

US Army Corps  
of Engineers®

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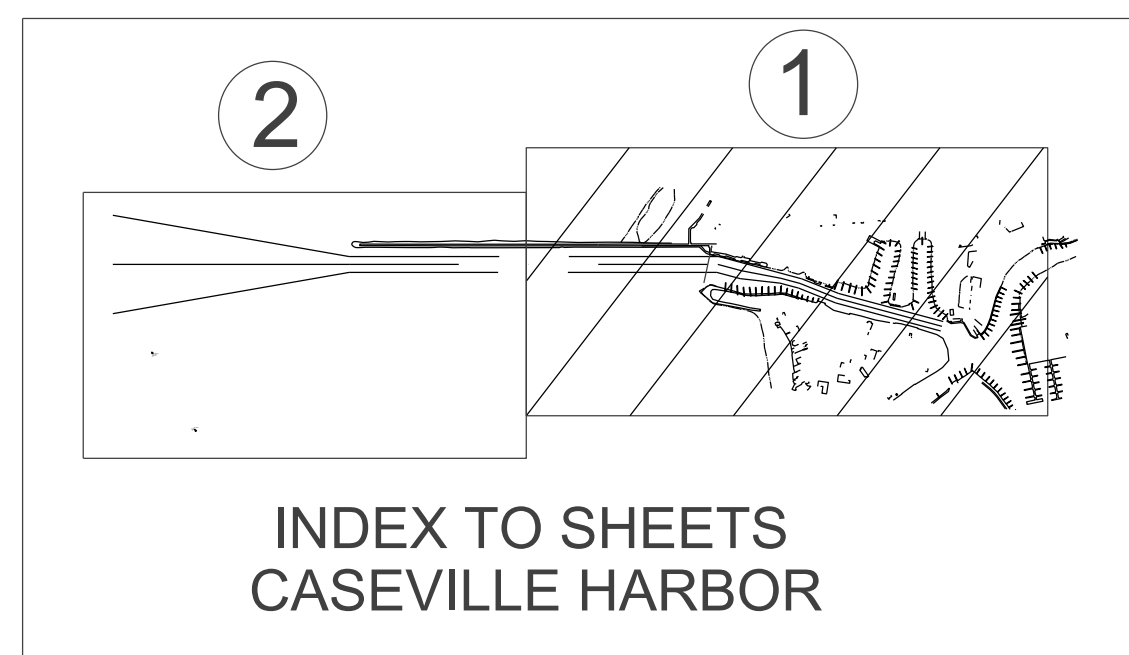
U.S. ARMY CORPS OF ENGINEERS DETROIT DISTRICT DETROIT, MI	SUPERVISOR: BR: NE		TOWN BY: NO	DRAWING DATE: JULY 2019
	REVIEWED BY:		S.S.R.	SUBMITTED BY: C.V.L.
	APPROVED BY:		CONTRACT NO.:	
	DETROIT AREA OFFICE 6309 W. JEFFERSON AVE DETROIT, MI 48209		IMAGE DATE: 17 SEP 2008 FILE NUMBER: IMAGE SOURCE: FILE NAME: ANSID NOAA	

**CASEVILLE HARBOR**  
**MICHIGAN**

POST-DREDGE SURVEY  
27 JUNE 2019

**SHEET**  
**IDENTIFICATION**

SHEET    1    OF    2



CONTROL POINTS (CORPSCON)		
STATION	EAST	NORTH
C-10	13,410,620.50	892,951.05
C-11	13,409,974.35	892,700.76
C-12	13,410,595.66	892,165.78
C-13	13,410,627.44	891,824.51
PT-C	13,410,052.03	892,742.38
PT-D	13,410,507.77	892,383.63
PT-F	13,410,905.21	891,972.67
104	13,409,656.21	893,297.55
105	13,409,623.66	893,259.59
108	13,409,630.17	893,267.18
111	13,409,911.02	893,227.13
BEADLE	13,409,614.68	892,233.07

