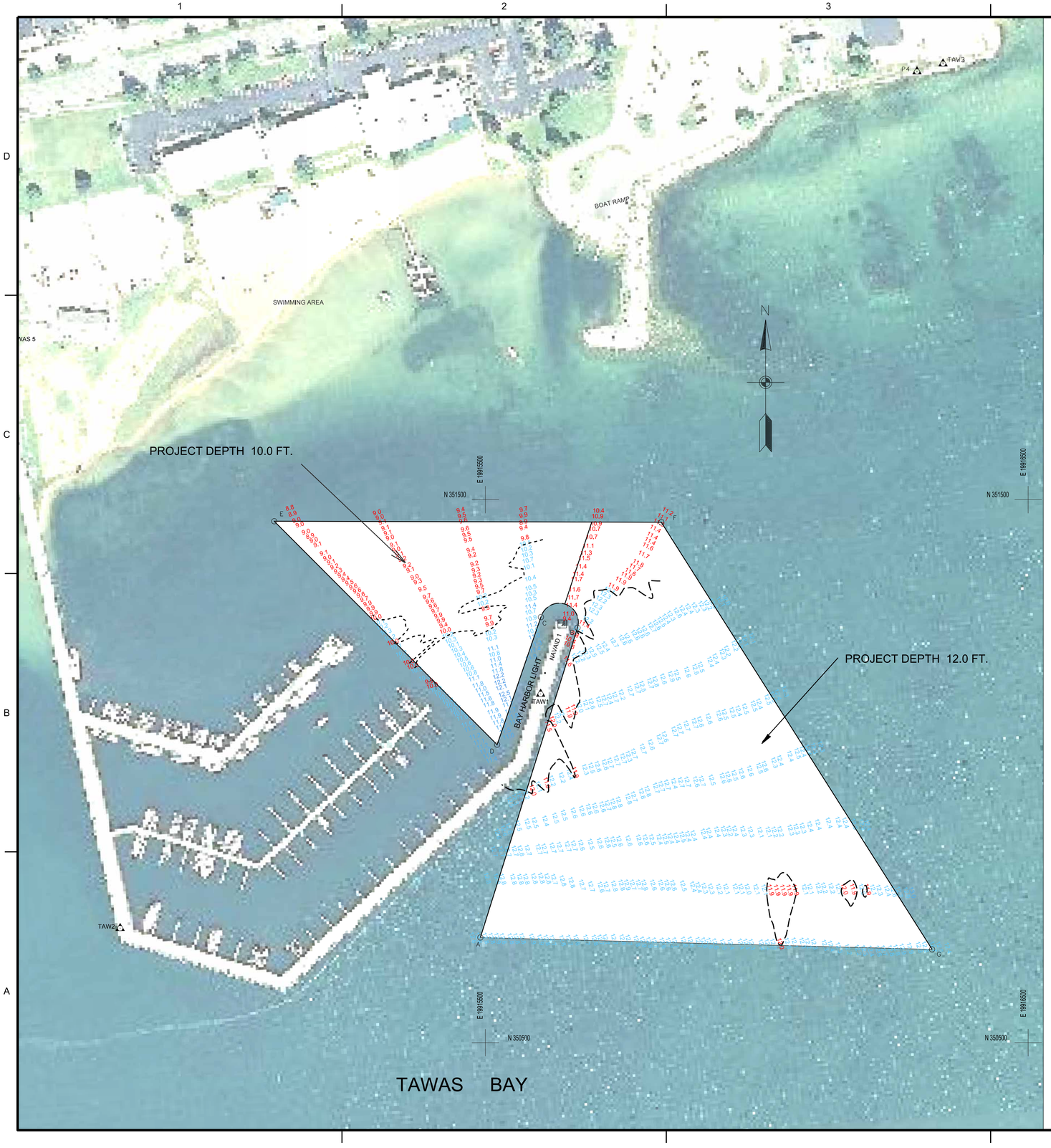

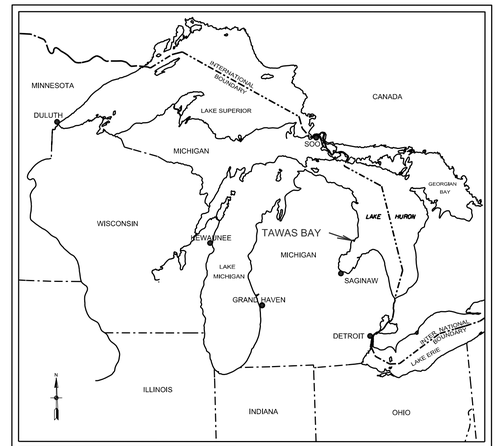

100' 0' 100' 200'

SCALE 1" = 100'

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 SOUTH ZONE #2113, NORTH AMERICAN DATUM (NAD) OF 1983.

   VERTICAL: INTERNATIONAL GREAT LAKES DATUM (IGLD) OF 1985. LWD=577.5

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

   POSITIONING: APPLANIX POS-MV W/VRS-RTK

   MOTION COMPENSATION: POS-MV MRU

   SONAR: ODOM CV-300

   SOFTWARE: HYPACK 2017

4) TIDE CORRECTION VALUES OBTAINED FROM AVERAGE TIDE INFORMATION FOR NOAA GAGES ESSEXVILLE (#9075035) AND ALPENA (#9075065).

SURVEY CONTROL POINTS

STATION	COORDINATES EAST X	NORTH Y
E. TAWAS 5	19,914,597.877	351,786.518
P3	19,913,921.855	351,687.833
P4	19,916,295.253	352,288.515
TAW1	19,915,601.796	351,142.306
TAW2	19,914,827.158	350,710.745
TAW3	19,916,343.163	352,302.999
NAVAID 1	19,915,641.291	351,267.441

CHANNEL LINE POINTS

STATION	COORDINATES EAST X	NORTH Y
A	19,915,490.8	350,693.6
B	19,915,669.8	351,264.1
C	19,915,602.6	351,284.5
D	19,915,521.7	351,048.8
E	19,915,111.1	351,460.3
F	19,915,824.1	351,458.5
G	19,916,323.0	350,671.8

10.0' PROJECT DEPTH:
0.0'
10.0'
11.0'
>12.0'

12.0' PROJECT DEPTH:
0.0'
12.0'
13.0'
>14.0'

10.0 ft. PROJECT DEPTH CONTOUR

12.0 ft. PROJECT DEPTH CONTOUR

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE	APPR.	MARK	DESCRIPTION	DATE	APPR.

SURVEYOR: KJK, MES
DWN BY: NJB
REVIEWED BY: CVL
APPROVED BY:
PLOT SCALE: 1" = 100'
SIZE: ANSI D
DRAWING DATE: 23 AUG 2018
SUBMITTED BY:
CONTRACT NO.:
FILE NUMBER:
IMAGE DATE: 4/6/2018
IMAGE SOURCE: USGS
FILE NAME:

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

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

TAWAS BAY HARBOR MICHIGAN

CONDITION SURVEY
24 JUL 2018

SHEET IDENTIFICATION

SHEET 1 OF 1