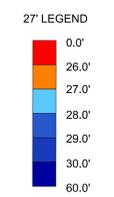
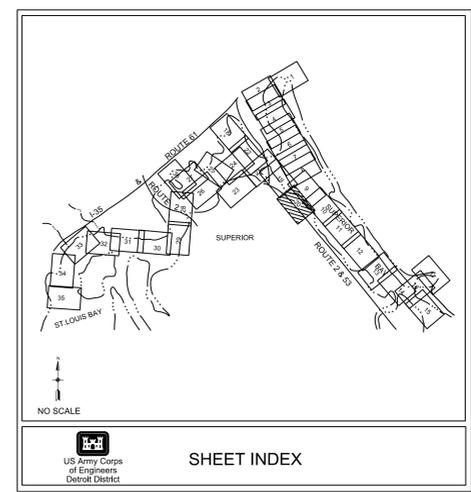




AREA 20

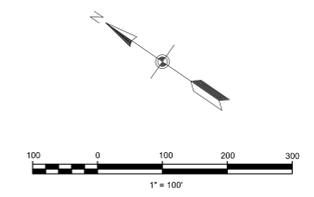


- 1) THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS PRESENT AT THAT TIME.
- 2) SOUNDING DEPTHS ARE REFERENCED TO INTERNATIONAL GREAT LAKES DATUM 1985 (IGLD 85) LOW WATER DATUM ELEVATION 601.1 FEET ABOVE MEAN WATER LEVEL AT RIMOUSKI QUEBEC. WATER LEVEL READINGS ARE FROM AN AUTOMATED NOAA GAGE LOCATED AT DULUTH, MINNESOTA (9099064). DEPTHS ARE MEASURED USING A ROSS LABORATORIES MODEL 825C PORTABLE SURVEY SOUNDER.
- 3) HORIZONTAL POSITIONING IS DETERMINED USING THE DIFFERENTIAL GLOBAL POSITIONING SYSTEM (DGPS). THE DIFFERENTIAL CORRECTIONS ARE PROVIDED BY THE U.S. COAST GUARD DIFFERENTIAL BROADCAST STATION LOCATED AT WISCONSIN POINT, SUPERIOR, WISCONSIN.

NOTES

- 4) THE GRID COORDINATE SYSTEM SHOWN IS REFERENCED TO THE MINNESOTA STATE PLANE COORDINATE SYSTEM, LAMBERT PROJECTION, NORTH ZONE (2201), NORTH AMERICAN DATUM 1983 (NAD 83), US SURVEY FOOT.
- 5) THE LOCATION OF NAVIGATION BUOYS REPRESENTS THEIR GENERAL LOCATION AND CANNOT BE CONSIDERED FOR NAVIGATION.
- 6) THE SURVEY SHOWN WAS CONDUCTED BY A. ALBERTSON ON 22 SEPT 2016.
- 7) THE BASE MAP FEATURES DEPICTED ON THIS MAP WERE DIGITIZED FROM EXISTING CHARTS AND ARE OUTDATED AND INACCURATE.
- 8) PROJECT DEPTH FOR THIS AREA IS 27.0'.

- LEGEND
- HORIZONTAL CONTROL POINT
 - CHANNEL LINE TURNING POINT
 - CHANNEL LINE
 - DREDGING LIMIT
 - SHORELINE
 - PROJECT DEPTH CONTOUR
 - X+XXHB = BASELINE STATIONING FOR HOWARDS BAY



US Army Corps of Engineers

PROJECT NAME:	DULUTH SUPERIOR HARBOR
PROJECT NUMBER:	MINNESOTA / WISCONSIN
DATE:	SEPTEMBER 2016
DESIGNER:	US ARMY CORPS OF ENGINEERS
ENGINEER:	DETROIT DISTRICT
CONTRACT NO.:	DETROIT, MI
APPROVED BY:	
DATE:	
FILE NAME:	800LAKE WISCONSIN SOUTH
IMAGE SOURCE:	DULUTH, MN 55802
SCALE:	1" = 100'

DULUTH SUPERIOR HARBOR
MINNESOTA / WISCONSIN
CONDITION OF CHANNEL
SEPTEMBER 2016

SHEET IDENTIFICATION
VH101