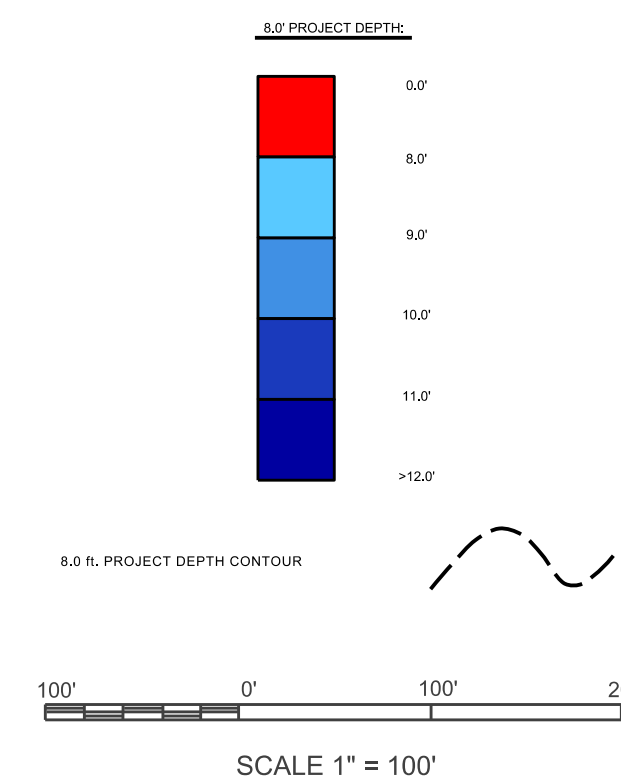
CONTROL POINTS (G.P.S.)		
STATION	EAST	NORTH
<i>C-12 (BM)</i>	<i>13,410,595.66</i>	<i>892,165.78</i>
<i>PT "G"</i>	<i>13,410,160.91</i>	<i>892,880.69</i>

CHANNEL LINE TURNING POINTS		
STATION	EAST	NORTH
1	13,410,550.46	892,486.22
2	13,410,419.52	892,446.93
3	13,410,119.41	892,825.53
4	13,410,086.16	892,788.06
5	13,409,975.75	892,968.97
6	13,409,942.51	892,931.50
7	13,409,634.23	893,238.21
8	13,409,865.79	892,991.89
10	13,409,689.62	893,092.78
12	13,409,593.01	893,168.83

