



INSPECTION FORM MOLDED CASE CIRCUIT BREAKER, < 1000V

ID:

Project	Facility: MacLean RPS	Project Name: MacLean Regional Pumping Station Valve House Electrical Upgrade
	Area : Valve House	Tender No.: 195-2024

Breaker Data	Location:	Panelboard/MCC:	Cell #:
	Manufacturer:	Type:	Serial #:
	Rated Voltage: V	Frame Size: A	Trip Unit:
	Interrupting Rating: kA	Comments:	

Visual Inspection / Cleaning	Breaker Identification Tag Installed: <input type="checkbox"/> Yes <input type="checkbox"/> No	Visual Signs of Overheating: <input type="checkbox"/> Yes <input type="checkbox"/> No
	Cleanliness (As Found): <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor	Cables Supported Appropriately: <input type="checkbox"/> Yes <input type="checkbox"/> No
	Connections: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor	Electro/Mechanical Interlock: <input type="checkbox"/> N/A <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor
	Ground Connection: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor	Exercise Circuit Breaker: <input type="checkbox"/> Yes
	Door Mechanical: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor	Other:
	Comments:	

Breaker Settings	Trip Unit Rating: A	Trip Unit Type: <input type="checkbox"/> None <input type="checkbox"/> Thermal Magnetic <input type="checkbox"/> Electronic <input type="checkbox"/> LI <input type="checkbox"/> LSI <input type="checkbox"/> LSIG					
	Breaker Setting (As Left)		Range	Setpoint		Delay	I²T
	Long Time	<input type="checkbox"/> Fixed <input type="checkbox"/> Adj.	-	X	A = A	sec	<input type="checkbox"/> On <input type="checkbox"/> Off
	Short Time	<input type="checkbox"/> Fixed <input type="checkbox"/> Adj.	-	X	A = A	sec	<input type="checkbox"/> On <input type="checkbox"/> Off
	Instantaneous	<input type="checkbox"/> Fixed <input type="checkbox"/> Adj.	-	X	A = A	N/A	
	Ground Fault	<input type="checkbox"/> Fixed <input type="checkbox"/> Adj.	-		A	sec	<input type="checkbox"/> On <input type="checkbox"/> Off

Insulation Resistance Test	<i>Perform insulation resistance measurements for breakers >= 250A, or as specified.</i>									
	Temperature: °C	Source: <input type="checkbox"/> Disconnected <input type="checkbox"/> Connected (Source Isolated)			<i>Approval is required, prior to leaving cables connected during the test.</i>					
		Load: <input type="checkbox"/> Disconnected <input type="checkbox"/> Connected (Load Isolated)								
	Test Voltage (VDC)	Insulation Resistance (MΩ)								
		Phase To GND (Breaker Closed)			Phase To Phase (Breaker Closed)			Line to Load (Breaker Open)		
		A	B	C	A - B	B - C	A - C	A	B	C
Test Summary <input type="checkbox"/> Test Passed <input type="checkbox"/> Test Inconclusive. Further Investigation Required. <input type="checkbox"/> Test Failed										
Comments:										

Contact Resistance	<i>Perform contact measurements for breakers >= 250A, or as specified.</i>					
	Resistance (μΩ)	A	B	C	Test Summary <input type="checkbox"/> Test Passed <input type="checkbox"/> Test Inconclusive Further Investigation Required. <input type="checkbox"/> Test Failed	
Comments:						




INSPECTION FORM
MOLDED CASE CIRCUIT BREAKER, < 1000V

ID:

Final Analysis	Returned to Service: <input type="checkbox"/> Yes <input type="checkbox"/> No	Comments:
	Monitoring / Further Inspection Required: <input type="checkbox"/> Yes <input type="checkbox"/> No	
	Repair / Replacement Required: <input type="checkbox"/> Yes <input type="checkbox"/> No	

	Company	Name	Signature	Date (yyyy/mm/dd)
Performed By				
Checked By				

Note: The person(s) performing the check is responsible for ensuring that the data is transcribed from the handwritten form correctly, and that the analysis results are correct.

	INSPECTION FORM POWER CABLE < 1000V		Page 1 of 1
			Cable ID:
Project	Facility: MacLean RPS	Project Name: MacLean Regional Pumping Station Valve House Electrical Upgrade	
	Area : Valve House	Tender No.: 195-2024	

Cable Data	Source:		Dest. / Load:	
	Manufacturer:		Type:	Conductor: <input type="checkbox"/> Copper <input type="checkbox"/> Aluminum
	No. of Conductors:	Size: <input type="checkbox"/> AWG <input type="checkbox"/> MCM	Length: m	<input type="checkbox"/> Measured <input type="checkbox"/> Previous Data <input type="checkbox"/> Jacket Markings <input type="checkbox"/> TDR
	Rated Voltage: V	Operating Voltage: V	Date Installed:	
	Installation: <input type="checkbox"/> Cable Tray <input type="checkbox"/> EMT <input type="checkbox"/> Alum. Conduit <input type="checkbox"/> Direct Buried <input type="checkbox"/> Strapped <input type="checkbox"/> Steel Conduit <input type="checkbox"/> PVC Conduit <input type="checkbox"/> Underground Duct		Other:	


Visual Inspection	Physical Damage on Exposed Ends: <input type="checkbox"/> Yes <input type="checkbox"/> No	Cable Identification Tag Installed: <input type="checkbox"/> Yes <input type="checkbox"/> No
	Visual Signs of Overheating: <input type="checkbox"/> Yes <input type="checkbox"/> No	Cable Supported Appropriately: <input type="checkbox"/> Yes <input type="checkbox"/> No
	Bend Radius Acceptable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Comments:

Insulation Resistance Test	Test Preparation: <input type="checkbox"/> Disconnected <input type="checkbox"/> Connected with Source Isolated	Source: <input type="checkbox"/> Disconnected <input type="checkbox"/> Connected with Load Isolated	Cable Dest. / Load: <input type="checkbox"/> Disconnected <input type="checkbox"/> Connected with Load Isolated	Note: Approval of City's Representative is required, prior to leaving cables connected during the test.		
	Cable Temperature: °C		Temperature Correction Factor for 20°C:	Ground all conductors not under test for each reading.		
	Test Voltage	Insulation Resistance (MΩ)			Test Summary <input type="checkbox"/> Test Passed <input type="checkbox"/> Test Inconclusive Further Investigation Required. <input type="checkbox"/> Test Failed	
			A-GND	B-GND		C-GND
	V	Reading				
		Corrected to 20°C				
<i>Utilize 1000VDC Test Voltage for 600V rated cables, 500VDC for cables rated <= 300V.</i>						
Comments:						

Connection Resistance	<i>Note: Torque check required for all cables. Connection Resistance Test required for cables 4/0 AWG or larger.</i>					
	Termination	Connection Resistance (μΩ) - As Left				Torque Check
		A	B	C	N	
	Source					<input type="checkbox"/> OK
	Dest. / Load					<input type="checkbox"/> OK
Comments:						

Final Analysis	Cable Returned to Service: <input type="checkbox"/> Yes <input type="checkbox"/> No	Comments:
	Monitoring / Further Inspection Required: <input type="checkbox"/> Yes <input type="checkbox"/> No	
	Repair / Replacement Required: <input type="checkbox"/> Yes <input type="checkbox"/> No	

	Company	Name	Signature	Date (yyyy/mm/dd)
Performed By				
Checked By				

	INSPECTION FORM CONTROL POWER TRANSFORMER, 600V		Page 1 of 1
			ID:
Project	Facility: MacLean RPS	Project Name: MacLean Regional Pumping Station Valve House Electrical Upgrade	
	Area: Valve House	Tender No.: 195-2024	

PT Data	Location:		Pri. Voltage Rating:	Sec. Voltage Rating:
	Manufacturer:		Pri. Fuse Size:	Sec. Fuse Size:
	Size:	Type:	Other:	

Visual Inspection	Physical Damage:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Defective Connections/Wiring:	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Visual Signs of Overheating:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Grounding and Shorting Connections Provide Contact:	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Verify Ground Connection:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Verify Withdrawal Mechanism Function:	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Fuse Sizes Match Drawings:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Comments:	

Insulation Resistance Test	Test Preparation: <input type="checkbox"/> Disconnected <input type="checkbox"/> Connected with Source Isolated		Note: Approval of City's Representative is required, prior to leaving cables connected during the test.	
	Test	Voltage	Insulation Resistance (MΩ)	Temperature: °C
	Primary To GND	1000 VDC		Test Summary <input type="checkbox"/> Test Passed <input type="checkbox"/> Test Inconclusive <input type="checkbox"/> Further Investigation Required. <input type="checkbox"/> Test Failed
	Secondary To GND	500 VDC		
	Primary To Secondary	1000 VDC		
Comments:				

Final Analysis	Returned to Service:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Comments:
	Monitoring / Further Inspection Required:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	Repair / Replacement Required:	<input type="checkbox"/> Yes <input type="checkbox"/> No	

	Company	Name	Signature	Date (yyyy/mm/dd)
Performed By				
Checked By				

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INSPECTION FORM CURRENT TRANSFORMER

ID:

Project	Facility: MacLean RPS	Project Name: MacLean Regional Pumping Station Valve House Electrical Upgrade
	Area: Valve House	Tender No.: 195-2024

CT Data	Location:	Current Ratio: : A	Voltage Class: V
	Manufacturer:	Model No.:	Type: <input type="checkbox"/> Bar <input type="checkbox"/> Window (Solid) <input type="checkbox"/> Split Core
	Burden Rating:	BIL: kV	Accuracy Class:

Visual Inspection	Physical Damage: <input type="checkbox"/> Yes <input type="checkbox"/> No	Clean and Inspect Insulators: <input type="checkbox"/> Yes <input type="checkbox"/> No
	Visual Signs of Overheating: <input type="checkbox"/> Yes <input type="checkbox"/> No	Verify Connections are Correct: <input type="checkbox"/> Yes <input type="checkbox"/> No
	Adequate Mounting Support: <input type="checkbox"/> Yes <input type="checkbox"/> No	Comments:

Insulation Resistance Test	Test Preparation:	Source: <input type="checkbox"/> Disconnected <input type="checkbox"/> Connected with Source Isolated	Cable Dest. / Load: <input type="checkbox"/> Disconnected <input type="checkbox"/> Connected with Load Isolated	Note: Approval of City's Representative is required, prior to leaving cables connected during the test.		
	Test	Voltage	Insulation Resistance (MΩ)		Temperature: °C	
			A	B	C	Test Summary
	Primary To GND	1000 V				<input type="checkbox"/> Test Passed <input type="checkbox"/> Test Inconclusive Further Investigation Required. <input type="checkbox"/> Test Failed
	Secondary To GND	500 V				
	Primary To Secondary	1000 V				
Comments:						

Turns Ratio, Excitation, Saturation and Polarity Tests	Note: Attach supporting data and saturation curve.						Test Summary <input type="checkbox"/> Test Passed <input type="checkbox"/> Test Inconclusive Further Investigation Required. <input type="checkbox"/> Test Failed
		Phase					
		A	B	C	N		
	Calculated Ratio						
	Measured Ratio						
	Exciting Current (mA)						
Polarity Correct	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
CT Saturation Test Performed:	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		

Final Analysis	CT Returned to Service: <input type="checkbox"/> Yes <input type="checkbox"/> No	Comments:
	Monitoring / Further Inspection Required: <input type="checkbox"/> Yes <input type="checkbox"/> No	
	Repair / Replacement Required: <input type="checkbox"/> Yes <input type="checkbox"/> No	

