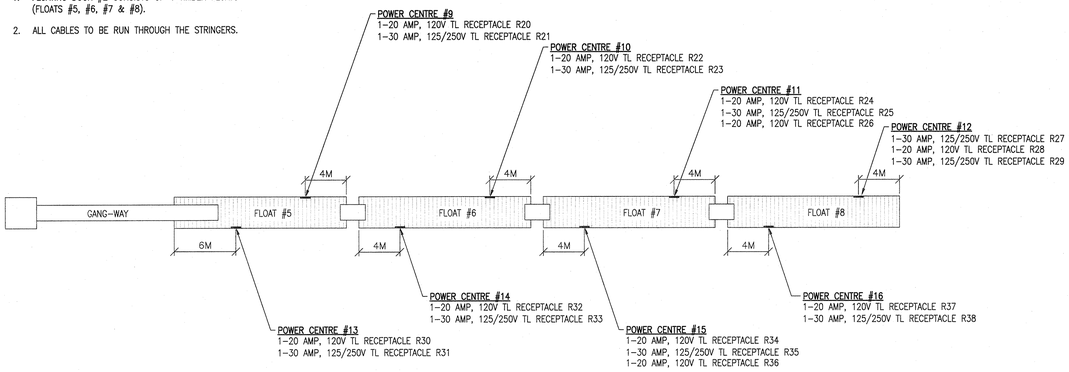
NOTES:

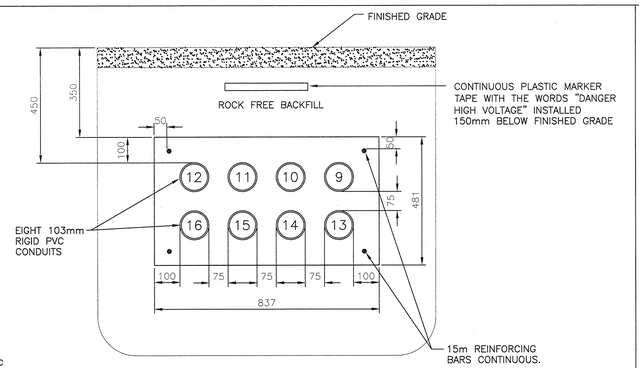
1. FLOATING DOCK #2 CONSISTS OF 4 TIMBER FLOATS (FLOATS #5, #6, #7 & #8).
2. ALL CABLES TO BE RUN THROUGH THE STRINGERS.



FLOATING DOCK #2 ELECTRICAL LAYOUT

SCALE: 1:250

0m 5m 10m 15m 20m 25m



SECTION – EXISTING DUCT BANK TO FLOATING DOCK #2 (B / E1 E2)

SCALE : N.T.S.

NOTE: ALL DIMENSIONS ARE IN MILLIMETERS.

NOTES:

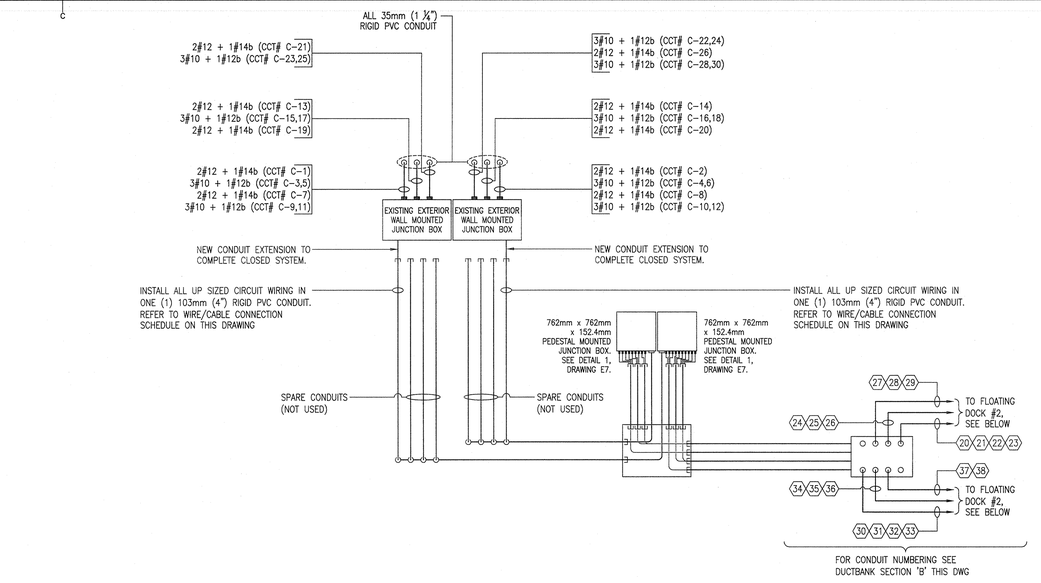
1. DUCTBANK IS EXISTING.
2. INSTALL CABLES IN THE DUCTBANK AS PER THE FEEDER SCHEDULE.
3. MULTIPLE CABLES TO BE PULLED INTO CONDUITS USING A SINGLE PULL.
4. ALL CABLES TO BE MEGGARED IMMEDIATELY AFTER PULL.
5. ANY DAMAGED CABLES TO BE REPLACED AT CONTRACTORS COST.
6. SHOULD ANY CABLES FAIL THE MEGGAR TEST; ALL CABLES IN THAT CONDUIT ARE TO BE REMOVED AND BE RE-INSTALLED WITH THE REPLACEMENT CABLE.

