



CONDUITS FOR FUTURE FANS ARE EXPOSED
TO THE WEATHER



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Client Contact



Ottawa River Power Corporation
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Pembroke, Ontario K8A 6Y6
Ph: 613-732-3687
Email:

OTTAWA RIVER POWER CORPORATION

SUBSTATION CONDITION ASSESSMENT
PEMBROKE MS-4
DATE TAKEN: THURSDAY AUGUST 3, 2017
PHOTO DSC_2235

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: K.LAPIER	Date: 29/08/2017
Checked by: S.COSTELLO	Date: —
Approved by: R.LAPIER	Date: —
Project Number: 17153	Drawing Number: DSC_2235



1. STRUCTURE LOCATED OUTSIDE OF THE FENCE AND GROUND GRID.
2. PERSONS CAN BE WITHIN THE LIMITS OF APPROACH STANDING ON THE STRUCTURE FOOTING (WITHIN A RESIDENTIAL NEIGHBOURHOOD)



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SUBSTATION CONDITION ASSESSMENT
 PEMBROKE MS-4
 DATE TAKEN: THURSDAY AUGUST 3, 2017
 PHOTO DSC_2238

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: K.LAPIER	Date: 29/08/2017
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Approved by: R.LAPIER	Date: -
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POSSIBLE BARE SYSTEM NEUTRAL – NOT
PER CODE. DANGEROUS.

COPPER COMMUNICATION LINE FOR
SCADA – NO ELECTRICAL ISOLATION



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SUBSTATION CONDITION ASSESSMENT
PEMBROKE MS-4
DATE TAKEN: THURSDAY AUGUST 3, 2017
PHOTO DSC_2240

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: K.LAPIER	Date: 29/08/2017
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FIBRE OPTIC TELECOMMUNICATION EQUIPMENT
IN HIGH VOLTAGE SUBSTATION ENVIRONMENT



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SUBSTATION CONDITION ASSESSMENT
PEMBROKE MS-4
DATE TAKEN: THURSDAY AUGUST 3, 2017
PHOTO DSC_2265

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DOOR GROUNDING AND BONDING



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SUBSTATION CONDITION ASSESSMENT
PEMBROKE MS-4
DATE TAKEN: THURSDAY AUGUST 3, 2017
PHOTO DSC_2268

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
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Pembroke MS5



NEED TO CONFIRM IF THIS IS THE ONLY CONNECTION FROM THE TRANSFORMER LV TO GROUND GRID. APPEARS TO BE UNDERSIZED.



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SUBSTATION CONDITION ASSESSMENT
PEMBROKE MS-5
DATE TAKEN: THURSDAY AUGUST 3, 2017
PHOTO DSC_2307

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: A.RIST	Date: 29/08/2017
Checked by: S.COSTELLO	Date: -
Approved by: R.LAPIER	Date: -
Project Number: 17153	Drawing Number: DSC_2307



DYI VECTOR (FOR INFORMATION ONLY)



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SUBSTATION CONDITION ASSESSMENT
PEMBROKE MS-5
DATE TAKEN: THURSDAY AUGUST 3, 2017
PHOTO DSC_2310

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: A.RIST	Date: 29/08/2017
Checked by: S.COSTELLO	Date: -
Approved by: R.LAPIER	Date: -
Project Number: 17153	Drawing Number: DSC_2310



TEMPORARY GROUNDING WORK PRACTICES
FOR DISCUSSION



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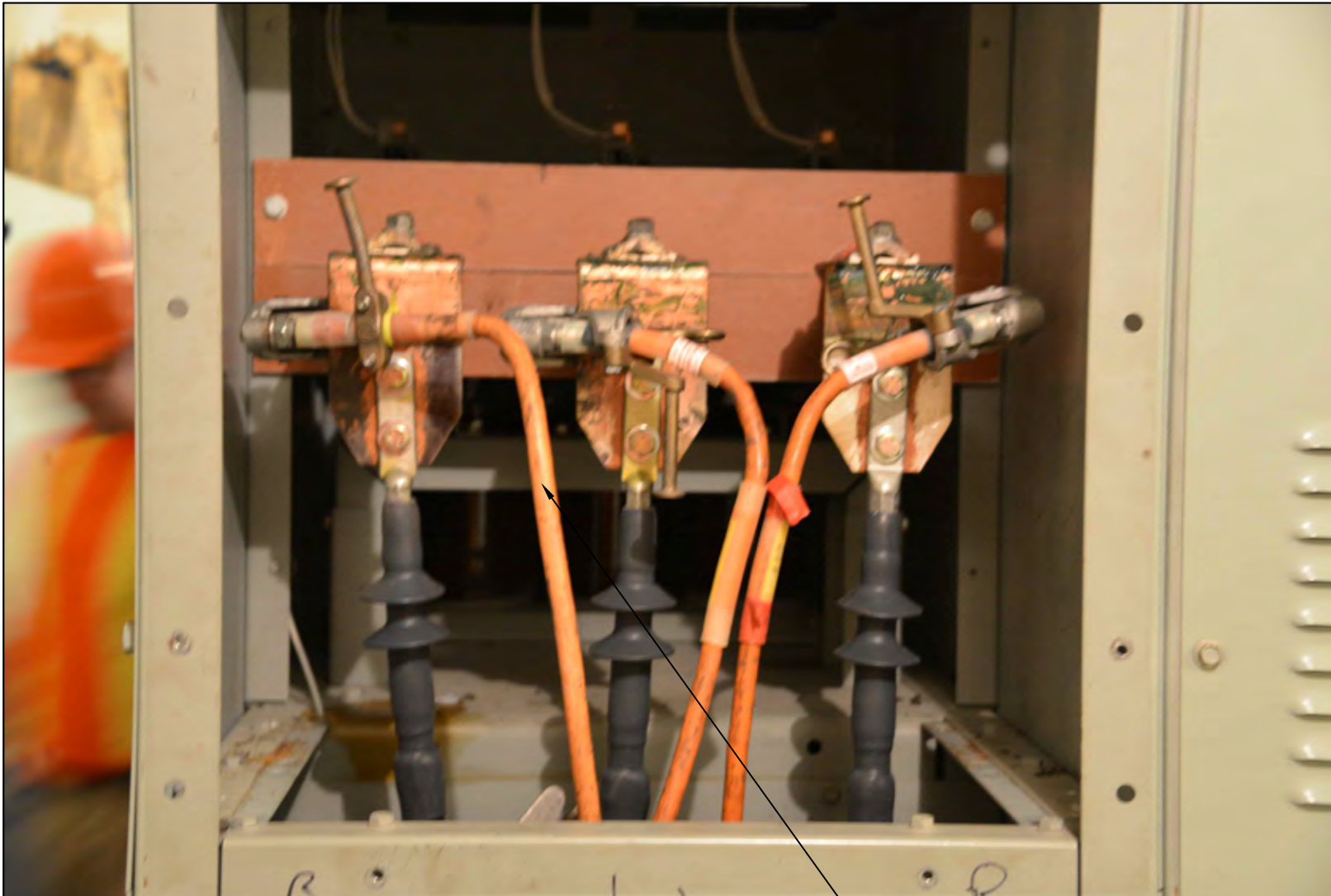


