U.S. ARMY CORPS OF ENGINEERS 2,671,000 2,668,000 US Army Corps of Engineers District: CEMVN LL=45.1 MLLW Bayou D'Inde LL=44.1 MLLW Buoy BD CALCASIEU SHIP CHANNEL
UPPER SHEET 3
CR_03_UPR_20220808_CS
08 August 2022 629,000 2,668,000 626,000 2,665,000 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. VICINITY MAP **LEGEND** Vertical Datum: -16' and above VRS RTK NTRIP: 1.90 MLLW AVG. Gage Reading: Soundings are shown in feet and indicate depths below Mean Lower Low Water Datum (MLLW). Datum Relationships for gage 73550 as of December 2013:

0.0' NAVD88 (OPUS 2010) = 0.6' MLLW = 1.6' MLG or 0.0' MLLW = 1.0' MLG 3 Fluff Thickness (feet)* -16' to -21' CALM Cable Area Sea Conditions: --- Federal Navigation Channel OB-169 Vessel Name: -21' to -26' — Federal Navigation Center Line Placement Area Shoalest Sounding** Distances on the Calcasieu River are shown at 1 mile intervals. CONDITION Survey Type: -26' to -33' Esri, HERE, Garmin, (c) OpenStreetMap contributors. Sounding Frequency***: LOW The location of navigation aids are base on and provided by the U.S. Coast Guard **Upper Channel** As-built Pipeline/Cable Anchorage Area -33' to -39' Beacon, General and USACE survey crews. -39' to -41' ∅ Obstruction Point Unconfirmed Pipeline/Cable 2022 Aerial Photography data source: PAR LLC Red Navigation Buoy Sheet -41' to -43' Reference is N.O.A.A. Navigation Chart No. 11339. — Project Depth Contour Wrecks-Submerged Reference -43' and below Green Navigation Buoy 400 1,200 Number * Difference between high and low frequency elevations where greater than 1.0'. 3 **of** 53 ** 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) Bar Charnel ERE, Garmin, (c) OpenStreet Map contributors, and the GIS user community survey data normally penetrates through this "fluff" layer to depict elevations of consoldiated bottom Revison Number: material. Low frequency accuracies may vary depending on channel conditions and fathometer 4.2-20200420