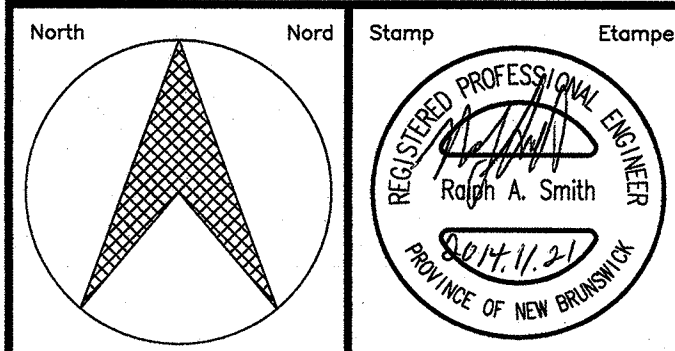


electrical consultant



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POWER CENTER #	RECEPTACLE	LOADING RECEPT	VOLTS	CIRCUIT	RATED CURRENT	DISTANCE (M)	VOLTAGE DROP	WIRE SCHEDULE	CONDUIT SCHEDULE	SCHEDULE ①
1	1A 1B 1C 1D 1E,1F,1G,1H,1I	100A, 3P 100A, 3P 60A, 3P 60A, 3P 100A, 2P	600V 208V 208V 208V 208V	P-1,3,5 P1-7,9,11 P1-13,15,17 P1-19,21,23 P1-31,33	80 70 48 70 80	70 70 70 70 70	< 3% < 3% < 3% < 3% < 3%	3#3, 1#8G 3#2, 1#8G 3#4 3#4, 1#8G 3#4, 1#8G	53mm 53mm 53mm 53mm 53mm	1 2 3 4 C
2	2A 2B 2C 2D 2E,2F,2G,2H,2I	100A, 3P 100A, 3P 60A, 3P 60A, 3P 100A, 2P	600V 208V 208V 208V 208V	P-7,9,11 P1-41,43,45 P1-47,49,51 P1-53,55,57 P1-65,67	80 80 48 48 80	105 105 105 105 105	< 3% < 3% < 3% < 3% < 3%	3#2, 1#8G 3#1/0, 1#8G 3#2 3#2, 1#8G 3#1/0, 1#8G	53mm 53mm 53mm 53mm 2-53mm	5 6 7 8 C
3	3A 3B 3C 3D 3E,3F,3G,3H,3I	100A, 3P 100A, 3P 60A, 3P 60A, 3P 100A, 2P	600V 208V 208V 208V 208V	P-13,15,17 P1-8,10,12 P1-14,16,18 P1-20,22,24 P1-32,34	80 80 48 48 80	140 140 140 140 140	< 3% < 3% < 3% < 3% < 3%	3#1, 1#8G 3#2/0, 1#8G 3#1 3#1, 1#8G 3#2/0, 1#8G	53mm 53mm 53mm 53mm 2-53mm	9 10 11 12 C
4	4A 4B 4C 4D 4E,4F,4G,4H,4I	100A, 3P 100A, 3P 60A, 3P 60A, 3P 100A, 2P	600V 208V 208V 208V 208V	P-19,21,23 P1-42,44,46 P1-48,50,52 P1-54,56,58 P1-66,68	80 80 48 48 80	175 175 175 175 175	< 3% < 3% < 3% < 3% < 3%	3#1/0, 1#8G 3#3/0, 1#8G 3#1/0 3#1/0, 1#8G 3#3/0, 1#8G	53mm 53mm 53mm 53mm 2-53mm	13 14 15 16 C
5	5A 5B 5C 5D 5E,5F,5G,5H,5I	100A, 3P 100A, 3P 60A, 3P 60A, 3P 100A, 2P	600V 208V 208V 208V 208V	P-2,4,6 P2-7,9,11 P2-13,15,17 P2-19,21,23 P2-33,35	80 80 48 48 80	210 210 210 210 210	< 3% < 3% < 3% < 3% < 3%	3#2/0, 1#8G 3#4/0, 1#8G 3#2/0 3#2/0, 1#8G 3#4/0, 1#8G	53mm 53mm 53mm 63mm 53mm	17 18 19 20 C
6	6A 6B 6C 6D 6E,6F,6G,6H,6I	100A, 3P 100A, 3P 60A, 3P 60A, 3P 100A, 2P	600V 208V 208V 208V 208V	P-8,10,12 P2-43,45,47 P2-49,51,53 P2-55,57,59 P2-67,69	80 80 48 48 80	245 245 245 245 245	< 3% < 3% < 3% < 3% < 3%	3#2/0, 1#8G 3#4/0, 1#8G 3#2/0 3#2/0, 1#8G 3#4/0, 1#8G	53mm 53mm 53mm 63mm 53mm	21 22 23 24 C
7	7A 7B 7C 7D 7E,7F,7G,7H,7I	100A, 3P 100A, 3P 60A, 3P 60A, 3P 100A, 2P	600V 208V 208V 208V 208V	P-14,16,18 P2-8,10,12 P2-14,16,18 P2-20,22,24 P2-34,36	80 80 48 48 80	280 280 280 280 280	< 3% < 3% < 3% < 3% < 3%	3#3/0, 1#8G 3#4/0, 1#8G 3#3/0 3#3/0, 1#8G 3#4/0, 1#8G	53mm 53mm 63mm 53mm 1-53mm	25 26 27 28 C

