

CONSERVATION AND RECLAMATION PLAN

Wild Rose 2 T10 and T11 Project

Prepared For

Wild Rose 2 Wind Inc.

2930 – 155 Wellington St. W
Toronto, ON, M5V 3H1

Prepared By

EDI ENVIRONMENTAL DYNAMICS INC.

400 – 622 5 Ave. SW
Calgary, AB, T2P 0M6

EDI Contact

Jennifer Muir

Terrestrial Ecologist

EDI Project

24C0068

Version: 1

October 2024



Down to Earth Biology



AUTHORSHIP

Team members from EDI Environmental Dynamics Inc. who contributed to preparing this report include:

Christina Tennant, MSc GIS Analyst

Patrick Audet, PhD, P. Biol. Author

Jennifer Muir, MSc, P. Biol. Technical Review

Kerri Oseen, MSc, P. Biol. Senior Review



TABLE OF CONTENTS

1	INTRODUCTION	1
1.1	RELEVANT DEFINITIONS	3
1.2	REGULATORY FRAMEWORK.....	4
2	DESKTOP REVIEW ASSESSMENT	4
2.1	SOIL	5
2.1.1	<i>Landform and Soil Series Classification.....</i>	<i>5</i>
2.1.2	<i>Land Suitability Rating.....</i>	<i>7</i>
2.2	VEGETATION	8
2.2.1	<i>Land Cover.....</i>	<i>8</i>
2.2.2	<i>Native Pasture.....</i>	<i>8</i>
2.2.3	<i>Listed Plants.....</i>	<i>10</i>
2.2.4	<i>Wetlands.....</i>	<i>10</i>
3	CONCEPTUAL RECLAMATION PLAN	10
3.1	INTERIM RECLAMATION.....	11
3.2	FINAL RECLAMATION	11
3.3	RECLAMATION COMMITMENTS.....	12
3.4	RECLAMATION BENCHMARKS.....	13
3.5	ADAPTIVE MANAGEMENT.....	13
4	CLOSURE	14
5	REFERENCES	14



LIST OF TABLES

Table 1.	Applicable Legislation and Regulations.....	4
Table 2.	Mapped Landforms and Soils Series.....	5
Table 3.	Landforms and Soils Series Descriptors.	7
Table 4.	Mapped Land Suitability Ratings.....	7
Table 5.	Land Suitability Descriptors.....	8
Table 6.	Reclamation Monitoring Commitments.	12

LIST OF FIGURES

Figure 1.	Project Layout.....	2
Figure 2.	Land Capability.....	6
Figure 3.	Land Cover and Wetlands.	9



1 INTRODUCTION

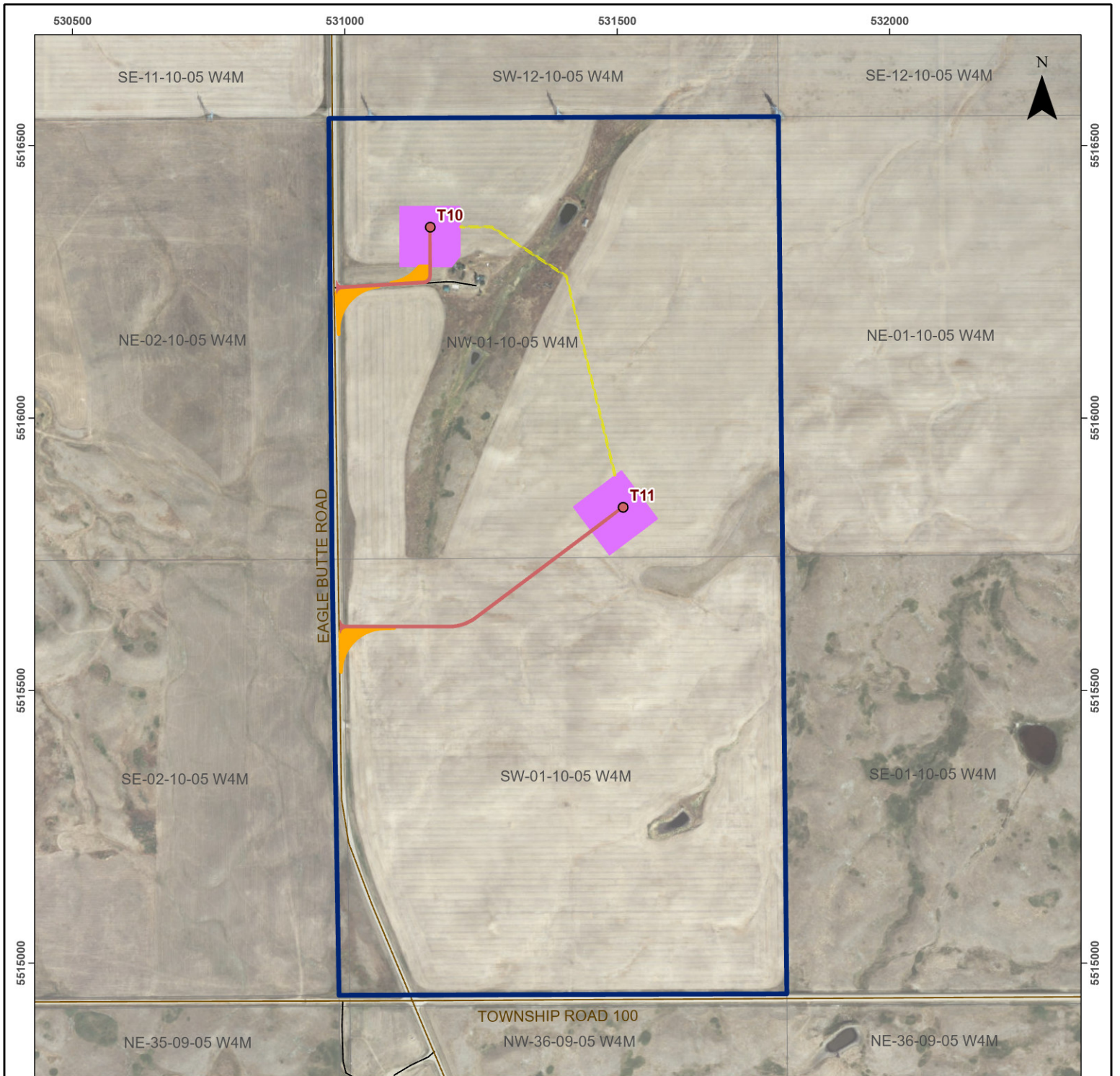
Wild Rose 2 Wind Inc. (Wild Rose 2; a subsidiary of Capstone Infrastructure Corporation), is proposing to construct and operate the Wild Rose 2 T10 and T11 Project (the Project), a wind energy facility in Cypress County, Alberta. The Project, located approximately 25 km southeast of Medicine Hat, Alberta, is situated entirely on Private agricultural land in SW- and NW-01-10-05 W4M (Figure 1).

