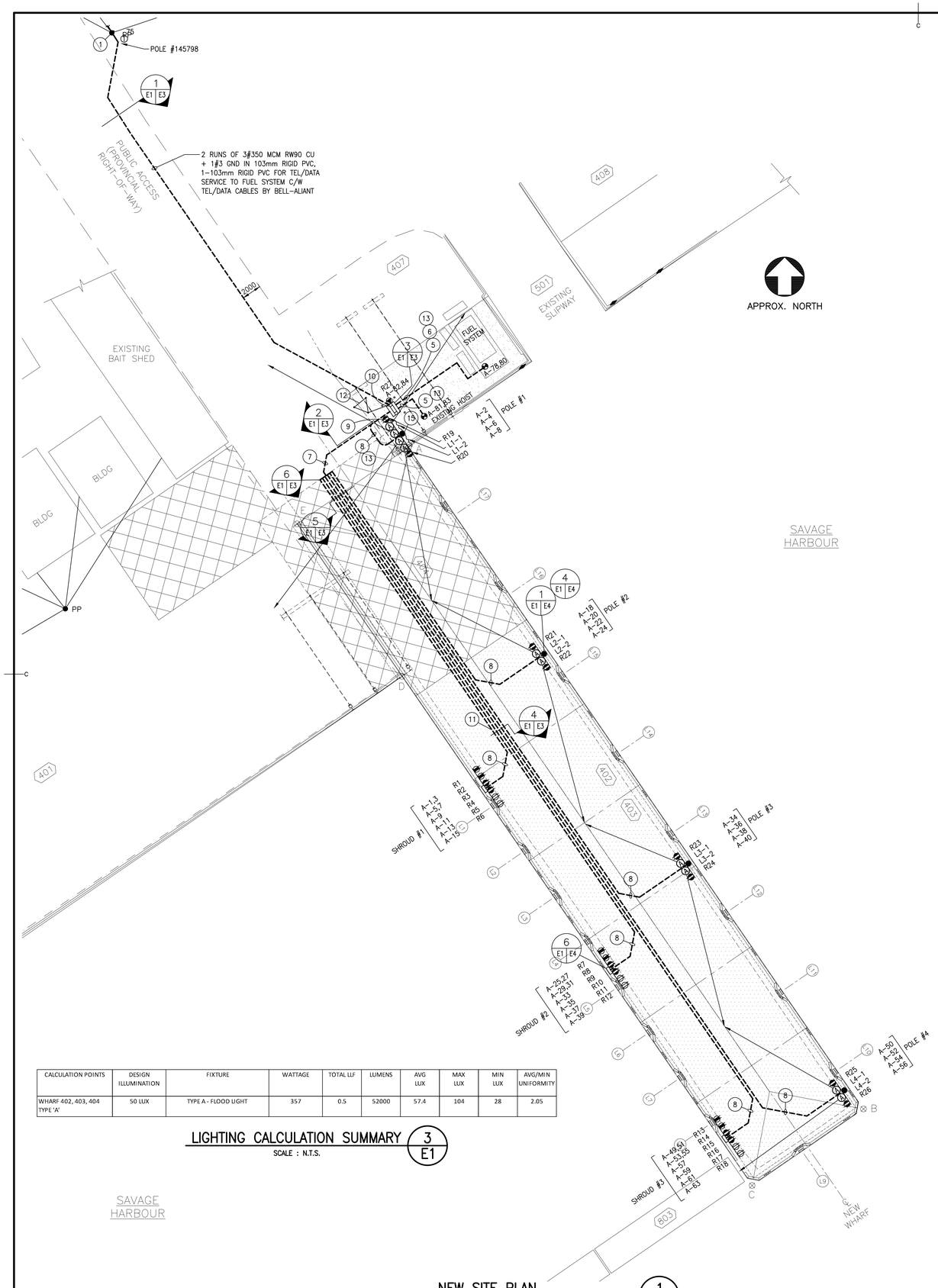


CALCULATION POINTS	DESIGN ILLUMINATION	FIXTURE	WATTAGE	TOTAL LLF	LUMENS	AVG LUX	MAX LUX	MIN LUX	AVG/MIN UNIFORMITY
WHARF 402, 403, 404 TYPE 'A'	50 LUX	TYPE A - FLOOD LIGHT	357	0.5	52000	57.4	104	28	2.05

LIGHTING CALCULATION SUMMARY — 3/E1

SCALE : N.T.S.