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SUBSTATION CONDITION ASSESSMENT
PEMBROKE MS-5
DATE TAKEN: THURSDAY AUGUST 3, 2017
PHOTO DSC_2318

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: A.RIST	Date: 29/08/2017
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Approved by: R.LAPIER	Date: -
Project Number: 17153	Drawing Number: DSC_2318



TEMPORARY GROUNDING WORK PRACTICES
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SUBSTATION CONDITION ASSESSMENT
PEMBROKE MS-5
DATE TAKEN: THURSDAY AUGUST 3, 2017
PHOTO DSC_2320

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: A.RIST	Date: 29/08/2017
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Approved by: R.LAPIER	Date: -
Project Number: 17153	Drawing Number: DSC_2320



NO GROUND PROTECTION
FOUR (4) RECLOSURES



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SUBSTATION CONDITION ASSESSMENT
PEMBROKE MS-5
DATE TAKEN: THURSDAY AUGUST 3, 2017
PHOTO DSC_2322

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: A.RIST	Date: 29/08/2017
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Project Number: 17153	Drawing Number: DSC_2322



HOME-MADE 44KV SUPPORTS ON ROOF.
ENGINEERING REVIEW REQUIRED.



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SUBSTATION CONDITION ASSESSMENT
PEMBROKE MS-5
DATE TAKEN: THURSDAY AUGUST 3, 2017
PHOTO DSC_2324

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: A.RIST	Date: 29/08/2017
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Approved by: R.LAPIER	Date: -
Project Number: 17153	Drawing Number: DSC_2324



PORCELAIN LIGHTNING ARRESTORS



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SUBSTATION CONDITION ASSESSMENT
PEMBROKE MS-5
DATE TAKEN: THURSDAY AUGUST 3, 2017
PHOTO DSC_2326

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
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Approved by: R.LAPIER	Date: —
Project Number: 17153	Drawing Number: DSC_2326

Pembroke MS6



BREATHER REQUIRED



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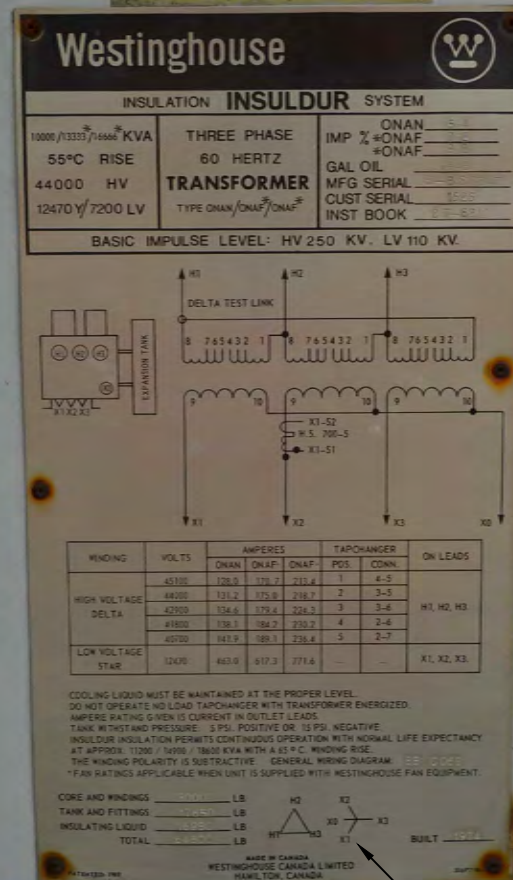


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SUBSTATION CONDITION ASSESSMENT
PEMBROKE MS-6
DATE TAKEN: THURSDAY AUGUST 3, 2017
PHOTO DSC_2280

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: A.RIST	Date: 29/08/2017
Checked by: S.COSTELLO	Date: —
Approved by: R.LAPIER	Date: —
Project Number: 17153	Drawing Number: DSC_2280



DYII VECTOR (FOR INFORMATION ONLY)



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SUBSTATION CONDITION ASSESSMENT
PEMBROKE MS-6
DATE TAKEN: THURSDAY AUGUST 3, 2017
PHOTO DSC_2282

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: A.RIST	Date: 29/08/2017
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Approved by: R.LAPIER	Date: -
Project Number: 17153	Drawing Number: DSC_2282



SYSTEM NEUTRAL WITHOUT ANY MECHANICAL PROTECTION



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SUBSTATION CONDITION ASSESSMENT
PEMBROKE MS-6
DATE TAKEN: THURSDAY AUGUST 3, 2017
PHOTO DSC_2285

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: A.RIST	Date: 29/08/2017
Checked by: S.COSTELLO	Date: —
Approved by: R.LAPIER	Date: —
Project Number: 17153	Drawing Number: DSC_2285



PADLOCK REQUIRED



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SUBSTATION CONDITION ASSESSMENT
PEMBROKE MS-6
DATE TAKEN: THURSDAY AUGUST 3, 2017
PHOTO DSC_2288

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: A.RIST	Date: 29/08/2017
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Project Number: 17153	Drawing Number: DSC_2288



POSSIBLE GROUNDING AND BONDING ISSUES
ON SOLAR INSTALLATION



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SUBSTATION CONDITION ASSESSMENT
PEMBROKE MS-6
DATE TAKEN: THURSDAY AUGUST 3, 2017
PHOTO DSC_2294