CENTRE D'ÉNERGIE #	PRISE	CHARGE PAR PRISE	VOLTS	CIRCUIT	COURANT NOMINAL	DISTANCE (M)	CHUTE DE VOLTAGE	NOMENCLATURE E DES FILS	NOMENCLATURE E DES CONDUITS	NOMENCLATURE ①
1	1A 1B 1C 1D 1E,1F,1G,1H,1I	100A, 3P 100A, 3P 60A, 3P 60A, 3P 100A, 2P	600V 208V 208V 208V 208V	P-1,3,5 P1-7,9,11 P1-13,15,17 P1-19,21,23 P1-31,33	80 70 48 70 80	70 70 70 70 70	< 3% < 3% < 3% < 3% < 3%	3#3, 1#8G 3#2, 1#8G 3#4 3#4, 1#8G 3#4, 1#8G	53mm 53mm 53mm 53mm 2-53mm	1 2 3 4 C
2	2A 2B 2C 2D 2E,2F,2G,2H,2I	100A, 3P 100A, 3P 60A, 3P 60A, 3P 100A, 2P	600V 208V 208V 208V 208V	P-7,9,11 P1-41,43,45 P1-47,49,51 P1-53,55,57 P1-65,67	80 80 48 48 80	105 105 105 105 105	< 3% < 3% < 3% < 3% < 3%	3#2, 1#8G 3#1/0, 1#8G 3#2 3#2, 1#8G 3#1/0, 1#8G	53mm 53mm 53mm 53mm 2-53mm	5 6 7 8 C
3	3A 3B 3C 3D 3E,3F,3G,3H,3I	100A, 3P 100A, 3P 60A, 3P 60A, 3P 100A, 2P	600V 208V 208V 208V 208V	P-13,15,17 P1-8,10,12 P1-14,16,18 P1-20,22,24 P1-32,34	80 80 48 48 80	140 140 140 140 140	< 3% < 3% < 3% < 3% < 3%	3#1, 1#8G 3#2/0, 1#8G 3#1 3#1, 1#8G 3#2/0, 1#8G	53mm 53mm 53mm 53mm 2-53mm	9 10 11 12 C
4	4A 4B 4C 4D 4E,4F,4G,4H,4I	100A, 3P 100A, 3P 60A, 3P 60A, 3P 100A, 2P	600V 208V 208V 208V 208V	P-19,21,23 P1-42,44,46 P1-48,50,52 P1-54,56,58 P1-66,68	80 80 48 48 80	175 175 175 175 175	< 3% < 3% < 3% < 3% < 3%	3#1/0, 1#8G 3#3/0, 1#8G 3#1/0 3#1/0, 1#8G 3#3/0, 1#8G	53mm 53mm 53mm 53mm 2-53mm	13 14 15 16 C
5	5A 5B 5C 5D 5E,5F,5G,5H,5I	100A, 3P 100A, 3P 60A, 3P 60A, 3P 100A, 2P	600V 208V 208V 208V 208V	P-2,4,6 P2-7,9,11 P2-13,15,17 P2-19,21,23 P2-33,35	80 80 48 48 80	210 210 210 210 210	< 3% < 3% < 3% < 3% < 3%	3#2/0, 1#8G 3#4/0, 1#8G 3#2/0 3#2/0, 1#8G 3#4/0, 1#8G	53mm 53mm 53mm 63mm 53mm	17 18 19 20 C
6	6A 6B 6C 6D 6E,6F,6G,6H,6I	100A, 3P 100A, 3P 60A, 3P 60A, 3P 100A, 2P	600V 208V 208V 208V 208V	P-8,10,12 P2-43,45,47 P2-49,51,53 P2-55,57,59 P2-67,69	80 80 48 48 80	245 245 245 245 245	< 3% < 3% < 3% < 3% < 3%	3#2/0, 1#8G 3#4/0, 1#8G 3#2/0 3#2/0, 1#8G 3#4/0, 1#8G	53mm 53mm 53mm 63mm 53mm	21 22 23 24 C
7	7A 7B 7C 7D 7E,7F,7G,7H,7I	100A, 3P 100A, 3P 60A, 3P 60A, 3P 100A, 2P	600V 208V 208V 208V 208V	P-14,16,18 P2-8,10,12 P2-14,16,18 P2-20,22,24 P2-34,36	80 80 48 48 80	280 280 280 280 280	< 3% < 3% < 3% < 3% < 3%	3#3/0, 1#8G 3#4/0, 1#8G 3#3/0 3#3/0, 1#8G 3#4/0, 1#8G	53mm 53mm 63mm 53mm 1-53mm	25 26 27 28 C

