

Appendix 13.15-A-B Non-farm Application Update

January 12, 2022

EDI File: 20P0172

Telkwa Coal Ltd. (A Subsidiary of Allegiance Coal Ltd.)
1415 Hankin Avenue
Telkwa, BC, V0J 2X0

Attention: Dan Farmer, Chief Operating Officer

RE: TENAS PROJECT | NON-FARM SUPPORT DOCUMENT TO THE ALC
Update to Project Information

EDI Environmental Dynamics Inc. (EDI) was retained by Telkwa Coal Limited (TCL) to compile technical support documents for the *Non-Farm Use Application* for the Tenas Metallurgical Coal Project (hereafter referred to as the Tenas Project) that is partially situated within the BC Agricultural Land Reserve (ALR). Following the *Criteria for Agricultural Capability Assessment* (ALC 2017), the report (cf. EDI 2020) provided an inventory of land resources for Project components within the ALR (e.g., land use, predominant vegetation and soils, and agricultural capability), summarized potential effects to agricultural production associated with the Project, and identified measures to mitigate these potential effects. This content was primarily based on Project-specific baseline field survey (terrain, soil, and vegetation) completed by Ardea Biological Consulting (Ardea 2020a, 2020b). Where necessary, this information was supplemented with provincial spatial inventories (e.g., historical land inventories and soil surveys).

Since the initial compilation and submission of the *Non-Farm Use Application* to the BC Agricultural Land Commission (ALC), minor changes have been made to the Tenas Project footprint within the ALR and additional baseline data have been made available (i.e., referring to field-based Classes and Subclasses for agricultural land capability). A comparison of data changes between the initial vs. revised information is provided hereafter. The primary differences are:

1. The Project Footprint presently omits a water discharge pipeline that was no longer required and removed from the Project. The Project Component Footprint within the ALR has decreased from 51.35 ha to 49.10 ha.
2. Agricultural land capability ratings have been updated using field-based values. Provincial mapped vs. field-based agricultural land capability are geographically similar, but polygon delineations are locally different. Within an acceptable range of variation, the Subclass ratings are also locally different due to a higher-level resolution.

In summary, the updated/revised ALR usage reflects a similar total area and the patterns/trends between mapped vs. field-based agricultural land capability. The potential effects, mitigations and conclusions cited in the original technical report (cf. EDI 2020) are still considered valid and applicable to the updated Project Footprint.

Kindly yours,

EDI Environmental Dynamics Inc.

