GENERAL NOTES

HORIZONTAL GRID COORDINATES ARE IN UTM NAD 83 CSRS ZONE 20. DEPTHS ARE IN METRES, AND REFERENCED TO CANADIAN HYDROGRAPHIC SERVICE (CHS) CHART DATUM. SOUNDINGS WERE ROUNDED ACCORDING TO CANADIAN HYDROGRAPHIC SERVICE (CHS) SURVEY STANDARDS USING A 0.05 METRE THRESHOLD ON DEPTHS BELOW CHART DATUM.

THE HORIZONTAL COORDINATE VALUES OF P.E.I. MONUMENT 5626 ARE REFERENCED TO CSRS NAD83 DATUM AS LISTED IN THE PROVINCIAL DATABASE IN OCTOBER 2017.

FIELD SURVEY USED A TRIMBLE R7 GPS BASE RECEIVER AND POS MV320 ON BOARD THE SURVEY VESSEL FOR REAL-TIME KINEMATIC POSITIONING.

SOUNDINGS WERE COLLECTED WITH A RESON SEABAT T50 MULTI-BEAM SYSTEM USING 512 BEAM MODE OPERATING AT 400 kHz.

SOUND VELOCITY PROFILES WERE OBTAINED WITH AN APPLIED MICROSYSTEMS SVP PLUS SOUND VELOCITY PROFILER.

THE RAW SURVEY DATA WAS PROCESSED USING CARIS HIPS AND SIPS v.11.4.23 AND AVERAGE DEPTHS EXPORTED AT A 0.5m BY 0.5m REGULAR GRID. MINIMUM DEPTHS WERE PRODUCED FROM HYPACK® 2022 AT AN IRREGULAR GRID OF 2.4 x 6.0 METRES FOR THE SOUNDINGS PLANS FOR PRODUCING SOUNDING PLANS.

THE USE OF CHS ENC CA576182 IS UNDER COPYRIGHT, HIS MAJESTY THE KING IN RIGHT OF CANADA, REPRESENTED BY THE MINISTER OF FISHERIES AND OCEANS, ON BEHALF OF THE CANADIAN HYDROGRAPHIC SERVICE. IT IS NOT TO BE USED FOR NAVIGATION IN THIS FORMAT.

CHS ENC CA576182 SHOWN ON THIS DRAWING IS A GEOTIFF IMAGE PRODUCED FROM THE CHS ENC ON JUNE 10, 2024. IT IS DISPLAYED HERE AT A SCALE OF 1:6,000 IT HAS BEEN DIGITALLY MODIFIED FOR CARTOGRAPHIC PRESENTATION PURPOSES. THE ENC IS UP TO DATE AS OF JUNE 10, 2024. THE LATEST UPDATE WAS JUNE 4, 2024. DEPTHS ON THE CHART ARE SHOWN IN METRES AND REFERENCED TO CHS CHART DATUM.

THE CHANNEL AND CENTERLINE COORDINATES, AND VECTOR BASED MAPPING SHOWN ON THESE PLANS ARE FROM HISTORICAL PWGSC SURVEYS AND P.E.I. PROVINCIAL MAPPING. THEIR COORDINATES ARE BASED ON THE NAD83 ORIGINAL ADJUSTMENT.

LEGEND

- C.C.G. BUOY CARD POSITION
- PWGSC OBSERVED BUOY POSITION
- VERTICAL CONTROL
- HORIZONTAL CONTROL
- NAVIGATIONAL LIGHT
- NAVIGATION RANGE
- 1.4/+1.0 DEPTH BELOW/ABOVE CHART DATUM

HISTORICAL CHANNEL CENTERLINE COORDINATES

NODE	EASTING(m)	NORTHING(m)	STATION (m)
1	439330.15	5137392.04	0+000.00
2	436974.76	5136656.31	2+467.62
3	436696.23	5136431.61	2+825.49
4	435932.85	5135085.36	4+373.11

HISTORICAL CHANNEL COORDINATES

NODE	EASTING(m)	NORTHING(m)
5	439310.370	5137430.386
6	439286.356	5137333.781
7	439274.004	5137283.894
8	439281.777	5137282.001
9	439573.259	5137211.020
10	438984.790	5137239.591
11	436995.140	5136618.150
12	436729.220	5136403.610
13	435969.820	5135064.400
14	435896.911	5135105.736
15	436764.100	5136635.090