CABLE SCHEDULE  
NOMENCLATURE DES CÂBLES  
SCALE N.T.S. / P. A. E.

SCALE : N.T.S.  
ECHELLE : P. A. E.

SERVICE CALCULATION - TOTAL SERVICE	PROJECT #1310
TOTAL OF LOADS:	TOTAL
1. 7 - 100A 600V 3Ø 80A	83,040W 581,280W
2. 7 - 100A 208V 3Ø 80A	28,787W 201,509W
3. 7 - 2-60A 208V 3Ø 48A	17,272W 241,808W
7 - 1-50A 208V 1Ø 40A	8,320W 58,240W
4. 7 - 4-20A 120V 1Ø 16A	1,920W 53,760W
5. 9 - 2-4A 120V 1Ø 72A LTS	960W 8,640W
6. BUILDING	11,620W 11,620W
TOTAL ON PANEL P:	1,156,857W
1. 100% OF FIRST FOUR (4) RECEPTACLES	332,160W
4 X 80A X 600V X 1.73 X 100% =	
2. 65% OF NEXT FOUR (4) RECEPTACLES	161,928W
3 X 80A X 600V X 1.73 X 65% =	
1 X 80A X 208V X 1.73 X 65% =	18,712W
3. 50% OF NEXT FIVE (5) RECEPTACLES	71,968W
5 X 80A X 208V X 1.73 X 50% =	
4. 25% OF NEXT SIXTEEN (16) RECEPTACLES	7,197W
6 X 40A X 208V X 1.73 X 25% =	
14 X 48A X 208V X 1.73 X 25% =	60,453W
1 X 40A X 208V X 25% =	2080W
5. 20% OF NEXT TWENTY (20) RECEPTACLES	9,984W
6 X 40A X 208V X 20% =	
14 X 16A X 120V X 20% =	5,376W
6. 15% OF NEXT TWENTY (20) RECEPTACLES	4,032W
14 X 16A X 120V X 15% =	
7. LIGHTING 9 X 2 X 480W =	8,640W
ELECTRICAL BUILDING =	11,620W
TOTAL AT ON PANEL P:	694,150W
AMPERAGE ON PANEL P = 694,150W / 600V X 1.73 = 668A AT 100%	
800A @ 20% SPARE CAPACITY AT 600V	

