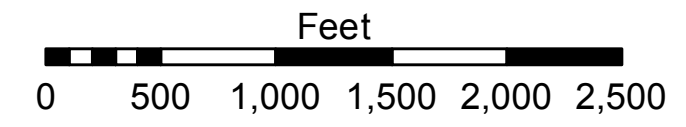
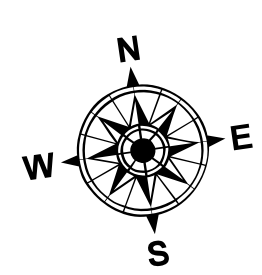


LEGEND	
--- Federal Navigation Channel	○ Cable Area
— Federal Navigation Center Line	□ Placement Area
— As-built Pipeline/Cable	□ Anchorage Area
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point
— Project Depth Contour	⚓ Wrecks-Submerged
□ Borrow Area	★ Beacon, General
● Shoalest Sounding**	◆ Red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

0' and above
0' to -5'
-5' to -10'
-10' to -20'
-20' to -30'
-30' to -35'
-35' to -40'
-40' to -45'
-45' and below



LWRP: 1.9
 Gage Reading: BR:24.0 D:14.7 USED:19.8 NAVD
 Sea Conditions: CALM
 Vessel Name: M/V LAFOURCHE
 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.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.



ACCESSORIES:
 The United States Government furnishes these data and the recipient accepts and uses them with the express understanding that the Government makes no warranty, expressed or implied, concerning the accuracy, completeness, reliability, usability or suitability for any particular purpose of the information provided. The user is responsible for the results of the application of the data for other than its intended purpose.
 Date Created: Hydrographic survey data is subject to change rapidly due to several factors including but not limited to dredging operations, channel migration, and other changes in the hydrographical conditions when developed after the date of the survey. The user is responsible for the results of the application of the data for other than its intended purpose.
 The information depicted on this map represents the results of a survey conducted on or about the date shown. It is not to be considered as representing the general condition existing at that time.

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT	
Submitted:	Surveyed By: JH/SPS
Recommended:	Plotted By: BD
Approved:	Checked By: AC

**MISSISSIPPI RIVER - B.R. TO GULF
 GRANADA CROSSING
 MD_10_GRAX_20200709_CS
 09 July 2020**

**Sheet
 Reference
 Number
 10 of 97**

Revision Number:
 4.1-20191105