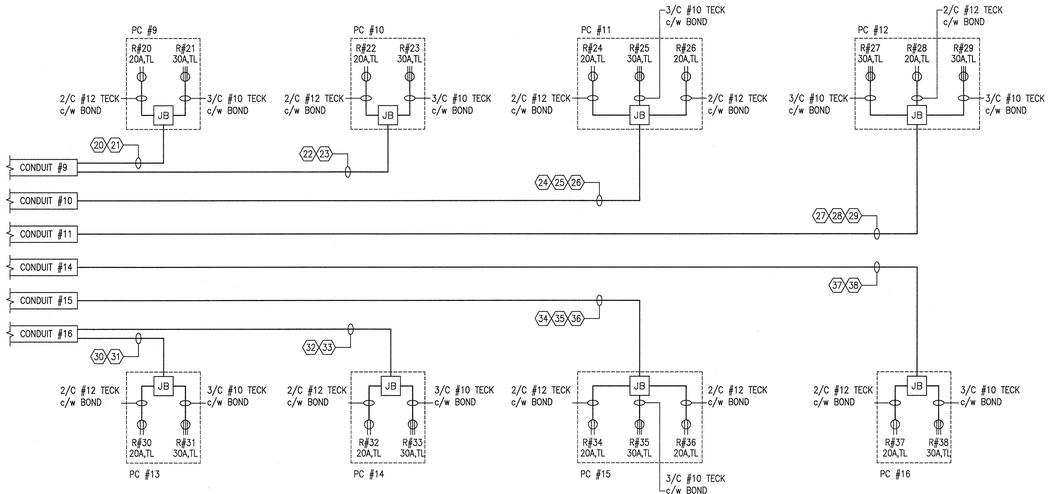
WIRE/CABLE CONNECTION SCHEDULE

	①		②		③
CIRCUIT	WIRE SIZE	SPLICE TO	WIRE SIZE	SPLICE TO	CABLE #
C-2	2#12 + 1#14b	→	2#8 + 1#14b	→	⟨20⟩
C-4,6	3#10 + 1#12b	→	3#8 + 1#12b	→	⟨21⟩
C-8	2#12 + 1#14b	→	2#4 + 1#14b	→	⟨22⟩
C-10,12	3#10 + 1#12b	→	3#6 + 1#12b	→	⟨23⟩
C-14	2#12 + 1#14b	→	2#4 + 1#14b	→	⟨24⟩
C-16,18	3#10 + 1#12b	→	3#4 + 1#12b	→	⟨25⟩
C-20	2#12 + 1#14b	→	2#4 + 1#14b	→	⟨26⟩
C-22,24	3#10 + 1#12b	→	3#4 + 1#12b	→	⟨27⟩
C-26	2#12 + 1#14b	→	2#4 + 1#14b	→	⟨28⟩
C-28,30	3#10 + 1#12b	→	3#4 + 1#12b	→	⟨29⟩
C-1	2#12 + 1#14b	→	2#8 + 1#14b	→	⟨30⟩
C-3,5	3#10 + 1#12b	→	3#8 + 1#12b	→	⟨31⟩
C-7	2#12 + 1#14b	→	2#6 + 1#14b	→	⟨32⟩
C-9,11	3#10 + 1#12b	→	3#8 + 1#12b	→	⟨33⟩
C-13	2#12 + 1#14b	→	2#4 + 1#14b	→	⟨34⟩
C-15,17	3#10 + 1#12b	→	3#6 + 1#12b	→	⟨35⟩
C-19	2#12 + 1#14b	→	2#4 + 1#14b	→	⟨36⟩
C-21	2#12 + 1#14b	→	2#4 + 1#14b	→	⟨37⟩
C-23,25	3#10 + 1#12b	→	3#4 + 1#12b	→	⟨38⟩

SPLICE TO OCCUR IN BUILDING MOUNTED JUNCTION BOX.

