Preliminary Post-Construction Rehabilitation Plan

Theodore Wind Farm

PREPARED FOR

Theodore Energy Development Pty Ltd

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Preliminary Post-Construction Rehabilitation Plan

Theodore Wind Farm

0661076

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ACRONYMS AND ABBREVIATIONS

Acronym	Description
BESS	Battery Energy Storage System
CEMP	Construction Environment Management Plan
Ha	Hectares
Km	Kilometres
OMF	Operations and Maintenance Facility
MSES	Matters of State Environment Significance
RE	Regional Ecosystem
RWE	RWE Renewables Europe & Australia
State Code 23	State Code 23: Wind Farm Development v3.0
State Code 16	State Code 16: Native vegetation clearing
TED	Theodore Energy Development Pty Ltd
WTG	Wind turbine generators

KEY TERMS

Key Term	Description
The Applicant	Theodore Energy Development Pty Ltd
The Project	Theodore Wind Farm involves the development, construction and operation of a large-scale wind farm approximately 22 kilometres (km) east of the township of Theodore and 50 km south of Biloela in the Banana Shire Council Local Government Area, Queensland.
Project Area	The Project Area is the land/properties containing the Project. It is approximately 46,830 ha in size. The Project Area consists of nine lots on three properties. The total development footprint has a maximum area of 1,,589 ha, which accounts for approximately 4.1% of the Project Area.
Type 1 Rehabilitation	Natural regeneration measures that include no active planting of canopy cover trees for disturbance from linear assets and return some ecological functionality back to disturbance areas no longer required for operations. Restricted to low shrubbery and grass (937ha of the Disturbance Footprint).
Type 2 Rehabilitation	Rehabilitation/revegetation measures that aim to return nominal temporary pre-disturbance areas to full ecological functionality. Reinstated to equivalent pre-construction vegetation without height restrictions (93 ha of the Disturbance Footprint).
Construction Facilities and Laydown Compounds (temporary use areas)	This includes the 'temporary use areas' as defined under the Guide to State Development Assessment Provisions – State Code 16: Natural vegetation clearing (State Code 16 Guide).

1. INTRODUCTION

Environmental Resources Management Australia Pty Ltd (ERM) has been engaged by Theodore Energy Development Pty Ltd (TED) / (the Applicant) to prepare a Preliminary Post-Construction Rehabilitation Plan for the proposed Theodore Wind Farm located approximately 22 km east of the township of Theodore, Queensland (herein referred to as the Project).

The Preliminary Post-Construction Rehabilitation Plan has been prepared for the area considered for the Project.

The Project consists of up to 170 WTG and ancillary infrastructure, including but not limited to access tracks, substations, overhead and underground electrical cabling, hardstands, and an operation and maintenance compound. In order to facilitate connection to the electricity grid, TED is working with Powerlink to determine the optimal connection point to the existing network. The Project is being developed across 9 freehold land parcels, on alluvial plains with non-remnant grasslands predominantly used for agricultural grazing.

1.1 PURPOSE AND SCOPE

The objective of this Preliminary Post-Construction Rehabilitation Plan is to adequately address Performance Outcome (PO) 5 (flora and fauna) of State Code 23: Wind farm development v3.0 (State Code 23) and the requirements of State Code 16: Native vegetation clearing (State Code 16) and provide detail in relation to the potential post-construction rehabilitation approaches to be undertaken for the various access tracks, waterway crossings, turbine pads, laydowns, and transmission corridors, and in consideration of the requirements of native species known or likely to be present within the Project Area.

This Preliminary Post-Construction Rehabilitation Plan provides a framework for key rehabilitation outcomes, and includes a description of rehabilitation principles, methods and performance outcomes that can be implemented to achieve the objectives of the PO5 of State Code 23 and State Code 16. These include:

- Description of existing environment and phases of development that relate to the rehabilitation objectives;
- Description of appropriate site-wide rehabilitation methods that relate to post-construction phases of the Project;
- Description of how rehabilitation can apply to site-specific infrastructure and scenarios, including cross-sections for each scenario;
- Consideration of principles both during the construction and operational phases of development;
- Consideration of existing land use practices on the land prior to construction and surrounding the areas of potential rehabilitation; and
- Consideration of species-specific requirements across the Project Area.

2. EXISTING ENVIRONMENT

Table 2-1 outlines the characteristics of the existing environment in the Project Area.