	Company	Name	Signature	Date (yyyy/mm/dd)
Performed By				
Checked By				

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INSPECTION FORM DIGITAL METER

ID:

Project	Facility: MacLean RPS	Project Name: MacLean Regional Pumping Station Valve House Electrical Upgrade
	Area: Valve House	Tender No.: 195-2024

Meter Data	Location:	Cell #:
	Manufacturer:	Model:

Visual Inspection / Cleaning	Cover Gasket: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor	Cover Glass: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor
	General Condition: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor	
	Cleanliness (as found) <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor	Unit Cleaned: <input type="checkbox"/> Yes
	Connections (as found) <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor	Connections Torqued: <input type="checkbox"/> Yes

Test Meter	Manufacturer:	Model:
	Calibration Date: Meter calibration must be within one year, unless otherwise specified.	

		Nominal Test Value (V)	Phase	Calibrated Meter Measurement (V)	Meter Under Test (V)	Difference (V)	Error (%)	Acceptable (See Specs)	
		Accuracy	Voltage	0					
								<input type="checkbox"/> Yes <input type="checkbox"/> No	
								<input type="checkbox"/> Yes <input type="checkbox"/> No	
								<input type="checkbox"/> Yes <input type="checkbox"/> No	
								<input type="checkbox"/> Yes <input type="checkbox"/> No	
								<input type="checkbox"/> Yes <input type="checkbox"/> No	
Current	0			A					<input type="checkbox"/> Yes <input type="checkbox"/> No
				B					<input type="checkbox"/> Yes <input type="checkbox"/> No
				C					<input type="checkbox"/> Yes <input type="checkbox"/> No
				A					<input type="checkbox"/> Yes <input type="checkbox"/> No
				B					<input type="checkbox"/> Yes <input type="checkbox"/> No
				C					<input type="checkbox"/> Yes <input type="checkbox"/> No
Measurements Applicable To: <input type="checkbox"/> As-Found <input type="checkbox"/> As-Left May check both boxes if applicable.									
Unit Calibration Adjusted: <input type="checkbox"/> Yes <input type="checkbox"/> No If calibration was adjusted, complete two forms, one for as-found, the other for as-left after calibration.									



INSPECTION FORM DIGITAL METER


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ID:

Final Analysis	Returned to Service: <input type="checkbox"/> Yes <input type="checkbox"/> No	Comments:
	Monitoring / Further Inspection Required: <input type="checkbox"/> Yes <input type="checkbox"/> No	
	Repair / Replacement Required: <input type="checkbox"/> Yes <input type="checkbox"/> No	

	Company	Name	Signature	Date (yyyy/mm/dd)
Performed By				
Checked By				

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	INSPECTION FORM EMERGENCY LIGHTING		Page 1 of 1
Project	Facility: MacLean RPS	Project Name: MacLean Regional Pumping Station Valve House Electrical Upgrade	
	Area: Valve House	Tender No.: 195-2024	

Battery Unit Data	Location:		Fed From:		Circuit #:
	Manufacturer:		Model:		Serial No:
	Input Voltage: V AC	Input Current: A	Output Voltage: V DC	Wattage: W	
	Qty of Internal Lamps:	Internal Lamp Wattage: W	Type of Internal Lamps:		

Remote Fixtures	Quantity:		Manufacturer:		Model:
	Input Voltage: V DC	Input Current: A	Qty of Lamps per Fixture:		
	Lamp Wattage: W	Type of Lamps:	Wire Size: AWG		

Visual Inspection / Cleaning	Identification Tag Installed: <input type="checkbox"/> Yes <input type="checkbox"/> No		Lamps Properly Aimed: <input type="checkbox"/> Yes <input type="checkbox"/> No	
	Visual signs of Moisture: <input type="checkbox"/> Yes <input type="checkbox"/> No		Connections: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor	
	Cleanliness (As Found): <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor		Ground Connection: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor	
	Comments:			

Battery Testing	Equipment Temperature: °C		Test Summary <input type="checkbox"/> Test Passed <input type="checkbox"/> Test Inconclusive <input type="checkbox"/> Further Investigation Required. <input type="checkbox"/> Test Failed
	Test Results		
	Stated Design Time (From Drawings):	Min	
	Time Until Lamps Turn Off:	Min	
Comments:			

Final Analysis	Returned to Service: <input type="checkbox"/> Yes <input type="checkbox"/> No	Comments:
	Monitoring / Inspection Required: <input type="checkbox"/> Yes <input type="checkbox"/> No	
	Repair / Replacement Required: <input type="checkbox"/> Yes <input type="checkbox"/> No	

	Company	Name	Signature	Date (yyyy/mm/dd)
Performed By				
Checked By				

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**INSPECTION FORM
GROUNDING/BONDING CONNECTION RESISTANCE**

Area:

Project	Facility: MacLean RPS	Project Name: MacLean Regional Pumping Station Valve House Electrical Upgrade
	Area: Valve House	Tender No.: 195-2024

Resistance Checks (Ductor Test)	Point A	Point B	Resistance (mΩ)	Acceptable
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Inconclusive
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Inconclusive
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Inconclusive
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Inconclusive
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Inconclusive
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Inconclusive
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Inconclusive
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Inconclusive
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Inconclusive
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Inconclusive
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Inconclusive
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Inconclusive
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Inconclusive
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Inconclusive
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Inconclusive
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Inconclusive
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Inconclusive
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Inconclusive
	Comments:			



**INSPECTION FORM
GROUNDING/BONDING CONNECTION RESISTANCE**

ID: _____

Resistance Checks (Ductor Test)	Point A	Point B	Resistance (mΩ)	Acceptable
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Inconclusive
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Inconclusive
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Inconclusive
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Inconclusive
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Inconclusive
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Inconclusive
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Inconclusive
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Inconclusive
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Inconclusive
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Inconclusive
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Inconclusive
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Inconclusive
	Comments:			

Final Analysis	Monitoring / Inspection Required: <input type="checkbox"/> Yes <input type="checkbox"/> No	Comments:
	Repair / Replacement Required: <input type="checkbox"/> Yes <input type="checkbox"/> No	

	Company	Name	Signature	Date (yyyy/mm/dd)
Performed By				
Checked By				

Note: The person performing the check is responsible for ensuring that the data is transcribed from the handwritten form correctly, and that the analysis results are correct.



