



Wood Buffalo Environmental Association
**Ambient Air Monitoring Station
Site Documentation**

Wapasu

LAST UPDATED: MARCH 28, 2024



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General Site Information

Revision Date: March 28, 2024

Station

Station ID	AMS 17
Station name	Wapasu
Date station established	November, 2013

Location

Station street address	Located northeast of Husky Sunrise.
Legal land description	9-22-095-07 W4
Airshed Zone	Wood Buffalo Environmental Association
Latitude	57.25913818
Longitude	-111.0385386
UTM East	497672
UTM North	6346240
Nearest community	Fort Mackay
Community population	757
Census Year	2021

Owner/Operator/Approval Holder

Operating Agency	Wood Buffalo Environmental Association
Address of Operating Agency	Unit 3-805 Memorial Drive, Fort McMurray, Alberta T9K 0K4
Name of Approval Holder	Cenovus
Approval number	206355-01-00
Contact Name	Rene Morales
Address	N/A
Phone number	403-816-6144
Email address	Rene.morales@cenovus.com

Site Description

Land use by sector	0 – 90 degrees	Decommissioned well pad
	91 – 180 degrees	Wooded area
	181 – 270 degrees	Wooded area
	271 – 360 degrees	Site access road
Site elevation (m) (above sea level)	491	
Angle of elevation to nearby buildings	Greatest angle	N/A
	Building direction	N/A
Airflow restrictions	North	No
	East	No

	South	No
	West	No
Distance to nearest trees (m)	North	45 m
	East	45 m
	West	80 m
	South	45 m
Sample manifold	Type	All glass
	Inlet height above roof	1 metre
Wind Sensors	Type	Cup and vane
	Height above ground (m)	10 m
	Distance from station (m)	0 m

Site Influences

Localized Sources (within 20 metres of station)

Type	Distance (m)	Description
None	N/A	N/A

Roadway Influences

Type	Traffic Volume	Distance (m)	Description
Access road	Low	5	Gravel access road used by pickup trucks.
Canterra Main Road	High	1500	Heavily trafficked gravel road frequented by heavy equipment, tractor trailers, and pickup trucks.

Major Point Sources

Facility Name	Source Type	Distance from site (km)	Compass direction from site
Suncor Firebag	Oilsands Operation	10	SE
Cenovus Sunrise	Oilsands Operation	2	SW

Station Equipment

Equipment Owner:

Analytical Equipment

Parameter	Make	Model	Serial Number	Date Instrument Installed	WBEA Data Start Date
Continuous					
SO ₂	Thermo Environmental	43i	1218153459	March, 2016	December, 2013
H ₂ S	Thermo Environmental	450i	1218453583	March, 2016	December, 2013
NO/NO _x /NO ₂	Thermo Environmental	42iQ	12300522720	June, 2023	December, 2013
THC	Thermo Environmental	51i	1218153352	March, 2016	December, 2013
O ₃	Teledyne/API	T400	3870	March, 2016	January, 2014
PM _{2.5}	Teledyne/API	T640	1183	March, 2016	December, 2013
Time-Integrated					
ECOC	Thermo Environmental	2000i	20001204511404	March, 2016	-
PC	N-CON	00-120-2	60198	March, 2016	-

Meteorological Equipment

Parameter	Make	Model	Serial Number	WMO Site Class	Date Sensor Installed	WBEA Data Start Date
AT/RH	Vaisala	HMP155	G4330041	3	September, 2021	December, 2013
WS	Met One	010C-1	N14664	3	May, 2018	December, 2013
WD	Met One	020C-1	P19942	3	May, 2018	December, 2013
PC	OTT	Pluvio 2	31209514	3	March, 2016	December, 2015

Support Equipment

Name	Description	Make	Model	Serial Number
Datalogger	Datalogger	Campbell Scientific	CR3000	2663
Datalogger	Datalogger	Campbell Scientific	CR310	6009
Gas Dilution Calibrator	Dynamic dilution calibrator	Teledyne/API	T700	2449
Zero air generator	Zero Air Generator	Teledyne/API	701H	359
Shelter / Building	Air monitoring portable	ITB	8 x 16 trailer	ITB12-15686
HVAC	Heating and air conditioning system. Wall mount unit	BARD	1 ton	NA

