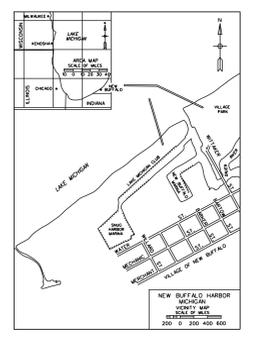
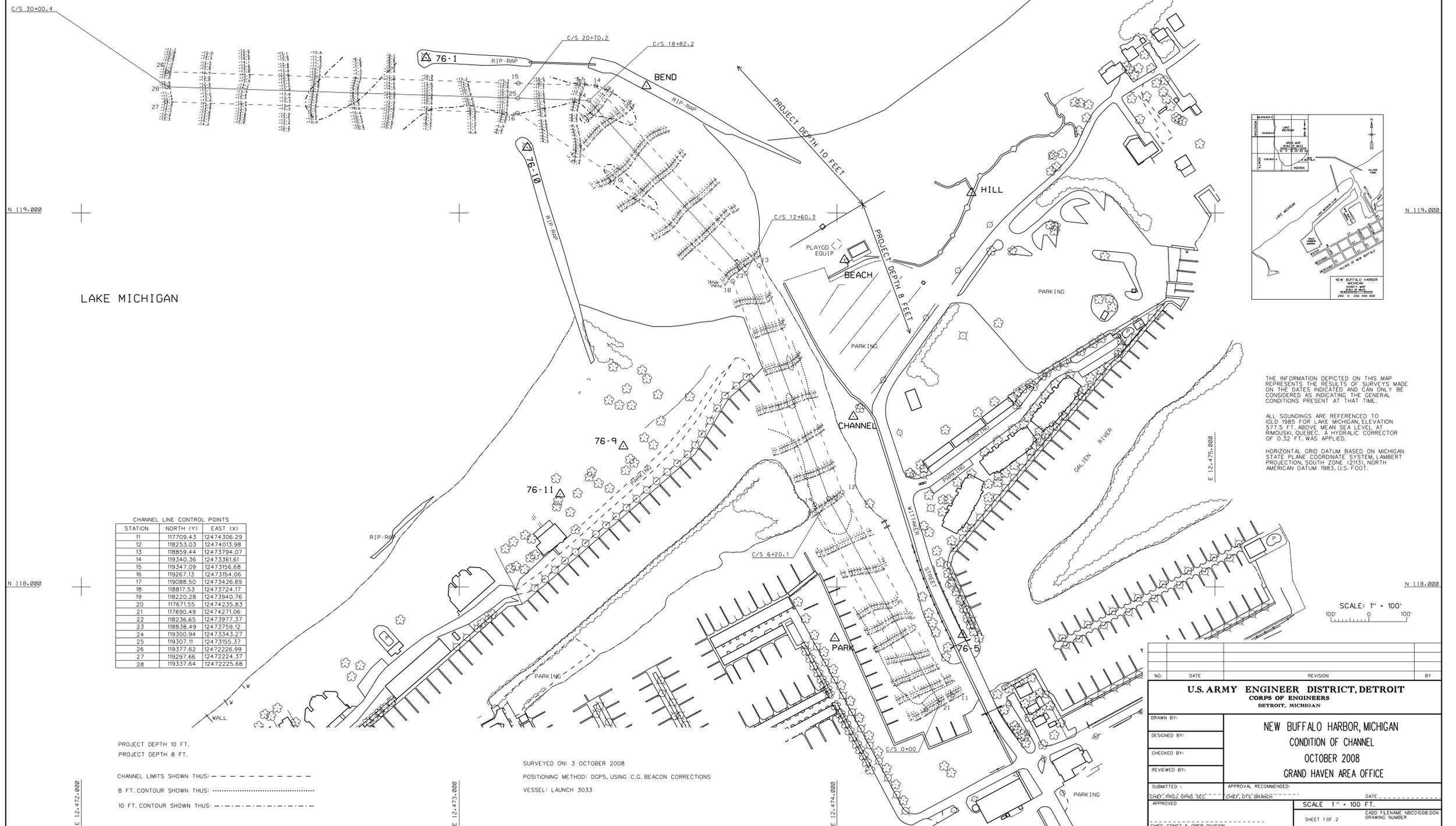
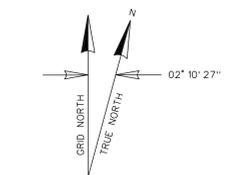


N 120.000 E 12.472.000 DATE OF PHOTOGRAPHY 21 AUGUST 1991 E 12.473.000 E 12.474.000 E 12.475.000 N 120.000



THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS PRESENT AT THAT TIME.

ALL SOUNDINGS ARE REFERENCED TO IGLD 1985 FOR LAKE MICHIGAN, ELEVATION 577.5 FT. ABOVE MEAN SEA LEVEL AT RIMOUSKI, QUEBEC. A HYDRAULIC CORRECTOR OF 0.32 FT. WAS APPLIED.

HORIZONTAL GRID DATUM BASED ON MICHIGAN STATE PLANE COORDINATE SYSTEM, LAMBERT PROJECTION, SOUTH ZONE (215), NORTH AMERICAN DATUM 1983, U.S. FOOT.

CHANNEL LINE CONTROL POINTS		
STATION	NORTH (Y)	EAST (X)
11	117709.43	12474306.29
12	118253.03	12474013.98
13	118859.44	12473794.07
14	119340.36	12473561.61
15	119347.09	12473556.68
16	119267.13	12473554.06
17	119088.50	12473426.69
18	118817.53	12473724.17
19	118220.28	12473940.76
20	117671.55	12474235.83
21	117690.49	12474271.06
22	118236.65	12473977.37
23	118838.49	12473759.12
24	119300.94	12473343.27
25	119307.11	12473555.37
26	119377.62	12472226.99
27	119297.66	12472224.37
28	119337.64	12472225.68

PROJECT DEPTH 10 FT.
PROJECT DEPTH 8 FT.

CHANNEL LIMITS SHOWN THUS: - - - - -
8 FT. CONTOUR SHOWN THUS:
10 FT. CONTOUR SHOWN THUS: - - - - -

SURVEYED ON: 3 OCTOBER 2008
POSITIONING METHOD: DOPS, USING C.G. BEACON CORRECTIONS
VESSEL: LAUNCH 3033

SCALE: 1" = 100'

NO.	DATE	REVISION	BY
U.S. ARMY ENGINEER DISTRICT, DETROIT CORPS OF ENGINEERS DETROIT, MICHIGAN			
DRAWN BY:		NEW BUFFALO HARBOR, MICHIGAN CONDITION OF CHANNEL OCTOBER 2008 GRAND HAVEN AREA OFFICE	
DESIGNED BY:			
CHECKED BY:			
REVIEWED BY:			
SUBMITTED:		APPROVAL/RECOMMENDED:	
CHEF, PROJ. DIV. SEC.		CHEF, DIST. BRANCH	
APPROVED		DATE	
CHEF, CONST. & OPER. DIVISION		SCALE 1" = 100 FT.	
		SHEET 1 OF 2	
		CAD FILENAME: NBS01008.DGN DRAWING NUMBER	