Under the Alberta *Environmental Protection and Enhancement Act* (EPEA) (Government of Alberta 2000a) and consistent with the Conservation and Reclamation Directive for Renewable Energy Operations (the C&R Directive) (Government of Alberta 2018a), a condition of Project approval is the development of a Conservation and Reclamation Plan (C&R Plan) to guide the Project with final reclamation in mind. The C&R Plan identifies the Project Setting and defines end-land use expectations, strategies, and mitigation measures for interim reclamation, Project decommissioning, and final reclamation.

EDI Environmental Dynamics Inc. (EDI) was retained to compile this Project-specific C&R Plan. A key objective is the conservation of soil as a growing medium to support the desired end-land use and associated vegetation cover/composition. Topics addressed herein include (but are not limited to):

- Identification of end-land-use objectives in relation to land capability;
- Delineation approaches, standards and best managements practices for reclamation; and,
- Establishment of reclamation benchmarks, expectation for aftercare and closure criteria.

Mitigation measures and guidance during the pre-construction, construction, and operations phases are provided within the Project-specific Environmental Protection Plan. The C&R Plan is intended as a guide with the understanding that it will be updated and refined closer to Project decommissioning.



Legend

- Primary Local Road
- Secondary Local Road
- Quarter Section
- Project Area

Layout

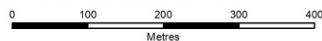
- Wind Turbine Generator - Operational
- Access Road - Operational
- Wind Turbine Generator - Construction
- Access Road - Construction
- Collector Line - Construction

**Wild Rose 2 T10 & T11 Project
Project Layout**

Wild Rose 2 Wind Inc.

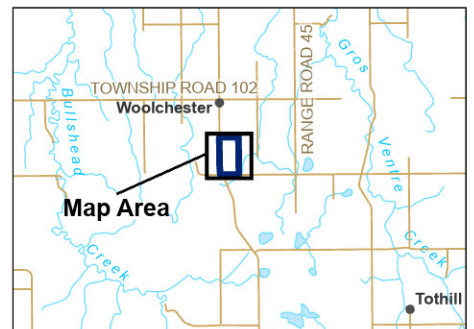
- Data Sources**
- Project Data. September 13, 2024. Wild Rose 2 Wind Inc.
 - Base data. CanVec 1:50,000 and 1:250,000. Government of Canada; 1:20,000. Altalis
 - Quarter Sections. Government of Alberta.
 - Main Basemap. April 2021. World Imagery: Southern Alberta, Maxar.

Disclaimer
 EDI Environmental Dynamics Inc. has made every effort to verify this map is free of errors. Data has been derived from a variety of digital sources and, as such, EDI does not warrant the accuracy, completeness, or reliability of this map or its data.



Map Scale: 1:10,000 (printed on 8.5 x 11)
 Map Projection: NAD 1983 UTM Zone 12N

Drawn: CT Checked: CG Figure 1 Date: 2024-09-25





1.1 RELEVANT DEFINITIONS

The following terms have been defined to support interpretation of this C&R Plan:

Project Footprint — The area subject to direct disturbance from the Project. Defined as the surveyed boundaries for the safe construction, operation and decommissioning and reclamation of all Project components.

Project Area — The two quarter sections that encompass the Project Footprint (i.e., NW-01-10-05 W4M and SW-01-10-05 W4M).

Reclamation — The process of returning disturbed land to its former land use and condition, or another/alternative land use. Contingent on the re-instatement of terrain, soil, and vegetation.

Interim (alt. Progressive) Reclamation — Planned approach to reclamation that is carried out concurrently during all Project Phases. Intended to progressively reduce the Project Area by reclaiming areas no longer necessary for Operations.

Equivalent Land Capability (ELC) — Reclamation standard referring to the ability of the land to support various land uses after conservation and reclamation that are similar to the pre-development conditions, but not necessarily identical to it.