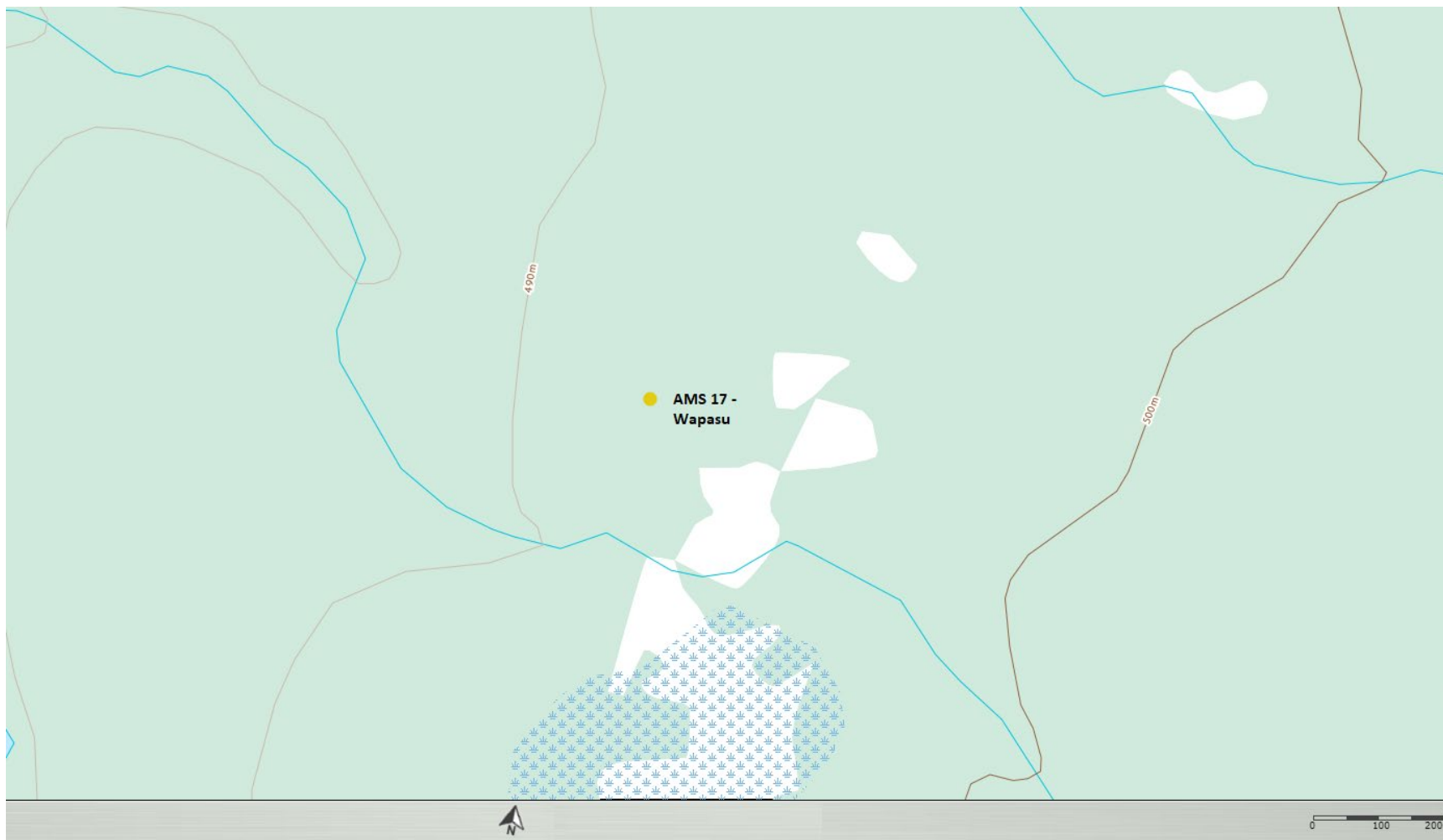


Figure 1 – Area topographic map showing AMS 17

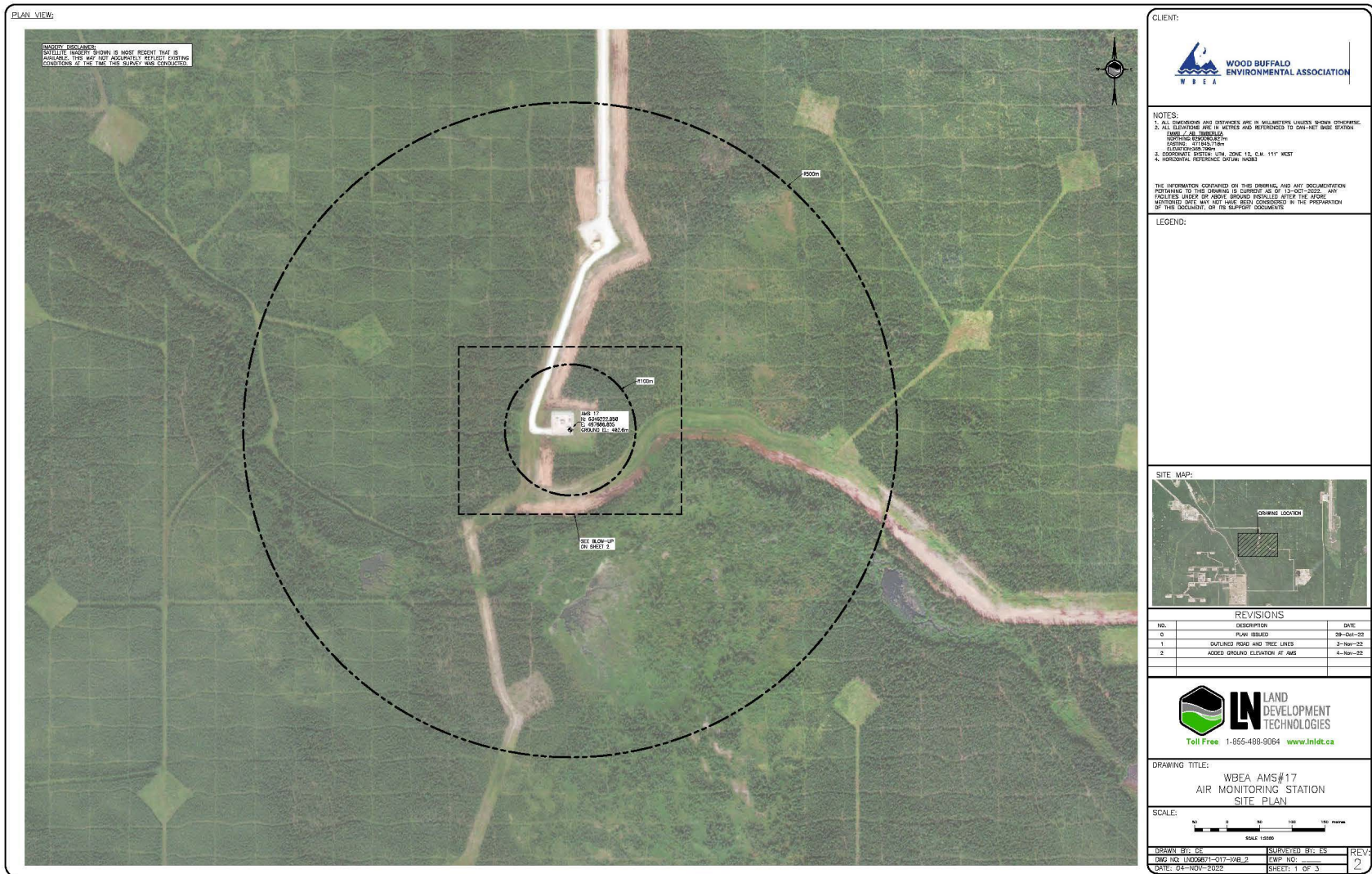