NEW SITE PLAN — 1/E1

SCALE: 1:200

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

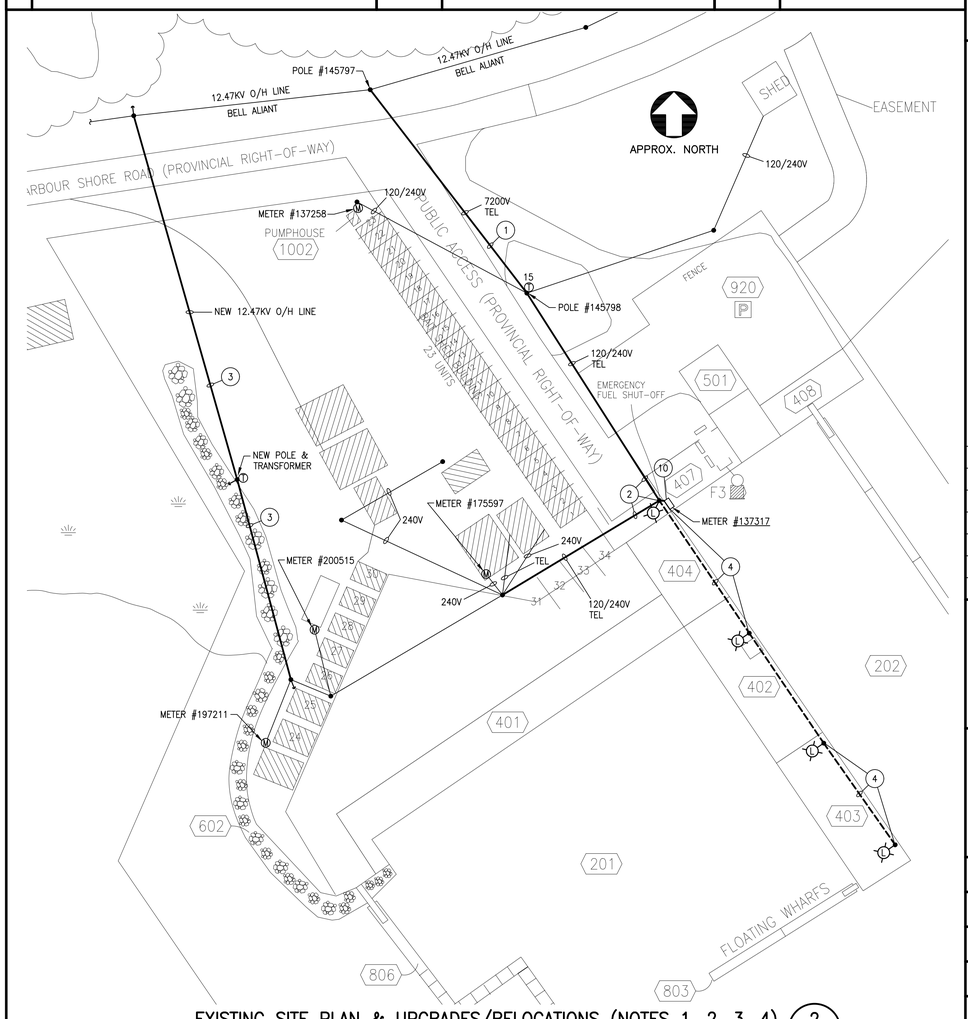
NOTES

1. EXISTING 7200V 1ϕ SERVICE C/W TEL SERVICE BELOW. ELECTRICAL CONTRACTOR TO PAY FOR M.E.C.L. TO UPGRADE O/H SERVICE, POLE AND TRANSFORMER TO ACCOMMODATE LOAD DETAILED IN SERVICE ENTRANCE CALCULATION IN DETAIL 2 ON DRAWING E2.
2. ELECTRICAL CONTRACTOR TO PAY FOR M.E.C.L. AND BELL ALIANT TO REMOVE OVERHEAD 120/240V AND TEL SERVICES C/W WOOD POLE AND METER. D.F.O./H.A. REQUIRE O/H LINES TO BE REMOVED AND REROUTED DUE TO BOATS THAT ARE HIGH LOADS ON WHARF AS PER NOTE 3.
3. ELECTRICAL CONTRACTOR TO PAY FOR M.E.C.L. AND BELL ALIANT TO REROUTE 120/240V POWER AND TEL SERVICE FROM POLE #145798 TO THE WEST OF THE 23 UNIT BUILDING TO SERVICE EXISTING 120/240V AND TEL SERVICE REROUTED AS PER NOTE 2.
4. ELECTRICAL CONTRACTOR TO REMOVE EXISTING SERVICE ENTRANCE, WIRE IN U/G CONDUITS, SERVICES ON 4 LIGHT POLES, 4 WOOD POLES ON WHARF. EXISTING LED LIGHTS AND BRACKETS ON 4 WOOD POLES TO BE TURNED OVER TO H.A. IN GOOD CONDITION.
5. EXISTING TECK CABLES IN RIGID PVC U/G CONDUIT TO BE TRACED OUT ELECTRICALLY MARKED ON CONCRETE DECK AND REROUTED TO NEW ENCLOSURE PANEL 'A'. PRIOR TO RECONNECTION MEGGER TECK CABLES. IF ISOLATION RESISTANCE IS LESS THAN 1 MOHM. THE DEPARTMENTAL REPRESENTATIVE WILL ADDRESS APPROPRIATELY.