Soil — Comprises the naturally occurring, unconsolidated mineral and/or organic materials at the earth's surface capable of supporting plant growth. Topsoil (the most bioactive portion of soil) refers to the topmost soil horizon(s) composed of surface organic materials and/or the mineral A horizon (depending on biogeoclimatic conditions). Subsoil (B Horizon) refers to soil horizons directly underlying topsoil and overlying parent material (C Horizon).

Soil Stripping/Salvage — Action of temporarily removing and stockpiling soil over an indeterminate timeframe (from short- to long-term). The purpose of soil stripping and salvage is to viably separate topsoil from subsoil and/or parent material and conserve soil quality and quantity as a growing substrate for reclamation purposes. This is achieved by stripping topsoil and surface organic materials together and minimizing mixing with lower subsoil and parent materials.

Revegetation — The process of re-establishing vegetative ground cover via seeding and/or planting. Natural revegetation relies on native soil seedbank and/or colonization by volunteer plant species.

Invasive plants — Commonly referred to as “non-native”, “alien”, “exotic” or “introduced”, invasive plants are not defined by the *Weed Control Act* (2008) but refer to undesirable plants that pose a risk to desirable plant species due to their aggressive colonization of a given environment and ability to outcompete desirable plants for resources.



Weeds — Plants that are listed in the Alberta *Weed Control Act's* Weed Control Regulation. This legislation defines two classes of weeds: prohibited noxious weeds that must be destroyed and noxious weeds that must be controlled.

1.2 REGULATORY FRAMEWORK

Table 1 summarizes key federal, provincial, and municipal legislation, regulations and directives applicable to reclamation of the Project.

Table 1. Applicable Legislation and Regulations.

Act	Summary
Federal	
<i>Pest Control Products Act</i> (2002) and Regulations	The Act governs the manufacture, storage, distribution, sale and use of products used in the control of pests (including invasive plants) in Canada.
<i>Plant Protection Act</i> (1990) and Regulations	The Act allows for the implementation of policies and operational programs to manage or prevent the introduction of invasive plants that will threaten Canadian plant life.
<i>Seeds Act</i> (1985; 2019AMD) and Regulations	The <i>Seeds Act</i> and regulations regulate the import, export, and sale of seeds in Canada, and their release into the environment. Seeds must meet established standards of registration, quality, testing, inspection, and labelling.
Provincial	
<i>Environmental Protection and Enhancement Act</i> (2000a) and Conservation and Reclamation Regulation	The <i>Environmental Protection and Enhancement Act</i> (EPEA) defines the requirement that an operator reclaim disturbed lands to equivalent land capability.
<i>Soil Conservation Act</i> (2000b) and Regulation	Under the Alberta <i>Soil Conservation Act</i> , landholders are required to prevent and otherwise stop soil loss and/or deterioration of soil quality.
<i>Weed Control Act</i> (2008) and Regulation	The Act requires control of designated noxious weeds and destruction of designated prohibited noxious weeds on all owned or occupied lands. The Regulation is a provision of the <i>Weed Control Act</i> and specifies noxious and prohibited noxious weeds.

2 DESKTOP REVIEW ASSESSMENT

The following sections summarize landform and soil series classification, land suitability ratings, and predominant land use and vegetation in accordance with Desktop Review Assessment requirements under the C&R Directive (Government of Alberta 2018a). The Project is located on lands previously assessed as part of the Wild Rose 2 Wind Power Project (Alberta Utilities Commission [AUC] Proceeding 27729); further description is provided here to reflect the specific environmental conditions encountered by the Project.

Consistent with the C&R Directive, a Pre-Disturbance Site Assessment of the Project Footprint and associated baseline reporting will be completed prior to construction to confirm terrain, soil and land use/vegetation that will inform final reclamation objectives and benchmarking.



2.1 SOIL

2.1.1 LANDFORM AND SOIL SERIES CLASSIFICATION

Landform models summarize the characteristics of repeating patterns in the landscape. These patterns are described in surface form by seven attribute values and five slope classes. Soil series consist of soils developed on similar parent material and under similar environmental conditions. The Project Footprint was overlaid in GIS with provincial landform and soil series map layers from AGRASID 4.1 (Government of Alberta 2018b) and the Canadian Soil Information System (CanSIS; Agriculture and Agri-Food Canada 2022a). Landform and soil series polygon coinciding with the Project Footprint is shown on Figure 2. Mapped landform and soil series polygon and associated descriptors are presented in Table 2 and Table 3.