SPLICE TO OCCUR IN PEDESTAL MOUNTED JUNCTION BOX LOCATED ADJACENT TO GRADE LEVEL PULL PIT.



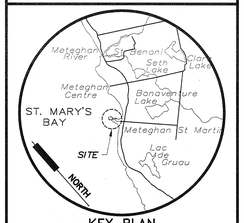


NOTE:

CONDUITS 12 & 13 ARE SPARE AND NOT SHOWN FOR CLARITY.

FLOATING DOCK #2 – WIRING DIAGRAM

SCALE : N.T.S.



KEY PLAN
N.T.S.

NOTES	DESIGNATION	KW A	KW B	KW C	WIRE SIZE	CIR NO.	BKR	A	B	C	BKR	CIR NO.	WIRE SIZE	KW A	KW B	KW C	DESIGNATION	NOTES
1	RECEPTACLE #R30 @ PC#13	1.92			12/8/12	1	20A				20A	2	12/8/12	1.92			RECEPTACLE #R20 @ PC#9	1
2	RECEPTACLE #R31 @ PC#13	4.992			10/8/10	3	30A				30A	4	10/8/10	4.992			RECEPTACLE #R21 @ PC#9	2
						5	2P				2P	6						
1	RECEPTACLE #R32 @ PC#14	1.92			12/4/12	7	20A				20A	8	12/6/12	1.92			RECEPTACLE #R22 @ PC#10	1
2	RECEPTACLE #R33 @ PC#14	4.992			10/6/10	9	30A				30A	10	10/8/10	4.992			RECEPTACLE #R23 @ PC#10	2
						11	2P				2P	12						
1	RECEPTACLE #R34 @ PC#15	1.92			12/4/12	13	20A				20A	14	12/4/12	1.92			RECEPTACLE #R24 @ PC#11	1
2	RECEPTACLE #R35 @ PC#15	4.992			10/4/10	15	30A				30A	16	10/6/10	4.992			RECEPTACLE #R25 @ PC#11	2
						17	2P				2P	18						
1	RECEPTACLE #R36 @ PC#15	1.92			12/4/12	19	20A				20A	20	12/4/12	1.92			RECEPTACLE #R26 @ PC#11	1
1	RECEPTACLE #R37 @ PC#16		1.92		12/4/12	21	20A				30A	22	10/4/10	4.992			RECEPTACLE #R27 @ PC#12	2
2	RECEPTACLE #R38 @ PC#16	4.992			10/4/10	23	30A				2P	24						
						25	2P				20A	26	12/4/12	1.92			RECEPTACLE #R28 @ PC#12	1
						27					30A	28	10/4/10	4.992			RECEPTACLE #R29 @ PC#12	2
						29					2P	30						
						31						32						
						33						34						
						35						36						
	SPARE	0				37	20A				20A	38		0			SPARE	
	SPARE		0			39	15A				15A	40			0		SPARE	
	SPARE			0		41	15A				15A	42				0	SPARE	

VOLTS 120/208 — PANEL EXISTING PANEL C — INTERRUPTING 10 KA
PHASE 3 — LOCATION MARINA ELECTRICAL SHED — MAINS 225 AMPS
WIRE 4 — FED FROM MAIN BOARD — MOUNTING SURFACE

ϕ "A" TOTAL: 22.848 kW – 169.6 AMPS @ 120V
ϕ "B" TOTAL: 21.312 kW – 177.6 AMPS @ 120V
ϕ "C" TOTAL: 19.968 kW – 187.2 AMPS @ 120V

TOTAL LOAD: 64.128 kW – 178 AMPS @ 208V, 3ϕ

NOTES:
#1. ALL 20 AMP, 1 POLE BREAKERS ARE NEW.
#2. ALL 30 AMP, 2 POLE BREAKERS ARE EXISTING.
#3. REFER TO SPECIFICATION SECTION 26 28 21.
#4. RECONFIGURE PANEL TO MATCH THIS SCHEDULE.