TABLE 2-1 CHARACTERISTICS OF EXISTING ENVIRONMENT

Existing Project Area Characteristics	
Existing land use	The Project Area is within the Rural Zone of the Banana Shire Planning Scheme 2021 and is predominately used for rural purposes (cattle grazing).
Access	Access to the Project is primarily from Defence Road, with crossing and smaller access from Crowsdale Camboon Road.
Topography and views	The Project Area lies within the Brigalow Belt Southern bioregion, within the Fitzroy catchment. The topography of the Project Area is characterised by rolling hills and flat plains. Across the Project Area the landscape features vary in geology, from torsdale volcanics mixed with camboon volcanics, to rocky outcrops of large boulders, open flat areas on tops of ridges, and sedimentary stratigraphy on the western extent of the Project Area. The Project Area is intersected by serval major waterways, those being Castle Creek in the northern section of the Project Area, and Boam Creek in the southern end of the Project Area.
Vegetation and Flora	The majority of the Project Area is mapped as cleared land, with approximately 40.04% containing remnant regulated vegetation. There is 1,657.5 ha of Matter of State Environmental Significance (MSES) Category B Regulated Vegetation mapped within the Project Area. The Project Area also contains small areas MSES Category C regulated vegetation – high value regrowth (1.9 ha) and 191.1 ha of MSES Category R regulated vegetation – Great Barrier Reef riverine regrowth. The majority of the Project Area is cleared agricultural land with grasslands, and occasional regrowth dominant throughout the middle and the northern portion of the Project Area. The Project Area, particularly the southern section and a pocket in the north section, contains eucalypt woodlands and dominated by narrow leaved ironbark (*E. crebra*) and silver-leaved ironbark (*E. melanophloia*) (Regional Ecosystems (RE) 11.12.1 and 11.12.2), with the south section also supporting open forest dominated by lemon-scented gum (*Corymbia citriodora*) (RE 11.12.6). Eucalypt woodlands (*E. populnea)* and blue gum (*E. tereticornis, E. camaldulensis*) woodlands (Res 11.12.3 and 11.3.2) are present and occur largely in the southern sections of the Project Area along alluvium associated with ephemeral watercourses. Brigalow open forest (*Acacia harpophylla)* are present mostly in the centre of the Project Area (RE 11.12.21). Small, isolated patches of semi evergreen vine thicket are also present, largely in the south and south-east corner (RE 11.12.4). Some woodland is mapped on Cainozoic lateritic duricrust, with presence of lemon-scented gum (*C. citriodora),* gum-top ironbark *(E. decorticans)* and *Acacia* spp. (REs 11.7.6 and 11.7.4c).
Fauna	Four *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and *Nature Conservation Act 1994* listed threatened fauna are considered as known to occur within the Project Area due to positive identification during ecology field surveys. These include the southern squatter pigeon (*Geophaps scripta scripta)* and the koala (*Phascolarctos cinereus*), greater glider (southern and central) (*Petauroides Volans)*, and Large-eared pied-bat (*Chalinolobus dwyeri*). One *Nature Conservation Act 1994* listed threatened fauna are considered known to occur, short-beaked echidna (*Tachyglossus aculeatus*).

Existing Project Area Characteristics	
Weeds	Weeds of National Significance or as Category 3 restricted invasive species under the *Queensland Biosecurity Act 2014 (Biosecurity Act 2014)* were observed occurring within the Project Area. Weeds of National Significance and Category 3 restricted invasive plants include: • lantana – (*Lantana camara*); • velvet tree pear (*Opuntia tomentosa*); • parthenium (*Parthenium hysterophorus*); and • cats claw creeper (*Dolichandra unguis-cati*). Other observed introduced species not listed as Weeds of National Significance or under the *Biosecurity Act 2014* include: • Blue billygoat (*Ageratum houstonianum*) • Balloon cotton-bush (*Gomphocarpus physocarpus*) • Noogoora burr (*Xanthium occidentale*) • Cobbler's peg (*Bidens pilosa*) and • Natal grass (*Melinis repens*)
Waterways	The main watercourse within the Project Area is Castle Creek, however, there are several other tributaries associated with Castle Creek and the Dawson River within the Project Area. There are general ecological significance Wetland Management Areas in the Project Area, associated with the Dawson River. There are no wetlands of international importance associated with the Project Area. There are also no high ecological value waterways and wetlands, nor high ecological significance wetlands that occur within the Project Area. The Project has been designed to avoid Castle Creek and limit impacts to tributaries to linear infrastructure crossings.

3. PHASES OF DEVELOPMENT

3.1 CONSTRUCTION

The Principal Contractor of the Project will be responsible for the detailed construction methodology for the Project. A Preliminary Construction Environment Management Plan (CEMP) has been prepared and it is expected that this will be updated by the Principal Contractor prior to the commencement of any construction activities. The CEMP includes details of the construction program, construction techniques to be employed, mitigation measures to control construction impacts, and contact details for queries and reporting incidents. The CEMP will be implemented in accordance with the permits and the State Code 23 approval issued to the Project.

