

LEGEND

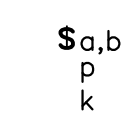
LIGHTING



LED LIGHTING FIXTURE, WALL MOUNTED. LETTER DENOTES TYPE. SEE LIGHTING FIXTURE SCHEDULE & SPECIFICATIONS FOR DESCRIPTION.



LED LIGHTING FIXTURE. LETTER DENOTES TYPE. SEE LIGHTING FIXTURE SCHEDULE & SPECIFICATIONS FOR DESCRIPTION.



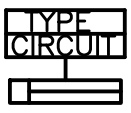
SINGLE POLE TOGGLE SWITCH. 15 AMP, SPECIFICATION GRADE, WHITE C/W STAINLESS STEEL COVERPLATE. SEE SPEC. FOR MORE INFORMATION. MOUNT 1200mm ABOVE FINISHED FLOOR.

"a" OR "b" INDICATES CIRCUIT TO BE CONTROLLED.

"p" INDICATES PILOT LIGHT

"k" INDICATES KEY OPERATED

ELECTRIC HEATING



ELECTRIC HEATER. SEE HEATER FIXTURE SCHEDULE AND/OR SPECIFICATION FOR DESCRIPTION.



LOW VOLTAGE ELECTRONIC THERMOSTAT. MOUNT 1200mm ABOVE FINISH FLOOR.

CONTROLS & MISCELLANEOUS



DISCONNECT SWITCH SUPPLIED AND INSTALLED BY ELECTRICAL DIVISION UNLESS NOTED OTHERWISE. EEMAC 2 (SPRINKLER PROOF) FOR INTERIOR AND EEMAC 4X FOR EXTERIOR.



MANUAL STARTER SUPPLIED AND INSTALLED BY MECHANICAL DIVISION WIRED BY ELECTRICAL DIVISION. WALL MOUNT 1400mm ABOVE FINISHED FLOOR.



DAMPER MOTOR. SUPPLIED AND INSTALLED BY MECHANICAL DIVISION AND WIRED BY ELECTRICAL DIVISION.



ELECTRICAL PANEL. EEMAC 2 (SPRINKLER PROOF) IF THERE IS A SPRINKLER SYSTEM.



ELECTRIC MOTOR. SUPPLIED BY MECHANICAL DIVISION, WIRED BY ELECTRICAL DIVISION.

