

Brockville Intermediate Mile 23.70 - LIST OF MATERIALS			Notes:			
LOCATION	Brockville North MP 23.70		For spare equipment refer to Section 3 Signal Technical Specifications; Section 3B-10			
CLASSIFICATION	Intermediate					
NAME	Intermediate Mile 23.70					
REVISION	Revision 1 - December 10, 2018					
VIA Reference #	C20150030C-1-62	CPI-249	PROJECT II			
TYPE	MANUFACTURER	PART NUMBER	DESCRIPTION	QUANTITY	LONG LEAD (Y/N)	COMMENTS
RELAY	Siemens/GRS	400020/A62-310	B1 RELAY, 500Ω, NEUTRAL, 4FB-2F-1B HD CONTACTS	1	Y	
	Siemens/GRS	420000-41X/A62-586	B1 RELAY, PLUGBOARD, CRIMP TERMINALS	1	Y	
TERMINALS	ERICO	EPD2050F	nVENT ERICO PROTECTION DEVICE, F-SERIES ARRESTOR	2	N	
SIGNALS	GE Lumination	LS6-WFA3-01B-5	TAKE SIDING INDICATION, WHITE, LED, CONTINUOUSLY FLASHING	1	N	
CABLE	Nexans	#10	#10, INTERNAL WIRING(I), STRANDED	-	N	Length to be confirmed in field
	Nexans	#16	#16, INTERNAL WIRING(I), STRANDED	-	N	Length to be confirmed in field

Brockville Siding North - LIST OF MATERIALS			Notes:			
LOCATION	Brockville North MP 27.32		For spare equipment refer to Section 3 Signal Technical Specifications; Section 3B-10			
CLASSIFICATION	Control Point - End of Siding					
NAME	Brockville North					
REVISION	Revision 1 - December 10, 2018					
VIA Reference #	C20150030C-1-62	CPI-249	PROJECT II			
TYPE	MANUFACTURER	PART NUMBER	DESCRIPTION	QUANTITY	LONG LEAD (Y/N)	COMMENTS
ELECTRONICS	Alstom/GE	26-99AA70000-0F-A01	ElectroLogIXS VLC, EC5 END OF SIDING UNIT	1	Y	
	Alstom/GE	800-096000-011	Track Inductor Panel, TIP-2	2	Y	
	Alstom/GE	814-096000-016	TIP-2 Cable, 4 ft.	2	Y	
	Alstom/GE	075113-010	CIO-CLA to LCP Interface Cable, 10 ft.	1	Y	
	Alstom/GE	251333-000	VLC Ground Fault Detector, GFD-1	1	Y	
	Alstom/GE		ElectroLogIXS, DIP Shunt Chassis ID	2	Y	
	Alstom/GE	16-722220000-10C1	ElectroLogIXS XP4 9 SLOT, Crossing 2TR CWD Unit (2 track remote)	1	Y	
	Alstom/GE	250675-100	Panel, Surge Arrester, MDSA-2XS (2 Track)	1	Y	
	Alstom/GE	250736-000	Base, Unit, HLC/LCP, Generic Toggle Switch	1	N	
	Honeywell or equivalent	AML21BBA2AC	Switch, Pushbutton, DPDT, 2A, 250V	2	N	
	Honeywell or equivalent	AML51C10W	Switch Cap, Pushbutton	2	N	
	Honeywell or equivalent	AML76C10T01P	Switch Guard, Pushbutton	2	N	
	Modern Manufacturing Ltd.	RR-35-00012	Universal Mounting Plate	1	N	
COMMUNICATIONS	APC	SMX1000	SMART-UPS X 1000 VA	1	Y	To be confirmed
	APC	SMX48RMBP2U	SMART-UPS X-SERIES 48V EXTERNAL BATTERY PACK	3	Y	To be confirmed
	CISCO	CISCO-2951	CISCO 2951 ROUTER	1	N	To be confirmed
