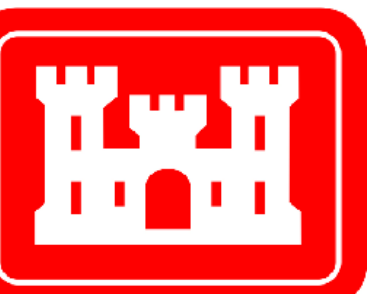
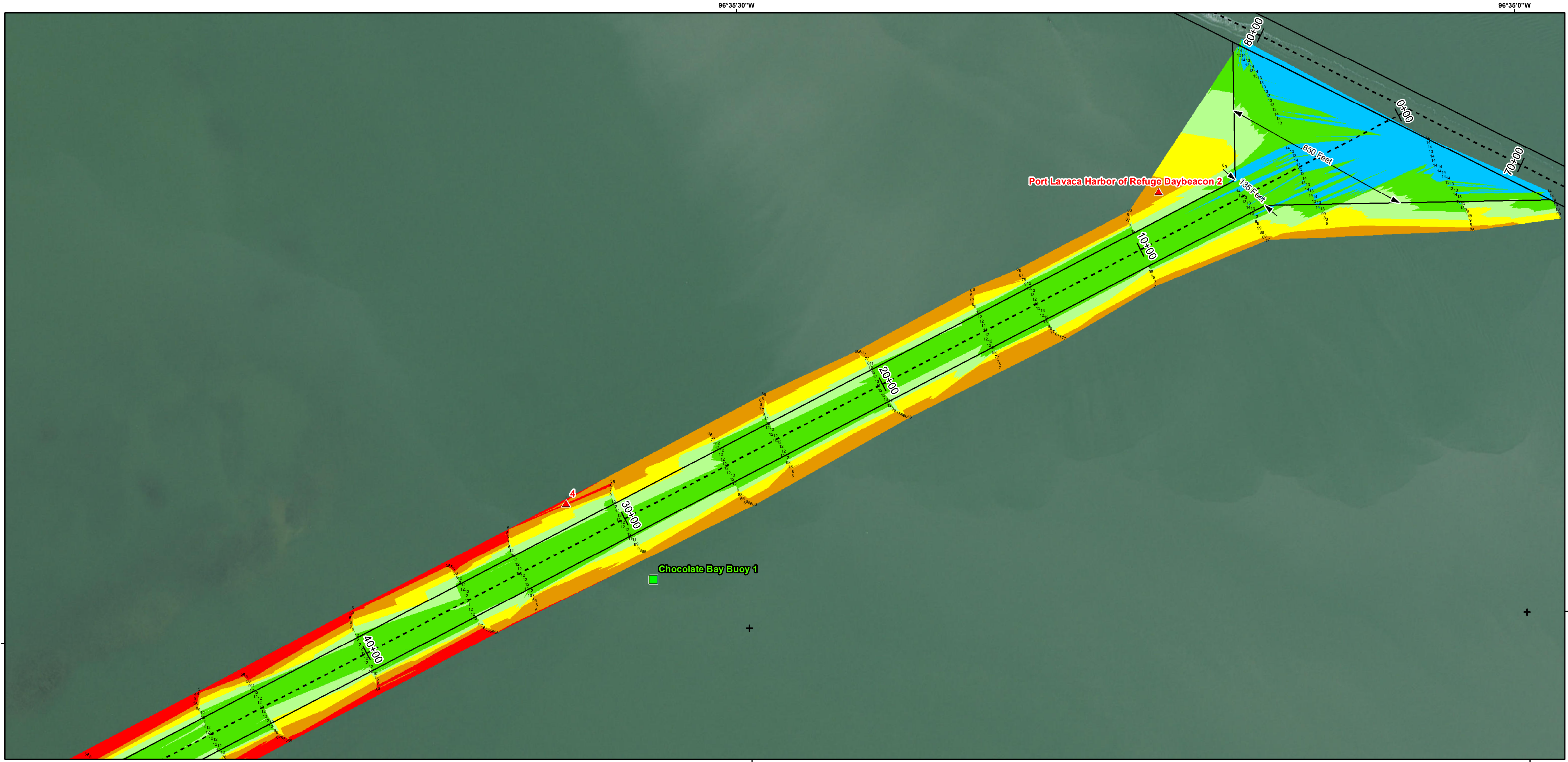
