

MAINTENANCE DREDGING 2019

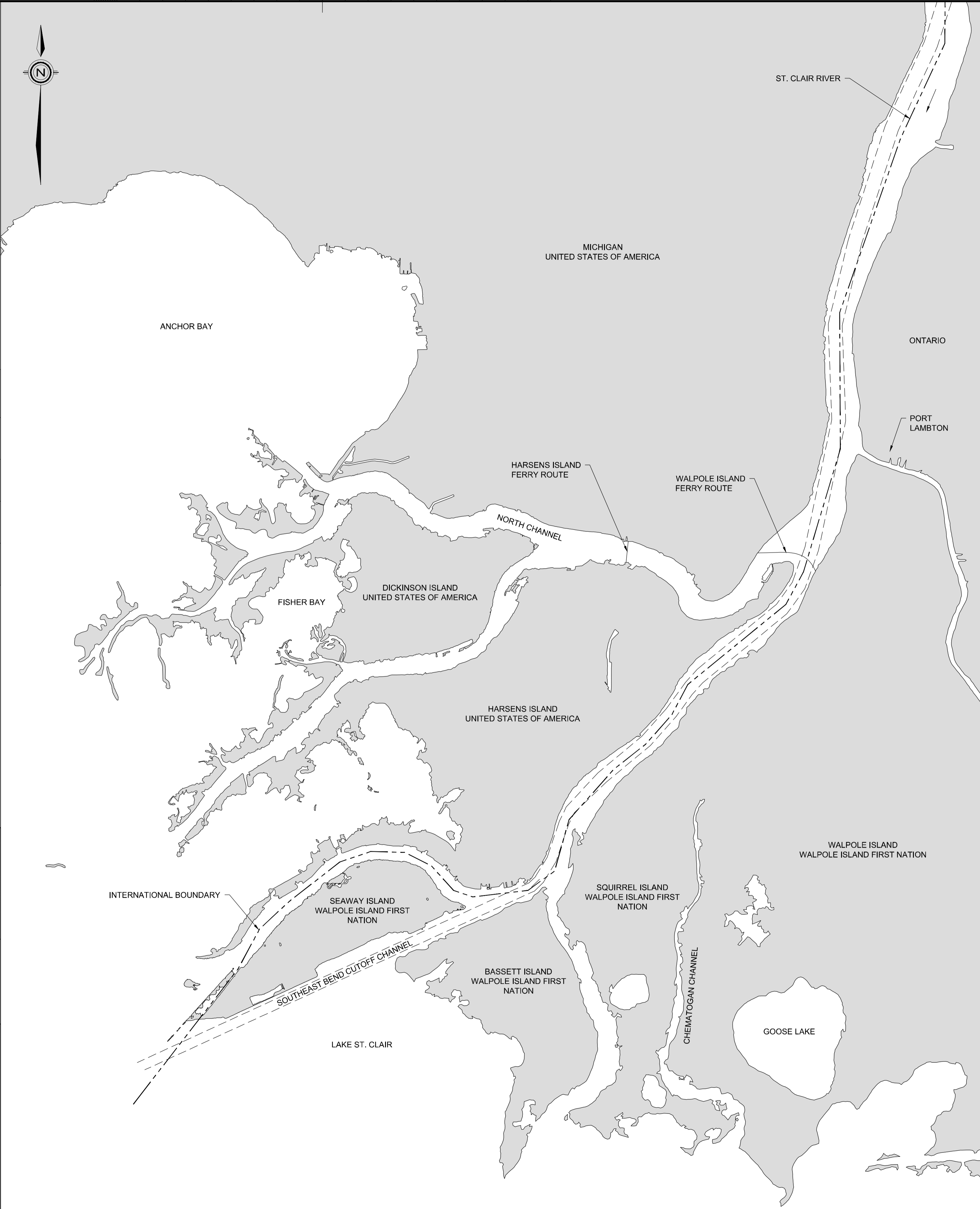
