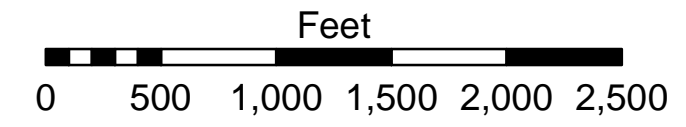
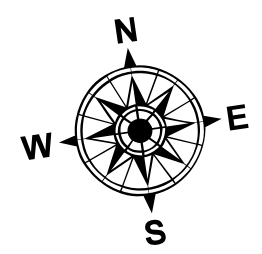
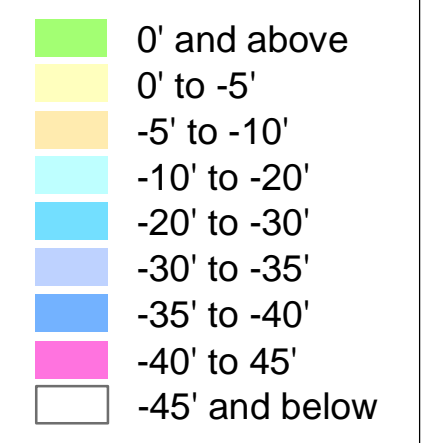


LEGEND	
--- Federal Navigation Channel	○ Cable Area
— Federal Navigation Center Line	□ Placement Area
— As-built Pipeline/Cable	□ Anchorage Area
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point
— Project Depth Contour	⚓ Wrecks-Submerged
□ Borrow Area	★ Beacon, General
● Shoalest Sounding**	◆ Red Navigation Buoy
◆ Green Navigation Buoy	



LWRP: 1.9  
 Gage Reading: BR:9.4 D:4.5 USED:7.20 NAVD  
 Sea Conditions: CALM  
 Vessel Name: M/V LAFORCHE  
 Survey Type: CS  
 Sounding Frequency\*\*\*: HIGH

**NOTES:**  
 Horizontal Coordinate System:  
 North American Datum of 1983 (NAD83), projected to the State Plane Coordinate System (SPCS), Louisiana South Zone. Distance units in U.S. Survey Feet.  
 Vertical Datum:  
 Soundings are shown in feet and indicate depths below Low Water Reference Plane 2007 (NAVD).  
 Distances on the Mississippi River, above and below Head of Passes are shown at 1 mile intervals.  
 The location of navigation aids are base on and provided by the U.S. Coast Guard and USACE crew.  
 2015 Aerial Photography data source: NAIP, USDA-FSA-APFO Aerial Photography Field Office.  
 Reference is N.O.A. Navigation Chart No. 11370.  
 \*\* Shoalest Sounding per Quarter per Reach.  
 \*\*\* High frequency (200 kHz) survey data represents the first signal return at a sounding location and will include suspended solids, known as "fluff", if present. Low frequency (20 kHz) survey data normally penetrates through this "fluff" layer to depict elevations of consolidated bottom material. Low frequency accuracies may vary depending on channel conditions and fathometer settings.

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT		
Submitted:	Surveyed By: RYLAND/SIMMONS	Plotted By: BD
Recommended:	Chief, Survey Section	Checked By: AD/JH
Approved:	Chief, Waterways Maintenance Section	

**MISSISSIPPI RIVER - B.R. TO GULF  
 GRANADA CROSSING  
 MD\_10\_GRA\_20230718\_CS  
 18 July 2023**

**Sheet  
 Reference  
 Number  
 10 of 97**

Revision Number:  
 4.2-3020M(2)



**DISCLAIMER**  
 Access Constraints: The United States Government furnishes these data and the recipient accepts and uses them with the express understanding that the data are not to be used for any purpose other than that for which they were prepared, and that the user is responsible for the results of any use of the data. The user is responsible for the results of any use of the data. The user is responsible for the results of any use of the data. The user is responsible for the results of any use of the data.  
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 Data Constraints: Hydrographic survey data is subject to change rapidly due to several factors including but not limited to changing bathymetry, sedimentation, and channel migration. The user is responsible for the results of any use of the data. The user is responsible for the results of any use of the data. The user is responsible for the results of any use of the data.  
 The information depicted on this map represents the results of a survey conducted on the Mississippi River. The information is not to be used for any purpose other than that for which it was prepared. The user is responsible for the results of any use of the data. The user is responsible for the results of any use of the data. The user is responsible for the results of any use of the data.