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: A.RIST	Date: 29/08/2017
Checked by: S.COSTELLO	Date: -
Approved by: R.LAPIER	Date: -
Project Number: 17153	Drawing Number: DSC_2294



NO GROUND PROTECTION



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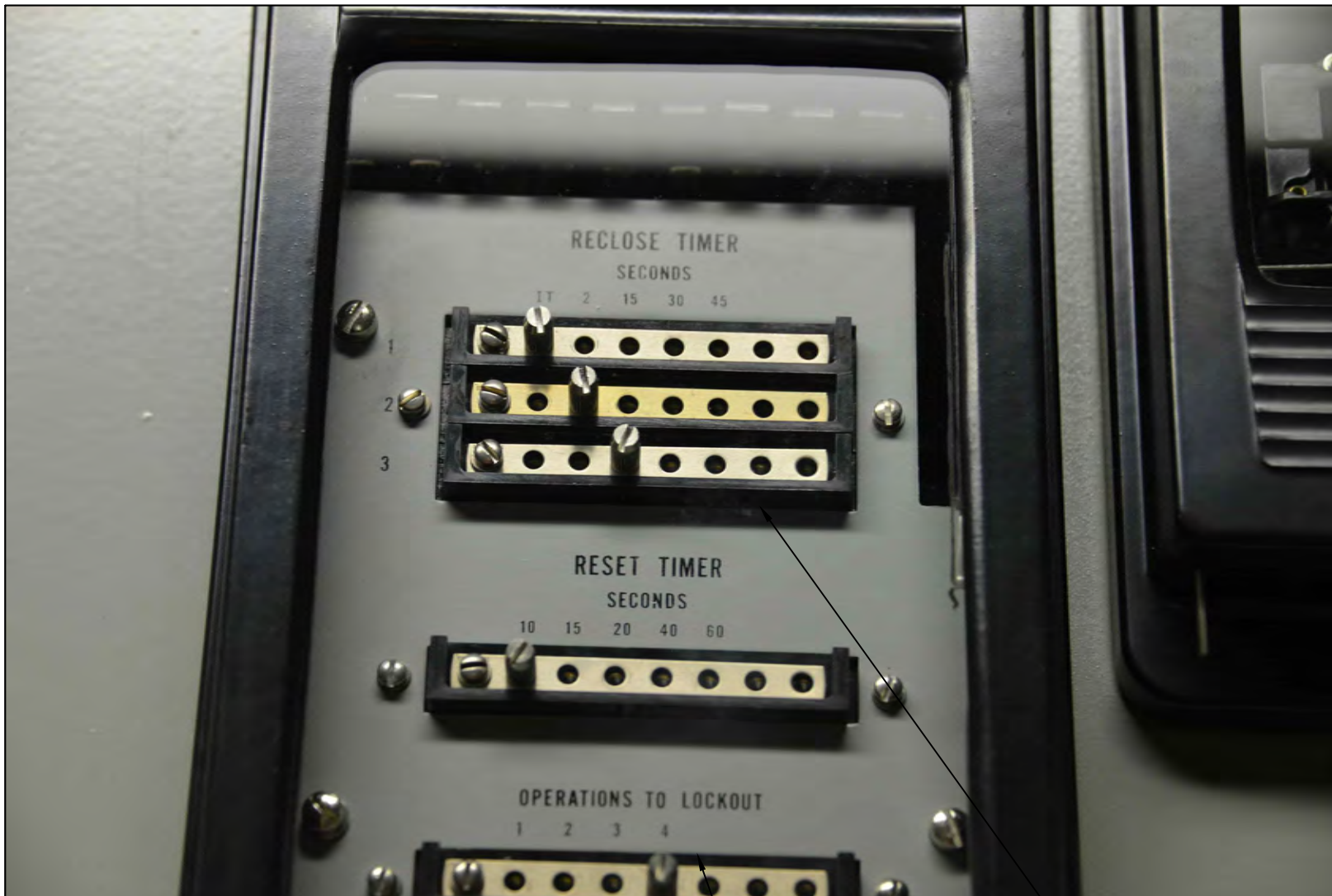


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SUBSTATION CONDITION ASSESSMENT
PEMBROKE MS-6
DATE TAKEN: THURSDAY AUGUST 3, 2017
PHOTO DSC_2297

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: A.RIST	Date: 29/08/2017
Checked by: S.COSTELLO	Date: —
Approved by: R.LAPIER	Date: —
Project Number: 17153	Drawing Number: DSC_2297



FOUR AUTO RECLOSURES IN URBAN ENVIRONMENT

NO TIME DELAY ON 1ST AUTO-RECLOSE APPLICATION



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SUBSTATION CONDITION ASSESSMENT
PEMBROKE MS-6
DATE TAKEN: THURSDAY AUGUST 3, 2017
PHOTO DSC_2300

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
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Checked by: S.COSTELLO	Date: -
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Pembroke MS8



BARBED WIRE REQUIRED TO BE
AT TOP OF FENCE AS PER
CODE



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SUBSTATION CONDITION ASSESSMENT
PEMBROKE MS-8
DATE TAKEN: THURSDAY AUGUST 3, 2017
PHOTO DSC_2367

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
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BARBED WIRE REQUIRED TO BE
AT TOP OF FENCE AS PER
CODE.

BROKEN WIRES.



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SUBSTATION CONDITION ASSESSMENT
PEMBROKE MS-8
DATE TAKEN: THURSDAY AUGUST 3, 2017
PHOTO DSC_2369

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
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EXTREMELY LOW CLEARANCE 44kV.
REQUIRES ADDITIONAL BOUNDARY
FENCING OR REBUILDING STRUCTURE.



