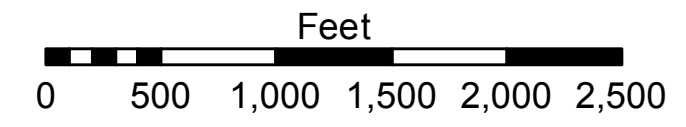
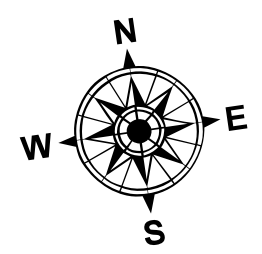


LEGEND

--- Federal Navigation Channel	○ Cable Area	□ Borrow Area	■ 0' and above
— Federal Navigation Center Line	■ Placement Area	● Shoalest Sounding**	■ 0' to -5'
— As-built Pipeline/Cable	□ Anchorage Area	☆ Beacon, General	■ -5' to -10'
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point	◆ Red Navigation Buoy	■ -10' to -20'
— Project Depth Contour	⚓ Wrecks-Submerged	◆ Green Navigation Buoy	■ -20' to -30'
			■ -30' to -35'
			■ -35' to -40'
			■ -40' to -45'
			■ -45' and below



LWRP: 1.9
 Gage Reading: BR:14.2D:7.2 USED:10.2 NAVD
 Sea Conditions: SMOOTH
 Vessel Name: LAFORUCHE
 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 based 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.



DISCLAIMER:

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 furnished. The user is responsible for the results obtained from the use of this information. The application of the data for other than its intended purpose is at the user's risk. The user is responsible for the results obtained from the use of this information. The application of the data for other than its intended purpose is at the user's risk. The user is responsible for the results obtained from the use of this information. The application of the data for other than its intended purpose is at the user's risk.

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT	
Submitted:	Surveyed By: D/S/SPS
Recommended: Chief Survey Section	Plotted By: AO
Approved: Chief Waterways Maintenance Section	Checked By: AO

**MISSISSIPPI RIVER - B.R. TO GULF
 GRANADA CROSSING
 MD_10_GRA_20200805_CS
 05 August 2020**

**Sheet
 Reference
 Number
 10 of 97**

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 4.1-20191105