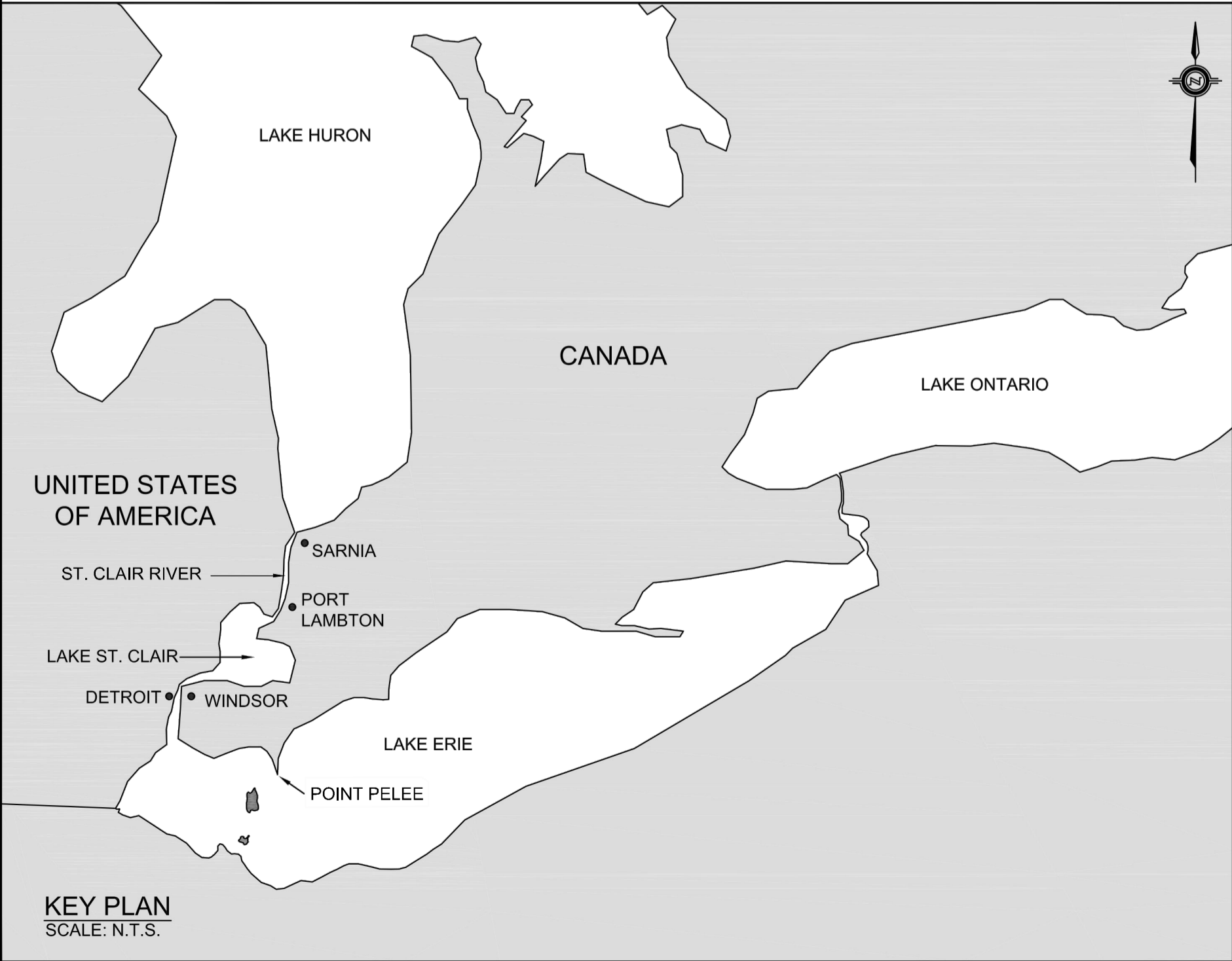
ST. CLAIR RIVER, ONTARIO

