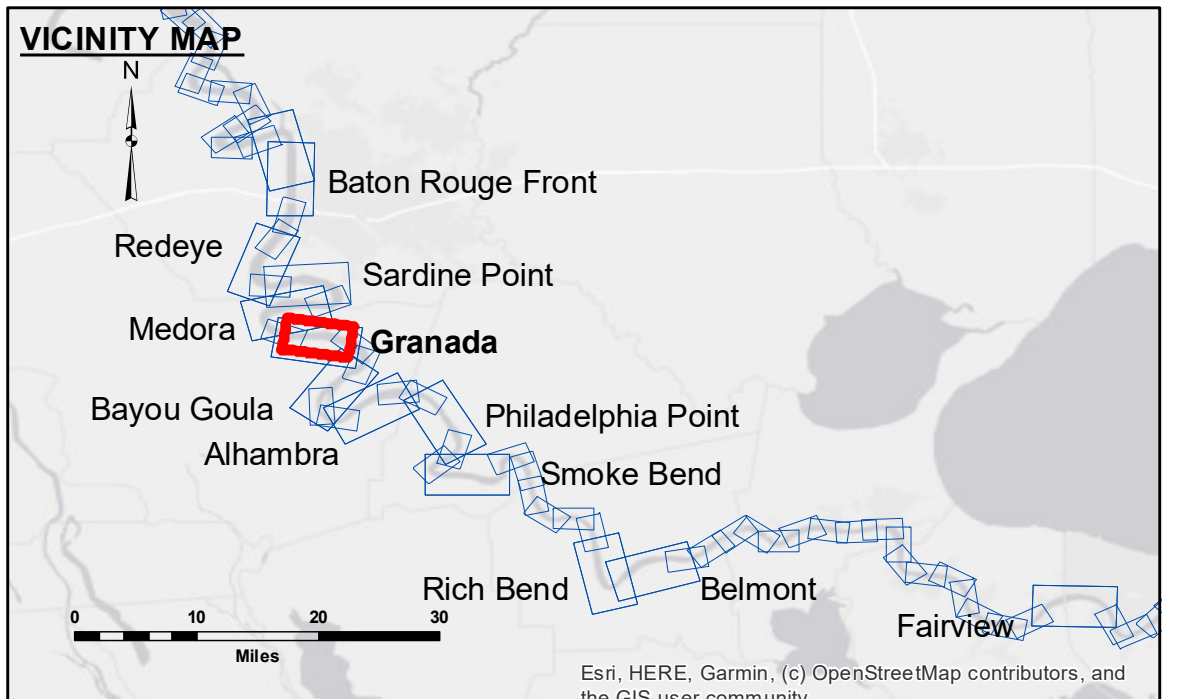


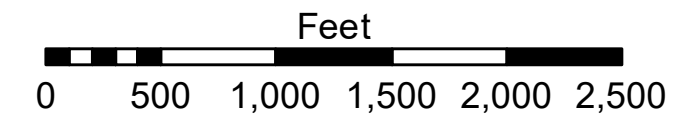
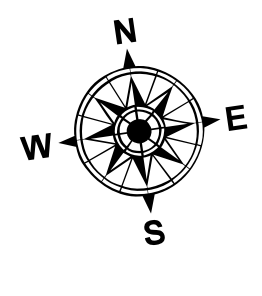
DISCLAIMER: The data represented on this map represents the results of a data collection process for a specific US Army Corps of Engineers project. The data is only valid for the intended use, control, time and accuracy specifications. The user is responsible for the results. The application of the data for other than its intended purpose is not recommended. Hydrographic survey data is subject to change due to several factors including but not limited to dredging, sedimentation, and channel migration. The user is responsible for the results of the data and should verify the data for use in the field. The information depicted on this map represents the results of a data collection process for a specific US Army Corps of Engineers project. The data is only valid for the intended use, control, time and accuracy specifications. The user is responsible for the results. The application of the data for other than its intended purpose is not recommended. Hydrographic survey data is subject to change due to several factors including but not limited to dredging, sedimentation, and channel migration. The user is responsible for the results of the data and should verify the data for use in the field.

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT	
Submitted:	Surveyed By: DSPM
Recommended: Chief Survey Section	Plotted By: BD
Approved: Chief Waterways Maintenance Section	Checked By: AC

**MISSISSIPPI RIVER - B.R. TO GULF
GRANADA CROSSING
MD_10_GRA_20201016_CS
16 October 2020**



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
★ Beacon, General	◆ Green 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:11.6 D:6.5 USED:9.2 NAVD
 Sea Conditions: CALM
 Vessel Name: OB169
 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.

**Sheet
Reference
Number
10 of 97**