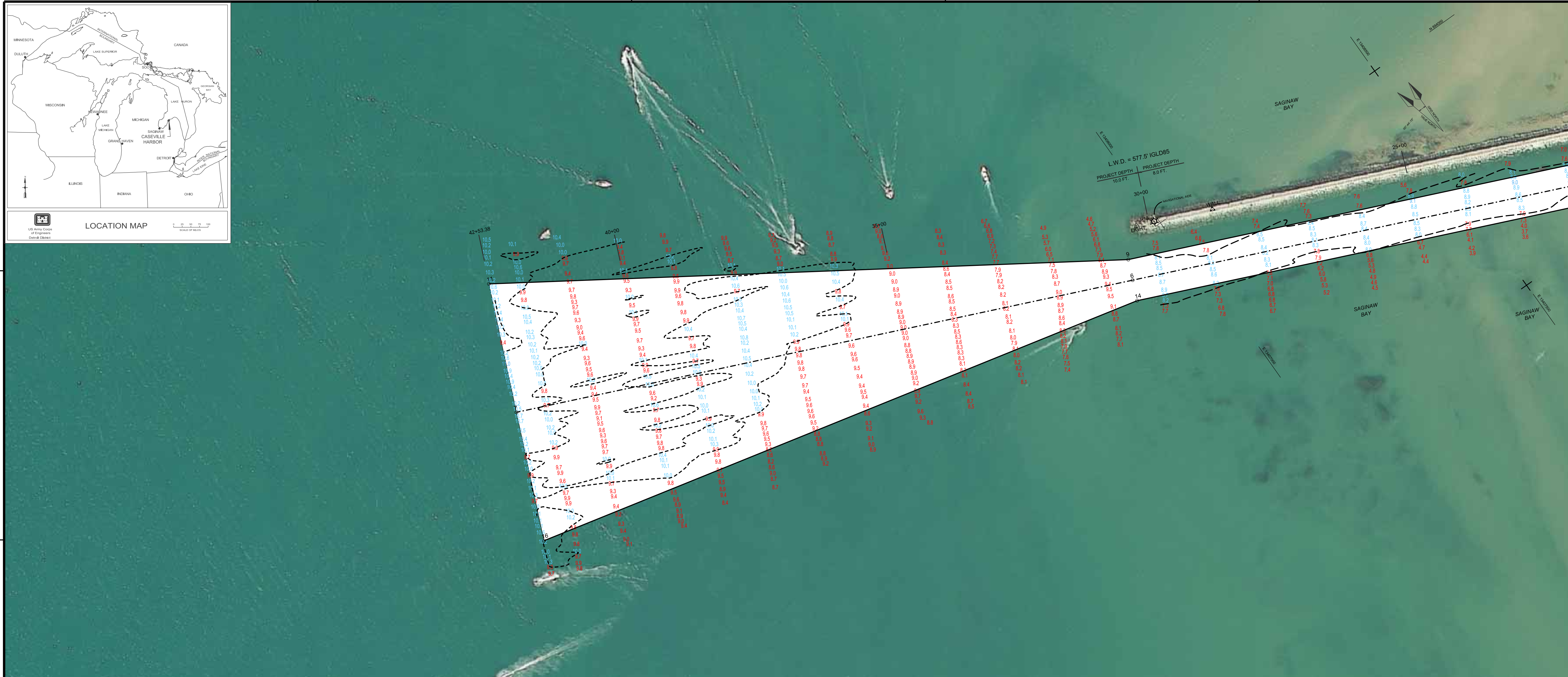
CENTERLINE TURNING POINTS			
STATION		EAST	NORTH
00+00	0	13,410,534.98	892,466.57
05+50.04	1	13,410,102.79	892,806.79
07+53.06	2	13,409,959.13	892,950.23
08+53.07	3	13,409,880.54	893,012.10
10+55.72	4	13,409,712.64	893,125.56
11+81.74	5	13,409,613.62	893,203.51

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.
- 3) THE ABOVE SURVEY WAS CONDUCTED USING THE U.S.A.C.E. SURVEY VESSEL SKIFF EMPLOYING THE FOLLOWING COMPONENTS:  
POSITIONING: TRIMBLE R-10 W/VRS-RTK CORRECTIONS  
SONAR: ODOM CV-300  
SOFTWARE: HYPACK 2015
- 4) GAGES USED WERE REFERENCED FROM THE TOP OF A STEEL WALL CORNER AT THE CASEVILLE HARBOR BOAT RAMP WITH AN IGLD85 ELVATION OF 583.591 FT.





