

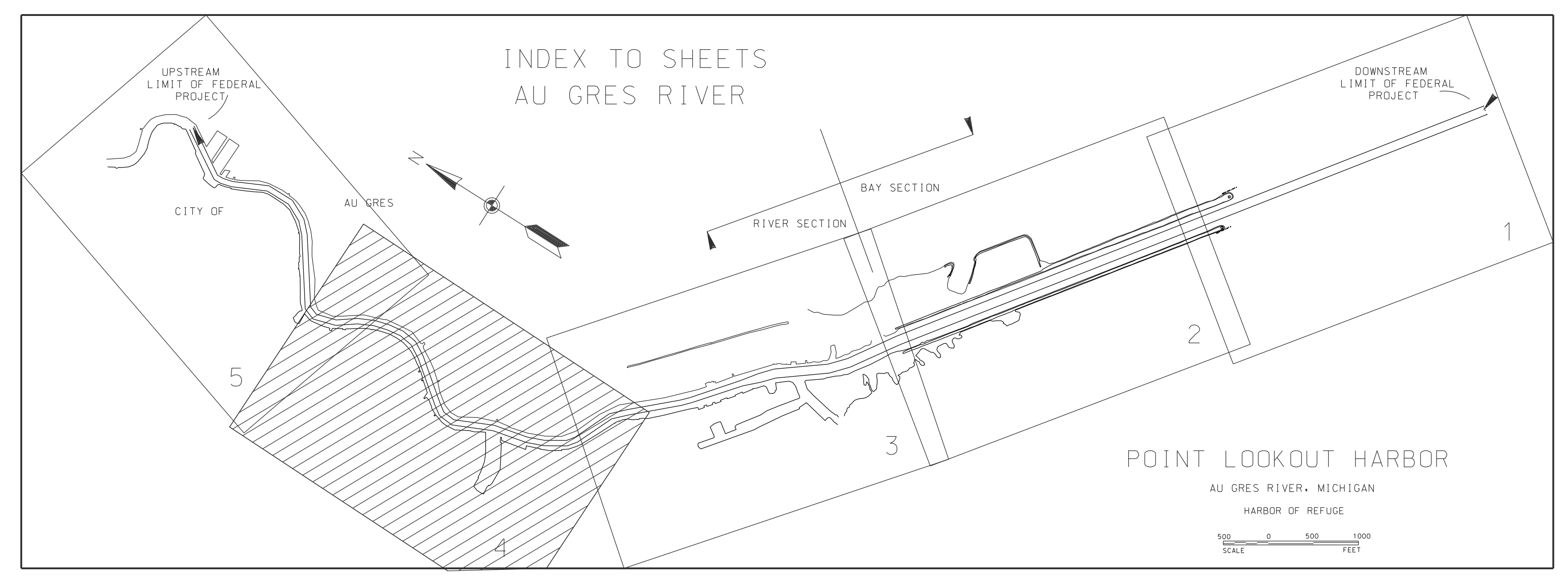
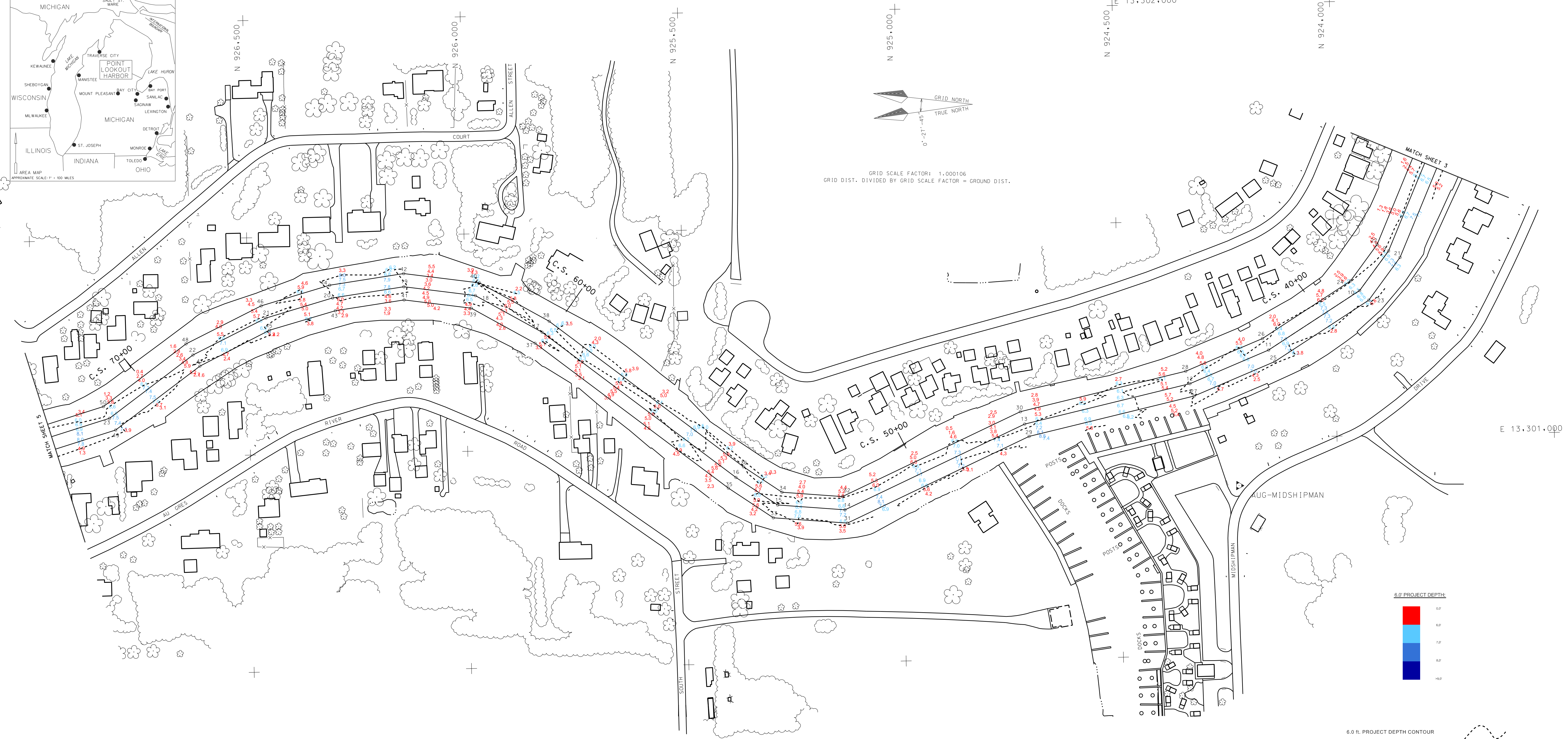
