

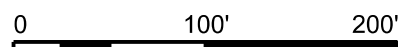
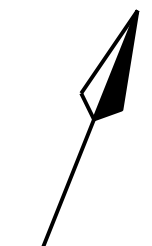
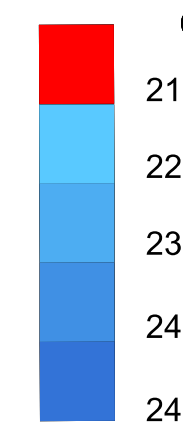
ALL SOUNDINGS ARE REFERENCED TO I.G.L.D. 1985 FOR LAKE MICHIGAN, ELEVATION 577.5 FT. ABOVE MEAN SEA LEVEL AT RIMOUSKI, QUEBEC.

GRID SYSTEM BASED ON LAMBERT PROJECTION,
MICHIGAN STATE PLANE COORDINATE SYSTEM, SOUTH
ZONE (2113) 1983 NORTH AMERICAN DATUM, U.S. FOOT.

THE SOUNDINGS INDICATED HEREIN ARE GENERALIZED DEPTHS AND ARE NOT REPRESENTATIVE OF THE FULL DATA SET. THE SOUNDINGS REPRESENT THE MINIMUM DEPTH FOUND WITHIN THE 10X10 AREA CENTERED ON THE TEXT, DERIVED FROM A 1X1 AVERAGE DATASET AT CELL CENTER. THIS MAP SHOULD NOT BE USED FOR CHANNEL CLEARANCE OR VOLUME COMPUTATIONS. MINIMUM DEPTH DATA IS PRODUCED FOR STRIKE/SOAL REMOVAL OPERATIONS AND NOTICE TO NAVIGATION INTERESTS.

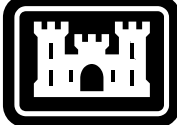
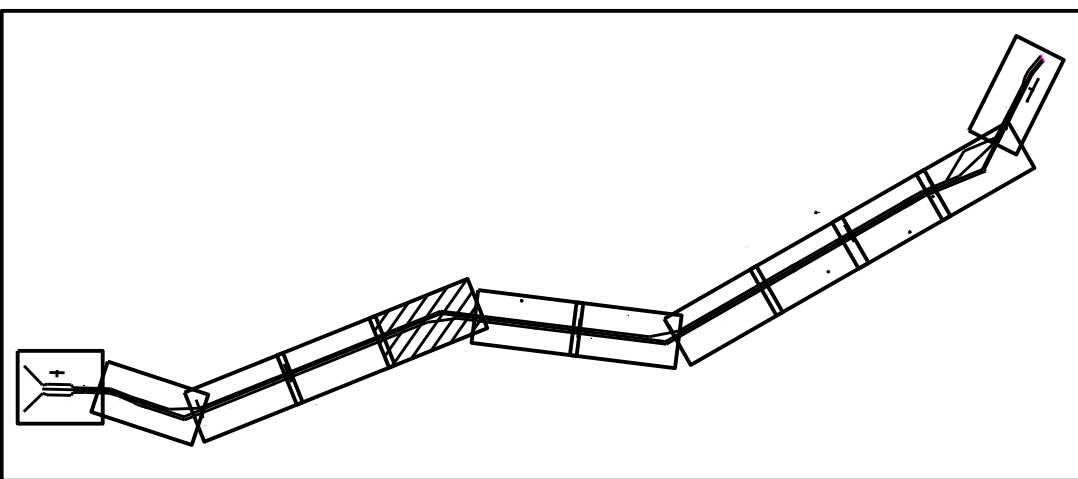
VERTICAL WATER LEVEL READINGS WERE TAKEN FROM A
FIXED GAUGE MARK ALONG THE SHEET STEEL WALL NEAR
CROSS SECTION 17+50E IN HOLLAND HARBOR, MI.

SURVEYED ON: 18 APRIL 2019
POSITIONING METHOD: APPLANIX POS M/V W/DGPS CORRECTIONS
MOTION COMPENSATION: APPLANIX OCEAN MASTER POS M/V
EQUIPMENT: R2 SONIC 2024 MULTIBEAM ECHOSOUNDER
SOFTWARE: HYPACK
VESSEL: LAUNCH 3058



CENTER LINE T.P.		
T.P.	EAST X	NORTH Y
CL-4	12,638,104.68	471,507.57

CHANNEL LINE T.P.		
T.P.	EAST X	NORTH Y
W	12,638,101.92	471,578.57
WW	12,637,715.12	471,261.39
RR	12,638,557.18	471,371.32



**US Army Corps
of Engineers®**

[illegible]

U.S. ARMY CORPS OF ENGINEERS DETROIT DISTRICT 477 MICHIGAN AVE DETROIT, MI 48226	SURVEYED BY: E.D.S.	ISSUE DATE: 19-APRIL-2019
LAKE MICHIGAN AREA OFFICE 307 SOUTH HARBOR DR GRAND HAVEN, MI 49534	DRAWN BY: REVIEWED BY:	SOLICITATION NO.: CONTRACT NO.:
	APPROVED BY:	DRAWING NUMBER:
	SIZE: ANSI D	FILE NAME: holland 2019.dgn

HOLLAND HARBOR
MICHIGAN

SHEET ID

VH105