FEEDER –
–

CABLE/FEEDER SCHEDULE/VOLTAGE DROP/WIRE SIZE CALCULATIONS – FLOATING DOCK #2

CABLE #	LOADS	LOCATION	BRK. RATING	VOLTAGE	RATED CURRENT	CIRCUIT	DISTANCE METER (FT)	VOLTAGE DROP	WIRE SIZE	CABLE TYPE	CONDUIT #
⟨20⟩	RECEPTACLE #R20	POWER CENTRE #9	20 AMP	120V	16 AMPS	C-2	50.6m (166')	3.34V (2.78%)	3/C #8	SOOW	9
⟨21⟩	RECEPTACLE #R21	POWER CENTRE #9	30 AMP	120/208V	24 AMPS	C-4,6	50.6m (166')	5.01V (2.4%)	4/C #8	SOOW	9
⟨22⟩	RECEPTACLE #R22	POWER CENTRE #10	20 AMP	120V	16 AMPS	C-8	77.7m (255')	2.2V (1.8%)	3/C #4	SOOW	9
⟨23⟩	RECEPTACLE #R23	POWER CENTRE #10	30 AMP	120/208V	24 AMPS	C-10,12	77.7m (255')	5.64V (2.7%)	4/C #6	SOOW	9
⟨24⟩	RECEPTACLE #R24	POWER CENTRE #11	20 AMP	120V	16 AMPS	C-14	86.6m (284')	2.46V (2.05%)	3/C #4	SOOW	10
⟨25⟩	RECEPTACLE #R25	POWER CENTRE #11	30 AMP	120/208V	24 AMPS	C-16,18	86.6m (284')	3.69V (1.77%)	4/C #4	SOOW	10
⟨26⟩	RECEPTACLE #R26	POWER CENTRE #11	20 AMP	120V	16 AMPS	C-20	86.6m (284')	2.46V (2.05%)	3/C #4	SOOW	10
⟨27⟩	RECEPTACLE #R27	POWER CENTRE #12	30 AMP	120/208V	24 AMPS	C-22,24	104.5m (343')	4.46V (2.14%)	4/C #4	SOOW	11
⟨28⟩	RECEPTACLE #R28	POWER CENTRE #12	20 AMP	120V	16 AMPS	C-26	104.5m (343')	2.97V (2.47%)	3/C #4	SOOW	11
⟨29⟩	RECEPTACLE #R29	POWER CENTRE #12	30 AMP	120/208V	24 AMPS	C-28,30	104.5m (343')	4.46V (2.14%)	4/C #4	SOOW	11
⟨30⟩	RECEPTACLE #R30	POWER CENTRE #13	20 AMP	120V	16 AMPS	C-1	39.9m (131')	2.63V (2.19%)	3/C #8	SOOW	16
⟨31⟩	RECEPTACLE #R31	POWER CENTRE #13	30 AMP	120/208V	24 AMPS	C-3,5	39.9m (131')	3.95V (1.89%)	4/C #8	SOOW	16
⟨32⟩	RECEPTACLE #R32	POWER CENTRE #14	20 AMP	120V	16 AMPS	C-7	57.9m (190')	2.8V (2.33%)	3/C #6	SOOW	16
⟨33⟩	RECEPTACLE #R33	POWER CENTRE #14	30 AMP	120/208V	24 AMPS	C-9,11	57.9m (190')	5.7V (2.75%)	4/C #8	SOOW	16
⟨34⟩	RECEPTACLE #R34	POWER CENTRE #15	20 AMP	120V	16 AMPS	C-13	75.9m (249')	2.15V (1.79%)	3/C #4	SOOW	15
⟨35⟩	RECEPTACLE #R35	POWER CENTRE #15	30 AMP	120/208V	24 AMPS	C-15,17	75.9m (249')	5.5V (2.6%)	4/C #6	SOOW	15
⟨36⟩	RECEPTACLE #R36	POWER CENTRE #15	20 AMP	120V	16 AMPS	C-19	75.9m (249')	2.15V (1.79%)	3/C #4	SOOW	15
⟨37⟩	RECEPTACLE #R37	POWER CENTRE #16	20 AMP	120V	16 AMPS	C-21	93.9m (308')	2.67V (2.22%)	3/C #4	SOOW	14
⟨38⟩	RECEPTACLE #R38	POWER CENTRE #16	30 AMP	120/208V	24 AMPS	C-23,25	93.9m (308')	4.0V (1.92%)	4/C #4	SOOW	14

NOTE:

POWER CENTRE JUNCTION BOXES TO BE SIZED AS PER CEC.

revisions		date
1	ISSUED FOR TENDER	DEC. 2014

project / projet

METEGHAN WHARF FLOATING DOCK ELECTRICAL INSTALLATION

DIGBY COUNTY, NOVA SCOTIA

drawing / dessin

FLOATING DOCK #2 ELECTRICAL LAYOUT DETAILS AND NOTES

designed G. BOWSER / conçu
date DECEMBER 2014
drawn K. WOLFE / dessiné
date DECEMBER 2014
approved / approuvé
date 2014 12 10
Tender / Soumission
PWGSC Project Manager / Administrateur de projets TPSGC
project number / no. du projet
R.074439.002
drawing no. / no. du dessin
E2

Public Works and Government Services Canada / Travaux Publics et Services gouvernementaux Canada

E-DRM/GDD-E: 192287 Version 1