INSPECTION FORM INTELLIGENT OVERLOAD

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ID:

Project	Facility: MacLean RPS	Project Name: MacLean Regional Pumping Station Valve House Electrical Upgrade
	Area: Valve House	Tender No.: 195-2024

O/L Data	Location:	Cell #:
	Manufacturer:	Model:

Visual Inspection / Cleaning	General Condition: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor	
	Cleanliness (as found) <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor	Unit Cleaned: <input type="checkbox"/> Yes
	Connections (as found) <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor	Connections Torqued: <input type="checkbox"/> Yes

Communication Settings	Static IP Address:	Subnet Mask
	Gateway:	Protocol:
	MAC Address:	

Test Meter	Manufacturer:	Model:
	Calibration Date:	Meter calibration must be within one year, unless otherwise specified.

CTs	Type: <input type="checkbox"/> Internal to O/L <input type="checkbox"/> External	External CT Ratio:
	External Ground CT: <input type="checkbox"/> Yes <input type="checkbox"/> No	Ground CT Ratio:



INSPECTION FORM INTELLIGENT OVERLOAD


ID:

Verify accuracy of Intelligent O/L Measurements with the use of software via the communication network.									
Accuracy	Current	Nominal Test Value (A)	Phase	Calibrated Meter Measurement (A)	Intelligent O/L Measurement (A)	Difference (A)	Error (%)	Acceptable (See Specs)	
		0	A						<input type="checkbox"/> Yes <input type="checkbox"/> No
			B						<input type="checkbox"/> Yes <input type="checkbox"/> No
			C						<input type="checkbox"/> Yes <input type="checkbox"/> No
			A						<input type="checkbox"/> Yes <input type="checkbox"/> No
			B						<input type="checkbox"/> Yes <input type="checkbox"/> No
			C						<input type="checkbox"/> Yes <input type="checkbox"/> No
Measurements Applicable To: <input type="checkbox"/> As-Found <input type="checkbox"/> As-Left May check both boxes if applicable.									
Unit Calibration Adjusted: <input type="checkbox"/> Yes <input type="checkbox"/> No If calibration was adjusted, complete two forms, one for as-found, the other for as-left after calibration.									

Final Analysis	Returned to Service:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Comments:
	Monitoring / Further Inspection Required:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	Repair / Replacement Required:	<input type="checkbox"/> Yes <input type="checkbox"/> No	

	Company	Name	Signature	Date (yyyy/mm/dd)
Performed By				
Checked By				

Note: The person performing the check is responsible for ensuring that the data is transcribed from the handwritten form correctly, and that the analysis results are correct.

	INSPECTION FORM MCC, 600V			Page 1 of 6	
					ID:
Project	Facility: MacLean RPS		Project Name: MacLean Regional Pumping Station Valve House Electrical Upgrade		
	Area: Valve House		Tender No.: 195-2024		

MCC Data	Location:			# of Cells:	
	Manufacturer:		Model:		Serial #:
	Rated Voltage: V	Main Bus Rating: A		Main Bus Neutral Rating: A	
	Bus Conductor: <input type="checkbox"/> Copper <input type="checkbox"/> Aluminum		Current Withstand Rating: A		

Visual Inspection / Cleaning	Identification Tag Installed: <input type="checkbox"/> Yes <input type="checkbox"/> No		Visual Signs of Overheating: <input type="checkbox"/> Yes <input type="checkbox"/> No		
	Visual Signs of Moisture: <input type="checkbox"/> Yes <input type="checkbox"/> No		Visual Signs of Corona: <input type="checkbox"/> Yes <input type="checkbox"/> No		
	Fuse/Breaker Sizes Match Drawings: <input type="checkbox"/> Yes <input type="checkbox"/> No		PT and CT ratios match drawings: <input type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No		
	Elevation Drawings Correct: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cables Supported Appropriately: <input type="checkbox"/> Yes <input type="checkbox"/> No		
	Cleanliness (As Found): <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor		Insulators Condition: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor		
	Connections: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor		Electro/Mechanical Interlock System: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor		
	Ground Connection: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor		Vents/Filters: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor		
	Doors Mechanical: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor		Exercise Active Components: <input type="checkbox"/> Yes <input type="checkbox"/> No		
	Cell Fit and Alignment: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor				
	Required Clearances are Met: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor				
	Indicating mechanisms: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor		Unit Cleaned: <input type="checkbox"/> Yes	Photograph Taken: <input type="checkbox"/> Yes	
	Comments:				

Incoming Power	Type:	Inspection			
	<input type="checkbox"/> Main Breaker	Complete appropriate breaker inspection form.			
	<input type="checkbox"/> Disconnect	Complete appropriate disconnect inspection form.			
	<input type="checkbox"/> Main Lugs	Visual Inspection: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor			
		Connections Torqued: <input type="checkbox"/> Yes			
	Connection Resistance ($\mu\Omega$) As Left	A	B	C	N



INSPECTION FORM MCC, 600V

ID:

Insulation Resistance Test (Buswork)	Test Preparation:	Source: <input type="checkbox"/> Disconnected <input type="checkbox"/> Connected with Source Isolated	Cable Dest. / Load: <input type="checkbox"/> Disconnected <input type="checkbox"/> Connected with Load Isolated	Note: Approval of City's Representative is required, prior to leaving cables connected during the test.	
	Temperature: _____ °C				
	Test Voltage (dc)	Insulation Resistance (MΩ) Phase To Phase			Test Summary <input type="checkbox"/> Test Passed <input type="checkbox"/> Test Inconclusive Further Investigation Required. <input type="checkbox"/> Test Failed
		A - B	B - C	C - A	
	1000 V				
	Test Voltage	Insulation Resistance (MΩ) Phase To GND			
	A - GND	B - GND	C - GND		
1000 V					
Comments:					

Ground Resistance Checks (Ductor Test)	Point A	Point B	Resistance (μΩ)	Test Summary <input type="checkbox"/> Test Passed <input type="checkbox"/> Test Inconclusive Further Investigation Required. <input type="checkbox"/> Test Failed
	MCC GND Bus	Facility Ground Electrode		
	MCC GND Bus	MCC Enclosure		
	MCC GND Bus	System Neutral		
Comments:				

Feeder Breakers	Visual Inspect Requirements:	G=Good, A=Acceptable, P=Poor Comments are required for all items identified in Poor condition.
		<ol style="list-style-type: none"> Confirm identification tag / lamacoid is installed. Look for visual signs of overheating. Inspect and torque connections. Inspect and test any electro/mechanical interlocks. Confirm disconnect operation. Check door mechanical condition. Exercise circuit breaker. Confirm cables are supported and routed appropriately. Visually assess the general condition of the installation.
	Note:	Complete an appropriate Breaker Inspection Form for all breakers with separate adjustable Long and Short trip settings, Ground trip settings, or > 250A frame size.
Continued on next page		



INSPECTION FORM MCC, 600V

ID:

Motor Starters / Contactors	Overcurrent Protection Type:	B=Breaker (Thermal Magnetic), M=Motor Circuit Protector, F=Fuse
	Overload Protection Type:	T=Thermal, SS=Solid State, I=Intelligent
	Visual Inspect Requirements:	G=Good, A=Acceptable, P=Poor Comments are required for all items identified in Poor condition.
		<ol style="list-style-type: none"> 1. Confirm identification tag / lamacoid is installed. 2. Look for visual signs of overheating. 3. Inspect and torque connections. 4. Inspect and test any electro/mechanical interlocks. 5. Confirm disconnect operation. 6. Check door mechanical condition. 7. Exercise circuit breaker. 8. Confirm cables are supported and routed appropriately. 9. Visually assess the general condition of the installation.
Note:		Complete a Motor Starter Inspection Form for all Motor Starters Size 4 or larger, with VFDs, or with Soft Starters.

Motor Starters / Contactors	ID	Loc./ Cell	Overcurrent Protection			Contactor	Overload		Visual Insp.	Cleaned	Comments
			Type	Rating (A)	Manuf.	Model	Size / Rating	Type			
										<input type="checkbox"/>	
										<input type="checkbox"/>	
										<input type="checkbox"/>	
										<input type="checkbox"/>	
										<input type="checkbox"/>	
										<input type="checkbox"/>	
										<input type="checkbox"/>	
										<input type="checkbox"/>	
										<input type="checkbox"/>	
										<input type="checkbox"/>	
										<input type="checkbox"/>	
										<input type="checkbox"/>	
										<input type="checkbox"/>	
										<input type="checkbox"/>	
										<input type="checkbox"/>	
										<input type="checkbox"/>	
General Comments:											



INSPECTION FORM MCC, 600V

ID:

Final Analysis	Returned to Service: <input type="checkbox"/> Yes <input type="checkbox"/> No	Comments:
	Monitoring / Inspection Required: <input type="checkbox"/> Yes <input type="checkbox"/> No	
	Repair / Replacement Required: <input type="checkbox"/> Yes <input type="checkbox"/> No	

	Company	Name	Signature	Date (yyyy/mm/dd)
Performed By				
Checked By				

Note: The person(s) performing the check is responsible for ensuring that the data is transcribed from the handwritten form correctly, and that the analysis results are correct.



INSPECTION FORM MOTOR STARTER, FVNR, 600V

ID:

Project	Facility: MacLean RPS	Project Name: MacLean Regional Pumping Station Valve House Electrical Upgrade
	Area: Valve House	Tender No.: 195-2024

Starter Data	Load:		Starter Location:			Cell #:		
	Manufacturer:		Type:		Serial #:			
	Size:		Rated Voltage: V		Current Rating: A		Control Voltage: V	
	Circuit Protection:	<input type="checkbox"/> Fused Disc.	Rating: A		Fuse Size: A		Fuse Mfg. Model:	
		<input type="checkbox"/> Breaker <input type="checkbox"/> MCP	Rating: A		Inst. Setting: A		Manufacturer: Model:	
	Overload Protection:	<input type="checkbox"/> Thermal <input type="checkbox"/> Electronic <input type="checkbox"/> Intelligent		Class: <input type="checkbox"/> 10 <input type="checkbox"/> 20 <input type="checkbox"/> 30 <input type="checkbox"/> Unknown		Setting / Rating: A		Manufacturer: Model:
								Manufacturer: Model:
	Control Power Transformer:		Size: VA	Sec. Voltage: V	Primary Fuse: A		Secondary Fuse: A	
Current Transformers:		Phases: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C		<input type="checkbox"/> None	Ratio:	Ground Fault CT: <input type="checkbox"/> Present <input type="checkbox"/> Not Present	Ratio:	

Motor Data	ID:		Size: kW / HP		Voltage: V	
	Full Load Amps: A		Service Factor:		Other:	