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SUBSTATION CONDITION ASSESSMENT
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DATE TAKEN: THURSDAY AUGUST 3, 2017
PHOTO DSC_2373

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
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Project Number: 17153	Drawing Number: DSC_2373



PORCELAIN ARRESTORS SHOULD BE REPLACED



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SUBSTATION CONDITION ASSESSMENT
PEMBROKE MS-8
DATE TAKEN: THURSDAY AUGUST 3, 2017
PHOTO DSC_2374

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
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Approved by: R.LAPIER	Date: —
Project Number: 17153	Drawing Number: DSC_2374



TAP CHANGERS REQUIRE PADLOCK



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SUBSTATION CONDITION ASSESSMENT
PEMBROKE MS-8
DATE TAKEN: THURSDAY AUGUST 3, 2017
PHOTO DSC_2377

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: —
Approved by: R.LAPIER	Date: —
Project Number: 17153	Drawing Number: DSC_2377



NEED TO VERIFY NEUTRAL
CONNECTORS DURING OUTAGE



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DATE TAKEN: THURSDAY AUGUST 3, 2017
PHOTO DSC_2378

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Drawn by: Z.KOOMANS	Date: 30/08/2017
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Project Number: 17153	Drawing Number: DSC_2378



LACK OF CRUSHED STONE
VEGETATION IN YARD



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PHOTO DSC_2385

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STRUCTURE HAS A SMALL LEAN.
APPEARS TO BE "HOME-MADE"?



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PHOTO DSC_2384

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SOLAR PANELS COMPLETELY BLOCK
ACCESS TO STATION YARD.
NO GROUND OR BOUNDING ON
SOLAR PANELS.



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TELECOM EQUIPMENT IN
SUBSTATION.

TRAINING, ARC FLASH, PPE



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PHOTO DSC_2389

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Project Number: 17153	Drawing Number: DSC_2389



4 RECLOSURES TO LOCK OUT
1ST RECLOSE IS INSTANTANEOUS



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Client Contact



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Email:

OTTAWA RIVER POWER CORPORATION

SUBSTATION CONDITION ASSESSMENT
PEMBROKE MS-8
DATE TAKEN: THURSDAY AUGUST 3, 2017
PHOTO DSC_2395

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: -
Approved by: R.LAPIER	Date: -
Project Number: 17153	Drawing Number: DSC_2395



LOTS OF SIGNS WARNING OF VERY DANGEROUS H.V. YARD.



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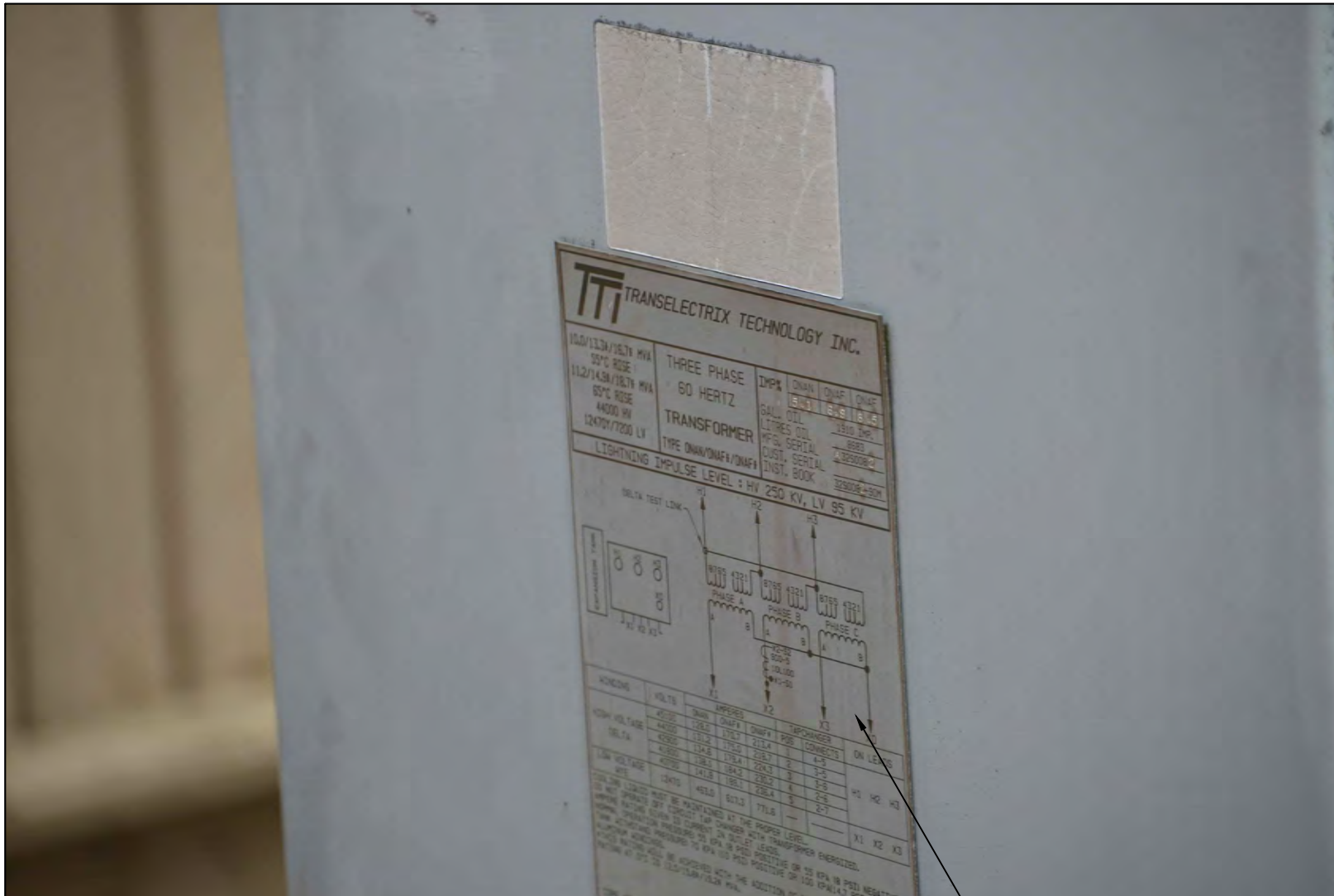


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OTTAWA RIVER POWER CORPORATION

SUBSTATION CONDITION ASSESSMENT
PEMBROKE MS-8
DATE TAKEN: THURSDAY AUGUST 3, 2017
PHOTO DSC_2398

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: —
Approved by: R.LAPIER	Date: —
Project Number: 17153	Drawing Number: DSC_2398



DY II VECTOR (INFO ONLY)



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OTTAWA RIVER POWER CORPORATION