CALCUL DES SERVICES - SERVICE TOTAL	PROJET #1310
TOTAL DES CHARGES:	TOTAL
1. 7 - 100A 600V 3Ø 80A	83,040W 581,280W
2. 7 - 100A 208V 3Ø 80A	28,787W 201,509W
3. 7 - 2-60A 208V 3Ø 48A	17,272W 241,808W
7 - 1-50A 208V 1Ø 40A	8,320W 58,240W
4. 7 - 4-20A 120V 1Ø 16A	1,920W 53,760W
5. 9 - 2-4A 120V 1Ø 72A LTS	960W 8,640W
6. BUILDING	11,620W 11,620W
TOTAL SUR PANNEAU P:	1,156,857W
1. 100% DES QUATRE (4) PREMIÈRES PRISES	332,160W
4 X 80A X 600V X 1.73 X 100% =	
2. 65% DES QUATRE (4) PROCHAINES PRISES	161,928W
3 X 80A X 600V X 1.73 X 65% =	
1 X 80A X 208V X 1.73 X 65% =	18,712W
3. 50% DES CINQ (5) PROCHAINES PRISES	71,968W
5 X 80A X 208V X 1.73 X 50% =	
4. 25% DES SEIZE (16) PROCHAINES PRISES	7,197W
6 X 40A X 208V X 25% =	
14 X 48A X 208V X 1.73 X 25% =	60,453W
1 X 40A X 208V X 25% =	2080W
5. 20% DES VINGT (20) PROCHAINES PRISES	9,984W
6 X 40A X 208V X 20% =	
14 X 16A X 120V X 20% =	5,376W
6. 15% DES VINGT PROCHAINES PRISES	4,032W
14 X 16A X 120V X 15% =	
7. ÉCLAIRAGE 9 X 2 X 480W =	8,640W
BÂTIMENT ÉLECTRIQUE =	11,620W
TOTAL SUR LE PANNEAU P:	694,150W
AMPERAGE SUR PANNEAU P = 694,150W / 600V X 1.73 = 668A AT 100%	
800A @ 20% DE CAPACITÉ DE RÉSERVE À 600V	

LOADS ON 208V TRANSFORMER T2 PANEL P1	TOTAL
1. 100% OF FIRST FOUR (4) RECEPTACLES	115,149W
4 X 80A X 208V X 1.73 X 100% =	
2. 65% OF NEXT FOUR (4) RECEPTACLES	44,908W
3 X 80A X 208V X 1.73 X 65% =	
3. 50% OF NEXT FIVE (5) RECEPTACLES	34,545W
5 X 80A X 208V X 1.73 X 50% =	
1 X 40A X 208V X 50% =	4,160W
4. 25% OF NEXT SIXTEEN (16) RECEPTACLES	38,705W
6 X 40A X 208V X 25% =	
13 X 16A X 120V X 25% =	6,240W
5. 20% OF NEXT TWENTY (20) RECEPTACLES	6,240W
13 X 16A X 120V X 20% =	
TOTAL:	1,152W
AMPERAGE = 212,394W / 208V X 1.73 = 590A AT 100%	
ON PANEL P1	
USE: 225KVA TRANSFORMER T2 AND 800A PANEL P1	
LOADS ON 208V TRANSFORMER T3 PANEL P2	TOTAL
1. 100% OF FIRST FOUR (4) RECEPTACLES	86,362W
3 X 80A X 208V X 1.73 X 100% =	
1 X 48A X 208V X 1.73 X 100% =	17,272W
2. 65% OF NEXT FOUR (4) RECEPTACLES	103,634W
4 X 80A X 208V X 1.73 X 65% =	
3. 50% OF NEXT FIVE (5) RECEPTACLES	44,908W
5 X 80A X 208V X 1.73 X 50% =	
1 X 40A X 208V X 50% =	4,160W
4. 25% OF NEXT SIXTEEN (16) RECEPTACLES	22,076W
6 X 40A X 208V X 25% =	
11 X 16A X 120V X 25% =	5,280W
5. LIGHTING =	8,640W
BÂTIMENT ÉLECTRIQUE =	11,620W
TOTAL:	196,158W
AMPERAGE = 196,158W / 208V X 1.73 = 545A AT 100%	
ON PANEL P2	
USE: 225KVA TRANSFORMER T3 AND 800A PANEL P2	

