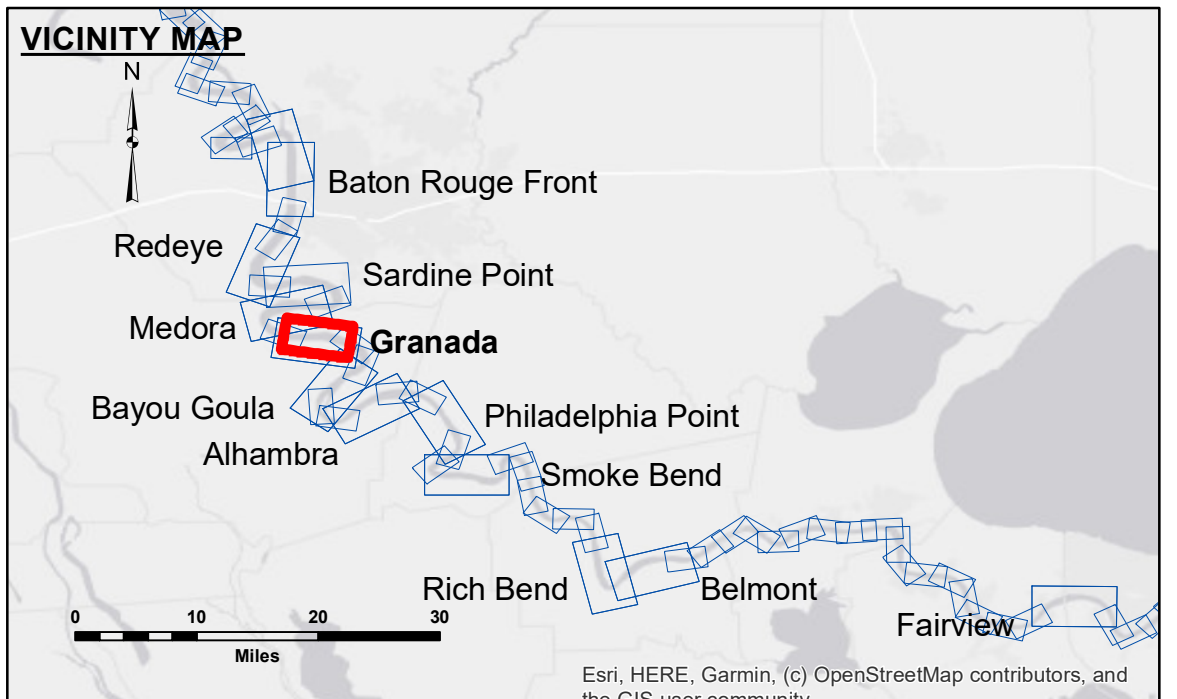


DISCLAIMER
 The information depicted on this map represents the results of a survey conducted by the United States Army Corps of Engineers. The data represents the results of data collection for a specific project and is not intended for use in any other project. The user is responsible for the accuracy, completeness, and reliability of the data for their intended purpose. The user is responsible for the accuracy, completeness, and reliability of the data for their intended purpose. The user is responsible for the accuracy, completeness, and reliability of the data for their intended purpose.

Submitted:	Surveyed By:	DUS/JH
Recommended:	Plotted By:	AO
Approved:	Checked By:	AO

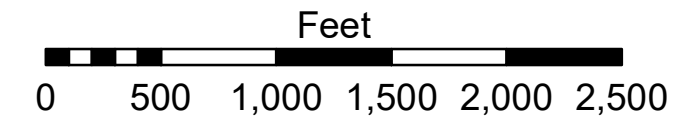
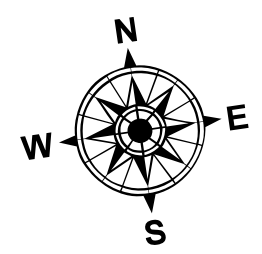
U.S. ARMY CORPS OF ENGINEERS
 NEW ORLEANS DISTRICT

MISSISSIPPI RIVER - B.R. TO GULF
GRANADA CROSSING
 MD_10_GRA_20200316_CS
 16 March 2020



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:38.4D:27.5 USED:33.4 NAVD
 Sea Conditions: SMOOTH
 Vessel Name: OB189
 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.

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