

2	PRO	POSED NEW SITE PLAN: GENERAL ELECTRICAL LAYOUT
E001	SCALE:	1:500

	DRAWING LIST
Sheet Number	Sheet Title
E001	SITE PLAN - EXISTING AND PROPOSED GENERAL ELECTRICAL LAYOUT
E002	SINGLE LINE DIAGRAM, PANEL SCHEDULES AND CALCULATIONS
E003	ELECTRICAL DETAILS
E004	RECEPTACLE CABINET (RC) AND FLOAT DETAILS
E005	TRANSFORMER RECEPTACLE CABINET (TRC) DETAILS

AHJ	Authority Having Jurisdiction
XXF	CB Frame Rating (amps)
XXT	CB Trip Setting (amps)
ВСН	B.C. Hydro
СВ	Circuit Breaker or Breaker
СТ	Current Transformer
CCT	Circuit
CEC	Canadian Electrical Code
DFO	Department of Fisheries & Oceans
MDP	Main Distribution Panel
NIC	Not In Contract
Р	Pole
PH	Phase
RC	Receptacle Cabinet (c/w RCP & receptacle outlets)
RCP	RC Panel
SCH	Small Craft Harbour
SEE	Service Entrance Enclosure
TRC	Transformer Receptacle Cabinet (c/w TRCP, TRF and RCP)
TRF	Transformer
TRCP	Transformer Receptacle Cabinet Panel
WP	Weatherproof Outlet
2P	Two pole CB (1 phase use)
3P	Three pole CB (3 phase use)

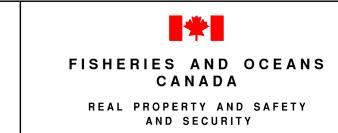
$\boxtimes$	SURFACE CEILING MOUNTED LUMINAIRE
Ş	WALL MOUNTED LUMINAIRE
•A	EXTERIOR LUMINAIRE WITH POLE ASSEMBLY
●всн	POWER POLE
<	OVERHEAD UTILITY SERVICE MAST
JB J	JUNCTION BOX
	PANEL
MDP	MAIN DISTRIBUTION PANEL
⊠RC-1	RECEPTACLE CABINET No.1
<b>™</b> TRC-1	TRANSFORMER RECEPTACLE CABINET No.1

**ELECTRICAL SYMBOL** 

SCHEDULE AND ANNOTATIONS

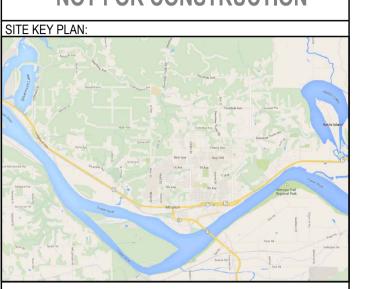
<b>⋖</b>	OVERHEAD UTILITY SERVICE MAST
JB J	JUNCTION BOX
	PANEL
MDP	MAIN DISTRIBUTION PANEL
⊠RC-1	RECEPTACLE CABINET No.1
<b>⊠</b> TRC-1	TRANSFORMER RECEPTACLE CABINET No.1
Т	TRANSFORMER
$\rightarrow$	DOWNHAUL GUY WITH ANCHOR AND GUARD
-60-	LV CIRCUIT BREAKER
_ <b>&gt;</b> _	DISCONNECT SWITCH
<u> </u>	UTILITY POWER METER
•	CONNECTION POINT
фф	CABINET RECEPTACLES
1	REFERENCE NOTE (1 DENOTES SEE NOTE 1)
A	PANEL IDENTIFICATION TAG
	NEW EQUIPMENT
	EXISTING EQUIPMENT TO REMAIN

EXISTING EQUIPMENT TO BE REMOVED





# **PRELIMINARY** NOT FOR CONSTRUCTION





### DO NOT SCALE DRAWINGS

1 ISSUED FOR TENDER 14/03/25 0 ISSUED FOR REVIEW 14/03/31	Revision/ Revision Client/client	Description/Description	Date/Date
4 3 2 RE-ISSUED FOR TENDER 15/06/26	v		14/03/31
3	1	ISSUED FOR TENDER	14/03/25
4	2	RE-ISSUED FOR TENDER	15/06/26
	3		
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### **FISHERIES AND OCEANS** SMALL CRAFT HARBOURS

401 BURRARD STREET, SUITE 200 VANCOUVER, BC

Project title/Titre du projet MISSION, B.C.

