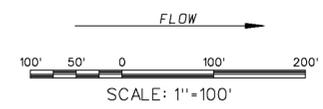


**NOTES**

1. THE SOUNDINGS INDICATED HEREON REPRESENT THE MINIMUM DEPTH FOUND IN THE 10 FOOT BY 10 FOOT AREA CENTERED AROUND THE TEXT. MINIMUM DEPTH DATA IS PRODUCED FOR STRIKE/SHOAL REMOVAL OPERATIONS AND NOTICES TO NAVIGATION INTERESTS.
2. ELEVATIONS AND SOUNDING DEPTHS ARE REFERRED TO INTERNATIONAL GREAT LAKES DATUM 1955 (IGLD 55). LOW WATER DATUM ZERO IS 599.9 FEET ABOVE MEAN WATER LEVEL AT FATHER POINT QUEBEC. WATER LEVEL READINGS ARE FROM AN AUTOMATED GAUGE LOCATED AT BAY MILLS POINT. DEPTHS ARE MEASURED USING A RESON SEABAT 8125 MULTIBEAM SONAR.
3. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON MAY 10, 2007 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS PRESENT AT THE TIME.
4. THE LOCATION OF NAVIGATION AIDS REPRESENT THEIR GENERAL LOCATION AND CANNOT BE CONSIDERED FOR NAVIGATION.
4. HORIZONTAL POSITIONING IS DETERMINED USING THE DIFFERENTIAL GLOBAL POSITIONING SYSTEM (DGPS). THE DIFFERENTIAL CORRECTIONS ARE PROVIDED BY U.S. COAST GUARD DIFFERENTIAL BROADCAST STATIONS LOCATED AT PICKFORD, AND CHEBOYGAN MI. SIGNAL STRENGTH IS USED AS THE DETERMINING FACTOR IN DIFFERENTIAL SELECTION. THE DGPS RECEIVER IS MANUFACTURED BY STARLINK, INC. MODEL DNAV 212, SERIAL NO. 292. THIS IS A SINGLE FREQUENCY RECEIVER (C/A, L1 CODE) WITH ADVERTISED POSITIONAL ACCURACY OF 1-3 METERS RMS.
5. GRID COORDINATES ARE BASED ON THE MICHIGAN STATE PLANE COORDINATE SYSTEM, LAMBERT PROJECTION, MICHIGAN NORTH ZONE (2111), NORTH AMERICAN DATUM 1983 (NAD83). ALL COORDINATES SHOWN ARE IN U.S. SURVEY FEET. CROSS SECTIONS AND RANGES ARE REFERRED TO BIRCH POINT COURSE.
6. UNLESS OTHERWISE NOTED PROJECT DEPTH IS 30.0' BELOW LOW WATER DATUM. UNLESS OTHERWISE NOTED PRIMARY BOTTOM TYPE CONSISTS OF SAND/CLAY.



Sheet Reference Number:  
**BP-19**  
Sheet 19 of 20

500 AREA OFFICE  
SAINT MARY'S RIVER  
FEDERAL NAVIGATION CHANNEL  
  
**BIRCH POINT COURSE  
SURVEY SECTION 19  
C.S. 360+00 TO C.S. 380+00  
30.0' STRIKE CHART**

U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS DETROIT, MICHIGAN		Surveyed by: J. Mrazek	Survey Date: May 10, 2007	Rev.
Area Eng. Sso Office	Chief, Operations	Dwn by: J.S.M.	ckd by:	Design file name: Bipv119s071.dgn
Approved by:	Submitted by:	Drawing code:		
District Engineer:	Chief, SMR Section	File name:	Plot date:	Plot scale:

Symbol	Description	Date	Appr.	Symbol	Description	Date	Appr.