Patrick Audet | Ph.D., R.P.Bio.
Senior Scientist, Team Lead



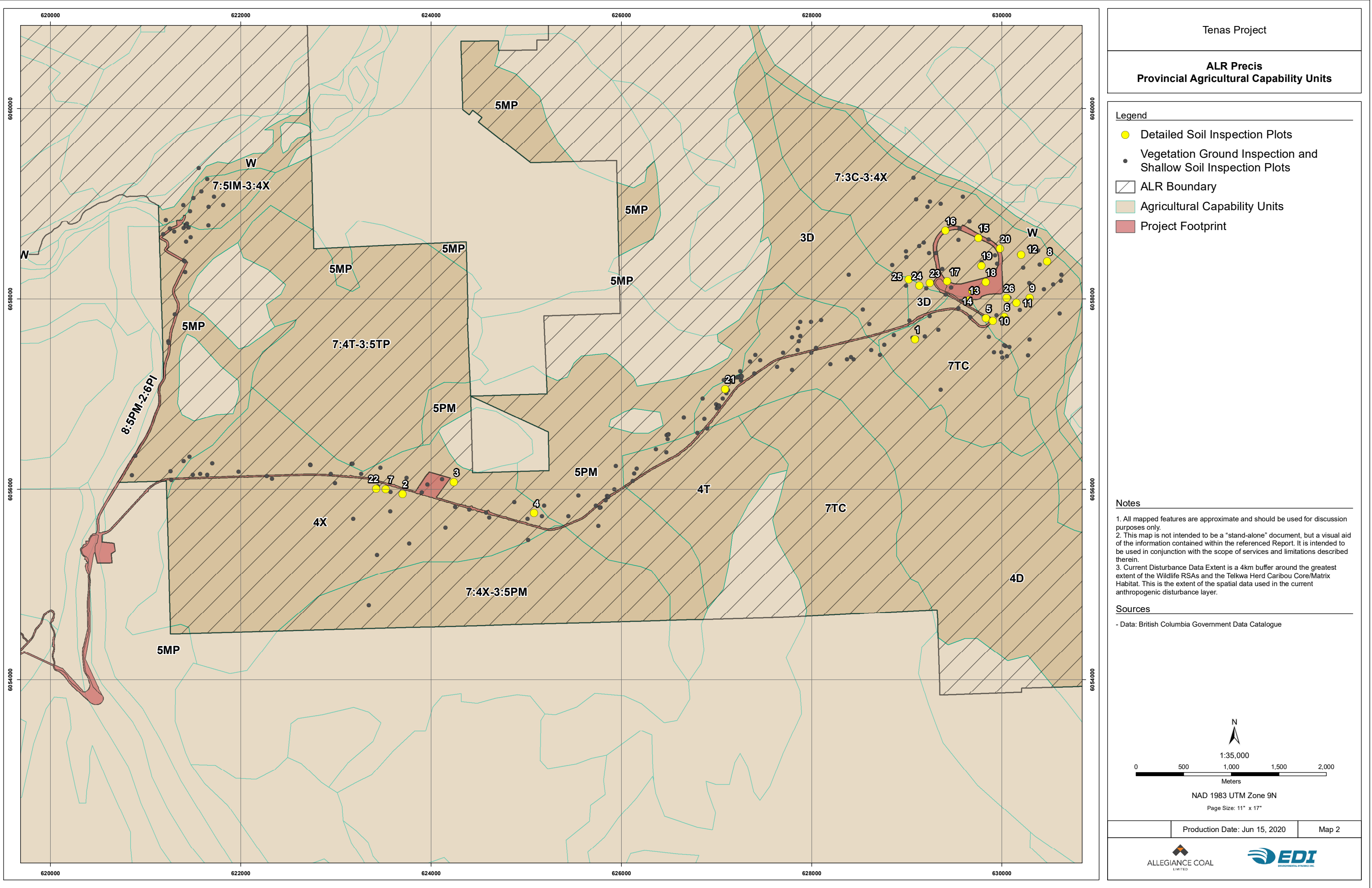
AGRICULTURAL CAPABILITY UNITS

Mapped Agricultural Capability Units — Provincial Spatial Inventory cited in EDI (2020)

Portions of the Project Footprint located within the ALR were projected in GIS with spatial inventory data based on methods of determining *Land Capability Classification for Agriculture in BC* by Kenk and Cotic (1983). Map 1 shows mapped agricultural land capability units based on provincial resources occurring within the Project Footprint located within the ALR. Table 1 summarizes corresponding land capability Classes and Subclasses and associated land capability descriptors for the Project Footprint that overlaps designated ALR lands. The total ALR usage by the Project was 51.35 ha: most of this land area (77 %) was comprised of Class 3, Class 3/4, and Class 4 land; a lesser amount of land (18 %) was comprised of Class 4/5 and Class 5 land; the remaining land (5 %) was classified as non-arable.

Table 1. Mapped Agricultural Capability Units and Descriptors.

Class (Decile Ratio)		Subclass	Project Footprint Components
3 (100 %)		D	1.62 ha
3 (70 %) / 4 (30 %)		C/X	19.20 ha
4 (100 %)		D	3.84 ha
4 (100 %)		T	1.95 ha
4 (100 %)		X	13.00 ha
4 (70 %) / 5 (30 %)		X/PM	0.33 ha
4 (30 %) / 5 (70 %)		X/IM	0.25 ha
5 (100 %)		PM	8.47 ha
7 (100 %)		TC	2.65 ha
N/A		N/A	(Telkwa River) 0.03 ha
Total		VARIOUS	51.35 ha
Descriptors			
Class 3	Land Requires Moderately Intensive Management Practices and/or Range of Crops Moderately Restricted		
Class 4	Land Requires Special Management Practices and/or Range of Crops Severely Restricted		
Class 5	Land Capability Restricted to Production of Perennial Forage Crops or Other Specially Adapted Crops		
Class 7	Land Holds No Capability for Agriculture or Sustained Natural Grazing		
Subclass C	Adverse Climate — Thermal Limitations to Plant Growth.		
Subclass D	Undesirable Soil Structure — Soil Properties Restrict and/or Hinder Agricultural Use		
Subclass I	Inundation — Overflow by Streams/Lakes Causes Crop Damage or Restricts Agriculture Use		
Subclass M	Moisture — Low Moisture Holding Capacity Caused by Adverse Inherent Soil Characteristics		
Subclass P	Stoniness — Significant Coarse Fragments Pose Limitations for Agricultural Operations		
Subclass T	Topography — Slope Patterns and Steepness Restrict and/or Hinder Agriculture Use		
Subclass X	Other — Cumulative Minor Adverse Characteristics		





Field-Based Agricultural Capability Units — Updated based on Ardea (2020a, 2020b)

Portions of the Project area located within the ALR were projected in GIS based on the field-based agricultural capability units developed from the Project-specific Terrain and Soil Baseline study (Ardea 2020a) and Vegetation Baseline Studies (Ardea 2020b). Map 2 illustrates the field-based agricultural land capability units occurring within the Project Component Footprints located within the ALR. Table 2 summarizes corresponding land capability Classes and Subclasses, total Project Footprint overlap with ALR lands, and associated land capability descriptors.

