

# **ADDENDUM**

<b>Stantec</b>				
		ADDENDUM#: DATE: FILE #:	1 2017-Oct-16 163302290	
PROJECT NAME: CLIENT:	King City Generator Repla			
OLILIVI.			·	
THIS ADDENDUM IS PART OF CONTRACTUAL DOCUMENT		SPECIFICATIONS AND MI	UST BE RECOGNIZED AS AN INTEGRAL PART OF THE	
ATTENTION: ALL BIDD	PERS			
The following chang form part of the con		nts are effective in	nmediately. This addendum will	
SCOPE OF WORK				
.1 Providii motoriz control 2. Install generat	zed damper actuator, line v I wiring.	tion air control dam oltage temperature air ductwork contin	nper c/w related accessories including e sensor and associated power and auously from generator to existing wall dations.	
DRAWINGS				
<ol><li>REPLACE draw</li></ol>	ing E4 (revision date 2017/08	3/25) with attached	d drawing M3 issued on 2017/10/16. d drawing E4 issued on 2017/10/16. d drawing E8 issued on 2017/10/16.	
SPECIFICATIONS				
2. <b>REMOVE</b> the fo	on 23 09 33 from the contraction 23 33 1 aphs 2.1 and 2.4.			
ssued by:				
			October 16, 2017	
Si	gnature		Dated	

**Attachments:** Drawings M3, E4 and E8.

KING CITY RADAR WEATHER STATION - APU BUILDING PLAN - NEW WORK

# **GENERAL NOTES**

INSTALLATION OF NEW DIESEL STORAGE TANK SYSTEM SHALL BE COORDINATED WITH DEPARTMENTAL REPRESENTATIVE AND ELECTRICAL TRADE. MINIMIZE CHANGEOVER TIME AND ENSURE NEW GENERATOR SYSTEM IS DISCONNECTED FROM DIESEL STORAGE TANK SYSTEM FOR LEAST AMOUNT OF TIME POSSIBLE

# **NEW CONSTRUCTION NOTES**

NEW 100 kW STANDBY GENERATOR C/W INTEGRAL OEM FUEL COOLER AND FUEL FILTER TO BE ackslash Installed by Electrical. Shown here for coordination and reference only.

PROVIDE NEW 2270 L DOUBLE WALL STEEL VACUUM MONITORED DIESEL STORAGE TANK (CAN/ULC S602) AS INDICATED. PROVIDE PIPING CONNECTIONS, VALVES AND SENSORS AS PER 2/M1. EACH OF FOUR (4) SUPPORT LEGS OF NEW STORAGE TANK SHALL BE ANCHORED TO 100mmØ, 100mm HIGH SCH. 80 STEEL PIPE AS PER MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS. RIGIDLY ANCHOR EACH STEEL PIPE TO EXISTING FLOOR WITH EXPANSION-TYPE BOLTS APPROVED BY FUEL STORAGE TANK MANUFACTURER. NEW TANK SHALL BE PROVIDED WITH THE FOLLOWING MINIMUM SERVICE CLEARANCES: MIN. SPACING FROM GENERATOR SHALL BE NO LESS THAN 750 mm. MIN. SPACING BETWEEN FRONT AND ONE SIDE OF TANK FROM WALL AND OTHER INTERFERENCES SHALL BE NO LESS THAN 460 mm. MIN. SPACING FOR TANK FROM BACK WALL AND SECOND SIDE TO WALL SHALL BE NO LESS

SUPPORT ALL PIPING ON WALLS, FLOOR AND CEILING AS PER DETAILS ON DRAWING M4.

TYPICAL FOR ALL FUEL OIL PIPING. REFER TO SPECIFICATIONS FOR ADDITIONAL

THAN 50 mm.

REQUIREMENTS.

🔨 | PROVIDE NEW 50ø FILL PIPE TO OUTDOOR TERMINATION AS INDICATED. NEW FILL PIPE SHALL BE EQUIPPED WITH WEATHERTIGHT CAP AND CAN/ULC-S661 CERTIFIED SPILL CONTAINER WITH A MINIMUM CAPACITY OF 28 L. SLOPE FILL PIPING AT MINIMUM 2% TOWARD TANK WITHOUT ANY SAGS OR TRAPS IN WHICH FUEL CAN COLLECT. CONTRACTOR SHALL REUSE EXISTING WALL PENETRATION FROM EXISTING TO BE REMOVED FILL PIPE AND WIDEN AS REQUIRED TO SUIT ROUTING OF NEW PIPING. PATCH, SEAL AND MAKE GOOD TO MATCH EXISTING FINISH AND INTERIOR AND EXTERIOR OF APU BUILDING. REFER TO DETAIL 4/M4 FOR WALL PENETRATION REQUIREMENTS.