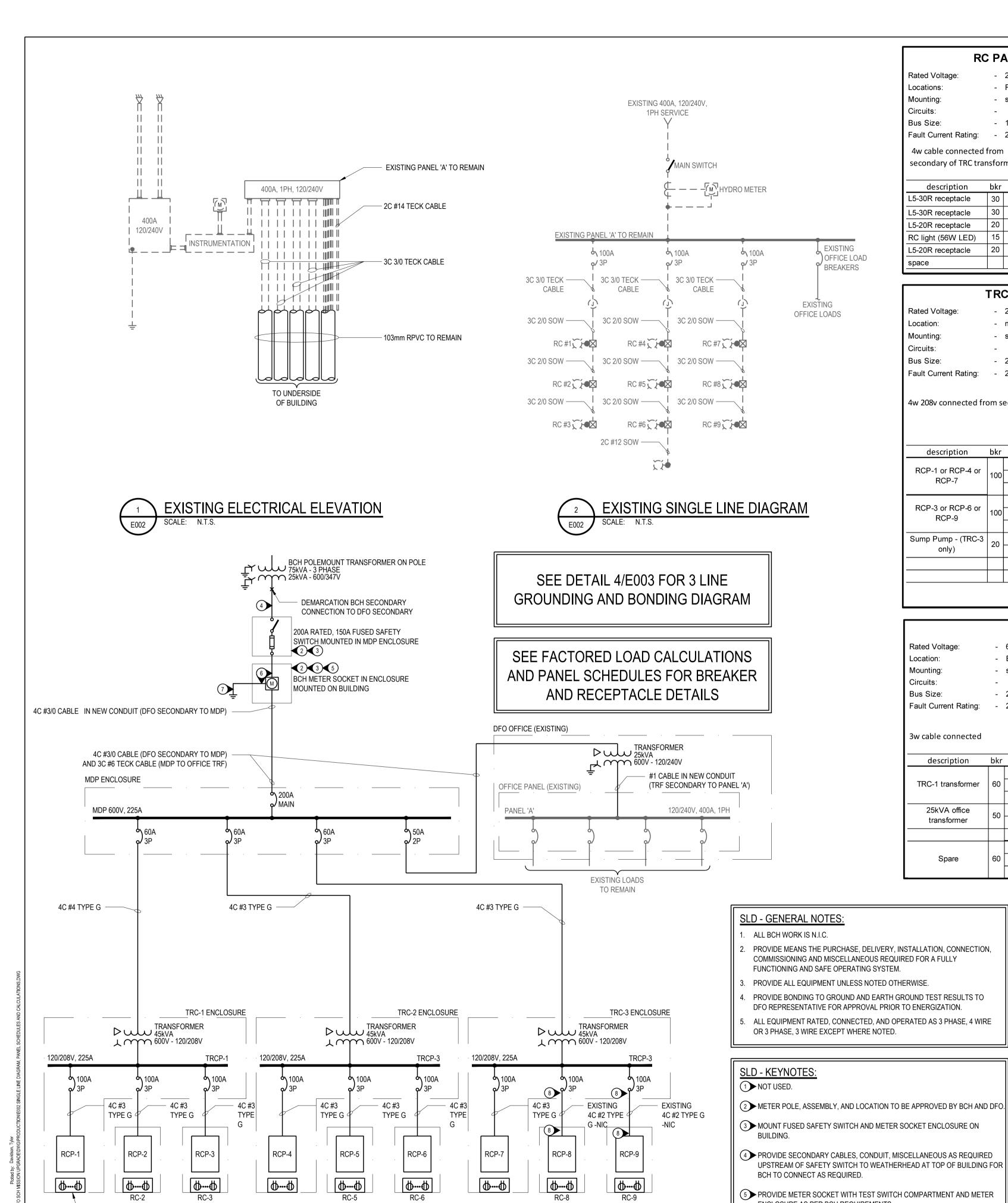
### **ELECTRICAL RECONSTRUCTION - MISSION** SMALL CRAFT HARBOUR

Designed by/Concep	t par	
G.P./T.D.		
Drawn by/Dessine p	oar	
P.P.		
PWGSC Project Mana	iger/Administrateur de	Projets TPSGC
PWGSC, Architectural Ressources Architect	l and Engineering Reso ural et de Directeur d'	urces Manager/ Ingénierie, TPSGC
Client/client		
DFO - SCH		
Drawing title/Titre d	u dessin	
SITE PLAN -	EXISTING AND	•
PROPOSED (		
<b>ELECTRICAL</b>	_ LAYOUT	

