

Notes  
 1. The constraints illustrated on the drawing do not represent the exact location in the field and shall only be used to assist with contractor planning. The contractor will be required to ground truth the listed constraints prior to the start of construction. This ground truthing exercise will be conducted by the contractor's designated environmental representative, along with the engineer's environmental representative.  
 2. All construction activities shall comply with the Project-Wide Environmental Protection Plan and the Contract-Specific Environmental Protection Plan.

**LEGEND**

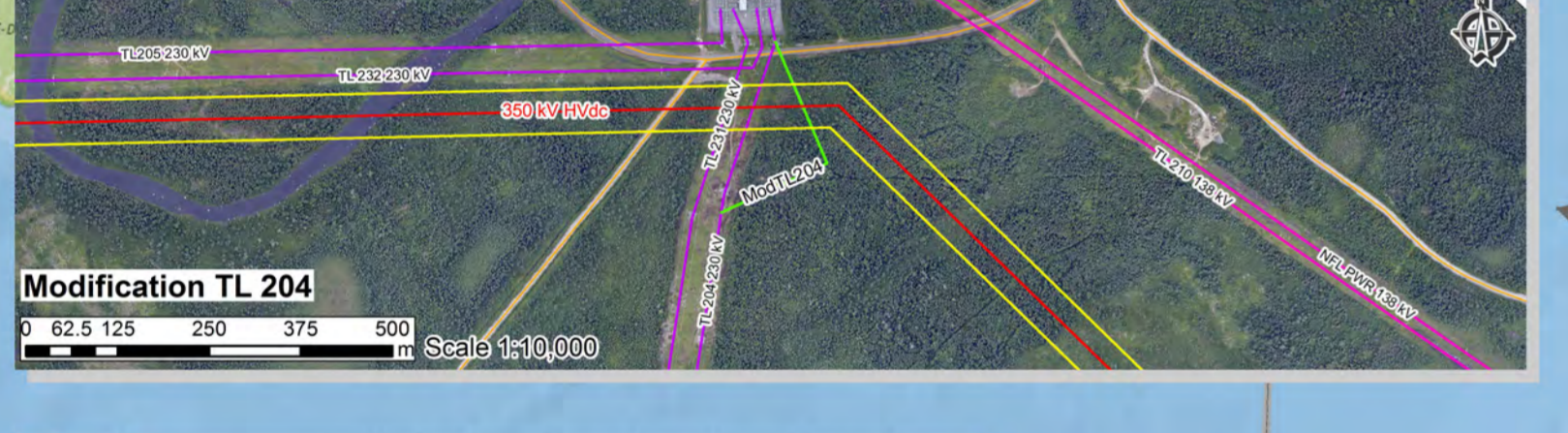
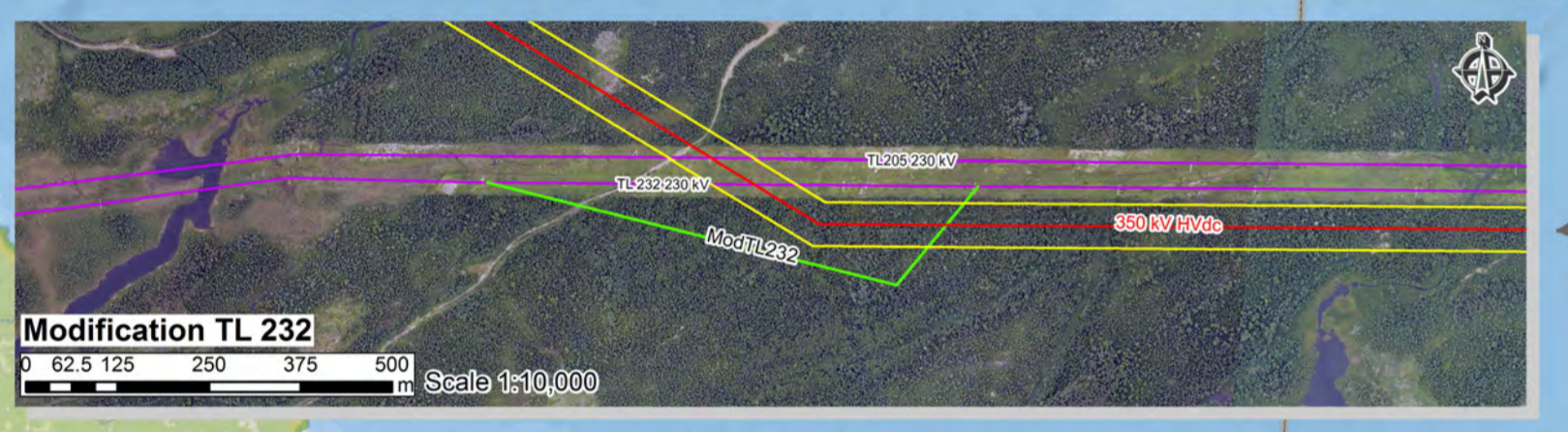
Proposed 350 kV HVdc and Electrode Line Infrastructure