PROVIDE NEW 75ø VENT TO ATMOSPHERE C/W NEW ULC WEATHERPROOF VENT CAP AT 5 | TERMINATION OUTSIDE. SLOPE VENT PIPING AT MINIMUM 2% TOWARD TANK WITHOUT ANY SAGS OR TRAPS IN WHICH FUEL CAN COLLECT. CONTRACTOR SHALL REUSE EXISTING WALL PENETRATION FROM EXISTING TO BE REMOVED VENT PIPE AND WIDEN AS REQUIRED TO SUIT ROUTING OF NEW VENT PIPING. PATCH, SEAL AND MAKE GOOD TO MATCH EXISTING FINISH AND INTERIOR AND EXTERIOR OF APU BUILDING. REFER TO DETAIL 4/M4 FOR WALL PENETRATION REQUIREMENTS.

NEW FUEL FILL AND VENT LINES TO BE ROUTED UP AND OUT OF BUILDING. TERMINATE BOTH  $\stackrel{6}{>}$  PIPES IN APPROXIMATELY THE SAME LOCATION AS CURRENT FILL & VENT CONNECTIONS. CLEARLY LABEL FILL AND VENT PIPES "DIESEL FILL" AND "DIESEL VENT" WITH LAMACOIDS. SUPPLY AND INSTALL "NO SMOKING" AND "TIGHT FILL ONLY" SIGN AT FILL LOCATION. PROVIDE NEW OVERFILL ALARM AT FILL LOCATION AS PER DETAIL ON DRAWING M4.

PROVIDE NEW 100 mm x 150 mm (W x H) CAST-IN-PLACE CONCRETE CURB SURROUNDING '|DIESEL STORAGE TANK SYSTEM AND GENERATOR WITHIN APU BUILDING AS INDICATED. SEAL ENTIRE FLOOR AREA LOCATED WITHIN NEW CURB WITH APPROVED SEALANT THAT IS IMPERMEABLE TO FUEL OIL. REFER TO DETAIL 6/M4. PATCH ALL EXISTING CRACKS IN CONCRETE FLOOR OF EXISTING APU BUILDING.

PROVIDE NEW SPRING-RETURN ACTUATOR C/W END SWITCHES FOR EXISTING COMBUSTION AIR AND VENTILATION AIR MOTORIZED DAMPERS. POWER, CONTROLS AND WIRING BY ELECTRICAL. REFER TO SPECIFICATIONS FOR ACTUATOR REQUIREMENTS. TYPICAL-2.

PROVIDE NEW APPROVED ULC-LISTED PREFABRICATED GENERATOR EXHAUST STACK 9 DIRECTLY DOWNSTREAM OF NEW APPROVED ULC-LISTED HEAVY DUTY RESIDENTIAL-GRADE GENERATOR SILENCER C/W ALL RELATED ACCESSORIES AS PER SPECIFICATIONS. NEW EXHAUST STACK SHALL BE SIZED TO SUIT NEW 100 kW STANDBY GENERATOR. NEW EXHAUST C/W SILENCER SHALL BE INSULATED FOR FIRST 2450 mm ABOVE GRADE AND THERE SHALL BE A CONDENSATE DRAIN C/W SHUTOFF VALVE PROVIDED TO DRAIN TO A SAFE LOCATION INSIDE THE APU BUILDING. CONTRACTOR SHALL ENGAGE QUALIFIED ROOFING SUBTRADE AND CARRY ALL COSTS ASSOCIATED WITH ROOFING WORK TO CREATING NEW ROOF OPENING FOR EXHAUST, INSTALLATION OF NEW EXHAUST ABOVE ROOF LEVEL, INSTALLATION OF SUPPORTS AND ALL EXHAUST RELATED WORK AT OR ABOVE ROOF LEVEL. WEATHERPROOF, PATCH, SEAL AND MAKE GOOD NEW ROOF OPENING TO MATCH EXISTING ROOF CONDITION. REFER TO DETAILS 9/M4 AND 10/M4. EXACT LOCATION OF NEW EXHAUST STACK AND NEW EXHAUST SILENCER TO SUPPLIED AND INSTALLED BY DIVISION 23 SHALL BE COORDINATED ONSITE WITH DEPARTMENTAL REPRESENTATIVE.

