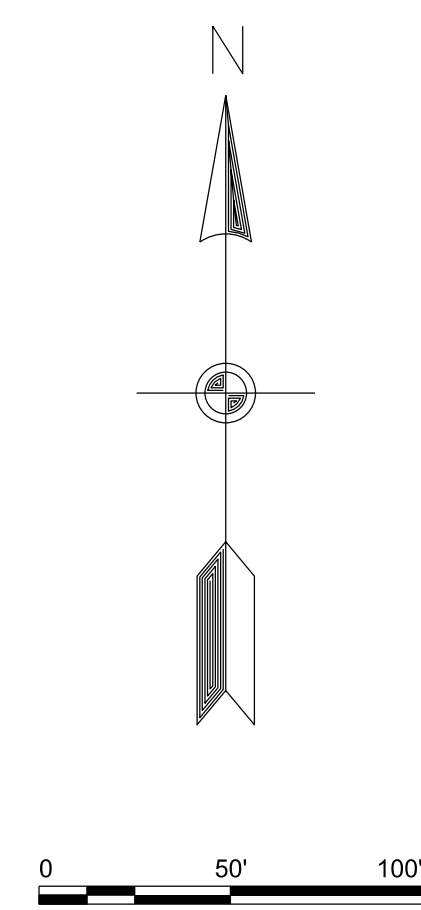
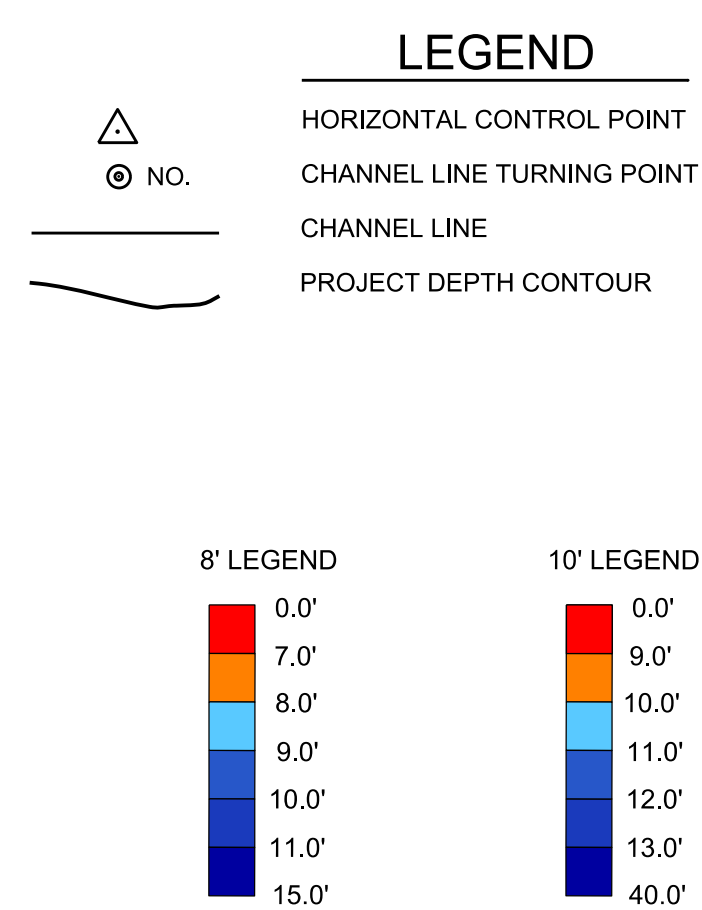


CHANNEL CONTROL			
STA.	DESCRIPTION	COORDINATES	
		NORTHING	EASTING
PT. 1	CHANNEL LINE PT.	492760.870	2954700.447
PT. 2	CHANNEL LINE PT.	492850.870	2954699.148
PT. 3	CHANNEL LINE PT.	492747.971	2954479.247
PT. 4	CHANNEL LINE PT.	492847.970	2954477.849
PT. 5	CHANNEL LINE PT.	492852.873	2954302.810
PT. 6	CHANNEL LINE PT.	492874.771	2954372.650
PT. 7	CHANNEL LINE PT.	493131.470	2953834.232
PT. 8	CHANNEL LINE PT.	492899.328	2954330.816
PT. 9	CHANNEL LINE PT.	492980.273	2953803.354
PT. 10	CHANNEL LINE PT.	493172.370	2953863.159
PT. 12	CHANNEL LINE PT.	493205.970	2953812.259
PT. 14	CHANNEL LINE PT.	493159.071	2953785.056
PT. 16	CHANNEL LINE PT.	493022.072	2953375.955

HORIZONTAL CONTROL		
STA.	COORDINATES	
	NORTHING	EASTING
KR-100	492805.32	2954473.59
KR-101	492701.46	2954668.20
KR-102	493054.94	2953774.60
KR-104	492947.72	2954347.85
KR-106	493321.07	2953707.65
KR-107	493265.47	2953707.04
KR-108	493159.80	2953898.39



NOTES

- 1) THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS CONDUCTED ON JUNE 13, 2019 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 WERE OBTAINED WITH RTK GPS. DEPTHS ARE MEASURED USING A ROSS LABORATORIES MODEL R20C PORTABLE SURVEY SOUNDER.
- 3) HORIZONTAL POSITIONING IS DETERMINED USING REAL TIME KINEMATIC (RTK) GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS) CORRECTIONS FROM A BASE STATION LOCATED AT NGS MONUMENT '908 9083 KNIFE,' A CHISELED SQUARE ON A ROCK OUTCROP.
- 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) PROJECT DEPTHS FOR THIS AREA ARE 8' & 10'.

US Army Corps of Engineers

DESIGNED BY	ENGINEER	DATE	2019
DRAWN BY	ENGINEER	DATE	2019
CHECKED BY	ENGINEER	DATE	2019
APPROVED BY	ENGINEER	DATE	2019

PROJECT NO.	10-15-19
PROJECT NAME	KNIFE RIVER HARBOR SPRINGS
PROJECT LOCATION	DETROIT DISTRICT, MI
PROJECT DATE	JUNE 2019
PROJECT SCALE	1" = 40'
PROJECT SOURCE	FILE NAME: 10-15-19

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