	VLINX	ESR-900	VLINX ESR-900 SERIES ETHERNET TO SERIAL CONVERTER	1	N	To be confirmed
	Ansaldo	N16401101	SERIAL COMMUNICATION CIRCUIT ISOLATION UNIT	1	Y	To be confirmed
	Safetran or Advance Tower	111039	TOWER WITH SINGLE ANTENNA 60 FT TILT	1	N	To be confirmed
Safetran or Advance Tower	065000-X6000X	60FT TILT TOWER DPS-2 EB FOUNDATION	1	N	To be confirmed	
SURGE SUPPRESSORS	Siemens	010807-7AX	240 VAC Line Surge Protectors Model SP20-3A, w/ equalizers	4	N	
	E-T-A	91H1210	C10 AMP BREAKER	3	N	
	E-T-A	91H1220	C20 AMP BREAKER	6	N	
BATTERIES & CHARGERS	National Railway Supply	ELC 12/40-D	BATTERY CHARGER, 12VDC, 40A OUTPUT, 115VAC, 230VAC INPUT	1	Y	
	Saft	SPL340	340 AH NICKEL-CADMIUM REFILLABLE BATTERY	11	Y	
	National Railway Supply	ELC 120/12	POWER SWITCH BATTERY CHARGER 110VDC	1	Y	
	EnerSys Energy Products Inc.	PC1200	44AH ODDYSEY BATTERY	9	Y	
	Hammond	266S24	24V/254VA TRANSFORMER Sw Heater	1	N	
Saft	66-03379-52	BATTERY BANK END LUG, SPL SERIES	4	Y		
RELAYS	Potter & Brumfield	KUP-14D15-12	KUP-STYLE RELAY, 12VDC	2	N	One for crossing 27.31
	Potter & Brumfield	KUP-14A15-240	KUP-STYLE RELAY, 240VAC	1	N	
	Potter & Brumfield	27E121	KUP-STYLE RELAY SOCKET	3	N	
	Potter & Brumfield	20C314	KUP-STYLE RELAY RETAINING CLIP	6	N	
	Siemens/GRS	400510/A62-120	B1 RELAY, 2Ω, BIASED, 4FB-2F-1B CONTACTS	3	Y	
	Siemens/GRS	400520/A62-429	B1 RELAY, 500Ω, NEUTRAL, 4FB XHD CONTACTS	2	Y	
	Siemens/GRS	400023/A62-580	B1 RELAY, 500Ω, NEUTRAL, 6FB HD CONTACTS	3	Y	
	Siemens/GRS	400000/A62-262	B1 RELAY, 500Ω, NEUTRAL, 6FB CONTACTS	6	Y	
	Siemens/GRS	420000-41X/A62-586	B1 RELAY, PLUGBOARD, CRIMP TERMINALS	14	Y	

Brockville Siding North - LIST OF MATERIALS			Notes:			
LOCATION	Brockville North MP 27.32		For spare equipment refer to Section 3 Signal Technical Specifications; Section 3B-10			
CLASSIFICATION	Control Point - End of Siding					
NAME	Brockville North					
REVISION	Revision 1 - December 10, 2018					
VIA Reference #	C20150030C-1-62	CPI-249	PROJECT II			
TYPE	MANUFACTURER	PART NUMBER	DESCRIPTION	QUANTITY	LONG LEAD (Y/N)	COMMENTS
TRACK CIRCUITS	GE	800-003510-000	DC TRACK CONVERTER MODEL 2TC	2	Y	One for crossing 27.31
	Siemens or Equivalent	029602-7X	RESISTOR, ADJUSTABLE, 2.5Ω	1	N	
	Siemens or Equivalent	029603-5X	RESISTOR, ADJUSTABLE, 10Ω	3	N	One for crossing 27.31
	Siemens or Equivalent	029245-100X	RESISTOR, FIXED, 100Ω	1	N	
	Siemens or Equivalent	62648	BATTERY CHOKE	1	N	
	GE/Alstom	800-080055-109	Electrocode Track Filter, TF-211, 211Hz	1	N	