THE CONTRACTOR SHALL ENGAGE A SEISMIC ENGINEER LICENSED IN THE PROVINCE OF  $\stackrel{<}{\sim}$  ONTARIO TO CARRY OUT THE DESIGN OF THE SUPPORTS FOR THE PROPOSED GENERATOR EXHAUST INCLUDING, BUT NOT LIMITED TO, THE NEW GENERATOR EXHAUST SILENCER AND CHIMNEY. THE CONTRACTOR SHALL SUBMIT SEALED SHOP DRAWING(S) OF THE SUPPORTS FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION IN ACCORDANCE WITH THE APPROVED SCHEDULE OF WORK. THE SHOP DRAWING(S) FOR THE SUPPORTS MUST BE APPROVED BY THE MANUFACTURERS OF BOTH THE APPROVED GENERATOR EXHAUST STACK AND APPROVED EXHAUST SILENCER. THE CONTRACTOR SHALL CARRY ALL COSTS ASSOCIATED WITH DESIGNING AND PROVIDING THE GENERATOR EXHAUST CHIMNEY SUPPORTS.

MAINTAIN EXISTING WALL OPENING C/W EXISTING 940mm x 1240mm (W x H) LOUVRE AND PROVIDE NEW BIRD SCREEN TO SUIT WALL OPENING SIZE. CONTRACTOR TO VERIFY DIMENSIONS PRIOR TO COMPLETING WORK AND NOTIFY DEPARTMENTAL REPRESENTATIVE OF

ANY DISCREPANCIES. PROVIDE NEW DUCTWORK PLENUM TO SUIT NEW 100 kW STANDBY GENERATOR RADIATOR COOLING AIR REQUIREMENTS (3000 L/s) AND EXISTING 940mm x 1240mm WALL OPENING AS PER MANUFACTURER'S RECOMMENDATIONS. INSULATE PLENUM AS PER SPECIFICATIONS.

13 NOT USED.

EXISTING DOUBLE MAN DOOR TO THE SATISFACTION OF DEPARTMENTAL REPRESENTATIVE. TYPICAL-2.

APPROXIMATE LOCATION OF NEW CONCRETE RAMP AT APU BUILDING ENTRANCE BY DIVISION 3. COORDINATE DELIVERY AND ROUGH IN OF NEW EQUIPMENT INSIDE APU BUILDING WITH STRUCTURAL TRADE. REFER TO DRAWING S1 FOR NEW CONCRETE RAMP.

PROVIDE NEW 1220mm (H) x 914mm (W) x 100mm (D) STORMPROOF LOUVRE C/W FLANGED CONNECTION IN NEW ±1220mm x ±970mm (W x H) OPENING CREATED BY REMOVAL OF WINDOW. INSTALL LOUVRE AS PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE WEATHERSTRIPPING AND CAULKING TO ENSURE THAT LOUVRE IS SEALED TO BE FULLY WEATHERTIGHT. CONTRACTOR IS RESPONSIBLE FOR ENLARGING OPENING AND/OR PROVIDING INSULATED ALUMINUM BLANK-OFF PANELS AS NECESSARY FOR THE INSTALLATION OF THE NEW LOUVER TO SUIT NEW WALL OPENING CREATED BY THE REMOVAL OF WINDOW. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

PROVIDE NEW 914MM (W) x 1220MM (W x H) THERMALLY BROKEN INSULATED DAMPER C/W / | FLANGED CONNECTION. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

PROVIDE NEW SPRING-RETURN ACTUATOR C/W END SWITCHES FOR NEW COMBUSTION AIR  $\stackrel{18}{>}$  AND VENTILATION AIR DAMPER. POWER, CONTROLS AND WIRING BY ELECTRICAL. REFER TO SPECIFICATIONS FOR ACTUATOR REQUIREMENTS.

Environment and Climate Change Canada Real Property Management Division Technical Services

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04	ISSUED WITH ADDENDUM 1	2017/10/16
03	ISSUED FOR TENDER	2017/07/07
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Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the engineer of all discrepancies.