During the construction phase, up to 1,589 ha of vegetation will need to be cleared to establish a development footprint. Clearing works may impact directly on flora species. Key aspects of the Project that could result in impacts to biodiversity include:

- Habitat clearance for permanent and temporary construction facilities (e.g. wind infrastructure such as WTGs, hardstands, transmission lines, compound sites, stockpile sites, access tracks, laydown areas). The consequences of this impact to vegetation may include:
  - Direct loss of listed flora and vegetation habitat (typically from clearing);
  - Fragmentation of connectivity areas;
  - Introduction and spread of priority weeds and pathogens; and
  - Indirect impacts to adjacent habitat areas as a result of noise, blasting, dust, runoff and erosion, including impacts to downstream environments.
- Following the completion of the construction phase of the Project, construction laydown areas may be rehabilitated to pre-clearance conditions.
- The widened access tracks not required for operation will undergo progressive restoration of grass species.

3.1.1 CLEARING METHODOLOGIES

The proposed clearing methodologies will be confirmed by the Principal Contractor. However, it is anticipated that clearing will largely be undertaken mechanically using dozers and other heavy equipment. No chemical spraying or burning is proposed. Trees can be mulched and used during rehabilitation activities.

Clearing of vegetation will occur during the construction phase of the Project, which is estimated to be 24-48 months. The rehabilitation and/or progressive restoration of area cleared for construction will take place after construction has been completed.

3.1.2 AFFECTED ENVIRONMENTAL VALUES

Table 3-1 details the impacts to environmental values during the construction phase of the Project.

TABLE 3-1 ENVIRONMENTAL VALUES

Environmental Values	Proposed Clearing / Impact
Regional Ecosystems associated with a watercourse or drainage features	The following impacts to regulate vegetation intersecting a watercourse are anticipated within the development footprint • 30.3 ha within stream orders 1 & 2 10 m buffer; • 4.7 ha within steam orders 3 & 4 with a 25 m buffer; and • 0 ha within stream orders 5 and above within a 50 m buffer.
Conserving an endangered, Of Concern and / or Least Concern Regional Ecosystem	The Project includes a maximum development footprint of 1,589 ha which includes the clearing of up to 613.1 ha of Category B Regulated Vegetation containing 610.6 of 'Least Concern' Regional Ecosystems, 1.0 ha of 'Of Concern' Regional Ecosystems and 1.5 ha of 'Endangered' Regional Ecosystems.

3.2 OPERATION AND MAINTENANCE FACILITIES

To monitor and maintain the wind farm facility during the operation and maintenance phase, two operations and maintenance facilities (OMF) will be established within the Project Area. The OMF will include management offices, workshops, storage, equipment laydown, and warehousing facilities.

Operational activities and their potential impacts during the operations phase include:

- Routine maintenance and servicing of turbines, access tracks, electrical installations and infrastructure as required, resulting in potential impacts of fauna vehicle mortality and incidents, habitat loss (though on a considerably smaller scale than construction phase activities), disturbance and potential hazardous materials exposure.

Operational phase activities, though longer in duration than those of construction phase activities, are anticipated to be more indirect, of lower frequency and smaller in intensity (such as potential impacts from vehicles, lower scale clearing and vegetation maintenance, infrequent disturbance, collision impacts etc.).

Rehabilitation activities will be undertaken at the post-construction phase as well as at end-of-life decommissioning phase. A detailed Rehabilitation and Decommissioning Plan will be prepared during the early stages of operation as a part of the post-construction activities, and will include overarching principles for the decommissioning phase.

3.3 DECOMMISSIONING AND END-OF-LIFE REHABILITATION

Following the completion of the construction phase of the Project, construction laydown areas and widened access tracks not required for operation will be rehabilitated in accordance with good practice at the time and where not required for ongoing grazing or agricultural practices.

At the end of life, the WTGs towers and other above ground infrastructure will be removed, and the area rehabilitated in accordance with the regulatory framework applicable at the time and in consultation with the relevant landowner. Post-construction rehabilitation will be undertaken progressively as construction occurs. Decommissioning rehabilitation will be in accordance with an End of Operation Decommissioning Management Plan prepared towards the end of the Project's operational life.

4. POST CONSTRUCTION REHABILITATION

Following the completion of the construction phase of the Project, construction laydown areas and widened access tracks not required for operation are anticipated to be revegetated. Rehabilitation has been separated into two types:

- **Type 1 Rehabilitation**– Natural regeneration measures that include no active planting of canopy cover trees for disturbance from linear assets and return some ecological functionality back to disturbance areas no longer required for operations. Restricted to low shrubbery and grass (937ha of the Disturbance Footprint).; and
- **Type 2 Rehabilitation** - Rehabilitation/revegetation measures that aim to return nominal temporary pre-disturbance areas to full ecological functionality. Reinstated to equivalent pre-construction vegetation without height restrictions (93 ha of the Disturbance Footprint).

The extent of Type 1 and 2 Rehabilitation will be as per the required bushfire setback and minimum offset requirement for electrical cabling. An example cross-section of Type 1 and 2 Rehabilitation is included as Appendix A.