TERMINALS	Siemens or Equivalent	051883-127X1	12 Terminal Panel for Faraday Cage	2	N	
	Siemens or Equivalent	051883-199X1	16 Terminal Panel for Faraday Cage	1	N	
	Siemens or Equivalent	051883-145X	20 Terminal Panel for Faraday Cage	5	N	
	ERICO	EPD2050F	nVENT ERICO PROTECTION DEVICE, F-SERIES ARRESTOR	-	N	Quantity to be confirmed
	Enduron	B33168	Blank Panel for Faraday Cage	7	N	
BUNGALOW	Les Boitiers CUSTOM Métal inc. or National Railway Supply	406B153207349-01	CN 8' X 8' BUNGALOW WITH FARADAY CAGE	1	Y	
	Bard Manufacturing CO. INC	71430	Bard Air Conditioning	1	Y	
	Bryant	71430	GENERATOR OUTLET - TWIST-LOCK RECEPTACLE L14-30P 125/250V 3P-4W	1	N	
	Siemens or Equivalent	N/A	EQUIPMENT RACK - 19"	2	N	
	ERICO	813400	GROUND ROD, 3/4" DIAMETER, 10'	6	N	
	Oldcastle	L Series 910	GROUND POT	6	N	
	Oldcastle	02-00297	HAND HOLE ENCLOSURE 36"x60"x48"	1	N	
SIGNALS	Siemens or GE		1-HEAD COLOURLIGHT SIGNAL UNIT, LED, RED LIGHT UNIT	7	Y	
	Siemens or GE		2-HEAD COLOURLIGHT SIGNAL UNIT, LED, YELLOW & RED LIGHT UNITS	3	Y	
	Siemens or GE		3-HEAD COLOURLIGHT SIGNAL UNIT, LED, GREEN, YELLOW & RED LIGHT UNITS	3	Y	
	Lindsay	190608	WAYSIDE THREE HEAD SIGNAL MAST, WITH PLATFORMS, FOUNDATION AND LADDER	1	Y	
	Lindsay	190219	WAYSIDE TWO HEAD SIGNAL MAST, WITH PLATFORMS, FOUNDATION AND LADDER	2	Y	
CABLE	Local	3C TECK 90	3C#2 TECK 90, POWER CABLE (m)	-	N	Length to be confirmed in field
	Nexans		S8 BOOTLEG CABLE MULTISTRAND BATTERY AND BOOTLEG CONNECTIONS (f)	-	N	Length to be confirmed in field
	Nexans	660083	5C #6, SIGNAL CABLE (m)	-	N	Length to be confirmed in field
	Nexans	2SC #6	2SC #6, TRACK CIRCUIT CABLE, TWISTED (m)	-	N	Length to be confirmed in field
	Nexans	660171	16C (7#6, 9#14), SWITCH MACHINE CABLE (m)	-	N	Length to be confirmed in field
	Nexans	#6	#6, GROUND CABLE, STRANDED (m)	-	N	Length to be confirmed in field
	ERICO	SBPACGBJ4	TRACK CONNECTOR, 5", 1/4" DIAMETER CABLE, FOR #6AWG	-	N	Length to be confirmed in field
	ERICO	SBGR1181G	CADWELD, 'ONE-SHOT' FOR GROUND ROD CONNECTIONS	-	N	Length to be confirmed in field
	Nexans	#10	#10, INTERNAL WIRING(f), STRANDED	-	N	Length to be confirmed in field
	Nexans	#16	#16, INTERNAL WIRING(f), STRANDED	-	N	Length to be confirmed in field
	Nexans	#20	#20, INTERNAL WIRING(f), STRANDED	-	N	Length to be confirmed in field
	Local	4C#8	4C#8, L14-30 EXTENSION CORDS - GENERATOR CORD W/ L14-30P TO L14-30R (f)	25	N	
	Local		COMMUNICATION CABLE	-	Y	Railterm to confirm size and type