CANADIAN COAST GUARD NAVIGATION FIXED AIDS

C.C.G. SIPA CARD POSITIONS

LIST OF LIGHTS	UTM NAD83 (ZONE 20) NORTHING (m)	UTM NAD83 (ZONE 20) EASTING (m)	NAD83 DATUM LATITUDE	NAD83 DATUM LONGITUDE	DATE OBTAINED
LL.1018.1	5138288.70	437749.43	46° 23' 43.1"	63° 48' 35"	2017/11/19
LL.1018.2	5138661.842	437960.725	46° 23' 55.258"	63° 48' 25.285"	2017/11/19
LL.1020.0	5136562.9	437174.2	46° 22' 47.00"	63° 49' 01.10"	2017/11/19
LL.1021.0	5137387.0	439316.6	46° 23' 14.40"	63° 47' 21.20"	2017/11/19
LL.1022.0	5137815.841	440686.893	46° 23' 28.732"	63° 46' 17.245"	2017/11/19
LL.1022.5	5137503.218	439457.698	46° 23' 18.212"	63° 47' 14.649"	2017/11/19

SURVEY NOTES

SURVEY PARTY CHIEF: SERGE VAUTOUR
SURVEY VESSEL: RAMPART SURVEYOR
SURVEY DATE(S): MAY 14 & 15, 2024

SOUNDER TYPE: RESON T50 MULTIBEAM SYSTEM
SOUNDER SETTING: BEST CVRG. SPEED OF SOUND: SOUND VELOCITY PROFILES
DEPTH GATE USED: N/A FREQ. OF TRANSDUCER: 400 kHz

POSITIONING SYSTEM USED: TRIMBLE R7 & APPLANIX POS MV 320 V5
RAW DATA FILE(S): SUM2024_135MX.ZIP
CAD DRAWING FILE(S): SUM2024_135MA.DWG

TIDAL REDUCTION SCHEME: CHS BM 1-1983, 3.26m ABOVE CHART DATUM, AT BASE OF BOLLARD ON PUBLIC WHARF. TIDE VALUES WERE OBSERVED WITH RTK TRIMBLE GPS AND REDUCED TO CHART DATUM.

OFFICE PROCESSOR: ELLEN MULLIN
DATE OF PROCESSING: MAY 2024
MODE OF PLOTTING: MINIMUM OF AVERAGE DEPTHS AT 0.5m BY 0.5m
MATRIX CELL WIDTH X LENGTH: 2.4m x 6.0m
CONTROL POINTS: UTM NAD83 CSRS (Zone 20)

Pt. NAME	EASTING	NORTHING	CD ELEV	DESCRIPTION	
5626	439315.101	5137631.334	3.88m	P.E.I. CONTROL	
1-1983	N/A	N/A	3.26m	CHS BENCHMARK	

DRAWING REVIEWED BY:

SIGNATURE DATE

NAVIGATION AIDS TABLE

PWGSC OBSERVED POSITIONS BUOY ID	(UTM ZONE 20 – NAD83) NORTHING	EASTING	NAD83 DATUM LATITUDE	LONGITUDE	DATE POSITIONED	C.C.G. SIPA CARD POSITIONS BUOY ID	(UTM ZONE 20 – NAD83) NORTHING	EASTING	NAD83 DATUM LATITUDE	LONGITUDE	REC'D DATE FROM CCG
DE3	5135064.70	435859.92	46° 21' 58.0"	63° 50' 01.9"	2024-05-14	DE3	5135070.20	435863.83	46° 21' 58.2"	63° 50' 01.7"	2024-04-22
DE4	5135749.69	436356.86	46° 22' 20.4"	63° 49' 39.0"	2024-05-14	DE4	5135744.19	436351.67	46° 22' 20.2"	63° 49' 39.2"	2024-04-22
DE6	5136416.51	436734.92	46° 22' 42.1"	63° 49' 21.6"	2024-05-14	DE6	5136419.32	436732.60	46° 22' 42.2"	63° 49' 21.7"	2024-04-22
DE7	5136623.63	436765.49	46° 22' 48.8"	63° 49' 20.3"	2024-05-14	DE7	5136635.04	436766.89	46° 22' 49.2"	63° 49' 20.2"	2024-04-22
DE8	5136639.92	437010.48	46° 22' 49.4"	63° 49' 08.8"	2024-05-14	DE8	5136632.49	437012.54	46° 22' 49.2"	63° 49' 08.7"	2024-04-22
DE10	5136832.20	437702.70	46° 22' 55.9"	63° 48' 36.5"	2024-05-14	DE10	5136841.51	437698.31	46° 22' 56.2"	63° 48' 36.7"	2024-04-22
DE11	5137076.14	438148.66	46° 23' 04.0"	63° 48' 15.7"	2024-05-14	DE11	5137068.42	438149.23	46° 23' 03.7"	63° 48' 15.7"	2024-04-22
DE12	5137038.48	438331.14	46° 23' 02.8"	63° 48' 07.2"	2024-05-14	DE12	5137035.71	438330.47	46° 23' 02.7"	63° 48' 07.2"	2024-04-22
DE14	5137197.87	438840.72	46° 23' 08.1"	63° 47' 43.4"	2024-05-14	DE14	5137200.40	438834.12	46° 23' 08.2"	63° 47' 43.7"	2024-04-22
DE15	5137321.78	439012.21	46° 23' 12.2"	63° 47' 35.4"	2024-05-15	DE15	5137328.32	439006.30	46° 23' 12.4"	63° 47' 35.7"	2024-04-22
DE16	5136984.57	439272.44	46° 23' 01.4"	63° 47' 23.1"	2024-05-15	DE16	5136986.20	439263.48	46° 23' 01.4"	63° 47' 23.5"	2024-04-22
DE18	5137153.73	439550.54	46° 23' 06.9"	63° 47' 10.1"	2024-05-15	DE18	5137146.85	439559.87	46° 23' 06.7"	63° 47' 09.7"	2024-04-22
DG1	5137440.22	439114.22	46° 23' 16.1"	63° 47' 30.7"	2024-05-15	DG1	5137444.54	439114.26	46° 23' 16.2"	63° 47' 30.7"	2024-04-22

CITY of SUMMERSIDE

APPROXIMATE MEAN HIGH WATER LINE

Water Street

Granville Street

5626

CHS BM 1-1983

PUBLIC WHARF

LL.1022.5

LL.1021

SUMMERSIDE INNER RANGE

SUMMERSIDE OUTER RANGE

TURNING BASIN

DE1 DE2 DE3 DE4 DE6 DE7 DE8 DE10 DE11 DE12 DE14 DE15 DE16 DE18 DG1

LL.1020

CHANNEL LIMITS

APPROXIMATE MEAN HIGH WATER LINE

SUMMERSIDE HARBOUR

SHEET 2 OF 7

SHEET 3 OF 7

SHEET 4 OF 7

SHEET 5 OF 7

BEDEQUE BAY

SHEET 6 OF 7

SHEET 7 OF 7

GRID NORTH
UNIVERSAL TRANSVERSE MERCATOR
N.A.D. 83 CSRS ZONE 20

63° 50' 63° 49' 63° 48'

46° 22'

N 5 138 000 N 5 137 500 N 5 137 000 N 5 136 500 N 5 136 000 N 5 135 500 N 5 135 000

E 436 000 E 436 500 E 437 000 E 437 500 E 438 000 E 438 500 E 439 000 E 439 500

SCALE: 1:5000

0m 100m 200m 300m 400m 500m

0 10 20mm 40 60 80 100 120 140 160 180 200mm

PWGSC B1 (2004)

E-DRM/GDD-E:

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

LOCATION PLAN
NOT TO SCALE

NOT TO BE USED FOR NAVIGATION IN THIS FORMAT

DEPTH COLOR RANGES

- 7.3 m AND DEEPER
- 6.7 TO 7.2 m
- 6.4 TO 6.6 m
- 4.0 TO 6.3 m
- 3.9 m AND SHALLOWER

BUOY LEGEND

- CCG BUOY CARD POSITION (APRIL 22, 2024)
- PSPC OBSERVED BUOY POSITION (MAY 14 & 15, 2024)

revisions | date

project | projet

HYDROGRAPHIC SURVEY SUMMERSIDE CHANNEL

SUMMERSIDE
PRINCE COUNTY, P.E.I.

drawing | dessin

KEY PLAN, SHEET LAYOUT, BATHYMETRY, CHS CHART, NAVIGATION AIDS & TABLES, LEGEND AND NOTES

designed | conçu

date

drawn: E. VAN NULAND & E. MULLIN | dessiné

date: JUNE 13, 2024

approved | approuvé

date

tender | Soumission

PWGSC Project Manager | Administrateur de projets TPSGC

project number | no. du projet

drawing no. | no. du dessin

1 OF 7