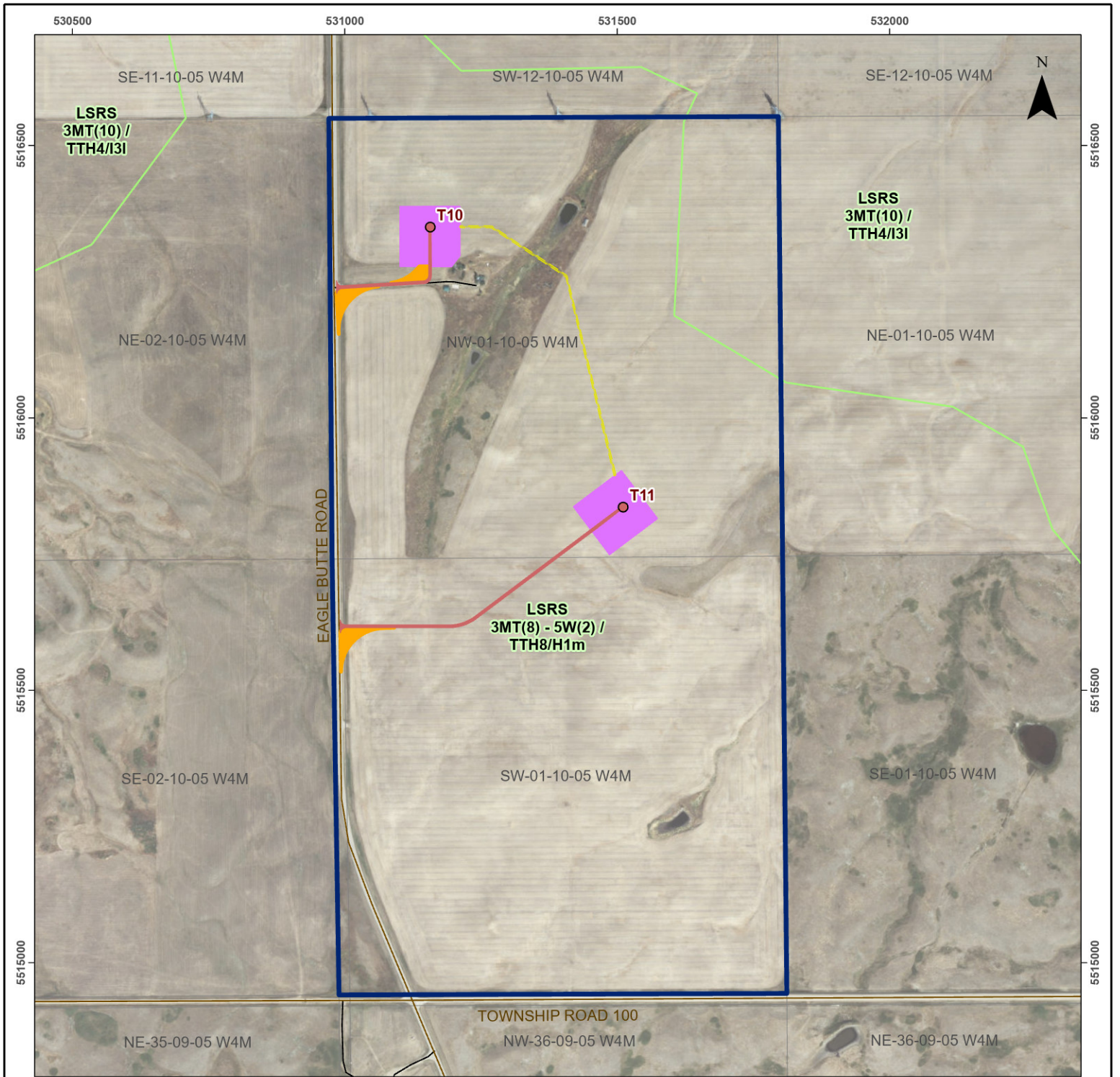
The Project Footprint is situated on terrain characterized by predominantly hummocky surface expressions with medium relief. The predominant/primary soil type is the Tothill soil series, referring to Orthic Dark Brown Chernozems. Secondary soil types include Miscellaneous Undifferentiated soils (referring to various/related eroded and Gleysolic soils). Tothill is characterized by a combination of Ap/Ah – Bm/Bt – Cca/Ck sequences¹ with sandy clay loam textured topsoil (A horizon) followed by sandy clay loam subsoil (B and C horizons) that are typically enriched with calcium carbonates (CaCO₃) from the morainal parent material.

Table 2. Mapped Landforms and Soils Series.

Polygon ID	Map Unit	Landform	Soil Series	
			Primary	Secondary
9750	TTH8/H1m	Hummocky Medium relief	Tothill	Misc. Eroded/Gleysol

*From AGRASID 4.1 (Government of Alberta 2018b)

¹ Ah/Ap = (Ah) enriched with organic matter, (Ap) disturbed by agriculture or human activity; Bm/Bt = (Bm) altered by chemical weathering to give a change in colour and/or structure, (Bt) that contains illuvial layer lattice clays; Ck/Cca = (Ck) presence of CaCO₃ or (Cca) enriched with CaCO₃ from the soil parent materials.



Legend

- Primary Local Road
- Secondary Local Road
- AGRASID 4.1: Land Suitability Rating (Spring Grains) / Soil Series
- Quarter Section
- Project Area

Layout

- Wind Turbine Generator - Operational
- Access Road - Operational
- Wind Turbine Generator - Construction
- Access Road - Construction
- Collector Line - Construction

Wild Rose 2 T10 & T11 Project Land Capability

Wild Rose 2 Wind Inc.

Data Sources

- Project Data. September 13, 2024. Wild Rose 2 Wind Inc.
- AGRASID 4.1. 2018. Government of Alberta.
- Base data. CanVec 1:50,000 and 1:250,000. Government of Canada; 1:20,000. Altalis
- Quarter Sections. Government of Alberta.
- Main Basemap. April 2021. World Imagery. Southern Alberta, Maxar.

Disclaimer
 EDI Environmental Dynamics Inc. has made every effort to verify this map is free of errors. Data has been derived from a variety of digital sources and, as such, EDI does not warrant the accuracy, completeness, or reliability of this map or its data.

0 100 200 300 400
 Metres
 Map Scale: 1:10,000 (printed on 8.5 x 11)
 Map Projection: NAD 1983 UTM Zone 12N

Drawn: CT	Checked: CG	Figure 2	Date: 2024-09-26
--------------	----------------	----------	------------------

Map Area



Table 3. Landforms and Soils Series Descriptors.