Detail No. No. du détail drawing no. — where detail required dessin no. — où détail exigé drawing no. — where detailed dessin no. — où détaillé

project title titre du projet

ONTARIO ENVIRONMENT AND CLIMATE CHANGE CANADA 14780 JANE STREET KING CITY, ON

GENERATOR REPLACEMENT

drawing title titre du dessin MECHANICAL APU BUILDING PLAN NEW WORK

C. LOBO C. LOBO approuve par C. McGEE

soumission DANIEL VENTURA de projets

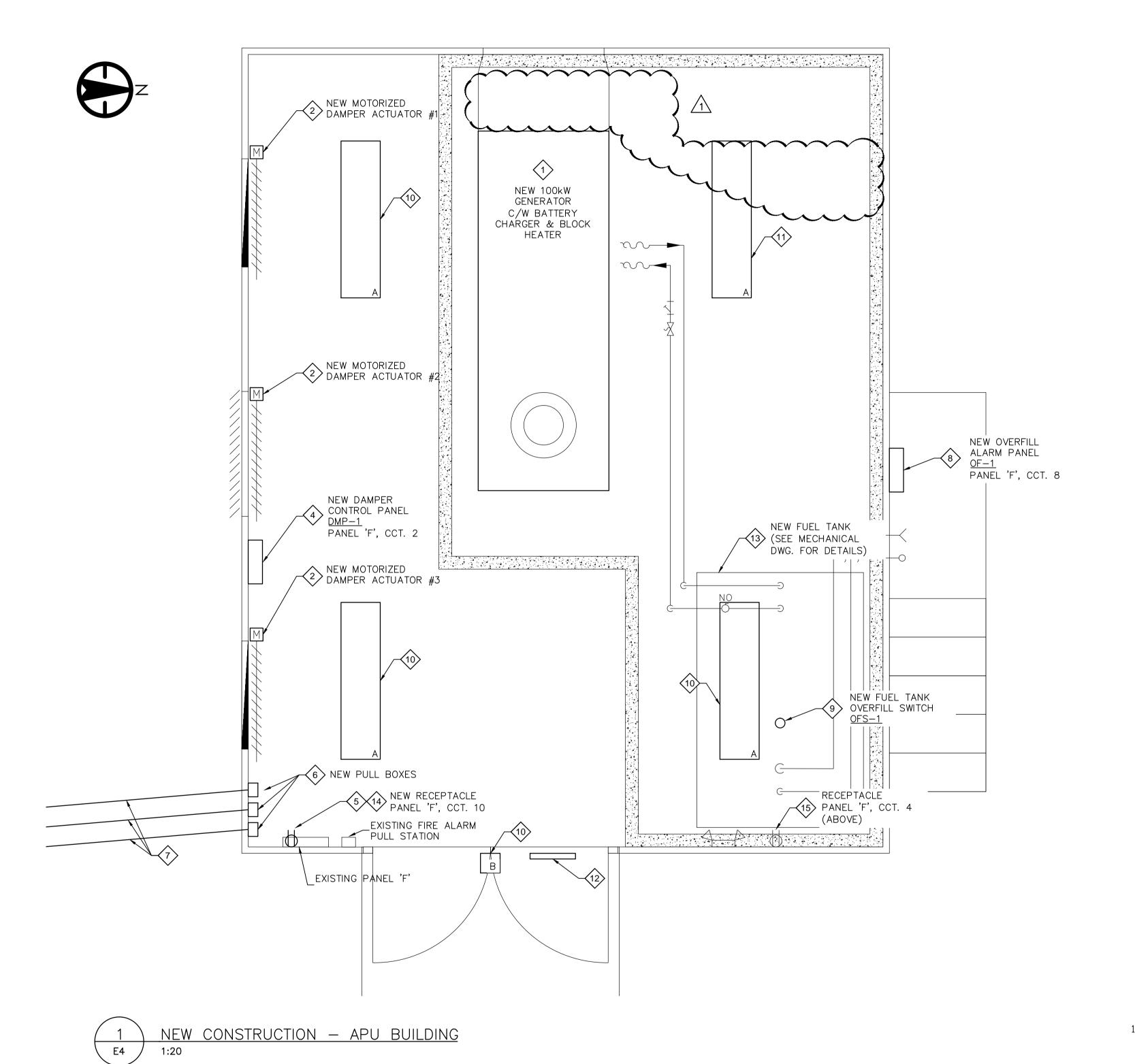
date du projet 2017/05/09

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DATE PLOTTED: PLOT SCALE: CAD FILE:

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# NEW CONSTRUCTION NOTES

PROVIDE AND INSTALL NEW 100kW GENERATOR C/W ALL ASSOCIATED WIRING AND CONDUIT. REFER TO SINGLE LINE DIAGRAM - NEW CONSTRUCTION FOR MORE DETAILS. FEED NEW BATTERY CHARGER FROM EXISTING PANEL 'F', CCT. 5. FEED NEW GENERATOR ENGINE BLOCK HEATER FROM EXISTING PANEL 'F', CCT

PROVIDE AND INSTALL WIRING AND EMT CONDUIT FROM NEW MOTORIZED DAMPERS TO NEW CONTROL PANEL DMR 1

NOT USED.