E001

1 OF 5

131-19108-05



**ENCLOSURE** 

PWGSC - A1 - 841X594

4 \ FOR RECEPTACLE E002 CONFIGURATION

**ENCLOSURE** 

**ENCLOSURE** 

**ENCLOSURE** 

**ENCLOSURE** 

**NEW SINGLE LINE DIAGRAM** 

**ENCLOSURE** 

### RC PANELS (RCP-1 to RCP-3) Rated Voltage 208V 3 phase - RCP-1, RCP-2, RCP-3 Locations: Mounting: - surface (inside top of RC) - 12 Circuits: - 125A Bus Size: - 22kA Fault Current Rating: 4w cable connected from from TRCP-1 panel secondary of TRC transformer cct bkr description description bkr cct 2 30 L5-30R receptacle L5-30R receptacle 4 30 L5-30R receptable L5-30R receptacle 6 20 L5-20R receptacle 20 5 L5-20R receptacle 8 15 Float light (58W LED) RC light (56W LED) \_\_\_\_\_ **10** | 20 | L5-20R receptacle L5-20R receptacle 11 12 space space

TRC PANEL (TRCP-1,2,3) 208V 3 phase Rated Voltage: - mounted inside TRC enclosure Location: Mounting: - surface (inside top of TRC) Circuits: - 42 - 225A Bus Size: Fault Current Rating: - 22kA

4w 208v connected from secondary of TRC transformer to RC's

			_					fron	n TRC transformer
			N .	A E	<b>1</b> C				
description	bkr	cct					cct	bkr	description
RCP-1 or RCP-4 or RCP-7	100	1 3 5		•			2 4 6	100	RCP-2 or RCP-5 or RCP-8
RCP-3 or RCP-6 or RCP-9	100	7 9 11		•			8 10 12		Space
Sump Pump - (TRC-3 only)	20	13 15					14 16		
		17			<b>—</b>		18		
		19				_	20		
				et	tc	_			

MDP

Rated Voltage: Location: Mounting: Circuits: Bus Size:	<ul> <li>600V 3ph</li> <li>Exterior Harbour Office</li> <li>surface (inside MDP enclosure)</li> <li>42</li> <li>225A</li> </ul>
Fault Current Rating:	- 22kA
3w cable connected	from BCH meter
description	bkr cct cct bkr description
TRC-1 transformer	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$
25kVA office transformer	50 7 8 10 TRC-3 transformer
Spare	60 13 14 16 Space Space

# RC PANELS (RCP-4 to RCP-7)

- 208V 3 phase Rated Voltage: Locations: - RCP-4, RCP-5, RCP-6, RCP-7, Mounting: surface (inside top of RC)

20 11

Circuits: - 12 Bus Size: - 125A Fault Current Rating: - 22kA

.5-20R receptacle

4w cable connected from secondary of TRC transformer bkr cct L5-50R receptacle 2 30 L5-30R receptacle 4 30 L5-20R receptacle \_5-50R receptacle 6 20 L5-20R receptacle \_5-20R receptacle RC light (56W LED) | 15 | **7** 5-20R receptacle 20 **9 10** 20 L5-20R receptacle

12 space

### RC PANELS (RCP-8) - 208V 3 phase Rated Voltage: - RCP-8 Locations: Mounting: surface (inside top of RC) - 12 Bus Size: - 125A

Fault Current Rating:  4w cable connected secondary of TRC trai	from		N_	1	<u>/</u> ⊮			fror	n TRCP panel
description	description bkr cct cct bkr description								
_5-50R receptacle	50	1		_	_		2	30	L5-30R receptacle
_5-50R receptacle									
_5-20R receptacle	30	5	$\bigcirc$		, ,		6	20	L5-20R receptacle
RC light (56W LED)	ight (56W LED) 15 <b>7 8</b> 15 Float light (58W LED)								
		9	$\bigcirc$	Ц	,		10		
		11	_		_	_ `	12		space
			-		'				

### **RC PANELS (RCP-9)**

- 208V 3 phase Rated Voltage - RCP-9 \_ocations Mounting: - surface (inside top of RC)

- 12 Circuits: Bus Size: - 125A Fault Current Rating: - 22kA

4w cable connected from

lw cable connected fecondary of TRC tran									
description	bkr	cct	_	L,	<u> </u>	:	cct	bkr	description
5-30R receptacle	30	1		_	Ļ		2	30	L5-30R receptacle
5-30R receptacle	30	3	$\bigcirc$	Ļ	<u> </u>		4	30	L5-30R receptacle
5-30R receptacle	30	5	$\bigcirc$	L,	Ļ		6		space
C light (56W LED)	15	7	$\bigcirc$	_	Ļ		8	15	Float light (58W LE
pace		9	$\bigcirc$	L	<u> </u>		10		space
pace		11	_			_	12		space



