



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) CORRESPONDING TO THE WATER SURFACE ABOVE MEAN WATER LEVEL AT RHINOCEROS, QUEBEC.

GRID COORDINATES

GRIDS SHOWN ARE BASED ON NATIONAL GEODETIC SURVEY PROJECTION TABLES, STATE OF MICHIGAN, SOUTH ZONE (8153), LAMBERT CONFORMAL PROJECTION, 1983 NORTH AMERICAN DATUM.

DIRECTIONS

ALL DIRECTIONS ARE GRID AZIMUTHS REFERRED TO NORTH ZERO.

PROJECT DEPTHS ARE AS SHOWN ON DRAWING.

THE AUTOMATED ELECTRONIC SURVEY WAS CONDUCTED BY FRED LEXON, PARTY CHIEF, ABOARD THE USACE SURVEY VESSEL WHEELER AT RHINOCEROS, QUEBEC.

AUTOMATED EQUIPMENT USED

POSITIONING: TSS POS-MV
 DATA PROCESSOR: BELL 950 PC
 SOFTWARE: HYBACK
 PLOTTERS: ENCAD CADAGE 2
 SONIC SOUNDERS: RESON SEABAT 8125

NOTES

1. GAGES USED WERE OBTAINED FROM A GAGE BOARD ON LIGHT 20.
2. POSITIONS WERE DETERMINED BY GPS REFERENCE BEACON BOB, LOCATED AT FORT WAYNE DETROIT, MICHIGAN - FREQUENCY 519 KHZ, 200 WPS
3. DEPTH MEASURED USING SEABAT 8125 ULTRA HIGH RESOLUTION FOCUSED MULTI-BEAM ECHOSOUNDER SYSTEM

100' 0' 100' 200'
SCALE

NO.	DATE	REVISION	BY
U.S. ARMY ENGINEER DISTRICT, DETROIT			
CORPS OF ENGINEERS			
DETROIT, MICHIGAN			
DESIGNED BY:	DETROIT AREA OFFICE	04 MAY 2004	
DRAWN BY:	DETROIT RIVER, MICHIGAN		
CHECKED BY:	LIVINGSTONE CHANNEL		
REVIEWED BY:	CS 357+50 TO CS 393+50		
	MULTI-BEAM SURVEY RESULTS		
	MINIMUM STRIKE PLOT		
SUBMITTED BY:	P.E. APPROVAL RECOMMENDED:	P.E.	DATE
CHIEF, PROJ. OPS. SEC.	CHIEF, OPERATIONS TECHNICAL SUPPORT BRANCH		
APPROVED:	SCALE AS SHOWN		
CHIEF, CONSTRUCTION - OPERATIONS DIVISION	P.E.	SCALE AS SHOWN	DRAWING NUMBER
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			SHEET 11 OF 14