6. EXISTING TEL/DATA CABLE IN RIGID PVC CONDUIT TO BE REROUTED TO WOOD FRAME FOR PANEL 'A' ENCLOSURE AND PAY FOR BELL ALIANT TO CONNECT TO NEW U/G CABLE IN BELL ALIANT CONNECTION BOX.
7. 12-53mm RIGID PVC CONDUITS. (60mm O.D.)
8. 2-53mm RIGID PVC CONDUITS. (60mm O.D.)
9. ALIGN 2 BOLLARDS WITH EAST EDGE OF WHARF 404 AND 3.4 METERS FROM FACE OF WHARF 407.
10. RELOCATE AND REWIRE FUEL PUMP EMERGENCY SHUT OFF PUSH BUTTONS AND DATA SERVICE FROM EXISTING PLYWOOD ON WOOD POLE TO NEW PLYWOOD ON PANEL 'A' ENCLOSURE.
11. LOCATION OF WHARF EXPANSION JOINT AS PER DETAIL 2 ON DRAWING E4.
12. GROUND GRID AS PER DETAIL 1 ON DWG E2. 1#2 CU RW90 IN 25mm PVC CONNECTED TO 3-3m LONG BY 19mm DIA. COPPER GROUND RODS PLACED IN A 3 METER TRIANGLE 3 METERS FROM THE MCB AND CONNECTED TO SERVICE ENTRANCE GROUND GRID.
13. GENERAL CONTRACTOR TO CUT AND RESTORE EXISTING CONCRETE DECK.
14. CONDUITS CONCRETE ENCASED C/W REBAR SIMILAR TO DETAIL 2 ON DRAWING E3.
15. LIGHT POLE #1 IS LOCATED ON NEW PEDESTAL ON EXISTING CONCRETE PAD WITH UPDATED FOUNDATION DETAILED ON STRUCTURAL DRAWINGS.