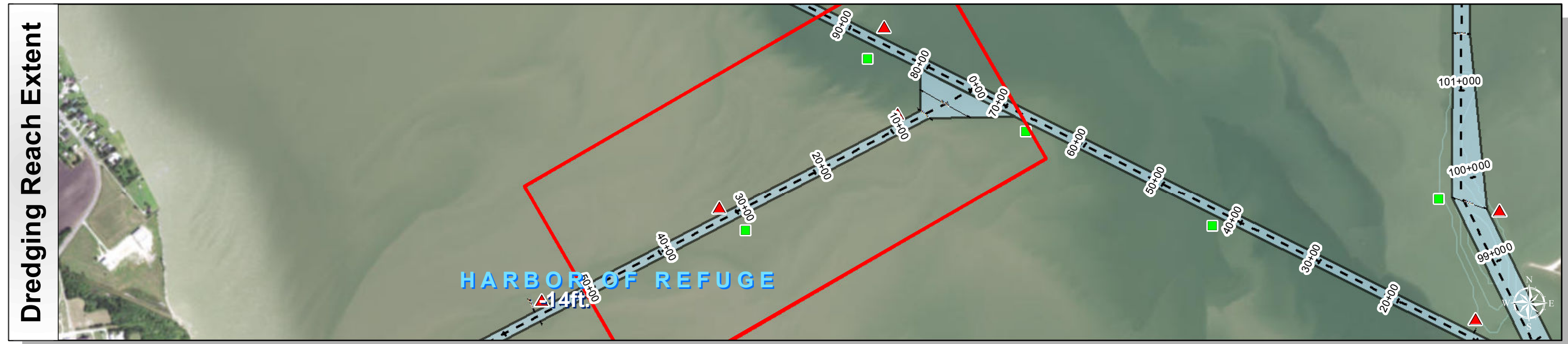
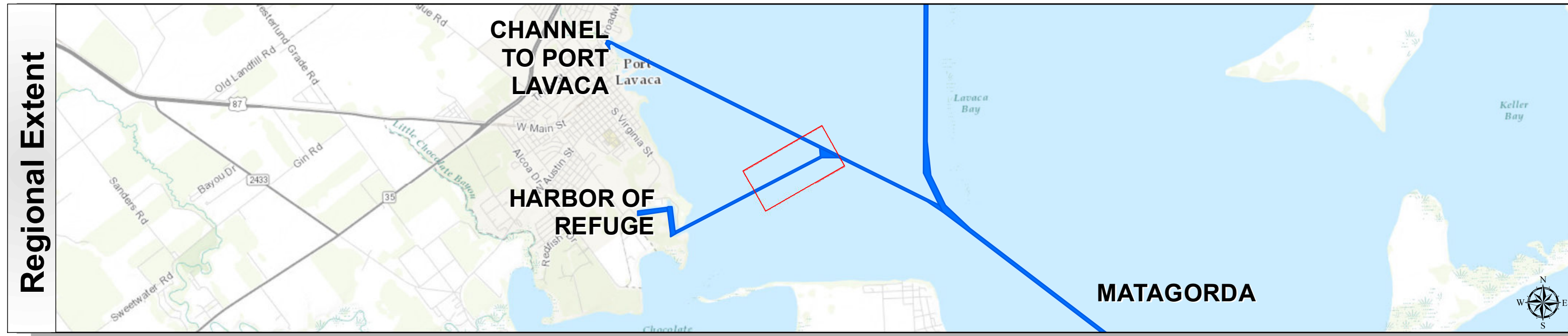