DRAWING INDEX

MA-00	KEY PLAN & LOCATION PLAN
MA-01	SITE PLANS
MA-02	2018 SOUNDINGS
MA-03	2018 SOUNDINGS
MA-04	2018 SOUNDINGS
MA-05	POINT PELEE OPEN-WATER PLACEMENT PLAN

DISPOSAL SCENARIOS

SCENARIO	PROJECT	SHOAL AREA	DREDGE GRADE (m)	VOLUME (m³)	DISPOSAL LOCATION
A	MAINTENANCE DREDGING 2019	LSCR - W3	8.6	+8,960	POINT PELEE
B	MAINTENANCE DREDGING 2019	LSCR - W1 + W2	8.6	+6,644	POINT PELEE
C	MAINTENANCE DREDGING 2019	LSCR - E2 + E3	8.6	+11,139	POINT PELEE



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A	Detail No.
B	No. du detail
C	drawing no. - where detail required dessin no. - ou detail exigé
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project title
titre du projet
**ST. CLAIR & DETROIT RIVERS
NAVIGATIONAL DREDGING**

MAINTENANCE DREDGING 2019

drawing title
titre du dessin
**KEY PLAN &
LOCATION PLAN**

drawn by
dessiné par
Y. WU

designed by
conçu par
J. METCALFE

approved by
approuvé par
N. KIMAGHALAM

bid
offre
JACK TO

project manager
administrateur
de projets

project date
date du projet
2019/06/12

project no.
no. du projet
R.095968.001

drawing no.
dessiné no.
MA-00

DREDGE AREA CONTROL POINTS

MAINTENANCE DREDGING 2019

DREDGE AREA "LSCR-E2" (DREDGE GRADE 8.6m)

CP#	EASTING (m)	NORTHING (m)
CP1	362590.734	4708929.965
CP2	362604.909	4708899.051
CP3	363025.472	4709129.313
CP4	363039.651	4709098.390

DREDGE AREA "LSCR-E3" (DREDGE GRADE 8.6m)

CP#	EASTING (m)	NORTHING (m)
CP2	362604.909	4708899.051
CP4	363039.651	4709098.390
CP5	362607.415	4708893.587
CP6	363042.161	4709092.900

DREDGE AREA "LSCR-W1" (DREDGE GRADE 8.6m)

