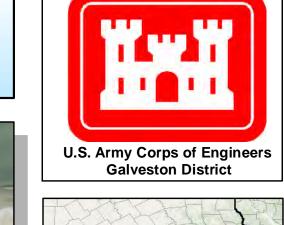
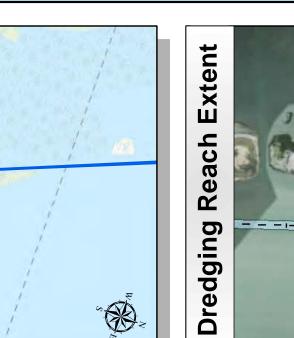


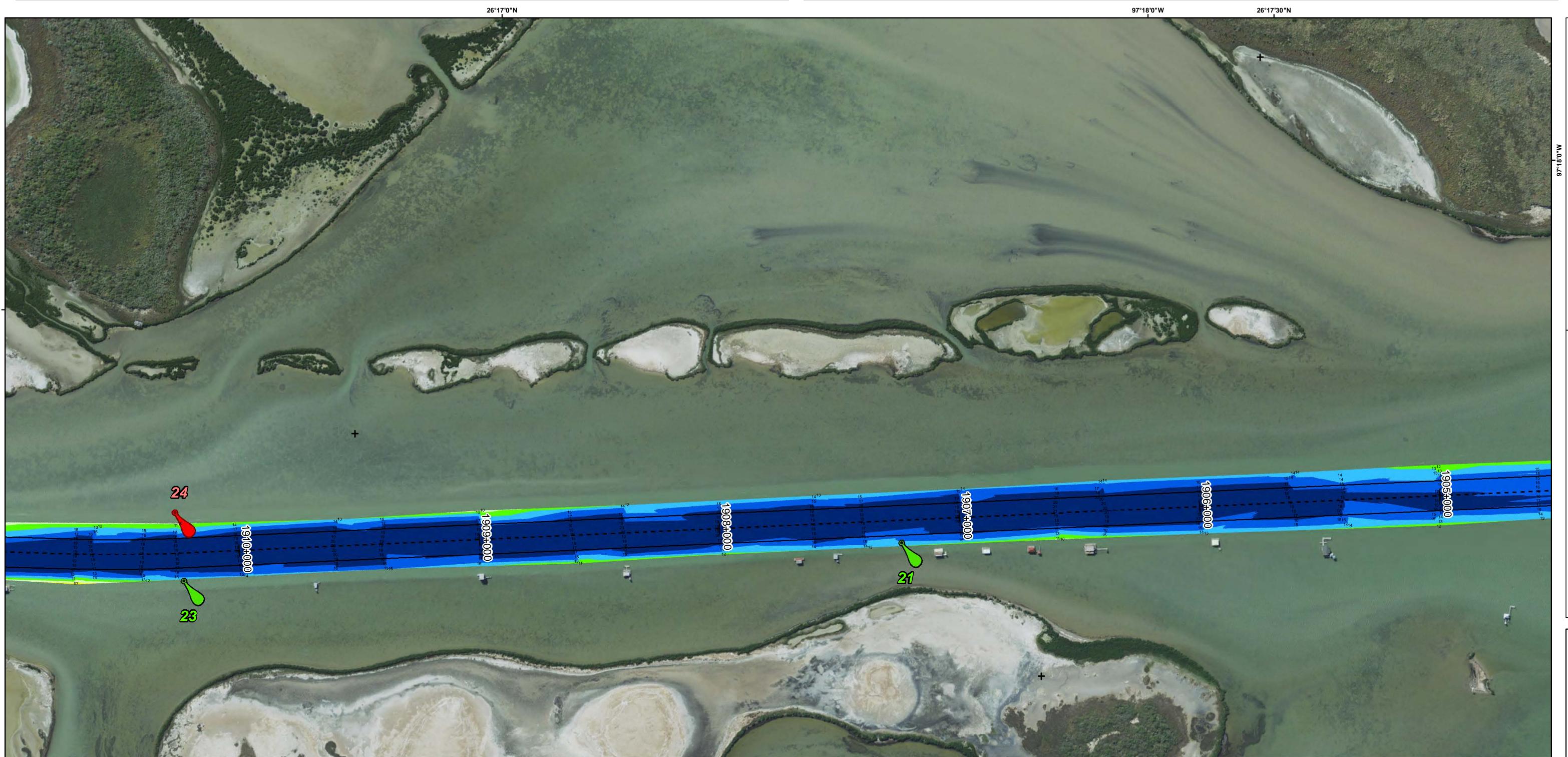
# Gulf Intracoastal Waterway: Arroyo Colorado to Port Brownsville











Aids to Navigation | MLLW

NOAA Bathymetry (DREDGING REACH EXTENT)

**Channel Features** 

Channel Toe

– – Channel Center Line

**←** Channel Dimensions

—— Channel Station Lines

GULF

INTRACOASTAL

WATERWAY

HARLINGEN

I. HORIZONTAL COORDINATES ARE REFERENCED TO TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE NAD83 US SURVEY FEET.