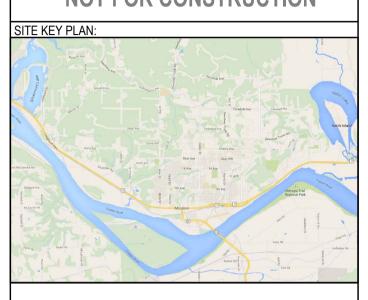
MDP Factored Load Calculations: 3ph 600v NEW SUPPLY, NEW LOAD											
Load at Service Entrance: To SCH office + 3 TRC's on floats											
Receptacle count	rec'pt	qty	amps	volts	ph	kW	mult	Total kW			
1st 4 highest rated		4	50	208	1	41.6	1.00	41.6			
Next 4 highest rated		2	50	208	1	20.8	0.65	13.5			
Next 4 flightest fated		2	30	120	1	7.2	0.65	4.7			
Next 5 highest rated		5	30	120	1	18.0	0.50	9.0			
Next 16 highest rated		16	30	120	1	57.6	0.25	14.4			
Next 20 highest rated		7	30	120	1	25.2	0.20	5.0			
		13	20	120	1	31.2	0.20	6.2			
Next 20 highest rated		20	20	120	1	48.0	0.15	7.2			
Remaining receptacles		3	20	120	1	7.2	0.10	0.7			
Total plug/receptacles	•	72						102.4			
Cabinet Lighting Fixture	56W	9				0.1	1.00	0.5			
Dock Lighting Fixture	58W	23				0.1	1.00	1.3			
Heat Trace								1.3			
Office load (est.)											
building	50W/m <sup>2</sup>	144	$m^2$				1.00	7.2			
water heater		1				1.9	1.00	1.9			
elec heat		2				1.3	0.75	1.9			
Estimated MDP load (89 rec'	ote + office	\						116.4			
·								110.4			
Feeder ampacity: volts	ph	amps									
from xfmr to MDP 600	3	112									







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Revision/ Revision	Description/Description	Date/Da
0	ISSUED FOR REVIEW	14/03/3
1	ISSUED FOR TENDER	14/03/25
a	RE-ISSUED FOR TENDER	15/06/20
3		
4		
5		

### FISHERIES AND OCEANS **SMALL CRAFT HARBOURS**

**401 BURRARD STREET, SUITE 200** VANCOUVER, BC

Project title/Titre du projet MISSION, B.C.

Client/client

**ELECTRICAL RECONSTRUCTION - MISSION SMALL CRAFT HARBOUR** 

Approved	by/Approuve par
Designed	by/Concept par
G.P./T.D.	

	PWGSC	Project	Manaç	ger/A	dministrateur	de	Projet	s TPSG	С
Г	PWGSC.	Archite	ctural	and	Engineering	Resc	urces	Manage	er/

Client/client	

Drawing title/Titre du dessin

**CALCULATIONS** 

SINGLE LINE DIAGRAM, PANEL **SCHEDULES AND** 

Project No./No. du projet	Sheet/Feuille	Revision n La Révisio
101 10100 00	F000	no.

131-19108-05 E002 2 OF 5

ENCLOSURE AS PER BCH REQUIREMENTS.