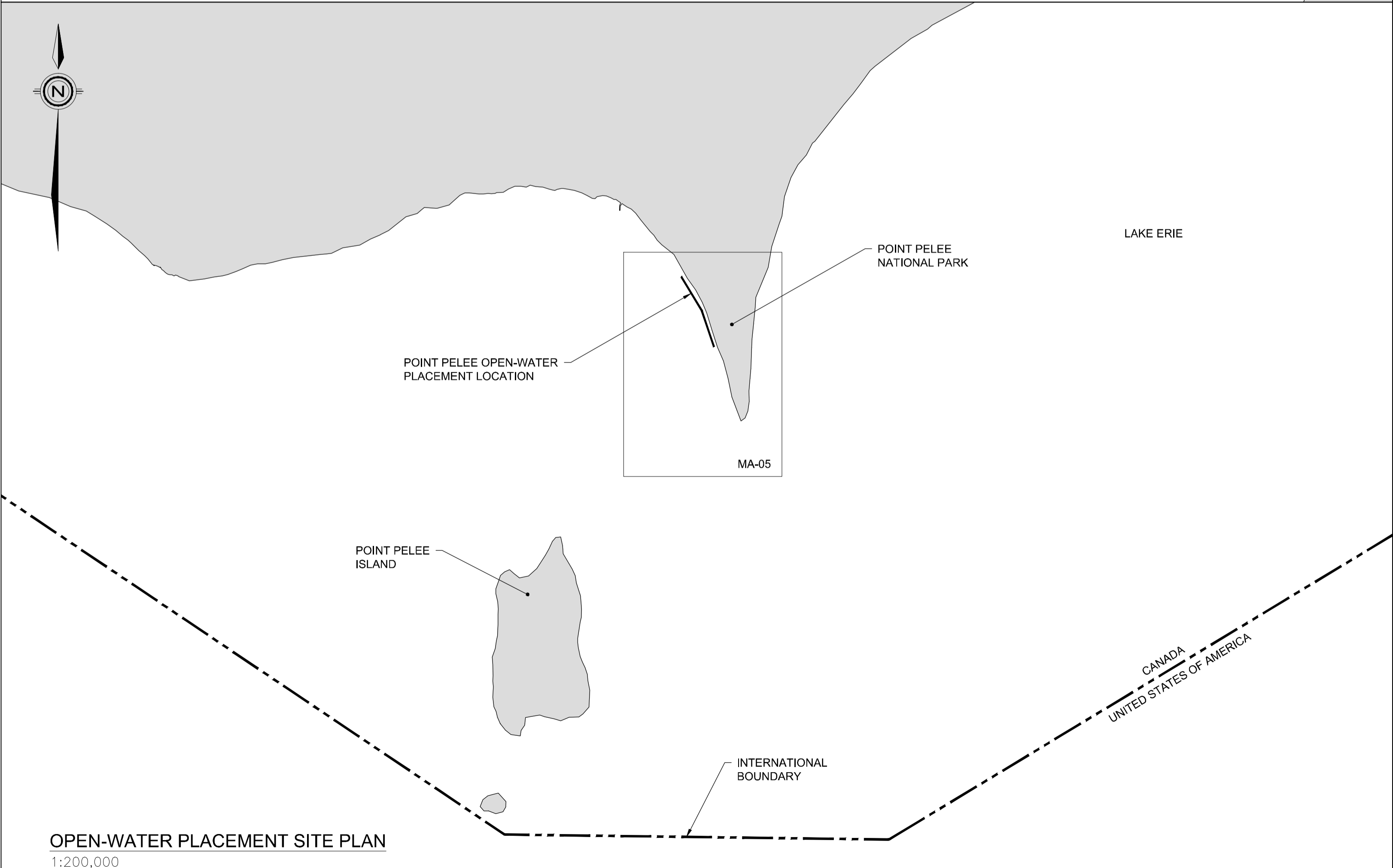
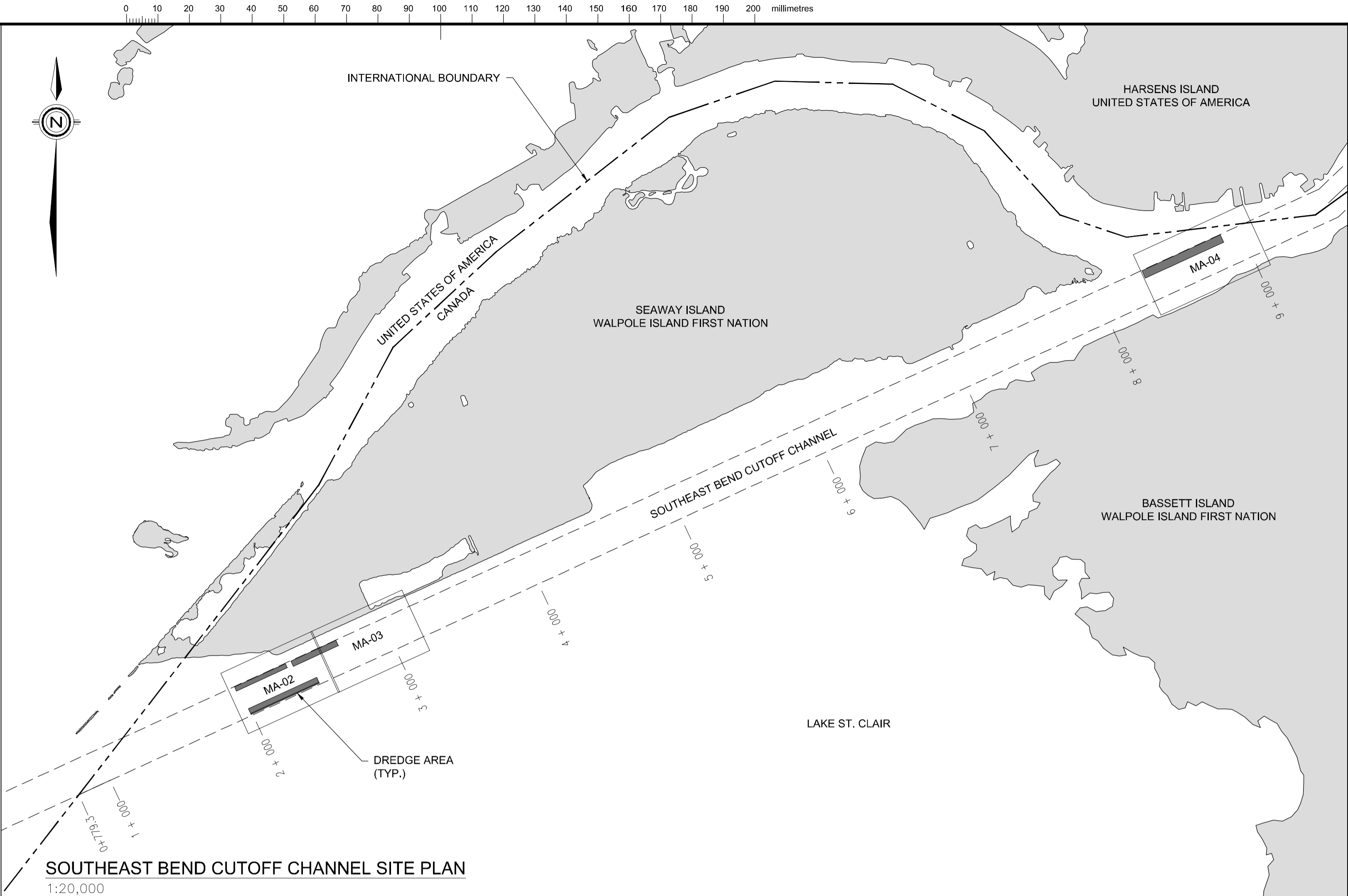
CP#	EASTING (m)	NORTHING (m)
CP13	362502.347	4709069.089
CP14	362514.705	4709042.139
CP15	362825.235	4709217.148
CP16	362837.593	4709190.198

