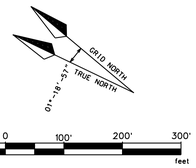


LEGEND

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 AT THE TIME.

LOW WATER DATUM

ELEVATIONS AND PROJECT DEPTHS ARE REFERRED TO INTERNATIONAL GREAT LAKES DATUM, (1985) WHEN THE MOUTH OF THE BLACK RIVER AT PORT HURON,MICHIGAN IS 576.2 FT. ABOVE MEAN WATER LEVEL AT RIMOUSKI, QUEBEC.

GRID COORDINATES

GRIDS SHOWN ARE BASED ON NATIONAL GEODETIC SURVEY PROJECTION TABLES, STATE OF MICHIGAN, SOUTH ZONE (2113). LAMBERT PROJECTION, 1983 NORTH AMERICAN DATUM.

DIRECTIONS

ALL DIRECTIONS ARE GRID AZIMUTHS REFERRED TO NORTH ZERO.

PROJECT DEPTHS

PROJECT DEPTHS ARE AS INDICATED ABOVE.

THE AUTOMATED ELECTRONIC SURVEY WAS CONDUCTED BY FRED LEECH, PARTY CHIEF, ABOARD THE USACOE SURVEY LAUNCH 3043.

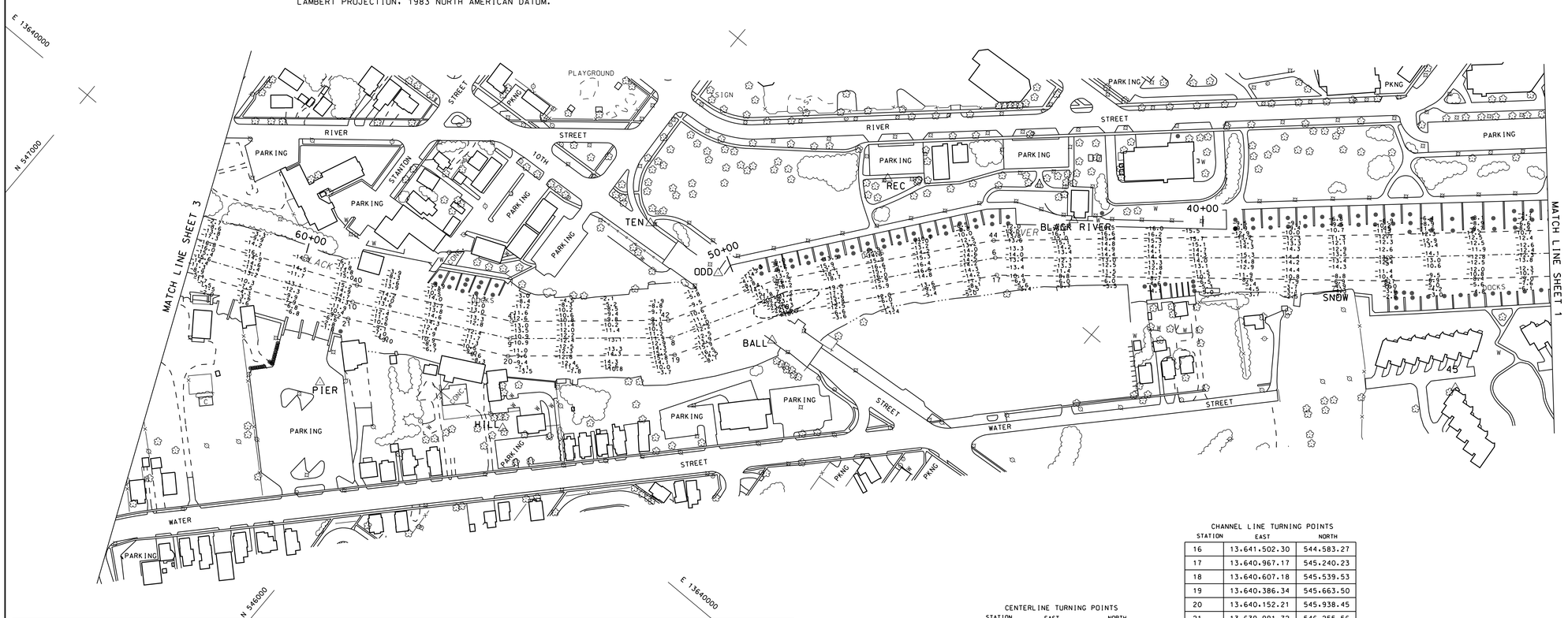
AUTOMATED EQUIPMENT USED

POSITIONING:	STARLINK DGPS
DATA PROCESSOR:	DELL PC
SOFTWARE:	COASTAL OCEANOGRAPHICS
PLOTTER:	ENCAD, CADJET 2
SONIC SOUNDER:	INNERSPACE 448

NOTES:

1. GAGES USED WERE REFERENCED FROM GAGE BOARD SET ON PILING AT THE MOUTH OF THE BLACK RIVER ON THE NORTH SIDE NEAR AN OLD RAILROAD TRESTLE
2. POSITIONS WERE DETERMINED BY GPS REFERENCE BEACON 838, LOCATED AT FORT WAYNE DETROIT, MICHIGAN - FREQUENCY 319 KHZ, 200 BPS
3. TRANSDUCER FREQUENCY USED TO MEASURE DEPTH DATA WAS 208 KHZ AND THE BEAM ANGLE WAS 3.0 DEGREES.