Map Unit	Soil Series Name	Soil Order	Descriptors
TTH	Tothill	Orthic Dark Brown Chernozem	Sequence: Ah – Bm – Cca – Csk; Well-drained, moderately fine textured sandy clay loam/clay loam topsoil, sandy clay loam/clay loam subsoil Parent Material: Till (morainal) with moderately to very strongly calcareous materials (6%-40% CaCO ₃)
ZER	Misc. Eroded Soils	Rego Dark Brown Chernozem	Sequence: Apk – Ck; Well-drained, Undifferentiated clay loam topsoil, undifferentiated subsoil Parent Material: Undifferentiated Mineral
ZGW	Misc. Gleysolic Soils	Orthic Humic Chernozem	Sequence: Ah – Bg – Ckg; Poorly Drained, variably loamy topsoil, undifferentiated subsoil texture Parent Material: Undifferentiated Mineral

Misc. = Miscellaneous

*From CanSIS (Agriculture and Agri-Food Canada 2022b)

2.1.2 LAND SUITABILITY RATING

The land suitability rating system (LSRS) is a procedure for rating the suitability of land for agricultural spring-seeded small grains (Alberta Agriculture and Forestry 2017). The system is based on the soil–climate–landscape potential and is an improvement on the Canada Land Inventory (CLI) capability rating (Agriculture and Agri-Food Canada 2019). There are seven classes according to agricultural limitations, where the range of suitable crops decreases from Class 1 to Class 7. Subclass indicates similar kinds of lands, but varying intensities of limitations and hazards. The Project Footprint was overlaid in GIS with provincial landform and soil series map layers from AGRASID 4.1 (Government of Alberta 2018b) and the Canadian Soil Information System (Agriculture and Agri-Food Canada 2022a). Mapped land suitability ratings and associated descriptors are presented in Table 4 and Table 5.

The Project Footprint occurs on land with a combination of Class 3 and Class 5 land suitability ratings characterized by moderate to very severe limitations to agricultural productivity (e.g., crop growth) (Table 4 and Table 5). Subclass restrictions are associated with topography (e.g., areas with adverse terrain) and/or soil (e.g., water holding capacity or drainage issues affecting optimal crop growth).

Table 4. Mapped Land Suitability Ratings.

Polygon ID*	Map Unit	Land Suitability Ratings		
		Ratio	Class	Subclass
9750	LSRS 3MT(8)-5W(2)	80%	3	MT
		20%	5	W

*From AGRASID 4.1 (Government of Alberta 2018b)



Table 5. Land Suitability Descriptors.

Class		Descriptor
2		Slight Limitation to Crop Growth
3		Moderate Limitation to Crop Growth
4		Severe Limitations to Crop Growth
5		Very Severe Limitation to Crop Growth
6		Extremely Severe Limitation to Crop Growth
Subclass		Descriptor
Soil	M	Water Holding Capacity – Crops are adversely affected by lack of water due to inherent soil characteristics
	W	Drainage – Soils in which excess water (not due to inundation) limits the production
Landscape	T	Slope – Landscapes with slopes steep enough to incur a risk of water erosion or to limit production

