.1, no road realignment or widening is required, hence there is no requirement for tree of vegetation removal on the roadside on route.

At the exit from the Western Freeway to the Ballan-Daylesford Road (both directions), over-dimensional vehicle tyres may traverse some grassed shoulders, however, these areas are previously disturbed. Steerable rear axle groups on longer vehicles will minimise disturbance of vegetation.

At the exit from the Ballan-Daylesford Road to site, construction works will be undertaken to install road base to enable heavy vehicle access. This is likely to result in removal of an area of existing grass, but no trees or other vegetation. The area affected is shown in Figure 3-4.



Figure 3-4
Approximate area of grass removal at Site entry

3.4 Overhead Power Lines

At least three overhead power lines were identified crossing the Ballan-Daylesford Road on route to site. It is recommended that Powercor, the local electricity service provider, be contacted to identify works that may be required to address this. As per Section 3.5, skid rails may also need to be installed on some vehicles (where the overall height exceeds 5.0 m) as part of permit conditions.

3.5 Over-Mass Trips

Gross combination and axle group masses for over-mass vehicle are specified in Appendix B. These are all expected to comply with bridge limits on route (no bridges observed on Ballan-Daylesford Road).

3.6 Over Dimensional Load Permits

All over-dimensional and over-mass vehicle trips will require permits to be issued by VicRoads. Permits should be applied for by contacting VicRoads Statewide Permit Office and this is the responsibility of the Transport Operator.

Details of conditions for permits are contained in VicRoads Information Bulletins⁶, however VicRoads may impose other conditions if deemed necessary to comply with the Victorian Road Safety (Vehicles) Regulations, 1999. Discussions with VicRoads indicate that no further conditions are likely.

For vehicles listed in Appendix B, conditions are likely to include:

- Driver and operator must inspect the route.
- Warning lights, flags and signage must be displayed.
- Travel restricted to daylight hours, and:
 - not after 4:00 pm on public holidays and the day before a holiday period and the last day of a holiday period
 - not before 9:00 am in Geelong urban areas.
- For vehicles over 5.0 m overall height, non-conductive skid rails in accordance with electricity authority (Powercor) requirements must be attached to the top of the load.
- Rear overhang of oversize vehicles limited to a maximum of 7.6 m.
- Pilot and escort vehicles according to Table 3-2.

Table 3-2
Required escort and pilot vehicles

| Load type | Drawing reference number (see Appendix B) | Pilot vehicles | Escort vehicles |
|-----------------------|--|----------------|-----------------|
| Top tower section | REPOW01A | 2 | 1 |
| Mid tower section | REPOW01B | 2 | 0 |
| Base tower section | REPOW01C | 1 | 0 |
| Hub | REPOW01D | 1 | 0 |
| Nacelle | REPOW01E | 1 | 0 |
| Blade | REPOW01F | 2 | 1 |
| Crane and other plant | N/A | 0* | 0* |

*May be required depending on selected crane

Note that this TMP does not entitle or pre-qualify the indicated transport vehicles for a permit to operate on the proposed route.

⁶ VicRoads (October 2007) Oversize Load Carrying Vehicles, INFORMATION BULLITEN and Additional Permit Conditions.

4. Construction Traffic

The construction phase of the Wind Farm will see an increase in local traffic. Once the Wind Farm is operational the increase in traffic above present levels will not be discernible. Traffic movements will be spread over the construction period. The first stage will involve truck traffic to bring materials for foundation and access track work. The second stage will involve the delivery of the turbine components.

Cranes will remain on site for the installation hence will only arrive and depart once. It is intended that all deliveries are made on a 'just-in-time' basis.

Engineering, project and construction personnel will visit the site as required during the construction period. It is expected the majority of these personnel will either live locally or be staying locally during the construction period.

After construction the Wind Farm will go through a period of commissioning followed by close monitoring. During this period there will be regular visits from technicians and maintenance personnel. This will decrease to an operational maintenance requirement of scheduled infrequent visits using a 4WD vehicle. These may be as often as one visit per month.

4.1 Construction Timeframe

Construction is expected to take approximately eight (8) months. In terms of the transport requirements, this can be broken down as:

- Civil construction (access track and turbine foundations) September 2010 – January 2011;
- Substation Construction March 2011 – April 2011
- Turbine delivery February 2011
- Turbine erection February 2011 – April 2011

4.2 Development Generated Trips

Table 4-1 shows the estimated number of trips required to complete the development, as supplied by REpower. These numbers may vary subject to details of the final design.

Table 4-1
Estimated number of development trips required

| Load type | Indicative number of trips |
|---------------------------------|--|
| Plant and equipment | 20 oversize floats (see Section 3.1) |
| Road base material | 250 semi tipper / tandem & trailer deliveries |
| Steel reinforcing | 7 semi trailer deliveries |
| Concrete agitators | 170 concrete truck deliveries |
| Sand for cable trenches | 20 tandem truck deliveries |
| Electrical cable & equip | 15 semi trailer deliveries |
| Watercart (construction water): | 120 deliveries (assuming construction water is sourced off-site) |
| Misc deliveries: | 40 delivery trucks |
| Light vehicles: | 1100 light vehicles (includes site vehicles and private vehicles of employees getting to work) |

4.3 Batch Plants

Given the relatively small scale of the project, specific concrete Batch Plants will not be set up. Concrete will likely be obtained from existing suppliers at Daylesford or Ballarat.

4.4 Construction Vehicle Access and Car Parking

All vehicles accessing the site during construction will enter at the same location (as defined in Section 2.1). Car parking and other facilities will be available on-site.

4.5 Restrictions on Operation

To avoid interference with school buses and likely resident movements, it is recommended that where practical, truck access to site (off the Ballan-Daylesford Road) be restricted daylight hours, with exclusion of hours of 7:30am – 9:00am and 3:15pm – 5:00pm on school days. This is in addition to restrictions on over-dimensional vehicles as per Section 3.6. Discussions should be undertaken with the relevant bus operators to identify specific times of operation and no over-dimensional vehicles should access site during these periods

5. Traffic management plan

Specific traffic management plans may be required for the following:

- Inspection of electrical works required on the Ballan-Daylesford Road
- Carrying out electrical works (if required) on the Ballan-Daylesford Road
- Carrying out vegetation pruning on the Ballan-Daylesford Road
- Minor works (temporary signage removal) at intersections on route for oversize vehicles
- Civil works to construct the site entry and access track
- Heavy vehicle access to site

In most of the above cases, the required traffic management plan will be minor and will be carried out by the entity carrying out the works (and submitted to the VicRoads at least 48 hours prior to carrying out the work). The traffic management plan for works and vehicle entry at Site, however, is more involved and an indicative plan is presented here. This plan will require adaptation based on the details of the works to be carried out (including specific time and dates) and the civil contractor's requirements. The final plan must receive final approval by VicRoads before implementation.

5.1 Traffic management plan for civil works to construct the site entry and access track

Civil works for this site entry are considered to constitute short term works (roadside reserve works duration approximately one week). Traffic management signage should be set-up prior to work and removed at the completion of work each day where construction takes place in the road reserve. Days and times of operation should be marked on the Traffic Management Plan. An indicative plan is presented in Figure 5-1 and Figure 5-2.

5.2 Traffic management plan for heavy vehicle entry to site

Works for the remainder of the Site, where trucks will be entering and exiting at defined days and times, are also treated as short term works. Traffic management signage should be set-up prior to work and removed at the completion of work each day where construction takes place in the road reserve. Days and times of operation should be marked on the Traffic Management Plan. An indicative plan is presented in Figure 5-3.

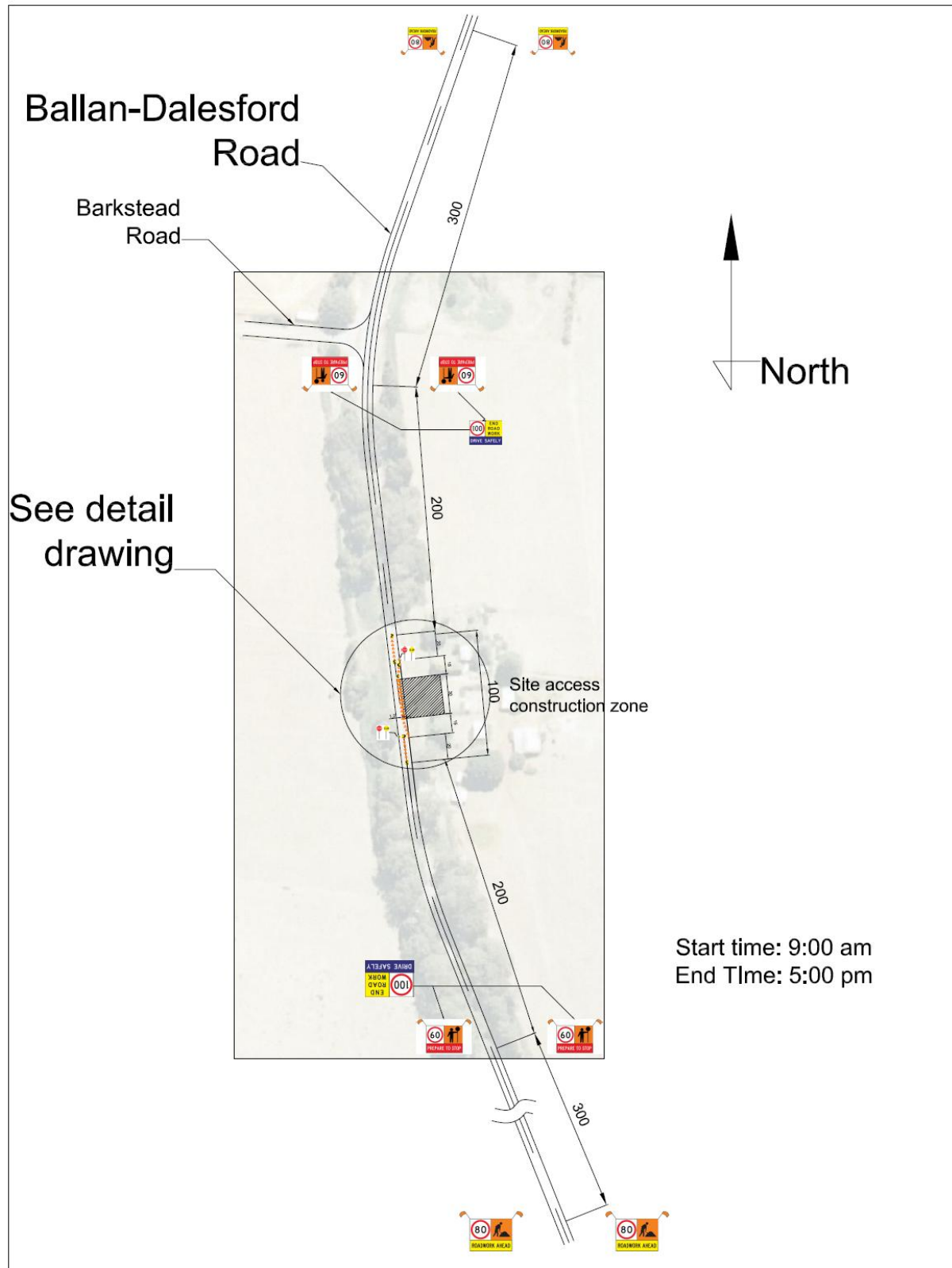


Figure 5-1
Indicative Traffic Management Plan for Site Entry Construction – Overview

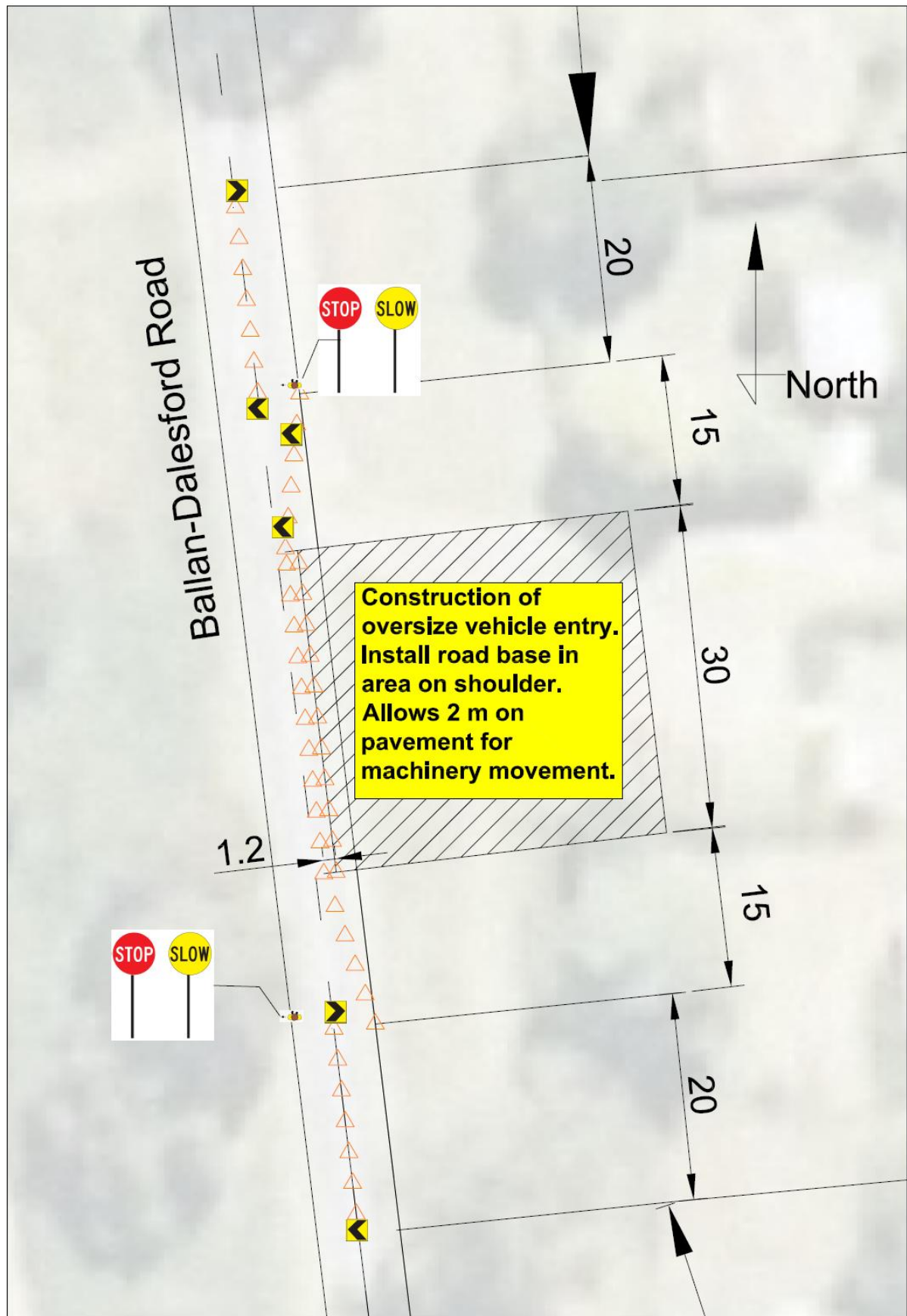


Figure 5-2
Indicative Traffic Management Plan for Site Entry Construction – Detail

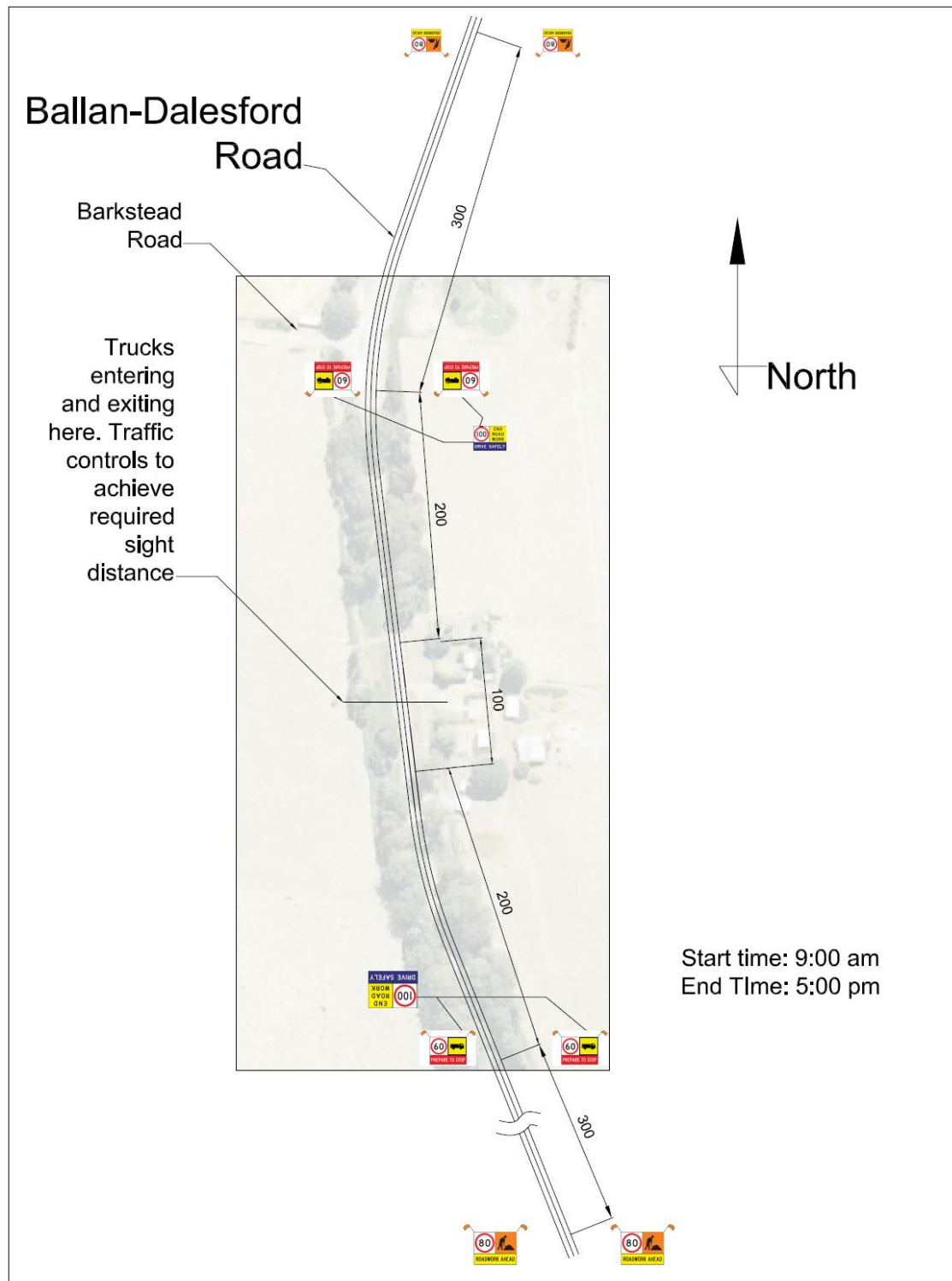


Figure 5-3
Indicative Traffic Management Plan for Construction during Heavy Vehicle Entry

Appendix A Ballan-Daylesford Road Conditions



Figure Appendix A-1
Typical section of Ballan-Daylesford Road showing minor wear and rutting



Figure Appendix A-2
Typical photo of overhanging powerlines on Ballan-Daylesford Road (clearance 5-6 m)



Figure Appendix A-3
Overhanging branch on Ballan-Daylesford Road approximately 200 m south of Site entry (5-6 m clearance – worst identified on route)



Figure Appendix A-4
View north from Site entry on Ballan-Daylesford Road



Figure Appendix A-5
View south from Site entry on Ballan-Daylesford Road

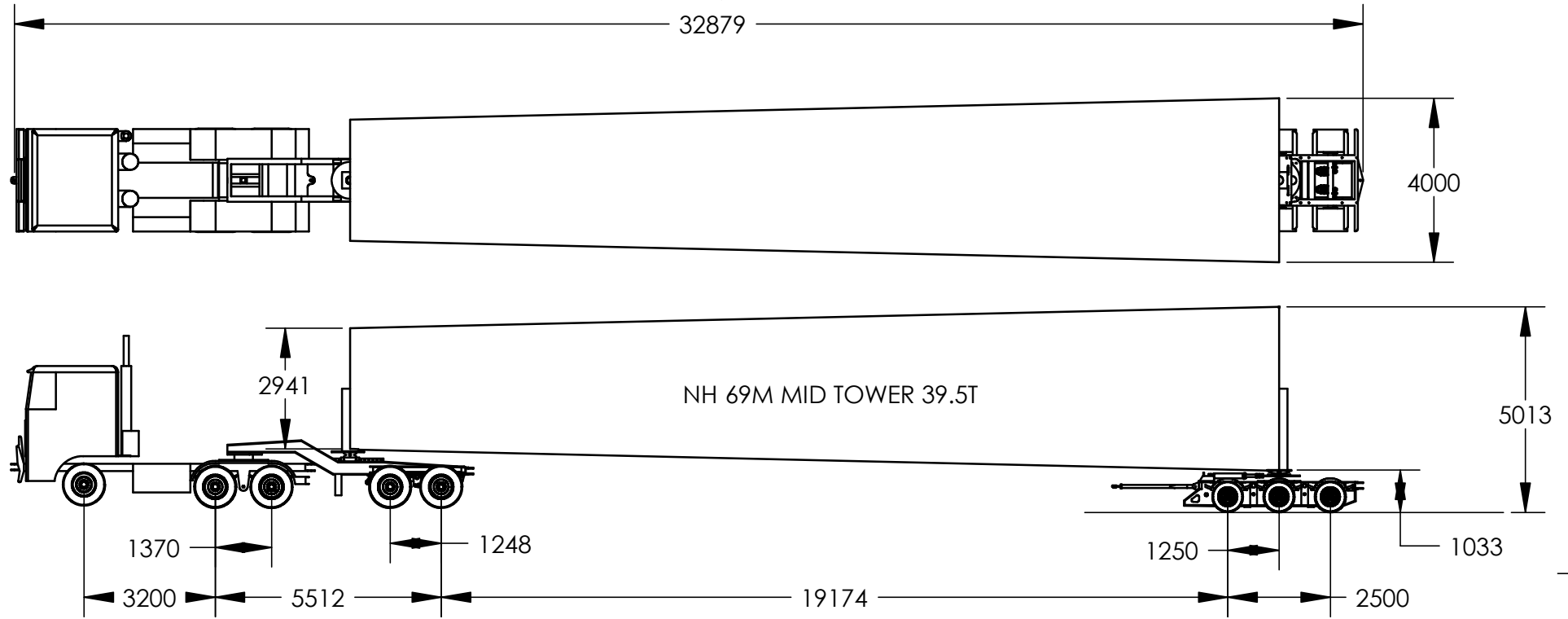


Figure Appendix A-6
Eastbound exit of the Western Freeway to the Ballan-Daylesford Road (sign that may require temporary removal is circled)



Figure Appendix A-7
Westbound exit of the Western Freeway to the Ballan-Daylesford Road (signs and barrier that may require temporary removal are circled)

Appendix B Proposed Oversize Transport Vehicles



11R22.5 X 2 @2.5M
T 6.0T
P 0.0 T
G 6.0T
AG 6.0T

11R22.5 X 8 @2.5M
T 6.5T
P 9.0 T
G 15.5T
AG 18.0T

11R22.5 X 8 @2.5M
T 4.0T
P 10.5T
G 14.5T
AG 18.0T

215/75R17.5 X 12 @ 2.5M
T 5.0T
P 20.0 T
G 25.0T
AG 25.0T
REAR STEER

THIRD ANGLE PROJECTION
DIMENSIONS IN MILLIMETRES
TOLERANCES (UNLESS OTHERWISE STATED)
- LINEAR ± 200.0
- RADIAL ± 0.2

DATE
21/3/2007

DRN:
H. ANDREWS

APPROVED:

ONLY APPROVED
DRAWINGS CAN BE
USED FOR
MANUFACTURING

REX J ANDREWS PTY LIMITED
ENGINEERED TRANSPORTATION

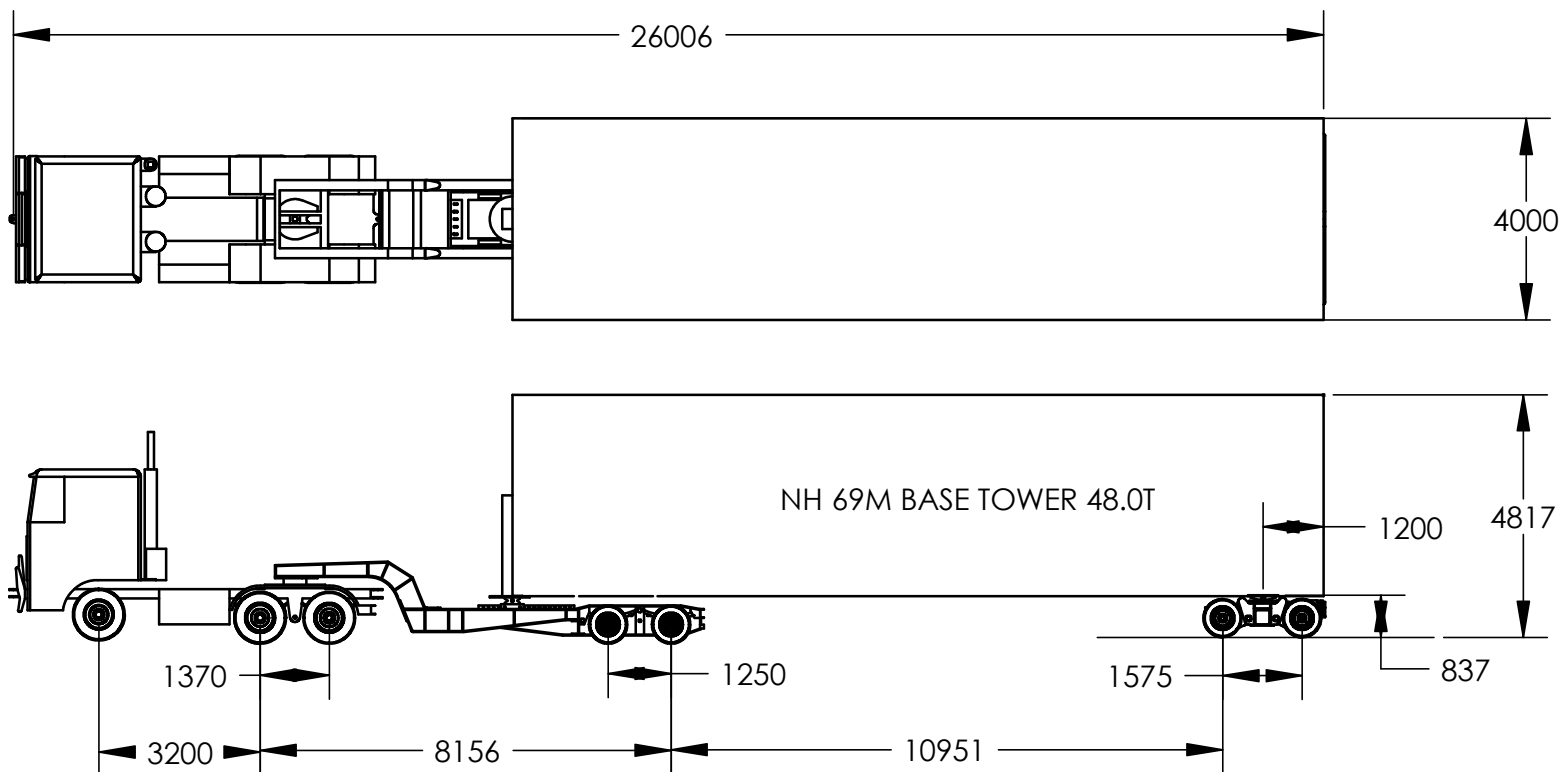
TRANSPORT PROPOSAL

REPOWER WINDMILL
NH 69M
MID TOWER SECTION

DO NOT
SCALE

DRG NO: REPOW01B

A4



11R22.5 X 2 @2.5M
T 6.0T
P 0.0T
G 6.0T
AG 6.0T

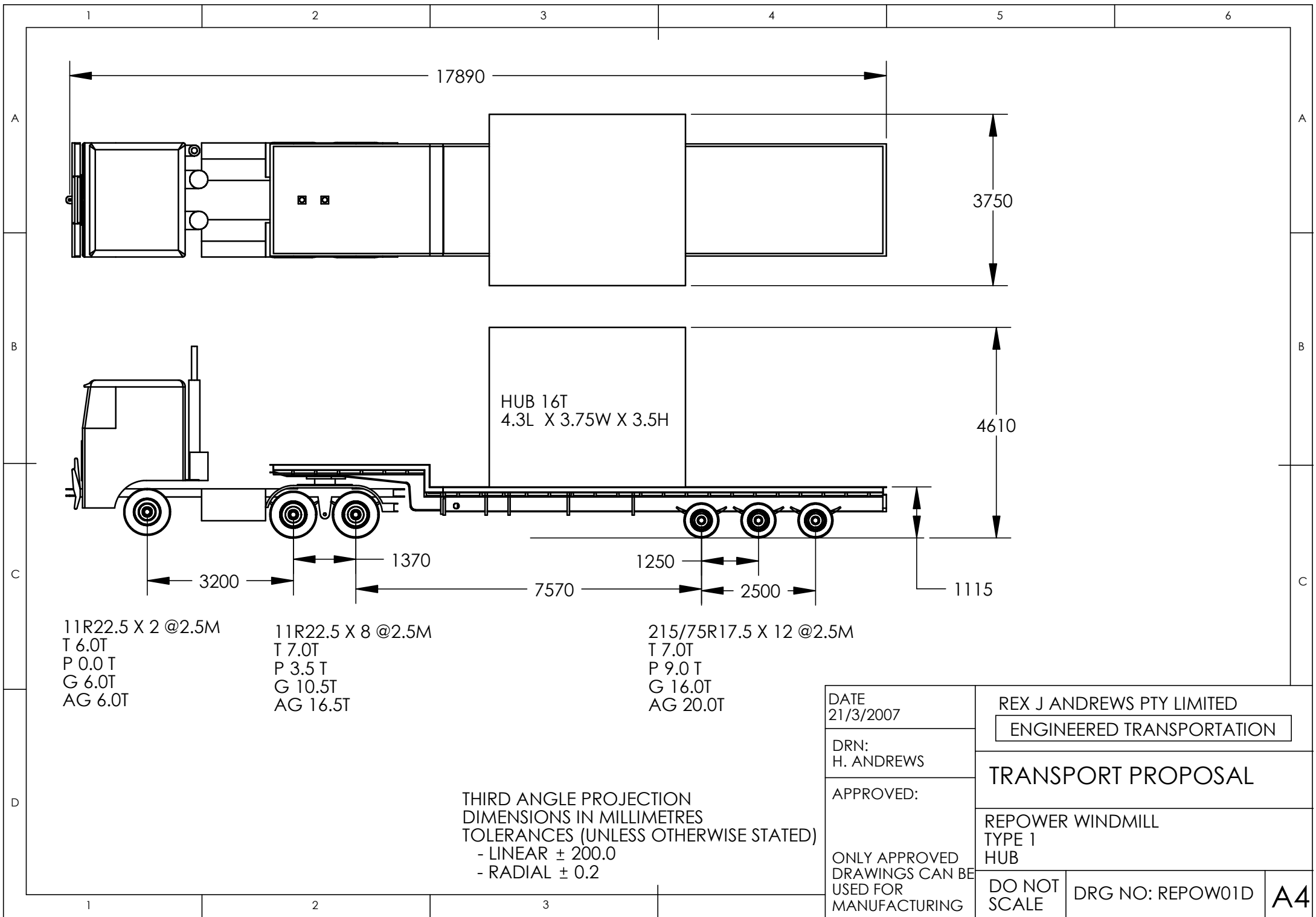
11R22.5 X 8 @2.5M
T 6.0T
P 11.0T
G 17.0T
AG 18.0T