SUBSTATION CONDITION ASSESSMENT
PEMBROKE MS-8
DATE TAKEN: THURSDAY AUGUST 3, 2017
PHOTO DSC_2402

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: —
Approved by: R.LAPIER	Date: —
Project Number: 17153	Drawing Number: DSC_2402



STATION 3/0 NEUTRAL
CONNECTION CUT AND USED TO
GROUND SWITCH MOTOR
OPERATION

OTTAWA RIVER POWER CORPORATION

SUBSTATION CONDITION ASSESSMENT
PEMBROKE MS-8
DATE TAKEN: THURSDAY AUGUST 3, 2017
PHOTO DSC_2406

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: —
Approved by: R.LAPIER	Date: —
Project Number: 17153	Drawing Number: DSC_2406

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— CLEARANCE/SECURITY ISSUE



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OTTAWA RIVER POWER CORPORATION

SUBSTATION CONDITION ASSESSMENT
PEMBROKE MS-8
DATE TAKEN: THURSDAY AUGUST 3, 2017
PHOTO DSC_2621

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: —
Approved by: R.LAPIER	Date: —
Project Number: 17153	Drawing Number: DSC_2621



— CLEARANCE/SECURITY ISSUE



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OTTAWA RIVER POWER CORPORATION

SUBSTATION CONDITION ASSESSMENT
PEMBROKE MS-8
DATE TAKEN: THURSDAY AUGUST 3, 2017
PHOTO DSC_2620

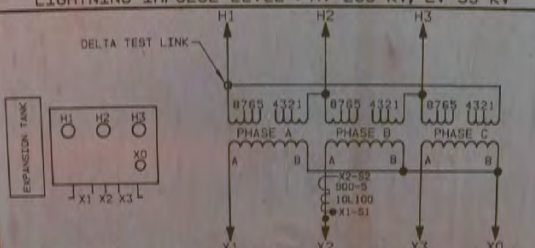
Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: —
Approved by: R.LAPIER	Date: —
Project Number: 17153	Drawing Number: DSC_2620

Almonte MS1



TRANSELECTRIX TECHNOLOGY INC.

10.0/13.3*/16.7* MVA 55°C RISE 11.2/14.9*/18.7* MVA 65°C RISE 44000 HV 12470Y/7200 LV	THREE PHASE 60 HERTZ TRANSFORMER TYPE ONAN/ONAF*/ONAF#	IMP% ONAN ONAF ONAF	ONAN ONAF ONAF	ONAF ONAF ONAF
		GAL. OIL LITRES OIL MFG. SERIAL CUST. SERIAL INST. BOOK	1910 TWP. 8003 325008 325008-90M	
LIGHTNING IMPULSE LEVEL : HV 250 KV, LV 95 KV				



WINDING	VOLTS	AMPERES			TAPCHANGER		ON LEADS		
		ONAN	ONAF#	ONAF#	POS	CORRECTS			
	45100	128.0	170.7	213.4	1	4-5			
	44000	131.2	175.0	218.7	2	3-5			
HIGH VOLTAGE	42900	134.8	179.4	224.3	3	3-6	H1	H2	H3
DELTA	41800	138.1	184.2	230.2	4	2-6			
	40700	141.9	188.1	236.4	5	2-7			
LOW VOLTAGE	12470	463.0	617.3	771.6	—	—	X1	X2	X3

COOLING LIQUID MUST BE MAINTAINED AT THE PROPER LEVEL.
DO NOT OPERATE OFF CIRCUIT TAP CHANGER WITH TRANSFORMER ENERGIZED.
AMPERE RATING GIVEN IS CURRENT IN OUTLET LEADS.
NORMAL OPERATION PRESSURE 55 KPA (8 PSI) POSITIVE OR 55 KPA (8 PSI) NEGATIVE.
TANK WITHSTAND PRESSURE 70 KPA (10 PSI) POSITIVE OR 100 KPA (14.7 PSI) NEGATIVE.
ALUMINUM WINDINGS.
*THIS RATING WILL BE ACHIEVED WITH THE ADDITION OF FAN COOLING.
RATING AT 0°C IS 12.5/15.8/19.2* MVA.

CORE AND WINDINGS	15841 KG	341.0 L.B.
TANK AND FITTINGS	2114 KG	466.0 L.B.
INSULATING LIQUID	7568 KG	167.0 L.B.
TOTAL	30523 KG	674.0 L.B.

MADE IN CANADA
TRANSELECTRIX TECHNOLOGY INC. 238789-1

DYII VECTOR (INFO ONLY)

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OTTAWA RIVER POWER CORPORATION

SUBSTATION CONDITION ASSESSMENT
ALMONTE MS-1
DATE TAKEN: FRIDAY AUGUST 4, 2017
PHOTO DSC_2412

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: -
Approved by: R.LAPIER	Date: -
Project Number: 17153	Drawing Number: DSC_2412



NO GROUNDING AND BONDING ON FENCE AS
PER CODE.

DESKS ARE IN ARC FLASH ZONE



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OTTAWA RIVER POWER CORPORATION

SUBSTATION CONDITION ASSESSMENT
ALMONTE MS-1
DATE TAKEN: FRIDAY AUGUST 4, 2017
PHOTO DSC_2440

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: -
Approved by: R.LAPIER	Date: -
Project Number: 17153	Drawing Number: DSC_2440



SYSTEM NEUTRAL CABLE NOT
MECHANICALLY PROTECTED.

DANGEROUS TO PUBLIC



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OTTAWA RIVER POWER CORPORATION

SUBSTATION CONDITION ASSESSMENT
ALMONTE MS-1
DATE TAKEN: FRIDAY AUGUST 4, 2017
PHOTO DSC_2447

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: -
Approved by: R.LAPIER	Date: -
Project Number: 17153	Drawing Number: DSC_2447

Almonte MS2



METAL CLAD SIDING — IMPROPER
GROUNDING AND BONDING

NO CRUSHED STONE



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OTTAWA RIVER POWER CORPORATION

SUBSTATION CONDITION ASSESSMENT
ALMONTE MS-2
DATE TAKEN: FRIDAY AUGUST 4, 2017
PHOTO DSC_2456

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: —
Approved by: R.LAPIER	Date: —
Project Number: 17153	Drawing Number: DSC_2456



BARE SYSTEM NEUTRAL
DANGEROUS



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OTTAWA RIVER POWER CORPORATION

SUBSTATION CONDITION ASSESSMENT
ALMONTE MS-2
DATE TAKEN: FRIDAY AUGUST 4, 2017
PHOTO DSC_2464

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: -
Approved by: R.LAPIER	Date: -
Project Number: 17153	Drawing Number: DSC_2464



CONCENTRIC NEUTRALS IN USE.

