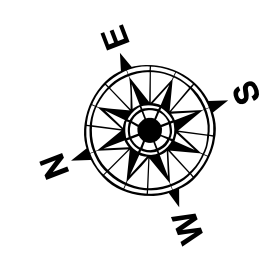
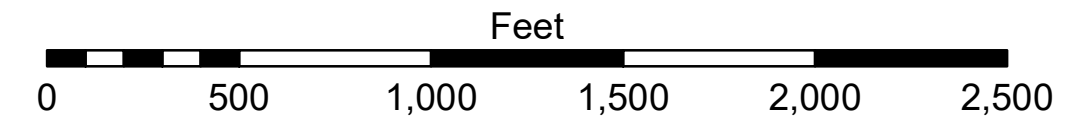


LEGEND			
--- Federal Navigation Channel	○ Cable Area	□ Borrow Area	■ -10' and above
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**	■ -10' to -20'
— As-built Pipeline/Cable	□ Anchorage Area	★ Beacon, General	■ -20' to -30'
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point	◆ Red Navigation Buoy	■ -30' to -40'
— Project Depth Contour	★ Wrecks-Submerged	◆ Green Navigation Buoy	■ -40' to -45'
			■ -45' to -50'
			■ -50' to -55'
			■ -55' and below



Gage Reading: 1.8 MLLW @ MILE 17.9 @ 0925  
 Sea Conditions: ROUGH, 8FT SWELLS  
 Vessel Name: JOHN BOPP  
 Survey Type: CONDITION, SB  
 Sounding Frequency\*\*\*: LOW



**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 Mean Lower Low Water (MLLW, 12-16). Datum Relationships for gage 01670 as of March 2020: 0.0' NAVD88, 2009.55 = 0.79' MLLW = 4.29' MLG  
 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.  
 2016 Aerial Photography data source: Precision Aerial Reconnaissance, LLC (1998 DOQQ in green)  
 Reference is N.O.A. Navigation Chart No. 11361.  
 \*\* 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 (24 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.



**DISTRIBUTION LIABILITY:** The data represents the results of data collection/processing for a specific US Army Corps of Engineers project. It is only valid for its intended use, content, time and accuracy specifications. The user is responsible for the results and accuracy of the data for other than its intended purpose.  
 Data: Constants Hydrographic survey data is subject to change and may vary from time to time. The user is responsible for the accuracy of the data for other than its intended purpose. The user is responsible for the accuracy of the data for other than its intended purpose. The user is responsible for the accuracy of the data for other than its intended purpose. The user is responsible for the accuracy of the data for other than its intended purpose.

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT	
Submitted:	Surveyed By: JH & RCC
Recommended:	Plotted By: TSS
Approved:	Checked By: MSK

**MISSISSIPPI RIVER - B. R. TO GULF  
 SOUTHWEST PASS - SHEET 13  
 SW\_13\_SWP\_20210901\_CS\_PRO  
 01 September 2021**

**Sheet Reference Number  
 13 of 13**

Revision Number:  
 4.1-20191115