Figure 2 – Aerial photo showing AMS 17

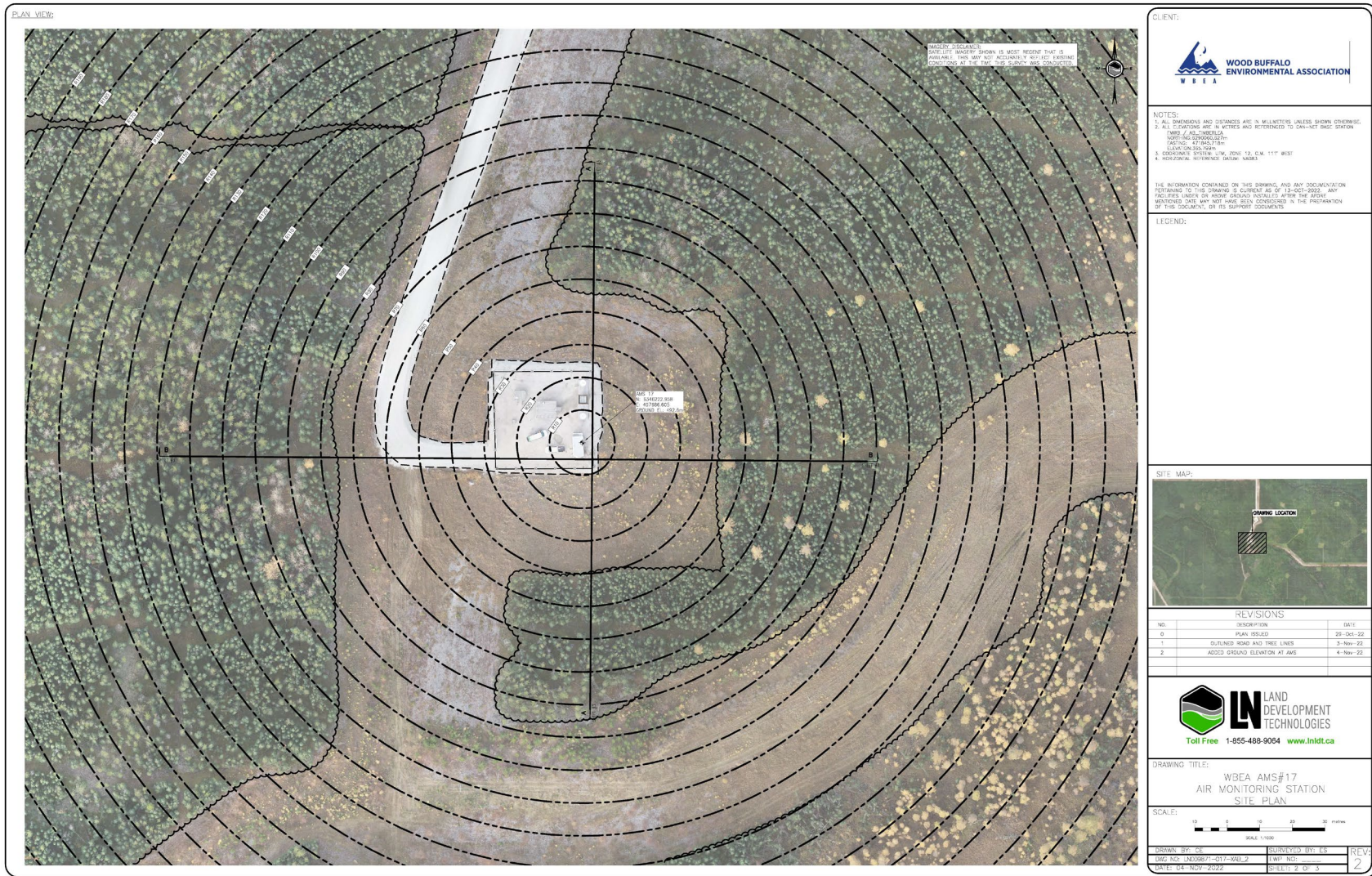