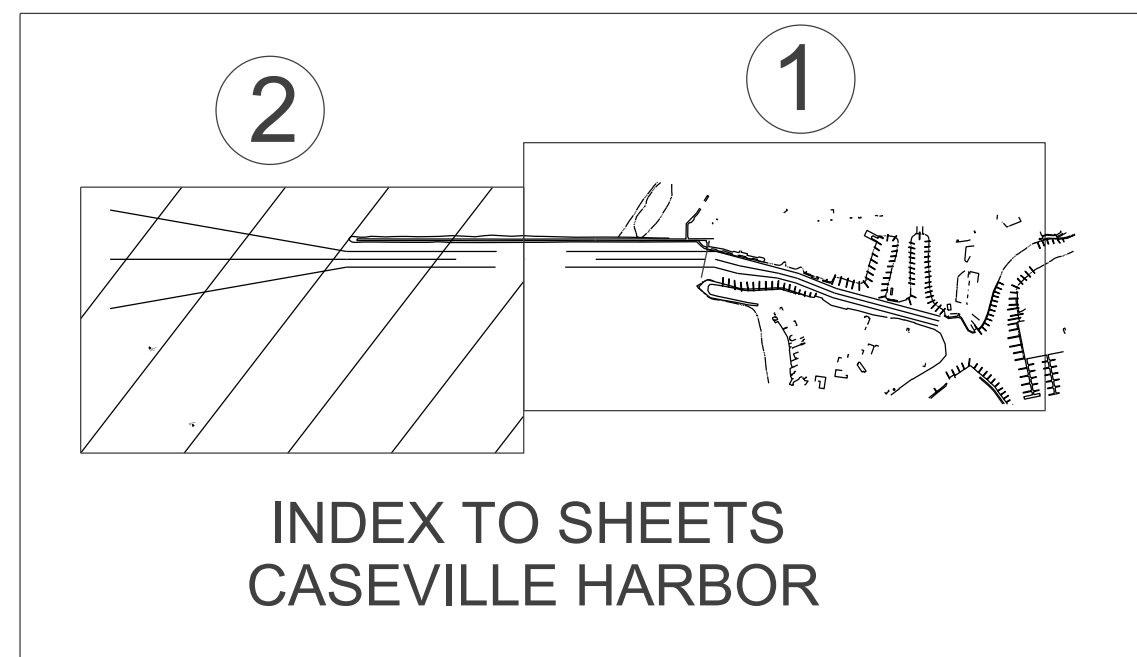
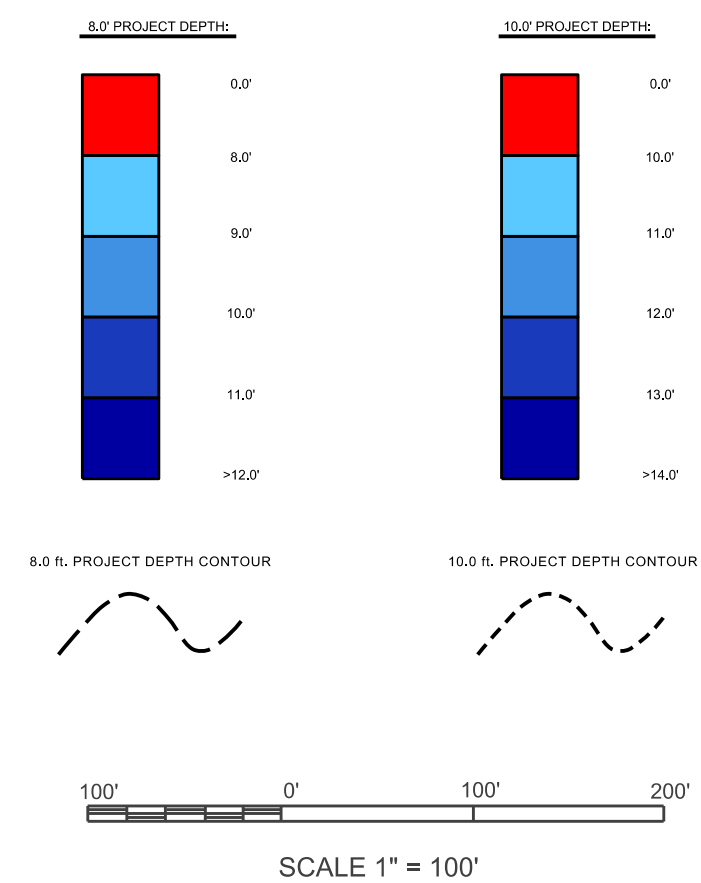


CONTROL POINTS (CORPSCON)		
STATION	EAST	NORTH
<i>J-13</i>	<i>13,407,988.50</i>	<i>894,009.89</i>
<i>103</i>	<i>13,409,618.25</i>	<i>893,330.10</i>
<i>106</i>	<i>13,409,419.72</i>	<i>893,395.58</i>
<i>107</i>	<i>13,409,504.37</i>	<i>893,427.75</i>
<i>LIGHT</i>	<i>13,407,959.78</i>	<i>894,022.22</i>

CONTROL POINTS (G.P.S.)		
STATION	EAST	NORTH
J-11	13,409,554.73	893,337.63

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SOFTWARE: HYPACK 2015
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CENTERLINE TURNING POINTS			
STATION		EAST	NORTH
30+53.29	6	13,407,893.80	893,941.70
42+53.38	7	13,406,791.00	894,415.04

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