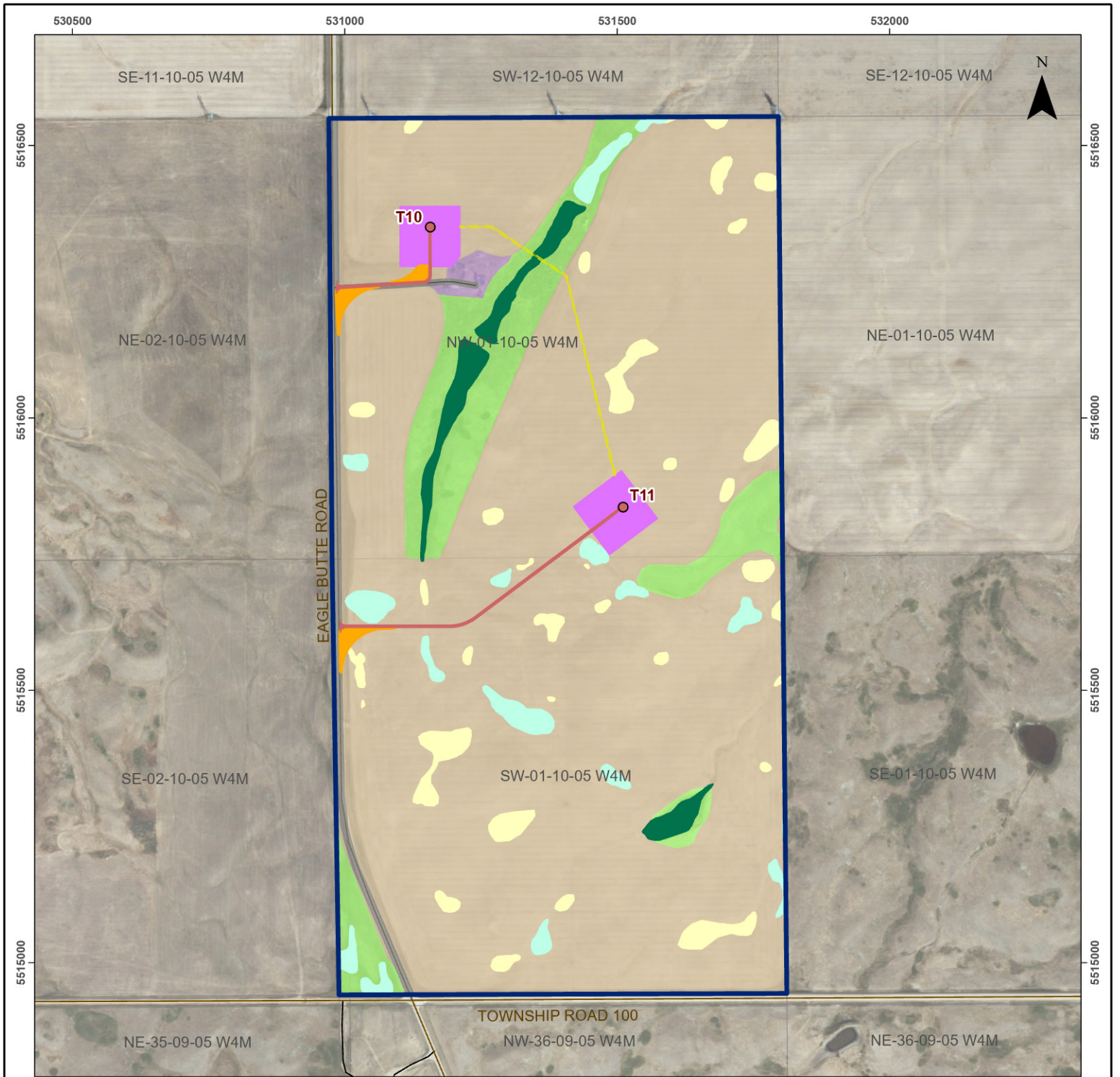
2.2 VEGETATION

2.2.1 LAND COVER

Land cover within the Project Area has been assessed by means of a desktop review of the Grassland Vegetation Inventory (Government of Alberta 2019), aerial and satellite imagery (Figure 3). Land cover within the broader Project Area (i.e., SW- and NW-01-10-05 W4M) includes cultivated cropland, tame pasture, wetlands, roads, and a rural residential development (mapped as farmyard; Figure 3). The majority of Project infrastructure is sited on cultivated cropland, with the exception of a small farmyard anticipated to be temporarily disturbed at the southeastern extent of the crane pad for T10, and a collector line crossing of a Class IV wetland with tame grassland along its edges.

2.2.2 NATIVE PASTURE

The Project occurs within the Mixedgrass Natural Subregion of Alberta’s Grassland Natural Region (Natural Regions Committee 2006). All Project infrastructure is sited to avoid construction and operations on native pasture.



Legend

- Primary Local Road
- Secondary Local Road
- Quarter Section
- ▭ Project Area

Layout

- Wind Turbine Generator - Operational
- Access Road - Operational
- Wind Turbine Generator - Construction
- Access Road - Construction
- Collector Line - Construction

Land Cover

■ Cultivated	■ Graminoid Marsh I
■ Farm Yard	■ Graminoid Marsh II
■ Road	■ Graminoid Marsh III
■ Tame Pasture	■ Graminoid Marsh IV

**Wild Rose 2 T10 & T11 Project
Land Cover and Wetlands**

Wild Rose 2 Wind Inc.

Data Sources

- Project Data. September 13, 2024. Wild Rose 2 Wind Inc.
- Land Cover. September 2024; Wetlands. January 2024. Golder Associates Ltd. and EDI Environmental Dynamics Inc.
- Base data. CanVec 1:50,000 and 1:250,000. Government of Canada; 1:20,000. Altalis
- Quarter Sections. Government of Alberta.
- Main Basemap. April 2021. World Imagery: Southern Alberta, Maxar.

Disclaimer
EDI Environmental Dynamics Inc. has made every effort to verify this map is free of errors. Data has been derived from a variety of digital sources and, as such, EDI does not warrant the accuracy, completeness, or reliability of this map or its data.

0 100 200 300 400
Metres

Map Scale: 1:10,000 (printed on 8.5 x 11)
Map Projection: NAD 1983 UTM Zone 12N

Drawn: CT	Checked: CG	Figure 3	Date: 2024-10-02
--------------	----------------	----------	------------------

EDI



2.2.3 LISTED PLANTS

The Project is not located within the Endangered and Threatened Plant Range ((Government of Alberta 2024). A search of the Alberta Conservation Information Management System (ACIMS) did not identify any element occurrences of listed plants within the Project Area (Alberta Environment and Protected Areas 2022). Project infrastructure is located entirely on anthropogenically disturbed lands, including cultivation and a small area of farmyard. A collector line crosses a Class IV wetland with tame pasture along its edges; this collector line will be installed via Horizontal Directional Drilling (HDD) to reduce habitat disturbance.

2.2.4 WETLANDS

Wetlands identified within the Project Area are within privately-owned, agricultural land (i.e., cultivation and pasture) noted to be chronically disturbed by agricultural activity. To the extent possible, the Project applied a decision-framework/hierarchy during planning and siting to avoid and/or minimize its construction and operations footprint on wetlands. Wetlands are avoided by Project infrastructure, with the exception of one Class IV wetland intersected by the collector line, which will be installed via HDD. Approvals and/or notifications under the *Water Act* and reporting requirements under the Alberta Wetland Policy will be submitted prior to construction as applicable.