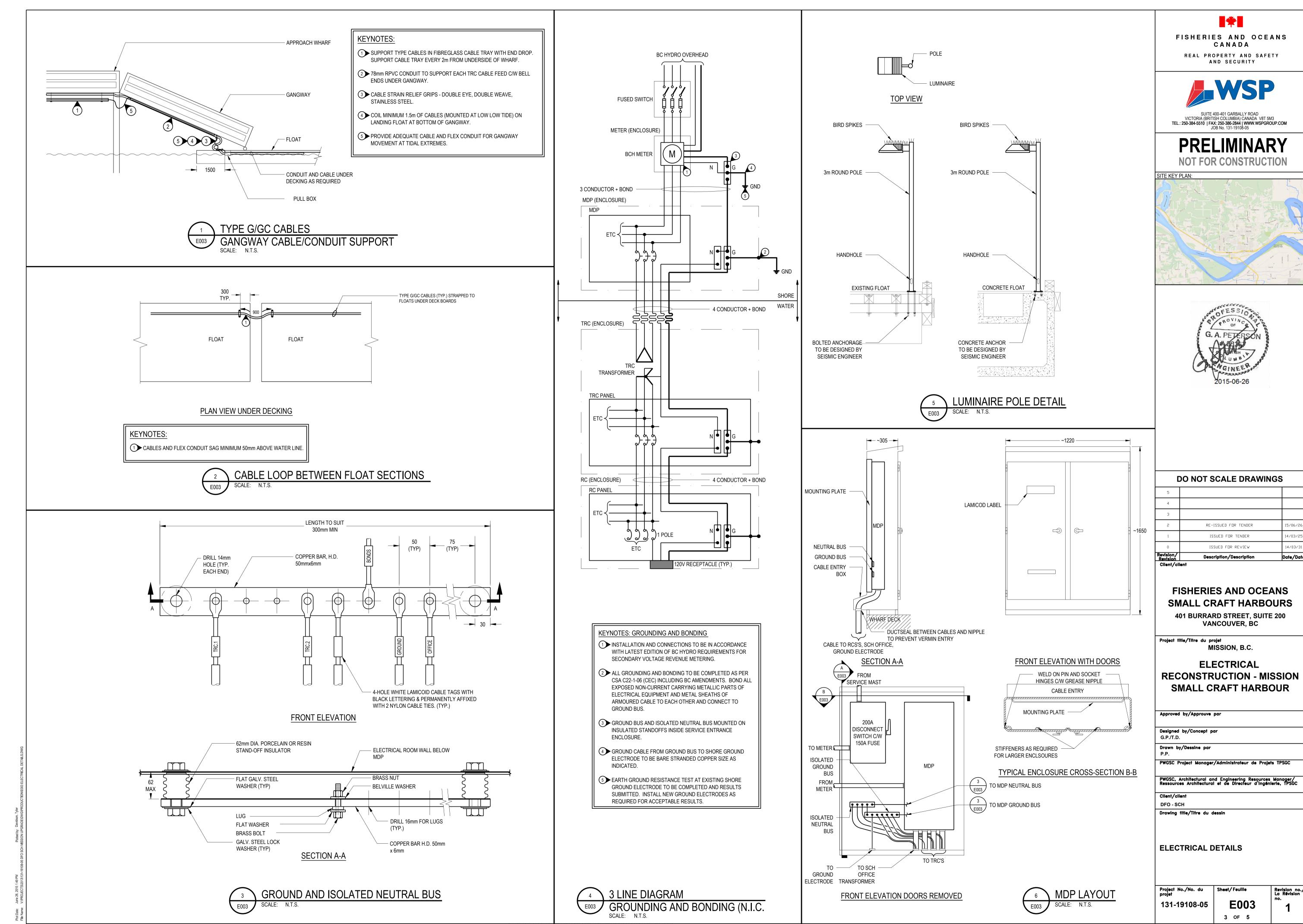
METER SOCKET NEUTRAL TO GROUND ROD.