215/75/R17.5 X 8 @2.5M
T 4.0T
P 13.0T
G 17.0T
AG 18.0T

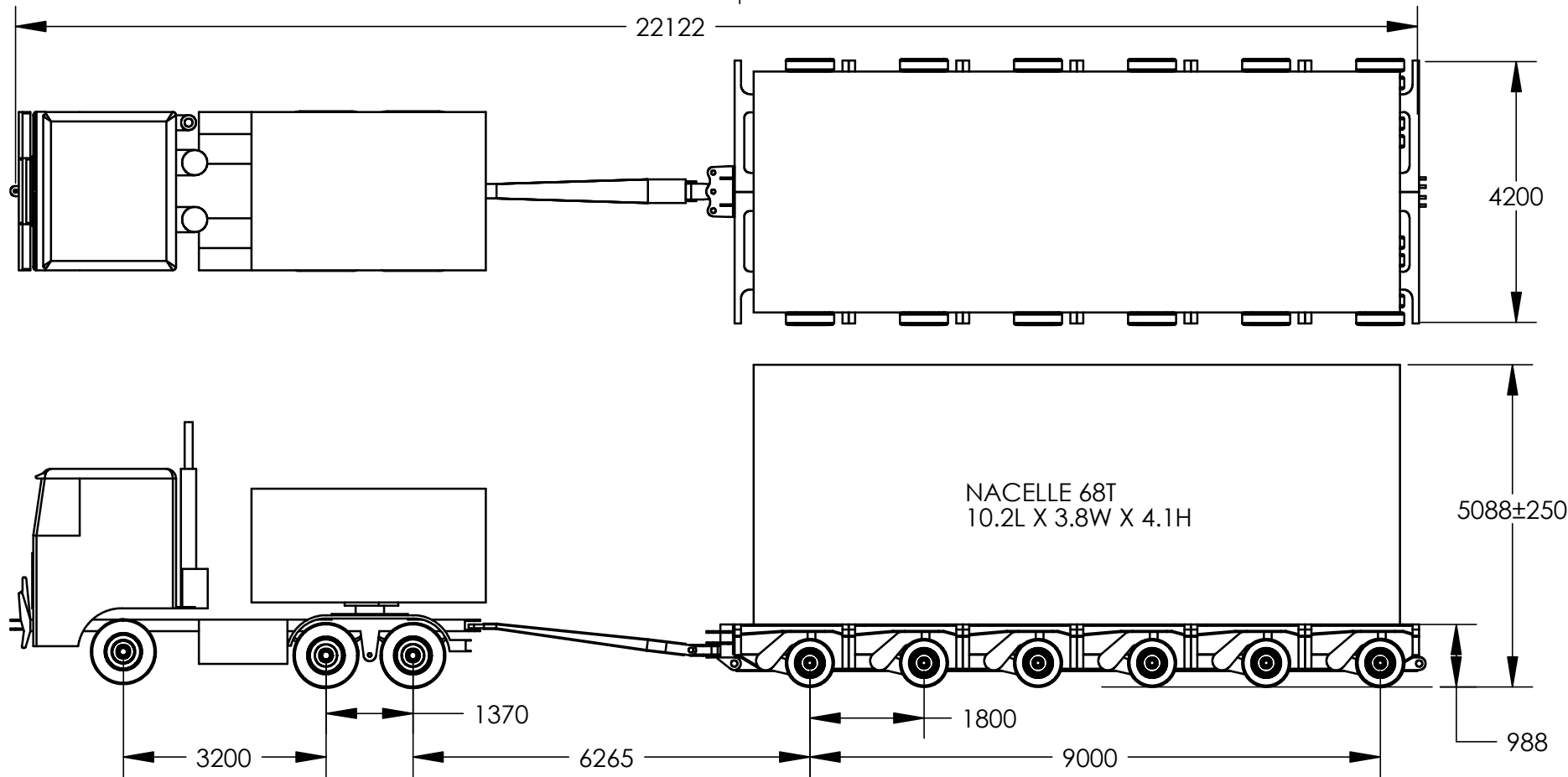
215/75R17.5 X 16 @ 4.0M
T 5.0T
P 24.0T
G 29.0T
AG 31.0T
REAR STEER

THIRD ANGLE PROJECTION
DIMENSIONS IN MILLIMETRES
TOLERANCES (UNLESS OTHERWISE STATED)
- LINEAR ± 200.0
- RADIAL ± 0.2

| | | | |
|---|--|------------------|----|
| DATE 21/3/2007 | REX J ANDREWS PTY LIMITED | | |
| DRN: H. ANDREWS | ENGINEERED TRANSPORTATION | | |
| APPROVED: | TRANSPORT PROPOSAL | | |
| ONLY APPROVED DRAWINGS CAN BE USED FOR MANUFACTURING | REPOWER WINDMILL TYPE 1 BASE TOWER SECTION | | |
| | DO NOT SCALE | DRG NO: REPOW01C | A4 |



| | | | |
|---|-----------------------------------|------------------|----|
| DATE 21/3/2007 | REX J ANDREWS PTY LIMITED | | |
| DRN: H. ANDREWS | ENGINEERED TRANSPORTATION | | |
| APPROVED: | TRANSPORT PROPOSAL | | |
| ONLY APPROVED DRAWINGS CAN BE USED FOR MANUFACTURING | REPOWER WINDMILL TYPE 1 HUB | | |
| | DO NOT SCALE | DRG NO: REPOW01D | A4 |



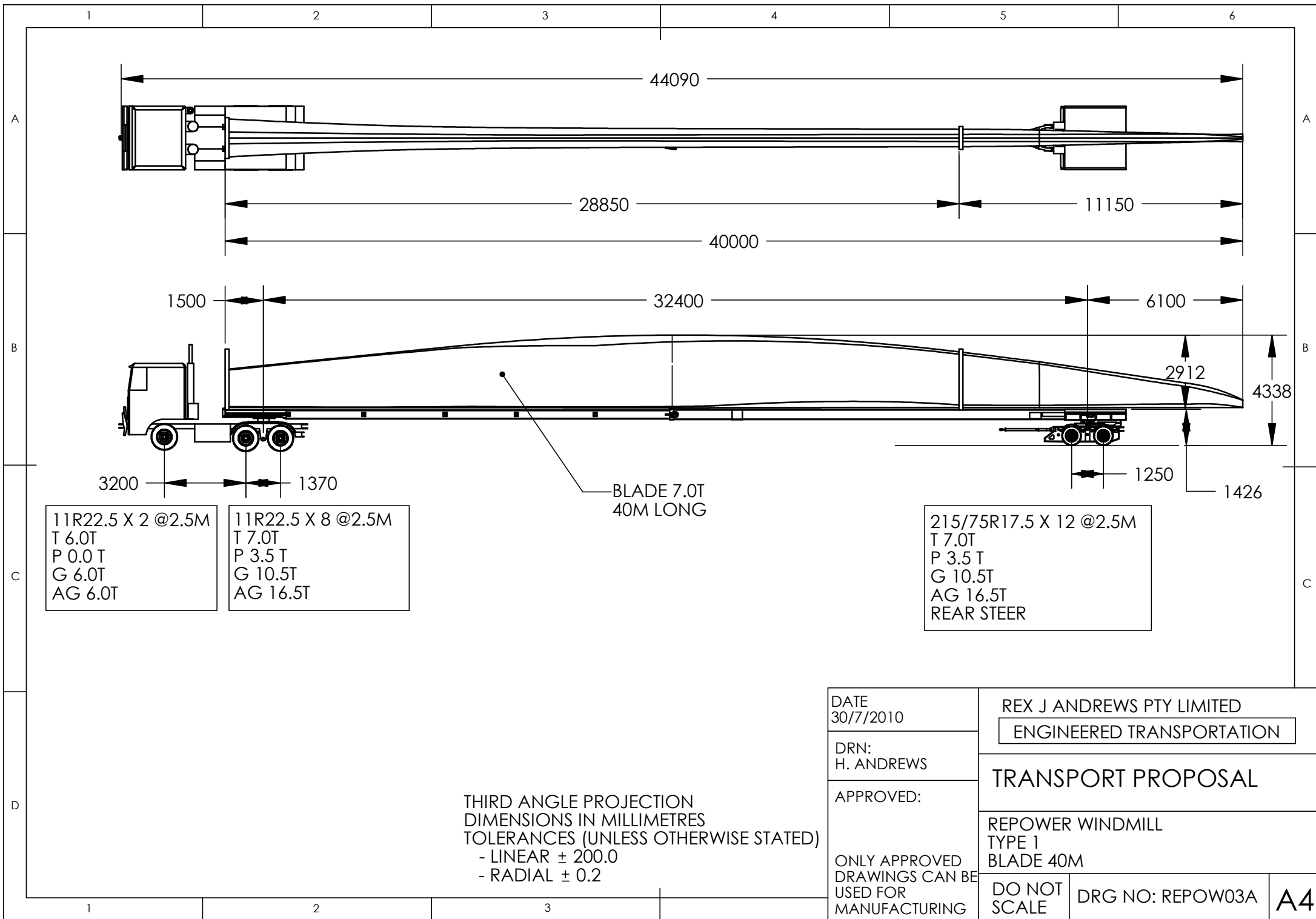
11R22.5 X 2 @2.5M
T 6.0T
P 0.0 T
G 6.0T
AG 6.0T

11R22.5 X 8 @2.5M
T 18.0T
P 0.0 T
G 18.0T
AG 18.0T

215/75R17.5 X 48 @ 4.2M
T 24.0T
P 68.0 T
G 92.0T
AG 96.0T
ALL
STEER

THIRD ANGLE PROJECTION
DIMENSIONS IN MILLIMETRES
TOLERANCES (UNLESS OTHERWISE STATED)
- LINEAR ± 200.0
- RADIAL ± 0.2

| | | | |
|---|---------------------------------------|------------------|----|
| DATE 21/3/2007 | REX J ANDREWS PTY LIMITED | | |
| DRN: H. ANDREWS | ENGINEERED TRANSPORTATION | | |
| APPROVED: | TRANSPORT PROPOSAL | | |
| ONLY APPROVED DRAWINGS CAN BE USED FOR MANUFACTURING | REPOWER WINDMILL TYPE 1 NACELLE | | |
| | DO NOT SCALE | DRG NO: REPOW01E | A4 |



| | | | |
|---|---|------------------|----|
| DATE 30/7/2010 | REX J ANDREWS PTY LIMITED | | |
| DRN: H. ANDREWS | ENGINEERED TRANSPORTATION | | |
| APPROVED: | TRANSPORT PROPOSAL | | |
| ONLY APPROVED DRAWINGS CAN BE USED FOR MANUFACTURING | REPOWER WINDMILL TYPE 1 BLADE 40M | | |
| | DO NOT SCALE | DRG NO: REPOW03A | A4 |

Abmessungen / dimensions

Bitte zu beachten das diese Zeichnung nur zur Information für Australische Projekte dient!
Attention that this drawing is only made for information according to Australian projects!

auch spiegelbildlich möglich
mirror image possible

weitere Anforderungen siehe Spezifikation V-1.1-GP.00.10-A
more requirements see specification V-1.1-GP.00.10-A

| | | | | | | |
|---|---|---|---|--|--|---------------------------------|
| weitergeleitet durch Veranlassung dieses Zeichners, Verantwortung und Haftung dieses Zeichners und weiterer Zeichner nicht ausgedrückt gestrichelt. Zusätzliche Verantwortungen des Zeichners Alle Rechte für den Fall der Patent-, Gebrauchsmuster- oder Erfindungsmusteranmeldung vorbehalten. | The reproduction, distribution and utilization of this document as well as the reproduction of its contents to others without explicit authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or design. | ON ISO 10765 Datum/dates 06.09.2009 J. LUTJEN 01.01.2001 01.01.2001 Zeichner/drawn 01.01.2001 Prüfer/checked 01.01.2001 Zeichner/drawn 01.01.2001 Prüfer/checked 01.01.2001 | DIN ISO 2768- mS Name/name J. LUTJEN 01.01.2001 01.01.2001 Zeichner/drawn 01.01.2001 Prüfer/checked 01.01.2001 | Maßstab / Scale: X REPPOWER Systems Repower Systems AG - Europäischer Hauptsitz - 44701 Phone: +49-4301-137560 Fax: +49-4301-137569 | Material / Material: Ausführung / Execution: Einfahrtstrichter & Kurve - AUS Funnel shaped access road & curve - AUS für Komponenten Transporte MD/HM for components transport MD/HM Z-1.1-GP.00.11-B 0-AUS | Gewicht / weight: - 0-AUS |
|---|---|---|---|--|--|---------------------------------|

Rev: 18.08.2009

The information contained in this document has been carefully compiled but Hydro Tasmania Consulting takes no responsibility for any loss or liability of any kind suffered by any party, not being the intended recipient of this document, in reliance upon its contents whether arising from any error or inaccuracy in the information or any default, negligence or lack of care in relation to the preparation of the information in this document.



Hydro Tasmania
Consulting

Hepburn Community Wind Farm Environmental Management Plan

E300628 - 1

10 August 2010

Prepared by
Hydro-Electric Corporation
ARBN: 072 377 158
ABN: 48 072 377 158
t/a **Hydro Tasmania Consulting**
89 Cambridge Park Drive, Cambridge
Tasmania, Australia






LEADERS IN CONSULTABILITY

Document information

| | |
|---------------------|-------------------------------------|
| Title | Hepburn Community Wind Farm |
| | Environmental Management Plan |
| Client organisation | REpower Australia Pty LtdSystems AG |
| Client contact | Emilio Urruchi |
| Document number | E300628 - 1 |
| Project manager | David Procter |
| Project reference | |

Revision history

Revision Final

| | | | |
|----------------------|--|--|-----------|
| Revision description | | | |
| Prepared by | David Procter |  | 10/8/2010 |
| Reviewed by | Jane McKenzie-Smith / Simon Wheeler |  | 10/8/2010 |
| Approved by | Julien Gaschignard |  | 10/8/2010 |
| Distributed to | Emilio Urruchi | REpower Australia Pty Ltd | 10/8/2010 |

The concepts and information contained in this document are the property of Hydro Tasmania Consulting. This document may only be used for the purposes, and upon the conditions, for which the report is supplied. Use or copying of this document in whole or in part for any other purpose without the written permission of Hydro Tasmania Consulting constitutes an infringement of copyright.

Contents

| | |
|--|-----------|
| 1. Introduction | 1 |
| 1.1 Environmental Assessment and Approval | 1 |
| 1.2 Objectives and Scope | 3 |
| 2. Project Description | 5 |
| 2.1 Wind farm components | 5 |
| 2.2 Construction Activities | 6 |
| 3. Sediment and Erosion Control Management Plan | 9 |
| 3.1 Introduction | 9 |
| 3.2 Objectives | 9 |
| 3.3 Key Guidance | 9 |
| 3.4 Performance Criteria | 10 |
| 3.5 Contingencies | 10 |
| 3.6 Control Measures | 10 |
| 4. Wildfire Prevention and Response Plan | 13 |
| 4.1 Introduction | 13 |
| 4.2 Objectives | 13 |
| 4.3 Key Guidance | 13 |
| 4.4 Performance Criteria | 13 |
| 4.5 Contingencies | 13 |
| 4.6 Control Measures | 14 |
| 5. Hydrocarbon and Hazardous Materials Plan | 15 |
| 5.1 Introduction | 15 |
| 5.2 Objectives | 15 |
| 5.3 Key Guidance | 15 |
| 5.4 Performance Criteria | 15 |
| 5.5 Contingencies | 16 |
| 5.6 Control Measures | 16 |
| 6. Construction and Work Site Management Plan | 19 |
| 6.1 Introduction | 19 |
| 6.2 Objectives | 19 |
| 6.3 Key Guidance | 19 |
| 6.4 Performance Criteria | 20 |
| 6.5 Control Measures | 20 |
| 6.6 Summary of Control Measures | 22 |
| 7. Complaints | 25 |
| 8. Auditing | 25 |

Appendices

A Preliminary site plan

List of tables

| | |
|--|----|
| Table 1-1 Planning Permit Conditions | 2 |
| Table 2-1 Preliminary Construction Program | 8 |
| Table 3-1 Sediment and Erosion Control | 10 |
| Table 4-1 Wildfire Prevention and Response | 14 |
| Table 5-1 Hydrocarbon and Hazardous Materials | 16 |
| Table 6-1 Construction and Worksite Management | 22 |

1. Introduction

The Hepburn Community Wind Farm is being developed by Leonards Hill Wind Operations Pty Ltd on behalf of Hepburn Wind. The wind farm site is located at Leonards Hill, approximately ten kilometres south of Daylesford in Victoria. The wind farm consists of two 2,05 MW wind turbines and will be the first community owned and operated wind farm in Australia.

A detailed description of the Hepburn Community Wind Farm and environmental assessments that have been completed is contained in Hepburn Community Wind Farm – Application for Planning Permit (HREA, 2006).

This Environmental Management Plan (EMP) outlines the management and monitoring requirements to be implemented by Leonards Hill Wind Operations Pty Ltd, its employees, and nominated Engineer, Procure and Construct (EPC) contractor REpower Systems AG.

1.1 Environmental Assessment and Approval

The Hepburn Community Wind Farm has been subject to a rigorous assessment process. Hepburn Wind has completed a number of key studies including:

- Fauna Assessment
- Noise Assessment
- Landscape and Visual Assessment Study
- Archaeological Assessment

The results of these studies have been used to ensure the design and location of the wind farm and associated infrastructure is optimised to minimise environmental impacts. The turbines and infrastructure will be located on land used for grazing and it is anticipated that this activity will be able to continue once the wind farm construction is completed. Noise impacts on surrounding residences were assessed and found to be compliant with prescribed standards.

The project received development approval from the Victorian Civil and Administrative Tribunal in July 2007, subject to compliance to conditions issued in Permit 2006/0321.

This EMP has been developed in response to Permit Condition 7. Table 1-1 summarises Condition 7 and indicates which section of this EMP has addressed the requirement.

Table 1-1
Planning Permit Conditions

| No. | Permit Condition | How addressed |
|-----|---|-------------------------|
| 7 | Before the development starts, an Environmental Management Plan must be prepared to the satisfaction of the Responsible Authority. When approved, the plan will be endorsed by the Responsible Authority. The Environmental Management Plan must include (but is not limited to): | This document |
| 7a | <p>A construction and work site management plan. This Plan must include:</p> <ul style="list-style-type: none"> • Procedures for access, noise and pollution management. • The identification of all potential contaminants, hazardous chemicals, liquids and similar materials to be stored on site. • The identification of all construction and operational processes that could potentially lead to water contamination. • The identification of appropriate storage, construction and operational and spill control methods to control any identified contamination risks including any arising from the identification processes in Conditions 7(a)(ii) and (iii). • Criteria for the siting of any temporary concrete batching plant associated and procedures for its removal and reinstatement of the site once its use finishes. The establishment and operation of any temporary concrete batching plant must be in accordance with the Environment Protection Authority's Environmental Guidelines for the Concrete Batching Industry, Publication No. 628. • The identification of waste re-use recycling and disposal procedures. • Procedures for the storage of any fuels, lubricants or waste oil to be stored in bunded areas and procedures for managing any spills. • The removal of works buildings and staging area • on completion of construction of the project and for the return of the site to its former condition. | Section 5 and Section 6 |
| 7b | A wildfire prevention and response plan. | Section 4 |
| 7c | <p>A sediment and erosion management plan. This plan must include:</p> <ul style="list-style-type: none"> • Procedures to ensure that silt from batters, cut-off drains, table drains and road works is retained on the work site during and after the construction stage of the project. All land disturbances must be confined to a minimum practical working area and to the vicinity of the identified work areas. Soil to be removed must be stockpiled and separate soil horizons must be retained in separate stockpiles and not mixed. Stockpiles must be located away from drainage line • All track construction and maintenance equipment, earth moving equipment and associated machinery, must be made free of soil, seed and plant material before being taken to the works site and again before being removed from the works site on completion of the development. • All road-making and maintenance material such as rock, gravel and sand required for the project must come from an area free of | Section 3 and Section 5 |

| No. | Permit Condition | How addressed |
|-----|---|---------------|
| | <p>weeds.</p> <ul style="list-style-type: none"> • The installation of geotextile silt fences (with sedimentation basins where appropriate) on all drainage lines from the site which are likely to receive run-off from disturbed areas. • Procedures to contain any contaminated or turbid run-off during and after construction of the wind energy facility. • Procedures to suppress dust arising from construction-related activities. Appropriate measures may include water sprays of roads and stockpiles, stabilising surfaces, temporary screening and/or wind fences, modifying construction activities during periods of heightened winds and revegetating exposed areas as soon as practicable. • Procedures to ensure that steep batters are treated in accordance with Environmental Protection Authority recommendations detailed in the 'Construction Techniques for Sediment Pollution Control' No 275, May 1991. • Procedures for waste water and discharge management to prevent adverse off-site impacts. | |

1.2 Objectives and Scope

The objectives of this EMP are to:

- Detail measures to mitigate any potential impacts on the surrounding environment associated with the construction of the Hepburn Community Wind Farm
- Provide a framework for the construction works to be implemented in accordance with conditions issued in Permit 2006/0321

2. Project Description

The Hepburn Community Wind Farm will consist of two turbines located on the exposed plateau of Leonards Hill. A 22 kV underground cable will link the turbines to the local electricity network via an onsite switchyard and the existing 22 kV overhead power line. The key project components are shown in Figure A-1 in Appendix A of this EMP and described below.

2.1 Wind farm components

2.1.1 Wind Turbines

The project will use the REpower MM82 2,05 MW wind turbine. The turbines have a rotor diameter of 82 m (40 m blade length) and will be installed on 66.15 m steel tube towers. The turbines are designed with rated wind speed of 14.5 m/s and cut in and cut out speeds of 3.5 m/s and 25 m/s respectively. Turbines will be linked to REpower's standard Supervisory Control and Data Acquisition (SCADA) system. The system controls all the functions of the turbine (including blade tip angle, direction, stop/start and electricity generation) and records operating data, energy production and environmental conditions.

A step up transformer will be located adjacent to each turbine to transform electrical output from the turbines to 22 kV.

2.1.2 Hard Stand Areas

Hard Stand areas will be located adjacent to the turbine foundations and will be approximately 25 m x 45 m. Hard Stand areas will be used as a base for cranes required to assemble, service or replace (if required) and decommission the turbines. The Hard Stand areas will be remediated to a state agreed with the Landowner.

2.1.3 Access Roads

An access road will be constructed from the site access on Ballan-Daylesford Road to the turbines as shown in Figure A-1. One tree may need to be pruned or removed to construct the access road. The access roads will be approximately 5.5 m wide with 0.5 m shoulders and be constructed with locally sourced materials. The access road will be used for both construction of the wind farm and to provide access to the turbines for routine maintenance.

2.1.4 Cabling

The turbines will be connected to an onsite switchyard by an underground 22 kV cable. The underground cable will follow the same route as the access road.

2.1.5 Switchyard

The switchyard will consist of a reactive power plant, 22 kV switch room housing 22 kV switchgear, a control booth and an auxiliary power supply. The switchyard will be fenced and will cover an area of approximately 15m x 15m.

2.1.6 Wind Monitoring Mast

There will be no wind monitoring mast on site.

2.2 Construction Activities

2.2.1 Site office

A temporary site office will be established close to the access point on Ballan-Daylesford Road on an existing concrete pad. The temporary site office will be comprised of about 5-6 demountable buildings that will be used for offices, kitchen/mess room, First Aid room and toilets. Temporary amenities will be provided in accordance with Victorian WorkCover Authority Code of Practice No 13 – *Building and Construction Workplaces*. The site will be fenced. All components of the temporary site office will be removed at the completion of construction.

2.2.2 Access Roads and Hard Stand Areas

Construction of the access roads and Hard Stand areas will commence once the site office is established. Construction of the access roads will involve stripping of topsoil, and placement and compaction of suitable crushed-rock sub base and wearing course. Drainage measures will be included in the design of the access roads to prevent erosion as described in Section 3 Sediment and Erosion Control.

2.2.3 Turbine Foundations

Each turbine will require the installation of a steel-reinforced concrete foundation. The final design of the foundations will depend on the results of the detailed geotechnical investigation however, preliminary investigations have shown that mass pad footings are likely to be most suitable. A typical mass pad footing would require the excavation of an area of approximately 12-15 m in diameter and 2.5 m deep. Excavated materials will be stockpiled adjacent to the excavation site, with the top soil

stored separately from the subsoil. Foundations will be covered by approximately 0.5m of backfill and topsoil.

2.2.4 Erection of turbines

Both turbines will be transported to site as individual components. The components for each turbine will consist of three tower sections (upper, middle, lower), three blades and the nacelle. Each turbine component will be required to be transported using oversize (over-dimension) vehicles. Hard Stand areas adjacent to each turbine will be used for storage and assembly of the components. The turbines will be assembled and erected using two cranes. The turbines will be constructed in three stages as follows:

- **Tower:** The lowest tower section is bolted to the foundation. Upper sections are progressively bolted on
- **Nacelle:** The nacelle is lifted by crane and attached to tower
- **Rotor/blades:** The three blades and hub are assembled at ground level, lifted as a single unit and attached to the main shaft which protrudes from the nacelle or each blade is lifted and attached to the hub separately

2.2.5 Cabling

Underground cabling will be installed in trenches approximately 300 mm wide and 900 mm deep. The cable will be laid on a base layer of sand which will be topped by a further layer of sand and backfilled to surface level. The cable route will be revegetated to prevent erosion and erosion control measures as outlined in Section 3 will be implemented to revegetation works.

2.2.6 Site restoration

Rehabilitation of construction areas will be undertaken progressively to minimise exposed areas. At the completion of construction the temporary site office, waste and surplus materials will be removed. Any exposed areas will be revegetated to prevent erosion and erosion control measures as outlined in Section 3 will be implemented to revegetation works.

2.2.7 Working hours

Working hours are expected to be from 7.00am to 6.00pm Monday to Friday and 7.00am to 1.00pm on Saturdays.

2.2.8 Construction program

Construction is expected to commence in September-October 2010. A preliminary construction program is outlined in Table 2-1.

Table 2-1 Preliminary Construction Program

| Construction phase | Month | | | | | | | | |
|------------------------------|-------|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Site establishment | ■ | | | | | | | | |
| Access Roads and Hard Stands | | ■ | | | | | | | |
| Turbine foundations | | | ■ | ■ | | | | | |
| Turbine installation | | | | | ■ | ■ | ■ | | |
| Electrical (inc SCADA) | | | | | | ■ | ■ | ■ | |
| Commissioning and operation | | | | | | | | ■ | ■ |

2.2.9 Operation and maintenance

Once commissioned, the wind turbines will operate continually, except during periods when wind conditions are outside of the operating regime of the turbine or during regular maintenance periods. Automatic control systems allow the turbines to operate unattended. The wind farm will be remotely monitored 24 hours a day 7 days a week by REpower.

2.2.10 Decommissioning

The leasing agreements with the landowners provide Hepburn Wind with 25 year tenure to operate a wind farm on the site. A decision will be made at the end of the initial operating period on whether to replace the existing turbines or to decommission the wind farm and return the site to its original condition.

If the site were to be decommissioned, the tower foundations would be demolished and top soil and pasture reinstated. The Hard Stand areas would then be rehabilitated. The access roads would be removed unless the landowner requests otherwise. All above-ground infrastructure would be removed and reused (if appropriate), recycled or removed for disposal. A site contamination assessment of the switchyard would be performed and any contaminated material would be moved to an appropriate disposal facility.

3. Sediment and Erosion Control Management Plan

3.1 Introduction

Construction of the wind farm has the potential to cause erosion, loss of soil and sedimentation of water courses through:

- Sediment laden runoff or dust from exposed or stockpiled soils resulting from earthworks for turbine foundations, laydown areas, access roads, cable trenches and switchyard
- Runoff from unsealed access roads or Hard Stand Areas
- Altering the drainage characteristics of the site by the construction of access roads, Hard Stand areas and underground cabling trenches
- Migration of dust from access roads, stockpiles and exposed areas
- Inappropriate disposal of sewerage or waste waters from site amenities

The site is protected by an Environmental Significance Overlay (ESO – 1) Proclaimed Catchment Protection under the Hepburn Shire Planning Scheme. There are no public water supply points however, there are several private dams located close to the site. The site is not close to any recorded significant wetlands. There are no defined streams or rivers on or close to the site. It is likely that surface water drains from the site via poorly defined drainage lines to private dams.