3 CONCEPTUAL RECLAMATION PLAN

To reclaim the Project Footprint and achieve closure certification after decommissioning, Wild Rose 2 is required to reinstate an equivalent land capability (ELC) and address all commitments for interim monitoring and final assessment under the C&R Directive (Government of Alberta 2018a). Based on these Guidelines, the following C&R Plan items identify end-land use objectives, minimum standards, and requirements for the Project to facilitate re-instatement of ELC. Key reclamation activities include:

Decommissioning — All surface equipment and facilities will be dismantled, and Project-related materials, debris and other waste will be removed from site.

Reclamation Earthworks — Pads, laydowns, access, and other ancillary features will be re-graded and contoured to tie in with predominant topography and surface drainage patterns or (if/where appropriate) improve surface drainage characteristics.

Reclamation Surface Preparation — Salvaged topsoil and/or supplemental topsoil will be redistributed across the reclaimed Project Footprint.

Revegetation — Replaced topsoil will be seeded with an approved seed mixture aligning with the desired end-land use objective, or the landowner will resume agricultural activities (e.g., cultivation).



3.1 INTERIM RECLAMATION

At the completion of construction, the Project will undergo interim reclamation to reduce the Project Footprint during operations. Temporary laydown areas deemed to be non-essential for operations will be decommissioned and de-compacted (if/where required). Salvaged topsoil will be redistributed and reseeded, or the landowner will resume cultivation. Vegetation within these areas will be monitored and managed until establishment of a vegetation cover aligning with the desired end-land use objectives.

3.2 FINAL RECLAMATION

At the completion of operations, all Project infrastructure will be decommissioned to the standard of the day and the operational Project Footprint will be reclaimed and revegetated, as appropriate.

- Where present, surface gravel will be removed from access roads and other gravelled areas and disposed of.
- Access roads and other areas prone to high traffic will be de-compacted, as appropriate.
- Portions of the turbine foundations (if/where they may occur) will be excavated and removed to approximately 1 metre below ground surface to facilitate surface reclamation; excavated features will be backfilled with subsoil.
- Underground collector lines may be de-energized and left in place, or removed.
- Where necessary, areas of the Project Footprint where land has been disturbed will be re-graded and contoured to tie in with adjacent topography and surface drainage patterns.
- Salvaged topsoil will be handled and redistributed in a manner that meets minimum requirements for soil quality and quantity. Topsoil will have similar characteristics (i.e., texture) to pre-disturbance conditions and meet a Required Replacement Depths (RRD) of 80% of the pre-disturbance A horizon values. Admixing will be minimized and maintained as less than 30% of the control values. Subsoil will maintain an average bulk density as less than 120% of the control values.
- Soil erosion, compaction and rutting will be minimized to avoid adverse effects on soils and growing capability.
- End-land use will target re-instatement of pre-disturbance land use or regionally appropriate land use, in consultation with the landowner.
- Vegetation will achieve greater than or equal to 80% cover or crop density and display healthy vigour, height and colour compared with adjacent undisturbed ground.
- Noxious weeds will be monitored/managed in a manner that aligns with land use objectives.

A Project-specific Final Reclamation Plan informed by the results of the Pre-Disturbance Site Assessment will be developed to the standard of the day to refine the sequencing of reclamation activities at the Project.



3.3 RECLAMATION COMMITMENTS

Table 6 summarizes monitoring activities and commitments to be implemented at the Project to facilitate achievement of reclamation and revegetation objectives.

Table 6. Reclamation Monitoring Commitments.

Activity/Concern	Mitigation Measure
Revegetation	<ul style="list-style-type: none"> • Engage a qualified environmental professional to complete revegetation monitoring at the site during a biologically appropriate timeframe at the end of the first full growing season following revegetation in accordance with the Conservation and Reclamation Directive for Renewable Energy Operations (Government of Alberta 2018a) or the standard of the day.
Invasive Plants and Weed Species	<ul style="list-style-type: none"> • Invasive plant and weed surveys will be conducted during a biologically appropriate time of year (e.g., when invasive plants can be identified) within areas where soil was exposed during construction activities (e.g., temporary access routes, laydowns, collector line trenches) during the first growing season following reclamation. • The incidence of observed invasive plant and/or weed species will be documented; information collected for each occurrence should include: <ul style="list-style-type: none"> ○ Date and surveyor information; ○ Plant species; ○ Geographic location (e.g., GPS point); ○ Estimated size of the population (e.g., by pacing the length and width or delineating with a GPS track); ○ Density and distribution of the population; and, ○ Photo documentation. • Invasive plants and weeds will be controlled using the following treatment options (alone or in combination): <ul style="list-style-type: none"> ○ mechanical control (involves the physical removal of the plants); ○ chemical control (involves application of synthetic and/or natural herbicides); and, ○ biological control measures (involves the use of living organisms [e.g., rusts, insects] to control selected invasive plant species). • Treatment options for an invasive plant/weed occurrence will be based on the identity of the weed/invasive plant, its designation in Cypress County, the size and extent of the occurrence, time of year, the proximity of the occurrence to sensitive areas (e.g., livestock grazing areas, waterbodies), and the available control options. • Invasive plants will be controlled in consultation with a qualified professional to minimize potential effects on surrounding land uses. • If required, herbicide selection and use on site will comply with all applicable laws and regulations. • Previously identified occurrences of invasive plants and/or weeds will be periodically monitored within the Project Footprint in subsequent years to verify efficacy of control measures and allow for early detection of recolonization and/or spread.
Erosion Control – Monitoring	<ul style="list-style-type: none"> • Periodically monitor any remaining erosion control structures for their effectiveness and repair as/when required. • If/where necessary, engage a qualified environmental professional to support adaptive management.



