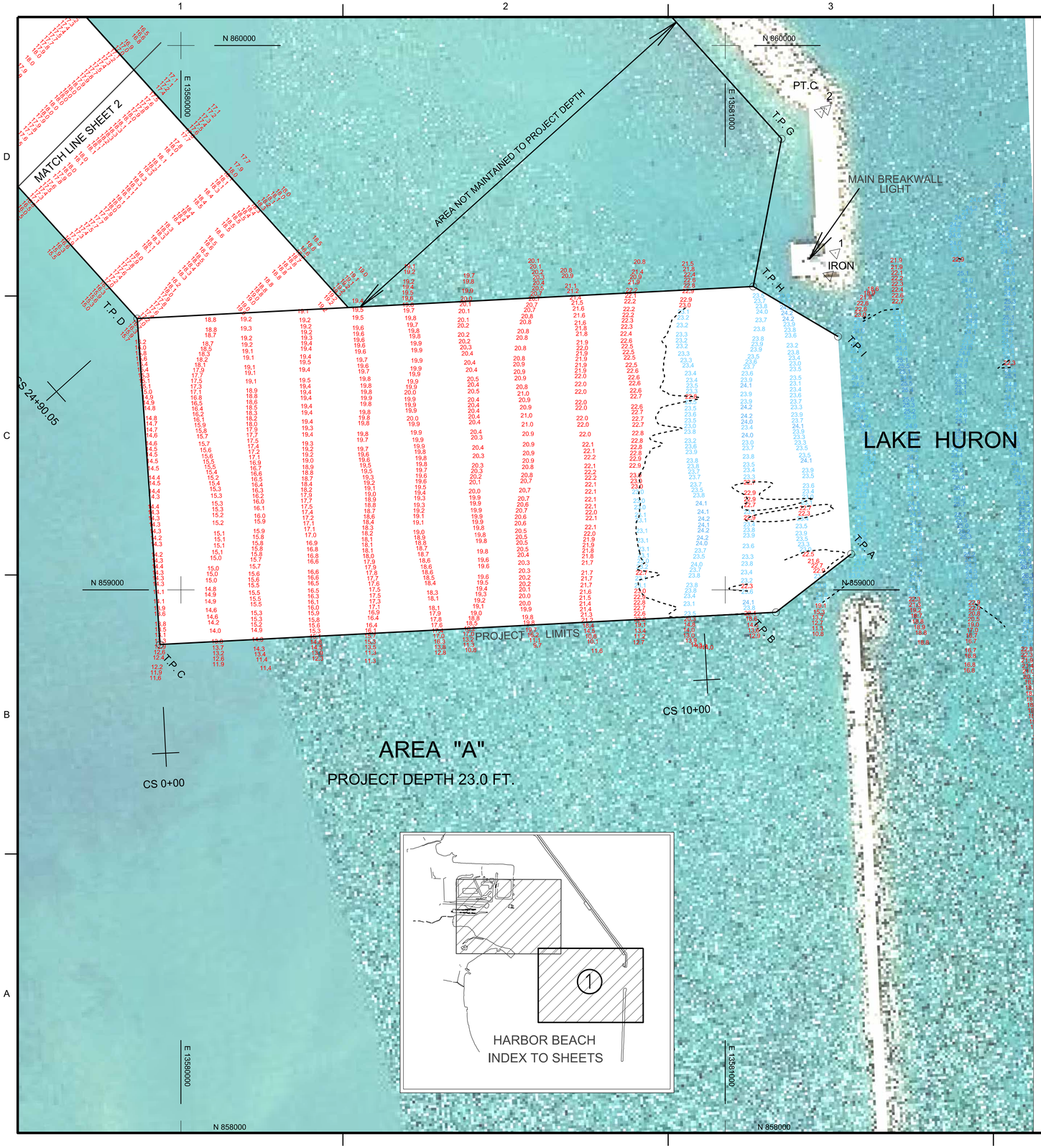


CONTROL POINTS (CORPSCON)		
STATION	EAST	NORTH
1	13,581,202.38	859,618.94
2	13,581,185.82	859,882.94
3	13,581,021.62	860,062.84
4	13,580,596.34	860,542.27
5	13,579,701.76	861,540.64
KURT	13,579,300.57	862,000.63
IRON	13,581,190.20	859,577.94
PT.C	13,581,174.52	859,878.09