Channel to Harbor of Refuge: Approach Channel



U.S. Army Corps of Engineers
Galveston District

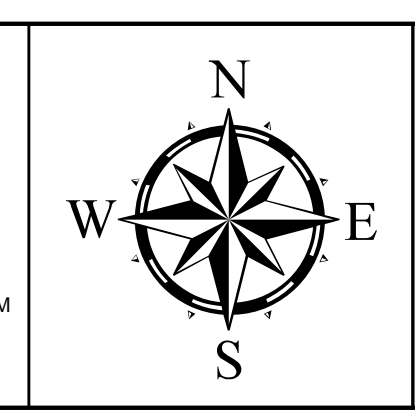


Survey Date(s): 26 September 2017	Authorized Depth: -14ft.
Page: 1 of 4	Side Slope Ratio: (Rise : Run)
Scale: 1:2,000	Additional Imagery: © DigitalGlobe Inc.
Mapped by: m3odmrvk	Print Date: 9/27/2017
Additional Info :	

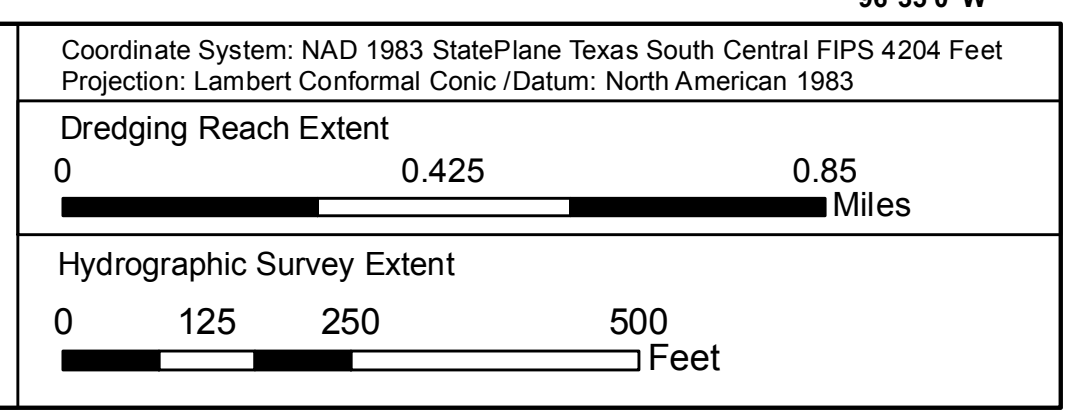
Channel Features	Aids to Navigation	MLLW
— Channel Toe	★ Lights	▲ 4
- - - Channel Center Line	▲ Red Side Aids	■ 4 - 6
— Channel Station Lines	■ Green Side Aids	■ 6 - 8
↔ Channel Dimensions	◆ Mooring Buoy	■ 8 - 10
		■ 10 - 12
		■ 12 - 14
		■ 14 - 16
		■ 16 - 18
		■ < 18
		■ NOAA Bathymetry (DREDGING REACH EXTENT)
		■ 0 - 10
		■ 10 - 15
		■ 15 - 20
		■ 20 - 25
		■ 25 - 30
		■ 30 - 50

NOTES:

- HORIZONTAL COORDINATES ARE REFERENCED TO TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE NAD83 US SURVEY FEET.
- ELEVATIONS ARE REFERENCED TO MEAN LOWER LOW TIDE (MLLW) DATUM.
- THIS PROJECT WAS DESIGNED BY THE GALVESTON DISTRICT OF THE U.S. ARMY CORPS OF ENGINEERS. THE INITIALS AND SIGNATURES AND REGISTRATION DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER1110-1-8152.
- THE INFORMATION DEPICTED ON THIS SURVEY MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME. THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE DUE TO SHOALING EVENTS. A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION PROVIDED HERE. REQUIRED BY 33 CFR 209.325
- FOR THE MOST UP TO DATE INFORMATION PLEASE CHECK OUR WEBSITE AT: [HTTP://WWW.SWG.USACE.ARMY.MIL/MISSIONS/NAVIGATION/HYDROGRAPHIC-SURVEYS/](http://www.swg.usace.army.mil/missions/navigation/hydrographic-surveys/)
- NOAA BATHYMETRY CONTOURS PRODUCED FROM HISTORIC BATHYMETRIC (HYDROGRAPHIC) SURVEYS CONDUCTED BY THE NOAA NATIONAL OCEAN SERVICE/COAST SURVEY, AVAILABLE FROM THE NATIONAL GEOPHYSICAL DATA CENTER. SURVEYS VARY AS TO SOUNDING DENSITY, ACCURACY OF DEPTH, ACCURACY OF NAVIGATION, ZERO DATUM, DATE OF SURVEY AND TYPE OF INSTRUMENTATION.