3.4 RECLAMATION BENCHMARKS

The objectives of the revegetation targets are to:

- Monitor revegetation status and trajectory.
- Verify presence, abundance, and status (health and vigour) of desired species.
- Identify deficiencies and potential management concerns (e.g., erosion, changes in hydrology, establishment of weeds/invasive species).
- Address deficiencies and provide recommendations for remedial action(s) and timelines for success.

Benchmarks will be developed to the standard of the day prior to final reclamation and as part of the Final Reclamation Plan.

3.5 ADAPTIVE MANAGEMENT

Approach

A philosophy of adaptive management will be adopted to verify that the C&R Plan and associated mitigation measures are meeting performance targets. This will be achieved via periodic content review (if/where appropriate) as a mechanism for improvement and adaptation in relation to site conditions and in response to ongoing environmental monitoring. Deteriorating trends will be studied to determine their root cause(s); corrective action(s) will be developed and implemented in a timely manner.

Documentation

The Project Owner will be responsible for maintaining appropriate records to demonstrate due diligence and compliance with the C&R Plan and Project regulatory requirements. No amendments to these documents may be made without the approval of these personnel. For example, key information should include:

- Information on materials/guidance provided to contractors as part of general site orientation procedures.
- Records of cleaning and disinfection of vehicles and equipment that are on site.
- Soil salvage procedures, timelines, and storage locations.
- Information on any environmental incidents and occurrence of non-compliance.
- Photo records of implemented mitigation measures, monitoring, and inspections (e.g., flagging/ staking of boundaries, equipment inspections, soil replacement, site preparation, seeding of the site).
- Records of invasive plant and weed species monitoring including date, type of monitoring, personnel completing work, type of treatment or control used, location, and monitoring observations.
- Seed mixture quality and certification of weed free status documents.
- Records of any site investigations performed and the outcome of the visit.



4 CLOSURE

This C&R Plan has been prepared in accordance with the C&R Directive and will act to inform the successful conservation and reclamation of the Wild Rose 2 T10 and T11 Project. The content is expected to be revisited, revised and/or refined over the Project life cycle to facilitate timely and effective reclamation. If/where necessary, additional recommendations, mitigation measures and guidance will be developed based on site conditions identified during the Pre-Disturbance Site Assessment, and Project activities.

5 REFERENCES

- Agriculture and Agri-Food Canada. 2019. Canada Land Inventory (CLI). (<https://sis.agr.gc.ca/cansis/nsdb/cli/index.html>)
- Agriculture and Agri-Food Canada. 2022a. Canadian Soil Information System. (https://agriculture.canada.ca/atlas/apps/ae/main/index_en.html?AGRIAPP=3&APPID=e87af05bd35848598994b13f45a24a25&WEBMAP-EN=c225cc78d5b142d58eacefae91cc535b&WEBMAP-FR=ad0b6822a33e411683f99979a1167efa&mapdescription=true&print=true&breadcrumb=b1,b2,b10,b3&adjust_to_viewport=true)
- Agriculture and Agri-Food Canada. 2022b. Canadian Soil Information Service: National Soil Database. (<https://sis.agr.gc.ca/cansis/>)
- Alberta Agriculture and Forestry. 2017. Land Suitability Rating System (LSRS). Government of Alberta. (<https://open.alberta.ca/dataset/dc0e6b58-b9d9-45d4-8d68-9d9dbd21687a/resource/f339217e-c4ae-4dc3-b619-883023350199/download/lrs-explained.pdf>)
- Alberta Environment and Protected Areas. 2022. Alberta Conservation Information Management System (ACIMS). (<https://www.albertaparks.ca/albertaparksca/management-land-use/alberta-conservation-information-management-system-acims/>)
- Government of Alberta. 2000a. *Environmental Protection and Enhancement Act*. Chapter E-12. (<https://open.alberta.ca/publications/e12>)
- Government of Alberta. 2000b. *Soil Conservation Act*. Chapter S-15.
- Government of Alberta. 2008. *Weed Control Act*. Chapter W-5.1.
- Government of Alberta. 2018a. Conservation and Reclamation Directive for Renewable Energy Operations. Edmonton, Alberta. 50 pp.
- Government of Alberta. 2018b. Agricultural Regions of Alberta Soil Inventory Database (AGRASID) 4.1, updated November 2018. Ministry of Agriculture and Forestry. (<https://soil.agric.gov.ab.ca/agrasidviewer/>)
- Government of Alberta. 2019. Grassland Vegetation Inventory (GVI). (<https://open.alberta.ca/opendata/gda-d3ab9031-8ec0-4589-9335-c1e50ae05992>)



- Government of Alberta. 2024. Fish and Wildlife Internet Mapping Tool - Public (FWIMT). (https://geospatial.alberta.ca/FWIMT_Pub/Viewer/?TermsOfUseRequired=true&Viewer=FWIMT_Pub)
- Government of Canada. 1985. *Seeds Act*. R.S.C., 1985, c. S-8. (<https://laws-lois.justice.gc.ca/eng/acts/s-8/>)
- Government of Canada. 1990. *Plant Protection Act*. S.C. 1990, c. 22. (<https://laws-lois.justice.gc.ca/PDF/P-14.8.pdf>)
- Government of Canada. 2002. *Pest Control Products Act*. S.C. 2002, c. 28.
- Natural Regions Committee. 2006. Natural Regions and Subregions of Alberta. T/852. Government of Alberta, Edmonton, Alberta. 254 pp.