Where appropriate, areas of disturbance associated with construction are to be rehabilitated in accordance with a post-construction rehabilitation plan. This plan identifies areas of disturbance that are not required to be used during the operation of the Project. Rehabilitation objectives will be developed and have consideration for the existing condition, potential ongoing direct and indirect impacts, the need to maintain setbacks to reduce bushfire risk, and the need for disturbance for decommissioning. It is expected that rehabilitation will be required following end-of-life decommissioning of the Project.

4.1 PROPOSED REHABILITATION AREAS

The Project will require temporary disturbance to regulated vegetation to facilitate construction activities. Following the completion of construction, areas identified as not being required for operation and maintenance have the potential to be rehabilitated, in accordance with a Post-Construction Rehabilitation Plan to be developed for the Project.

It is of note that after the construction phase there is an opportunity to rehabilitate the following areas:

- 937 ha of Type 1 regeneration/rehabilitation; and
- 93 ha of Type 2 revegetation/rehabilitation.

Given the Project footprint of 1,589 ha, taking into account the area potentially rehabilitated after construction, the operation footprint is anticipated to be 559 ha. This includes 93 ha of ‘temporary use areas’ as defined under the Guide to State Development Assessment Provisions – State Code 16: Natural vegetation clearing (State Code 16 Guide) (Department of Resources, 2023) which will not be required post-construction. These areas have been nominated for Type 2 Rehabilitation. In addition to this, there is 937 ha of disturbance associated with construction, which does not contain operational infrastructure but is required to remain clear for the purpose of ongoing maintenance and decommissioning activities. These are nominated for Type 1 Rehabilitation. The permanent operation footprint required for the Project is 559 ha, required to facilitate construction.

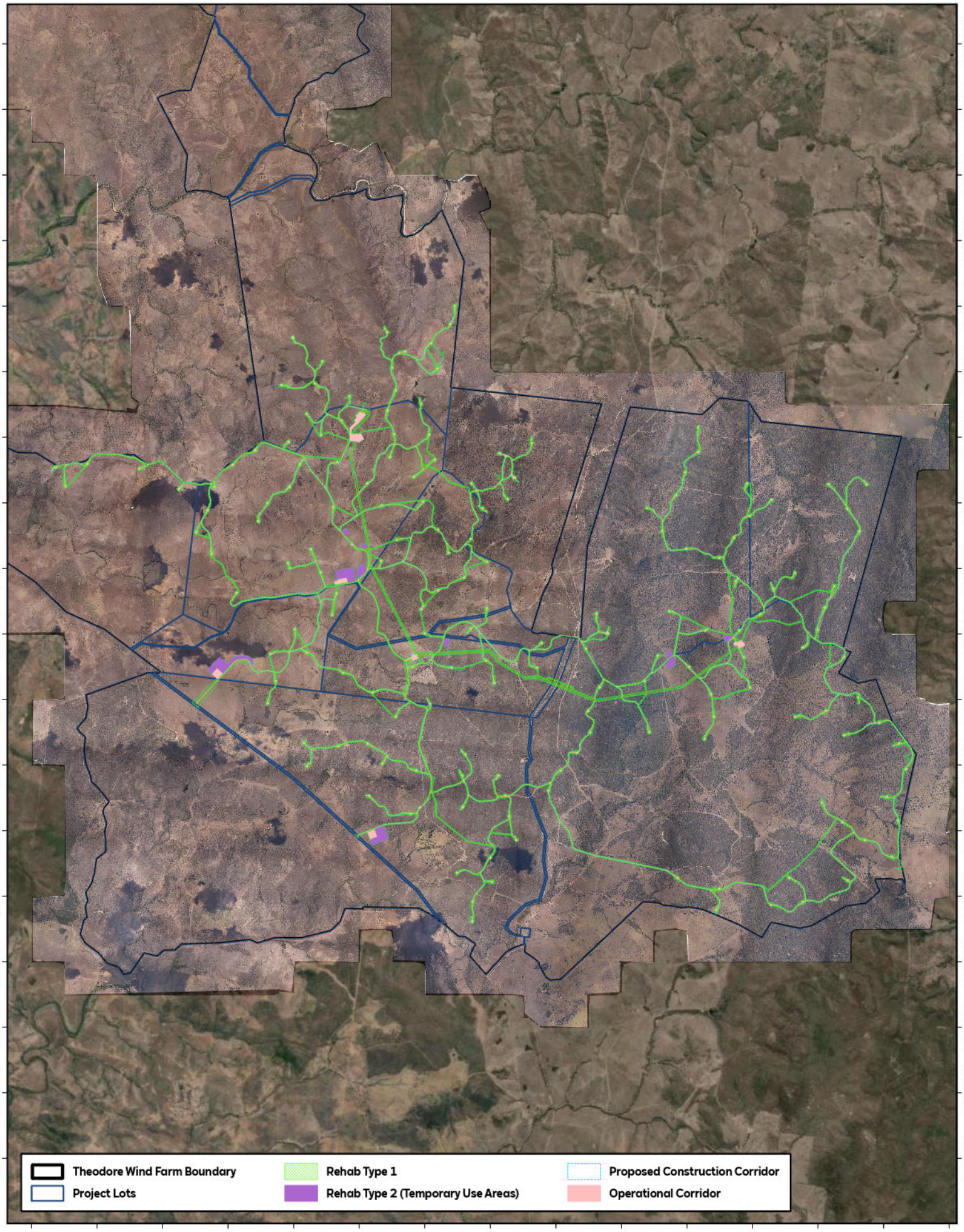
Figure 4-1, depicts the Project Area showing the Project footprint and the proposed area of rehabilitation after the construction phase.