Visual Inspection / Cleaning	Starter Identification Tag Installed: <input type="checkbox"/> Yes <input type="checkbox"/> No		Visual Signs of Overheating: <input type="checkbox"/> Yes <input type="checkbox"/> No		
	Cleanliness (As Found): <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor		Support Insulators: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor		
	Connections: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor		Electro/Mechanical Interlock: <input type="checkbox"/> N/A <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor		
	Ground Connection: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor		Contactor Condition: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor		
	Door Mechanical: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor		Contact Alignment: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor		
	Verify O/L element is correctly sized for the load: <input type="checkbox"/> Yes <input type="checkbox"/> No		Exercise Circuit Breaker/MCP/Disconnect: <input type="checkbox"/> Yes		
	Cables Supported Appropriately: <input type="checkbox"/> Yes <input type="checkbox"/> No		Unit Cleaned: <input type="checkbox"/> Yes	Photograph Taken: <input type="checkbox"/> Yes	
	Comments:				

Contact/Pole Measurements	Test	A	B	C	Test Summary	
	Contact Resistance ($\mu\Omega$)					<input type="checkbox"/> Test Passed <input type="checkbox"/> Test Inconclusive <input type="checkbox"/> Further Investigation Required. <input type="checkbox"/> Test Failed
	Disconnect / Breaker / MCP Resistance ($\mu\Omega$)					
	Fuse Resistance ($\mu\Omega$)					
Comments:						



**INSPECTION FORM
MOTOR STARTER, FVNR, 600V**

ID:

Insulation Resistance Test	Test Preparation: Source: <input type="checkbox"/> Isolated Cable Dest. / Load: <input type="checkbox"/> Disconnected Note: Approval of City's Representative is required, prior to leaving cables connected during the test. Contactor: <input type="checkbox"/> Open <input type="checkbox"/> Connected with Load Isolated					
	Test	Voltage	Insulation Resistance (MΩ)			Ground all phases not under test!
			A	B	C	
	Contactor Line To GND	1000 VDC				Test Summary <input type="checkbox"/> Test Passed <input type="checkbox"/> Test Inconclusive Further Investigation Required. <input type="checkbox"/> Test Failed
	Contactor Load To GND	1000 VDC				
Contactor Line to Load	1000 VDC					
Comments:						

Final Analysis	Returned to Service: <input type="checkbox"/> Yes <input type="checkbox"/> No	Comments:
	Monitoring / Further Inspection Required: <input type="checkbox"/> Yes <input type="checkbox"/> No	
	Repair / Replacement Required: <input type="checkbox"/> Yes <input type="checkbox"/> No	

	Company	Name	Signature	Date (yyyy/mm/dd)
Performed By				
Checked By				

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INSPECTION FORM AC MOTOR, LOW VOLTAGE

Page: 1 of 2

ID: _____

Project	Facility: MacLean RPS	Project Name: MacLean Regional Pumping Station Valve House Electrical Upgrade
	Area: Valve House	Tender No.: 195-2024

Motor Data	Size: kW / HP	Voltage: V	R.P.M:
	Manufacturer:	Model:	Serial Number:
	Frame Type:	Service Factor:	Other:
	Cooling: <input type="checkbox"/> Air <input type="checkbox"/> Fan	# Cooling Fans:	Winding Material:

Visual Inspection / Cleaning	Motor Identification Tag Installed: <input type="checkbox"/> Yes <input type="checkbox"/> No	Visual Signs of Overheating: <input type="checkbox"/> Yes <input type="checkbox"/> No
	Connections: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor	Air Baffles: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor
	Paint: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor	Filter Media: <input type="checkbox"/> N/A <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor
	Cooling Fans: <input type="checkbox"/> N/A <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor	Fan Controls: <input type="checkbox"/> N/A <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor
	Anchorage/Alignment: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor	
	Ground Connection: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor	
	Mechanical/Electrical Noise During Operation: <input type="checkbox"/> Yes <input type="checkbox"/> No	Lubrication Required: <input type="checkbox"/> Yes <input type="checkbox"/> No
	Cleanliness (As Found): <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor	Unit Cleaned: <input type="checkbox"/> Yes <input type="checkbox"/> No Photograph Taken: <input type="checkbox"/> Yes <input type="checkbox"/> No

Winding Insulation Resistance	Stator Winding	Test Voltage (Vdc)	Winding Temperature (°C)	Resistance (MΩ)			Dielectric Absorption Ratio	Polarization Index (a)
				30 Sec	1 min.	10 min. (a)		
		500	40				-	-
		500	40				-	-
		500	40				-	-
Notes:								
(a) Testing to 10 minutes and calculation of Polarization Index is only required for motors > 150 kW (200 HP)								
Test Summary <input type="checkbox"/> Test Passed <input type="checkbox"/> Test Inconclusive. Further Investigation Required. <input type="checkbox"/> Test Failed								

Winding Resistance	Resistance (μΩ)			Test Summary <input type="checkbox"/> Test Passed <input type="checkbox"/> Test Inconclusive Further Investigation Required. <input type="checkbox"/> Test Failed
	A - B	B - C	A - C	
Comments:				



INSPECTION FORM AC MOTOR, LOW VOLTAGE

Page: 2 of 2

ID: _____

Bearing Insulation Resistance	<input type="checkbox"/> Not Applicable				
	Bearing	Test Voltage (Vdc)	Bearing Temperature (°C)	Resistance (MΩ)	
				1 min.	Corrected to 40°C
		500			
		500			
Test Summary <input type="checkbox"/> Test Passed <input type="checkbox"/> Test Inconclusive. Further Investigation Required. <input type="checkbox"/> Test Failed					

RTD Resistance	<input type="checkbox"/> Not Applicable					
	Actual Winding Temperature: _____ °C			Actual Bearing Temperature _____ °C		
	RTD	Resistance (Ω)	Calculated Temperature (°C)	RTD	Resistance (Ω)	Calculated Temperature (°C)
Test Summary <input type="checkbox"/> Test Passed <input type="checkbox"/> Test Inconclusive. Further Investigation Required. <input type="checkbox"/> Test Failed						

Note: Test connection resistance of bolted connections. Report on cable inspection sheet.