5 PROVIDE METER SOCKET WITH TEST SWITCH COMPARTMENT AND METER

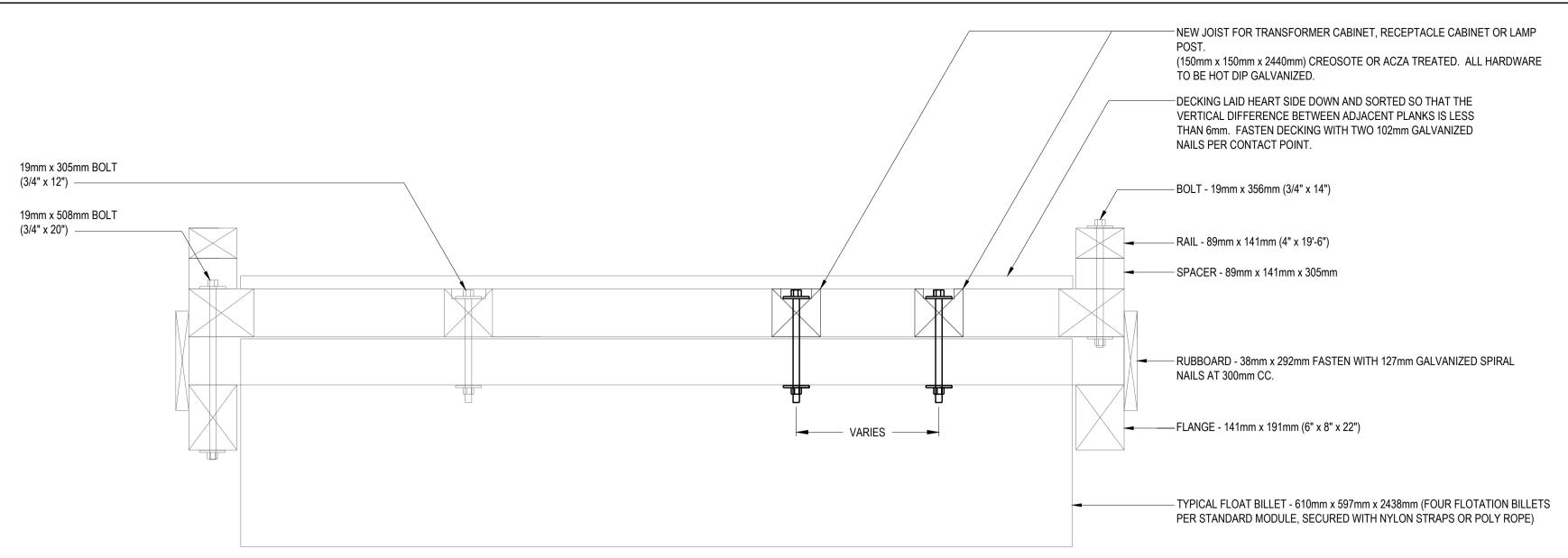
6 PROVIDE NEUTRAL FROM METER SOCKET TO WEATHERHEAD. CONNECT

7 PROVIDE GROUND ROD AND REQUIRED CONNECTIONS ADJACENT TO POLE.

(8) CONTRACTOR SHALL CONNECT EXISTING CABLES TO NEW CABINET



PWGSCA1



### **GENERAL NOTES:**

**KEYNOTES**:

- . TIGHTEN ALL ANCHOR BOLTS TO 80 FOOT POUNDS.
- OBTAIN REQUIRED CLEARANCES FROM HARBOUR MASTER FOR EACH CABINET ON EACH FLOAT PRIOR TO INSTALLATION.

1 MODIFY RECEPTACLE MOUNTING PLATE LOCATION AND

WITH MELAMINE BODY AND NYLON FACE.

CABLES AS NECESSARY.

DIMENSIONS TO ACCOMMODATE ALL RECEPTACLES AND

THEIR CORRESPONDING PLUG AND CABLE ASSEMBLIES.

2 RECEPTACLE SHALL BE SINGLE, TWIST LOCK MARINE GRADE,

3 REPLACE CABTYRE SUPPORT KELLEMS GRIPS. RE-ARRANGE

AND TIDY UP CABLES AS NECESSARY. KELLEMS GRIPS -DOUBLE EYE, DOUBLE WEAVE, STAINLESS STEEL.

HARDWARE AS NECESSARY. RE-ARRANGE AND TIDY UP

(4) REPLACE SUPPORT HARDWARE WITH STAINLESS STEEL

SUITE 400-401 GARBALLY ROAD
VICTORIA (BRITISH COLUMBIA) CANADA V8T 5M3
TEL.: 250-384-5510 | FAX: 250-386-2844 | WWW.WSPGROUP.COM

\*

FISHERIES AND OCEANS

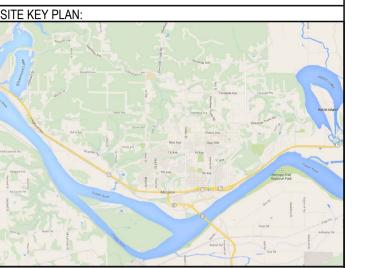
CANADA

REAL PROPERTY AND SAFETY

AND SECURITY

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Description/Description

### FISHERIES AND OCEANS **SMALL CRAFT HARBOURS**

**401 BURRARD STREET, SUITE 200** VANCOUVER, BC

Project title/Titre du projet MISSION, B.C.

Client/client

**ELECTRICAL RECONSTRUCTION - MISSION** SMALL CRAFT HARBOUR

PWGSC Project Manager/Administrateur de Projets TPSGC

PWGSC, Architectural and Engineering Resources Manager/ Ressources Architectural et de Directeur d'Ingénierie, TPSGC

Client/client DFO - SCH

Drawing title/Titre du dessin

Approved by/Approuve par

Designed by/Concept par

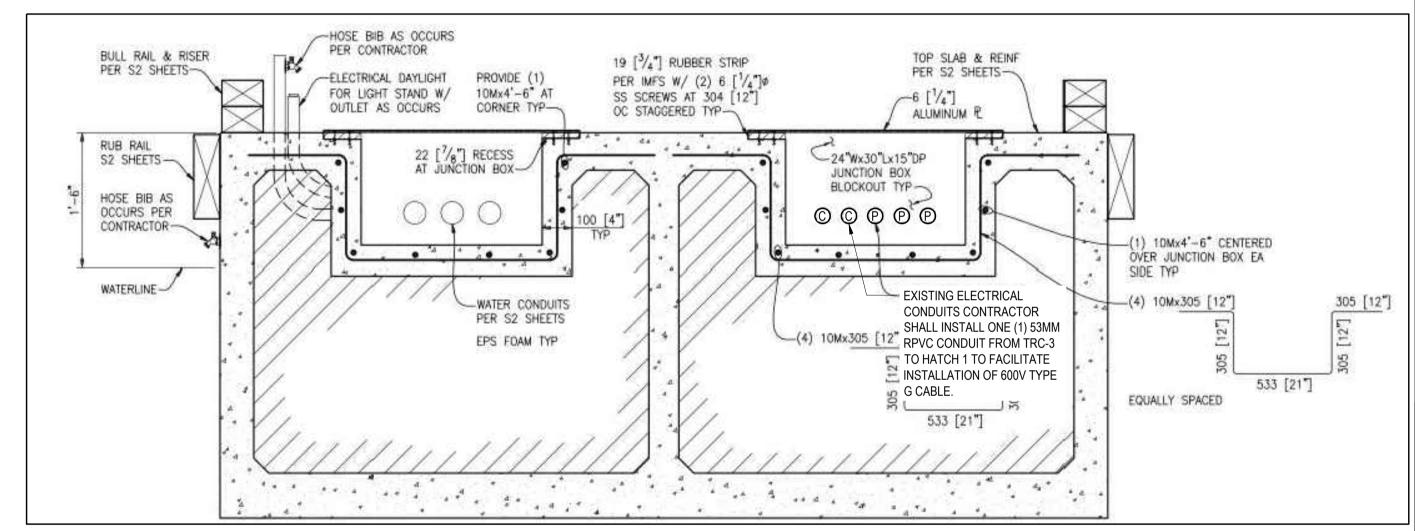
G.P./T.D.