Brockville Siding North - LIST OF MATERIALS				Notes:		
LOCATION	Brockville North MP 27.32			For spare equipment refer to Section 3 Signal Technical Specifications; Section 3B-10		
CLASSIFICATION	Control Point - End of Siding					
NAME	Brockville North					
REVISION	Revision 1 - December 10, 2018					
VIA Reference #	C20150030C-1-62	CPI-249	PROJECT II			
TYPE	MANUFACTURER	PART NUMBER	DESCRIPTION	QUANTITY	LONG LEAD (Y/N)	COMMENTS
SNOW MELTER	Fastrax		HOVEY HELLFIRE 900	1	Y	
POWER SWITCH	US&S (Entire Kit) Including rods Gauge Plates Fiber Glass Specialist and or Rails Schwihag	N451160 SM-100	MODEL M-23A SWITCH MACHINE (110VDC, 3-WIRE)	1	Y	*1 set for #12S turnout reminder for track
			GAUGE PLATES FOR TURNOUT SADDLE PLATES	1	Y	
			FIBER GLASS COVERS	1*	Y	
			SWITCH ROLLERS FOR #15 TURNOUTS	1	Y	

Brockville Siding South - LIST OF MATERIALS			Notes:			
LOCATION	Brockville South MP 27.56		For spare equipment refer to Section 3 Signal Technical Specifications; Section 3B-10			
CLASSIFICATION	Control Point - End of Siding					
NAME	Brockville South					
REVISION	Revision 1 - December 10, 2018					
VIA Reference #	C20150030C-1-62	CPI-249	PROJECT II			
TYPE	MANUFACTURER	PART NUMBER	DESCRIPTION	QUANTITY	LONG LEAD (Y/N)	COMMENTS
ELECTRONICS	Alstom/GE	26-99AA70000-0F-A01	ElectroLogIXS VLC, EC5 END OF SIDING UNIT	1	Y	
	Alstom/GE	800-096000-011	Track Inductor Panel, TIP-2	2	Y	
	Alstom/GE	814-096000-016	TIP-2 Cable, 4 ft.	2	Y	
	Alstom/GE	075113-010	CIO-CLA to LCP Interface Cable, 10 ft.	1	Y	
	Alstom/GE	251333-000	VLC Ground Fault Detector, GFD-1	1	Y	
	Alstom/GE		ElectroLogIXS, DIP Shunt Chassis ID	2	Y	
	Alstom/GE	16-722220000-10C1	ElectroLogIXS XP4 9 SLOT, Crossing 2TR CWD Unit (2 track remote)	1	Y	
	Alstom/GE	250675-100	Panel, Surge Arrester, MDSA-2XS (2 Track)	1	Y	
	Alstom/GE	250736-000	Base, Unit, HLC/LCP, Generic Toggle Switch	1	N	
	Honeywell or equivalent	AML21BBA2AC	Switch, Pushbutton, DPDT, 2A, 250V	2	N	
	Honeywell or equivalent	AML51C10W	Switch Cap, Pushbutton	2	N	
	Honeywell or equivalent	AML76C10T01P	Switch Guard, Pushbutton	2	N	
Modern Manufacturing Ltd.	RR-35-00012	Universal Mounting Plate	1	N		
COMMUNICATIONS	APC	SMX1000	SMART-UPS X 1000 VA	1	Y	To be confirmed
	APC	SMX48RMBP2U	SMART-UPS X-SERIES 48V EXTERNAL BATTERY PACK	3	Y	To be confirmed
	CISCO	CISCO-2951	CISCO 2951 ROUTER	1	N	To be confirmed
	VLINX	ESR-900	VLINX ESR-900 SERIES ETHERNET TO SERIAL CONVERTER	1	N	To be confirmed