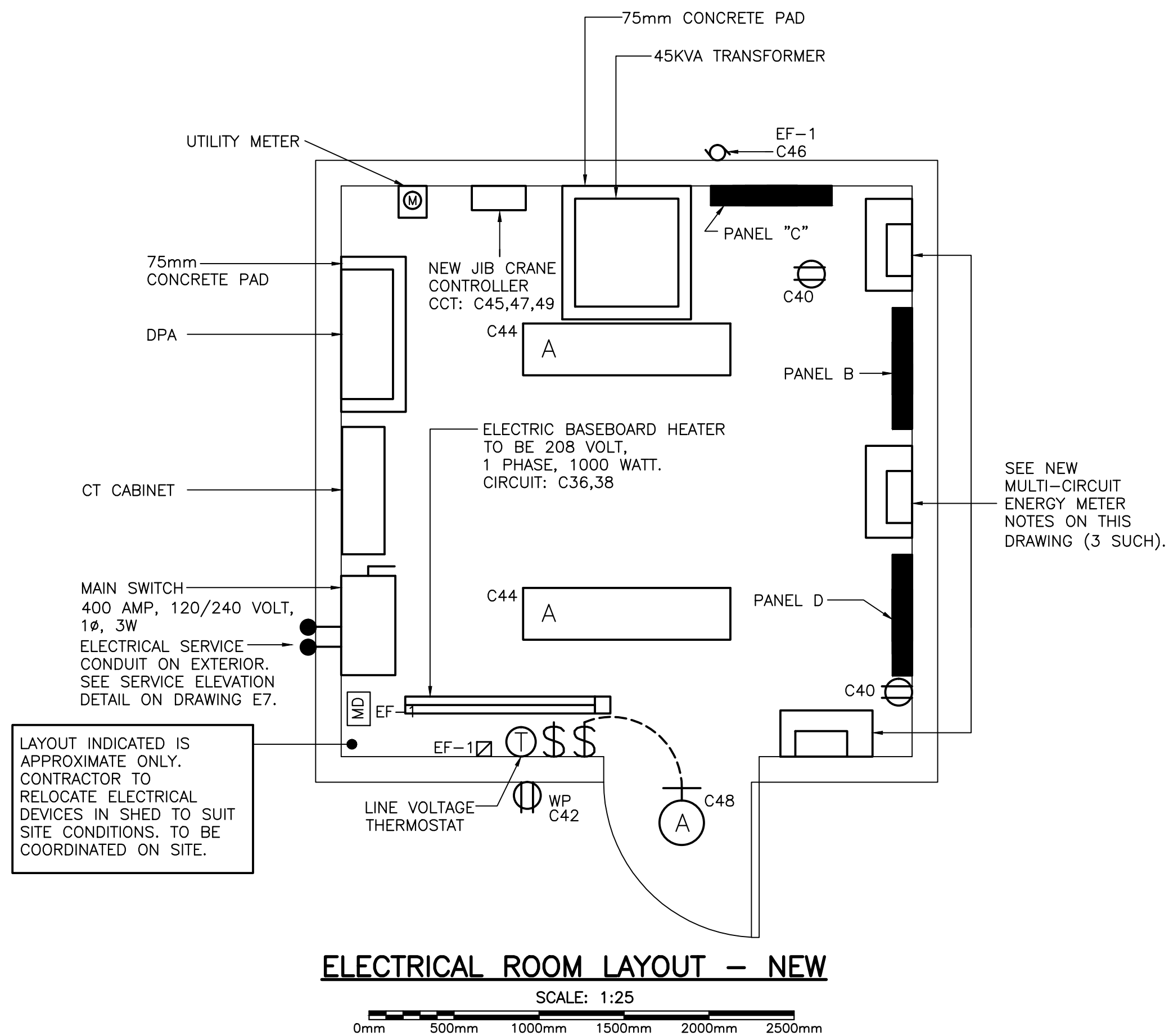
WIRING DEVICES



DUPLEX U-GROUND RECEPTACLE. 120 VOLT, 15 AMP, SPECIFICATION GRADE. WHITE & C/W STAINLESS STEEL COVERPLATE. WALL MOUNT 400mm ABOVE FINISHED FLOOR. "WP" INDICATES WEATHERPROOF COVERPLATE. "C" INDICATES CEILING MOUNTED, COORDINATE EXACT LOCATION ON SITE. "HRV" INDICATES FOR HRV UNIT, COORDINATE EXACT LOCATION ON SITE WITH MECHANICAL PRIOR TO ROUGH-IN.

NEW MULTI-CIRCUIT ENERGY METER NOTES:

- NEW MULTI-CIRCUIT ENERGY METER ENCLOSURES C/W DISPLAYS AND CT'S. SHALL MONITOR ALL RECEPTACLE CIRCUITS (54 SUCH) OF ALL ELECTRICAL PEDESTALS (13 SUCH). CAPACITY FOR MONITORING 70 CIRCUITS MINIMUM. MEASURE AMPERAGE, VOLTAGE, KW, KVA, KVAR, PF, HZ, KWH. INTELLIMETER OR APPROVED EQUAL. ALL METERS TO BE FACTORY SEALED AND REISTERED WITH MEASUREMENT CANADA. COORDINATE WITH HARBOUR AUTHORITY.
- CONTRACTOR TO SUPPLY AND INSTALL TEST BLOCK EQUAL TO MESURINA 4 POLE TEST SWITCH C/W COVER. TEST BLOCK TO BE TIED INTO NEW MULTI-METERING SYSTEM TO MEASURE VOLTAGE REFERENCE. PROVIDE LABEL TO READ "VOLTAGE TEST BLOCK".
- CONTRACTOR SHALL ENSURE THAT THE INFORMATION LABELS OF THE CURRENT TRANSFORMERS (POLARITY MARK / DIRECTION OF CURRENT FLOW, SERIAL NUMBER, APPROVAL NUMBER, ETC.) ARE PLACED AT THE FRONT AND ARE VISIBLE AND LEGIBLE BY THE INSPECTOR.
- CONTRACTOR TO INSTALL MULTI-METERING SYSTEM IN COMPLIANCE WITH MEASUREMENT CANADA. REFER TO THE FOLLOWING MEASUREMENT CANADA DOCUMENTS:
 - S-E-04--INSTALLATION REQUIREMENTS FOR MULTIPLE CUSTOMER METERING SYSTEMS <https://www.ic.gc.ca/eic/site/mc-mc.nsf/eng/m00586.html>
 - S-E-03--SPECIFICATION FOR THE INSTALLATION AND USE OF ELECTRICITY METERS -- INPUT CONNECTIONS AND RATINGS. <https://www.ic.gc.ca/eic/site/mc-mc.nsf/eng/m00172.html>
 - S-E-08--SPECIFICATIONS FOR THE INSTALLATION AND USE OF ELECTRICITY METERS -- MEASUREMENT CANADA STANDARD DRAWINGS FOR ELECTRICITY METERING INSTALLATIONS <https://www.ic.gc.ca/eic/site/mc-mc.nsf/eng/m04068.html>
- CONTRACTOR SHALL ARRANGE FOR SUPPLIERS, EQUIPMENT MANUFACTURERS, AND/OR OTHERS AS REQUIRED FOR ALL COMMISSIONING ACTIVITIES OF THIS SYSTEM. ENSURE PROPER OPERATION OF EQUIPMENT AND ON SITE TRAINING, MAKING NECESSARY CORRECTIONS AS REQUIRED. PROVIDE COMMISSIONING REPORT INCLUDING LIST OF ATTENDEES AND DATE OF ON SITE COMMISSIONING. ALL COSTS ASSOCIATED WITH COMMISSIONING REQUIREMENTS SHALL BE INCLUDED WITHIN TENDER PRICE.



ELECTRICAL ROOM LAYOUT - NEW

SCALE: 1:25

0mm 500mm 1000mm 1500mm 2000mm 2500mm

NEW PANEL

VOLTS <u>120/240</u>		PANEL NAME <u>"D"</u>		MAINS RATED <u>400</u> <u>AMPS.</u>													
PHASE <u>1</u>		LOCATION <u>ELECTRICAL ROOM</u>		MOUNTING <u>SURFACE</u>													
WIRE <u>3</u>		FED FROM <u>45 KVA TRANSFORMER</u>		MIN.CIRCUITS <u>20</u>													
DESIGNATION												DESIGNATION					
		WATTAGE		U/G	WIRE	BKR	CCT	A	B	CCT	BKR	WIRE	U/G	WATTAGE			
		ø A	ø B											ø A	ø B		
PEDESTAL #2		3640				3	8	50/2	1		2	50/2	8	4	3640	PEDESTAL #8	
			3640						3			50/2	8	3	3640	PEDESTAL #9	
									5		6						
									7		8				3640		
									9		10						
									11		12						
									13		14						
									15		16						
									17		18						
									19		20						
DEMAND <u>.36</u> KW <u>.150</u> AMP @ 240 VOLT, 1ø																	
GF30 - INDICATES GFCI CIRCUIT BREAKER WITH GROUND FAULT SETTING AT 30mA.																	

PANEL TUB FOR PANEL 'D' SHALL BE MINIMUM 710mm (28") WIDE TO ACCOMMODATE MULTI-CIRCUIT METERING SYSTEM CT'S & LARGE BRANCH CIRCUIT WIRING.