Figure 3 – Plan view sketch for AMS 17 site

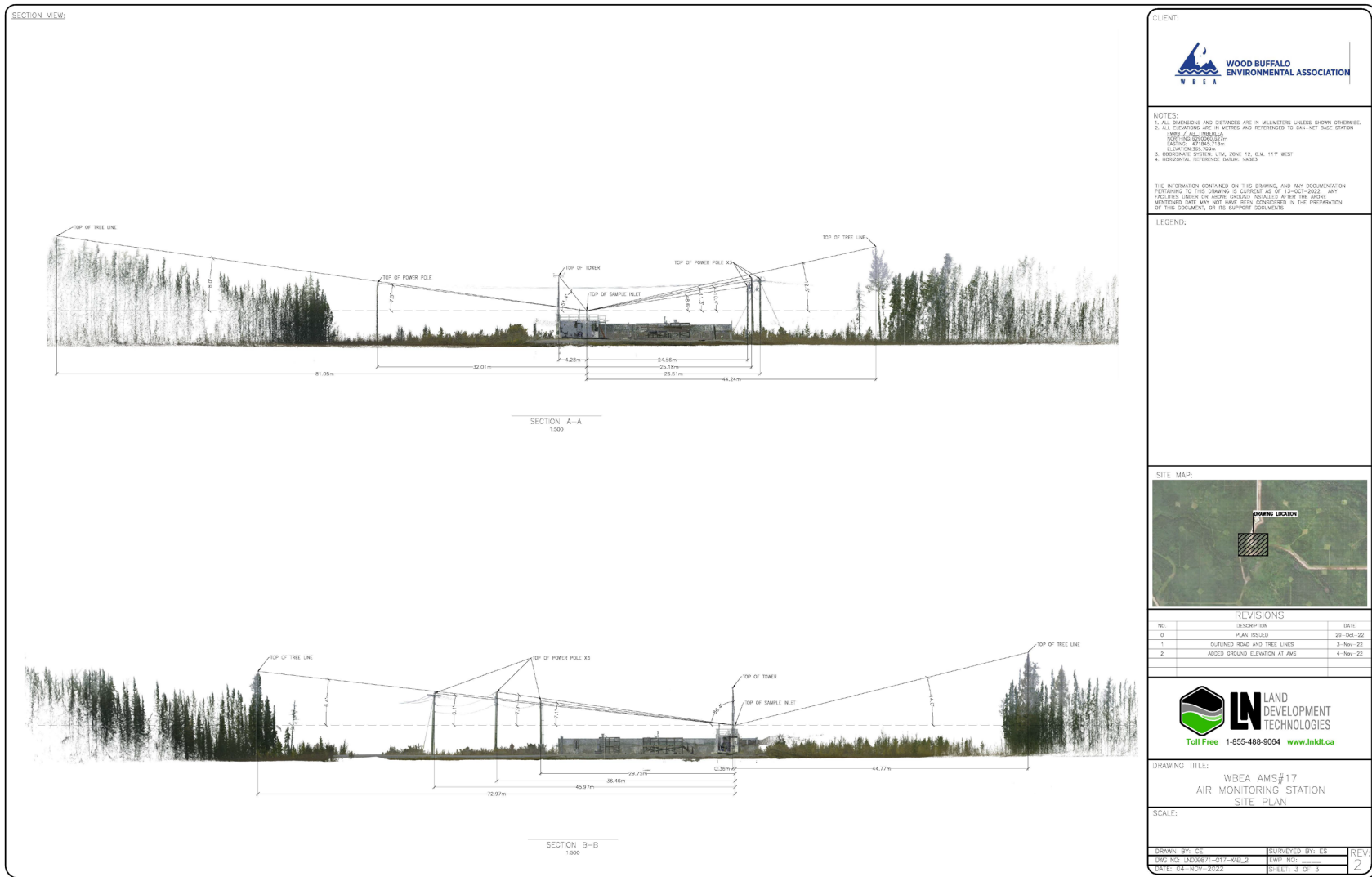


Figure 4 – Elevation view sketch for AMS 17 site

Site photos

The following photos show the environment surrounding the monitoring station.