	Ansaldo	N16401101	SERIAL COMMUNICATION CIRCUIT ISOLATION UNIT	1	Y	To be confirmed
	Safetran or Advance Tower	111039	TOWER WITH SINGLE ANTENNA 60 FT TILT	1	N	To be confirmed
Safetran or Advance Tower	065000-X6000X	60FT TILT TOWER DPS-2 EB FOUNDATION	1	N	To be confirmed	
SURGE SUPPRESSORS	Siemens	010807-7AX	240 VAC Line Surge Protectors Model SP20-3A, w/ equalizers	4	N	
	E-T-A	91H1210	C10 AMP BREAKER	3	N	
	E-T-A	91H1220	C20 AMP BREAKER	6	N	
BATTERIES & CHARGERS	National Railway Supply	ELC 12/40-D	BATTERY CHARGER, 12VDC, 40A OUTPUT, 115VAC, 230VAC INPUT	1	Y	
	Saft	SPL340	340 AH NICKEL-CADMIUM REFILLABLE BATTERY	11	Y	
	National Railway Supply	ELC 120/12	POWER SWITCH BATTERY CHARGER 110VDC	1	Y	
	EnerSys Energy Products Inc.	PC1200	44AH ODDYSEY BATTERY	9	Y	
	Hammond	266S24	24V/254VA TRANSFORMER Sw Heater	1	N	
Saft	66-03379-52	BATTERY BANK END LUG, SPL SERIES	4	Y		
RELAYS	Potter & Brumfield	KUP-14D15-12	KUP-STYLE RELAY, 12VDC	2	N	
	Potter & Brumfield	KUP-14A15-240	KUP-STYLE RELAY, 240VAC	1	N	
	Potter & Brumfield	27E121	KUP-STYLE RELAY SOCKET	3	N	
	Potter & Brumfield	20C314	KUP-STYLE RELAY RETAINING CLIP	6	N	
	Siemens/GRS	400510/A62-120	B1 RELAY, 2Ω, BIASED, 4FB-2F-1B CONTACTS	2	Y	
	Siemens/GRS	400520/A62-429	B1 RELAY, 500Ω, NEUTRAL, 4FB XHD CONTACTS	2	Y	
	Siemens/GRS	400023/A62-580	B1 RELAY, 500Ω, NEUTRAL, 6FB HD CONTACTS	3	Y	
	Siemens/GRS	400000/A62-262	B1 RELAY, 500Ω, NEUTRAL, 6FB CONTACTS	6	Y	
	Siemens/GRS	420000-41X/A62-586	B1 RELAY, PLUGBOARD, CRIMP TERMINALS	13	Y	

Brockville Siding South - LIST OF MATERIALS			Notes:			
LOCATION	Brockville South MP 27.56		For spare equipment refer to Section 3 Signal Technical Specifications; Section 3B-10			
CLASSIFICATION	Control Point - End of Siding					
NAME	Brockville South					
REVISION	Revision 1 - December 10, 2018					
VIA Reference #	C20150030C-1-62	CPI-249	PROJECT II			
TYPE	MANUFACTURER	PART NUMBER	DESCRIPTION	QUANTITY	LONG LEAD (Y/N)	COMMENTS
TRACK CIRCUITS	GE	800-003510-000	DC TRACK CONVERTER MODEL 2TC	1	Y	
	Siemens or Equivalent	029602-7X	RESISTOR, ADJUSTABLE, 2.5Ω	1	N	
	Siemens or Equivalent	029603-5X	RESISTOR, ADJUSTABLE, 10Ω	2	N	
	Siemens or Equivalent	029245-100X	RESISTOR, FIXED, 100Ω	1	N	
	Siemens or Equivalent	62648	BATTERY CHOKE	1	N	
TERMINALS	Siemens or Equivalent	051883-127X1	12 Terminal Panel for Faraday Cage	2	N	
	Siemens or Equivalent	051883-199X1	16 Terminal Panel for Faraday Cage	1	N	
	Siemens or Equivalent	051883-145X	20 Terminal Panel for Faraday Cage	5	N	