2. ELEVATIONS ARE REFERENCED TO MEAN LOWER LOW TIDE (MLLW) DATUM. B. 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.

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/HYDROGRAPHICSURVEYS/

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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Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

26°17'30"N

97°17<sup>'</sup>30"W

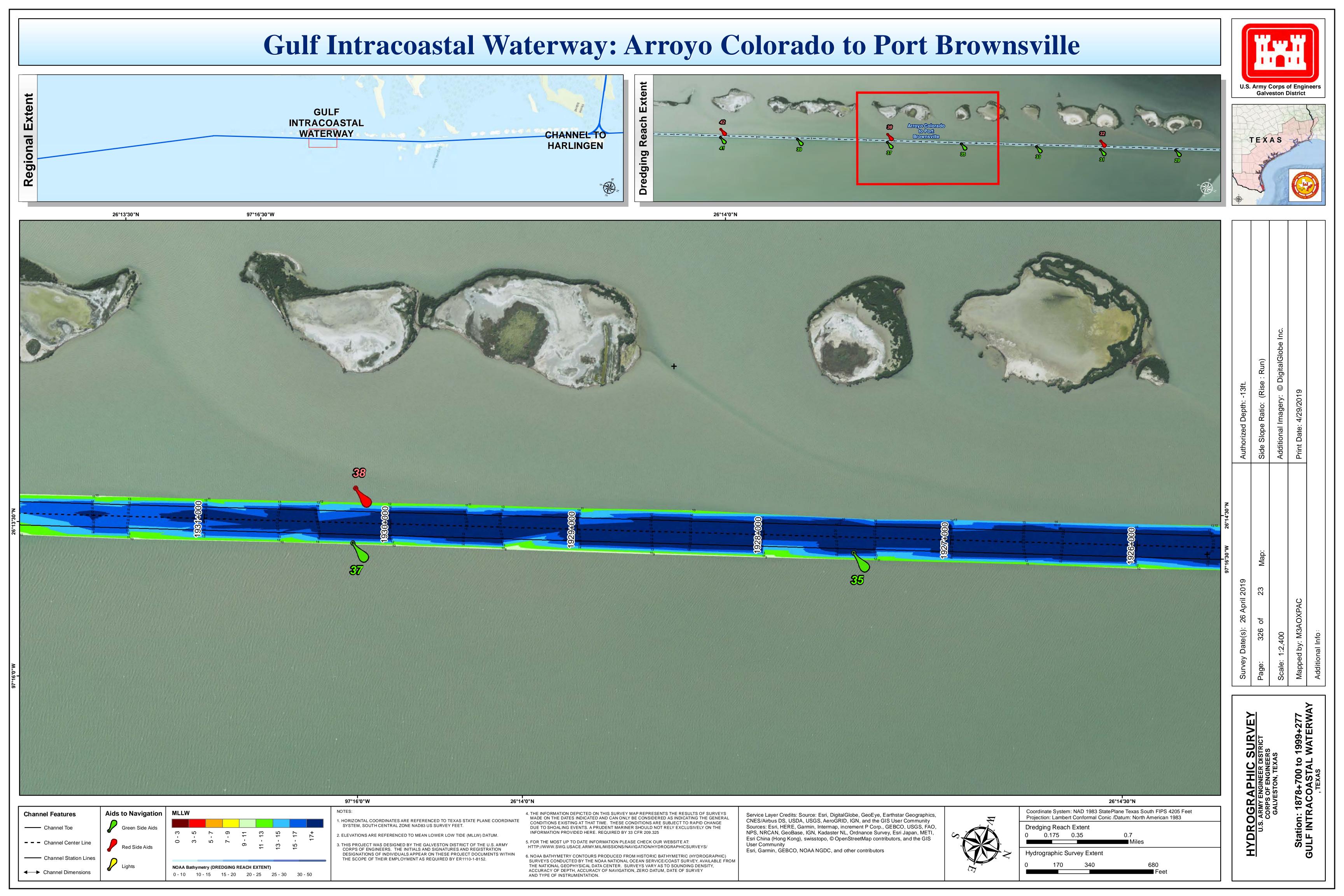
Coordinate System: NAD 1983 StatePlane Texas South FIPS 4205 Feet Projection: Lambert Conformal Conic /Datum: North American 1983 Dredging Reach Extent Hydrographic Survey Extent