SINGLE LINE DIAGRAM NEEDS TO
BE UPDATED WITH
NON-STANDARD NEUTRAL
METHOD



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OTTAWA RIVER POWER CORPORATION

SUBSTATION CONDITION ASSESSMENT
ALMONTE MS-2
DATE TAKEN: FRIDAY AUGUST 4, 2017
PHOTO DSC_2469

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: -
Approved by: R.LAPIER	Date: -
Project Number: 17153	Drawing Number: DSC_2469



— MATERIALS FROM NEIGHBOR STACKED AGAINST WALL
DAYCARE ON OPPOSITE SIDE OF STATION.
SECURITY RISK



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SUBSTATION CONDITION ASSESSMENT
ALMONTE MS-2
DATE TAKEN: FRIDAY AUGUST 4, 2017
PHOTO DSC_2472

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: —
Approved by: R.LAPIER	Date: —
Project Number: 17153	Drawing Number: DSC_2472



NO BARBED WIRE AS PER CODE



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Client Contact

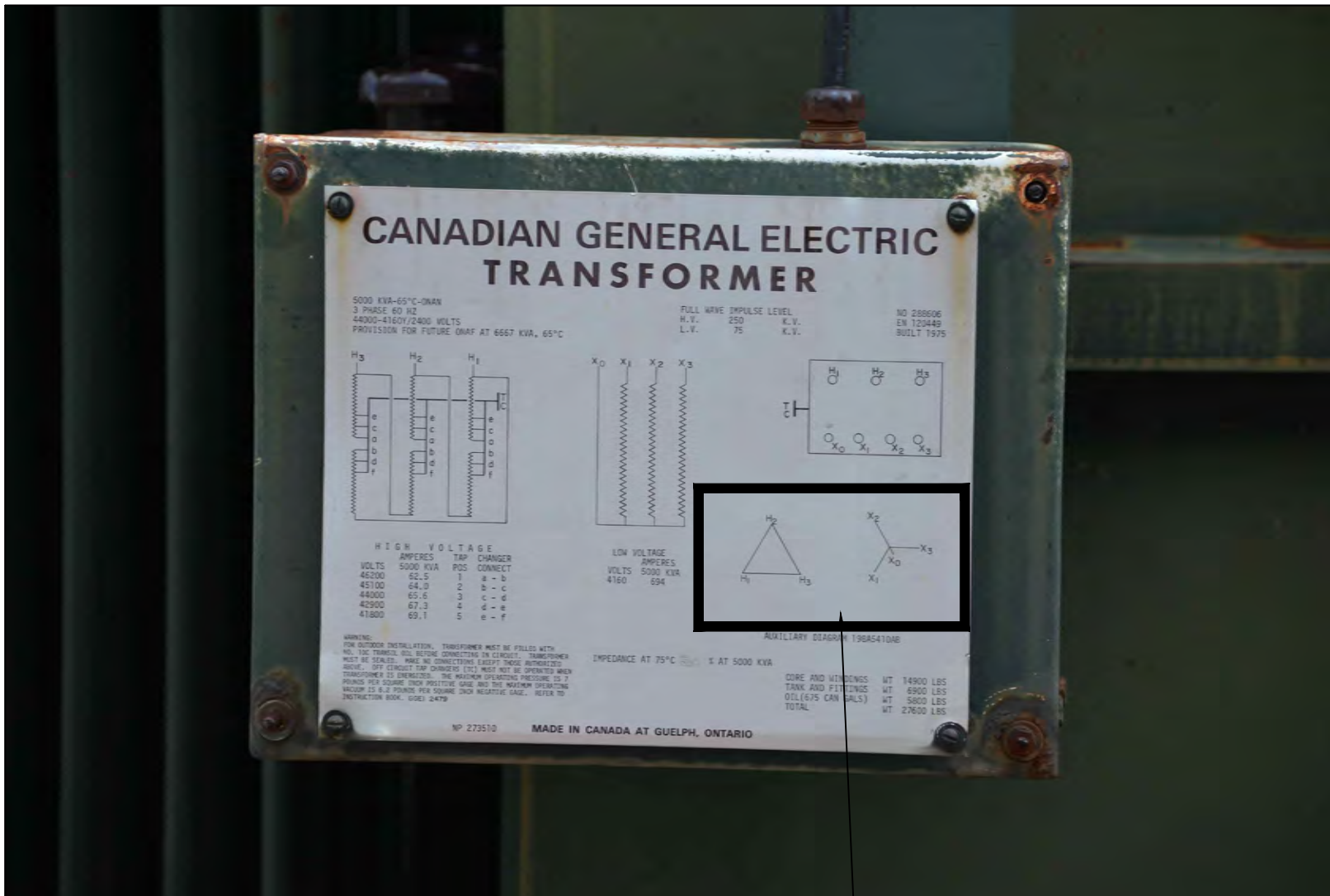


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OTTAWA RIVER POWER CORPORATION

SUBSTATION CONDITION ASSESSMENT
ALMONTE MS-2
DATE TAKEN: FRIDAY AUGUST 4, 2017
PHOTO DSC_2474

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: -
Approved by: R.LAPIER	Date: -
Project Number: 17153	Drawing Number: DSC_2474



DYII VECTOR (INFO ONLY)



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SUBSTATION CONDITION ASSESSMENT
ALMONTE MS-2
DATE TAKEN: FRIDAY AUGUST 4, 2017
PHOTO DSC_2477

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: -
Approved by: R.LAPIER	Date: -
Project Number: 17153	Drawing Number: DSC_2477



CONSTRUCTION WORK BEING DONE
WITHOUT ANY ENGINEERED PLANS.

