LAKE HURON

EAST BREAKWATER LIGHT

WEST BREAKWATER LIGHT

C.S. 10+00

C.S. 15+00

100 TRANSITION

RIP-RAP

TBM I-BEAM

TANK

LIMITS OF FEDERAL PROJECT
PROJECT DEPTH 12.0 FT.

LIMITS OF FEDERAL PROJECT
PROJECT DEPTH 10.0 FT.

SCALE 1" = 100'

N

SURVEY CONTROL POINTS

STATION	COORDINATES EAST X	NORTH Y
COE3	19,737,430.738	829,044.618
HAM1	19,735,939.645	829,666.149
HAMMOND	19,736,758.430	829,197.472
P1	19,735,805.443	829,714.889
P2	19,737,413.599	830,136.696
P3	19,736,869.817	828,645.105
P4	19,737,789.491	829,609.922
P5	19,737,932.404	827,586.695
P6	19,738,368.627	828,649.498
TANK	19,737,477.008	829,065.474
NAVAID 1	19,737,283.629	830,239.432
NAVAID 2	19,737,289.886	829,877.881

CHANNEL LINE POINTS

STATION	COORDINATES EAST X	NORTH Y
A	19,737,828.540	830,360.490
B	19,737,281.930	830,299.538
C	19,737,241.712	830,277.367
D	19,737,228.945	830,233.254
E	19,737,251.116	830,193.036
F	19,737,479.947	830,010.121
G	19,737,853.655	829,386.132
H	19,737,777.131	829,340.304
I	19,737,175.908	829,495.355
J	19,737,144.745	829,593.247
K	19,737,347.253	829,847.000
L	19,737,331.546	829,923.506
M	19,736,940.983	830,235.697
N	19,736,562.880	830,940.712

NOTES:

1) THE SOUNDINGS AND ASSOCIATED INFORMATION REPRESENTED HEREIN ARE THE RESULT OF SURVEYS MADE ON THE DATE AS INDICATED AND CAN ONLY BE CONSIDERED REPRESENTATIVE OF THE GENERAL CONDITIONS EXISTING AT THE TIME OF SURVEY.

2) THE SOUNDINGS DEPICTED HEREIN ARE EXPRESSED IN U.S. SURVEY FEET AND TENTHS THEREOF AND ARE REFERENCED TO THE FOLLOWING DATUMS:
HORIZONTAL: MICHIGAN STATE PLANE COORDINATE SYSTEM, MICHIGAN CENTRAL ZONE #2112, NORTH AMERICAN DATUM (NAD) OF 1983.
VERTICAL: INTERNATIONAL GREAT LAKES DATUM (IGLD) OF 1985.

3) THE ABOVE SURVEY WAS CONDUCTED USING THE U.S.A.C.E. SURVEY VESSEL WHEELER EMPLOYING THE FOLLOWING COMPONENTS:

POSITIONING: APPLANIX POS-MV4 W/VRS-RTK OR MARINESTAR G2+
MOTION COMPENSATION: APPLANIX POS-MV4
SONAR: R2 SONIC 2024
SOFTWARE: HYPACK 2018

4) GAGES USED WERE REFERENCED FROM TBM I BEAM WHICH WAS ESTABLISHED FROM NGS VERTICAL CONRTOL POINT W 301 (PID QKO514).

5) THE SOUNDINGS INDICATED HEREON ARE GENERALIZED DEPTHS AND ARE NOT REPRESENTATIVE OF THE FULL DATASET. THE SOUNDINGS REPRESENT THE MINIMUM DEPTH FOUND WITHIN THE 10 FOOT BY 10 FOOT AREA CENTERED ON THE TEXT, DERIVED FROM A 1 FOOT BY 1 FOOT AVERAGE DATASET AT CELL CENTER. THIS MAP SHOULD NOT BE USED FOR CHANNEL CLEARANCE OR VOLUME COMPUTATIONS. MINIMUM DEPTH DATA IS PRODUCED FOR STRIKE/SHOAL REMOVAL OPERATIONS AND NOTICES TO NAVIGATION INTERESTS..

LEGEND

12.0'	10.0'
13.0'	11.0'
14.0'	12.0'
>15.0'	>13.0'

12.0 ft. PROJECT DEPTH CONTOUR

10.0 ft. PROJECT DEPTH CONTOUR

LOCATION MAP

0 25 50 75 100
SCALE OF MILES

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE	APPR.
MARK	DESCRIPTION	DATE	APPR.

SURVEYOR: BRONBDM
DWN BY: B.R.
REVIEWED BY:
APPROVED BY:
DRAWING DATE: 29AUG2019
SUBMITTED BY:
CONTRACT NO.:
C.Y.L.
PLOT SCALE: 1:600
SIZE: ANSI D
IMAGE DATE: 4/5/2019
IMAGE SOURCE: U.S.G.S.
FILE NUMBER:
FILE NAME:

U.S. ARMY CORPS OF ENGINEERS
DETROIT DISTRICT
DETROIT, MI

DETROIT AREA OFFICE
6309 WEST JEFFERSON AVE.
DETROIT, MICHIGAN 48209

HAMMOND BAY
MICHIGAN
CONDITION SURVEY
27 AUG 2019

SHEET IDENTIFICATION

SHEET 1 OF 1