CONTROL POINTS (G.P.S.)		
STATION	EAST	NORTH
CHAMPLAIN	13,578,133.07	859,603.53

PROJECT LIMIT TURNING POINTS		
STATION	EAST	NORTH
T.P. A	13,581,231.42	859,066.04
T.P. B	13,581,093.15	858,958.75
T.P. C	13,579,961.56	858,899.63
T.P. D	13,579,919.81	859,498.18
T.P. E	13,578,251.36	861,346.58
T.P. F	13,579,067.95	862,083.61
T.P. G	13,581,103.47	859,828.64
T.P. H	13,581,051.40	859,557.30
T.P. I	13,581,207.25	859,465.30

NAVIGATIONAL AIDES		
STATION	EAST	NORTH
L.L.9505	13,581,143.6	859,592.0

US Army Corps of Engineers
Detroit District

LOCATION MAP

SCALE OF MILES

21 FT LEGEND

0.0'
21.0'
22.0'
23.0'
24.0'
24.0'
25.0'
26.0
> 27.0'

23 FT LEGEND

0.0'
23.0'
24.0'
25.0'
26.0'
27.0'
28.0'
29.0'
> 30.0'

21.0 ft. PROJECT DEPTH CONTOUR

23.0 ft. PROJECT DEPTH CONTOUR

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 LAUNCH 3053 EMPLOYING THE FOLLOWING COMPONENTS:

POSITIONING: APPLANIX POS-MV4 W/DGPS

MOTION COMPENSATION: APPLANIX POS-MV4

SONAR: ODOM CV-300

SOFTWARE: HYPACK 2015

4) WATER LEVELS WERE OBTAINED FROM THE NOAA TIDE GAGE "HARBOR BEACH" (#9075014) AND REFERENCED TO IGLD 85.

N

100' 0' 100' 200'

SCALE 1" = 100'

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE	APPR.	MARK	DESCRIPTION	DATE	APPR.

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

DETROIT AREA OFFICE
6065 WEST JEFFERSON AVE.
DETROIT, MICHIGAN 48209

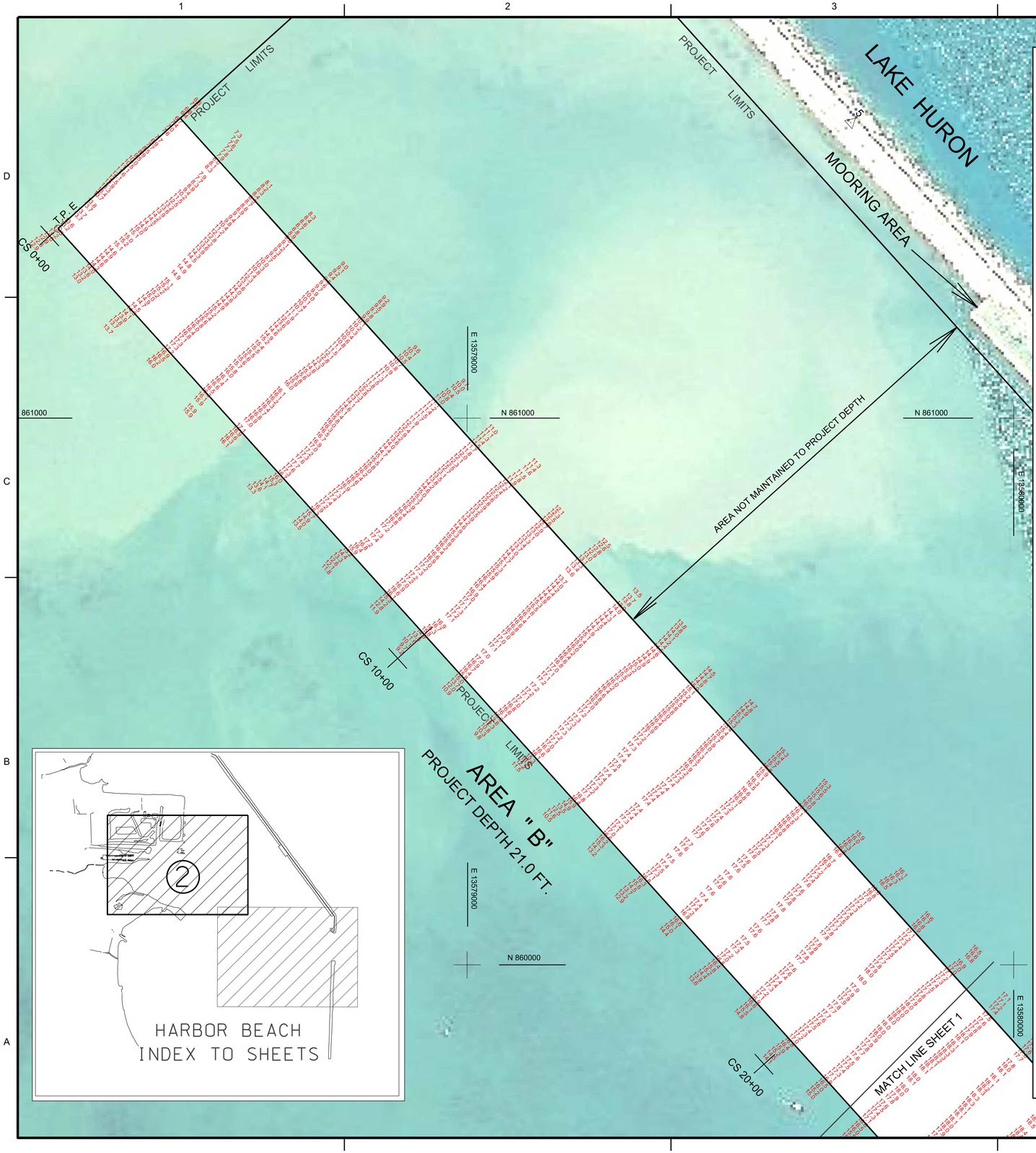
SURVEYOR: NB, CVL | DWN BY: N.B. | DRAWING DATE: 01 OCT 2018
REVIEWED BY: C.V.L. | SUBMITTED BY:
APPROVED BY: | CONTRACT NO.:
PLOT SCALE: 1" = 100' | IMAGE DATE: | FILE NUMBER:
SIZE: ANSI D | IMAGE SOURCE: | FILE NAME:

HARBOR BEACH MICHIGAN

CONDITION
28 SEP 2018

SHEET IDENTIFICATION

SHEET 1 OF 2



CONTROL POINTS (CORPSCON)		
STATION	EAST	NORTH
1	13,581,202.38	859,618.94
2	13,581,185.82	859,882.94
3	13,581,021.62	860,062.84
4	13,580,596.34	860,542.27
5	13,579,701.76	861,540.64
KURT	13,579,300.57	862,000.63
IRON	13,581,190.20	859,577.94
PT.C	13,581,174.52	859,878.09

CONTROL POINTS (G.P.S.)		
STATION	EAST	NORTH
CHAMPLAIN	13,578,133.07	859,603.53

PROJECT LIMIT TURNING POINTS		
STATION	EAST	NORTH
T.P. A	13,581,231.42	859,066.04
T.P. B	13,581,093.15	858,958.75
T.P. C	13,579,961.56	858,899.63
T.P. D	13,579,919.81	859,498.18
T.P. E	13,578,251.36	861,346.58
T.P. F	13,579,067.95	862,083.61
T.P. G	13,581,103.47	859,828.64
T.P. H	13,581,051.40	859,557.30
T.P. I	13,581,207.25	859,465.30

NAVIGATIONAL AIDES		
STATION	EAST	NORTH
L.L.9505	13,581,143.6	859,592.0

21 FT LEGEND

- 0.0'
- 21.0'
- 22.0'
- 23.0'
- 24.0'
- 24.0'
- 25.0'
- 26.0
- > 27.0'

23 FT LEGEND

- 0.0'
- 23.0'
- 24.0'
- 25.0'
- 26.0'
- 27.0'
- 28.0'
- 29.0'
- > 30.0'

21.0 ft. PROJECT DEPTH CONTOUR

23.0 ft. PROJECT DEPTH CONTOUR

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 LAUNCH 3053 EMPLOYING THE FOLLOWING COMPONENTS:

POSITIONING: APPLANIX POS-MV4 W/DGPS

MOTION COMPENSATION: APPLANIX POS-MV4

SONAR: ODOM CV-300

SOFTWARE: HYPACK 2015

4) WATER LEVELS WERE OBTAINED FROM THE NOAA TIDE GAGE "HARBOR BEACH" (#9075014) AND REFERENCED TO IGLD 85.

N

100' 0' 100' 200'

SCALE 1" = 100'

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE	APPR.	MARK	DESCRIPTION	DATE	APPR.

SURVEY/OP: NB, CVL
DWN BY: N.B.
DRAWING DATE: 01 OCT 2018
REVIEWED BY: C.V.L.
SUBMITTED BY:
APPROVED BY:
CONTRACT NO.:
PLOT SCALE: 1" = 100'
IMAGE DATE:
FILE NUMBER:
SIZE: ANSI D
IMAGE SOURCE:
FILE NAME:

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

DETROIT AREA OFFICE
6303 WEST JEFFERSON AVE.
DETROIT, MICHIGAN 48209

HARBOR BEACH MICHIGAN

CONDITION
28 SEP 2018

SHEET IDENTIFICATION

SHEET 2 OF 2