SYMBOL / LEGEND

SYMBOL	LEGEND
	EXISTING OR NEW UNDERGROUND (U/G) WIRE IN RIGID PVC CONDUIT.
	EXISTING OVERHEAD (O/H) WIRE.
	EXISTING WOOD POLE.
	NEW NEMA 5-20R, 120V DUPLEX GFI RECEPTACLE C/W IN-USE WEATHERPROOF COVERPLATE.
	NEW 50A 120/240V 1ϕ 3W WELDING RECEPTACLE.
15	EXISTING POLE MOUNTED TRANSFORMER 15KVA 7200-120/240V 1ϕ 3W. TO BE UPGRADED TO 75KVA.
	EXISTING DIRECT CONNECT.
	NEW 20A 120V SINGLE TWIST LOCK MARINE GRADE RECEPTACLE C/W SPRING LOADED COVERPLATE AND GFI MODULE.
	NEW 30A 120/240V 1ϕ 4W SINGLE TWIST LOCK MARINE GRADE RECEPTACLE C/W SPRING LOADED COVERPLATE.
A	NEW 357W LED 120V MARINE GRADE FLOOD LIGHT LUMINAIRE.
MCB	MAIN CIRCUIT BREAKER.
M.E.C.L.	MARITIME ELECTRIC COMPANY LTD.
PANEL 'A'	NEW WEATHERPROOF ALUMINUM ENCLOSURE C/W PANEL 'A', PHOTOCELL, TIME CLOCK & CONTACTORS.
M	UTILITY METER IN NEMA 3R METER SOCKET.
600/2P	600A 2P 120/240V ENCLOSED CIRCUIT BREAKER IN NEMA 4X ENCLOSURE.
	19mm x 3m DIA. COPPER GROUND ROD.
A A A A	10.7 METER GALVANIZED STEEL LIGHT POLE C/W BULLARM AND 2 OR 4 TYPE A LIGHT FIXTURES MOUNTED ON 1220mm HIGH CONCRETE BASE. ARROW INDICATES AIMING ANGLE - FIXTURE TO BE TILTED UP 55 DEGREES.
	EXISTING LED ROADWAY LIGHT FIXTURE ON EXISTING WOOD POLE.
	LIGHT FIXTURE AIMING LOCATIONS.
GSC	GALVANIZED STEEL CONDUIT.
402	WHARF SECTION NUMBER.
PC	PHOTO ELECTRIC CELL.
TC	TIME CLOCK.
C	30A 120V 8P CONTACTOR.
$	TIME CLOCK/PHOTOCELL 120V BY-PASS SWITCH.

SYMBOL	LEGEND
H.A.	ELECTRICAL ENCLOSURE.
A / C	HARBOUR AUTHORITY.
	A - DETAIL NUMBER.
A / B C	B - LOCATION DRAWING NUMBER.
	C - DRAWING NUMBER.



EXISTING SITE PLAN & UPGRADES/RELOCATIONS (NOTES 1, 2, 3, 4) — 2/E1

SCALE: 1:500

0m 10m 20m 30m 40m 50m

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

SHM CANADA
INNOVATIVE ENGINEERING AND DESIGN
STRUCTURAL ENGINEERING | STRUCTURAL HEALTH MONITORING

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Stamp / Etampe

THE ASSOCIATION OF PROFESSIONAL ENGINEERS OF THE PROVINCE OF PRINCE EDWARD ISLAND
VALID FOR THE YEAR 2022
Tracey L. McDade
No. 1051
DATE: 2022.03.23
LICENSED PROFESSIONAL ENGINEER
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revisions	description	date
0	ISSUED FOR TENDER	2022 03.23

project / projet

WHARF CONSTRUCTION
402, 403, and 404
SAVAGE HARBOUR
QUEENS CO., PE

drawing / dessin

ELECTRICAL
EXISTING & NEW SITE
PLAN & LEGEND

designed	RALPH SMITH, P. ENG.	conçu
date	2022.03.23	
drawn	JODI PARKER	dessiné
date	2022.03.23	
approved	TRACEY McDADE, P. ENG.	approuvé
date	2022.03.23	
Tender		Soumission
PWGSC Project Manager		Administrateur de projets TPSGC

project number / no. du projet: R.117999.001

drawing no. / no. du dessin: E1 of 4

PWGSC B1 (2004)

E-DRM/GDD-E: 553388

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