3.2 Objectives

The objectives of this Sediment and Erosion Control Management Plan are to:

- Prevent erosion, the loss of soil and sedimentation of drainage lines by appropriately managing planned works
- Maintain or improve the quality of surface water during construction

3.3 Key Guidance

- [Environmental Protection Authority Victoria Publication 275 – Construction Techniques for Sediment Pollution Control](#)
- [EPA Victoria Publication 891.2 – Code of Practice – Onsite Waste Water Management](#)

- [State Environment Protection Policy \(Waters of Victoria\), EPA Victoria, revised 2004.](#)
- [Building and Construction Workplaces – Code of Practice No. 13, Worksafe Victoria, 1990.](#)

3.4 Performance Criteria

- No discharge of sediment laden water from site
- No significant erosion on site
- Correct design and function of erosion and sedimentation control measures

3.5 Contingencies

If erosion and sediment controls are found to be insufficient the following measures will be implemented:

- The ineffective control will be modified or replaced
- The construction method will be reviewed and modified if necessary

3.6 Control Measures

Table 3-1 Sediment and Erosion Control

| Audit Ref | Control Measure |
|----------------|--|
| General | |
| SE 1 | Site access roads and lay-down areas will incorporate existing tracks where ever possible to minimise disturbance of the site. |
| SE 2 | All land disturbances will be confined to the minimum practicable working area to ensure that the minimum land area is exposed to erosion for the shortest possible time. |
| SE 3 | All vehicles will use only designated access roads and movement of vehicles on and off site will be through approved access points only. |
| SE 4 | Existing drainage lines will be protected and diversion of drainage lines avoided wherever practicable. |
| SE 5 | Surface water will be diverted around the construction footprint using structures such as catch drains, silt fences or bunds. Surface water will not be diverted across erosion prone slopes. |
| SE 6 | Sediment controls shall be installed in accordance with the relevant guidelines and standards for such controls e.g. EPA Victoria Publication 275 – Construction Techniques for Sediment Pollution Control |
| SE 7 | Erosion control works and measures will be installed to control surface water runoff and prevent the export of sediments from the site by ensuring; |

| | |
|------------------------|--|
| | <ul style="list-style-type: none"> Discharge of stormwater is to stable preferably vegetated land Erosion control measures closely follow land contours to reduce runoff velocity from exposed soils |
| SE 8 | Silt fences will be constructed across all drainage lines and erosion control from site that are likely to receive runoff from exposed or disturbed soils. Sediment basis will be installed where required. |
| SE 9 | Tower foundations will be designed to ensure there is no impact on groundwater. |
| Cable Trenches | |
| SE 10 | Trenches will remain open for the shortest duration possible and prevailing weather conditions taken into consideration. |
| SE 11 | Excavated spoil will be stockpiled on the uphill side of the exposed trench and silt fences installed where necessary. |
| SE 12 | Where cable trenches will be open for a significant length of time trench plugs may be used if appropriate. |
| Soil Stockpiles | |
| SE 13 | All soil stockpiles will be located at least 30m from drainage lines. |
| SE 14 | Soil will be stockpiled to maintain separate soil horizons. |
| SE 15 | Stockpiles will be designed with slopes no greater than 2:1. |
| SE 16 | Steep Batters will be treated in accordance with EPA Victoria Publication 275 – Construction Techniques for Sediment Pollution Control |
| SE 17 | Stockpiles will be stabilised and control measures implemented including watering to suppress dust. |
| SE 18 | If required, sediment controls will be installed around unstable stockpiles. |
| Access Roads | |
| SE 19 | <p>Access roads and Hard Stand areas will be designed to minimise erosion both during and after construction by:</p> <ul style="list-style-type: none"> Constructing roads using compacted crushed rock Providing regular gutters along the main access road that runs up the face of the hill Implementing a regular maintenance program for access roads and Hard Stand areas |
| SE 20 | Access roads will be designed to avoid the generation of mud. |
| Dust | |
| SE 21 | <p>Dust suppression measures will be implemented as required and may include:</p> <ul style="list-style-type: none"> wetting access roads and or Hard Stand areas revegetating exposed areas as soon as practicable |
| Rehabilitation | |
| SE 22 | Rehabilitation of disturbed areas will be completed progressively to ensure disturbed land is exposed for the shortest possible time. |
| SE 23 | Rehabilitation will include at a minimum reinstatement of soil and pasture and surface levelling. |
| Site Hygiene | |
| SE 24 | All earth moving and track construction equipment shall be thoroughly cleaned prior to entering or leaving the site. |
| SE 25 | All materials (sand, aggregate etc) imported on to site must be sourced from weed and |

| | |
|--|---|
| | pathogen free sites. |
| Maintenance | |
| SE 26 | All drains will be regularly cleaned to remove silt and other debris and replaced immediately if damaged. |
| SE 27 | Access roads and Hard Stand areas will be maintained for the duration of the project to prevent erosion. |
| Sewerage and waste water management | |
| SE 28 | Appropriate sanitary facilities will be provided for construction personnel in accordance with Building and Construction Workplaces – Code of Practice No. 13, Worksafe Victoria, 1990. |
| SE 29 | Sanitary facilities will be self contained and serviced in accordance with the supplier's information and instruction. |
| Monitoring | |
| SE 30 | Sediment and erosion control measures will be inspected daily and after a significant rainfall event by the Site Manager. |
| SE 31 | All personnel will report damaged or ineffective sediment control measures or potential water contamination to the Site Manager immediately |
| SE 32 | Monitoring for erosion and sedimentation will be undertaken at 6 months and 12 months after the completion of construction. |
| SE 33 | This plan shall be audited at the commencement of works and at regular intervals throughout construction works. |

4. Wildfire Prevention and Response Plan

4.1 Introduction

Wildfires have the potential to significantly impact the community of Leonards Hill through the loss of property and livestock and the endangerment of resident's lives. The wind farm has been sited in a cleared paddock in part, to reduce the risk of wildfire. The nearest vegetated area is located more than 250m from the closest turbine.

4.2 Objectives

The objectives of the Wildfire Prevention and Response Plan (WPRP) are to:

- Prevent the occurrence of a wildfire at the Hepburn Community Wind Farm Site
- In the event of a fire, ensure the safety of personnel on site and residents and minimise damage to property

4.3 Key Guidance

- [Emergency Management Guidelines for Wind Farms, CFA, 2007.](#)
- Australian Standard 1851 – *Portable Fire Extinguishers*, 1997

4.4 Performance Criteria

- Extent of fuel in the designated areas
- Presence of spark arrestors and plant and machinery
- Number of fires that occur on site

4.5 Contingencies

In the event of a fire on site the following measures will be implemented:

- Dial 000 immediately
- All reasonable attempts will be made by onsite personnel to extinguish the fire without compromising personnel safety
- All onsite equipment will be made available as requested by the CFA

4.6 Control Measures

Table 4-1 Wildfire Prevention and Response

| Audit Ref | Control Measure |
|--|--|
| During a declared 'Fire Danger Period' the following measures will be implemented: | |
| WF 1 | For a distance of 30m from both turbines and in all areas where plant and heavy equipment will be working grass will be maintained below 100mm high and leaf litter below 10mm deep. |
| WF 2 | A fuel reduced area of 4m will be maintained around the switchyard. |
| WF 3 | All plant and heavy equipment will at a minimum carry at least one nine litre water stored pressure fire extinguisher to a minimum rating of 3A. |
| In addition the following basic measures will be implemented at all times: | |
| WF 4 | Access roads will be constructed in accordance with guidance provided in Emergency Management Guidelines for Wind Farms, CFA, 2007 and be a minimum of four meters wide with appropriate vertical clearance and suitability for all weather access by CFA vehicles. |
| WF 5 | No fires will be lit on site for any purpose at any time. |
| WF 6 | No hot work will be conducted on Extreme Fire Days and Code Red (Catastrophic) days. |
| WF 7 | All hot work will be conducted using a permit system and will be undertaken in a manner that minimises the risk of fire. |
| WF 8 | Spark arresters will be installed and maintained on all plant and equipment. |
| WF 9 | The induction procedure for employees and contractors working on site will include site specific fire response procedures. |
| WF 10 | All vehicles will be equipped with suitable fire extinguishers compliant with AS1851. |
| WF 11 | The CFA will be provided with: <ul style="list-style-type: none"> • A construction works schedule • Maps showing access roads and locations of access gates • Security information such as the location of locked gates and restricted access areas |
| WF 12 | The CFA will be briefed on planned fire response measures and invited to inspect the site prior to construction. |
| WF 13 | Prior to the commencement of construction advice will be sought from the CFA regarding access to and the location of water access points on the site. |
| Monitoring | |
| WF 14 | The extent of fuel (grass height and leaf litter depth) will be monitored weekly during 'Fire Danger Periods' and monthly at all other times. |
| WF 15 | This plan shall be audited at the commencement of works and at regular intervals throughout construction works. |

5. Hydrocarbon and Hazardous Materials Plan

5.1 Introduction

The construction of the Hepburn Community Wind Farm has the potential to contaminate the aquatic environment through the inappropriate transport, handling, storage and disposal of hazardous materials and hydrocarbons.

The Hydrocarbon and Hazardous Materials Management Plan (HHMP) describes the management measures for the storage, use and disposal of hydrocarbons and hazardous substances.

5.2 Objectives

The objectives of the HHMP are to:

- Minimise the potential for hydrocarbon or chemical spills and ensure the availability of appropriate hydrocarbon spill kits
- Prevent the contamination of surrounding waters through the mismanagement of hazardous materials.

5.3 Key Guidance

- [EPA Victoria Publication 347 – Bunding Guidelines](#)
- AS1940:2004 – *The storage and handling of Flammable and Combustible materials*
- AS1216:2006 – *Class labels for dangerous goods*
- [Hazardous Substances Information System – List of Designated Hazardous Substances](#)
- [Dangerous Goods Storage and Handling – Code of Practice No. 27, Worksafe Victoria, 2000.](#)
- [Hazardous Substances – Code of Practice No. 24, Worksafe Victoria, 2000.](#)

5.4 Performance Criteria

- No spillage of hydrocarbons or hazardous substances beyond containment areas
- No discharge of hydrocarbons or hazardous substances to land or waterways

- Minimal storage of hydrocarbons and hazardous substances on worksites

5.5 Contingencies

In the event of a spill of hydrocarbons or hazardous materials the following measures will be implemented:

- The cause of the spill shall be immediately stopped
- Clean up measures including the deployment of spill kits and any MSDS requirements will be instigated immediately
- If required, EPA Victoria will be informed
- Any wastes arising from a spill, including contaminated soil, will be disposed of in an appropriate manner.

5.6 Control Measures

Table 5-1 Hydrocarbon and Hazardous Materials

| Audit Ref | Control Measure |
|-----------|--|
| HH 1 | Storage areas for hazardous substances shall be bunded in accordance with EPA Victoria Publication 347 – Bunding Guidelines and Australian Standard AS1940. |
| HH 2 | Hydrocarbon and hazardous substance storage areas shall be clearly identified with the appropriate signage and labels, in accordance with AS 1216:2006. All hydrocarbon and hazardous substances stored and used shall have a current Material Safety Data Sheet (MSDS) and be readily accessible. |
| HH 3 | Appropriate spill kits shall be kept on site. The location of spill containment materials will be included in the site induction. Training for spill clean up will be provided to nominated persons. |
| HH 4 | All plant and equipment shall undergo maintenance in accordance with their individual service requirements. Equipment leaks shall be addressed immediately. |
| HH 5 | Where practicable, all plant and mobile equipment will be parked in designated Hard Stand areas when not being used in construction activities. |
| HH 6 | Oil and grease spills shall be cleaned immediately in accordance with EPA and Local Government Authority requirements. Disposal of contaminated soil and clean up materials shall be to an approved waste disposal facility. |
| HH 7 | Significant quantities of fuel will not be stored on site. Equipment and machinery that requires refuelling on site (e.g. cranes) will be refuelled by a dedicated refuelling vehicle. The refuelling vehicle will have adequate spill kits and containment devices readily available. |
| HH 8 | Post construction, there may be small volumes of hazardous materials used in the maintenance of the wind turbines. All materials will be stored in accordance with Australian Standard AS1940. |

Monitoring

| | |
|-------|---|
| HH 9 | Documented inspections of all plant and equipment for fuel, oil or hydraulic leakage will be carried out at least weekly. Any leakages must be repaired before plant and equipment is permitted to be used. |
| HH 10 | Regular documented inspections of chemical, oil and fuel stores shall be undertaken. |
| HH 11 | This plan shall be audited at the commencement of works and at regular intervals throughout construction works. |

6. Construction and Work Site Management Plan

6.1 Introduction

In addition to the specific plans contained within this Environmental Management Plan a Construction and Work Site Management Plan (CWSMP) has been prepared to ensure that the environmental impact of the construction of the Hepburn Community Wind Farm is minimised.

To ensure all requirements of condition 7a of the Planning Permit are addressed this CWSMP considers each requirement separately.

6.2 Objectives

The objectives of the Construction and Work Site Management Plan are to:

- Minimise the impact of construction of the Hepburn Community Wind Farm on the surrounding environment
- Reduce as far as practicable construction noise
- Minimise the generation of waste and to appropriately manage waste generated

6.3 Key Guidance

- [*Noise Control Guidelines, EPA Publication 1254, 2008.*](#)
- [*EPA State Environmental Protection Policy \(Control of noise from commerce industry and trade\) No. N-1, 1989.*](#)
- [*Environmental Guidelines for Major Construction Sites, Best Practice Management Series, EPA Publication 480, 1995.*](#)
- [*Policy and Planning Guidelines for Development of Wind Energy Facilities in Victoria, Sustainable Energy Authority Victoria, 2002.*](#)
- [*Best Practice Guidelines for Implementation of Wind Energy Projects in Australia, AusWEA, 2006*](#)

6.4 Performance Criteria

- Compliance with *Noise Control Guidelines*, EPA Publication 1254, 2008
- Appropriate segregation and disposal of wastes

6.5 Control Measures

6.5.1 Procedures for access, noise and pollution management

Access

Other than landowners, access to the site will be restricted to authorised personnel and construction contractors at all times. The site office and compound enclosure will be fenced and construction sites will be appropriately managed to prevent unauthorised access.

Traffic access to the site is described in the Traffic Management Plan prepared for the Hepburn Community Wind Farm.

Noise

Noise will be managed to comply with the *Noise Control Guidelines*, EPA Publication 1254, 2008. The following general noise mitigation measures will be implemented:

- Wherever possible working hours will be between 7am and 6pm Monday to Friday and 7am to 1pm on Saturdays. Where safety or technical reasons require work to be completed outside these hours' noise levels will be in compliance with [*Noise Control Guidelines*, EPA Publication 1254, 2008](#).
- Prior to the commencement of construction local residences will be informed of the planned construction schedule and be made aware of periods when works are expected to be noisy
- All mechanical plant will be silenced by the best available means
- As far as is practicable noisier works will be scheduled at times of least disturbance to landowners
- The site induction will include information on noise awareness

Pollution

Pollution will be managed through the implementation of the Sediment and Erosion Control Management Plan (Section 3) and Hydrocarbon and Hazardous Materials Plan (Section 5).

6.5.2 Identification of all potential contaminants on site

The following potential contaminants are considered likely to be stored on site during construction:

- Small quantities of liquid fuels will be stored on site. Larger quantities of fuel will be on site periodically when refuelling
- Lubricants and hydraulic oils –new and used
- Wash down waters
- Aggregates and cement
- Domestic waste (food wastes)

6.5.3 Identification of all construction and operational processes that could potentially lead to water contamination

Processes that could potentially lead to water contamination are identified in the Sediment and Erosion Control Management Plan (Section 3) and Hydrocarbon and Hazardous Materials Plan (Section 5).

Operational processes are confined to routine maintenance activities none of which are considered likely to potentially lead to water contamination.

6.5.4 Identification of appropriate storage, construction and operational methods to control any identified contamination risks

Methods to control potential contamination risks are described in the Sediment and Erosion Management Control Plan (Section 3) and Hydrocarbon and Hazardous Materials Plan (Section 5).

6.5.5 Criteria for siting of any temporary concrete batching plant

There will be no concrete batching plant established during the construction of the Hepburn Community Wind Farm.

6.5.6 Identification of waste re-use, recycling and disposal procedures

The construction of the Hepburn Community Wind Farm is not expected to generate a significant quantity of waste. Wherever possible the generation of waste will be avoided. Sources of waste include:

- Containers, packaging and wrapping materials
- Construction wastes including scrap timber, metal and concrete
- Topsoil, spoil and rock wastes from turbine foundation excavations

- Domestic waste and litter

The following measures will be implemented to manage the waste streams identified above:

- Recycling bins and skips will be available on site
- Wastes will be collected and disposed by licensed contractors
- Wastes will be collected progressively and not allowed to stockpile
- All relevant legislative requirements relating to prescribed and other wastes will be adhered to

6.5.7 Procedures for the storage of any fuels, lubricants or waste oil to be stored in bunded areas and procedures for managing any spills.

Procedures for the storage and managing spills of fuels lubricants or waste oils are contained in the Hydrocarbon and Hazardous Materials Plan (Section 5).

6.5.8 The removal of works buildings and staging area on completion of construction of the project and for the return of the site to its former condition.

All works buildings will be contained within the site office that will be established on an existing concrete slab. At the completion of construction all buildings and fencing will be removed and the site returned to its original condition.

Areas disturbed during construction will be rehabilitated as outlined in the Sediment and Erosion Control Management Plan (Section 3).

6.6 Summary of Control Measures

Table 6-1 Construction and Worksite Management

| Audit Ref | Control Measure |
|------------------|---|
| Noise | |
| CW 1 | Noise will be managed to comply with the Noise Control Guidelines, EPA Publication 1254, 2008 . |
| CW 2 | Wherever possible working hours will be between 7am and 6pm Monday to Friday and 7am to 1pm on Saturdays. Where safety or technical reasons require work to be completed outside these hours noise levels will be in compliance with Noise Control Guidelines, EPA Publication 1254, 2008 . |
| CW 3 | Prior to the commencement of construction local residences will be informed of the planned construction schedule and be made aware of periods when works are expected to be noisy. |

| | |
|-------------------|---|
| CW 4 | All mechanical plant will be silenced by the best available means. |
| CW 5 | As far as is practicable noisier works will be scheduled at times of least disturbance to landowners. |
| CW 6 | The site induction will include information on noise awareness. |
| Waste | |
| CW 7 | Recycling bins and skips will be available on site. |
| CW 8 | Wastes will be collected and disposed by licensed contractors. |
| CW 9 | Wastes will be collected progressively and not allowed to stockpile. |
| CW 10 | All relevant legislative requirements relating to prescribed and other wastes will be adhered to. |
| Monitoring | |
| CW 11 | Waste management practices will be periodically audited. |
| CW 12 | Waste documentation records will be checked and recorded. |
| CW 13 | This plan shall be audited at the commencement of works and at regular intervals throughout construction works. |

7. Complaints

A complaints procedure shall be established to receive and respond to complaints from the community and stakeholders associated with the construction of the wind farm. The following information about each complaint shall be recorded:

- Name of complainant (anonymous if preferred)
- Address/general location of complainant when complaint occurred
- Nature of complaint (e.g. noise, sediment release)
- Detailed description of complaint (e.g. noise characteristics)
- When complaint event occurred
- If ongoing, frequency and duration of events

All complaints shall be recorded and, where construction activities are considered likely to be the cause of the complaint, action shall be taken to rectify the cause and prevent the incident recurring.

The following information shall be recorded:

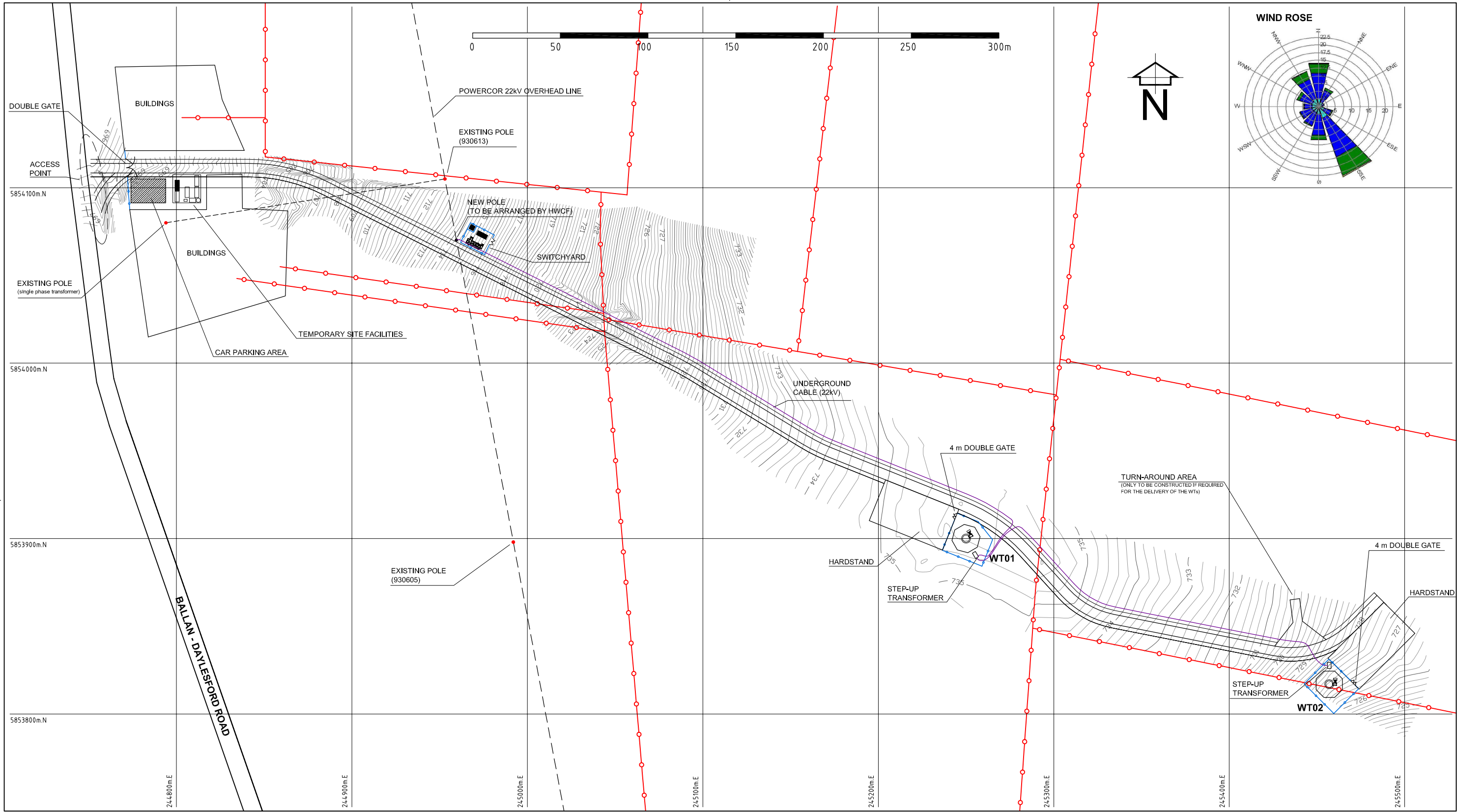
- Details of the activities undertaken at the time of the complaint (e.g. excavating foundations)
- Details of the nature of any abnormal activities or environmental conditions
- Results of on-site observations and investigations
- Results of on-site observations of wind speed, wind direction, cloud cover, any discharges evident
- Details of actions taken to alleviate or mitigate the identified causal factors of the complaint and actions to reduce the risk of recurring complaints
- Steps taken to notify complainant of the outcomes of any investigations

8. Auditing

An audit program will be established that includes at a minimum an audit of this plan at the commencement of construction and at least one follow up audit during construction.

Appendices

A Preliminary site plan



| Coordinates WTs | |
|-----------------|-----------------|
| MGA 94 Zone 55 | |
| WT01 | 245250, 5853900 |
| WT02 | 245457, 5853817 |

| LEGEND | |
|--------|---------------------|
| | EXISTING FENCELINE |
| | NEW FENCELINE |
| | UNDERGROUND CABLING |

NOTE:
Any coordinates in this document are just for information purposes and will have to be checked by a certified surveyor before construction.

FOR INFORMATION ONLY

| | | | | | | |
|--|--|--|--|--|---|---------------------------|
| Weitergabe sowie Vervielfältigung dieses Dokuments, Verwertung und Mitteilung seines Inhalts sind verboten, soweit nicht ausdrücklich gestattet. Zuwiderhandlungen verpflichten zu Schadenersatz. Alle Rechte für den Fall der Patent-, Gebrauchsmuster- oder Geschmacksmustereintragung vorbehalten. | | DIN ISO 13715 | DIN ISO 2768-mH Tolerance DIN ISO 8015 | Maßstab / Scale: NOT TO SCALE REpower Systems AG - Entwicklungszentrum - Hollensenstraße 15 D-24768 Rendsburg Phone: +49 - 4331 - 131990 Fax: +49 - 4331 - 1319999 | Werkstoff / Material: N/A | Gewicht / Weight: N/A |
| | | Datum/date | Name/name | | Benennung / title HEPBURN COMMUNITY WIND FARM | |
| | | gezeichnet / drawn: | 09-08-10 E. URRUCHI | | Unterbenennung / subtitle PRELIMINARY SITE PLAN ACCESS ROADS & CABLE ROUTES | |
| | | geprüft / checked: | 09-08-10 E. URRUCHI | | Zeichnungsnummer / Drawing Number HEP-ARP-01-02 | Version / revision A-0 |
| The reproduction, distribution and utilization of this document as well as the communication of its contents to others without explicit authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or design. | | freigegeben/released: | 09-08-10 E. URRUCHI | Angegebene Spezifikation ist zwingend zu beachten! Indicated Specification has to be strictly observed! | Spezifikationsnummer / Specification Number N/A | Blatt/Sheet 1/1 |
| | | Stückzahl pro Anlage / No. of Pieces per Turbine: SAP-No.: N/A EDP NO. N/A | Schutzvermerk DIN ISO 16016 Protection Mark DIN ISO 16016 Pos.-Nr.: N/A | | DR-Stat/DIN-Stat A3 | |
| | | | | | (Ers.f. / repl.for:) N/A | (Ers.d. / repl.by:) N/A |
| | | | | | | |

The information contained in this document has been carefully compiled but Hydro Tasmania Consulting takes no responsibility for any loss or liability of any kind suffered by any party, not being the intended recipient of this document, in reliance upon its contents whether arising from any error or inaccuracy in the information or any default, negligence or lack of care in relation to the preparation of the information in this document.



Hydro Tasmania
Consulting

Hepburn Community Wind Farm

Preliminary Off-site Landscaping and Visual Screening Plan

E301070 02

10 August 2010

Prepared by
Hydro-Electric Corporation
ARBN: 072 377 158
ABN: 48 072 377 158
t/a **Hydro Tasmania Consulting**
89 Cambridge Park Drive, Cambridge
Tasmania, Australia






LEADERS IN CONSULTABILITY

Document information

| | |
|---------------------|--|
| Title | Hepburn Community Wind Farm |
| | Preliminary Off-site Landscaping and Visual Screening Plan |
| Client organisation | Leonards Hill Wind Operations Pty Ltd |
| Client contact | Brett Dutton |
| Document number | E301070 02 |
| Project manager | David Procter |
| Project reference | |

Revision history

Revision Final

| | | | |
|----------------------|---------------|--|-----------|
| Revision description | | | |
| Prepared by | Ian Jones |  | 10/8/2010 |
| Reviewed by | David Procter |  | 10/8/2010 |
| Approved by | Scott Lobdale |  | 10/8/2010 |
| | (name) | (signature) | (date) |
| Distributed to | Brett Dutton | Leonards Hill Wind Operations Pty Ltd | 10/8/2010 |
| | (name) | (organisation) | (date) |

The concepts and information contained in this document are the property of Hydro Tasmania Consulting. This document may only be used for the purposes, and upon the conditions, for which the report is supplied. Use or copying of this document in whole or in part for any other purpose without the written permission of Hydro Tasmania Consulting constitutes an infringement of copyright.

Contents

| | |
|--|----------|
| 1. Preliminary off-site landscaping and visual screening plan | 1 |
| 1.1 This document | 1 |
| 1.2 Properties that will be offered screening | 2 |
| 1.3 Screening options | 2 |
| 1.4 Timeline for offer of screening | 5 |
| 1.5 Draft letter | 5 |
| 1.6 Off-site screening plans | 5 |
| 1.7 Maintenance Schedule | 6 |

Appendices

A Draft letter of offer

List of tables

| | |
|---|---|
| Table 1-1 Off-site landscaping and visual screening permit condition and response | 1 |
|---|---|

1. Preliminary off-site landscaping and visual screening plan

In July 2007, the Victorian Civil and Administrative Tribunal issued a decision approving permit 2006/9231 from the Hepburn Shire Council for the development of two wind turbines at 2040 Ballan-Daylesford Road, Leonards Hill.

1.1 This document

Condition 5 of permit 2006/9231 requires that an Off-site Landscape Plan be prepared and approved by the Responsible Authority (Hepburn Shire Council). This preliminary off-site landscaping and visual screening plan is intended to comply with the condition of approval relating to off-site landscaping and visual screening for the Hepburn Community Wind Farm

Table 1-1 provides the complete text of Condition 5 and describes how the requirements of the permit condition are to be addressed.