RECEPTACLE CABINET (RC) **AND FLOAT DETAILS** 

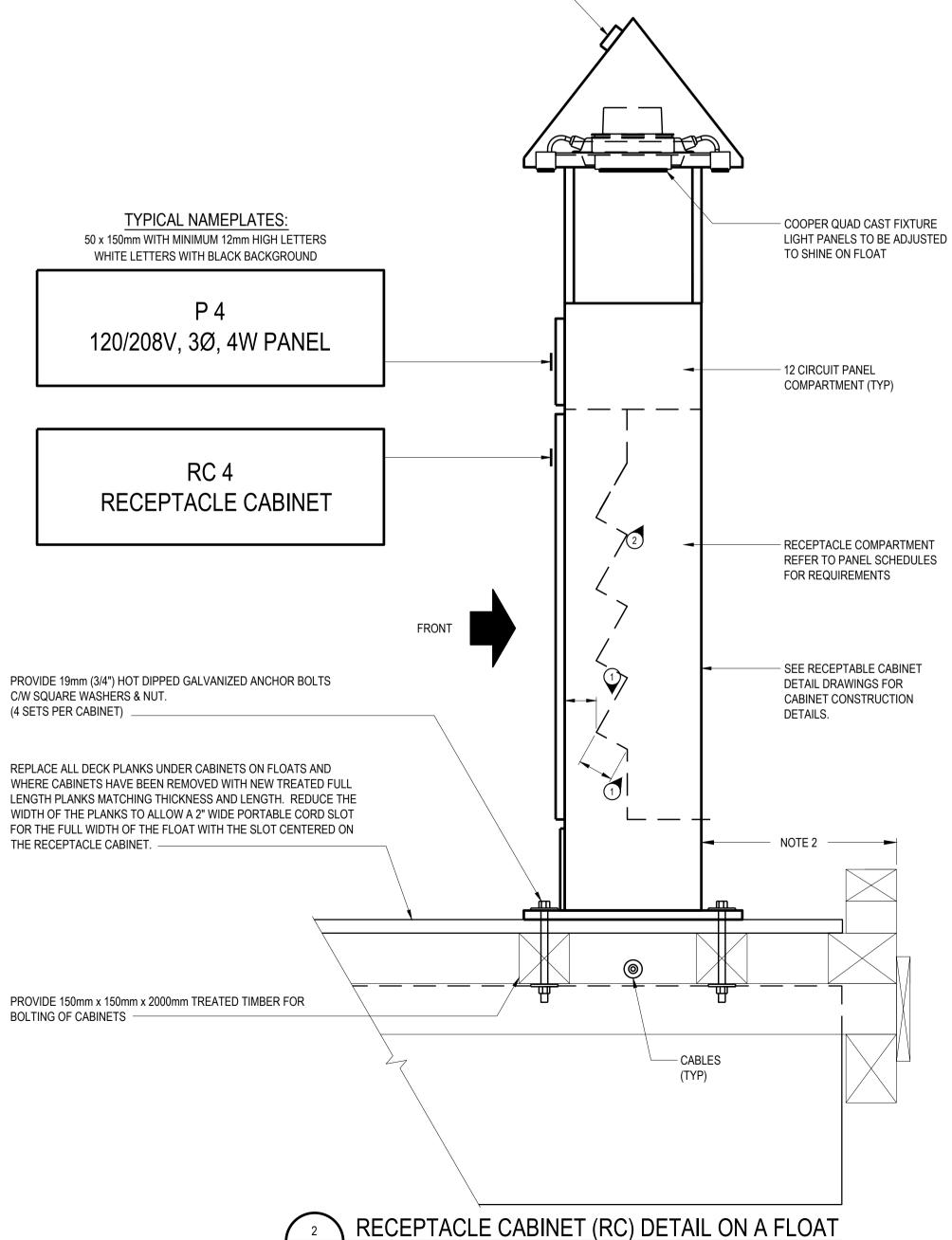
Revision no., La Révision E004 131-19108-05