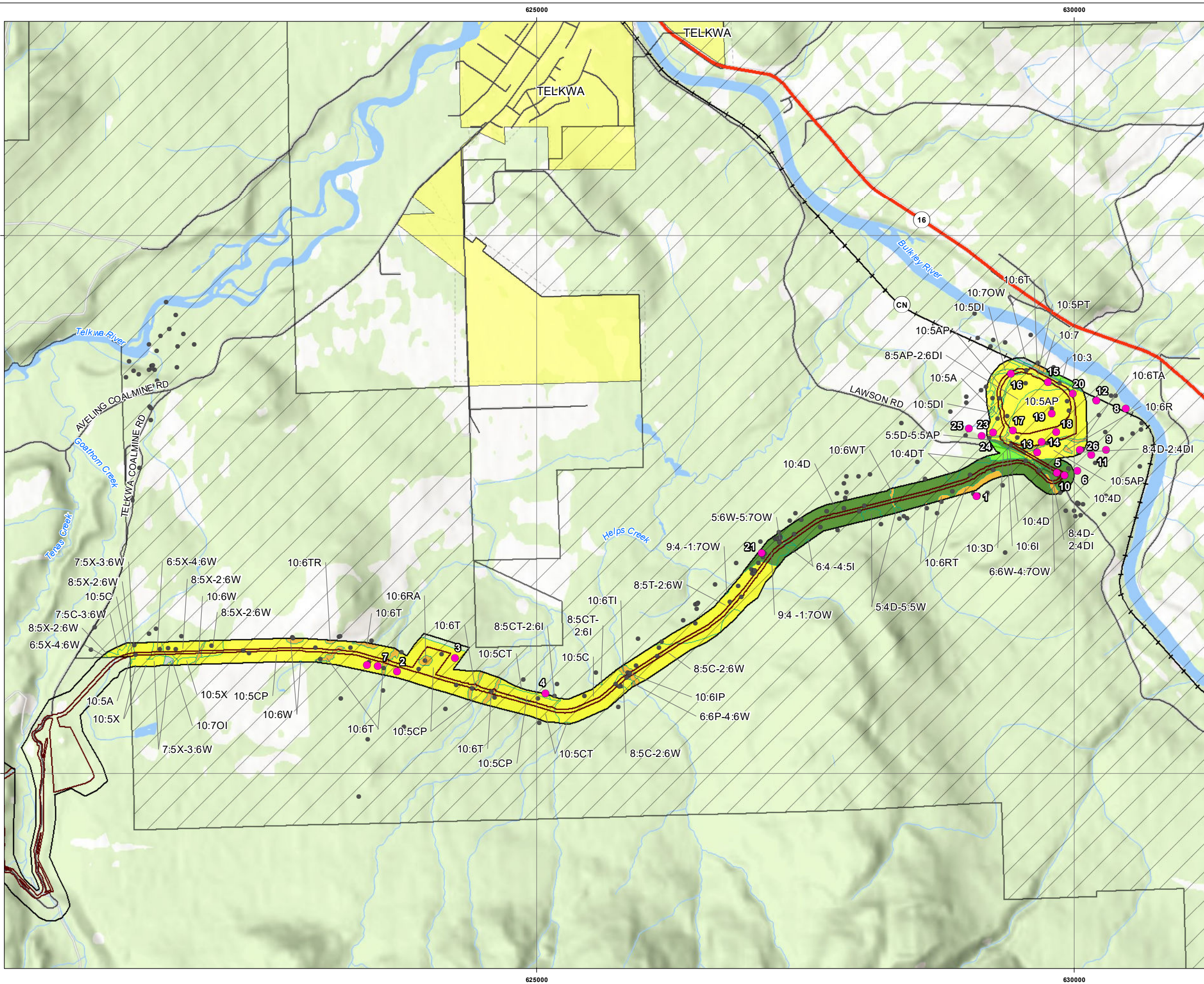
The revised total ALR usage by the Project is 49.10 ha (Project Component/Footprint Area). Most of this land area was comprised of Class 5 (69.7%) and Class 4 (20.1%) land; a lesser amount was comprised of Class 6 (9.8%); the remaining land was deemed Class 7 (0.3%) and classified as non-arable. Class 3 land no longer coincides with the Project Component Footprints.