Table 1-1
Off-site landscaping and visual screening permit condition and response

| Permit Condition | How addressed |
|--|--|
| 5) Before the development starts, a program of landscape mitigation works is to be made available to relevant landowners. As part of that program an Off-site Landscape Plan must be prepared and submitted to the satisfaction of the Responsible Authority. When approved, the plan will be endorsed by the Responsible Authority. The Off-site Landscaping Plan may be submitted in stages to the satisfaction of the Responsible Authority (so that not all stages are completed before the development starts) and must include (but may not be limited to the following: | This report |
| (a) A provision for landowners within a one kilometre radius of any wind turbine to have the opportunity to accept the offer to provide visual screen planting at any time up until six (6) months after the commissioning of the last wind generator; | Section 1.2 of this report |
| (b) The process by which landowners within a one kilometre radius of any wind turbine will be informed of this offer and the process by which it can be accepted. | Section 1.4 to 1.6 and Appendix A of this report |
| (c) Details of planting or other treatments that will be used to reduce the visual impact of the wind turbines at the dwellings of participating landowners; | Section 1.3 of this report |
| (d) Details of species proposed to be used for the landscaping including details of height and size of species at maturity; | Section 1.3 of this report |

| Permit Condition | How addressed |
|----------------------------|----------------------------|
| (f) A maintenance program. | Section 1.7 of this report |




1.2 Properties that will be offered screening




The landowners within one kilometre of the proposed turbines with residential dwellings on their properties have been identified on the REpower Systems plan HEP-4.01-DRG-03 ver A00-04. All residential dwellings within one kilometre of a turbine shall be offered visual screening options under this plan. The properties as numbered are:

| House Number | Property Address | House Number | Property Address |
|--------------|--|--------------|--|
| 1 | 1886 Ballan-Daylesford Road, Korweinguboorra, 3461 | 11 | 2084 Ballan-Daylesford Road, Leonards Hill, 3461 |
| 2 | 1914 Ballan-Daylesford Road, Korweinguboorra, 3461 | 12 | 2095 Ballan-Daylesford Road, Leonards Hill, 3461 |
| 3 | 1881 Ballan-Daylesford Road, Korweinguboorra, 3461 | 13 | 52 Leonards Hill-South Bullarto Road, Leonards Hill 3461 |
| 4 | 1941 Ballan-Daylesford Road, Korweinguboorra, 3461 | 14 | 47 Leonards Hill-South Bullarto Road, Leonards Hill 3461 |
| 6 | 2028 Ballan-Daylesford Road, Leonards Hill, 3461 | 16 | 64 Leonards Hill-South Bullarto Road, Leonards Hill 3461 |
| 7 | 2030 Ballan-Daylesford Road, Leonards Hill, 3461 | 17 | 63 Leonards Hill-South Bullarto Road, Leonards Hill 3461 |
| 8 | 850 Barkstead Road, Leonards Hill, 3461 | 18 | 76 Leonards Hill-South Bullarto Road, Leonards Hill 3461 |
| 9 | 80 Barkstead Road, Leonards Hill, 3461 | 19 | 2101 Ballan-Daylesford Road, Leonards Hill, 3461 |
| 10 | 2055 Ballan-Daylesford Road, Leonards Hill, 3461 | 31 | 840 Barkstead Road, Leonards Hill 3461 |

1.3 Screening options

The following plant species have been chosen as preferred screening options on the basis that they are characteristic of the native vegetation in the wider locality, and have properties that would make them suitable as screening options.

| Species | Example |
|--|--|
| <p>Manna Gum (<i>E. Viminalis</i>)</p> <p><i>Eucalyptus viminalis</i>, Manna Gum, also known as White Gum, Ribbon Gum or Viminalis is an Australian eucalypt.</p> <p>It is a straight erect tree, often around 40 metres tall, with rough bark on the trunk and base of larger branches, its upper bark peels away in long "ribbons" which can collect on the branches and surrounding ground.</p> |  |
| <p>Narrow-leaf Peppermint (<i>E. radiata</i>)</p> <p><i>Eucalyptus radiata</i> (Narrow-leaved peppermint) is a medium to tall tree to 30 m high (rarely 50m) with persistent bark on the trunk and larger branches or persistent to smaller branches. The bark shortly fibrous ("peppermint"), grey to grey-brown, shedding in long ribbons.</p> |  |
| <p>Silver Wattle (<i>Acacia dealbata</i>)</p> <p><i>Acacia dealbata</i> (Silver Wattle) is a species of Acacia, native to southeastern Australia in New South Wales, Victoria, Tasmania, and the Australian Capital Territory.</p> <p>It is a fast growing evergreen tree or shrub growing up to 30 m tall, typically a pioneer species after fire.</p> |  |

| | |
|--|--|
| <p>Narrow-leaf Wattle (<i>Acacia mucronata</i>)</p> <p>This is a fast growing, bushy wattle from eastern Tasmania, to 5m high by 4m wide, and most handsome. Yellow flowers in spring. Adapts to moist, well drained sites or dry situations.</p> |  |
| <p>Messmate (<i>E. obliqua</i>)</p> <p>It grows as a tree up to 90 metres tall, with a trunk up to three metres in diameter. It has a lignotuber, so burnt or coppiced trees sometimes recover in mallee form. It has thick, rough, stringy bark, and glossy green leaves.</p> |  |
| <p>Blackwood (<i>Acacia melanoxylon</i>)</p> <p>Moderately fast growing and hardy acacia common through out Victoria and elsewhere in Australia. Grows to trees of 3 up to 45m or shrubs 1.5 to 3m with cream flowers in late winter / spring.</p> |  |

Notwithstanding this list, Hepburn Renewable Energy Association will consider appropriate plant species proposed by landowners on a case by case basis.

1.4 Timeline for offer of screening

The offer of visual screening will be made prior to works commencing on site.

Acceptance of the offer can be made at any point up until 6 month post commissioning of the last turbine.

The preparation of visual screening plans shall be undertaken in two stages. Offers accepted prior to the commencement of construction will see the preparation of visual screening plans within two months of the commencement of construction, or during the next most appropriate time for planting.

Acceptance after the commencement of construction and before 6 months post commissioning of the last turbine will see the preparation of landscaping plans within two months of the end of the offer, or during the next most appropriate time for planting.

1.5 Draft letter

A draft written offer to landowners is attached to this plan as Appendix A. This draft written offer includes details of:

- The on-site landscaping already planned.
- An offer for visual screening at the landowners property that is valid for 6 months post commissioning of the last turbine.
- Details of the options that are available for visual screening.
- Instructions to the landowner detailing how they can accept the offer.

1.6 Off-site screening plans

Following the acceptance of an offer for offsite screening, the Hepburn Renewable Energy Association shall contact the landowner and outline the process required for the development of offsite screening plans in accordance with the following steps:

- Following the commencement of construction or the expiration of the six month period post commissioning of the last turbine, Hepburn Renewable Energy Association shall arrange a site visit to the landowners property to discuss visual screening options.
- Within four weeks of the site visit, a draft visual screening plan, including a schedule for planting and maintenance shall be forwarded to the landowner for approval.

- The landowner shall have two weeks in which to make any comments on the draft visual screening plan.
- Within two weeks of the period for landowner comment, Hepburn Renewable Energy Association shall finalise the visual screening plan. This shall include figures showing location and species of plantings together with a proposed timeline for planting and a maintenance program.
- A final copy of the plan shall be forwarded to the Hepburn Shire Council for endorsement.

1.7 Maintenance Schedule

The Planting will be designed, planned, implemented and managed by experienced landscaping professionals. Plantings will be scheduled and co-ordinated having regard to the most advantageous seasons. Trees will have appropriate protection against the potentially negative effects of the elements and interference from livestock. This will incorporate protection for individual trees as well as specific fencing as appropriate.

Trees will be inspected on a regular basis, at least every three months, to assess their ongoing health and requirements up to 12 months following planting.

Appendices

A Draft letter of offer

10 August 2010

John Smith
1886 Ballan-Daylesford Road
Korweinguboorra 3461 VIC

Dear Mr Smith

Hepburn Community Wind Farm - Offer of visual screening

As you may be aware, Leonards Hill Wind Operations Pty Ltd. has attained development approval for the installation of two wind turbine at 2040 Ballan-Daylesford Road, Leonards Hill (Leonards Hill Wind Farm).

As part of the conditions of approval by the Victorian Civil and Administrative Tribunal, and off-site landscape plan (condition 5) is required to be prepared and approved by the Hepburn Shire Council, as the responsible authority. This must include an offer of visual screening to all landowners within a one kilometre radius of any wind turbine, with the offer being open at any time up until six months after the commissioning of the last wind turbine.

As part of the proposed development, on-site landscape and visual screening shall include, visual screening of the hard stand area and the grid control booth from Ballan-Daylesford Road, and planting along the site perimeter to provide visual screening to dwellings #2, #3, #11, #12 and #19 (as defined in the Proposed Hepburn Community Wind Farm, Landscape and Visual Assessment Study by J Cleary 2006). This plan is included as Attachment A to this letter.

Our Offer

In accordance with condition 5 of Permit 2006/9231 from the Hepburn Shire Council, Leonards Hill Wind Operations Pty Ltd. is making you, as landowner of <insert property address> an offer of landscaping to act as visual screening of the wind turbines at 2040 Ballan-Daylesford Road, Leonards Hill.

We are aware that there are a variety of vegetation types and options to act as visual screening and as such we have included a list of appropriate native species that we believe would be best suited to this task. This list of species is included as Attachment B to this letter.

This offer for visual screening is valid for 6 months post commissioning of the last turbine, and your acceptance can be made at any point until this time.

The offer of visual screening will be made prior to works commencing on site.

The preparation of visual screening plans shall be undertaken in two stages. Offers accepted prior to the commencement of construction will see the preparation of visual screening plans within two months of the commencement of construction, or during the next most appropriate time for planting.

Acceptance after the commencement of construction and before 6 months post commissioning of the last turbine will see the preparation of landscaping plans within two months of the end of the offer, or during the next most appropriate time for planting.

Acceptance of the offer

Should you wish to accept this offer of visual screening, please complete and return the letter of acceptance included with this letter. A representative of Leonards Hill Wind Operations Pty Ltd. will then contact you to discuss your requirements in more detail.

Yours sincerely

Leonards Hill Wind Operations Pty Ltd.
Phone: 03
Email:

10 August 2010

The Chairman
Leonards Hill Wind Operations Pty Ltd
PO Box 225
Daylesford VIC 3460

Dear Chairman

Acceptance of visual screening offer

I wish to advise the Leonards Hill Wind Operations Pty Ltd that
I,.....wish to accept the offer of visual screening of the
Leonards Hill Wind Farm from the property at

Please contact us on the following phone number during business hours to discuss the project
(03)

Signed

.....

.....




.....

.....

Please Print Name

Attachment A – On-site landscaping plan

Attachment B – Species list

| Species | Example |
|--|--|
| <p>Manna Gum (<i>E. Viminalis</i>)</p> <p><i>Eucalyptus viminalis</i>, Manna Gum, also known as White Gum, Ribbon Gum or Viminalis is an Australian eucalypt.</p> <p>It is a straight erect tree, often around 40 metres tall, with rough bark on the trunk and base of larger branches, its upper bark peels away in long "ribbons" which can collect on the branches and surrounding ground.</p> |  |
| <p>Narrow-leaf Peppermint (<i>E.radiata</i>)</p> <p><i>Eucalyptus radiata</i> (Narrow-leaved peppermint) is a medium to tall tree to 30 m high (rarely 50m) with persistent bark on the trunk and larger branches or persistent to smaller branches. The bark shortly fibrous ("peppermint"), grey to grey-brown, shedding in long ribbons.</p> |  |
| <p>Silver Wattle (<i>Acacia dealbata</i>)</p> <p><i>Acacia dealbata</i> (Silver Wattle) is a species of Acacia, native to southeastern Australia in New South Wales, Victoria, Tasmania, and the Australian Capital Territory.</p> <p>It is a fast growing evergreen tree or shrub growing up to 30 m tall, typically a pioneer species after fire.</p> |  |

Narrow-leaf Wattle (*Acacia mucronata*)

This is a fast growing, bushy wattle from eastern Tasmania, to 5m high by 4m wide, and most handsome. Yellow flowers in spring. Adapts to moist, well drained sites or dry situations.



Messmate (*E. obliqua*)

Eucalyptus obliqua grows as a tree up to 90 metres tall, with a trunk up to three metres in diameter. It has a lignotuber, so burnt or coppiced trees sometimes recover in mallee form. It has thick, rough, stringy bark, and glossy green leaves.



Blackwood (*Acacia melanoxylon*)

Moderately fast growing and hardy acacia common through out Victoria and elsewhere in Australia. Grows to trees of 3 up to 45m or shrubs 1.5 to 3m with cream flowers in late winter / spring.



The information contained in this document has been carefully compiled but Hydro Tasmania Consulting takes no responsibility for any loss or liability of any kind suffered by any party, not being the intended recipient of this document, in reliance upon its contents whether arising from any error or inaccuracy in the information or any default, negligence or lack of care in relation to the preparation of the information in this document.



Hydro Tasmania
Consulting

Hepburn Community Wind Farm Bird and Bat Monitoring Plan

E301070 01

10 August 2010

Prepared by
Hydro-Electric Corporation
ARBN: 072 377 158
ABN: 48 072 377 158
t/a **Hydro Tasmania Consulting**
89 Cambridge Park Drive, Cambridge
Tasmania, Australia



LEADERS IN CONSULTABILITY

Document information

| | |
|---------------------|---------------------------------------|
| Title | Hepburn Community Wind Farm |
| | Bird and Bat Monitoring Plan |
| Client organisation | Leonards Hill Wind Operations Pty Ltd |
| Client contact | Brett Dutton |
| Document number | E301070 01 |
| Project manager | David Procter |
| Project reference | |

Revision history

Revision Final

| | | | |
|----------------------|--------------------|--|-----------|
| Revision description | | | |
| Prepared by | David Procter |  | 10/8/2010 |
| Reviewed by | Raymond Brereton |  | 10/8/2010 |
| Approved by | Julien Gaschignard |  | 10/8/2010 |
| | (name) | (signature) | (date) |
| Distributed to | Brett Dutton | Leonards Hill Wind Operations Pty Ltd | 10/8/2010 |
| | (name) | (organisation) | (date) |

The concepts and information contained in this document are the property of Hydro Tasmania Consulting. This document may only be used for the purposes, and upon the conditions, for which the report is supplied. Use or copying of this document in whole or in part for any other purpose without the written permission of Hydro Tasmania Consulting constitutes an infringement of copyright.

Contents

| | |
|--|-----------|
| 1. Introduction | 5 |
| 1.1 This document | 5 |
| 2. Overview of bird and bat site utilisation | 7 |
| 3. Pre-construction bat monitoring program | 9 |
| 3.1 Background | 9 |
| 3.2 Method | 10 |
| 3.2.1 Insectivorous bats | 10 |
| 3.2.2 Grey-headed Flying-fox | 10 |
| 3.3 Reporting | 11 |
| 4. Bird and bat strike monitoring | 13 |
| 4.1 Method | 13 |
| 4.1.1 Areas to be monitored | 13 |
| 4.1.2 Monitoring frequency | 13 |
| 4.1.3 Survey method | 15 |
| 4.1.4 Duration of monitoring | 15 |
| 4.1.5 Monitoring timetable | 15 |
| 4.1.6 Site hygiene | 15 |
| 5. Reporting | 17 |
| 5.1 Bird and bat collision reporting | 17 |
| 5.2 Threatened species collision reporting | 17 |
| 5.3 Bird and bat monitoring report | 18 |
| 6. Threatened species management and mitigation | 19 |
| 6.1 Mitigation trigger levels | 19 |
| 6.2 Management and mitigation procedures | 19 |
| 6.2.1 Desktop assessment | 19 |
| 6.2.2 Targeted Surveys | 20 |
| 6.2.3 Modify wind farm operations | 20 |

Appendices

A Bird and Bat Strike Reporting Form

List of figures

| | |
|--|----|
| Figure 4-1 Bird / bat strike monitoring search areas | 14 |
|--|----|

List of tables

| | |
|---|---|
| Table 1-1 Bird and bat monitoring permit condition and response | 5 |
| Table 2-1 Listed threatened birds and bats recorded from within 5 kilometres of the proposed wind farm site | 8 |

1. Introduction

The Hepburn Community Wind Farm is being developed by Leonards Hill Wind Operations Pty Ltd on behalf of Hepburn Wind. The proposed wind farm site is located at Leonards Hill approximately ten kilometres south of Daylesford in Victoria (refer Figure 4-1). The project received development approval from the Victorian Civil and Administrative Tribunal in July 2007, subject to compliance to conditions issued with Permit 2006/0321.

1.1 This document

Permit condition 8 requires that a bird and bat monitoring plan be prepared and approved by the Responsible Authority (Hepburn Shire Council). The plan is required to detail bird and bat monitoring and mitigation strategies that will be implemented at the proposed Hepburn Community Wind Farm. This document is submitted to fulfil these requirements.

Table 1-1 provides the complete text of Condition 8 and describes how the requirements of the permit condition are to be addressed.

Table 1-1
Bird and bat monitoring permit condition and response

| Permit Condition | How addressed |
|--|--------------------------|
| 8(a) A pre-construction monitoring program to monitor the presence and behaviour of bats on the site. The monitoring program is to be carried out by an independent fauna consultant. The program must specify that the following data be recorded and include provision for reporting of the data to the satisfaction of the Responsible Authority: <ul style="list-style-type: none">(i) The frequency and height of bat movements across the site(ii) Seasonal changes in bat movements(iii) The species involved and whether the species is identified as significant or threatened under the <i>Environmental Protection and Biodiversity Conservation Act</i> (1999) or the <i>Flora and Fauna Guarantee Act</i> (1988) | Section 3 of this report |

| Permit Condition | How addressed |
|---|---------------------------------|
| <p>8(b) A strategy for managing and mitigating bird and bat strike arising from the wind energy facility operation. The strategy must include:</p> <ul style="list-style-type: none"> (i) The areas required to be inspected (ii) The frequency of monitoring and inspections (iii) Scavenger management, for example, regular removal of carcasses likely to attract raptors to areas near generators and other measures to routinely control bird feed and prey. (iv) Recording and reporting requirements to the Responsible Authority. | Sections 4 and 5 of this report |
| <p>8(c) A procedure for addressing any significant impacts on bird and bat populations under the <i>Environmental Protection and Biodiversity Conservation Act</i> (1999) or the <i>Flora and Fauna Guarantee Act</i> (1988) caused by the wind energy facility operation. This procedure must provide that the operator of the wind energy facility immediately investigates the possible causes of any significant impacts on bird and bat populations, and thereafter must design and implement measures to mitigate those impacts in consultation with the Responsible Authority.</p> | Section 6 of this report |

2. Overview of bird and bat site utilisation

A fauna assessment was carried out at the Leonards Hill site by the Centre for Environmental Management (Ballarat University) in 2006. The assessment included a desktop investigation and site visit. The findings of the assessment indicated that:

- There is a low likelihood of any threatened species utilising the site primarily due to lack of suitable habitat.
- The geographical layout of the site is unlikely to concentrate or funnel birds or bats through the site.

Overall it was found that the proposed wind farm presented a low risk to birds and bats due to its small size and the poor habitat quality.

Table 2-1 lists threatened bird and bat species either recorded in the Atlas of Victorian Wildlife (5 kilometre search radius), (Centre for Environmental Management, 2006), identified in a search of the EPBC Protected Matters Database (accessed 16th July 2010) or identified in Greg Richards and Associates (specialist bat consultants) database. Those species listed as threatened under either the *Flora and Fauna Guarantee Act* (1988) or the *Environmental Protection and Biodiversity Conservation Act* (1999) are also identified.

Table 2-1
Listed threatened birds and bats recorded from within 5 kilometres of the proposed wind farm site

| Species (common name) | Conservation Category | |
|--|-----------------------|------------|
| | FFG Act | EPBC Act |
| <i>Ninox strenua</i> (powerful owl) | Listed | |
| <i>Anthochaera Phrygia</i> (regent honeyeater) | | Endangered |
| <i>Lathamus discolor</i> (swift parrot) | Listed | Endangered |
| <i>Rostratula australis</i> (Australian painted snipe) | | Vulnerable |
| <i>Haliaeetus leucogaster</i> (white-bellied sea-eagle) | Listed | Migratory |
| <i>Hirundapus caudacutus</i> (white-throated needletail) | | Migratory |
| <i>Merops ornatus</i> (rainbow bee-eater) | | Migratory |
| <i>Myiagra cyanoleuca</i> (satin flycatcher) | | Migratory |
| <i>Rhipidura rufifrons</i> (rufous fantail) | | Migratory |
| <i>Ardea alba</i> (great egret) | Listed | Migratory |
| <i>Ardea ibis</i> (cattle egret) | | Migratory |
| <i>Gallinago hardwickii</i> (Latham's snipe) | | Migratory |
| <i>Rostratula benghalensis s. lat.</i> (painted snipe) | Listed | Migratory |
| <i>Apus pacificus</i> (fork-tailed swift) | | Migratory |
| <i>Pteropus poliocephalus</i> (grey-headed flying fox) | Listed | Vulnerable |
| <i>Saccolaimus flaviventris</i> (yellow-bellied sheath-tail bat) | Listed | |
| <i>Miniopterus schreibersii</i> (eastern bentwing bat) | Listed | |

3. Pre-construction bat monitoring program

A pre-construction bat monitoring program will be undertaken at the Leonards Hill site. The monitoring program has been designed and will be directed by Dr Greg Richards, a recognised expert in bat survey and assessment.

3.1 Background

Although the two turbines are located in an open paddock, habitat that is usually considered to be poor for bats, the site and its environs are bounded by eucalypt forest which does provide suitable habitat. In addition to the threatened bat species identified in Table 2-1 the following species could potentially occur in or near the site, irrespective of habitat type, and have been used as a guide to designing the survey methodology.

Flying-foxes

- Little Red Flying Fox (*Pteropus scapulatus*)

Evening Bats

- Gould's Wattled Bat (*Chalinolobus gouldii*)
- Chocolate wattled Bat (*Chalinolobus morio*)
- Eastern Falsistrelle (*Falsistrellus tasmaniensis*)
- Large-footed Myotis (*Myotis macropus*)
- Lesser Longeared Bat (*Nyctophilus geoffroyi*)
- Gould's Longeared Bat (*Nyctophilus gouldi*)
- Inland Broadnosed Bat (*Scotorepens balstoni*)
- Large Forest Bat (*Vespadelus darlingtoni*)
- Southern Forest Bat (*Vespadelus regulus*)
- Little Forest Bat (*Vespadelus vulturnus*)

Freetail Bats

- White-striped Freetail Bat (*Austronomus australis*)

- Southern Freetail Bat (*Mormopterus planiceps*)

3.2 Method

A review of the species that could potentially occur on the site showed that all, apart from the *Pteropodidae* (the Flying-foxes), could be recorded using electronic bat call detectors because they were echolocating insectivorous bats.

3.2.1 Insectivorous bats

Bat calls will be recorded using automated Anabat recorders that will operate all night for 5 – 10 nights, depending upon battery life. Most bat species are easily identifiable from computer displays of zero-crossing analyses, apart from the two Longeared bats which are inseparable, and the Eastern Bentwing Bat, the calls of which are often difficult to separate from those of forest bats. To assist in the identification of this listed species, calls will also be recorded using a detector that produces sonograms that display harmonics.

Insectivorous bats will be sampled at locations selected to reflect differences in habitats. A minimum of four sampling sites will be located in the turbine area and at forest edges, with the view to assessing whether bats may be commuting across the site from one forest to another.

To establish whether there may be seasonal differences in bat community structure and potential movement patterns, sampling will be conducted in Spring and Summer 2010.

Information on the heights at which certain species of bats fly will be extrapolated from other studies in Victoria and NSW.

3.2.2 Grey-headed Flying-fox

It is very difficult to time surveys to coincide with the presence of flying-foxes, so it is intended to utilise local knowledge and records to gain an understanding of the utilisation of the site by flying-foxes. The community will be consulted through the membership of Hepburn Wind and local newspaper advertisements to gain an insight into the numbers that are seen, and the seasons when these animals are known to visit the area. In the event that insufficient information is able to be gathered or if responses show there is likely to be a large population of flying-foxes close to the site a further survey will be undertaken.

3.3 Reporting

The results of the pre-construction bat monitoring program will be presented to the Responsible Authority prior to the commencement of construction on site.

4. Bird and bat strike monitoring

A program to monitor bird and bat collisions with wind turbines will commence following the commissioning of the second wind turbine. The purpose of monitoring on site is to determine the impacts of the wind farm on bird and bat species that presently utilise the site and to help develop appropriate mitigation measures, if required.

No systematic monitoring of bird and bat collision will be undertaken during the construction of the wind farm for Operational Health and Safety reasons. However, the construction site will be checked regularly to determine if any birds or bats have collided with erected wind farm components. Checks will be undertaken by site personnel and overseen by the construction contractor's project manager.

A permit will be obtained from the Victorian Department of Sustainability and Environment (DSE) to hold or collect injured or dead native wildlife as part of the monitoring program. In addition to the method outlined below any additional conditions of a permit will be implemented.

4.1 Method

4.1.1 Areas to be monitored

Both turbines will be monitored for bird and bat collisions (refer Figure 4-1)

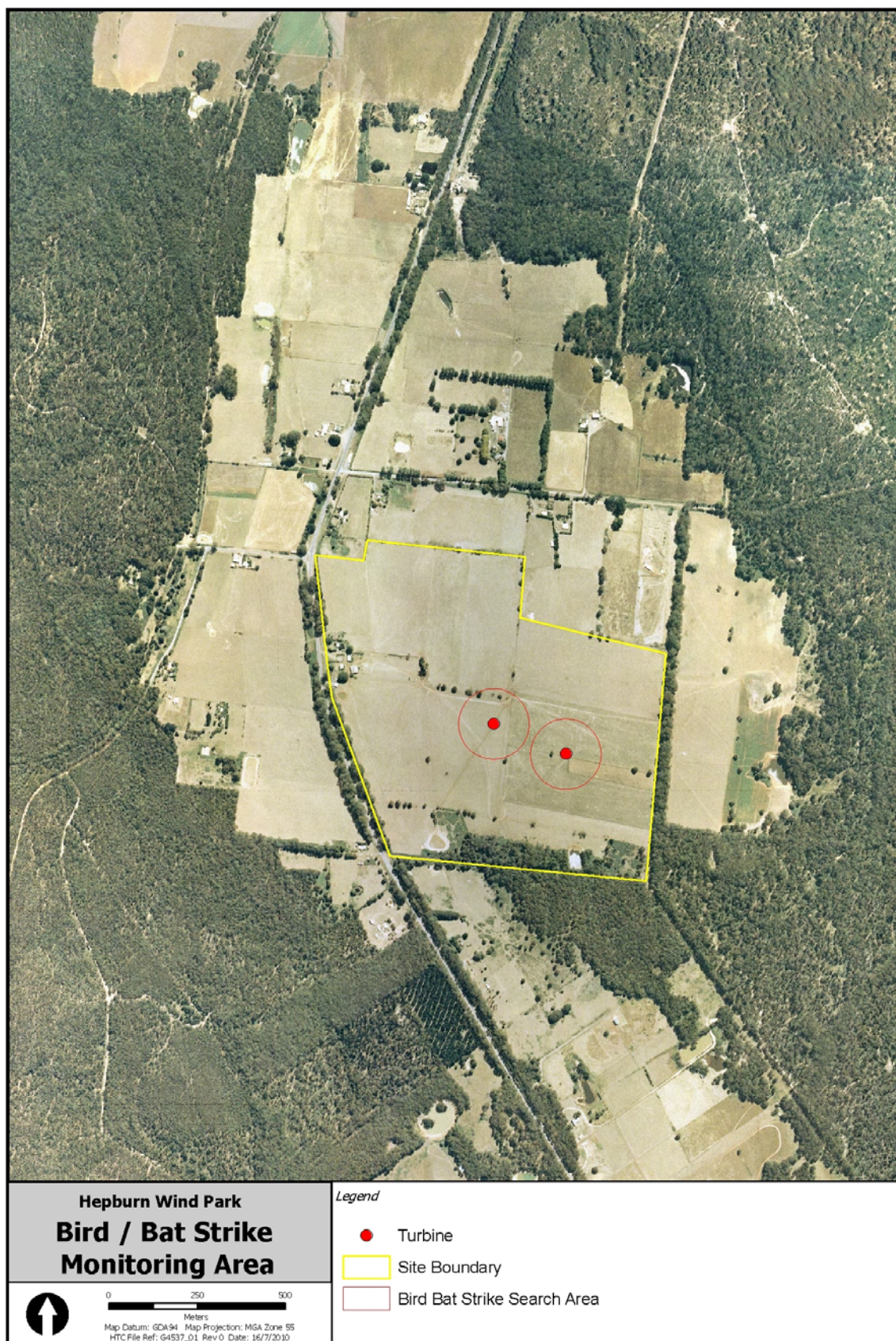
4.1.2 Monitoring frequency

The ongoing frequency of monitoring will be informed by the results of the first two months of monitoring.

Monitoring surveys will initially be conducted with the following frequency:

- Everyday for the first month post commissioning of the last turbine
- Every second day for the second month post commissioning of the last turbine
- Nominally twice per week for 10 months post commissioning of the last turbine dependent on results of the first two months of survey.

Figure 4-1
Bird / bat strike monitoring search areas



4.1.3 Survey method

- The survey area will include all areas within a radius of 100m from the base of each turbine (Hull & Muir, 2010)
- The survey area will be searched on foot and/or by using a slow moving vehicle
- All parts of any dead bird or bat will be collected, removed and disposed of in accordance with relevant permit requirements or advice from the DSE. Nominally all native bird and bat carcasses would be retained for a minimum of one month.
- Reporting of dead or injured native birds will be undertaken in accordance with Section 5 of this plan.

4.1.4 Duration of monitoring

The program to monitor bird and bat collisions with wind turbines will be implemented for a period of 12 months following the commissioning of the second turbine. At the completion of 12 months of post commissioning monitoring, results will be reviewed in consultation with the Responsible Authority and, if required, a further monitoring program will be implemented.

4.1.5 Monitoring timetable

| Phase | Frequency | Timing |
|-------------------------------------|---|---------------------------------|
| During construction / commissioning | The construction site will be checked regularly during construction | Duration of construction |
| Operation | Daily | First month post commissioning |
| Operation | Every second day | Second month post commissioning |
| Operation | Twice weekly | 10 months |

Data review

At the completion of post-commissioning monitoring results will be reviewed in consultation with the Responsible Authority

4.1.6 Site hygiene

In addition to the above all other carcasses, including dead stock, will be removed from site as soon as they are located to reduce scavenging by raptors. An agreement with the local landowner will be obtained to remove dead stock from the wind farm site as early as possible after its death

5. Reporting

5.1 Bird and bat collision reporting

Upon detection of evidence of a bird or bat collision, the following procedure will apply:

- Any dead or injured native birds or bats found will be reported to the Responsible Authority (**nominate person**) within 24 hours of their discovery by telephone (**insert phone number**).
- A Bird/Bat Strike Report Form (see Appendix B) will be submitted to the Responsible Authority within seven days of discovery of any dead or injured bird or bat. This report will include identification reference, description of evidence, species identification, sex and age (if known), location, photography of evidence and any other relevant information.

5.2 Threatened species collision reporting

Upon detection of evidence of a collision of a bird or bat listed as significant or threatened under the *Environmental Protection and Biodiversity Conservation Act* (1999) or the *Flora and Fauna Guarantee Act* (1988), (refer Table 2-1 for list of threatened species that may occur on site) the following procedure will apply:

- Any dead or injured birds or bats found will be reported to the Responsible Authority (**nominate person**) within 24 hours of their discovery by telephone (**insert phone number**).
- Injured birds or bats will be taken to a suitable veterinary service for examination.
- The decision to euthanize an injured bird or bat will be made on animal welfare grounds and the final decision to be made by the treating Veterinary Surgeon.
- A Bird/bat Strike Report Form (see Appendix B) will be submitted to the Responsible Authority within three days of discovery of any dead or injured bird or bat. This report will include identification reference, description of evidence, species identification, sex and age (if known), location, photography of evidence and any other relevant information.

5.3 Bird and bat monitoring report

A report will be submitted to the Responsible Authority within two months of the completion of 12 months of monitoring outlining the results of the bird and bat monitoring program. The report will include methods, results, analysis and interpretation of results and subsequent management actions and a recommendation as to whether or not future monitoring is required.

6. Threatened species management and mitigation

6.1 Mitigation trigger levels

Condition 8 of the planning permit requires that mitigation strategies be implemented if the results of the monitoring program show that the wind farm is having a significant impact on the population of threatened birds or bats. Ideally, to comply with this condition a trigger value would be assigned to each threatened species which, if exceeded, would result in the implementation of mitigation measures. However, this approach would require knowledge of the level of increased mortality, if any, the population of the species is able to withstand (i.e. the level above which the impact would be significant). It would also require wider assessment of the significance of the impact including consideration of the rarity of the species, the number of individuals affected and the geographic scale (local, regional, national etc) over which the affect is assessed.