VIOLATION OF ESA REG 22/04



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SUBSTATION CONDITION ASSESSMENT
ALMONTE MS-2
DATE TAKEN: FRIDAY AUGUST 4, 2017
PHOTO DSC_2486

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: -
Approved by: R.LAPIER	Date: -
Project Number: 17153	Drawing Number: DSC_2486



IMPROPER GROUNDING



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SUBSTATION CONDITION ASSESSMENT
ALMONTE MS-2
DATE TAKEN: FRIDAY AUGUST 4, 2017
PHOTO DSC_2490

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: —
Approved by: R.LAPIER	Date: —
Project Number: 17153	Drawing Number: DSC_2490



SAND - NO CRUSHED STONE



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SUBSTATION CONDITION ASSESSMENT
ALMONTE MS-2
DATE TAKEN: FRIDAY AUGUST 4, 2017
PHOTO DSC_2491

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: -
Approved by: R.LAPIER	Date: -
Project Number: 17153	Drawing Number: DSC_2491



BRACING FOR UNSTABLE WALLS.
NO GROUNDING, NO ENG. REVIEW



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SUBSTATION CONDITION ASSESSMENT
ALMONTE MS-2
DATE TAKEN: FRIDAY AUGUST 4, 2017
PHOTO DSC_2493

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: —
Approved by: R.LAPIER	Date: —
Project Number: 17153	Drawing Number: DSC_2493



TAPE TIED OFF TO NEUTRAL CABLES, DANGEROUS IF CABLE CAME LOOSE.

STATION NEUTRAL BUS – NO MECHANICAL PROTECTION, COVER, WARNING SIGN. VERY DANGEROUS



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SUBSTATION CONDITION ASSESSMENT
ALMONTE MS-2
DATE TAKEN: FRIDAY AUGUST 4, 2017
PHOTO DSC_2497

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
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Approved by: R.LAPIER	Date: -
Project Number: 17153	Drawing Number: DSC_2497



REQUIRES PADLOCK



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OTTAWA RIVER POWER CORPORATION

SUBSTATION CONDITION ASSESSMENT
ALMONTE MS-2
DATE TAKEN: FRIDAY AUGUST 4, 2017
PHOTO DSC_2515

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: -
Approved by: R.LAPIER	Date: -
Project Number: 17153	Drawing Number: DSC_2515

Almonte MS3



BARBED WIRE LEANING IN
VEGETATION
LACK OF CRUSHED STONE
BOLLARD GROUNDING



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OTTAWA RIVER POWER CORPORATION

SUBSTATION CONDITION ASSESSMENT
ALMONTE MS-3
DATE TAKEN: FRIDAY AUGUST 4, 2017
PHOTO DSC_2518

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: -
Approved by: R.LAPIER	Date: -
Project Number: 17153	Drawing Number: DSC_2518



VEGETATION AND TREE TRIMMING
LACK OF CRUSHED STONE



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OTTAWA RIVER POWER CORPORATION

SUBSTATION CONDITION ASSESSMENT
ALMONTE MS-3
DATE TAKEN: FRIDAY AUGUST 4, 2017
PHOTO DSC_2524

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: -
Approved by: R.LAPIER	Date: -
Project Number: 17153	Drawing Number: DSC_2524



BARE NEUTRAL UP POLE
NEED TO CONFIRM NEUTRAL
CONNECTIONS



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SUBSTATION CONDITION ASSESSMENT
ALMONTE MS-3
DATE TAKEN: FRIDAY AUGUST 4, 2017
PHOTO DSC_2529

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: -
Approved by: R.LAPIER	Date: -
Project Number: 17153	Drawing Number: DSC_2529



TELECOM CABLE HANGING DOWN



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SUBSTATION CONDITION ASSESSMENT
ALMONTE MS-3
DATE TAKEN: FRIDAY AUGUST 4, 2017
PHOTO DSC_2528

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: —
Approved by: R.LAPIER	Date: —
Project Number: 17153	Drawing Number: DSC_2528



NEED TO CONFIRM NEUTRAL CABLE CONNECTION



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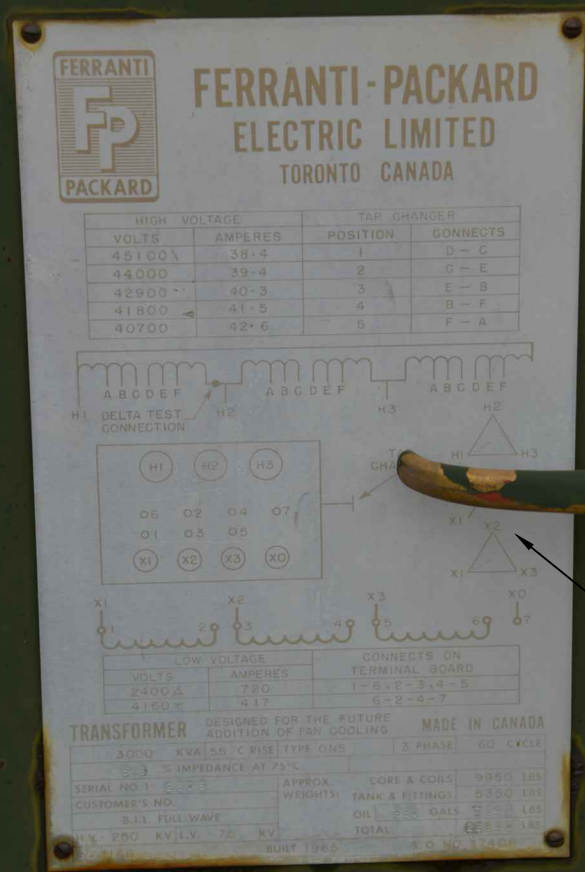


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SUBSTATION CONDITION ASSESSMENT
ALMONTE MS-3
DATE TAKEN: FRIDAY AUGUST 4, 2017
PHOTO DSC_2539

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: —
Approved by: R.LAPIER	Date: —
Project Number: 17153	Drawing Number: DSC_2539



DYII VECTOR (INFORMATION ONLY)