Final Analysis	Returned to Service:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Comments:
	Monitoring / Further Inspection Required:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
	Repair / Replacement Required:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

	Company	Name	Signature	Date (yyyy/mm/dd)
Performed By				
Checked By				

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INSPECTION FORM
NON-FUSIBLE DISCONNECT SWITCH, 600V

Page 2 of 2

ID

Final Analysis	Returned to Service: <input type="checkbox"/> Yes <input type="checkbox"/> No	Comments:
	Monitoring / Further Inspection Required: <input type="checkbox"/> Yes <input type="checkbox"/> No	
	Repair / Replacement Required: <input type="checkbox"/> Yes <input type="checkbox"/> No	

	Company	Name	Signature	Date (yyyy/mm/dd)
Performed By				
Checked By				

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	INSPECTION FORM PANELBOARD, LOW VOLTAGE		Page 1 of 2
			ID:
Project	Facility: MacLean RPS	Project Name: MacLean Regional Pumping Station Valve House Electrical Upgrade	
	Area: Valve House	Tender No.: 195-2024	

Panelboard Data	Location:		Fed From:		No. of Circuits:	
	Manufacturer:			Model:	Serial No:	
	Rated Voltage:	V	Current Rating:	A	Withstand Rating:	A
	<input type="checkbox"/> Single Phase		<input type="checkbox"/> 3 Phase, 3 Wire	<input type="checkbox"/> 3 Phase, 4 Wire	Neutral Bonded to Ground	<input type="checkbox"/> Yes <input type="checkbox"/> No
	<input type="checkbox"/> Main Lugs					
	<input type="checkbox"/> Main Breaker:		Rating: A	Manufacturer:	Model:	Inst. Setting:
	<i>Complete separate inspection form (F-BKR-MC-LV) for main breaker if >= 250A, or has long, short, or ground fault settings.</i>					

Visual Inspection / Cleaning	Identification Tag Installed:		<input type="checkbox"/> Yes <input type="checkbox"/> No	Visual Signs of Overheating:		<input type="checkbox"/> Yes <input type="checkbox"/> No
	Visual signs of Moisture:		<input type="checkbox"/> Yes <input type="checkbox"/> No	Visual Signs of Corona:		<input type="checkbox"/> Yes <input type="checkbox"/> No
	Fuse/Breaker Sizes Match Drawings:		<input type="checkbox"/> Yes <input type="checkbox"/> No	Cables Supported Appropriately:		<input type="checkbox"/> Yes <input type="checkbox"/> No
	Cleanliness (As Found):		<input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor	Connections:		<input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor
	Door Mechanical:		<input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor	Ground Connection:		<input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor
	Exercise All Circuit Breakers:		<input type="checkbox"/> Yes <input type="checkbox"/> No	Comments:		

Insulation Resistance Test	Test Preparation:		Source: <input type="checkbox"/> Disconnected <input type="checkbox"/> Connected with Source Isolated	Note: Approval of City's Representative is required, prior to leaving cables connected during the test.				Equipment Temperature: °C		
							Temperature Correction Factor to 20°C:			
	Test Voltage	Insulation Resistance (MΩ) Ground all Phases not under test!								Test Summary <input type="checkbox"/> Test Passed <input type="checkbox"/> Test Inconclusive Further Investigation Required. <input type="checkbox"/> Test Failed
		A-GND		B-GND		C-GND		N-GND		
	RDG	20°C	RDG	20°C	RDG	20°C	RDG	20°C		
Test Voltages: 120-300V → 500 VDC Test Voltage		301-600V → 1000 VDC Test Voltage								
Comments:										

Load/Feeder Breakers	Breakers < 100A and Without Inst. Setting					
	<i>List by model of breaker. Multiple breakers of varying ampacity may be listed per line.</i>					
	Type	Manufacturer	Model Series	Interrupting Rating (kA)	Positions/Circuits	Notes
	A					
	B					
	C					
	D					



**INSPECTION FORM
PANELBOARD, LOW VOLTAGE**

ID:

Breakers >= 100A or with Inst. Setting									
<i>List each breaker individually. Complete separate inspection form (F-BKR-MC-LV) for breaker if >= 250A, or has long, short, or ground fault settings.</i>									
Load/Feeder Breakers	ID	Pos.	Manufacturer	Model	Trip Rating (A)	Int. Rating (kA)	Inst. Setting	Separate Form	Notes
								<input type="checkbox"/>	
								<input type="checkbox"/>	
								<input type="checkbox"/>	
								<input type="checkbox"/>	
								<input type="checkbox"/>	
								<input type="checkbox"/>	
								<input type="checkbox"/>	

Final Analysis	Returned to Service: <input type="checkbox"/> Yes <input type="checkbox"/> No	Comments:
	Monitoring / Inspection Required: <input type="checkbox"/> Yes <input type="checkbox"/> No	
	Repair / Replacement Required: <input type="checkbox"/> Yes <input type="checkbox"/> No	

	Company	Name	Signature	Date (yyyy/mm/dd)
Performed By				
Checked By				

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INSPECTION FORM POTENTIAL TRANSFORMER, 600V

ID:

Project	Facility: MacLean RPS	Project Name: MacLean Regional Pumping Station Valve House Electrical Upgrade
	Area: Valve House	Tender No.: 195-2024

PT Data	PT Location or Designation:		Pri. Voltage Rating:	Sec. Voltage Rating:
	Manufacturer:	Catalogue #:	Pri. Fuse Size:	Sec. Fuse Size:
	Size: VA	Type:	Other:	