**HVdc Meteorological and Coastal Zones**

- A-frame
- Structure Type A
- Structure Type B
- Structure Type C
- Structure Type D
- Structure Type E
- Line Angle (PI)
- HVdc Centreline
- Right of Way
- Structure Box
- Anti-Cascade
- Electrode Centreline
- Proposed Modified Existing Transmission Lines
- Existing 69 kV TL
- Existing 138 kV TL
- Existing 230 kV TL
- Substation, Transition Compound
- Electrode Site

**Environmental / Landuse Constraints**

- Archaeological Site
- Limestone Barrens
- Braya Fernaldii
- Braya Longii
- Sensitive Wildlife and Plant Areas
- Bakeapple Bog
- Stream Crossing
- Wetland
- Rivers
- Ponds/Lakes
- Contours (5m)
- Roads and Highways
- Municipal Boundary
- Issued Titles
- Crown Land Applications
- UTM Zones



Construction Segment	Zone	Description	Length (km)	Ice (mm)	Ref. Wind Speed (km/h)	Exposure	Inland/Coastal	Max. Elevation Above Sea Level (m)	Tower Family
Labrador	1	Average Zone 1	248.8	50	105	Y	Inland	500	F1
	2a	Labrador High Alpine	23.4	115R	135	Y	Inland	430	F11
	2b	Labrador Extreme Alpine	63.9	130R	135	Y	Inland	440	F2
	2c	Labrador High Alpine	22.4	115R	135	Y	Inland	300	F11
	2d	Average Zone 2	32.4	95	120	Y	Inland	300	F5
Newfoundland	3a	Average Zone 2	33.1	90	120	N	Coastal	200	F10
	4a	Average Zone 2	32.8	90	120	N	Coastal	40	F10
	4b	Average Zone 2	56.2	90	120	N	Inland	300	F5
	4c	High Alpine	24.8	115R	130	N	Inland	300	F12
	4d	Average Zone 2	32.5	90	120	N	Inland	410	F6
	7a	LRA High Alpine	21.1	115R	140	N	Inland	540	F9
	7b	LRA Extreme Alpine	7.1	130R	140	N	Inland	610	F6
	7c	LRA High Alpine	32.8	115R	140	N	Inland	600	F9
	8a	Average Zone 2	32.9	90	120	N	Inland	550	F5
	8b	Average Zone 1	32.2	90	120	N	Coastal	400	F10
Eastern	9	Average Zone 1	62.7	90	105	N	Inland	440	F4
	10	Alpine	7.8	75	130	N	Inland	500	F7
	11a	Average Zone 1	223.0	90	105	N	Inland	300	F4
	11b	Eastern Zone	89.4	75	130	N	Inland	280	F7
	11c	Eastern Zone	88.7	75	130	N	Coastal	210	F8

This document has been reviewed & coded electronically via Aconex.