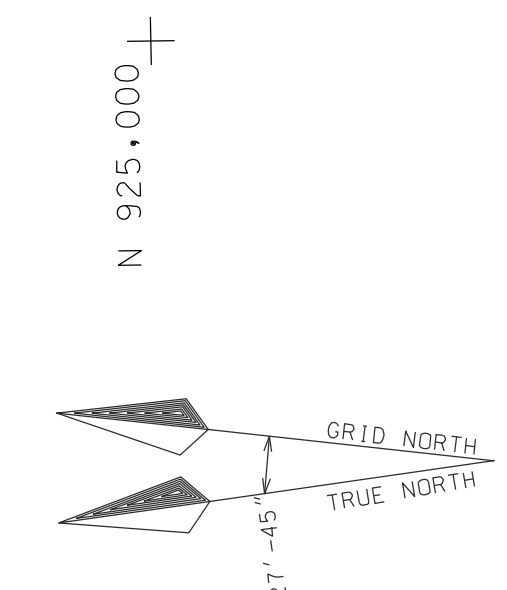
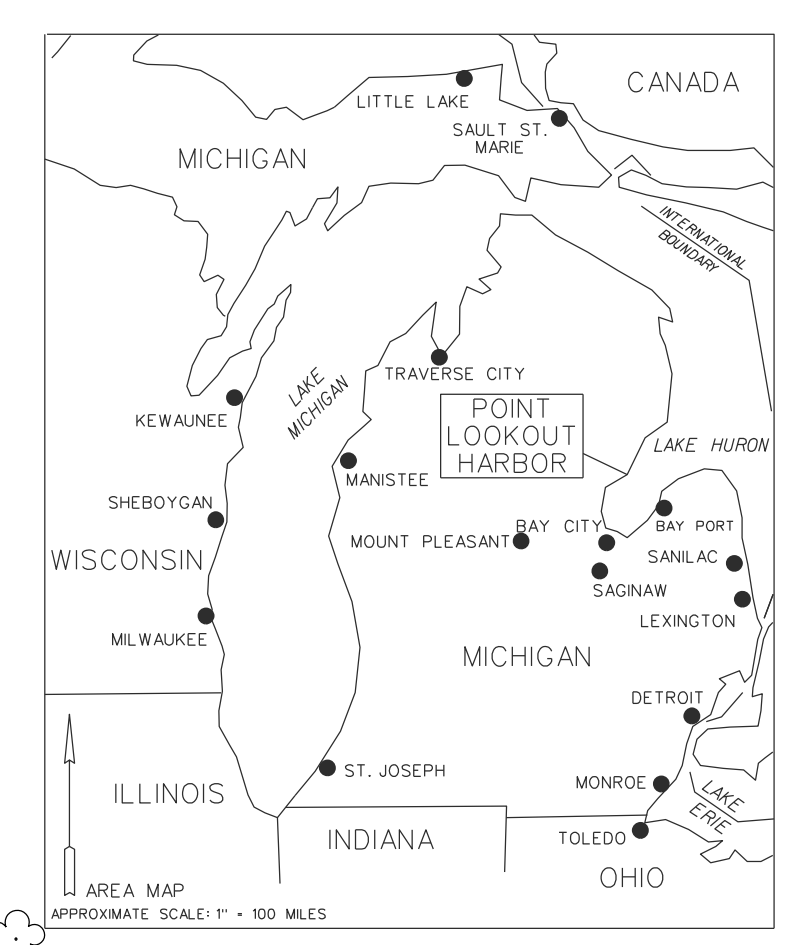