An indicative cross-section of Type 1 and 2 rehabilitation is included as Appendix A.

4.2 REHABILITATION ACTIVITIES

Depending on the location of disturbance and potential continued use through the life of the Project, the rehabilitation activities are anticipated to include:

- Mulching of cleared vegetation for use in rehabilitated areas;
- Potential reuse of cleared trees over rehabilitation areas to provide habitat;
- Topsoil stockpiling for use in rehabilitated areas;
- Natural regeneration of groundcover;
- Hydro-seeding of battered slopes to promote growth and bank stability;
- Direct seeding of native plant and grass species; and
- Planting of native species tube-stock where appropriate and no future disturbance is required.



RWE

Theodore Energy Development Pty Ltd: Theodore Wind Farm

Operational Footprint and Rehabilitation

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N

Produced By: BF

Reviewed By: HC THWF_PLAN_003A

19/05/2025 GDA2020 MGA Zone 56

4.3 REHABILITATION OBJECTIVES

Rehabilitation efforts for flora and fauna will focus on maintaining ecosystem functionality, through minimising the disturbance and rehabilitating in accordance with pre-clearance vegetation, bushfire setbacks and minimum offset requirements for electrical cabling.

Key objectives for this Preliminary Post-Construction Rehabilitation Plan include:

- Minimise the risk of damage to installed infrastructure;
- Ensure that the rehabilitation of vegetation post-construction is properly planned in a manner which promotes self-sustaining ecosystems;
- Ensure rehabilitation of native vegetation able to develop into a viable ecological system, comparable to pre-clearing native vegetation and its land uses;
- Ensure rehabilitation continues until ecosystems and all impacted areas are self-sustaining;
- Restore pre-clearance levels of biodiversity and ecosystem functionality;
- Re-planting to be consistent with pre-disturbance REs where development is planned within these REs, especially for ecosystems and vegetation communities known to provide habitat for known threatened species koala, greater glider and squatter pigeon in the medium-long term;
- Ensure connectivity for native wildlife through species-specific management practices, including:
    - Groundcover revegetation focused on establishing a diverse grassy understorey suitable for foraging, to provide for small native mammals;
    - Maintain connectivity for koala and greater glider habitat;
    - Larger logs that are cleared from the development site would be placed within the revegetation area to provide additional micro-habitat features; and
    - Ensuring a fauna spotter-catcher is on-site to relocate fauna within designated areas to be cleared.
- Reusing topsoil and utilising mulch made from cleared vegetation;
- Preventing erosion of soil, particularly on sloped terrain; and
- Ensuring exotic plant species do not take hold and dominate regrowth vegetation.

4.4 REHABILITATION MANAGEMENT

Rehabilitation aims to implement environmental management practices and procedures, that look to:

- Restore and improve areas disturbed during the construction phase;
- Reinstate connectivity of fauna habitats, thus improving ecological processes;
- Minimise soil erosion and sedimentation;
- Prevent/minimise the outbreak of exotic species within the area of rehabilitation;
- Ensure that topsoil is managed effectively; and
- Monitor, inspect, and maintain the revegetated areas.

It is important to note that the principles and methods detailed in Table 4-1, despite their focus on post-construction rehabilitation, should be implemented at the earliest possible opportunity. The rehabilitation principles outlined in Table 4-1 apply broadly to all infrastructure.