NEW PANEL

VOLTS <u>120/208</u>		PANEL NAME <u>"B"</u>		MAINS RATED <u>200</u> AMPS.												
PHASE <u>3</u>		LOCATION <u>ELECTRICAL ROOM</u>		MOUNTING <u>SURFACE</u>												
WIRE <u>4</u>		FED FROM <u>DPA</u>		MIN.CIRCUITS <u>42</u>												
DESIGNATION	WATTAGE			U/G WIRE	WIRE BKR	CCT	A	B	C	CCT	BKR	U/G WIRE	WATTAGE			DESIGNATION
	ø A	ø B	ø C										ø A	ø B	ø C	
PEDESTAL #10	2184			4	10	30/2	1			2	30/2	10	6	2184		PEDESTAL #6
PEDESTAL #10	2184		2520	3	10	30	5			6	30	10	4		2520	PEDESTAL #6
PEDESTAL #10		2520		3	10	30	7			8	30	10	4	2520		PEDESTAL #6
PEDESTAL #10		1680		4	12	20	9			10	20	12	6		1680	PEDESTAL #6
							11									
							13									
	2184			4	10	30/2	15			16	30/2	10	6		2184	PEDESTAL #8
PEDESTAL #11		2184		2	10	30	17			18	2	10	4		2184	PEDESTAL #8
PEDESTAL #11	2520			2	10	30	19			20	30	10	4	2520		PEDESTAL #8
PEDESTAL #11		2520		2	10	30	21			22	30	10	4		2520	PEDESTAL #8
PEDESTAL #11		1680		4	12	20	23			24	20	12	6		1680	PEDESTAL #8
PEDESTAL #12				4	10	30/2	25			26						
PEDESTAL #12	2184						27			28						
PEDESTAL #12		2520		1	10	30	29			30	30/2	10	4		2184	PEDESTAL #9
PEDESTAL #12				1	10	30	31			32	2			2184		PEDESTAL #9
PEDESTAL #12		1680		3	12	20	33			34	30	10	3	2520		PEDESTAL #9
							35			36	30	10	3		2520	PEDESTAL #9
							37			38	20	12	4	1680		PEDESTAL #9
LIGHT POLE #4		300		10	10	15	39			40						
LIGHT POLE #7			300	10	10	15	41			42						
GF - INDICATES CLASS A GFCI CIRCUIT BREAKER																
GF30 - INDICATES GFCI CIRCUIT BREAKER WITH GROUND FAULT SETTING																
DEMAND <u>.55.6</u> KW <u>.155</u> AMP @ 208 VOLT, 3ø																

PANEL TUB FOR PANEL 'B' SHALL BE MINIMUM 710mm (28") WIDE TO ACCOMMODATE MULTI-CIRCUIT METERING SYSTEM CT'S & LARGE BRANCH CIRCUIT WIRING.

NEW PANEL

VOLTS <u>120/208</u>				PANEL NAME <u>"C"</u>				MAINS RATED <u>200</u> AMPS.										
PHASE <u>3</u>				LOCATION <u>ELECTRICAL ROOM</u>				MOUNTING <u>SURFACE</u>										
WIRE <u>4</u>				FED FROM <u>DPA</u>				MIN.CIRCUITS <u>60</u>										
DESIGNATION		WATTAGE			U/G	WIRE	BKR	CCT	A	B	C	CCT	BKR	WIRE	U/G	WATTAGE	DESIGNATION	
		ø A	ø B	ø C														
PEDESTAL #4		2184				8	10	30/2	1				2	15				SPARE
			2184				6	10	30/2	3			4	15				SPARE
PEDESTAL #4			2520			6	10	30	5				6	30/2	10	4	2184	PEDESTAL #1
PEDESTAL #4		2520		1680		6	10	30	7				8	2				
				2184		8	12	20	9				10	30	10	2	2520	PEDESTAL #1
PEDESTAL #5						8	10	30/2	11				12	30	10	2		PEDESTAL #1
		2184					2	13					14	20	12	3	1680	PEDESTAL #1
PEDESTAL #5			2520			6	10	30	15				16	30	15			
PEDESTAL #5				2520		6	10	30	17				18	2	10	4	2184	PEDESTAL #2
PEDESTAL #5		1680				8	12	20	19				20	30	10	3	2520	PEDESTAL #2
			2184			6	10	30/2	21				22	30	10	3	2520	PEDESTAL #2
PEDESTAL #7				2184			2	23					24	20	12	4	1680	PEDESTAL #2
						4	10	30	25				26	30	10			
PEDESTAL #7		2520				4	10	30	27				28	2	10	6	2184	PEDESTAL #3
PEDESTAL #7			2520			4	10	30	27				28	2			2184	
PEDESTAL #7				1680		6	12	20	29				30	30	10	4		2520
LIGHT POLE #1		300				10	10	15	31				32	30	10	4	2520	PEDESTAL #3
LIGHT POLE #2			300			10	10	15	33				34	20	12	6	1680	PEDESTAL #3
LIGHT POLE #3				300		10	10	15	35				36	15				
SPARE									37				38	2	12		500	HEAT-ELECTRICAL SHED
LIGHT POLE #5		300				10	10	15	39				40	15	12		500	
LIGHT POLE #6			300			10	10	15	41				42	15	12		360	RECEPTACLES - SHED
SPARE				300		10	10	15	43				44	15	12		120	EXTERIOR RECEPTACLE - SHED
									45				46	15	12	100	LIGHTING - SHED	
		933						20	45				48	15	12		233	EF-1 (0.25HP)
JIB CRANE			933			6	6	3	49				50	30	10	4	2520	EXTERIOR LIGHTING
								4					52	30	10	4	2520	PEDESTAL #13
JIB CRANE RECEPTACLE		120				10	10	15	51				54	30	10	4		PEDESTAL #13
JIB CRANE LIGHTING			300			10	10	15	53				56	15			2520	PEDESTAL #13
SPARE									55				58	15				SPARE
SPARE									57				60	15				SPARE
SPARE									59									SPARE
GF - INDICATES CLASS A GFCI CIRCUIT BREAKER																		
GF30 - INDICATES GFCI CIRCUIT BREAKER WITH GROUND FAULT SETTING AT 30mA.																		
ST - INDICATES C/W SHUNT TRIP. SUPPLY AND INSTALL GROUND FAULT RELAY (EATON D64RPB100 OR APPROVED EQUAL). CONNECT TO SHUNT TRIP WITH GROUND FAULT SETTING AT 30mA. GFCI CIRCUIT BREAKER WITH GROUND FAULT SETTING AT 30mA ALSO ACCEPTABLE.																		
DEMAND <u>.69.18</u> KW <u>.192</u> AMP @ 208 VOLT, 3ø																		