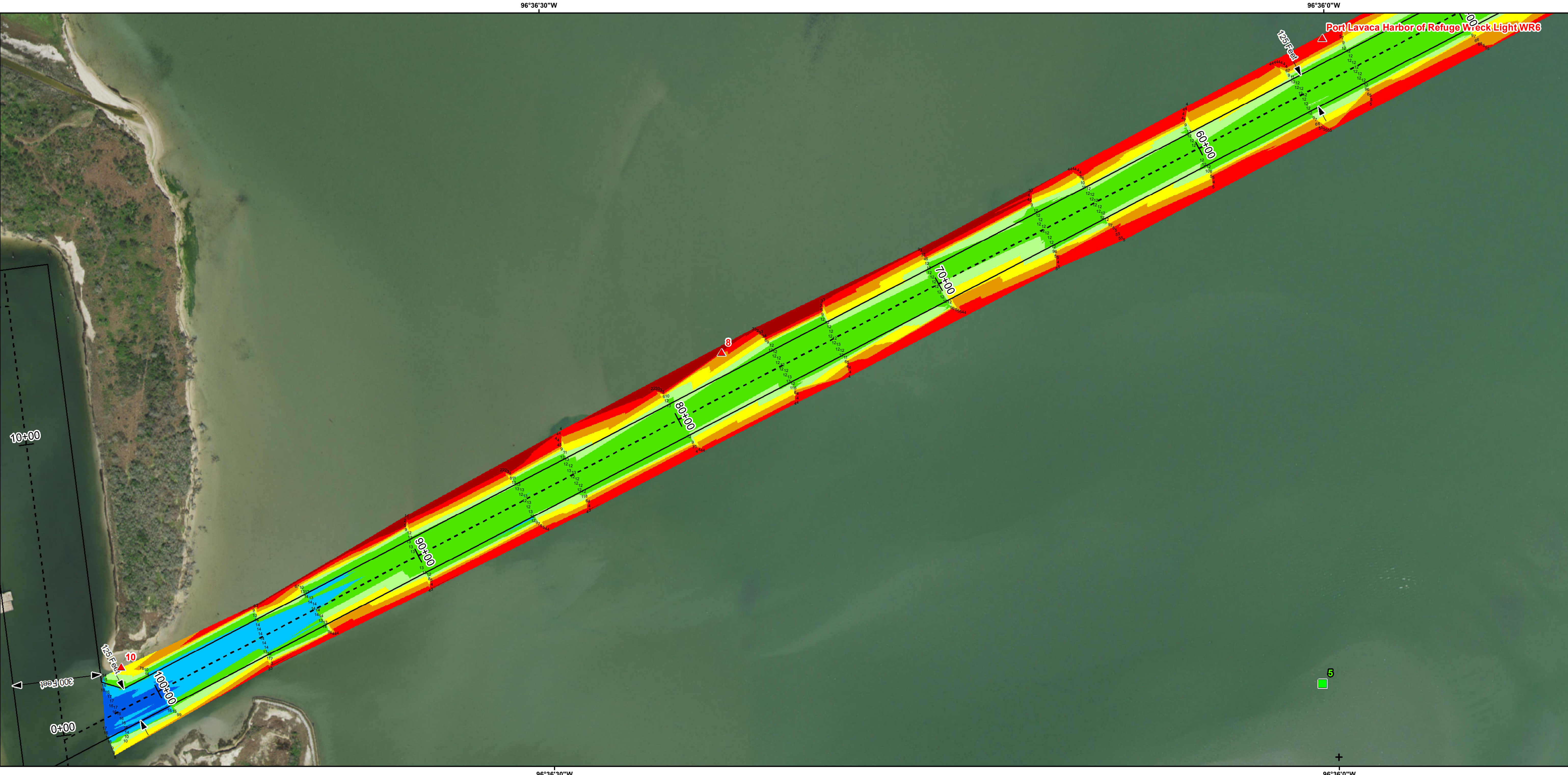
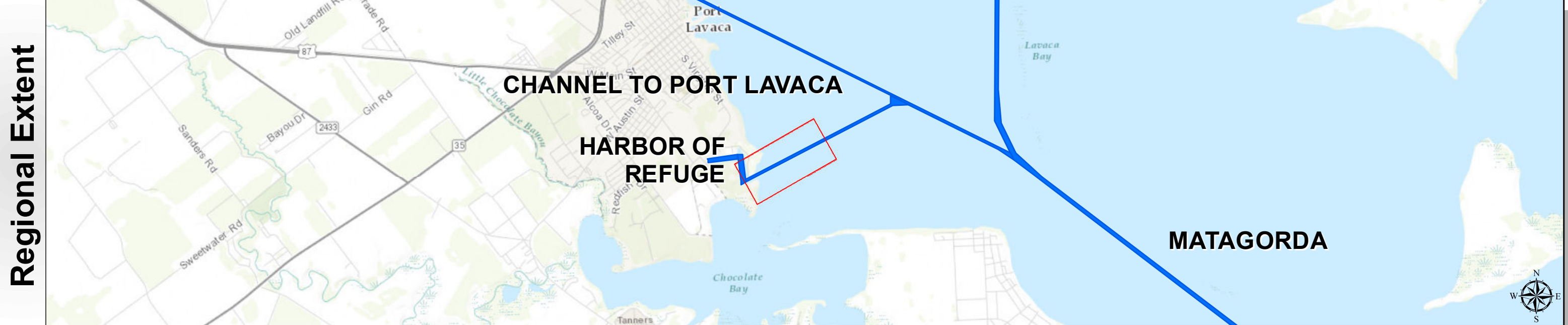
Service Layer Credits: Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