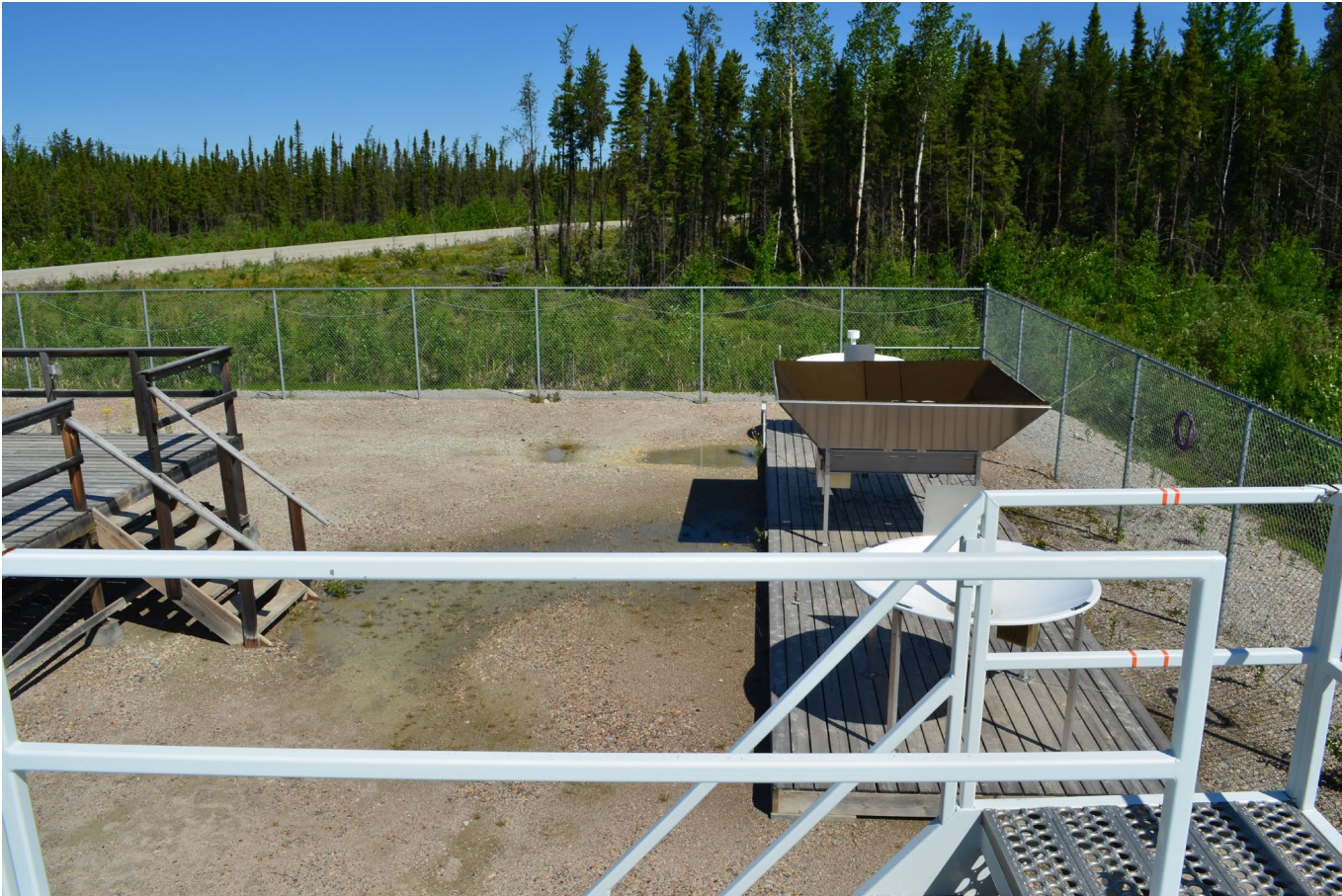


Figure 5 – Environment looking North

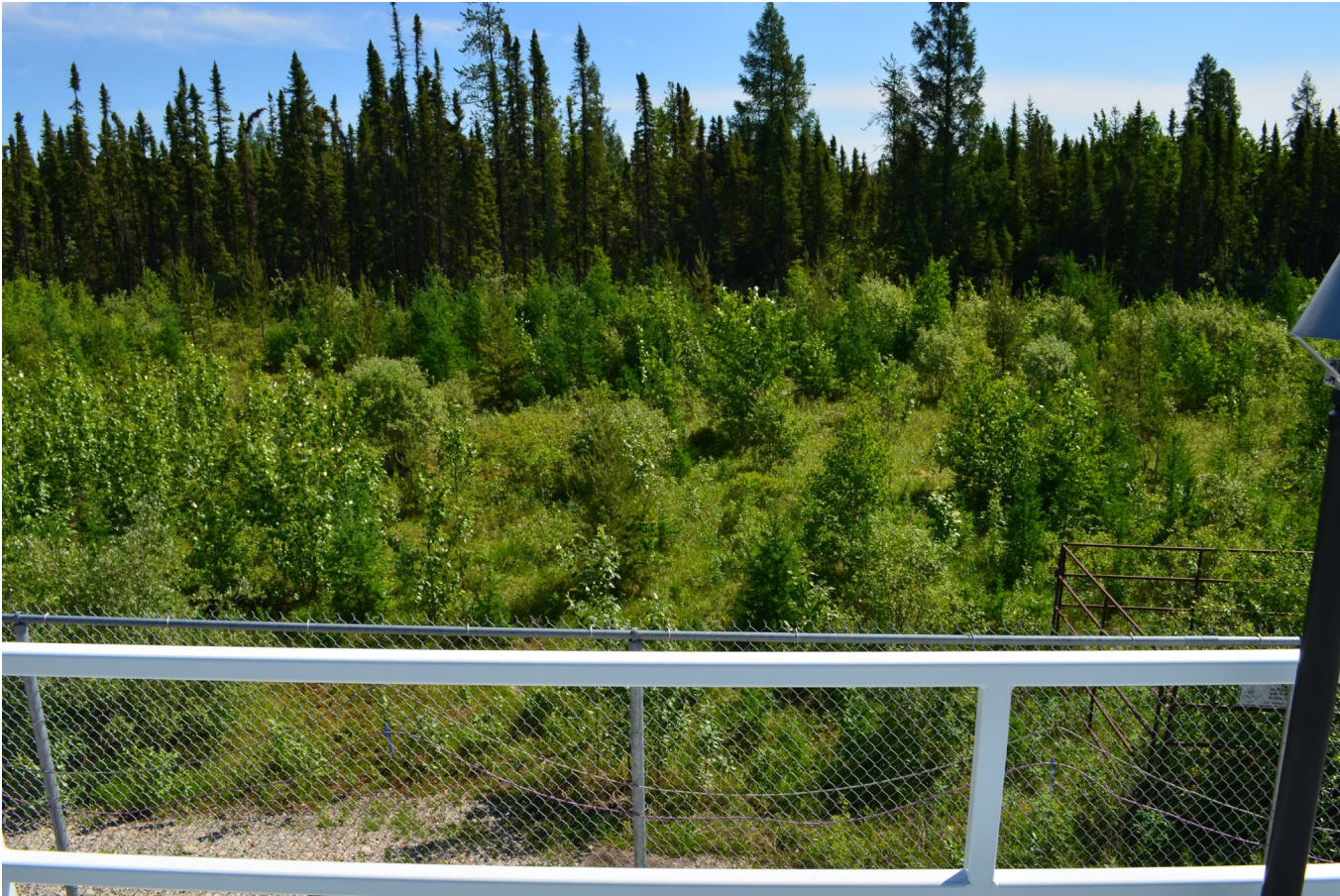


Figure 6 – Environment looking East

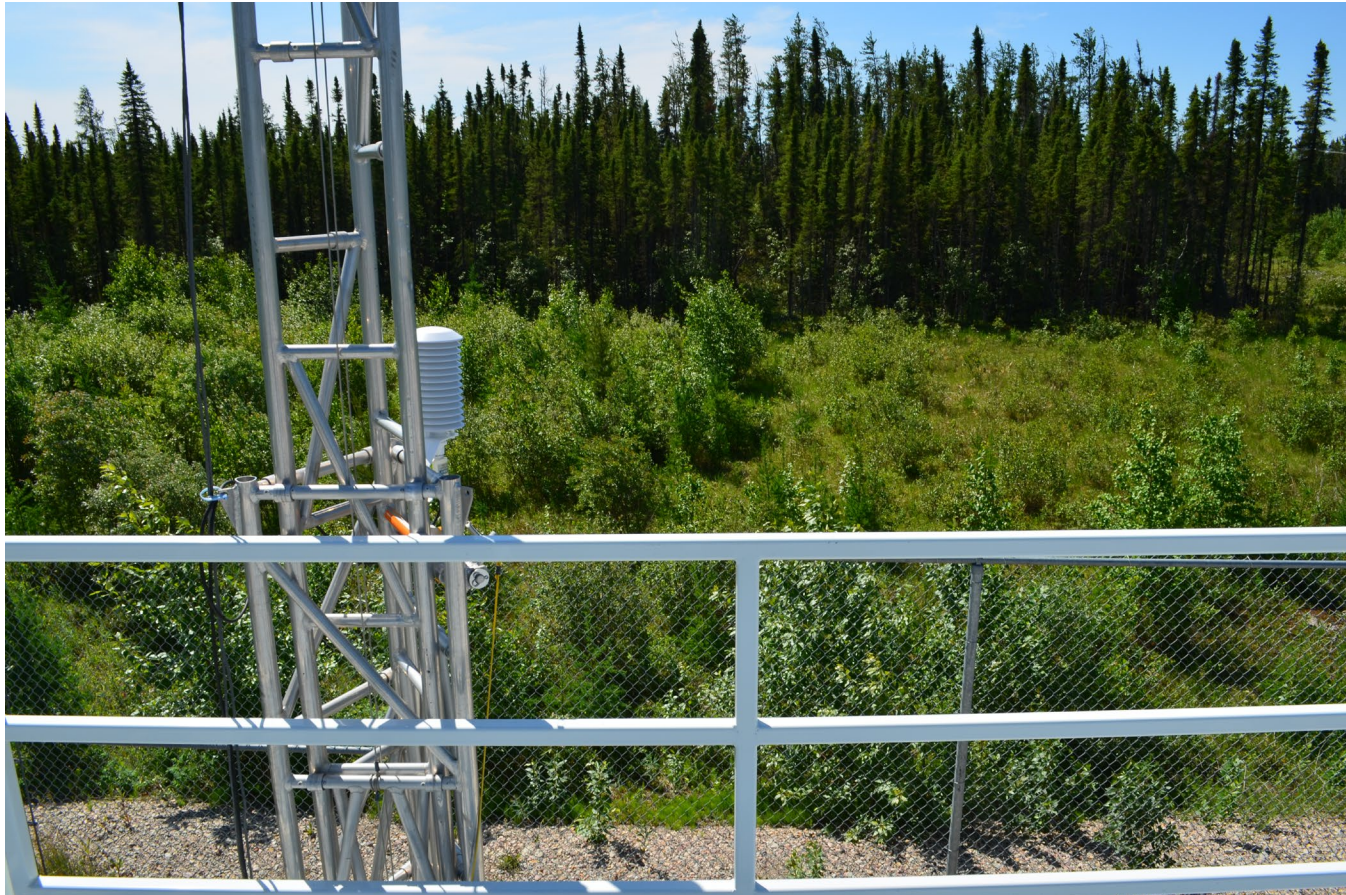


Figure 7 – Environment looking South



Figure 8 – Environment looking West



Figure 9 – Meteorological Tower

Station Photos

The following photos show the monitoring station and instrumentation.



Figure 10 – Photo showing the inlet and sample manifold



Figure 11 – Curb shot of the monitoring station



Figure 12 –Photo of the front and the back of instrument rack