DREDGE AREA "LSCR-W2" (DREDGE GRADE 8.6m)

CP#	EASTING (m)	NORTHING (m)
CP17	362861.451	4709233.811
CP18	362877.029	4709199.838
CP19	363147.593	4709365.020
CP20	363163.171	4709331.048

DREDGE AREA "LSCR-W3" (DREDGE GRADE 8.6m)

CP#	EASTING (m)	NORTHING (m)
CP21	368279.780	4711718.168
CP22	368301.032	4711671.820
CP23	368777.820	4711946.610
CP24	368799.088	4711900.228



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titre du projet
**ST. CLAIR & DETROIT RIVERS
NAVIGATIONAL DREDGING**

MAINTENANCE DREDGING 2019

drawing title
titre du dessin
SITE PLANS

drawn by
dessiné par
Y. WU

designed by
conç par
J. METCALFE

approved by
approuvé par
N. KIMIAGHALAM

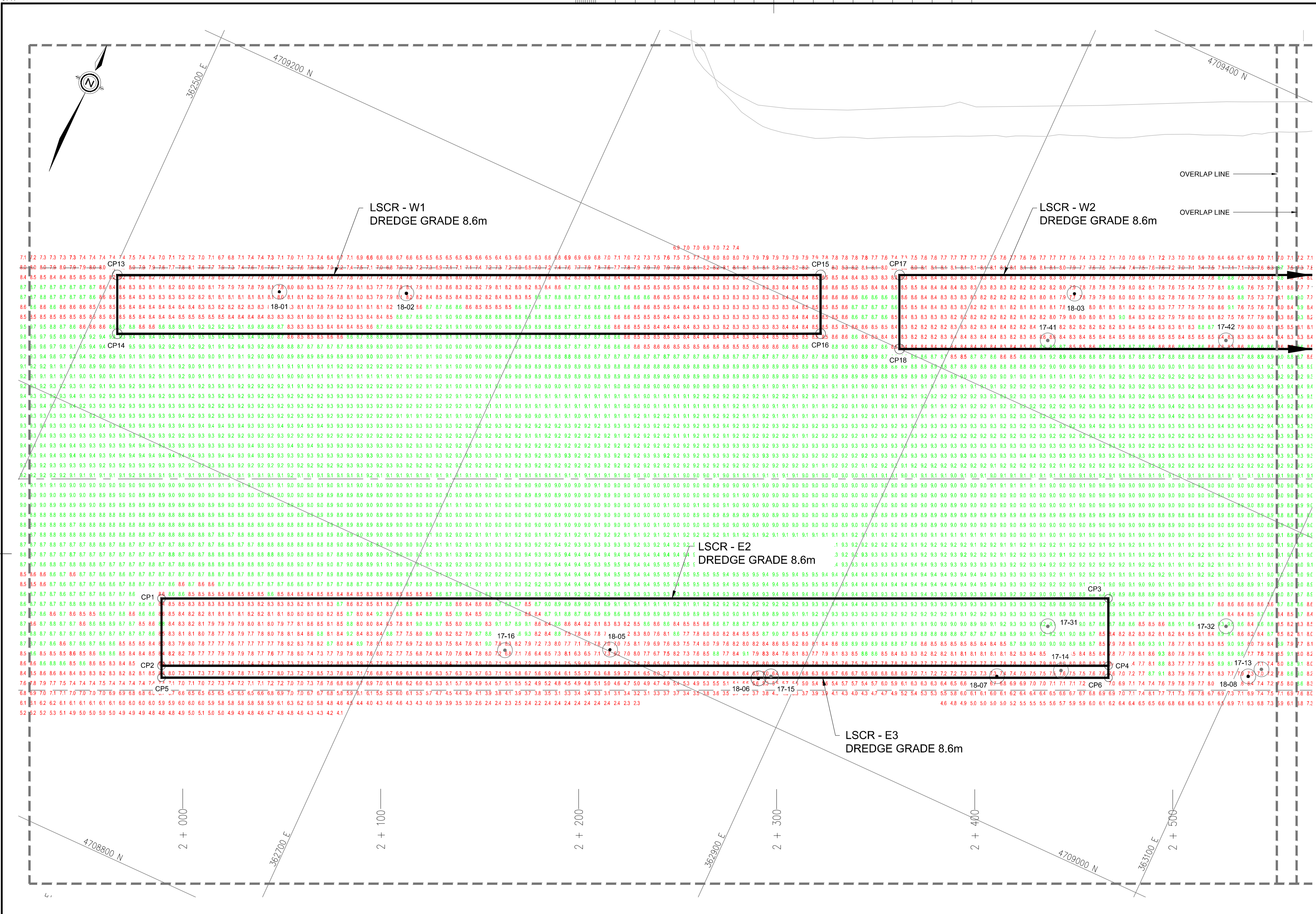
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MA-01