The information outlined above is not available for the threatened bird and bat species likely to occur at Leonards Hill (see Table 2-1). Therefore the approach adopted in this plan is similar to others proposed for wind farms in Victoria and sets a threshold number which if exceeded triggers a mitigation process that aims to firstly define the significance of the mortality on the population and subsequently implement appropriate mitigation measures. The threshold limit adopted for the Hepburn Wind Farm will be:

- The death of two or more individuals of a bird or bat species listed under the FFG Act or the EPBC Act (refer to Table 2-1) resulting from collision with either wind turbine within any 12 month period.

6.2 Management and mitigation procedures

In the event that the threshold trigger level is exceeded a three stage mitigation process will be implemented starting with a desktop assessment, followed by targeted surveys which could result in a modification of the wind farm operation. The mitigation process is described below

6.2.1 Desktop assessment

The objective of the desktop assessment would be to assess the recorded mortality rate against available population data. It is intended that the desktop assessment would provide an opportunity to

gather detailed species specific information in order to make an informed assessment of the significance of the impact prior to initiating targeted surveys. The results of the desktop assessment would be presented to the Responsible Authority and a decision to proceed to a targeted survey or not be made in consultation with the Responsible Authority.

6.2.2 Targeted Surveys

Based on the findings of the desktop assessment a targeted survey may be initiated. The targeted survey would aim to gather data on the population size, habitat use and behaviour of the species affected to assess the consequences of the recorded impact on the population. The method for the targeted survey would be determined in consultation with the Responsible Authority. The targeted survey may involve one or more of the following activities:

- Site utilisation survey to provide information on utilisation of the site by the species and areas of highest activity.
- Further off site surveys to identify critical foraging or breeding habitat that may be located on or close to the site.
- Surveys else where in the range of the species to better assess population impacts.

6.2.3 Modify wind farm operations

Based on the results of the targeted survey a Mitigation and Management Plan may be produced that outlines measures that will be implemented to mitigate the risk to the species of concern. Mitigation measures would be implemented on a hierarchical basis focussing firstly on deterring the species from using the site followed by implementing offsite measures to mitigate the impact and finally modifying turbine operation. Any mitigation measure would be implemented in consultation with the Responsible Authority. Mitigation and / or management measures may include:

- investigation of known deterrents e.g. bird scanners
- on site habitat modification e.g. controlling water levels in dams to reduce site utilisation
- off site habitat protection and / or enhancement, particularly of breeding areas, to offset the increased mortality caused by the wind farm
- the development of a turbine management strategy.

References

Centre for Environmental Management 2006, *Leonards Hill Wind Park – Fauna Assessment*,
University of Ballarat, Ballarat, VIC

Hull, C and Muir, S 2010, *Search Areas for Monitoring Bird and Bat Carcasses at Wind Farms Using
a Monte-Carlo Model*, Australian Journal of Environmental Management, Volume 17 Number 2
June 2010 pp 77- 87.

Appendices

A Bird and Bat Strike Reporting Form

| Report No. | Date |
|------------|------|
| | |

Hepburn Community Wind Farm – Bird and Bat Strike Report Form

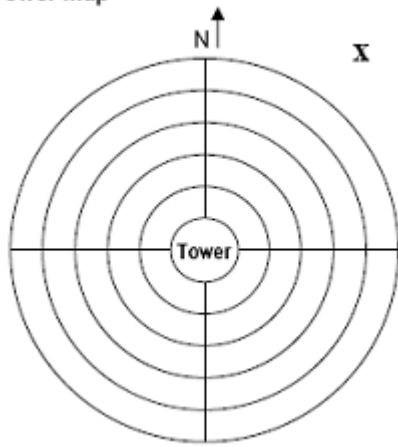
If a dead or injured bird or bat is found this form should be completed immediately and a copy emailed to **INSERT EMAIL**

Instructions

- Survey 100m radius from base of wind turbine
- Fill out this form for each dead or injured bird / bat found
- If feather spots are found ensure that all feathers are removed from the area before recording the details
- Collect and report all bird / bat remains and/or feather spots in accordance with the Bird and Bat Monitoring Plan
- Record any additional details in the comments section

| Turbine No: | Weather | Wind | Visibility | Event Type |
|-------------|----------------------------------|---------------------------------------|-------------------------------------|--|
| | Fine <input type="checkbox"/> | Calm <input type="checkbox"/> | Clear <input type="checkbox"/> | Dead bird/s <input type="checkbox"/> |
| Start Time: | Showers <input type="checkbox"/> | Light Breeze <input type="checkbox"/> | 30% Cloud <input type="checkbox"/> | Injured bird/s <input type="checkbox"/> |
| | Rain <input type="checkbox"/> | Moderate <input type="checkbox"/> | 60% Cloud <input type="checkbox"/> | Dead and Injured bird/s <input type="checkbox"/> |
| End Time: | Fog <input type="checkbox"/> | Strong <input type="checkbox"/> | 100% Cloud <input type="checkbox"/> | Feather Spots <input type="checkbox"/> |
| | | | | Dead bat/s <input type="checkbox"/> |
| | | | | Injured bat/s <input type="checkbox"/> |
| | | | | Dead and Injured bat/s <input type="checkbox"/> |

Tower map



Radius = 100m

Lines are at 20m Intervals

Place mark in appropriate sector of turbine map

Species:

Age:

| | |
|----------|--------------------------|
| Juvenile | <input type="checkbox"/> |
| Immature | <input type="checkbox"/> |
| Adult | <input type="checkbox"/> |
| Unknown | <input type="checkbox"/> |

Sex:

| | |
|---------|--------------------------|
| Male | <input type="checkbox"/> |
| Female | <input type="checkbox"/> |
| Unknown | <input type="checkbox"/> |

Distance from turbine (m):

Comments:

The information contained in this document has been carefully compiled but Hydro Tasmania Consulting takes no responsibility for any loss or liability of any kind suffered by any party, not being the intended recipient of this document, in reliance upon its contents whether arising from any error or inaccuracy in the information or any default, negligence or lack of care in relation to the preparation of the information in this document.



Leonards Hill Wind Operations Pty Ltd
Hepburn Community Wind Farm

Heritage Management Protection Plan

12 August 2010

Prepared by Future Energy Pty Ltd
on behalf of Hepburn Wind

| | |
|------------------------|--|
| Use and Development: | Hepburn Community Wind Farm |
| Address: | 2040 Ballan-Daylesford Road, Leonards Hill CA'S B1 & B4, SEC Y, LOT 1 TP000671N, CA B2, CA A1 & A2, SEC 3B |
| Planning Permit No: | 2006/9231 |
| Responsible Authority: | Hepburn Shire Council |
| Submitted for: | Leonards Hill Wind Operations Pty Ltd |
| Prepared by: | Hepburn Wind |
| Version date: | 12 August 2010 Revision 2 - FINAL |

Table of Contents

| | |
|---|----|
| 1. Background Information | 4 |
| 1.1. Purpose | 4 |
| 1.2. Activity Description | 4 |
| 1.3. Cultural Heritage Assessment | 8 |
| 2. Consultation | 9 |
| 3. Conditions of Planning Permit | 10 |
| Appendix 1 - Letter from Department Of Victorian Communities, Aboriginal Affairs Victoria. | |
| Appendix 2 - Archaeological Desktop Assessment | |
| Appendix 3 - Aboriginal Archaeological Subsurface Testing | |
| Appendix 4 - Map of RAP Applications pending in council..... | |

1. Background Information

1.1. Purpose

This Heritage Management Plan details the process by which Leonards Hill Wind Operations Pty Ltd (LHWO) will ensure the Hepburn Community Wind Farm will satisfy Permit Condition No. 9 a) through f) of the Development Approval No. 2006/9231 issued on 31 July 2007 by Hepburn Shire Council [signatory Christine Halstead, Team Leader Planning].

The condition is as follows:

Prior to the development commencing, a management plan addressing heritage protection must be prepared to the satisfaction of the Responsible Authority. When approved, the plan will be endorsed by the Responsible Authority. The heritage protection management plan must include (but is not limited to):

- a) A qualified archaeologist must be on-site during initial excavation works to identify any archaeological artefacts, and initiate measures for interim protection and reporting of any such objects or sites.
- b) Protocols for the control of construction activities, including the activities by contractors that have been identified to have potential effects on sites of cultural significance.
- c) Protocols for ongoing consultation with the relevant Aboriginal communities throughout the project, especially those relating to the detailed on-surface and sub-surface archaeological investigations, including maintaining confidentiality (where considered appropriate) of the locations of Aboriginal archaeological sites.
- d) Prior to disturbing any identified archaeological site, place or object, procedures for seeking and obtaining written consent of any identified Aboriginal local aboriginal community, as nominated for the purposes of Part 11A of the Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Commonwealth)
- e) Procedures providing appropriate workshops and training courses with contractors to protect all known sites of Aboriginal cultural heritage value.
- f) Protocols for protecting and reporting the discovery of any human remains in accordance with the requirements of the Victoria Police, the State Coroner's Office and Aboriginal Affairs Victoria.

1.2. Activity Description

The wind farm will be constructed, owned and operated by Leonards Hill Wind Operations Pty Ltd (LHWO). It will be situated on open, cleared grazing and cropping land situated 10 km south of Daylesford. The subject land is designated Farming Zone (FZ) under the Hepburn Shire Planning Scheme. The address of the subject land is 2040 Ballan – Daylesford Road, Leonards Hill and is owned by one landowner, R & N Liversidge Pty Ltd, as trustee for the R & N Liversidge Family Trust. [See Figure 1.1]

The land is described by the following legal titles:

- Certificate of Title Volume 9845 Folio 484
- Certificate of Title Volume 10172 Folio 201
- Certificate of Title Volume 10172 Folio 202
- Certificate of Title Volume 10172 Folio 203

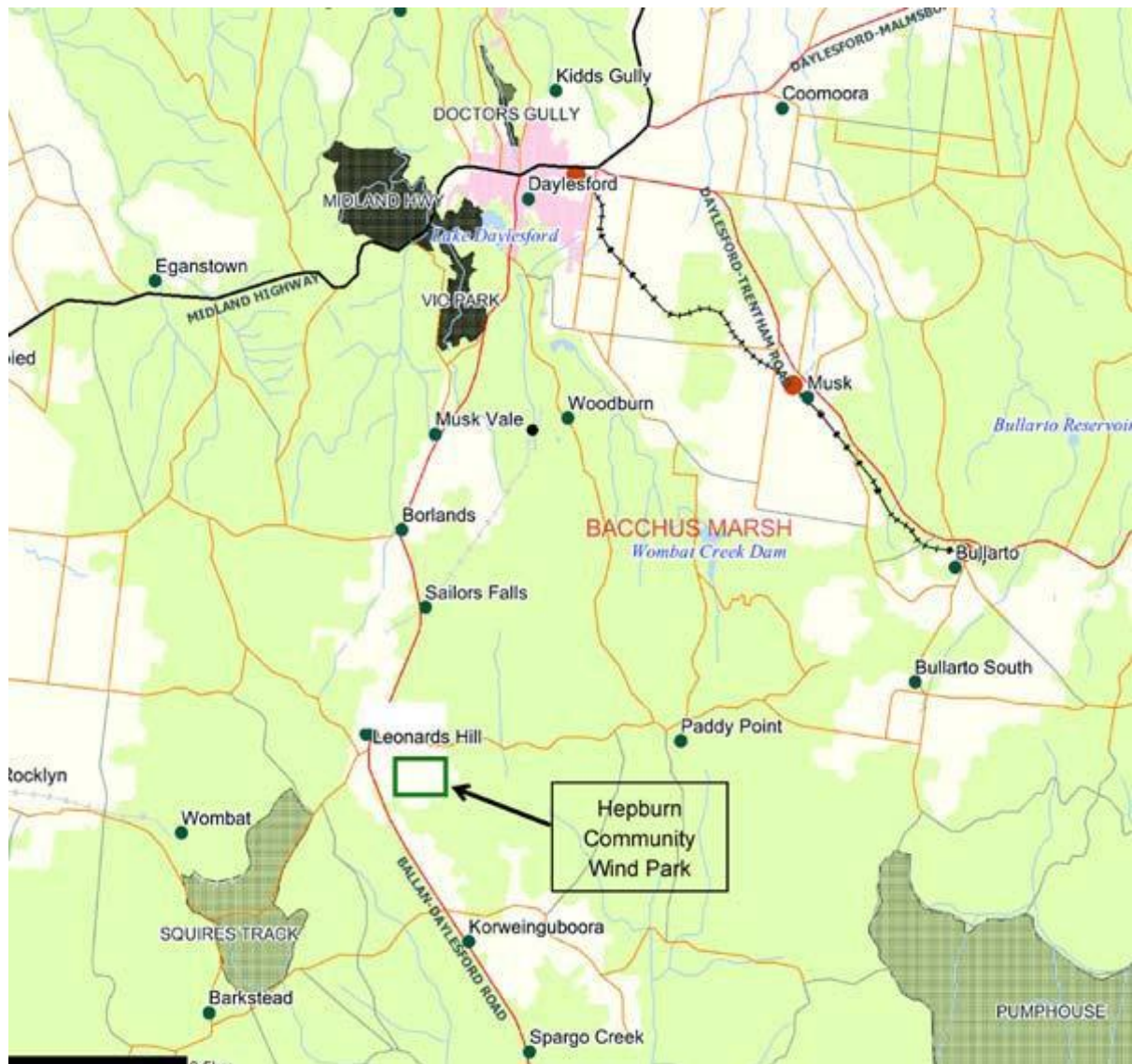


Figure 1.1 – Site location

The Wind Farm will consist of two Repower MM82 wind turbine generators. Each wind turbine generator will be mounted atop towers with a height of 68m and consist of three blades measuring 41m in length. The towers will have a diameter at the base of between approximately 4 and 5 metres and will taper to the top.

Concrete foundations will be required for each wind turbine. The foundations will be mass pad footings. This type of footing comprises a below ground-level concrete mass footing approximately 2.5 m deep and 12-15 metres in diameter. As shown in Figure 1.2 an access track will be constructed from the site entrance on the Ballan– Daylesford Road to the turbines. The track will be approximately 5m wide. This track will be used during the construction period and thereafter for maintenance vehicles to access each wind turbine.

The turbines will be connected to the local electricity grid via underground 22 kV cable. This underground cable will follow the route of the access track. The trench for the cables will measure approximately 300 mm wide and 600 mm deep and be dug alongside the access track. The layout of the access tracks can be seen in Figure 1.2.

Hard standing areas next to the base of each wind turbine will be used for turbine assembly during the construction of the Wind Park and will measure approximately 20 m by 40 m.

A small enclosed area housing metering and grid control equipment as well as maintenance facilities will be located alongside the point of connection into the electricity grid. This control booth or switchyard is shown in Figure 1.2

1.3. Cultural Heritage Assessment

An initial desktop Archaeological Assessment was completed by Terra Culture Pty Ltd [See Appendix 2]. The Assessment examined legislative requirements for cultural heritage sites, and assessed the likelihood of the site having significance in terms of European or Aboriginal archaeology.

It found that there were no Aboriginal or historical archaeological sites known to be on or within the vicinity of the subject land. However, given that there were several significant Aboriginal and historical archaeological sites elsewhere within the Hepburn Shire, it was recommended that a field survey and subsurface testing be undertaken on the subject land by a qualified archaeologist and an Aboriginal monitor.

The subsequent investigations were carried out by Terra Culture Pty Ltd on 3 August 2006 along with a Wurrundjeri representative, Mr Bill Nicholson. A representative from the Dja Dja Wurrung was also invited to attend the on-site investigations.

The field survey and sub-surface testing found no traces of either Aboriginal or European archaeological features or artefactual material. The final assessment including the results of the on-site investigations is provided in Appendix 3.

Under the Regulations of the Commonwealth *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*, the subject land site falls within the boundaries of the Wurrundjeri Tribe Land Compensation and Cultural Heritage Council Incorporated. However, it is noted that the location also falls within the traditional area of the Dja Dja Wurrung people. Refer to Appendix 1: Letter from Department of Victorian Communities, Aboriginal Affairs Victoria. At the present time, the area in which the wind farm is located is the subject of an Application for Registered Aboriginal Party (RAP) in accordance with The Victorian Aboriginal Heritage Act 2006. By both the Wurrundjeri Tribe Land Compensation and Cultural Heritage Council Incorporated and the Dja Dja Wurrung.

2. Consultation

Until the final determination of the current and pending RAP applications, the Wind Farm site falls under the area of the Wurrundjeri Tribe Land Compensation and Cultural Heritage Council Incorporated for statutory purposes. However the subject land also falls within the traditional area of the Dja Dja Wurrung people. During the project development the Dja Dja Wurrung were consulted. This included communication with Uncle Ricky Nelson, a respected elder of the Dja Dja Wurrung people. Uncle Ricky Nelson also accompanied the Project Developers on site for a half day visit. LHWO intends to continue to consult regularly with the local Aboriginal groups throughout the construction and operation phases of the wind farm.

3. Conditions of Planning Permit

9. a) A qualified archaeologist must be on-site during initial excavation works to identify any archaeological artefacts, and initiate measures for interim protection and reporting of any such objects or sites.

A qualified archaeologist will be present during initial excavation works to ensure any unexpected artefacts are correctly identified, and dealt with appropriately.

b) Protocols for the control of construction activities, including the activities by contractors that have been identified to have potential effects on sites of cultural significance.

As detailed in Section 1.3 and the Cultural Heritage Assessments prepared by Terra Culture included in Appendices 2 and 3 there are no known sites of cultural significance. Hepburn Wind will invite tribal representatives to be present at all ground breaking works where the first 300mm of soil are involved. An archaeologist will be present at all ground breaking works in any event as will a Hepburn Wind representative. In the event that a discovery is made of an artefact, or suspected artefact, the following protocol will be observed by contractors immediately involved in the discovery:

1. Stop work immediately at that location on the site.
2. Protect the find as best as possible until supervisor arrives.
3. The Contractors Site Manager and the Principals Representative will consult with the archaeologist and tribal representatives to determine if the suspected artefact is genuine.
4. If the find is confirmed as being of significance then:
 - a. Details of the find shall be recorded and a decision made to exhume or cover up. If it is to be removed then written permission must be received from the relevant cultural party.
 - b. Once all approvals are in place, the find shall be salvaged or covered up as required. It is not expected that any approvals are needed if the find is to be covered up.

c) Protocols for ongoing consultation with the relevant Aboriginal communities throughout the project, especially those relating to the detailed on-surface and sub-surface archaeological investigations, including maintaining confidentiality (where considered appropriate) of the locations of Aboriginal archaeological sites.

The Wind Park site falls under the area of the Wurrundjeri Tribe Land Compensation and Cultural Heritage Council Incorporated for statutory purposes. However the traditional landowners of the Wind Park site are the Dja Dja Wurrung people. The Wind Farm site is currently under application by both the Dja Dja Wurrung and Wurrundjeri for RAP (Registered Aboriginal Parties) status. As a result on the findings of the Cultural Heritage Assessments prepared by Terra Culture and included in Appendices 2 and 3, there are no further planned on-surface or sub-surface archaeological investigations prior to the works commencing. Notwithstanding the above, LHWO will consult regularly with these relevant Aboriginal communities which may include inviting each group to be present during initial excavation works.

d) Prior to disturbing any identified archaeological site, place or object, procedures for seeking and obtaining written consent of any identified Aboriginal local aboriginal community, as nominated for the purposes of Part 11A of the Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Commonwealth)

As detailed in Section 1.3 and the Cultural Heritage Assessments prepared by Terra Culture included in Appendices 2 and 3 there are no known sites of cultural significance. The procedures detailed in 9b) shall be used to gain consents in the event of a find of significance.

e) Procedures providing appropriate workshops and training courses with contractors to protect all known sites of Aboriginal cultural heritage value.

As detailed in Section 1.3 and the Cultural Heritage Assessments prepared by Terra Culture included in Appendices 2 and 3 there are no known sites of cultural significance. Notwithstanding this, all personnel who enter the site will undergo a site induction which will detail the procedure to be taken in the event of a suspected find of significance.

f) Protocols for protecting and reporting the discovery of any human remains in accordance with the requirements of the Victoria Police, the State Coroner's Office and Aboriginal Affairs Victoria.

Suspected human remains

In the event any suspected human remains are found during any activity, works will cease.

The Victoria Police and the State Coroner's Office will be notified immediately by the Site Manager.

If there are reasonable grounds to believe that the remains are Aboriginal, the Site Manager will immediately contact the Department of Sustainability and Environment's Emergency Coordination Centre on 1300 888 544.

Upon discovery of any suspected human remains the steps below will be followed.

1. Discovery

- If suspected human remains are discovered, the Site Manager will ensure all activity in the vicinity will stop to ensure minimal damage is caused to the remains; and,
- The Site Manager will ensure the remains are left in place, and protected from harm or damage.

2. Notification

- The Site Manager will immediately notify LHWO of all details relating to the discovery.
- LHWO will notify the Coroner's Office and the Victoria Police immediately;
- If there is reasonable grounds to believe that the remains could be Aboriginal, LHWO will immediately notify the DSE Emergency Co-ordination on 1300 888 544; and
- LHWO will provide the contacted authorities with the location and nature of the human remains.
- If it is confirmed by these authorities that the discovered remains are Aboriginal skeletal remains, LHWO will report the existence of the human remains to the Secretary, DPCD in accordance with s.17 of the Act.

3. Impact Mitigation or Salvage

- The Secretary, after taking reasonable steps to consult with any Aboriginal person or body with an interest in the Aboriginal human remains, will determine the appropriate course of action as required by s.18(2)(b) of the Act;
- After receipt of the determination from the Secretary of DPCD, LHWO will implement an appropriate impact mitigation or salvage strategy as determined by the Secretary of DPCD.

4. Curation and further analysis

- LHWO will ensure the treatment of the salvaged Aboriginal human remains are in accordance with the direction of the Secretary, DPCD.

5. Reburial

- LHWO will ensure any reburial site(s) are fully documented by an experienced and qualified archaeologist, and clearly marked with all details provided to AAV;
- LHWO will implement appropriate management measures to ensure that the remains are not disturbed in the future.



Department for Victorian Communities

AAV/00865/2

1 Spring Street
Melbourne Victoria 3000
GPO 2392V
Melbourne Victoria 3001
Telephone: (03) 9208 3333
Facsimile: (03) 9208 3680
www.dvc.vic.gov.au

23 October 2006

Mr David Schapero
Future Energy P/L
PO Box 2007
RICHMOND VIC 3121

Dear Mr Schapero

HEPBURN WIND ENERGY FARM, LEONARDS HILL – ABORIGINAL ORGANISATIONS

As discussed, the responsible organisation for the area of the proposed Hepburn Wind Energy Farm at Leonards Hill, for the purposes of the Commonwealth *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*, is the Wurundjeri Tribe and Land Compensation Cultural Heritage Council Inc.

Please note that the Ballarat and District Aboriginal Co-operative Ltd has no responsibilities in this location under the Commonwealth act.

The location also falls with the traditional area of the Dja Dja Wrung (Jaara Jaara) people. As such they may have interests in any Aboriginal cultural heritage issues that may arise concerning the location. Information on Aboriginal interests relating to the project area may be obtained by contacting Mr Russell Smith, Northwest Regional Cultural Heritage Program, on (03) 5442 4947.

Yours sincerely

MATTHEW PHELAN
Heritage Registrar
Aboriginal Affairs Victoria

ARCHAEOLOGICAL DESKTOP ASSESSMENT OF THE PROPOSED HEPBURN COMMUNITY WINDFARM

A **Letter Report** prepared for *Future Energy*

Chris Kaskadanis

July 2006

TerraCulture Pty Ltd
Suite 3/83 Station Street
Fairfield VIC 3078

This Report is Produced on 100% Recycled Paper

INTRODUCTION

This letter report is a brief archaeological desktop assessment of the proposed Hepburn Community Windfarm located approximately 10km south of Daylesford. The subject land is bounded by South Bullarto-Leonards Hill Road to the north and Daylesford-Ballan Road/Sailors Creek Road to the east (MAP 1). The aim of this letter report is to provide a review of the landforms within the Hepburn Shire, and to determine if there are any known sites in or close to the subject land. A search of the relevant heritage registers: *Aboriginal Affairs Victoria* and *Heritage Victoria* has revealed that although there are several significant Aboriginal and Historic sites located within the Hepburn Shire, there are no known sites located on or within the vicinity of the subject land.

LEGISLATIVE PROTECTION FOR CULTURAL HERITAGE SITES

All heritage legislation is subordinate to the Coroner's Act 1985 in relation to the discovery of human remains.

Victoria has both State and Commonwealth legislation providing protection for Aboriginal cultural heritage. With the exception of human remains interred after the year 1834, the *State Archaeological and Aboriginal Relics Preservation Act 1972* provides blanket protection for all material relating to the past Aboriginal occupation of Australia, both before and after European occupation. This includes individual artefacts, scatters of stone tools, rock art sites, ancient camp sites, human burials, trees with slabs of bark removed (for the manufacture of canoes, shelters, etc.) and ruins and archaeological deposits associated with Aboriginal missions or reserves. The Act also establishes administrative procedures for archaeological investigations and the mandatory reporting of the discovery of Aboriginal sites. Aboriginal Affairs Victoria (AAV) administers the *Archaeological and Aboriginal Relics Preservation Act 1972*.

In 1987, Part IIA of the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* was introduced by the Commonwealth Government to provide protection for Aboriginal cultural property in Victoria. Immediately after enactment, the Commonwealth delegated the powers and responsibilities set out in Part IIA to the Victorian Minister Responsible for Aboriginal Affairs. The legislation is administered on a day-to-day basis by AAV.

The Commonwealth Act prohibits anyone from defacing, damaging, interfering with or endangering an Aboriginal place unless the prior consent of the local Aboriginal community has been obtained in writing. The Schedule to the Act lists local Aboriginal communities and each community's area is defined in the Regulations so that the whole of Victoria is covered. Further information on the State and Commonwealth legislation protecting Aboriginal heritage in Victoria and the role of Aboriginal Affairs Victoria (AAV) Heritage Services Branch can be obtained from:

Aboriginal Affairs Victoria
Heritage Services Branch
PO Box 515
East Melbourne Vic 3002
Phone: (03) 9616 2923

ABORIGINAL COMMUNITY

Under the Regulations of the Commonwealth *Aboriginal and Torres Strait Islander Heritage Protection Act* 1984, the study area falls within the boundaries of the *Wurundjeri* Tribe Land Compensation and Cultural Heritage Council Incorporated (*Wurundjeri* for short). Under the heritage legislation, the *Wurundjeri* are the **statutory authority** for Aboriginal cultural heritage sites in the study areas. The boundary of the *Wurundjeri* is defined in detail in the *Aboriginal and Torres Strait Islander Heritage Protection Regulations* 1984 Statutory Rules 1984 No. 176 as amended (Schedule 4 – Community areas in relation to local Aboriginal communities in Victoria) (see Appendix for relevant extracted pages from the Act). The *Wurundjeri* boundary is described as “Area 23” in pages 72 – 82 of the Act. They can be contacted at:

Megan Goulding
Interim C.E.O.
Wurundjeri Tribe Land Compensation
& Cultural Heritage Council Incorporated
PO Box 516, Carlton North, Victoria
Phone: (03) 9388 2561

At the same time, as the subject land is in close proximity to the boundary of the Ballarat and District Aboriginal Co-operative Ltd, this community may also have an interest in any cultural heritage issues. This community is described as “Area 1” in pages 13 – 17 of the Act (see Appendix). Technically, *Wurundjeri* should be contacted first, although, in personal communication with Megan Goulding (Thursday 13th July 2006), she recommended that the proponent should also contact the Ballarat and District Aboriginal Co-operative Ltd as this Aboriginal community has a vested interest in the region. The Ballarat and District Aboriginal Co-operative Ltd can be contacted at:

Ballarat and District Aboriginal Co-operative Ltd
5 Market Street
Ballarat Vic 3350
PO Box 643
Ph: (03) 5331 5344

GEOMORPHOLOGY

The subject land falls within a geological sub-division of the ‘West Victorian Uplands’ known as the ‘Dissected Uplands’. This region extends from Ballarat and Gisborne in the south to Bendigo and St. Arnaud in the north (Cochrane *et al.* 1991:70). The geomorphology of the area is comprised of Lower Palaeozoic Granodiorite and Folded Sandstone and Shales. Essentially, these landforms consist of basaltic flows and river alluvium (Cochrane *et al.* 1991:70). This region provided rich resources for Aboriginal subsistence strategies in the way of wooded environments, swamps, waterways and lagoons, and stone quarries. In addition, such landforms have been subject to extensive gold mining throughout the mid-1850s and early-1900s.

ABORIGINAL ARCHAEOLOGY

At the time of European occupation there were at least sixteen clans within the *Djadja wurrung* Language Group. Essentially, these clans were comprised of extended family groups of around 10 to 30 individuals, and spoke a slightly variable dialect of the *Djadja wurrung* language (Cockbill and Clark 2000:17). According to Clark (1990:153), the area around Daylesford was occupied in the 19th Century by the clan named as *Munal gundidj*.

Ethnographic observations described the *Djadja wurrung* as a powerful 'tribe' and that a source of stone within their 'country' was procured for making axes (Parker in Morrison 1971:22; see also Massola 1973).

A 15km-radius search of Aboriginal cultural heritage places at *Aboriginal Affairs Victoria* around Daylesford located 27 registered places (Pre- and Post-Contact). Most of these sites are located north of Daylesford. Site types include: Artefact Scatters, Aboriginal Places, Earth Features, Stone Features, Quarries, Scarred Trees, and Burials/Human Remains. A further 10km-radius search around Sailors Falls found no archaeological sites, and none on the subject land.

HISTORICAL ARCHAEOLOGY

An extensive statewide study of historic gold mining was conducted by the Department of Natural Resources and Environment (DNRE) (1999). This study identified 48 sites (41 Heritage Inventory, 7 Heritage Register) located within the *Hepburn (and Daylesford) Mining District* that are related to *shallow alluvial mining* (shaft sinking, puddling, sluicing and dredging); *deap lead mining* (tunneling and shaft sinking); *quartz reefing* (tunneling, shaft sinking and open cutting); and, the re-treatment of ore through chlorination and cyaniding. No Historical sites are known to be on or within the vicinity of the subject land.

RECOMMENDATIONS

In light of the results, there are several significant Aboriginal and Historical archaeological sites located within the Hepburn Shire; therefore, there is the potential for archaeological material to be found within the boundaries of the subject land. The recommendation is that a field survey be undertaken on the subject land by a qualified archaeologist and an Aboriginal monitor, targeting areas of disturbance or erosion that may reveal archaeological features and artefactual material.

REFERENCES

Clark, I.D. 1990.

Aboriginal Languages and Clans: An Historical Atlas of Western and Central Victoria, 1800 – 1900. Monash Publications in Geography No. 37. Melbourne: Monash University.

Cochrane, G.W., Quick, G.W. and Spencer-Jones, D. (1991).

Introducing Victorian Geology. Melbourne: Geological Society of Australia Incorporated (Victorian Division).