	ERICO	EPD2050F	nVENT ERICO PROTECTION DEVICE, F-SERIES ARRESTOR	-	N	Quantity to be confirmed
Enduron	B33168	Blank Panel for Faraday Cage	7	N		
BUNGALOW	Les Boitiers CUSTOM Métal inc. or National Railway Supply		CN 8' X 8' BUNGALOW WITH FARADAY CAGE	1	Y	
	Bard Manufacturing CO. INC	406B153207349-01	Bard Air Conditioning	1	Y	
	Bryant	71430	GENERATOR OUTLET - TWIST-LOCK RECEPTACLE L14-30P 125/250V 3P-4W	1	N	
	Siemens or Equivalent	N/A	EQUIPMENT RACK - 19"	2	N	
	ERICO	813400	GROUND ROD, 3/4" DIAMETER, 10'	6	N	
	Oldcastle	L Series 910	GROUND POT	6	N	
SIGNALS	Oldcastle	02-00297	HAND HOLE ENCLOSURE 36X60X48	1	N	
	Siemens or GE		2-HEAD COLOURLIGHT SIGNAL UNIT, LED, YELLOW & RED LIGHT UNITS	2	Y	
	Siemens or GE		3-HEAD COLOURLIGHT SIGNAL UNIT, LED, GREEN, YELLOW & RED LIGHT UNITS	3	Y	
	Lindsay		WAYSIDE DWARF SIGNAL MAST, WITH PLATFORMS, FOUNDATION AND LADDER	1	Y	
CABLE	Lindsay	190219	WAYSIDE TWO HEAD SIGNAL MAST, WITH PLATFORMS, FOUNDATION AND LADDER	1	Y	
	Local	3C TECK 90	3C#2 TECK 90, POWER CABLE (m)	-	N	Length to be confirmed in field
	Nexans	660083	S8 BOOTLEG CABLE MULTISTRAND BATTERY AND BOOTLEG CONNECTIONS (f)	-	N	Length to be confirmed in field
	Nexans	2SC #6	5C #6, SIGNAL CABLE (m)	-	N	Length to be confirmed in field
	Nexans	660171	2SC #6, TRACK CIRCUIT CABLE, TWISTED (m)	-	N	Length to be confirmed in field
	Nexans	#6	16C (7#6, 9#14), SWITCH MACHINE CABLE (m)	-	N	Length to be confirmed in field
	Nexans	SBPACGBJ4	#6, GROUND CABLE, STRANDED (m)	-	N	Length to be confirmed in field
	ERICO	SBGR1181G	TRACK CONNECTOR, 5", 1/4" DIAMETER CABLE, FOR #6AWG	-	N	Length to be confirmed in field
	ERICO	#10	CADWELD, "ONE-SHOT" FOR GROUND ROD CONNECTIONS	-	N	Length to be confirmed in field
	Nexans	#16	#10, INTERNAL WIRING(f), STRANDED	-	N	Length to be confirmed in field
	Nexans	#20	#16, INTERNAL WIRING(f), STRANDED	-	N	Length to be confirmed in field
	Local	4C#8	#20, INTERNAL WIRING(f), STRANDED	-	N	Length to be confirmed in field
	Local		4C#8, L14-30 EXTENSION CORDS - GENERATOR CORD W/ L14-30P TO L14-30R (f)	25	N	
Local		COMMUNICATION CABLE	-	Y	Railterm to confirm size and type	
SNOW MELTER	Fastrax or Rails		HOVEY 900 - PROPANE	1	Y	
POWER SWITCH	US&S (Entire Kit) Including rods	N451160	MODEL M-23A SWITCH MACHINE (110VDC, 3-WIRE)	1	Y	
	Gauge Plates	SM-100	GAUGE PLATES FOR TURNOUT SADDLE PLATES	1	Y	
	Fiber Glass Specialist and or Rails		FIBER GLASS COVERS	1*	Y	*1 set for #12S turnout reminder for track
	Schiwhag		SWITCH ROLLERS FOR #15 TURNOUTS	1	Y	