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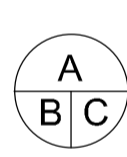
Stantec

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**ST. CLAIR & DETROIT RIVERS
NAVIGATIONAL DREDGING**

MAINTENANCE DREDGING 2019

drawing title
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2018 SOUNDINGS

drawn by
dessiné par
Y. WU

designed by
conc par
J. METCALFE

approved by
approuvé par
N. KIMAGHALAM

bid
offre
JACK TO

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drawing no.
dessin no.
MA-02

--- --	CHANNEL LIMIT	
---	CHANNEL CENTERLINE	
70	SOUNDING DEPTH BELOW CHART DATUM	2017 SAMPLING LOCATION
44	DRY SOUNDING	2018 SAMPLING LOCATION
	HORIZONTAL CONTROL POINT CHS	
	HORIZONTAL CONTROL POINT OTHER AGENCY	
	HORIZONTAL CONTROL POINT PWC	
	BUOY	
	NAVIGATION LIGHT	
		2018 DREDGE LIMITS
		2018 DREDGE AREA CONTROL POINTS
		2018 BATHYMETRY DATA (DEPTH)

NOTES:

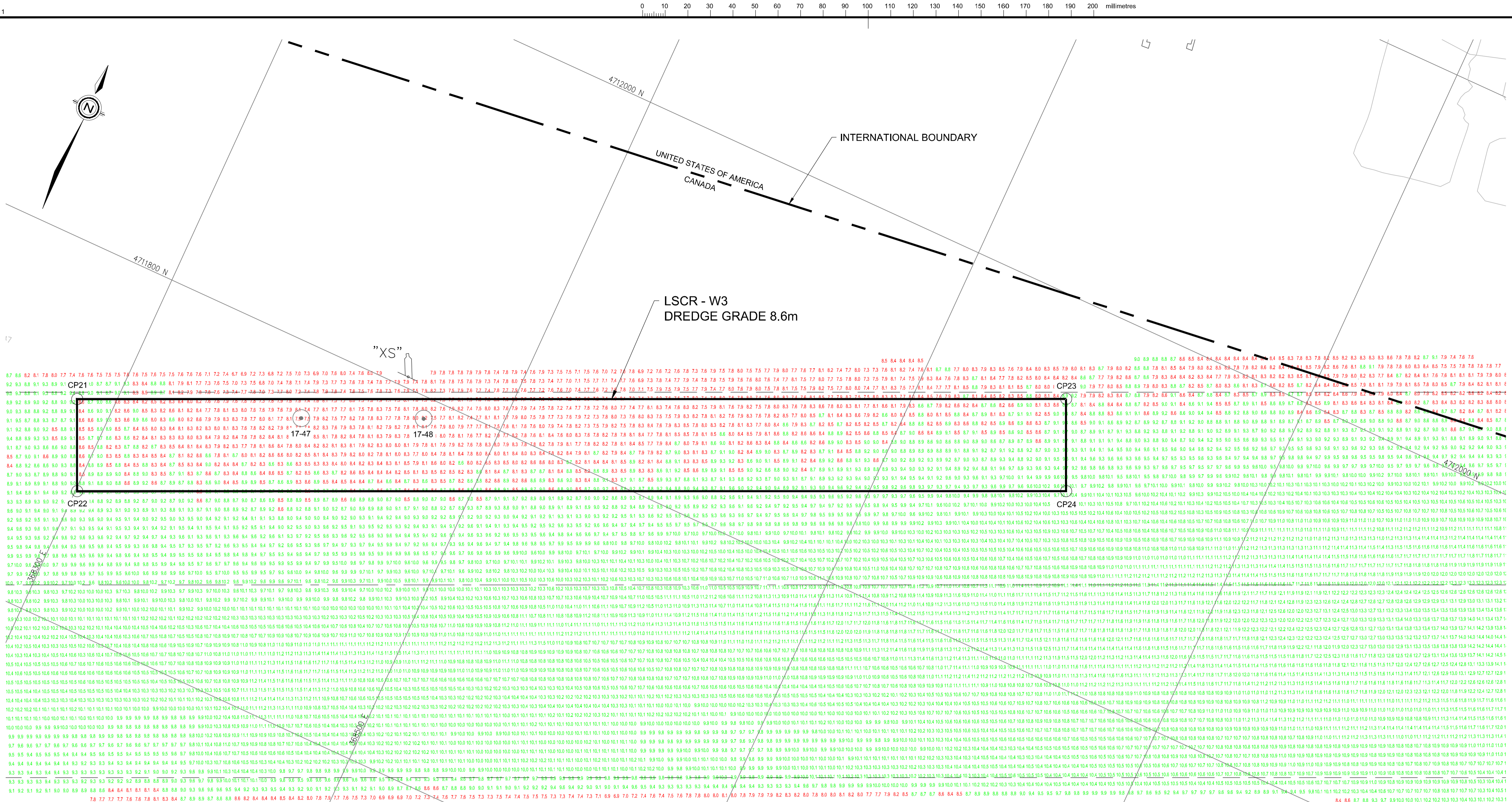
- SOUNDS WERE COLLECTED BETWEEN 2018-05-24 TO 2018-05-26.
- SOUNDS ARE SHOWN IN METERS BELOW CHART DATUM.
- CHART DATUM FOR LAKE ST. CLAIR IS 174.4 METERS ABOVE SEA LEVEL (I.G.L.D. 1985)
- VERTICAL DATUM REFERENCE BENCHMARK IS LOCATED ON NAVIGATION LIGHT "X35", HAVE A DISCRPTION OF CHS TEMPORARY GAUGE 11953".
- COORDINATE GRID REFERS TO UTM NAD83 (CSRS) EPOCH 2010 ZONE 17.

* THE SOUNDING INFORMATION REPRESENTS RESULTS OF THE SURVEY MADE ON THE DATE SPECIFIED AND CAN ONLY BE CONSIDERED AS INDICATING THE CONDITIONS AT THAT TIME.

- SOUNDINGS ARE VALID ONLY FOR THE DATE AND TIME THEY WERE TAKEN.
- THIS PLAN IS NOT FOR NAVIGATION
- IN THE ORDINARY PRACTICE OF GOOD SEAMANSHIP, NAVIGATORS USE UPDATED HYDROGRAPHIC CHARTS FOR NAVIGATION OF THEIR VESSELS.