Cockbill, J. and Clark, N. 2000.

Aboriginal Cultural Heritage Survey. Golden Spring, Argyle Spring, Tipperary Spring, Hepburn Regional Park, Daylesford. A report to Parks Victoria. Clarkeology Pty Ltd.

Department of Natural Resources & Environment (1999).

Historic Gold Mining Sites in Hepburn Mining Division. Victorian Goldfields Project. Report on Cultural Heritage. Draft April 1999.

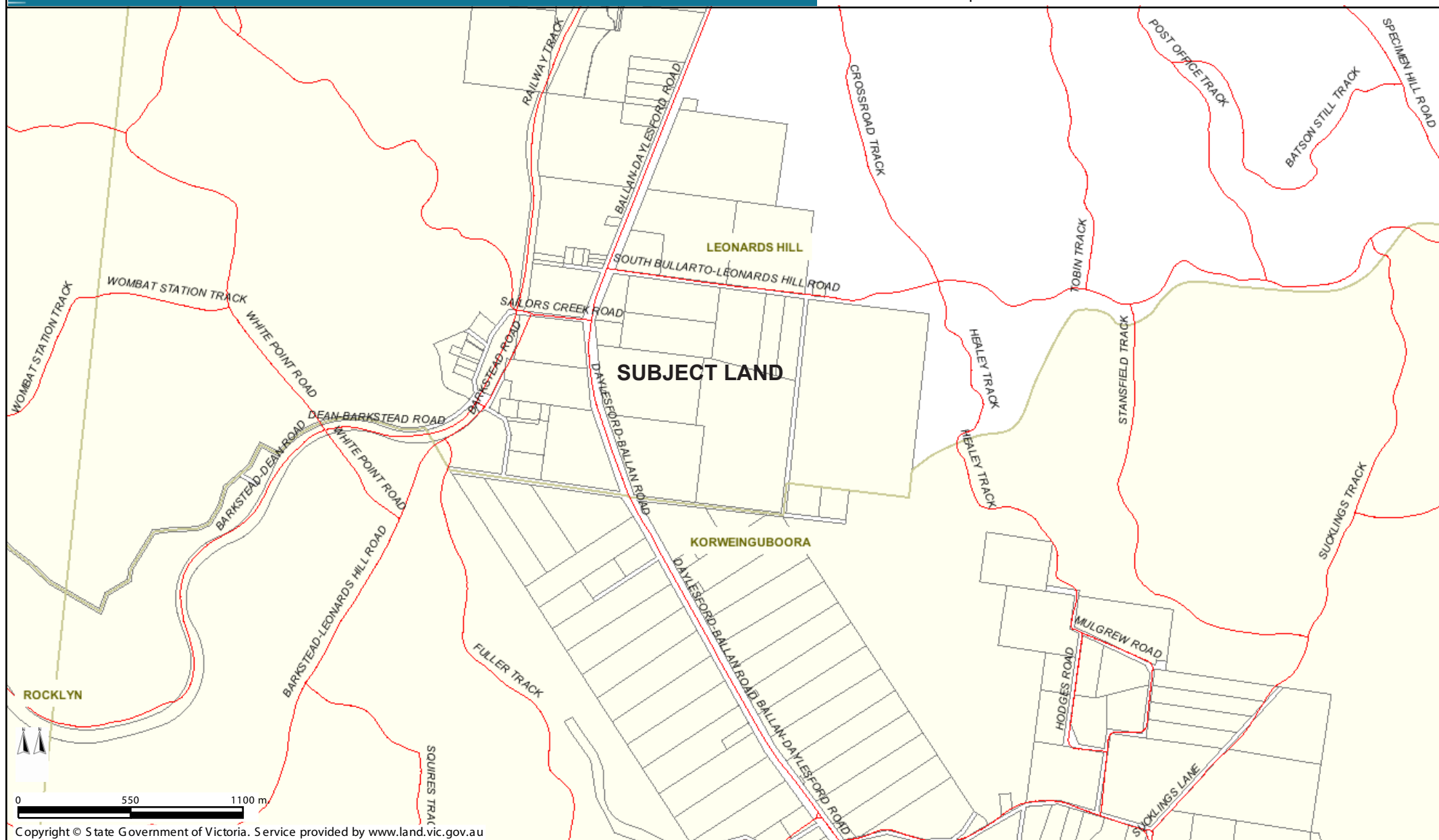
Morrison, E. 1971.

The Loddon Aborigines. Published by the author, Melbourne.

Parker, E.S. 1854.

The Aborigines of Australia. A lectured delivered in the Mechanics Hall, Melbourne before the John Knox Mens' Association, Wednesday 10 May 1854. Printed and published by Hugh McColl, Melbourne.

MAPS



Copyright © State Government of Victoria. Service provided by www.land.vic.gov.au

Map 1 Location of the Proposed Hepburn Community Wind Farm

Scale 1:25,000

Printed: May 25, 2006

Appendix



Aboriginal and Torres Strait Islander Heritage Protection Regulations 1984

Statutory Rules 1984 No. 176 as amended

made under the

*Aboriginal and Torres Strait Islander Heritage Protection
Act 1984*

This compilation was prepared on 1 July 2004
taking into account amendments up to SR 2004 No. 176

Prepared by the Office of Legislative Drafting,
Attorney-General's Department, Canberra

Schedule 4 Community areas in relation to local Aboriginal communities in Victoria

(regulation 3A)

COMMUNITY AREAS IN RELATION TO LOCAL ABORIGINAL COMMUNITIES IN VICTORIA

Notes

1. The community area boundaries described in this Schedule are represented graphically in a computer-based map of the State of Victoria. The map is maintained by the office of the Minister responsible for Aboriginal Affairs (Victoria) in Melbourne. Printed maps may be viewed at that office on written request.
2. In the following descriptions:
 - (a) all references to local government areas and boundaries are to those that existed before 1993, when a major program of local government reform was introduced in Victoria; and
 - (b) 'kms' means kilometres; and
 - (c) all bearings are measured clockwise from true north.

AREA 1: BALLARAT AND DISTRICT ABORIGINAL CO-OPERATIVE LTD.

The boundary of Area 1 begins in Kyneton at the junction of the Calder Highway and Ebdon Street and continues progressively:

- north-westerly along the Calder Highway to its junction in Malmsbury with the Malmsbury-Daylesford Road
- south-westerly along that road to its junction with the Drummond Vaughan Road

-
- generally westerly then northerly along that road through the township of Glenluce to its junction with the Vaughan Springs Road
 - generally westerly and north-westerly along that road through the townships of Vaughan and Yapeen to its junction with the Midland Highway
 - southerly along that highway for approximately 2.5 kms to its junction with the Newstead-Guildford Road in Guildford
 - generally west-north-westerly along that road to its junction with the Daylesford-Newstead Road in Strangways
 - north-westerly along that road to its junction with the Pyrenees Highway in Newstead
 - generally west-north-westerly along that highway to its junction with the Bendigo-Maryborough Road in Maryborough
 - north-north-easterly along that road to its junction with the Maryborough-Dunolly Road in Havelock
 - north-north-westerly along that road through the township of Bet Bet to Dunolly where it becomes the Dunolly-Moliagul Road at its junction with the Bridgewater-Dunolly Road
 - generally north-westerly along the Dunolly-Moliagul Road through the township of Inkerman to its junction with the Bendigo-St Arnaud Road in Moliagul
 - generally north-westerly and then westerly along that road to its junction with the Sunraysia Highway in St Arnaud
 - north-westerly along that highway for approximately 800 metres to its junction with the Wimmera Highway
 - south-westerly along that highway to its junction with the Ararat-St Arnaud Road in Moolerr

-
- generally southerly along that road, through Navarre township, to its junction with the Pyrenees Highway
 - south-westerly along that highway to its junction with the Western Highway in Ararat
 - easterly along that highway for approximately 4 kms to its junction with the Geelong Road
 - south-easterly along that road, past Ballyrogan and across the Eurambeen-Streatham Road, to its junction with the Beaufort-Carranballac Road at approximately E.700720 N.5844120
 - southerly, westerly, south-westerly and again southerly along that road to its junction with the Mount William Road
 - generally south-easterly along that road to its junction with the Skipton Road approximately 1 kilometre north-west of Skipton township
 - south-easterly along that road to the Glenelg Highway
 - easterly along that highway for approximately 1 kilometre to its junction with the Skipton-Rokewood-Geelong Road
 - south-easterly along that road to its junction with the Cressy Road approximately 1.2 kms east of the bridge over the Woady Yaloak River at Pitfield
 - southerly along that road and the Werneth Main Road to Werneth
 - south-easterly along the Cressy-Werneth Road to its junction with the Colac-Ballarat Road
 - generally northerly along that road through Rokewood and Dereel to its junction with the Buninyong Shire-Leigh Shire boundary
 - easterly along that boundary to its junction with the Buninyong Shire-Bannockburn Shire boundary at the Yarrowee River

-
- easterly along that boundary to its junction with the Meredith-Mt Mercer Road
 - southerly and then easterly along that road to its junction with the Midland Highway at Meredith
 - northerly along that highway for approximately 0.5 kms to its junction with the Ballan-Meredith Road
 - northerly along that road for approximately 0.4 kms to its junction with the Meredith-Durridwarrah Road
 - east-north-easterly along that road to its junction with the Geelong-Ballan Road at Durridwarrah
 - south-easterly along that road to its junction with the Staughton Vale Road
 - northerly along that road to its junction with the Bacchus Marsh-Balliang Road
 - northerly along that road to its junction with the Geelong-Bacchus Marsh Road
 - northerly along that road to its junction with the Bacchus Marsh-Gisborne Road
 - northerly along that road to its junction with Carrolls Road at Bullengarook
 - along that road to its junction with Firth Road
 - generally north-westerly along that road and the Trentham-Bullengarook Road to Trentham
 - generally south-westerly along the Greendale-Trentham Road to its junction with the Ballan Shire-Kyneton Shire boundary

-
- generally westerly along that boundary to its junction with Daylesford and Glenlyon Shire boundary
 - westerly along that boundary to its junction with the Ballan-Daylesford Road, approximately 1.2 kms south of Leonards Hill
 - northerly along that road to its junction with the Midland Highway in Daylesford
 - north-easterly along that highway for approximately 2.2 kms to its junction with the Malmsbury-Daylesford Road
 - north-easterly along that road to its junction in the township of Denver with the road to Spring Hill
 - generally south-easterly along that road to the settlement of Spring Hill
 - on a direct 58° bearing north-east from the eastern boundary of that settlement to the junction of the Calder Highway and the Redesdale Kyneton Road in Kyneton, to the point where the boundary began.

AREA 1A: BANGERANG CULTURAL CENTRE CO-OPERATIVE LTD

Part A: The boundary of the Bangerang Cultural Centre being Lot 1 of Crown Allotments 79A and 80B, Parish of Shepparton, County of Moira and being the land in Certificate of Title Volume 8910 Folio 987.

Part B: The boundary of Part B of Area 1A begins at the junction of Omeo Creek and the Murray River, approximately 600 metres north of Tom Groggin Station homestead, and continues progressively:

- west-south-westerly to the summit of Mt Pinnibar
- south-south-westerly to the summit of Mt Gibbo

**AREA 23: WURUNDJERI TRIBE LAND COMPENSATION AND
CULTURAL HERITAGE COUNCIL INCORPORATED**

Part A: The Coranderrk Aboriginal Cemetery, approximately 3 kms south of Healesville at approximately E.368100 N.5827700, in the Parish of Gracedale, County of Evelyn, containing 2656 square metres and shown hatched and cross-hatched in Schedule 2 to the **Aboriginal Lands Act 1991** (Victoria).

Part B: The former Army School of Health, approximately 2 kms south of Healesville at approximately E.369700 N.5828600, being Crown Allotments 119A, 121, 123 and part of Crown Allotments 120 and 122, Parish of Gracedale, County of Evelyn, and being the balance of land in Certificate of Title Volume 10115 Folio 942.

Part C: With the exclusion of the Camp Jungai property, which is surrounded by the community area of the Wurundjeri Tribe Land Compensation and Cultural Heritage Council Incorporated, approximately 3 kms north-north-west of Rubicon township at approximately E.397700 N.5870850, being the land in Certificate of Title Volume 9707 Folio 404 and noted on the Current Record Plan of Banyarmbite (B735), the boundary of Part C of Area 23 begins at the point where the Princes Freeway crosses the Bunyip River approximately 1 km west of Longwarry North, and continues progressively:

- westerly along that freeway until it becomes the Princes Highway
- westerly along that highway, through Pakenham and Berwick townships, to its junction with Heatherton Road in Dandenong
- due south from that junction for approximately 750 metres to the point where Joffre Street crosses Yarraman Creek
- generally southerly along Yarraman Creek to its junction with Mile Creek
- generally southerly along Mile Creek to its junction with Dandenong Creek
- generally southerly along Dandenong Creek to its junction with Mordialloc Creek

-
- generally westerly along Mordialloc Creek to the southern point of the mouth of the Creek on the coast of Port Phillip Bay
 - south-westerly to the low water mark on the northern tip of the north-western island of the Mud Island group
 - north-north-westerly from the Mud Island group to the southern point of the mouth of the Werribee River
 - generally north-westerly along the mid-line of that river to the eastern end of the Melton Reservoir
 - generally north-westerly along the northern shore of that reservoir to its western end
 - generally westerly along the Werribee River to where it is crossed by the Geelong-Bacchus Marsh Road
 - northerly along that road to its junction with the Bacchus Marsh-Gisborne Road in Bacchus Marsh
 - northerly along that road to its junction with Carrolls Road in Bullengarook
 - along that road to its junction with Firth Road
 - generally north-westerly along that road and the Trentham-Bullengarook Road to Trentham
 - generally south-westerly along the Greendale-Trentham Road to its junction with the Ballan Shire-Kyneton Shire boundary
 - generally westerly along that boundary to its junction with the Ballan Shire-Daylesford and Glenlyon Shire boundary
 - westerly along that boundary to its junction with the Ballan-Daylesford Road, approximately 1.2 kms south of Leonards Hill
 - northerly along that road to its junction with the Midland Highway in Daylesford
 - north-easterly along that highway for approximately 2.2 kms to its junction with the Malmsbury-Daylesford Road

-
- north-easterly along that road to its junction with the road to Spring Hill in the township of Denver
 - generally south-easterly along that road to the settlement of Spring Hill
 - 58° north-east from the eastern boundary of that settlement to the junction of the Calder Highway and Ebden Street in Kyneton
 - northerly along Ebden Street, which becomes the Redesdale Road, to its junction on the northern boundary of Kyneton township with the road to Pipers Creek
 - easterly along that road to its junction with the Kyneton-Baynton Road
 - north-easterly along that road to its junction with the road to Sidonia and the road to Pastoria East
 - easterly along the Kyneton-Baynton Road through Pastoria East
 - generally north-easterly along that road to Baynton
 - generally easterly along the road to Emu Flat
 - generally easterly along the road to Pyalong
 - easterly along the road to Glenaroua
 - generally east-north-easterly along the road to Tallarook to its junction with the road to Hilddene, approximately 6.5 kms west of Tallarook
 - north-easterly along that road to its junction with the Seymour-Tooborac Road
 - easterly along that road to its junction with the Hume Freeway
 - southerly along that freeway to its junction with the road from Glenaroua to Tallarook
 - south-easterly along that road to its junction with the Upper Goulburn Road in Tallarook

-
- easterly along that road to its junction with the Goulburn Valley Highway in Trawool township
 - north-westerly along that highway to its junction with the Highlands Road in Seymour
 - easterly along that road to its junction with the Hughes Creek Road
 - generally north-easterly along that road to the settlement of Tarcombe
 - generally north-north-easterly along the Ponkeen Creek Road to its junction with the Longwood-Gobur Road approximately 4 kms south-east of Old Longwood
 - generally easterly then south-easterly along that road to its junction with the Creightons Creek Road approximately 1.7 kms south of Creightons Creek township
 - northerly along that road through Creightons Creek to its junction with the Longwood-Mansfield Road approximately 5.5 kms north of that township
 - easterly along that road to its junction with the Euroa-Mansfield Road
 - north-easterly from that junction to the northern boundary of the settlement of Sheans Creek on the Euroa-Strathbogie Road
 - northerly along Baileys Road to its junction with the Faithfuls Creek-Sheans Gully Road
 - generally north-easterly then northerly along that road to its junction with Dunnings Road
 - north-easterly along that road to its junction with the Balmattum Road
 - north-easterly along that road to its junction with McClellan Lane
 - north-north-westerly along that lane to its termination on the south side of the Hume Freeway road reservation

-
- north-north-westerly to the Hume Freeway at approximately 2.3 kms south-west of the Harrys Creek Road bridge
 - north-easterly along that freeway to where it diverges from the line of the Hume Highway approximately 1.5 kms south-west of Baddaginnie
 - north-easterly along the route of that highway to Baddaginnie township
 - north-easterly along the Baddaginnie-Benalla Road for approximately 1 km to its junction with Kelleher Road
 - southerly along that road to its junction with the Warrenbayne Road
 - southerly and then south-easterly along that road, which becomes the Swanpool-Warrenbayne Road after crossing the Benalla-Warrenbayne Road, to its junction with the Midland Highway
 - southerly along that highway for approximately 1.8 kms to its junction with the Lima Road
 - southerly along that road through Lima to its junction with the Swanpool-Lima Road
 - easterly along that road to its junction with the Midland Highway
 - northerly along that highway for approximately 700 metres to its junction with the Swanpool Road
 - easterly along that road to Moorngag
 - generally southerly through Samaria via Samaria Road, which connects with Sawyer Road
 - easterly along that road to its junction with the Tatong-Tolmie Road in Wrightley
 - generally southerly and south-easterly along the Tatong-Tolmie Road to its junction with the Mansfield-Whitfield Road in Toombullup

-
- south-westerly along that road for approximately 3.7 kms to its junction with the Spring Creek Road
 - south-easterly along that road to its junction with the Old Tolmie Road in Tolmie township
 - south-westerly along that road, through Barwite to its junction with Graves Road
 - south-westerly along that road to its junction with the Mansfield-Mount Buller Road
 - westerly for approximately 1.2 kms along that road to its junction with the Mansfield-Woods Point Road
 - generally southerly along that road to its junction with the Jamieson-Licola Road in Jamieson township
 - generally south-easterly along the Jamieson-Licola Road for approximately 40 kms to its junction with the Barkly River Jeep Track, approximately 1 km south-east of Mt Skene
 - south-south-easterly to the summit of Mt Shillinglaw
 - south-south-westerly to the summit of Mt Singleton
 - south-westerly for approximately 3.5 kms to the Walhalla Road at approximately E.443800 N.5835300
 - southerly along that road, through the townships of Walhalla and Erica, to its junction with the Old Sale Road in Moe
 - easterly along that road for approximately 500 metres to where it crosses Narracan Creek
 - southerly along that creek to where it is crossed by the Moe-Thorpdale Road between Coalville and Narracan
 - southerly along that road through Narracan and Narracan East to its junction with the Morwell-Thorpdale Road
 - westerly along that road to the main crossroads in Thorpdale
 - southerly along the Mirboo North-Thorpdale Road to Mirboo North

-
- generally north-westerly along the Grand Ridge Road to its junction with the Leongatha-Mirboo Road
 - south-westerly along that road to its junction with the Leongatha-Yarragon Road
 - generally northerly along the Leongatha-Yarragon Road to its junction with the Princes Highway
 - generally northerly along the Yarragon-Shady Creek Road to its junction with the Warragul Shire-Narracan Shire boundary at approximately E.415150 N.5782200, approximately 4 kms east-south-east of Buln Buln East
 - northerly along that boundary to its junction with the Buln Buln Shire boundary
 - north-easterly then northerly along the Buln Buln Shire-Narracan Shire boundary to its junction with Shady Creek at approximately E.416200 N.5789300, approximately 2.3 kms north-north-east of the summit of Springsure Hill
 - generally north-westerly along that creek to where it is crossed by the Neerim East Road
 - generally northerly then north-westerly along that road to its junction with the Main Neerim Road
 - northerly along that road to its junction with the Yarra Junction-Noojee Road
 - easterly along that road to its junction with the Mount Baw Baw Road and the Loch Valley Road in Noojee
 - generally northerly along the Loch Valley Road to its junction with the Toorongo Road
 - generally easterly and north-easterly along the Toorongo Road, through the settlements of Loch Valley, Toorongo and Myrree, to the junction of that road and the Nine Mile Road
 - northerly along that road to its junction with the Warburton-Woods Point Road

-
- easterly along that road to its junction with the Mansfield-Woods Point Road in Matlock
 - generally northerly along that road to the northern boundary of Gaffneys Creek township
 - north-westerly to the southern boundary of Enoch Point township
 - north-north-westerly along the Enoch Point Road to its junction with the Eildon-Jamieson Road
 - generally westerly along that road to its junction with Dry Creek Road approximately 3.1 kms east-north-east of the summit of Mount Torbreck
 - west-north-westerly from that junction to the southern boundary of Rubicon township
 - north-westerly through that township along the Rubicon Road to its junction with the Taggerty-Thornton Road
 - generally south-westerly and westerly along that road to where it crosses the Maroondah Highway in Taggerty township
 - northerly along that highway for approximately 100 metres to where it crosses the Acheron River
 - northerly along the mid-line of that river to its junction with Connelly Creek
 - southerly along that creek for approximately 500 metres to where it is crossed by the Maroondah Highway, approximately 200 metres north of the Acheron township boundary
 - southerly along that highway to its junction with the Connelly Creek Road
 - westerly then south-westerly along that road for approximately 9.3 kms to its junction with the Crystal Creek Road at approximately E.381850 N.5868070
 - generally north-westerly along that road for approximately 9.5 kms to its junction with the Link Road at approximately E.378000 N.5875070

-
- generally westerly along that road to its junction with the Black Range Road
 - generally northerly along that road to its junction with the Scrubby Creek Road
 - northerly along that road to its junction with the Whanregarwen Road, approximately 40 metres south-east of where Whanregarwen Road crosses Scrubby Creek
 - south-westerly from that junction to the junction of Langs Road and the Limestone Road at approximately E.366450 N.5876700 in the settlement of Limestone
 - north-westerly along that road through Cheviot to its junction with the Goulburn Valley Highway approximately 1.6 kms east of Yea
 - westerly along that highway through Yea to its junction with the Whittlesea-Yea Road
 - generally south-westerly along that road through Flowerdale and Kinglake West to its junction with the Wallan-Whittlesea Road in Whittlesea
 - north-westerly along that road for approximately 1 km to its junction with the Glenburnie Road
 - westerly along that road through Eden Park to its junction with the Broadford-Epping Road approximately 850 metres south of Merriang
 - southerly along that road, through Woodstock where it becomes the Epping Road
 - southerly along that road to its junction with Rufus Street in Epping
 - easterly and north-easterly along that street to its junction with Greenbrook Drive
 - north-easterly along that drive to its junction with McDonalds Road

-
- easterly along that road to its junction with the Plenty Road and Gorge Road in Morang South
 - easterly along Gorge Road to where it crosses the Plenty River and becomes Kurrak Road
 - generally easterly along that road to its junction with the Yan Yean Road
 - southerly along that road to its junction with the Diamond Creek Road
 - generally easterly along that road to where it crosses Diamond Creek
 - southerly along that creek to where it is crossed by Main Road in Eltham
 - south-westerly along that road approximately 550 metres to its junction with Fitzsimons Lane
 - southerly along that lane to its junction with Anderson Street, Porter Street and Williamsons Road in Templestowe
 - southerly along Williamsons Road to its junction with Doncaster Road
 - easterly along that road to where it becomes Mitcham Road
 - south-easterly along that road to its junction with the Maroondah Highway
 - generally north-easterly along that highway to its junction with Dorset Road
 - southerly along that road to its junction with the Burwood Highway
 - easterly along that highway to its junction with the Mount Dandenong Tourist Road and Monbulk Road
 - east-south-easterly along Monbulk Road to its junction with the Belgrave-Gembrook Road in Belgrave
 - generally east-south-easterly along that road to its junction with the Beaconsfield-Emerald Road in Emerald

-
- generally south-south-easterly along that road approximately 6.2 kms to its junction with the Bourkes Creek Road
 - easterly and then south-easterly along that road to its junction with the Healesville-Koo-wee-rup Road in Pakenham Upper
 - generally northerly along that road approximately 800 metres to its junction with the Gembrook Road
 - generally north-north-easterly along that road to its junction with the Beenak East Road in Gembrook
 - easterly then northerly along that road to its junction with the Back Creek Road at Whites Corner
 - east-south-easterly for approximately 100 metres to an upper tributary of Back Creek at approximately E.375730 N.5800400
 - generally easterly along Back Creek to its junction with the Bunyip River
 - southerly along the Bunyip River to where it is crossed by the Princes Freeway approximately 1 km west of Longwarry North, at the point where the boundary began.

AREA 24: YORTA YORTA NATION ABORIGINAL CORPORATION

The boundary of Area 24 begins at the junction of the Murray River and the Yarran Creek on Gunbower Island, at approximately E.251600 N.6041330, and continues progressively:

- generally south-easterly then northerly then easterly upstream along the Victoria-New South Wales border to the eastern tip of Lake Mulwala, at approximately E.426150 N.6011200
- west-north-westerly to the Murray Valley Highway at approximately E.424500 N.6011600
- generally westerly along that highway to its junction with the Waaia-Bearii Road
- southerly along that road to its junction with the Nathalia-Katamatite Road

ABORIGINAL ARCHAEOLOGICAL SUBSURFACE TESTING

Proposed Hepburn Community Wind Park



A Final Report prepared for
FutureEnergy Pty Ltd

September 2006



Heritage Consultants
Suite 3, 83 Station Street
FAIRFIELD MELBOURNE 3078

Phone: (03) 9486 4524 Fax: (03) 9481 2078

ABORIGINAL ARCHAEOLOGICAL SUBSURFACE TESTING:
Proposed Hepburn Community Wind Park

A **Final Report** prepared for *Future Energy Pty Ltd*

Chris Kaskadanis

September 2006

TerraCulture Pty Ltd
Suite 3/83 Station Street
Fairfield Victoria 3078

This report is prepared on 100% recycled paper

Acknowledgements

TerraCulture Pty Ltd would like to thank the following people for their assistance with this project:

| | |
|--------------------|--|
| Megan Goulding | <i>Wurundjeri</i> Tribe Land & Compensation Cultural Heritage Council Incorporated |
| Bill Nicholson | <i>Wurundjeri</i> Tribe Land & Compensation Cultural Heritage Council Incorporated |
| David C.G. Shapero | Future Energy Pty Ltd |
| Matthew Phelan | Aboriginal Affairs Victoria |

The following TerraCulture staff produced this report:

| | |
|------------------|---|
| Chris Kaskadanis | Background, Consultation, Fieldwork, Report Writing |
| Richard Marshall | Fieldwork Assistant |
| Paul Bazalicki | Mapping |
| Catherine Webb | Editing |

Contents

| | |
|--|----|
| Acknowledgements | i |
| Contents | ii |
| | |
| 1.0 INTRODUCTION | 1 |
| 1.1 Background | 1 |
| 1.2 Aims and Principles of Subsurface Testing..... | 1 |
| 1.3 The Current Report..... | 1 |
| 1.4 Aboriginal Affairs Victoria (AAV)..... | 2 |
| 1.5 Aboriginal Community Consultation..... | 2 |
| 1.6 Aboriginal Perspective | 3 |
| 2.0 LEGISLATIVE PROTECTION FOR CULTURAL HERITAGE SITES | 4 |
| 2.1 State and Commonwealth Aboriginal Heritage Legislation | 4 |
| 2.1.1 Summary of the <i>Aboriginal Heritage Act 2006</i> | 5 |
| 2.1.2 Commonwealth Legislation | 7 |
| 3.0 ABORIGINAL BACKGROUND | 10 |
| 3.1 Dja Dja Wurrung | 10 |
| 3.2 Hunting and Gathering | 10 |
| 4.0 ARCHAEOLOGICAL SUBSURFACE TESTING | 11 |
| 4.1 Personnel..... | 11 |
| 4.2 Description of Areas Tested..... | 11 |
| 4.3 General Methods and Recording..... | 11 |
| 5.0 RESULTS | 12 |
| 5.1 Turbine Area 1 | 12 |
| 5.2 Turbine Area 2 | 12 |
| 5.3 Aboriginal Community Views..... | 13 |
| 6.0 MANAGEMENT RECOMMENDATIONS | 14 |
| 6.1 Aboriginal Archaeology..... | 14 |
| | |
| BIBLIOGRAPHY | 15 |
| | |
| MAPS | 16 |
| PLATES | 20 |
| | |
| APPENDIX A – AAV Correspondence | 23 |
| APPENDIX B – Excavation Permit | 25 |

1.0 INTRODUCTION

1.1 *Background*

TerraCulture Pty Ltd was commissioned by Future Energy Pty Ltd to conduct archaeological subsurface testing of the proposed Hepburn community wind park located approximately 10km south of Daylesford (Map 1). Two wind turbines are proposed to be constructed on Leonards Hill, adjacent to Ballan-Daylesford Road (Map 2). Based upon the fact that there are several significant Aboriginal and Historical archaeological sites located within the Hepburn Shire; there is the potential for archaeological material to be located subsurface.

In a brief desktop assessment presented to Future Energy Pty Ltd in July 2006, TerraCulture Pty Ltd recommended archaeological subsurface testing of the two proposed wind turbine areas. A field survey was considered to be inappropriate as surface visibility (pasture grasses) is poor and the land will be disturbed through the construction of the turbines. The recommendation was to conduct subsurface testing in the way of systematic shovel probes in the two proposed turbine areas by a suitably qualified archaeologist and a representative of the *Wurundjeri* Council. Under the Regulations of the Commonwealth *Aboriginal and Torres Strait Islander Heritage Protection Act* 1984, the study area falls within the boundaries of the *Wurundjeri* Tribe Land Compensation and Cultural Heritage Council Incorporated (*Wurundjeri* for short), and is therefore the Statutory Authority in Leonards Hill.

TerraCulture Pty Ltd requested a Letter of Support from the *Wurundjeri* Council for a subsurface testing permit application; in turn, an Excavation Permit was issued by Aboriginal Affairs Victoria (Appendices A and B). Although the subject land is in close proximity to the boundary of the Ballarat and District Aboriginal Co-operative Ltd, there is no need for the proponent to contact this Aboriginal community regarding any cultural heritage issues in the study area (Map 2).

1.2 *Aims and Principles of Subsurface Testing*

Generally, subsurface testing is in no way intended to map the entirety of archaeological material associated with any one location, be this a registerable archaeological site, natural landform, or potential area of sensitivity - however defined. Underlying this methodology is a number of basic archaeological field procedures, including;

- Identifying landform types that are more sensitive than others
- Sampling the archaeology to get *an indication* of its form and integrity
- Testing predictive models that may be relevant for an area or particular landform type

For this investigation, the aim of the subsurface testing was, through a systematic sampling strategy, to gain an indication of the number and importance of artefacts at the excavated sites, hence adding to our understanding of the sites.