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TYPICAL CROSS-SECTION OF EXISTING 2743mm (9'-0") WIDE FLOAT

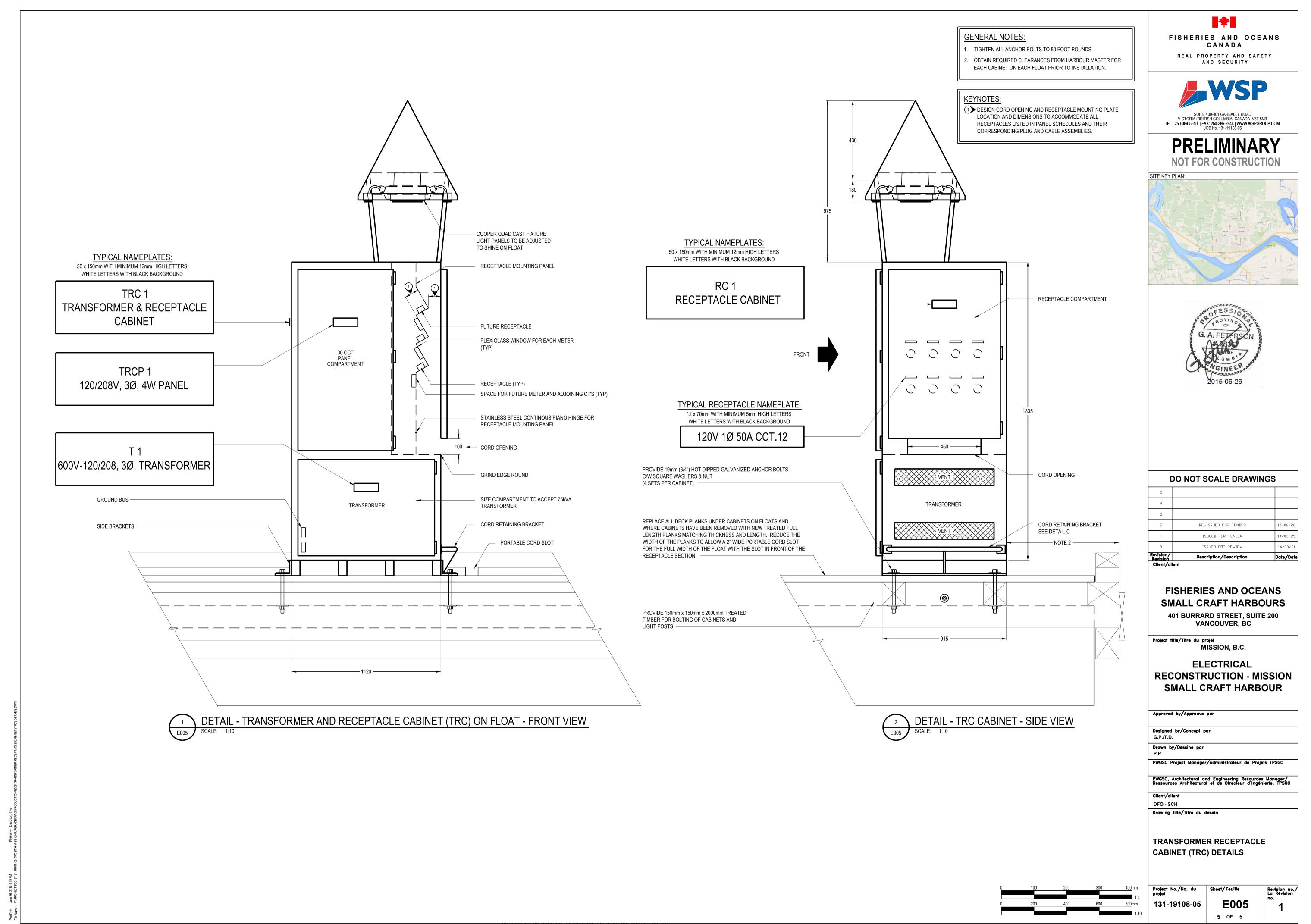


TYPICAL CROSS SECTION OF CONCRETE FLOAT



PWGSC - A1 - 841X594

PHOTOCELL



XT-PWGSCA1