DESIGN SURVEY BY:  
 DATE:  
 CONTRACT NO.:  
 FILE NUMBER:  
 SHEET NAME:  
 POINT LOOKOUT HARBOR

**POINT LOOKOUT**  
**AU GRES, MICHIGAN**  
 CONDITION SURVEY  
 25 JUL 2018

SHEET IDENTIFICATION  
 SHEET 4 OF 5

E  
 D  
 C  
 B  
 A



CENTER LINE		
STATION NUMBER	COORDINATES NORTH	COORDINATES EAST
9	925.873.95	13.301.424.06
10	923.942.12	13.301.354.13
11	924.153.91	13.301.200.82
12	924.336.23	13.301.126.73
13	924.717.87	13.301.040.35
14	925.134.75	13.300.850.22
15	925.283.39	13.300.854.00
16	925.384.22	13.300.923.08
17	925.424.11	13.301.270.92
18	925.976.16	13.301.358.03
19	926.140.30	13.301.381.18
20	926.304.94	13.301.358.23
21	926.458.70	13.301.314.78
22	926.628.20	13.301.232.63
23	926.822.57	13.301.090.35

CHANNEL LINE		
STATION NUMBER	COORDINATES NORTH	COORDINATES EAST
21	923.847.84	13.301.408.84
22	923.900.05	13.301.439.29
23	923.921.50	13.301.311.65
24	923.982.73	13.301.356.61
25	924.140.17	13.301.174.03
26	924.187.56	13.301.227.63
27	924.327.21	13.301.098.01
28	924.345.25	13.301.155.45
29	924.708.23	13.301.011.76
30	924.727.50	13.301.068.93
31	925.129.51	13.300.819.62
32	925.139.98	13.300.880.80
33	925.299.88	13.300.834.82
34	925.278.89	13.300.893.19
35	925.401.93	13.300.904.84
36	925.186.51	13.300.953.71
37	925.840.85	13.301.245.94
38	925.807.36	13.301.295.91
39	925.986.06	13.301.329.13
40	925.986.25	13.301.386.94
41	926.140.32	13.301.350.89
42	926.140.27	13.301.411.48
43	926.298.77	13.301.328.80
44	926.311.12	13.301.387.66
45	926.451.00	13.301.286.60
46	926.469.41	13.301.342.93
47	926.612.67	13.301.206.82
48	926.643.72	13.301.258.45
49	926.809.03	13.301.063.11
50	926.836.11	13.301.117.62

HORIZONTAL GROUND CONTROL		
STATION NUMBER	COORDINATES NORTH	COORDINATES EAST
AUG-MIDSHIPMAN	924.227.25	13.300.890.19
AUG-COURT	924.221.00	13.299.635.48

- NOTES:
- 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.
  - 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
  - THE ABOVE SURVEY WAS CONDUCTED USING THE U.S.A.C.E. SURVEY VESSEL BOULTON EMPLOYING THE FOLLOWING COMPONENTS:  
 POSITIONING: APPLANIX POS-MV WVR8-RTK  
 MOTION COMPENSATION: POS-MV MRU  
 SONAR: ODOM CV-300  
 SOFTWARE: HYPACK 2017
  - TIDE CORRECTION VALUES REFERENCED FROM A PAINT MARK ON THE SEAWALL DESCRIBED AS "TBM STEEL CORNER" LOCATED ON TOP OF A STEEL WALL AND AT THE DOWNSTREAM END OF SAID WALL (SHEET 3). IGLD 85 ELEVATION = 582.15'