PROVIDE AND INSTALL NEW MOTORIZED DAMPER CONTROL PANEL DMP-1. NEW PANEL TO BE FED FROM EXISTING PANEL 'F', CCT. 2.

PROVIDE AND INSTALL NEW RECEPTACLE BELOW EXISTING PANEL 'F'. FEED NEW RECEPTACLE FROM PANEL 'F', CCT. 10.

PROVIDE AND INSTALL NEW PULL BOXES FOR INCOMING CONDUITS FROM MAIN BUILDING MECH/ELEC ROOM B101.

PROVIDE AND INSTALL NEW DIRECT BURIED CONDUIT FROM APU BUILDING TO MAIN BUILDING B101 MECH/ELEC ROOM AS PER DIRECT

BURIED CONDUIT SCHEDULE. REFER TO DWG. E1 FOR DETAILS. PROVIDE AND INSTALL NEW OVERFILL ALARM PANEL <u>OF-1</u>. NEW OVERFILL ALARM PANEL TO BE MOUNTED ON EXTERIOR WALL OF

PROVIDE AND INSTALL NEW FUEL TANK OVERFILL SWITCH OFS-1 ON

APU BUILDING. FEED NEW PANEL FROM EXISTING PANEL 'F', CCT. 8.

NEW FUEL TANK. CONNECT TO NEW OVERFILL ALARM PANEL OF-1.

PROVIDE AND INSTALL NEW LED INTERIOR AND EXTERIOR APU BUILDING LIGHTING. CONNECT TO EXISTING WIRING.

PROVIDE AND INSTALL NEW LED INTERIOR LIGHT, TO BE FED FROM EXISTING LIGHTING CIRCUIT 1 IN PANEL 'F'.

PROVIDE AND INSTALL CAUTIONARY SIGNAGE ON ENTRANCE DOOR TO APU BUILDING SUITABLE FOR OUTDOOR USE. SEE DETAIL 2 FOR PREFERRED SIGN.

(13) BOND NEW FUEL TANK TO NEW GENERATOR.

PROVIDE CIRCUIT ID LABELS ON ALL RECEPTACLES TO INDICATE SOURCE CIRCUIT.

# CAUTION

STANDBY GENERATOR **AUTOMATICALLY STARTS** DURING POWER OUTAGE

CAUTION SIGN DETAIL - APU BUILDING



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- 1. THICK DASHED LINES INDICATE REMOVALS.
- 2. THICK SOLID LINES INDICATE NEW CONSTRUCTION.
- 3. THIN SOLID LINES INDICATE EXISTING.

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drawing no. — where detail required