1.3 *The Current Report*

This report is an Aboriginal archaeological assessment of the study area and focuses only on the results of the shovel-probe subsurface testing of the two proposed wind turbine areas as recommended by TerraCulture in July 2006. It is a statutory requirement that copies of an archaeological consultant's report be lodged with the responsible State heritage agencies and with the relevant Aboriginal communities.

Copies of the report will be sent to:

- Future Energy Pty Ltd
- *Wurundjeri* Tribe Land Compensation & Cultural Heritage Council Incorporated
- *Dja Dja Wurrung* Native Title Claimant Group
- North West Region Aboriginal Cultural Heritage
- Aboriginal Affairs Victoria

1.4 Aboriginal Affairs Victoria (AAV)

AAV Heritage Services Branch is the State Government body that administers the Commonwealth and State Legislation that serves to protect Aboriginal heritage in Victoria. This heritage includes archaeological sites, artefact collections and places of cultural significance.

1.5 Aboriginal Community Consultation

Under the Regulations of the Commonwealth *Aboriginal and Torres Strait Islander Heritage Protection Act* 1984, the study area falls within the boundaries of the *Wurundjeri* Tribe Land Compensation and Cultural Heritage Council Incorporated (*Wurundjeri* for short). Under the heritage legislation, this organisation represents the Aboriginal owners and custodians of Aboriginal cultural heritage sites in the Leonards Hill area.

The *Aboriginal and Torres Strait Islander Heritage Protection Act* 1984 recognises a cultural significance to artefacts, sites and places, distinct from an assessment based on scientific values. As the statutory authority the *Wurundjeri* have their own views on the importance of individual archaeological sites or areas as being generally sensitive for Aboriginal heritage materials. The *Wurundjeri* Tribe Land Compensation & Cultural Heritage Council Incorporated. They can be contacted at:

Wurundjeri Tribe Land Compensation
& Cultural Heritage Council Incorporated
P.O Box 516, North Carlton, 3054
Phone: (03) 9388 2561

In addition, the study area falls within the boundaries of the Bendigo *Dja Dja Wurrung* Aboriginal Association Incorporated. However, this organisation has not been operating, and since late 2002, powers regarding Aboriginal cultural heritage matters in this area have been the responsibility of the Victorian Minister for Aboriginal Affairs in Victoria, via the North West Region Aboriginal Cultural Heritage Program (NWRACH). As the traditional landowners are the *Dja Dja Wurrung*, it was recommended that the proponent extend an invitation to attend fieldwork as a matter of courtesy. We understand this invitation was extended. NWRACH can be contacted on:

North West Regional Cultural Heritage Program
231 Campbell Street
Swan Hill Vic. 3585
Ph: (03) 5033 0666

Although the subject land is in close proximity to the boundary of the Ballarat and District Aboriginal Co-operative Ltd, according to the AAV Heritage Registrar, this community does not have any interest in the area from a statutory or traditional viewpoint. Therefore, there is

no need for the proponent to contact the Ballarat and District Aboriginal Co-operative Ltd on matters regarding cultural heritage in the study area.

1.6 *Aboriginal Perspective*

The *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* recognises a cultural significance to artefacts, sites and places, distinct from an assessment based on scientific values. The Aboriginal groups with an interest in the area have their own views on the importance of individual archaeological sites or areas as being generally sensitive for Aboriginal heritage materials. This report focuses on the scientific values but records any views expressed by the Aboriginal representatives during this investigation.

2.0 LEGISLATIVE PROTECTION FOR CULTURAL HERITAGE SITES

All heritage legislation is subordinate to the Coroner's Act 1985 in relation to the discovery of human remains.

2.1 State and Commonwealth Aboriginal Heritage Legislation

Victoria has both State and Commonwealth legislation providing protection for Aboriginal cultural heritage. With the exception of human remains interred after the year 1834, the State *Archaeological and Aboriginal Relics Preservation Act 1972* provides blanket protection for all material relating to the past Aboriginal occupation of Victoria, both before and after European occupation. This includes individual artefacts, scatters of stone tools, rock art sites, ancient camp sites, human burials, trees with slabs of bark removed (for the manufacture of canoes, shelters, etc.) and ruins and archaeological deposits associated with Aboriginal missions or reserves. The Act also establishes administrative procedures for archaeological investigations and the mandatory reporting of the discovery of Aboriginal sites. Aboriginal Affairs Victoria (AAV) administers the *Archaeological and Aboriginal Relics Preservation Act 1972*.

In 1987, Part IIA of the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* was introduced by the Commonwealth Government to provide protection for Aboriginal cultural property in Victoria. Immediately after enactment, the Commonwealth delegated the powers and responsibilities set out in Part IIA to the Victorian Minister Responsible for Aboriginal Affairs. Currently, the Hon. Gavin Jennings holds this delegation, and the legislation is administered on a day-to-day basis by AAV.

Whereas the State Act provides legal protection for all the physical evidence of past Aboriginal occupation, the Commonwealth Act deals with Aboriginal cultural property in a wider sense. Such cultural property includes any places, objects and folklore that 'are of particular significance to Aboriginals in accordance with Aboriginal tradition'. Again, there is no cut-off date and the Act may apply to contemporary Aboriginal property as well as ancient sites. The Commonwealth Act takes precedence over State cultural heritage legislation where there is conflict. In most cases, Aboriginal archaeological sites registered under the State Act will also be Aboriginal places subject to the provisions of the Commonwealth Act.

The Commonwealth Act prohibits anyone from defacing, damaging, interfering with or endangering an Aboriginal place unless the prior consent of the local Aboriginal community has been obtained in writing. The Schedule to the Act lists local Aboriginal communities and each community's area is defined in the Regulations so that the whole of Victoria is covered.

Leonards Hill is in the community area of the *Wurundjeri* Tribe and Land Compensation and Cultural Heritage Council Incorporated. They can be contacted at;

Megan Goulding
Interim CEO
Wurundjeri Tribe Land Compensation and Cultural Heritage Council Inc.
P.O. Box 516
North Carlton 3054

Further information on the State and Commonwealth legislation protecting Aboriginal heritage in Victoria and the role of Aboriginal Affairs Victoria (AAV) Heritage Services Branch can be obtained from:

Aboriginal Affairs Victoria
Heritage Services Branch
GPO 2392V
Melbourne Victoria 3001
Ph: (03) 9208 3333

2.1.1 Summary of the *Aboriginal Heritage Act 2006*

The Victorian Parliament enacted a new Aboriginal Heritage Act in May 2006. This bill will replace both the current state Archaeological and Aboriginal Relics Preservation Act 1972 and the federal *Aboriginal and Torres Strait Islander Heritage Protection Act 1984 Part IIA* in relation to Aboriginal cultural heritage in Victoria. It is expected to come into force over the following 12 months as the enabling regulations are developed.

Aboriginal Heritage Council

The Act establishes an Aboriginal Heritage Council to, amongst other things, advise the Minister in regard to cultural heritage matters and to register Aboriginal parties with a cultural heritage interest in an area.

Registered Aboriginal Parties

The registered Aboriginal Parties replace the Aboriginal Communities under the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984 Part IIA* and may:

- Evaluate and approve or refuse to approve cultural heritage management plans that relate to the area for which the party is registered;
- Enter into cultural heritage agreements;
- Apply for interim and ongoing protection declarations; and
- Carry out any other functions conferred under this act.

More than one Registered Aboriginal Party may be registered for an area except where native title has been determined to exist, when the native title holder is the only registered party allowed.

Cultural Heritage Permits

A cultural heritage permit is required for various actions in relation to Aboriginal cultural heritage and must be referred to any Registered Aboriginal Party for the area. The party has 30 days to advise the Secretary in writing whether they object or agree to the granting of the permit and under what conditions they agree. The Secretary shall not grant the permit if a registered Aboriginal party objects within the 30 days nor shall the Secretary include any additional conditions that conflict with any conditions imposed by the registered Aboriginal party. A cultural heritage permit must not be granted for an activity for which a cultural heritage management plan is required under the act.

Cultural Heritage Agreement

A cultural heritage agreement may be made to deal with, but limited to, the following:

- Protection, maintenance or use of land containing an Aboriginal place;
- Protection, maintenance or use of an Aboriginal object;
- Rights of access to, or use of, Aboriginal places or objects by Aboriginal people; and
- The rehabilitation of Aboriginal places or objects.

A cultural heritage agreement may not deal with any activity for which a cultural heritage permit or cultural heritage management plan is required under the act.

Cultural Heritage Management Plan

A cultural heritage management plan under the act consists of an assessment of the area to determine the nature of any Aboriginal cultural heritage and a written report setting out the results of the assessment and recommendations to manage and protect any Aboriginal cultural heritage identified in the assessment. The assessment may include background research, a ground survey and excavation of the ground. *The cultural heritage plan must comply with the prescribed standards.*

A cultural heritage management plan may be carried out voluntarily but **must** be carried out under the following conditions:

- If the regulations require the preparation of the plan for the activity; or
- The Minister directs the preparation of the plan; or
- If an Environment Effects Statement is required under the *Environment Effects Act 1978*.

If the activity also requires statutory authorisation from another body, this authorisation must not be granted until an approved cultural heritage management plan is completed. Statutory authorisation must not be granted for an activity if that activity is inconsistent with the approved cultural heritage management plan.

The sponsor of a cultural heritage management plan must engage a cultural heritage advisor to assist in the preparation of the plan.

Before a cultural heritage management plan can begin written notice must be given to:

- The Secretary
- The Owner or occupier of the land
- Each relevant registered Aboriginal party.

A registered Aboriginal party may elect to evaluate the plan and must reply in writing within 14 days of their intention to do so. If they do notify their intention they may also do all or any of the following:

- Consult in relation to the assessment;
- Consult as to the recommendations; and
- Participate in the conduct of the assessment.

The Secretary must be advised if a registered Aboriginal party either declines to evaluate the plan or fails to respond within 14 days.

The act sets out various matters that must be considered in assessing whether a cultural heritage management plan is to be approved.

- Whether the activity will be conducted in a way that avoids harm to Aboriginal cultural heritage.
- If it is not possible to avoid harm, whether the activity will be conducted in a way that minimises harm.

- Specific measures for the management of Aboriginal cultural heritage material during and after the activity.
- Contingency plans for disputes, delays and other obstacles that may affect the conduct of the activity.
- Requirements for the custody and management of Aboriginal cultural material during the activity.

Application must be made to each registered Aboriginal party that notified their intention to evaluate the plan for approval of the plan. Written notice of their decision to approve or reject the plan must be given within 30 days after receiving the application. If no registered Aboriginal party exists in the area or notified their intention to evaluate the plan or the relevant registered party fails to respond within the 30 day period, the plan is submitted to the Secretary for approval.

The act also makes provisions for a cultural heritage audit if the Minister reasonably believes that a cultural heritage permit or a cultural heritage management plan has been or is likely to be contravened or that the impact of the activity on Aboriginal cultural heritage will be greater than determined at the time the plan was approved.

There is also provision in the act for the issuing of Stop Orders, interim protection declarations and ongoing protection declarations.

Dispute Resolution Procedures and Appeals

If there is a dispute between two or more relevant registered Aboriginal parties as to whether a plan should be approved or rejected, the sponsor of the plan may refer the dispute to the Chairperson of the Heritage Council for alternative dispute resolution, which must take place within 30 days.

The sponsor of a cultural heritage management plan may apply to VCAT for review of a decision of a registered Aboriginal party to refuse approval of a plan, or if one of the relevant registered Aboriginal parties refuses to approve the plan and the dispute resolution procedure above has been followed, or if the Secretary refuses to approve the plan. In reaching a decision VCAT must take into account all matters required to be considered by the relevant registered Aboriginal party or the Secretary under this act.

2.1.2 Commonwealth Legislation

Changes to the way heritage legislation is managed by the Commonwealth has occurred with the introduction of new laws from 1 January 2004. These new laws incorporate elements from previous systems as well as the implementation of additional provisions and are administered under the *Environment Protection and Biodiversity Conservation Act 1999*. The new heritage system was implemented by the passage of three new acts through Parliament in September 2003. These acts were:

- *Environment and Heritage Legislation Amendment Act (No. 1) 2003* (which amended the *Environment Protection and Biodiversity Conservation Act 1999* to include Cultural Heritage);
- *Australian Heritage Council Act 2003* (which established the Australian Heritage Council, thus replacing the Australian Heritage Commission. It also permitted the retention of the Register of the National Estate); and
- *Australian Heritage Council (Consequential and Transitional Provisions) Act 2003* (which repealed the Australian Heritage Commission Act and permitted the transition of the new heritage system).

The implementation of these acts and the amendment to the *Environment Protection and Biodiversity Act 1999 (amended 2004)* resulted in cultural heritage (indigenous and non-indigenous) that is of National significance being administered under this legislation.

The main features of the new heritage system are:

- The establishment of a new National Heritage List;
- Creation of a new Commonwealth Heritage List for places owned or managed by the Commonwealth;
- Creation of the Australian Heritage Council (which replaced the Australian Heritage Commission); and
- Management of the Register of the National Estate.

Environment Protection and Biodiversity Conservation Act 1999 (amended 2004) (EPBC Act)

The main aim of the EPBC Act 1999 was to protect natural places of importance to Australia from negative actions. However, the Act could also be applied to places of cultural heritage, and in 2004 the EPBC Act was amended to include provision for Indigenous and non-indigenous cultural sites that are of importance to the Nation. Under this law an application must be made to the Federal Minister for the Environment and Heritage for actions likely to have a negative impact upon sites or places listed on the National or Commonwealth Heritage lists. In order for the action to take place it requires approval under the EPBC Act. The Australian Heritage Council is the Federal Government's principle advisor on heritage issues.

The EPBC Act 1999 (amended 2004) enabled two new heritage lists to be established, the National List and the Commonwealth List. In addition, the Act permits the ongoing management of The Register of the National Estate by the Australian Heritage Council. Each of these lists has its own set of criteria and thresholds, and The Australian Heritage Council assesses all sites or places for their suitability for inclusion on the lists. These lists are further explained below.

National Heritage List (NHL)

This list consists of sites (both within and outside Australian territory) that are of outstanding national Indigenous, historic or natural value to the Nation of Australia. The list applies to sites that have 'special meaning for all Australians' and demonstrate important aspects of the history of Australia. A site or place on the National Heritage List will only be listed on the Commonwealth Heritage List if it is owned or managed by the Commonwealth.

Commonwealth Heritage List (CHL)

The Commonwealth Heritage List consists of sites that are owned or controlled (leased) by the Australian Government. The sites listed on this list will have been assessed as to whether they have significant heritage value to the Nation of Australia. This list may apply to sites owned or leased by the Commonwealth, including defence, communications and customs. A site or place on the Commonwealth Heritage List can also be listed on the National Heritage List.

Register of the National Estate (RNE)

The Register of the National Estate (RNE) is a register that was established under the *Australian Heritage Commission Act 1975*, but is now administered by the EPBC Act (2004) as a result of changes to heritage laws. The Commonwealth is the only body within Australia who is affected by constraints as a result of a site listing on the RNE. While there is no

legislative protection under the EPBC Act for privately owned sites on the RNE, these sites however are usually listed on other State or Commonwealth registers that do provide statutory protection. The Register of the National Estate contains natural, cultural and Indigenous places that are special to Australians and that are worth preserving for the future.

3.0 ABORIGINAL BACKGROUND

3.1 *Dja Dja Wurrung*

According to Clark (1990: 140, 151), the traditional Aboriginal Language Group surrounding the subject land is the *Dja Dja Wurrung*. At the time of European occupation there were at least sixteen clans within the *Dja Dja Wurrung* Language Group. Essentially, these clans were comprised of extended family groups of around 10 to 30 individuals, and spoke a slightly variable dialect of the *Dja Dja Wurrung* language (Cockbill and Clark 2000:17). According to Clark (1990:153), the area around Daylesford was occupied in the 19th Century by the clan named as *Munal gundidj*. The location and description of the *Dja Dja Wurrung* is described by Clark (1990: 151) as the following:

“... a language composed of possibly 16 clans occupying the country from the northern slopes of the Great Dividing Range near Kyneton to Amphitheatre; from Kyneton northeast to the Alexandrine Range and the Loddon River near Boort; from Boort northwest to Lake Buloke; and from Lake Buloke southwest along the Richardson River to Wallaloo Creek, then to Navarre Hill and back to the Pyrene Range at Amphitheatre.”

Several primary sources are used for the reconstruction of *Dja Dja Wurrung* clans. The earliest references to *Dja Dja Wurrung* are contained in journals, papers, and correspondence of George Augustus Robinson, the Chief Protector of Aborigines in Port Phillip from 1839 – 1849. Ethnographic observations described the *Dja Dja Wurrung* as a powerful ‘tribe’ and that a source of stone within their ‘country’ was procured for making axes (Parker in Morrison 1971:22; see also Massola 1973).

3.2 *Hunting and Gathering*

There are few historic details on traditional Aboriginal subsistence for the language group as a whole. It is likely that the patterns of settlement and movement were based on seasonal rounds following the changing availability of plant and animal resources. Historical details on how animals were traditionally procured (the techniques of hunting) and how and when plants were harvested are extremely poor for most of Aboriginal Victoria. It is known that spears were used to hunt and that hunters would hide behind vegetation or construct hides of stone. Nets were also used where game animals would be chased into them.

Certain foods are common to many accounts including: the Yam daisy or *Murnong*, the tuber of which was dug up by women; bull-rush roots which were collected from waterways and roasted; eels, which were a seasonal food caught in stone weirs and long fibre nets; kangaroos and other smaller macropods which were hunted; birds and their eggs; possums - the fur of brush tail possums was used to make cloaks and the meat roasted and according to Presland (1994) preserved for later use. Possum skin cloaks were a prestige item; there are only two surviving examples of traditional cloaks. Creek banks are specifically known to often contain Aboriginal archaeological cultural material and previous research has shown that such areas to be highly sensitive with regards to not only Aboriginal but also historical archaeology. However, the likelihood for Aboriginal artefacts and/or features to be recorded on the subject land is low as the area would have been heavily forested, and natural water sources are a minimum distance of 1km.

4.0 ARCHAEOLOGICAL SUBSURFACE TESTING

4.1 *Personnel*

Archaeological subsurface testing was conducted on Thursday 3rd August 2006 during overcast conditions by Chris Kaskadanis and Richard Marshall (TerraCulture Pty Ltd). Mr Bill Nicholson represented the *Wurundjeri* Tribe Land Compensation & Cultural Heritage Council Incorporated.

4.2 *Description of Areas Tested*

The subject land is situated off Ballan-Daylesford Rd approximately 10km south of Daylesford (Map 1). The area is comprised of typical pastoral grassland, and the two wind turbines are proposed to be constructed on middle-upper slopes on Leonards Hill ranging from approximately 730 – 740m ASL (Map 2). There is evidence of ground disturbance in the way of cattle and ploughing, and surrounding the property there is remnant native vegetation. According to the Department of Primary Industries (*GeoVic* website), distance to water (creeks) is about a 1km radius from the areas of testing. The property is totally cleared and exposed to wind (thus turbine proposals), and the area would have been dense wooded forest and other native vegetation.

4.3 *General Methods and Recording*

The archaeological subsurface testing was in accordance with the Special Conditions set in the Excavation Permit (Appendix B). Two shovel probe grids were laid out: a 20m x 10m grid oriented north-south in Turbine Area 1, and a 15m x 10m grid oriented east-west in Turbine Area 2 (Map 3). Where possible, all test probes were excavated to a minimum depth of 300mm at 5m intervals, and recorded in terms of their stratigraphy and their archaeological content. The soil from each transect was sieved at regular intervals and screened through an 8 millimetre gauge manual sieve. GPS coordinates, and photographs were taken regularly in the field. All shovel probes were backfilled on completion.

5.0 RESULTS

5.1 Turbine Area 1

GPS Coordinates of 20m x 10m north-south grid

NW Corner: 245222E – 5853889N NE Corner: 245232E – 5853885N
SW Corner: 245216E – 5853869N SE Corner: 245225E – 5853867N

Fifteen shovel probes were excavated in Turbine Area 1 (Map 3, Plate 1). Table 1 describes the general stratigraphy and soil description of this testing area – note that there is variation in depths from each shovel probe (see Plate 2 for example of shovel probe). Small- to large-sized basalt stones were recorded at various depths. A charcoal patch mixed with a rubbly reddish-brown soil at a depth of approximately 200mm is suggestive of a non-cultural burning event which occurred in this area. Dark layers usually denote high humus content and red colours indicate good drainage. Percolating rain water generally carries finely-divided clay and iron oxides out of loamy topsoil and silty-loam down to the underlying silty-clay/clay layer (e.g. reddish-brown layer) (Cochrane *et al.* 1991: 7). A small quartz fragment with a maximum dimension of 5mm was recorded in Hole C2; however, this was deemed as non-artefactual by both Chris Kaskadanis (TerraCulture) and Mr Bill Nicholson (*Wurundjeri*).

No Aboriginal archaeological artefacts or features were recorded in Turbine Area 1

Table 1: General stratigraphy and soil description of Turbine Area 1

| Depth (mm) | Stratigraphy & Soil Description |
|-------------------------|---|
| 0 - 50 | Soft dark loamy topsoil (shallow rooted vegetation, abundant humus, roots and organisms - grubs & worms) |
| 50 - 240/280 (>300) | Friable, sometimes compact medium brown/pale grey silty loam with small amounts of rubble (basalt) |
| 240/280 (>300) - 450 | Compact (hardpan) reddish-brown silty clay with rubble (increasingly more clay downwards) |

5.2 Turbine Area 2

GPS Coordinates of 15m x 10m east-west grid

NW Corner: 245440E – 5853816N NE Corner: 245455E – 5853815N
SW Corner: 245437E – 5853808N SE Corner: 245452E – 5853806N

Twelve shovel probes were excavated in Turbine Area 2 (Map 3, Plate 3). Table 2 describes the general stratigraphy and soil description of this testing area – note that there is variation in depths from each shovel probe (see Plate 4 for example of shovel probe). The subsurface description in this area is similar to Turbine Area 1. Small- to large-sized basalt stones were recorded at various depths. A charcoal patch mixed with a rubbly reddish-brown soil at a depth of approximately 200mm is suggestive of a non-cultural burning event which occurred in this area. Dark layers usually denote high humus content and red colours indicate good drainage. Percolating rain water generally carries finely-divided clay and iron oxides out of loamy topsoil and silty-loam down to the underlying silty-clay/clay layer (e.g. reddish-brown layer) (Cochrane *et al.* 1991: 7). A small rounded quartz pebble was recorded in Hole B1; again, this was deemed as non-artefactual by both Chris Kaskadanis (TerraCulture) and Bill Nicholson (*Wurundjeri*).

No Aboriginal archaeological artefacts or features were recorded in Turbine Area 2

Table 2: General stratigraphy and soil description of Turbine Area 2

| Depth (mm) | Stratigraphy & Soil Description |
|-------------------------|---|
| 0 - 50 | Soft dark loamy topsoil (shallow rooted vegetation, abundant humus, roots and organisms - grubs & worms) |
| 50 - 210/270 (>340) | Friable, sometimes compact medium brown/pale grey silty loam with small amounts of rubble (basalt) |
| 210/270 (>340) - 550 | Compact (hardpan) reddish-brown silty clay with rubble (increasingly more clay downwards) |

5.3 *Aboriginal Community Views*

Mr Bill Nicholson suggested that the potential for Aboriginal archaeological cultural material in both subsurface testing areas was low due to the fact that this region would have been dense forest. Therefore, the likelihood of finding stone knapping sites or camp sites that represents human behavioural patterns was considered low. Such locales would probably occur closer to water sources and sheltered areas. Aboriginal people may have travelled through the study area to other locales in order to collect resources or to trade items or for other social activities.

6.0 MANAGEMENT RECOMMENDATIONS

6.1 *Aboriginal Archaeology*

Recommendation 1

No further Aboriginal archaeological investigation is recommended; however, if the location of the proposed wind turbine areas is more than 100m from the current proposed sites, then the Aboriginal archaeological potential of the new location should be assessed.

Recommendation 2

If during construction works, archaeological material is uncovered, works should be stopped while the material is assessed by a representative of the *Wurundjeri* and a suitably qualified archaeologist.

Under the terms of the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*, Aboriginal archaeological sites documented and discovered as part of this programme of works are protected by law. Disturbance of these sites, or those nearby requires consent from the statutory authorities. Consent must be sought in writing by registered mail and addressed to:

Megan Goulding
Interim CEO
Wurundjeri Tribe Land Compensation and Cultural Heritage Council Inc.
P.O. Box 516, North Carlton, 3054

Under the terms of the Act, the *Wurundjeri* will place conditions on any grant of consent. These conditions may include:

- Permit fees;
- The collection of any artefactual material prior to any disturbance;
- Monitoring of any ground disturbance at or near the location of registered sites;
- Additional archaeological excavation, and;
- Consent for any other registered site located during the works

Recommendation 3

If human skeletal remains are uncovered during any ground disturbance the recommendations presented below should be followed:

- All works must cease immediately. The Police or Victorian Coroners Office must be immediately notified, as required by the *Coroners Act 1985*. The State Coroners Office can be contacted at any time on 1300 888 544;
- If there are reasonable grounds to suspect that the remains are Aboriginal, the discovery should also be reported to AAV on Ph. 9208 3333;
- The remains are not to be touched or otherwise interfered with, other than to safeguard them from further disturbance;
- Do not contact the media.

BIBLIOGRAPHY

Barwick, D.E. 1984.

Mapping the Past: An Atlas of Victorian Clans, 1835-1904 Part 1. *Aboriginal History* 8(1-2): 101-131.

Clark, I. 1990.

'Aboriginal Languages and Clans: an historical atlas of Western and Central Victoria, 1800 – 1900'. *Monash Publications in Geography* No. 37. Department of Geography and Environmental Science, Monash University, Melbourne.

Cochrane, G.W., Quick, G.W. and Spencer-Jones, D. 1991.

Introducing Victorian Geology. Melbourne: Geological Society of Australia (Victorian Division).

Cockbill, J. and Clark, N. 2000.

Aboriginal Cultural Heritage Survey. Golden Spring, Argyle Spring, Tipperary Spring, Hepburn Regional Park, Daylesford. A report to Parks Victoria. Clarkeology Pty Ltd.

Costermans, L. 1981.

Native Trees and Shrubs of South-Eastern Australia. New Holland Publishers, Sydney.

Harcourt, R. 2001.

Southern Invasion, Northern Conquest. Story of the founding of Melbourne. Golden point Press.

Hills, E.S. 1964.

The Physiography of Victoria: An Introduction to Geomorphology. Whitcome and Toms Pty Ltd.

Land Conservation Council. 1991.

Melbourne Area District 2 Review Descriptive Report. Land Conservation Council, Melbourne.

McDougall, K. 1987.

Sites of Botanical Interest in the Melbourne Region. Department of Geography, Melbourne University.

Morrison, E. 1971.

The Loddon Aborigines. Published by the author, Melbourne.

Parker, E.S. 1854.

The Aborigines of Australia. A lecture delivered in the Mechanics Hall, Melbourne before the John Knox Mens' Association, Wednesday 10 May 1854. Printed and published by Hugh McColl, Melbourne.

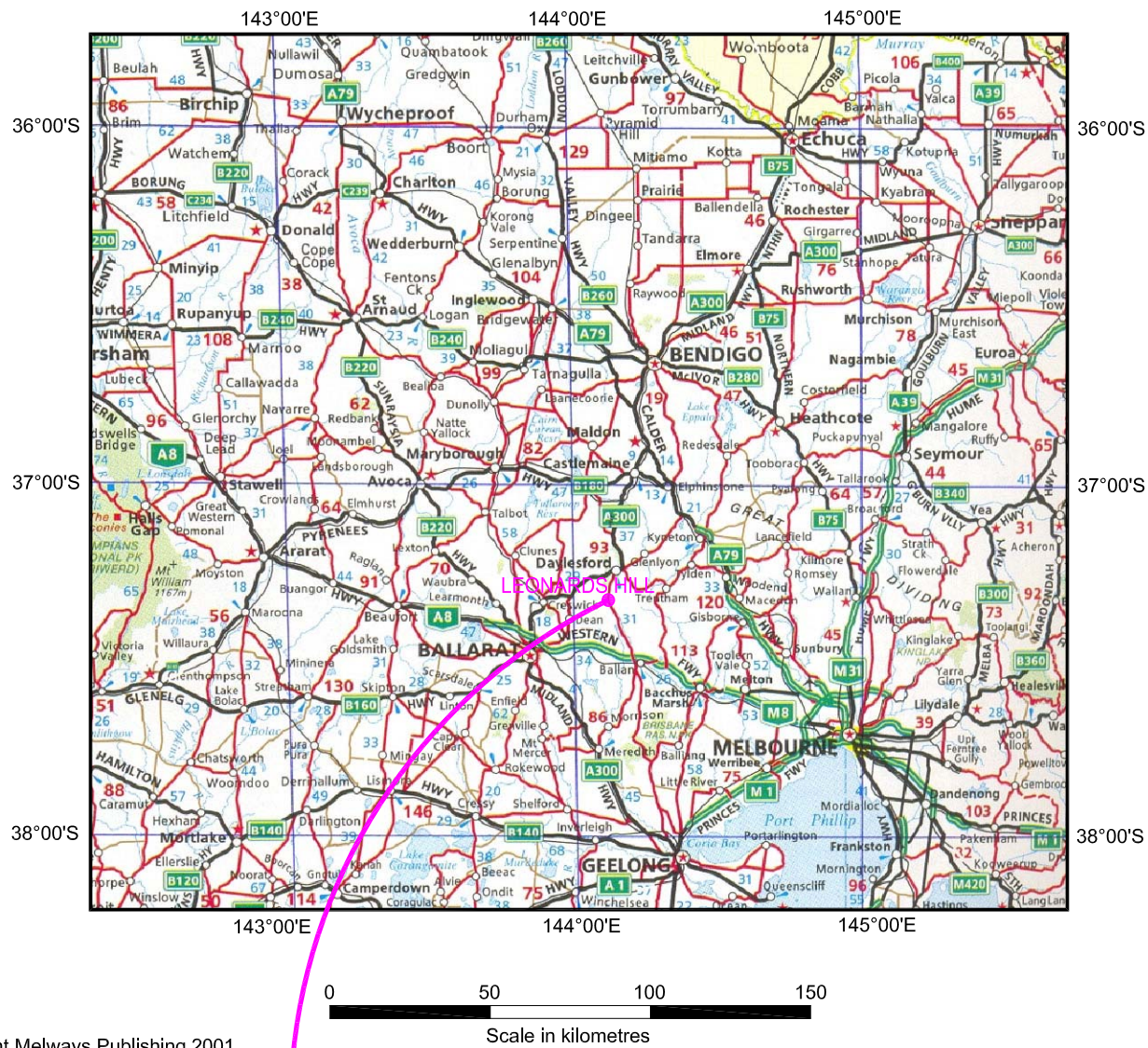
Presland, G. 1994.



