



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	

**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 (NGVD).  
 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.  
 2010 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 information depicted on this map represents the results of a survey conducted by the U.S. Army Corps of Engineers. The information is provided for informational purposes only and is not intended to be used for any other purpose. The user is responsible for the accuracy, reliability, and availability of the information for their intended use. The U.S. Army Corps of Engineers does not warrant the accuracy, reliability, or availability of the information for any purpose other than that for which it was collected. The user is responsible for the accuracy, reliability, and availability of the information for their intended use. The U.S. Army Corps of Engineers does not warrant the accuracy, reliability, or availability of the information for any purpose other than that for which it was collected.

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT	
Submitted:	Surveyed By: DS/PS
Recommended:	Plotted By: AO
Approved:	Checked By: AO

**MISSISSIPPI RIVER - B.R. TO GULF  
 GRANADA RECON  
 MR\_10\_GRA\_20170130  
 30 January 2017**

**Sheet  
 Reference  
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