KING CITY ENVIRONMENT AND CLIMATE CHANGE CANADA 14780 JANE STREET KING CITY, ON

GENERATOR REPLACEMENT

drawing title titre du dessin ELECTRICAL APU BUILDING -NEW CONSTRUCTION

J.CZYZEWSKI

T. BIRO

approuve par O. JAN

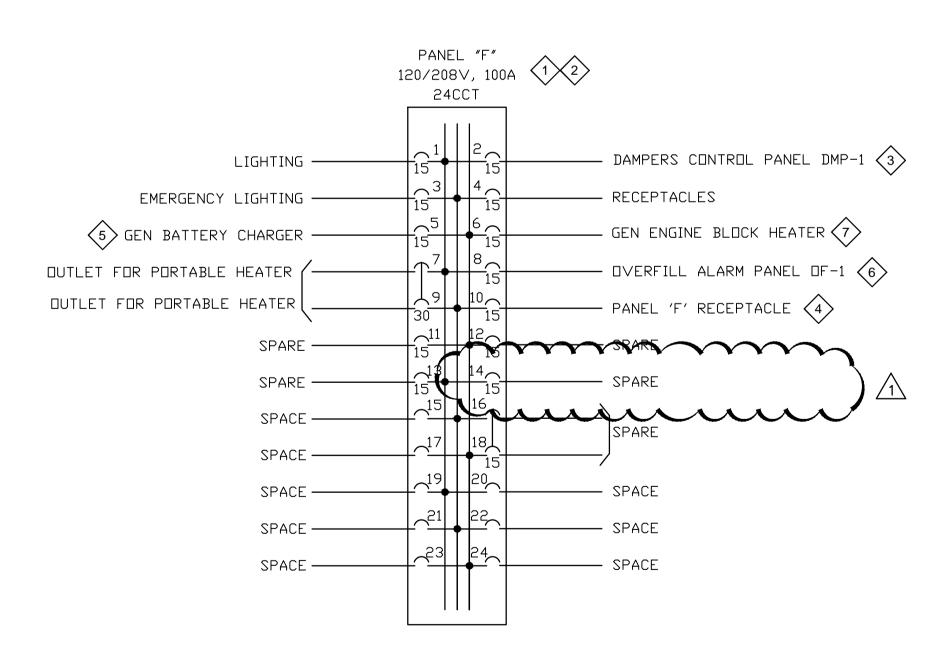
soumission DANIEL VENTURA

project date date date du projet 2017/05/09

163302290

drawing no. dessine no.

GSC-A1 DATE PLOTTED: PLOT SCALE: CAD FILE: <u>DEMOLITION - GENERATOR SHED - PANEL F SCHEDULE</u>



NEW CONSTRUCTION - GENERATOR SHED - PANEL F SCHEDULE

# **DEMOLITION NOTES**

- 1 REMOVE EXISTING POWER FEED TO EXISTING MOTORIZED ☐ DAMPERS.
- REMOVE EXISTING POWER FEED TO EXISTING WALL MOUNTED BATTERY CHARGER.
- REMOVE EXISTING POWER FEED TO EXISTING ENGINE COOLANT HEATER.
- 4 REMOVE EXISTING POWER FEED TO EXISTING LOW FUEL ALARM SYSTEM.
- $\begin{bmatrix} 5 \end{bmatrix}$  REMOVE EXISTING POWER FEED TO EXISTING BATTERY WARMER.
- 6 APU BUILDING INTERIOR AND EXTERIOR LIGHTS TO BE REPLACED. | EXISTING WIRING AND CONDUIT TO REMAIN.

# NEW CONSTRUCTION NOTES

- UPDATE TYPE WRITTEN PANEL SCHEDULE TO AS-BUILT CONDITION
- AND PROVIDE COPY IN PANELBOARD.
- PROVIDE CIRCUIT ID LABEL ON ALL RECEPTACLES TO INDICATE SOURCE CIRCUIT.
- PROVIDE NEW 2#14AWG T90 + BOND IN 21mm EMT FROM EXIST CIRCUIT BREAKER IN PANEL 'F' TO NEW MOTORIZED DAMPER PROVIDE NEW 2#14AWG T90 + BOND IN 21mm EMT FROM EXISTING
- CONTROL PANEL DMP-1.
- PROVIDE NEW 2#14AWG T90 + BOND IN 21mm EMT FROM EXISTING CIRCUIT BREAKER IN PANEL 'F' TO NEW RECEPTACLE.
- PROVIDE NEW 2#14AWG T90 + BOND IN 21mm EMT FROM EXISTING CIRCUIT BREAKER IN PANEL 'F' TO NEW GENERATOR BATTERY
- PROVIDE NEW 2#14AWG T90 + BOND IN 21mm EMT FROM EXISTING
- CIRCUIT BREAKER IN PANEL 'F' TO NEW OVERFILL ALARM PANEL
- PROVIDE NEW 2#14AWG T90 + BOND IN 21mm EMT FROM EXISTING

- CIRCUIT BREAKER IN PANEL 'F' TO NEW GENERATOR ENGINE BLOCK HEATER.
- 8 NOT USED

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## **GENERAL NOTES:**

- 1. THICK DASHED LINES INDICATE REMOVALS.
- 2. THICK SOLID LINES INDICATE NEW CONSTRUCTION.
- 3. THIN SOLID LINES INDICATE EXISTING.

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KING CITY ONTARIO ENVIRONMENT AND CLIMATE CHANGE CANADA 14780 JANE STREET KING CITY, ON

GENERATOR REPLACEMENT

drawing title titre du dessin ELECTRICAL APU BUILDING PANEL 'F' SCHEDULE

dessine par J.CZYZEWSKI

conc par

T. BIRO

approuve par O. JAN

soumission DANIEL VENTURA

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163302290

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