TABLE 4-1 REHABILITATION PRINCIPLES, METHODS AND PERFORMANCE OUTCOMES

Rehabilitation Methods	Performance Outcome	Responsibility	Monitoring	Infrastructure associated
Temporary use areas as defined under the State Code 16 Guide – Rehabilitation in accordance with pre-clearance vegetation (Type 2 Rehabilitation)				
• The use of tube-stock containing native species (in 50x70mm pots) that reflects the surrounding environment will assist in speeding up the rehabilitation process in areas outside of the corridor. • Matting also helps to conserve soil moisture, improves water infiltration and soil structure, and moderates soil temperatures, thereby improving plant growth. • Plastic tree guards, held away from a seedling by 3 stakes, to protect against grazing by feral pests, and provide protection from dying winds. • Revegetation will range from grassing areas with species that were common within the Project Area before construction, planting trees, and/ or allowing for natural regrowth. • Approximately 70% understory cover to be successfully established with a successful establishment of native species representative of the existing RE or neighbouring vegetation. This serves to protect and cover soils and vegetation, to minimise the risk of erosion and provide homogeneity with the surrounding vegetation. • Provide areas of newly rehabilitated areas with pre-clearance values and ecological secondary succession through planting and regenerating native species in line with pre-existing Regional Ecosystem values. • Replacement of native trees along the second order streams within the Project Boundary to increase the vegetation density along the creek-lines and enhance its value as a linking corridor with remnant vegetation fragments. • Strong focus and ongoing management of rehabilitation of koala fodder eucalypt species.	70% height and 50% cover rehabilitation are achieved in accordance with the *Vegetation Management Act 1999* (VM Act) for defining remnant vegetation with a successful establishment of native species representative of the existing RE or vegetation; • Rehabilitated vegetation will reflect pre-existing Regional Ecosystem; and • Post-construction and post-rehabilitation, there will be no loss of ecosystem function.	The Proponent	• Completion of rehabilitation task sheets; • Visual and monitoring assessment; and • Chronological photographic documentation.	• Construction Facilities and Laydown Compounds (temporary use areas)

Rehabilitation Methods	Performance Outcome	Responsibility	Monitoring	Infrastructure associated
Progressive Restoration of Construction Footprint (areas to be utilised during maintaining and decommissioning) (Type 1 Rehabilitation)				
• In areas identified for progressive restoration, it might be appropriate to regenerate the cleared area with grass species, with weed management processes in place. This weed management may involve the use of mulch formed from vegetation cleared from the Project Area.	Land stability and grass cover with a successful establishment of 70% neighbouring grass species.	The Proponent	• Visual and monitoring assessment for a 12-24 month period.	• Access corridors • Turbine hardstand areas • Transmission and Reticulation Corridor
Topsoil Management				
• Topsoil to be replaced before seeding takes place. • Topsoil to be stockpiled where appropriate (not in areas of high weed seed) and used in the rehabilitation process. • Topsoil from similar vegetation communities to be respread at similar depths (~5cm) to those originally removed.	Appropriate topsoil stockpiled and re-used where appropriate.	Construction contractor	• Completion of topsoil records; and • Soil testing.	• Access Corridors • Turbine Hardstands • Watercourse Crossings • Transmission and Reticulation Corridor • Construction Facilities and Laydown Compounds (temporary use areas)

Rehabilitation Methods	Performance Outcome	Responsibility	Monitoring	Infrastructure associated
Erosion and Sedimentation Management				
• Sloping areas around the hardstand used for construction can be revegetated post-construction, through natural revegetation, the planting of tube-stock, hydro-seeding and direct seeding, where seasonally appropriate. • Hydroseeding from seed mixes that reflect pre-existing vegetation should be implemented soon after the construction phase, where seasonally appropriate. • Soil stabilisation involving the use of mulch formed from vegetation cleared from the Project area, geotextiles or mulch from an appropriately certified provider. • Approximately two-thirds understory cover to be successfully established with a successful establishment of native species. This serves to protect and cover soils and vegetation, to minimise the risk of erosion.	Sloped areas to be appropriately revegetated as soon as disturbance period is finalised.	Construction contractor	• Visual inspection and documentation of any erosion, particularly on slopes.	• Watercourse crossings • Transmission and Reticulation Corridor
Weed and Pest Animal Management				
• Weeds within the Project Area and access areas will be controlled in accordance with the Weed Management Plan. • Presence of weeds and pests listed under the *Biosecurity Act 2014* is controlled regularly throughout a 24-month period post-construction, and where possible, regularly throughout the operational phase in areas within the rehabilitation opportunity area. • In some areas of rehabilitation, it might be appropriate to regenerate the track naturally, with weed management processes in place. This weed management may involve the use of mulch formed from vegetation cleared from the Project area. Natural regeneration means allowing native vegetation to establish without planting.	Weeds will not be allowed to establish in rehabilitated areas.	The Proponent and Construction contractor	• Weed and pest monitoring.	• Access Corridors • Turbine Hardstands • Watercourse Crossings • Transmission and Reticulation Corridor • Construction Facilities and Laydown Compounds (temporary use areas) • Construction & Laydown Compounds (areas that are required post-construction)

Rehabilitation Methods	Performance Outcome	Responsibility	Monitoring	Infrastructure associated
Fauna management				
• A spotter catcher will inspect all koala, squatter pigeon and grey falcon habitat where it intersects with infrastructure prior to clearing. • Use of a fauna spotter catcher during the construction phase to relocate native species in areas from be cleared. • Where possible, minimise disturbance to fauna habitat within the Project Area. • Vegetation and Fauna Management Plans are to be adhered to throughout the post-construction phase.	No fauna mortality during clearing and construction. Potential and essential habitat regions are rehabilitated.	The Proponent and Construction contractor	• Areas of potential koala, squatter pigeon and grey falcon habitats frequently monitored and regrowth documented.	• Access Corridors • Turbine Hardstands • Watercourse Crossings • Transmission and Reticulation Corridor • Construction Facilities and Laydown Compounds (temporary use areas) • Construction & Laydown Compounds (areas that are required post-construction)

Table 4-2 provides a more detailed and focused rehabilitation methodology for rehabilitation around areas cleared for each infrastructure type. Indicative disturbance cross-sections of these areas are provided in Appendix A.