CHARGES SUR 208V TRANSFORMATEUR T2 PANNEAU P1	TOTAL
1. 100% DES QUATRE (4) PREMIÈRES PRISES	115,149W
4 X 80A X 208V X 1.73 X 100% =	
2. 65% DES QUATRE (4) PROCHAINES PRISES	44,908W
3 X 80A X 208V X 1.73 X 65% =	
3. 50% DES CINQ (5) PROCHAINES PRISES	34,545W
5 X 80A X 208V X 1.73 X 50% =	
1 X 40A X 208V X 50% =	4,160W
4. 25% DES SEIZE (16) PROCHAINES PRISES	38,705W
6 X 40A X 208V X 25% =	
13 X 16A X 120V X 25% =	6,240W
5. 20% DES VINGT (20) PROCHAINES PRISES	6,240W
13 X 16A X 120V X 20% =	
TOTAL:	1,152W
AMPERAGE = 212,394W / 208V X 1.73 = 590A AT 100%	
SUR PANNEAU P1	
UTILISER: 225KVA TRANSFORMATEUR T2 AND 800A PANNEAU P1	
CHARGES SUR 208V TRANSFORMATEUR T3 PANNEAU P2	TOTAL
1. 100% DES QUATRE (4) PREMIÈRES PRISES	86,362W
3 X 80A X 208V X 1.73 X 100% =	
1 X 48A X 208V X 1.73 X 100% =	17,272W
2. 65% DES QUATRE (4) PROCHAINES PRISES	103,634W
4 X 80A X 208V X 1.73 X 65% =	
3. 50% DES CINQ (5) PROCHAINES PRISES	44,908W
5 X 80A X 208V X 1.73 X 50% =	
1 X 40A X 208V X 50% =	4,160W
4. 25% DES SEIZE (16) PROCHAINES PRISES	22,076W
6 X 40A X 208V X 25% =	
11 X 16A X 120V X 25% =	5,280W
5. ÉCLAIRAGE =	8,640W
BÂTIMENT ÉLECTRIQUE =	11,620W
TOTAL:	196,158W
AMPERAGE = 196,158W / 208V X 1.73 = 545A AT 100%	
SUR PANNEAU P2	
UTILISER: 225KVA TRANSFORMATEUR T3 AND 800A PANNEAU P2	

SERVICE CALCULATION  
CALCUL DU SERVICE  
SCALE N.T.S. / P. A. E.

SCALE : N.T.S.  
ECHELLE : P. A. E.

WHARF RECONSTRUCTION  
RECONSTRUCTION DU QUAI  
STRUCTURES 406, 408 AND 409  
LAMEQUE, N.B.

COMPTÉ DE GLOUCESTER COUNTY

ELECTRICAL  
WIRE/CONDUIT SCHEDULES  
& SERVICE CALCULATIONS  
NOMENCLATURES DU CÂBLAGE  
ET DES CONDUITS, ET CALCUL  
DES SERVICES

designed RALPH SMITH, P.ENG conçu  
date 2014.12.01  
drawn JODI PARKER dessiné  
date 2014.12.01  
approved RALPH SMITH, P.ENG approuvé  
date 2014.12.01  
Tender B.D. LeBlanc N.S.M. 2014.12.03  
PWSC Project Manager Administrateur de projets TPSG  
project number no. du projet  
R.068072.001  
drawing no. no. du dessin  
E11 of/de 11