



**NOTES**

- 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) ALL SOUNDINGS ARE IN FEET AND ARE REFERENCED TO LOW WATER DATUM ELEVATION 601.1 ABOVE MEAN SEA LEVEL, I.G.L.D. 1985.
- 3) PROJECT DEPTHS FOR THIS AREA ARE 27'
- 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 FOOT.
- 5) THE LOCATION OF NAVIGATION BUOYS REPRESENTS THE GENERAL LOCATION ON THE DATE OF THE SURVEY AND CANNOT BE CONSIDERED FOR NAVIGATION.
- 6) THE SURVEY SHOWN WAS CONDUCTED BY D.C. GOLTZ PARTY CHIEF DURING 20 JULY 2011, USING D.G.P.S. POSITIONING, AN ODOM CV-3 SOUNDER, AND A HIPACK AUTOMATED HYDROGRAPHIC SURVEY SYSTEM.

**\*\* NOTES \*\***  
 HB = Baseline Stationing for Howards Bay  
 Baseline =

**LEGEND**

- HORIZONTAL CONTROL POINT
- DREDGING LIMIT TURNING POINT
- CHANNEL LINE TURNING POINT
- CHANNEL LINE
- DREDGING LIMIT
- SHORELINE
- PROJECT DEPTH CONTOUR
- AFTER DREDGING SOUNDINGS

SCALE IN FEET

NO.	DATE	REVISION	BY
U.S. ARMY ENGINEER DISTRICT, DETROIT CORPS OF ENGINEERS DETROIT, MICHIGAN			
DESIGNED BY:	DULUTH-SUPERIOR HARBOR		
DRAWN BY:	MINNESOTA-WISCONSIN		
CHECKED BY:	CONDITION SURVEY - JULY 2011		
REVIEWED BY:	AFTER DREDGING SURVEY-SEPTEMBER 2011		
SUBMITTED BY:	DULUTH AREA OFFICE		DULUTH, MN
APPROVED:	P.E.	P.E.	DATE
CHIEF, PROJ. OPNS. SEC.	CHIEF, DT'S BRANCH		
SCALE AS SHOWN 1"=100'		CADD FILE NAME: DS19C11_UPDATED.DGN	
CHIEF, CONST. DIV.	P.E.	DRAWING NUMBER	
AS REQUIRED BY ENGINEERING CONTRACT 1102-7-101		SHEET 1 OF 1	

THIS PLAN ACCOMPANIES CONTRACT NO.

DS7570/19-57