Visual Inspection	Physical Damage: <input type="checkbox"/> Yes <input type="checkbox"/> No	Verify Connections are Correct: <input type="checkbox"/> Yes <input type="checkbox"/> No
	Visual Signs of Overheating: <input type="checkbox"/> Yes <input type="checkbox"/> No	Grounding and Shorting Connections Provide Contact: <input type="checkbox"/> Yes <input type="checkbox"/> No
	Verify Ground Connection: <input type="checkbox"/> Yes <input type="checkbox"/> No	Verify Withdrawal Mechanism Function: <input type="checkbox"/> Yes <input type="checkbox"/> No
	Fuse Sizes Match Drawings: <input type="checkbox"/> Yes <input type="checkbox"/> No	Comments:

Insulation Resistance Test	Test Preparation: <input type="checkbox"/> Disconnected <input type="checkbox"/> Connected with Source Isolated		Source: _____			Note: Approval of City's Representative is required, prior to leaving cables connected during the test.
	Test	Voltage	Insulation Resistance (MΩ)			Temperature: °C
			PT 1	PT 2	PT 3	Test Summary
	Primary To GND	1000 V				<input type="checkbox"/> Test Passed <input type="checkbox"/> Test Inconclusive Further Investigation Required. <input type="checkbox"/> Test Failed
	Secondary To GND	500 V				
	Primary To Secondary	1000 V				
Comments:						

Turns Ratio and Polarity Tests	Test Preparation: <input type="checkbox"/> Disconnected <input type="checkbox"/> Connected with Source Isolated		Source: _____		
		Phase			Test Summary
		PT 1	PT 2	PT 3	
	Calculated Ratio				
	Measured Ratio				
Polarity Correct	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Test Passed <input type="checkbox"/> Test Inconclusive Further Investigation Required. <input type="checkbox"/> Test Failed
Comments:					

Final Analysis	PT Returned to Service: <input type="checkbox"/> Yes <input type="checkbox"/> No	Comments:
	Monitoring / Further Inspection Required: <input type="checkbox"/> Yes <input type="checkbox"/> No	
	Repair / Replacement Required: <input type="checkbox"/> Yes <input type="checkbox"/> No	

	Company	Name	Signature	Date (yyyy/mm/dd)
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	INSPECTION FORM POTENTIAL TRANSFORMER, 600V			Page 2 of 2
				ID: _____

Performed By				
Checked By				

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INSPECTION FORM TRANSFORMER, DRY TYPE, LOW VOLTAGE

Page 1 of 2

ID:

Project	Facility: MacLean RPS	Project Name: MacLean Regional Pumping Station Valve House Electrical Upgrade
	Area: Valve House	I Tender No.: 195-2024

Transformer Data	KVA:	Phase:	Primary Voltage: V	Secondary Voltage: V						
	Manufacturer:		Type:	Serial Number:						
	Primary Winding: <input type="checkbox"/> Δ <input type="checkbox"/> Y	Secondary Winding: <input type="checkbox"/> Δ <input type="checkbox"/> Y	Impedance: %Z	Temp Rise: °C	K Factor:					
	Winding Material: <input type="checkbox"/> Copper <input type="checkbox"/> Aluminum									
	No Load Tap Changer	Tap Voltage	1	2	3	4	5			

Visual Inspection / Cleaning	Transformer Identification Tag Installed: <input type="checkbox"/> Yes <input type="checkbox"/> No	Visual Signs of Overheating: <input type="checkbox"/> Yes <input type="checkbox"/> No
	Bushings: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor	Support Insulators: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor
	Paint: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor	No Load Tap Changer: <input type="checkbox"/> N/A <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor
	Fans: <input type="checkbox"/> N/A <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor	Fan Controls: <input type="checkbox"/> N/A <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor
	Temp. Gauge: <input type="checkbox"/> N/A <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor	Connections: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor
	Ground Connection: <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor	Neutral Bonded to Ground: <input type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No
	Cleanliness (As Found): <input type="checkbox"/> Good <input type="checkbox"/> Acceptable <input type="checkbox"/> Poor	Unit Cleaned: <input type="checkbox"/> Yes Photograph Taken: <input type="checkbox"/> Yes

Operational Inspection	Operational Conditions / Notes:					
	Primary Voltage:	H1:H2: V	H2:H3: V	H3:H1: V	Measured at:	
	Secondary Voltage:	X1:__: V	X2:__: V	X3:__: V	Measured at:	
	Current:	Ph A: A	Ph B: A	Ph C: A	Measured at:	
	Tap Setting:	<input type="checkbox"/> Appears Satisfactory <input type="checkbox"/> Further Monitoring Recommended. <input type="checkbox"/> Recommend Changing Tap.			Tap Setting (As Left):	
	Thermographic Inspection Performed:	<input type="checkbox"/> Yes	Attach report separately	Results:	<input type="checkbox"/> No Issues Found <input type="checkbox"/> Potential Issue Identified.	

Insulation Resistance	Winding	Test Voltage (Vdc)	Resistance (MΩ)		Dielectric Absorption Ratio 60s/30s
			30 sec	60 sec.	
	Primary to Ground, Secondary Guarded				
	Secondary to Ground, Primary Guarded				
	Primary to Secondary, Ground Guarded				



**INSPECTION FORM
TRANSFORMER, DRY TYPE, LOW VOLTAGE**

ID:

Final Analysis	Returned to Service: <input type="checkbox"/> Yes <input type="checkbox"/> No	Comments:
	Monitoring / Further Inspection Required: <input type="checkbox"/> Yes <input type="checkbox"/> No	
	Repair / Replacement Required: <input type="checkbox"/> Yes <input type="checkbox"/> No	

	Company	Name	Signature	Date (yyyy/mm/dd)
Performed By				
Checked By				

Note: The person(s) performing the check is responsible for ensuring that the data is transcribed from the handwritten form correctly, and that the analysis results are correct.