PANEL TUB FOR PANEL 'C' SHALL BE MINIMUM 710mm (28") WIDE TO ACCOMMODATE MULTI-CIRCUIT METERING SYSTEM CT'S & LARGE BRANCH CIRCUIT WIRING.

PANELS B, C, & D:
TOTAL DEMAND .116.7 KW .324 AMP @ 208 VOLT, 3Ø

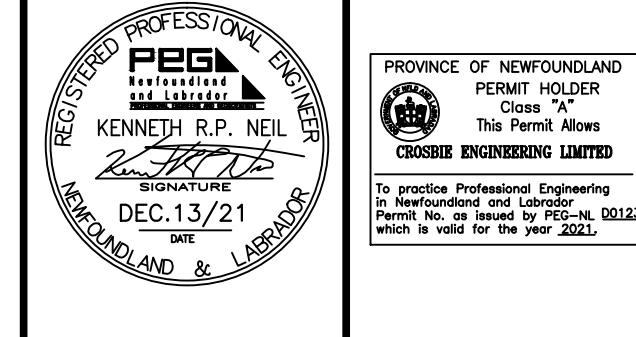
SMALL CRAFT HARBOURS



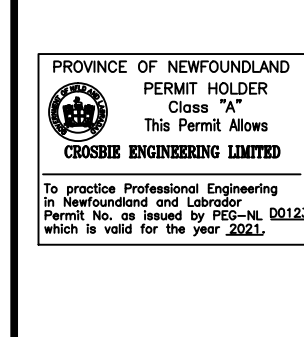
NOTES

- ALL ELEVATIONS ARE IN METRES UNLESS OTHERWISE NOTED.
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.
- DO NOT SCALE FROM DRAWINGS.
- CONTRACTOR MUST VERIFY ALL DIMENSIONS AND CONDITIONS ON SITE PRIOR TO PROCEEDING WITH ANY PORTION OF THIS WORK.

stamp



permit



O	ISSUED FOR TENDER	DEC 13 2021
D	ISSUED FOR PRE-TENDER REVIEW	NOV 24 2021
C	ISSUED FOR REVIEW	AUG 24 2020
B	ISSUED FOR REVIEW	JUNE 11 2020
A	ISSUED FOR REVIEW	MAY 21 2020
revisions		date
project		project

WHARF RECONSTRUCTION HARBOUR GRACE, NL

drawing desin

ELECTRICAL DETAILS

designed K. NEIL	concu
date DECEMBER 2021	
drawn K. NEIL	dessine
date DECEMBER 2021	
approved	approuve
Tender Paul Curran	Soumission
DFO Project Manager	
project number	no. du projet
C2-00201	
drawing no.	no. du dessin
E6	