HYDROGRAPHIC SURVEY
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
GALVESTON, TEXAS
Approach Channel

Station: 0+00 to 102+23
HARBOR OF REFUGE
PORT LAVACA, TEXAS

Channel to Harbor of Refuge: Approach Channel



Channel Features	Aids to Navigation	MLLW
— Channel Toe	★ Lights	▲ 4 - 6
- - - Channel Center Line	▲ Red Side Aids	▲ 6 - 8
— Channel Station Lines	▲ Green Side Aids	▲ 8 - 10
↔ Channel Dimensions	◆ Mooring Buoy	▲ 10 - 12
		▲ 12 - 14
		▲ 14 - 16
		▲ 16 - 18
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		0 - 10 10 - 15 15 - 20 20 - 25 25 - 30 30 - 50

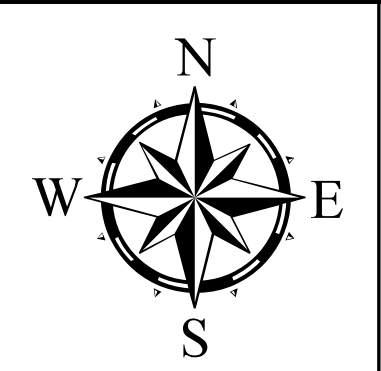
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4. THE INFORMATION DEPICTED ON THIS SURVEY MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME. THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE DUE TO SHOALING EVENTS. A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION PROVIDED HERE. REQUIRED BY 33 CFR 209.325

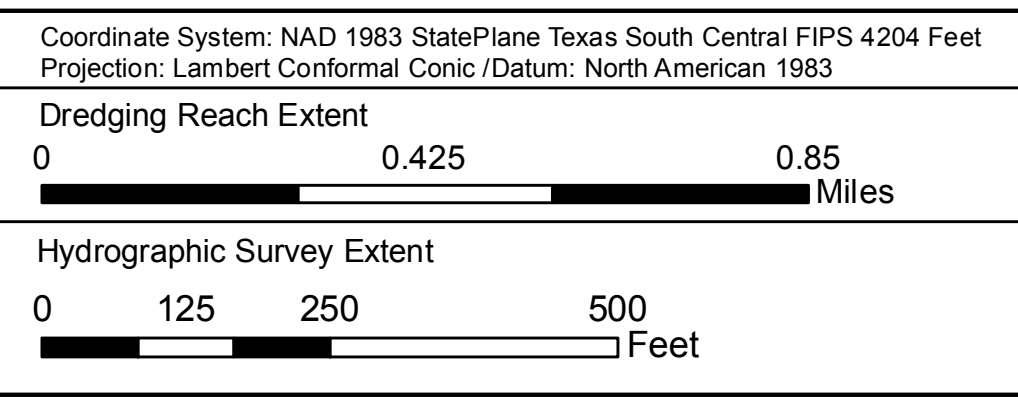
5. FOR THE MOST UP TO DATE INFORMATION PLEASE CHECK OUR WEBSITE AT: [HTTP://WWW.SWG.USACE.ARMY.MIL/MISSIONS/NAVIGATION/HYDROGRAPHIC-SURVEYS/](http://www.swg.usace.army.mil/missions/navigation/hydrographic-surveys/)

6. NOAA BATHYMETRY CONTOURS PRODUCED FROM HISTORIC BATHYMETRIC (HYDROGRAPHIC) SURVEYS CONDUCTED BY THE NOAA NATIONAL OCEAN SERVICE/COAST SURVEY, AVAILABLE FROM THE NATIONAL GEOPHYSICAL DATA CENTER. SURVEYS VARY AS TO SOUNDING DENSITY, ACCURACY OF DEPTH, ACCURACY OF NAVIGATION, ZERO DATUM, DATE OF SURVEY AND TYPE OF INSTRUMENTATION.



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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Survey Date(s): 26 September 2017	Authorized Depth: -1.4ft.
Page: 2 of 4	Side Slope Ratio: (Rise : Run)
Map:	Additional Imagery: © DigitalGlobe Inc.
Scale: 1:2,000	Print Date: 9/27/2017
Mapped by: m3odmrvk	Additional Info:

HYDROGRAPHIC SURVEY
 U.S. ARMY ENGINEER DISTRICT
 CORPS OF ENGINEERS
 GALVESTON, TEXAS
 Approach Channel

Station: 0+00 to 102+23
HARBOR OF REFUGE
 PORT LAVACA, TEXAS