TABLE 4-2 REHABILITATION METHODS FOR INFRASTRUCTURE

Infrastructure	Rehabilitation Methods
Access Corridor	• Determine progressive restoration opportunities post-construction based on rehabilitation opportunity areas identified in Appendix A. • Roads and access tracks to be constructed with a suitable gravel road base and will remain unsealed. In sections where the access tracks will be remediated, gravel will be removed from the access tracks and treated. • Every possible attempt made to avoid vegetation in habitat crossings. Where this is unavoidable, cleared wooden vegetation will be placed within, or near to the cleared area, where possible, to encourage fauna habitat continuation.
Turbine Hardstands	• After construction, disturbed areas not covered by infrastructure are to undergo progressive restoration • Ensure the Bushfire Protection Zone is maintained • Monitor for weeds post-construction and treat them accordingly • Consider potential future uses for maintenance and observation activities.
Watercourse Crossings	• After construction, disturbed areas of the bed and banks of the waterway outside the permanent development footprint are returned to their original profile and stabilised to promote the regeneration of natural fish habitats. • Rehabilitation criteria for watercourse crossings is to be consistent with the Stormwater Management Plan and Erosion and Sediment Control Plan developed prior to the commencement of construction. • Fertiliser and sedimentation management are required when working close to watercourses. • Installed crossings and culverts would likely be retained after rehabilitation of the Project Area, at the discretion of host landowners.
Transmission and Reticulation Corridor	• Where there are ditches for underground cabling, these will be backfilled and the area above the cables rehabilitated with low growing species which will not constitute a risk to the installed infrastructure • Respread topsoil and cleared vegetation across installed infrastructure. • Monitor for weeds post-construction and treat them accordingly • This will be rehabilitated through a combination of methods described in this table and Table 4-1.
Construction Facilities and Laydown Compounds (temporary use areas)	• Avoid sealing temporary construction laydown areas • Monitor for weeds post-construction and treat them accordingly • Cleared compounds not required for O&M are decommissioned and rehabilitated in accordance with Table 4-1 including Type 1 Rehabilitation (natural regeneration) of the compounds outside regulated vegetation areas, and Type 2 Rehabilitation for those areas defined under State Code 16 as “temporary use areas”.

4.5 MONITORING AND REPORTING

Monitoring of proposed rehabilitation areas will occur annually for the first three years after the completion of construction, then every five years until the performance objectives are met.

Prior to the clearing of vegetation, a monitoring plan will be developed by the Applicant for the Project.

The monitoring will be undertaken by a suitably qualified person, depending on the methodology to be applied as part of the monitoring.

As part of the monitoring, the following may be considered:

- Plant growth, percent of cover and survival rates;
- Plant losses through herbivores, disease, vandalism, storm damage, etc;
- Weed regrowth and control measures; and
- Plant replacement

The intent of the monitoring report is to inform ongoing management actions and to provide adaptive management recommendations to ensure the performance objectives are achieved.

The monitoring reports will be kept for 3 years and are able to be provided to the regulators upon request.

5. CONCLUSION

The key outcomes and actions of this Preliminary Post-Construction Rehabilitation Plan, as outlined in Section 4, focus on successfully rehabilitating the Project Area for the Project to a level that enhances that of pre-clearance levels. It is recognised that the implementation of careful avoidance measures is the most significant step in minimising the habitat disturbance at the construction phase. Furthermore, it is recognised that in order to maximise the efficiency and successful rehabilitation of the Project Area, rehabilitation will be performed sequentially and will be an ongoing process throughout the pre-construction, construction and operational phases, as well as into the decommissioning phase of the Project. A key component of this rehabilitation plan is the area that the Project is proposing an opportunity to undergo:

- up to 937 ha of Type 1 Rehabilitation
- up to 93 ha of Type 2 Rehabilitation

These areas provide sufficient space to affect the management tools and activities outlined in Section 4.