20.0 FT. CONTOUR



CENTERLINE TURNING POINTS

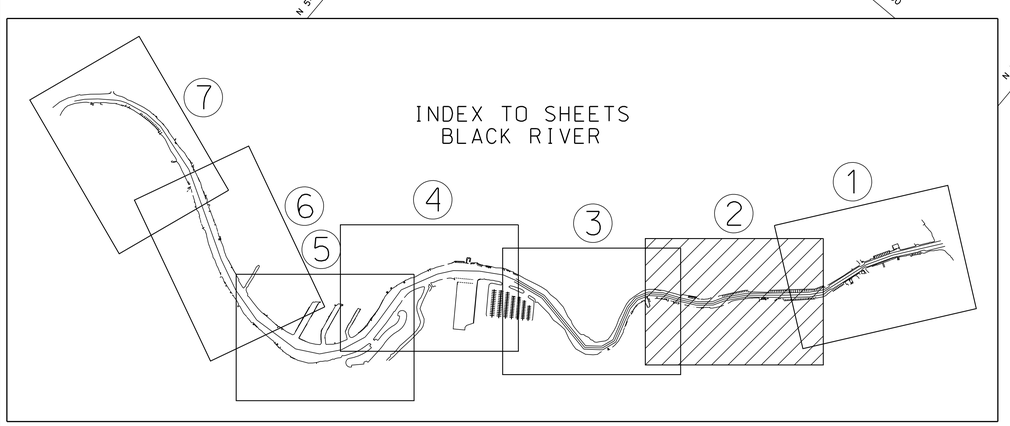
STATION	EAST	NORTH
5	13.641.540.16	544.615.94
6	13.640.993.73	545.266.91
7	13.640.628.52	545.570.56
8	13.640.410.54	545.692.92
9	13.640.183.65	545.959.37
10	13.640.025.63	546.271.62

CHANNEL LINE TURNING POINTS

STATION	EAST	NORTH
16	13.641.502.30	544.583.27
17	13.640.967.17	545.240.23
18	13.640.607.18	545.539.53
19	13.640.386.34	545.663.50
20	13.640.152.21	545.938.45
21	13.639.991.72	546.255.56
40	13.640.059.53	546.287.67
41	13.640.215.10	545.980.28
42	13.640.434.75	545.722.34
43	13.640.649.86	545.601.58
44	13.641.020.29	545.293.60
45	13.641.578.01	544.648.62

CONTROL POINTS (CORPSCON)

STATION	EAST	NORTH
BALL	13.640.546.11	545.522.09
HILL	13.640.025.11	545.846.75
ODD	13.640.582.72	545.705.31
PEW	13.640.037.19	546.579.48
PIER	13.639.847.16	546.213.84
REC	13.640.975.53	545.555.62
SNOW	13.641.420.55	544.657.73
TEN	13.640.571.14	545.887.29
45	13.641.418.24	544.322.41
BLACK RIVER	13.641.165.27	545.189.53



LEGEND:

- CHANNEL LIMITS
- UNDERGROUND LINE
- SHORE LINE S/L

NOTES:

1. THE GRID COORDINATE SYSTEM SHOWN IS REFERENCED TO THE MICHIGAN STATE PLANE COORDINATE SYSTEM. LAMBERT PROJECTION, SOUTH ZONE (2113). NORTH AMERICAN DATUM 1983 (NAD 83). US FOOT.

NO.	DATE	REVISION	BY

U.S. ARMY ENGINEER DISTRICT, DETROIT
CORPS OF ENGINEERS
DETROIT, MICHIGAN

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
SUBMITTED BY:
CHIEF, PROJ. OPNS SECT.

BLACK RIVER, MI

CONDITION SOUNDINGS
C.S. 33+00 TO C.S. 62+00
07 AUG 2006
DETROIT AREA OFFICE

APPROVAL RECOMMENDED:
CHIEF, OTS BRANCH
DATE

APPROVED:
CHIEF, CONST - OPNS DIVISION

SCALE AS SHOWN 1" = 100'
CADD FILE NAME
DRAWING NUMBER brph0206c.dgn
SHEET 2 OF 2