ISSUE REGISTER	NO	REFERENCE DRAWING	NO.	REFERENCE DRAWING	NO.	DATE	REVISION	MOD.	VER.	APP.
		ILK-SN-CD-6310-TL-MP-0001-01		Electrode Line Labrador L'Anse Au Diabie Site Plan (Rev.C1)						
		ILK-SN-CD-6200-TL-MP-0003-01		350 kV HVdc Line Forteau Site Plan (Rev.C1)	ILK-SN-CD-6223-TL-DD-0191-01		350 kV HVdc Line Route Map Construction Segment 5 (Rev.C1)			
		ILK-SN-CD-6200-TL-MP-0004-01		350 kV HVdc Line Shoal Cove Site Plan (Rev.C1)	ILK-SN-CD-6222-TL-DD-0001-01		350 kV HVdc Line Route Map Construction Segment 4 (Rev.C1)			
		ILK-SN-CD-6200-TL-MP-0006-01		350 kV HVdc Line Muskrat Falls Site Plan (Rev.C1)	ILK-SN-CD-6200-TL-DD-0190-01		350 kV HVdc Line Route Map Construction Segment 3 (Rev.C2)			
1	C1	07-APR-2014	ISSUED FOR CONSTRUCTION	MFA-SN-CD-4500-TL-MP-0001-01	ILK-SN-CD-6200-TL-DD-0191-01		350 kV HVdc Line Route Map Construction Segment 2 (Rev.C2)			
ISSU	REV	DATE	DISTRIBUTION & STATUS	ILK-SN-CD-8620-EL-TL-0001-01	ILK-SN-CD-6200-TL-MP-0008-01		350 kV HVdc Line Route Map Construction Segment 1 (Rev.C2)			

REVIEW CLASS:	EQUIPMENT TAG NUMBER:
REVIEW DOES NOT CONSTITUTE APPROVAL OF DESIGN DETAILS, CALCULATIONS, TEST METHOD OR MATERIAL DEVELOPMENT AND/OR SELECTED BY CONTRACTOR, NOR DOES IT RELIEVE THE CONTRACTOR FROM FULL COMPLIANCE WITH CONTRACTUAL OR OTHER OBLIGATIONS.	
<input checked="" type="checkbox"/> 1. REVIEWED AND ACCEPTED - NO COMMENTS	
<input type="checkbox"/> 2. REVIEWED - INCORPORATE COMMENTS, REVISE & RESUBMIT	
<input type="checkbox"/> 3. REVIEWED - NOT ACCEPTED	
<input type="checkbox"/> 4. INFORMATION ONLY	
<input type="checkbox"/> 5. NOT REVIEWED	
LEAD REVIEWER: Maria Veitch	DATE (dd-mm-yyyy): 08-Apr-2014
NE-LCP MANAGEMENT: Bob Barnes	DATE (dd-mm-yyyy): 08-Apr-2014
AREA MANAGER: Kyle Tucker	DATE (dd-mm-yyyy): 08-Apr-2014

**PROFESSIONAL STAMP**

DESIGNED BY: S. SHENOY  
 DRAWN BY: S. ROBERTS  
 VERIFIED BY: M. MEZIANE, J. YANG  
 DATE: 07-APR-2014

APPROVED DISCIPLINE LEAD ENGINEER: H. BAKSHI  
 APPROVED ENGINEERING MANAGER: G. SALTAN  
 SCALE: 11,000,000

CLIENT: SNC-LAVALIN  
 PROJECT: LOWER CHURCHILL PROJECT  
 TITLE: 350 kV HVdc LINE OVERVIEW MAP

SLI DOC NO.: 505573-462A-ZDD-0018\_02  
 NE DOC NO.: ILK-SN-CD-6000-TL-MP-0001-01