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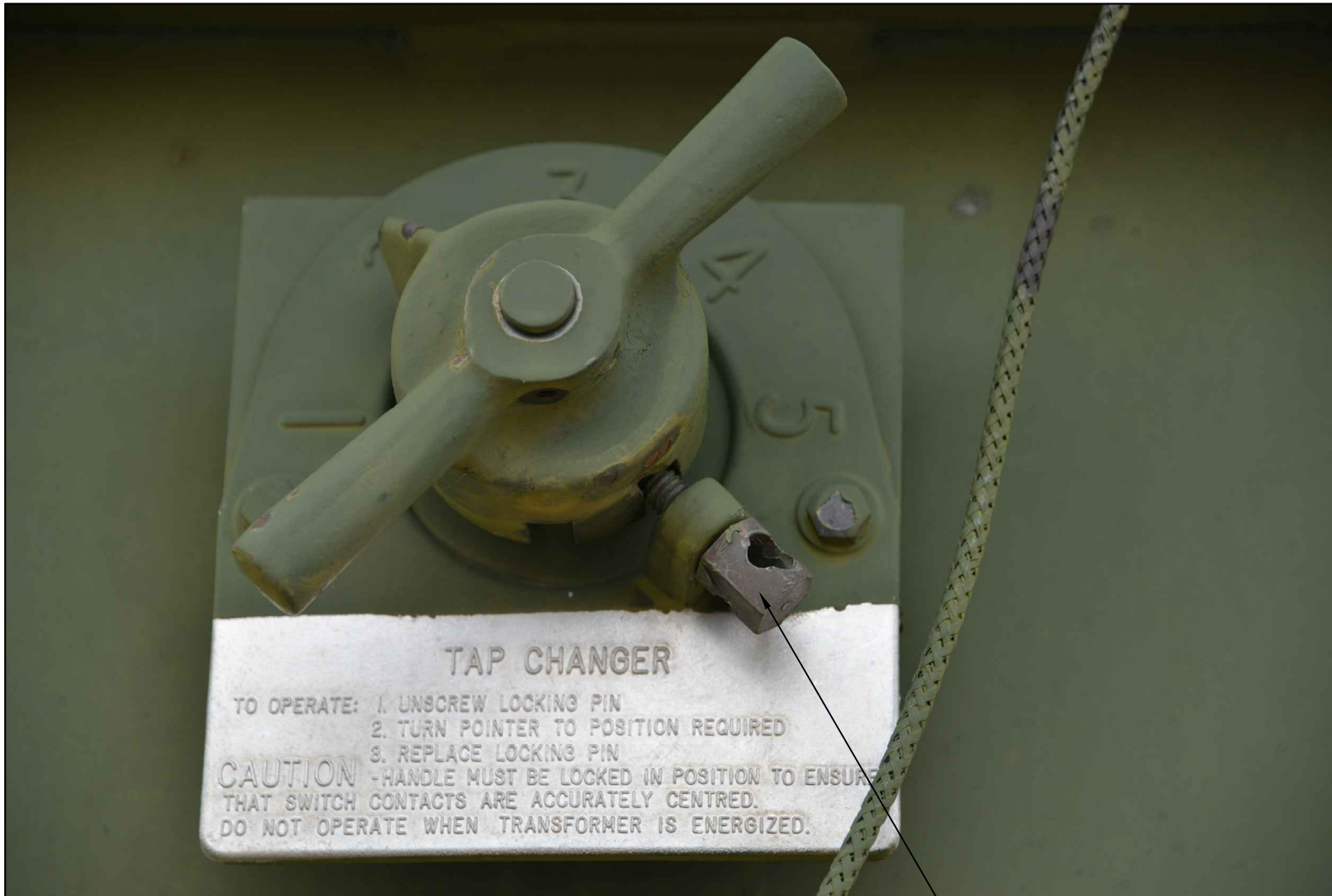


Ottawa River Power Corporation
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OTTAWA RIVER POWER CORPORATION

SUBSTATION CONDITION ASSESSMENT
ALMONTE MS-3
DATE TAKEN: FRIDAY AUGUST 4, 2017
PHOTO DSC_2546

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: -
Approved by: R.LAPIER	Date: -
Project Number: 17153	Drawing Number: DSC_2546



REQUIRES PADLOCK



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Client Contact



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OTTAWA RIVER POWER CORPORATION

SUBSTATION CONDITION ASSESSMENT
ALMONTE MS-3
DATE TAKEN: FRIDAY AUGUST 4, 2017
PHOTO DSC_2547

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: -
Approved by: R.LAPIER	Date: -
Project Number: 17153	Drawing Number: DSC_2547



IMPROPER CONNECTION ON XO GROUND



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SUBSTATION CONDITION ASSESSMENT
ALMONTE MS-3
DATE TAKEN: FRIDAY AUGUST 4, 2017
PHOTO DSC_2551

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: -
Approved by: R.LAPIER	Date: -
Project Number: 17153	Drawing Number: DSC_2551



PORCELAIN ARRESTORS



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SUBSTATION CONDITION ASSESSMENT
ALMONTE MS-3
DATE TAKEN: FRIDAY AUGUST 4, 2017
PHOTO DSC_2553

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: —
Approved by: R.LAPIER	Date: —
Project Number: 17153	Drawing Number: DSC_2553



POOR YARD CONDITION



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SUBSTATION CONDITION ASSESSMENT
ALMONTE MS-3
DATE TAKEN: FRIDAY AUGUST 4, 2017
PHOTO DSC_2554

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: -
Approved by: R.LAPIER	Date: -
Project Number: 17153	Drawing Number: DSC_2554



OBSOLETE SWITCHGEAR
DIFFICULT TO GET PARTS?



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OTTAWA RIVER POWER CORPORATION

SUBSTATION CONDITION ASSESSMENT
ALMONTE MS-3
DATE TAKEN: FRIDAY AUGUST 4, 2017
PHOTO DSC_2561

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: -
Approved by: R.LAPIER	Date: -
Project Number: 17153	Drawing Number: DSC_2561



NO GROUND PROTECTION



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OTTAWA RIVER POWER CORPORATION

SUBSTATION CONDITION ASSESSMENT
ALMONTE MS-3
DATE TAKEN: FRIDAY AUGUST 4, 2017
PHOTO DSC_2564

Final Drawing Size: ANSI A (8.5x11)	Scale: N.T.S.
Drawn by: Z.KOOMANS	Date: 30/08/2017
Checked by: S.COSTELLO	Date: -
Approved by: R.LAPIER	Date: -
Project Number: 17153	Drawing Number: DSC_2564