**DISPOSAL SCENARIOS**

SCENARIO	PROJECT	SHOAL AREA	DREDGE GRADE (m)	VOLUME (m³)	DISPOSAL LOCATION
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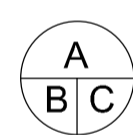
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NAVIGATIONAL DREDGING**

MAINTENANCE DREDGING 2019

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2018 SOUNDINGS

designed by
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J. METCALFE

approved by
approuve par
N. KIMAGHALAM

bid
offre
JACK TO

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drawing no.
dessin no.
MA-05

- CHANNEL LIMIT
--- CHANNEL CENTERLINE
- 70 SOUNDING DEPTH
BELOW CHART DATUM
- 44 DRY SOUNDING
- HORIZONTAL CONTROL POINT
CHS
- HORIZONTAL CONTROL POINT
OTHER AGENCY
- HORIZONTAL CONTROL POINT
PWC
- BUOY
- NAVIGATION LIGHT
- 2017 SAMPLING LOCATION
- 2018 SAMPLING LOCATION
- 2018 DREDGE LIMITS
- 2018 DREDGE AREA
CONTROL POINTS
- 2018 BATHYMETRY DATA
(DEPTH)
- 9.3 / 7.9

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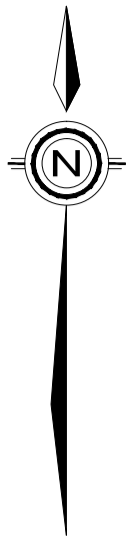
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PLACEMENT LOCATION COORDINATES		
LOCATION No.	EASTING (m)	NORTHING (m)
1	371118.493	4649527.919
2	371182.648	4649420.639
3	371246.803	4649313.358
4	371310.958	4649206.078
5	371375.113	4649098.797
6	371439.269	4648991.517
7	371503.424	4648884.236
8	371567.579	4648776.956
9	371631.734	4648669.675
10	371695.889	4648562.394
11	371760.044	4648455.114
12	371824.200	4648347.833
13	371888.355	4648240.553
14	371952.510	4648133.272
15	372016.665	4648025.992
16	372080.820	4647918.711
17	372144.975	4647811.431
18	372209.131	4647704.150
19	372273.286	4647596.870
20	372337.441	4647489.589
21	372386.363	4647374.560
22	372435.286	4647259.532
23	372484.208	4647144.503
24	372533.130	4647029.474
25	372582.052	4646914.445
26	372630.975	4646799.417
27	372679.897	4646684.388
28	372728.819	4646569.359
29	372777.742	4646454.330
30	372826.664	4646339.302
31	372875.586	4646224.273
32	372924.509	4646109.244
33	372973.431	4645994.216
34	373022.353	4645879.187
35	373071.276	4645764.158
36	373120.198	4645649.129
37	373169.120	4645534.101
38	373218.043	4645419.072



DISPOSAL LOCATION
SEE COORDINATE TABLE

POINT PELEE OPEN-WATER
DISPOSAL AREA

LAKE ERIE

SOURCE OF THE AERIAL IMAGERY:
ORTHOIMAGERY © FIRST BASE SOLUTIONS, 2018. IMAGERY DATE 2017

SOURCE OF THE BATHYMETRY CONTOURS:
ESRI SHAPE FILE BY NATIONAL CENTERS FOR ENVIRONMENTAL
INFORMATION, NATIONAL OCEANIC AND ATMOSPHERE ADMINISTRATION
(NOAA).

POINT PELEE OPEN-WATER PLACEMENT LOCATION PLAN
1:25,000



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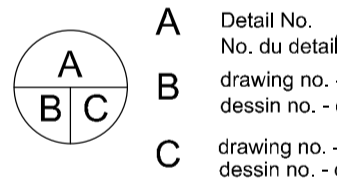


LEGEND

-  2018 SAMPLING LOCATION
(SEDIMENT)
-  DISPOSAL LOCATION
-  DISPOSAL AREA

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**ST. CLAIR & DETROIT RIVERS
NAVIGATIONAL DREDGING**

MAINTENANCE DREDGING 2019

drawing title
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**POINT PELEE OPEN-WATER
PLACEMENT PLAN**

drawn by dessiné par	Y. WU
designed by conc par	J. METCALFE
approved by approuvé par	N. KIMAGHALAM
bid offre	JACK TO
project date date du projet	2019/06/12
project no. no. du projet	R.095968.001
drawing no. dessiné no.	MA-05

DISPOSAL SCENARIOS					
SCENARIO	PROJECT	SHOAL AREA	DREDGE GRADE (m)	VOLUME (m³)	DISPOSAL LOCATION
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