Table 2. Field-Based Agricultural Capability Units and Descriptors.

Class*	Subclass*	Project Footprint Component
3	D	—
4	D/DI/DT	9.88 ha
5	A/AP/C/CP/CT/T/PT/X	34.24 ha
6	DI/I/IP/RA/T/TA/TI/W/WT	4.83 ha
7	OW/OI	0.15 ha
Total	VARIOUS	49.10 ha
Descriptors		
Class 3	Land Requires Moderately Intensive Management Practices and/or Range of Crops Moderately Restricted	
Class 4	Land Requires Special Management Practices and/or Range of Crops Severely Restricted	
Class 5	Land Capability Restricted to Production of Perennial Forage Crops or Other Specially Adapted Crops	
Class 6	Land is Non-Arable, But Capable of Producing Native and/or Uncultivated Perennial Forage Crops	
Class 7	Land Holds No Capability for Agriculture or Sustained Natural Grazing	
Subclass A	Soil Moisture Deficiency — Adversely Affected by Drought Due to Soil and/or Climate Characteristics	
Subclass C	Adverse Climate — Thermal Limitations to Plant Growth.	
Subclass D	Undesirable Soil Structure — Soil Properties Restrict and/or Hinder Agricultural Use	
Subclass I	Inundation — Overflow by Streams/Lakes Causes Crop Damage or Restricts Agriculture Use	
Subclass M	Moisture — Low Moisture Holding Capacity Caused by Adverse Inherent Soil Characteristics	
Subclass P	Stoniness — Significant Coarse Fragments Pose Limitations for Agricultural Operations	
Subclass T	Topography — Slope Patterns and Steepness Restrict and/or Hinder Agriculture Use	
Subclass X	Other — Cumulative Minor Adverse Characteristics	
Subclass O	Organic Soils	
Subclass W	Excess Water — Limits Agricultural Uses; Due to Poor Drainage, High Water Table and/or Runoff.	

*Classes and Subclasses have been consolidated for brevity and to facilitate comparison with Table 1 values.

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Tenas Project

Agricultural Capability Units within the ALR

Legend

- Detailed Soil Inspection Plots
- Vegetation Ground Inspection and Shallow Soil Inspection Plots
- Rail Line
- Highway
- Road
- Watercourse
- Wetland
- Waterbody
- Municipal Area
- Project Area
- Project Footprint
- ALR Boundary

Agriculture Capability Unit

- 3 - Moderate/Severe Limits
- 4 - Severe Limits
- 5 - Forage Crops/Feasible
- 6 - Forage Crops/Not Feasible
- 7 - No Capability

Notes

- All mapped features are approximate and should be used for discussion purposes only.
- This map is not intended to be a "stand-alone" document, but a visual aid of the information contained within the referenced Report. It is intended to be used in conjunction with the scope of services and limitations described therein.
- Project line features are for display only.

Sources

- Project Features: Allegiance Coal, April 21, 2021.
- Agricultural Capability Units: Ardea Biological Consulting, Nov 5, 2020.
- Basedata: Government of British Columbia
- Basemap: World Topo Base

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REFERENCES

- [Ardea] Ardea Biological Consulting. 2020a. DRAFT Terrain and Soils Baseline Report. Under Preparation for Telkwa Coal Ltd. in Support of the Tenas Metallurgical Coal Project.
- [Ardea] Ardea Biological Consulting. 2020b. DRAFT Vegetation Baseline Report. Under Preparation for Telkwa Coal Ltd. in Support of the Tenas Metallurgical Coal Project.
- [ALC] Agricultural Land Commission Act. 2017. Criteria for Agricultural Capability Assessments. Policy P-10, October 2017. Available at: <https://www.alc.gov.bc.ca/alc/content/alc-act-alr-regulation/alc-policies>
- [EDI] Environmental Dynamics Inc. 2020. Tenas Project — Non-Farm Use Application to the Agricultural Land Commission. Prepared for Telkwa Coal Ltd. December 2020.
- Kenk, E. and I. Cotic. 1983. Land Capability Classification for Agriculture in British Columbia. MOE Manual 1. Surveys and Resource Mapping Branch, Ministry of Environment and Soils Branch, Ministry of Agriculture and Food

SPATIAL DATA

1:50,000 Agricultural Capability data from Province of British Columbia, Ministry of Environment (MOE).