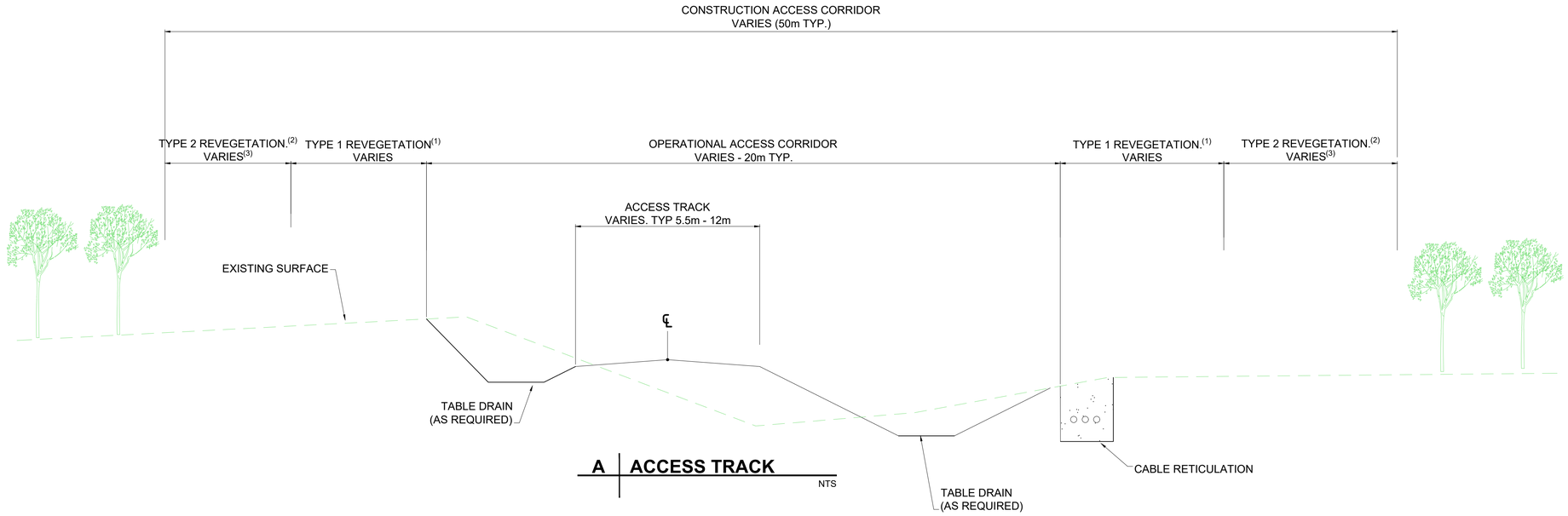
The key principles of this plan were based on the post-construction rehabilitation phase, and include management of weeds and pest animals, topsoil, minimisation & prevention of erosion and the progressive restoration of areas or regenerative alignment of cleared areas with pre-existing Regional Ecosystem values. These principles are to be utilised across a range of areas cleared due to the construction of access tracks, waterway crossings, wind turbine pads, construction and laydown compounds, underground cabling, transmission system and all infrastructure built upon slopes. Species specific plans for the koala, greater glider and southern squatter pigeon, as key species of interest known to occur within the Project Area, were touched upon, with a focus on maintaining connectivity and minimising alteration to pre-clearance Regional Ecosystems. It is important to note that a more detailed Post-Construction Rehabilitation Plan will be developed and based on detailed disturbance and actual rehabilitation areas, which will identify and map specific locations and associated objectives.

The methodologies and principles discussed within the Preliminary Post-Construction Rehabilitation Plan are to be subject to ongoing implementation and monitoring, to ensure best practice rehabilitation guidelines are met.

6. REFERENCES

Department of Resources. (2023, March). *Guide to State Development Assessment Provisions State code 16: Native vegetation clearing.* Retrieved from https://www.qld.gov.au/__data/assets/pdf_file/0024/374523/sdap-guide-state-code-16.pdf

APPENDIX A INDICATIVE DISTURBANCE CROSS SECTION



A | ACCESS TRACK

NTS

NOTES:

1. TYPE 1 REVEGETATION SHALL BE RESTRICTED TO LOW SHRUBBERY AND GRASS
2. TYPE 2 REVEGETATION SHALL BE REINSTATEMENT OF EQUIVALENT PRE-CONSTRUCTION VEGETATION WITHOUT HEIGHT RESTRICTIONS
3. EXTENT OF TYPE 1 AND 2 VEGETATION SHALL BE AS PER THE BUSH FIRE SETBACK TO BE IDENTIFIED AS PART OF THE NATURAL HAZARD RISK ASSESSMENT AND MINIMUM OFFSET REQUIREMENTS FOR ELECTRICAL CABLING
4. ACCESS TRACK WIDTH VARIES FROM TYP. 5.5m AT ON-GRADE STRAIGHTS TO 10m ON CURVES IN FILL

DATE	REV	DRAWN	REVISION
	-		

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RWE RENEWABLES AUSTRALIA PTY LTD

Level 9, 350 Collins St
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REFERENCE DRAWINGS

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ACCESS TRACK TYPICAL SECTION CLEARING AND REMEDIATION EXTENTS

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