Aboriginal Melbourne. The Lost Land of the Kulin People. McPhee Gribble Publishers, Victoria.

Zola, N. and Gott, B. 1996.

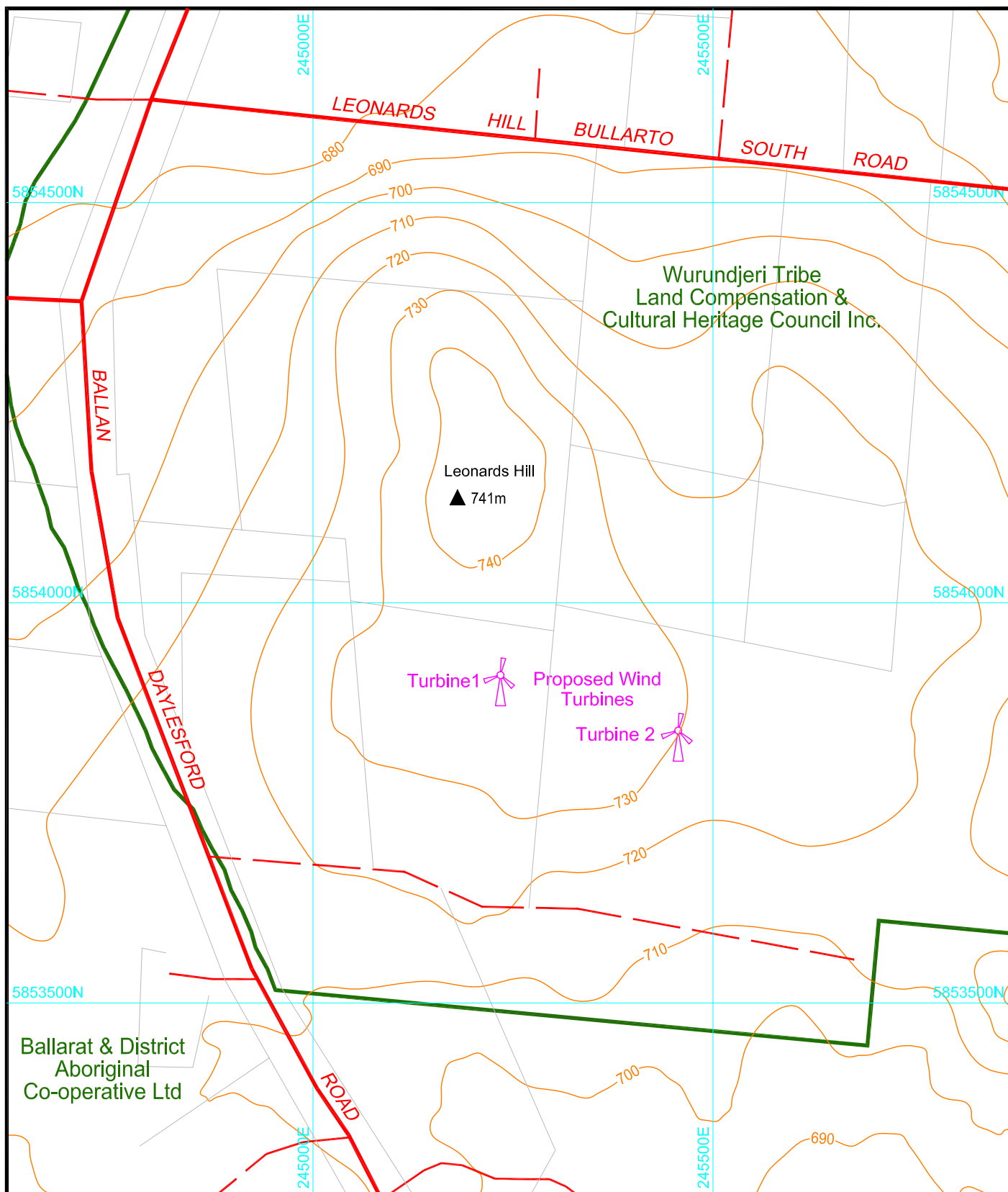
Koorie Plants, Koorie People. Koorie Heritage Trust, Melbourne.

MAPS







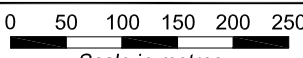
| | | | |
|---|---|---|-------------------------------|
|  <p>Heritage Consultants Suite 3, 83 Station St, Fairfield, 3078 VICTORIA Ph. 03 9486 4524 Fax. 03 9481 2078</p> |  Scale in kilometres | REGIONAL MAP LEONARDS HILL | |
| | | Drawing No.: Regional Hepburn.dwg Datum: AGD66 | Date: 10/8/2006 Format: A4 |

MAP 1: Regional map showing the location of Leonards Hill.

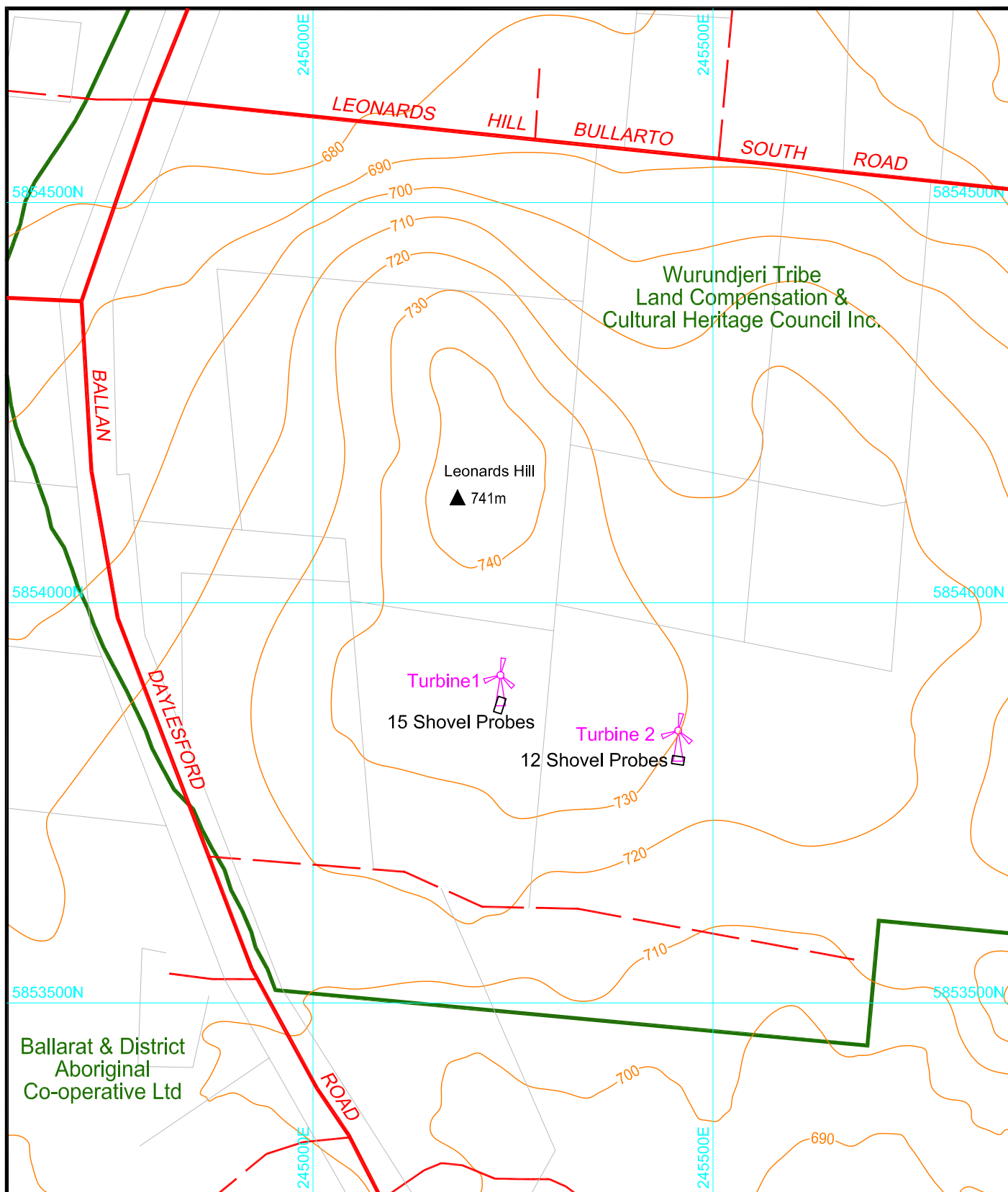


Copyright and Disclaimer Notes:

- 1) Barkstead (7723-3-3) - 1:25,000, Topographic Map Series NRE, 2000
- 2) Copyright the State of Victoria, Department of Natural Resources and Environment (NRE), 2000. Reproduced by permission of the Department of Natural Resources and Environment and therefore is not an official copy.
- 3) This material may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error may arise from you relying on any information contained in this material (or publication).






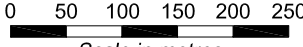
| | | | |
|---|---|---|--|
|  MGA94 Zone 55 |  Heritage Consultants Suite 3, 83 Station St, Fairfield, 3078 VICTORIA Ph. 03 9486 4524 Fax. 03 9481 2078 NOTE: Cadastral boundaries are indicative only. |  LEGEND Proposed Wind Turbine  Aboriginal Community Boundary  Scale in metres | LEONARDS HILL PROPOSED WIND TURBINE LOCATIONS Drawing No.: Proposed Wind.dwg Drawn: P.B. Date: 10/8/2006 Datum: GDA94 Format: A4 |
|---|---|---|--|

MAP 2: Showing proposed Wind Turbine Locations.



Copyright and Disclaimer Notes:

- 1) Barkstead (7723-3-3) - 1:25,000, Topographic Map Series NRE, 2000
- 2) Copyright the State of Victoria, Department of Natural Resources and Environment (NRE), 2000. Reproduced by permission of the Department of Natural Resources and Environment and therefore is not an official copy.
- 3) This material may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error may arise from you relying on any information contained in this material (or publication).

| | | | |
|---|---|--|--|
|  MGA94 Zone 55 |  Heritage Consultants Suite 3, 83 Station St, Fairfield, 3078 VICTORIA Ph. 03 9486 4524 Fax. 03 9481 2078 NOTE: Cadastral boundaries are indicative only. | LEGEND  Proposed Wind Turbine  Aboriginal Community Boundaries  Shovel Probes <div style="text-align: center;">  0 50 100 150 200 250 Scale in metres </div> | Leonards Hill Proposed Wind Turbine Locations & Shovel Probe Locations Drawing No.: Shovel Probes.dwg Drawn: P.B. Date: 11/8/2006 Datum: GDA94 Format: A4 |
|---|---|--|--|

MAP 3: Showing Results of Subsurface Testing.

PLATES

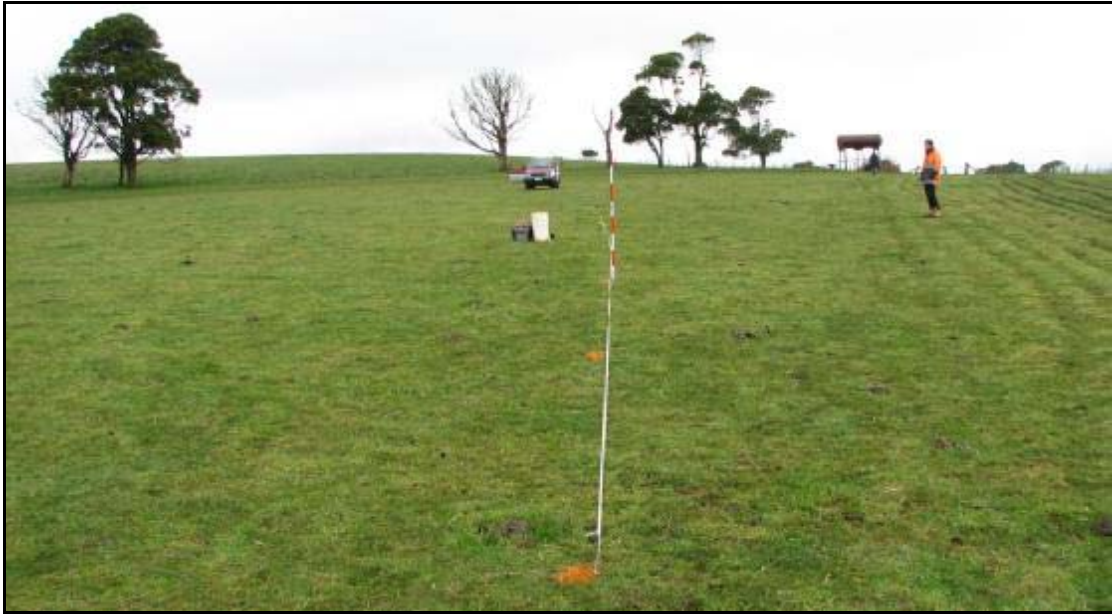


Plate 1: Turbine Area 1 (Facing North).



Plate 2: Turbine Area 1 (Hole A1 – Depth 550mm).



Plate 3: Turbine Area 2 (Facing Southeast).



Plate 4: Turbine Area 2 (Hole A3 – Depth 420mm).

APPENDIX A – AAV Correspondence



Department for Victorian Communities

1 Spring Street
Melbourne Victoria 3000
GPO 2392V
Melbourne Victoria 3001
Telephone: (03) 9208 3333
Facsimile: (03) 9208 3680
www.dvc.vic.gov.au

AAV/00860

21 July 2006

Dr Cathie Webb
TerraCulture P/L
3 – 83 Station St
FAIRFIELD VIC 3078

Dear Cathie

EXCAVATION PERMIT - HEPBURN COMMUNITY WINDFARM, LEONARDS HILL

Please find enclosed the above permit, and a receipt for the twelve dollar application fee. The permit is valid for one month from 24 July 2006.

Aboriginal Affairs Victoria (AAV) staff will visit a number of excavation projects for which we are issuing permits. This program of project visits will assist in further developing Aboriginal cultural heritage management processes across Victoria.

In order to co-ordinate this program I would be grateful if you could provide me with the specific project dates and with contact details for the relevant land owner or manager, either by email to: matthew.phelan@dvc.vic.gov.au or by telephone on (03) 9208 3275, as soon as these details are available.

Please contact me if I can be of further assistance.

Yours sincerely

MATTHEW PHELAN
Heritage Registrar
Aboriginal Affairs Victoria



APPENDIX B – Excavation Permit

SCHEDULE 1

Victoria

Archaeological and Aboriginal Relics Preservation Act 1972

ARCHAEOLOGICAL AND ABORIGINAL RELICS PRESERVATION REGULATIONS 2003

EXCAVATION PERMIT

Dr Cathie Webb

of

TerraCulture P/L
3 – 83 Station St
FAIRFIELD VIC 3078

is authorised to disturb or excavate the land described below for the purpose of uncovering or exposing any relic or excavating any relic.

The land is described as proposed community wind farm, situated near Leonards Hill, in the Parish of Wombat in the County of Talbot, and shown on the accompanying map.

This permit is valid from **24 July 2006** to **24 August 2006** and is issued subject to the attached terms, conditions and limitations.

Dated:

21 July 2006.



Acting Director, Heritage Services
On behalf of the Minister

Victoria
Archaeological and Aboriginal Relics Preservation Act 1972

Archaeological and Aboriginal Relics Preservation Regulations 2003

EXCAVATION PERMIT
Standard Conditions

1. The permit does not abrogate the holder's responsibility to obtain the permission of the owner, occupier and/or manager of the subject land and to obtain relevant permits and/or consents from government authorities.
2. The permit is conditional on the consent of any relevant local Aboriginal community having been obtained in accordance with Section 21U(4) of the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*. The consent should be obtained prior to applying for a permit.
3. If the excavation is to take place on Crown land (other than Crown land in relation to which native title has been extinguished), the holder of the permit is to obtain consent from any native title holders/registered claimants or their legal representatives. Further advice on identifying and contacting groups with native title interests can be obtained from the National Native Title Tribunal (phone: 1800 640 501).
4. The permit is valid only for the time period, land and site described in the application.
5. The permit can be renewed providing there has been compliance with the conditions of the permit up until the renewal application.
6. The permit cannot be transferred or assigned.
7. In cases of illness or other circumstances which may prevent the undertaking of the excavation, the Minister may agree, on application, to suspend the permit provided that the suspension does not result in any variation of the applicant's ability to undertake the work outlined in the application.
8. An officer of Aboriginal Affairs Victoria, or an Inspector acting under the authority of the *Archaeological and Aboriginal Relics Preservation Act 1972* may at any time inspect the works undertaken or relics recovered under the permit.
9. The permit can be revoked at any time at the discretion of the Minister.
10. The holder of the permit shall, within 6 months of completion of the excavation or expiry of the permit (whichever is the earlier), submit to Aboriginal Affairs Victoria an interim report of the results of the excavation.
11. The holder of the permit shall, within 6 months of completion of the excavation or expiry of the permit (whichever is the earlier), lodge with Aboriginal Affairs Victoria a copy of all excavation notes, plans, section drawings and relevant photographs relating to the work carried out under the permit, to form an archival record in the event that the originals are lost or destroyed.
12. Copies of all work based on the results of the excavation for which the permit was issued should be submitted to Aboriginal Affairs Victoria for lodgement in its archive/library.
13. The permit holder must agree to indemnify the Minister and the Crown against all claims in connection with the permit.
14. The permit holder must agree to apply reasonable and appropriate safety procedures to all aspects of the proposed excavation work.

Victoria

Archaeological and Aboriginal Relics Preservation Act 1972

ARCHAEOLOGICAL AND ABORIGINAL RELICS PRESERVATION REGULATIONS 2003

EXCAVATION PERMIT

Special Conditions

1. The disturbance of the land is to be limited to the excavation of up to fifteen shovel test-pits, arranged in a grid formation in the area of each of the two proposed turbine locations as described in the attached map. Shovel test-pits are to be no more than 5m apart. Excavated deposits are to be sieved and all features and artefacts recorded.
2. If considered necessary, further excavation should be carried out. This work is to be limited to five shovel test-pits of the dimensions and character described above at each location.
3. Where substantial sub-surface deposits are encountered other excavation works should cease at that location and manually excavated test-pits (at least 1m x 1m) should be employed sufficient to determine the character and extent of those deposits.
4. In cases where cultural material is considered *in-situ* and where suitable sample material is available, appropriate age determinations (e.g. radiocarbon, thermoluminescence, optically stimulated luminescence) shall be made to determine the age of the cultural material.
5. Any artefacts recovered during excavations should be secured by the excavator until works have ceased. Decisions regarding the subsequent disposal of artefacts must be made in consultation with relevant Aboriginal community organisations. Where artefacts are to be reburied, artefacts are to be placed in a durable container together with information about their provenance and reburied in a secure location as close as possible to their place of origin. This location should be determined in consultation with relevant Aboriginal community organisations. The reburial location is to be documented by the excavator and details provided to the Heritage Registrar, Aboriginal Affairs Victoria (AAV).
6. Aboriginal Affairs Victoria (AAV) site record forms are to be completed for all sites and/or occurrences of artefacts discovered as a result of the excavation. These forms are to be forwarded to the Heritage Registrar, AAV as soon as possible after the completion of the field work, and within a maximum of 30 days.
7. The location of each pit and transect is to be recorded accurately, along with details of any exposed stratigraphy. This information is to be provided to the Heritage Registrar, as soon as possible after completion of the field work, and within a maximum of 30 days. Please note that this requirement applies whether or not any cultural material is found during the excavation.
8. The holder of this permit shall ensure that the site is properly restored and stabilised following the excavation, to the satisfaction of the owner/manager of the subject land.

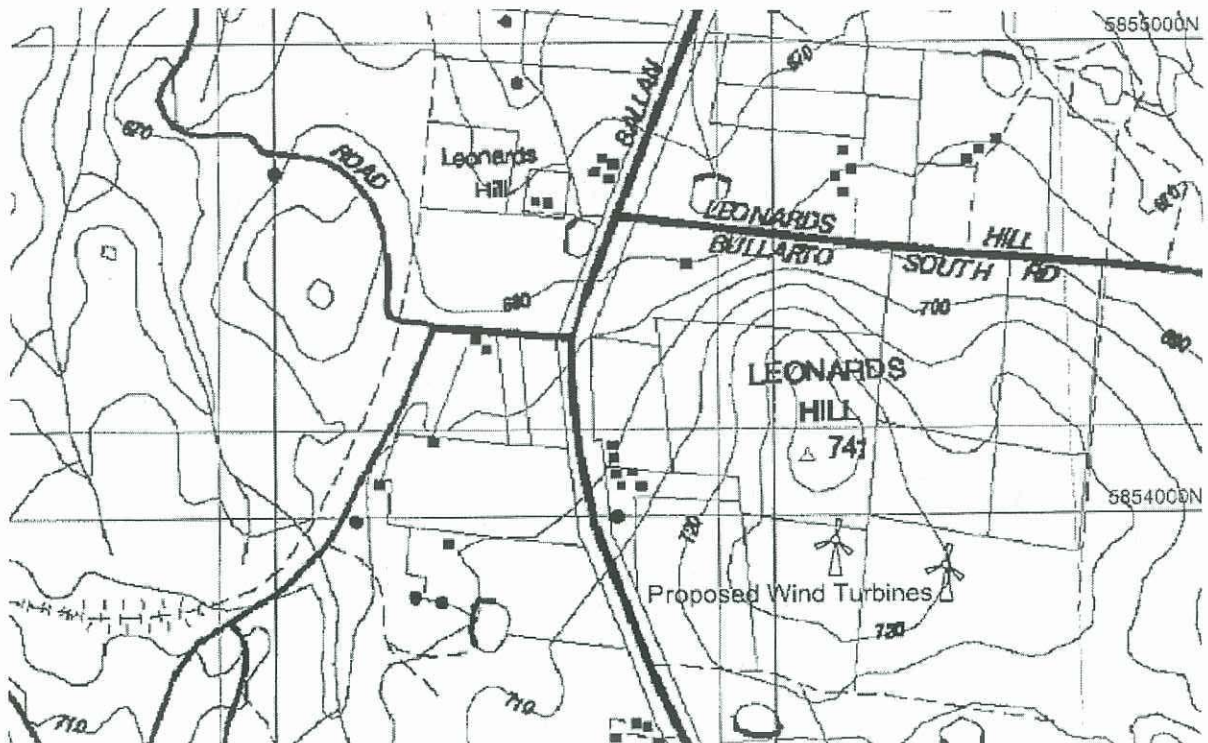
Victoria

Archaeological and Aboriginal Relics Preservation Act 1972

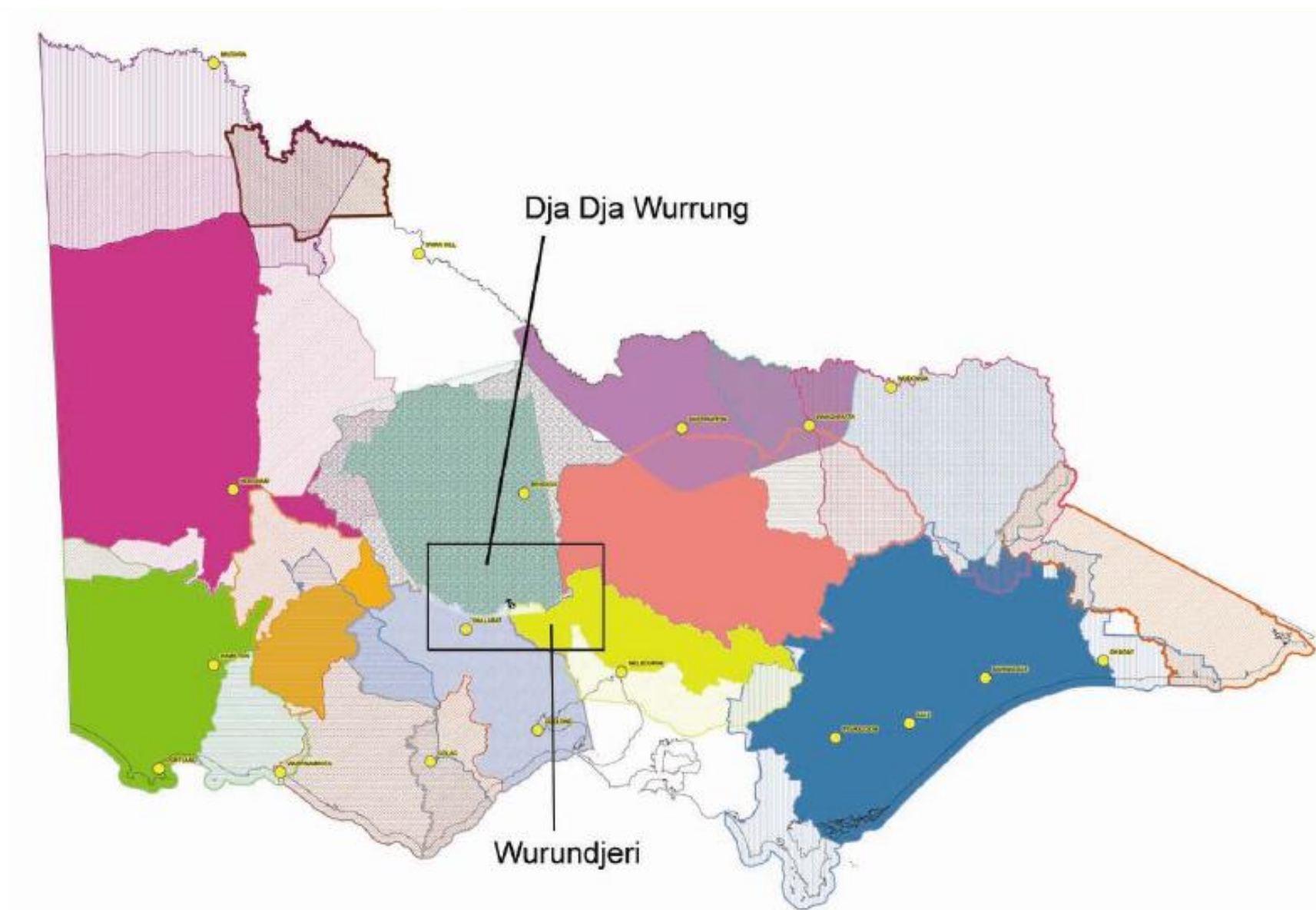
**ARCHAEOLOGICAL AND ABORIGINAL RELICS PRESERVATION
REGULATIONS 2003**

EXCAVATION PERMIT

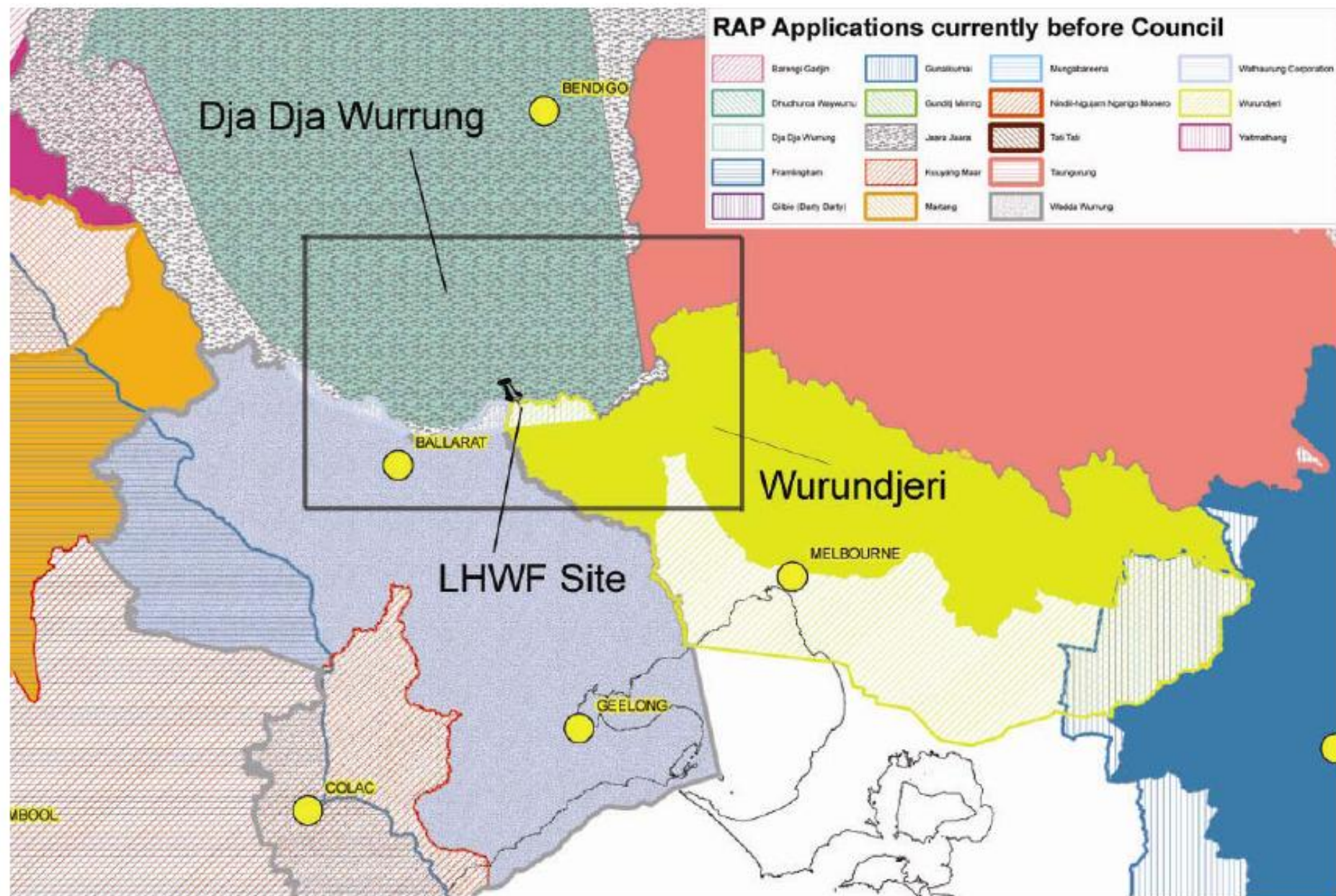
Map showing location of the subject land



Appendix 4 - Map of RAP Applications pending in council



Statewide Appointed RAPs and RAP Applications currently before Council – See Detail on following



Leonards Hill Wind Farm Site – Pending applications currently before Council, by both Dja Dja Wurrung and Wurundjeri Tribes. As at May 3rd, 2010.