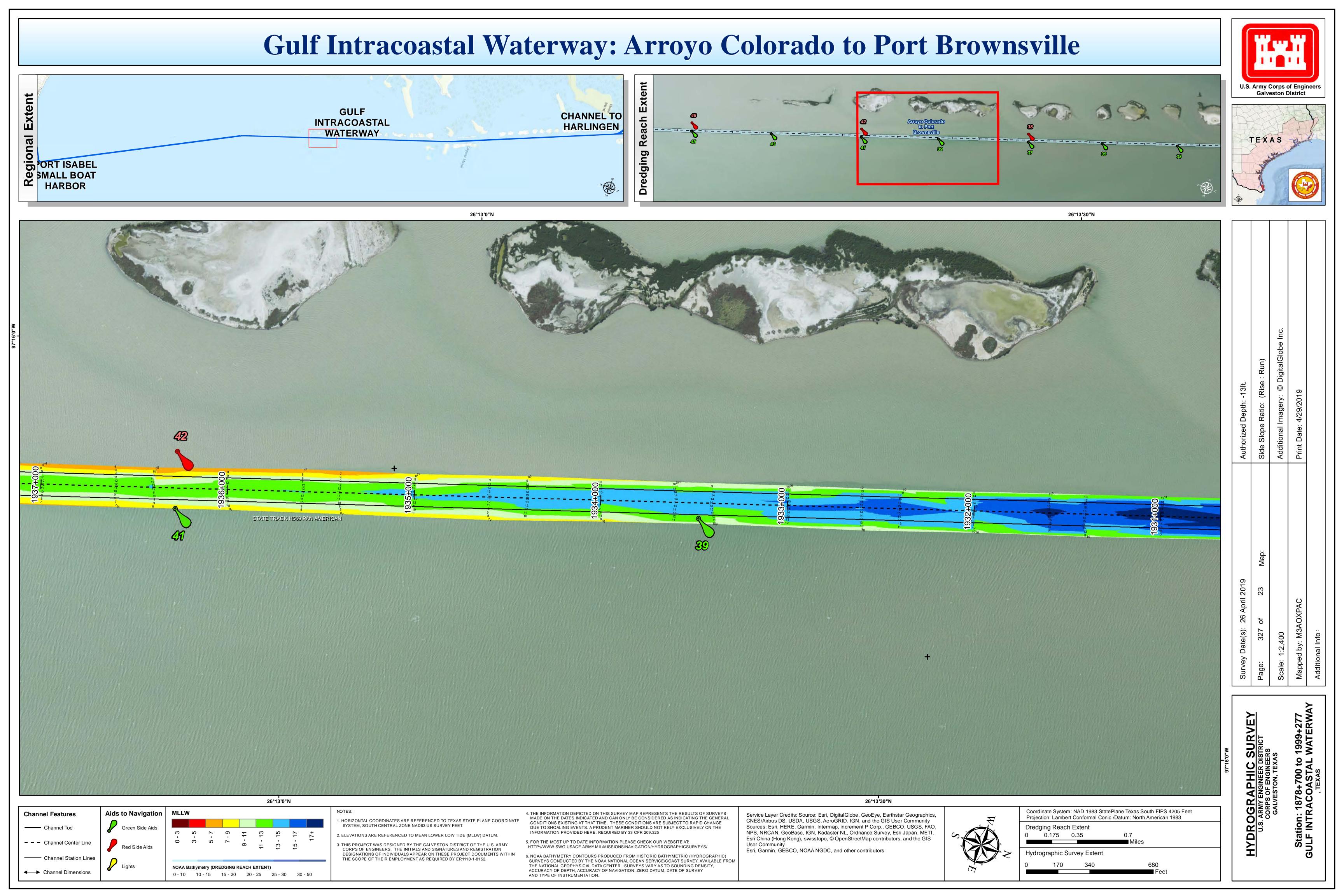
HYDROGRAPHIC
U.S. ARMY ENGINEER I
CORPS OF ENGINE
GALVESTON, TEX

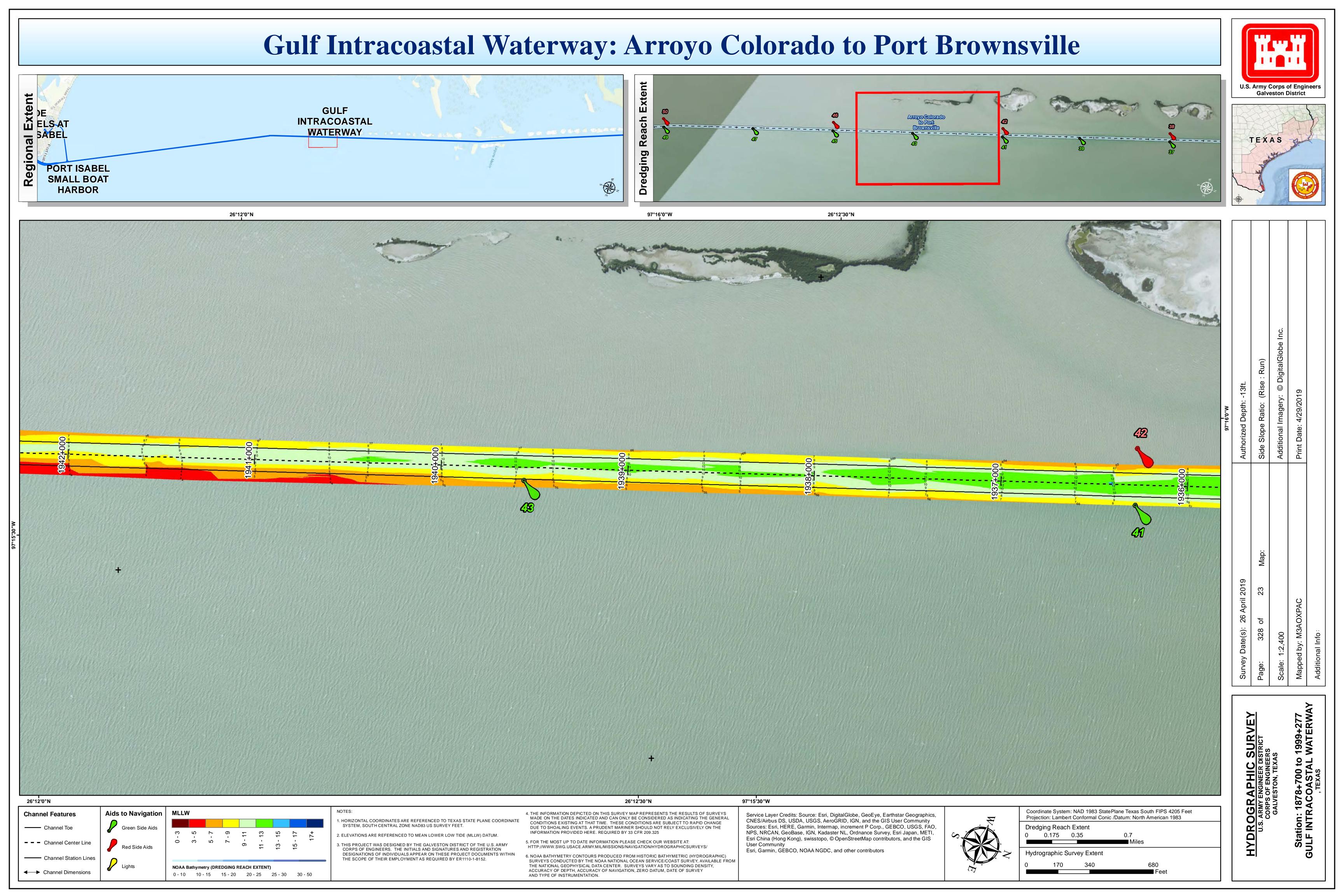
### Gulf Intracoastal Waterway: Arroyo Colorado to Port Brownsville GULF INTRACOASTAL WATERWAY **CHANNEL TO** HARLINGEN 👍 HYDROGRAPHIC U.S. ARMY ENGINEER I CORPS OF ENGINE GALVESTON, TEX 97°17'0"W 26°16'30"N Coordinate System: NAD 1983 StatePlane Texas South FIPS 4205 Feet Aids to Navigation | MLLW 4. THE INFORMATION DEPICTED ON THIS SURVEY MAP REPRESENTS THE RESULTS OF SURVEYS Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community **Channel Features** Projection: Lambert Conformal Conic /Datum: North American 1983 MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL 1. HORIZONTAL COORDINATES ARE REFERENCED TO TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE NAD83 US SURVEY FEET. CONDITIONS EXISTING AT THAT TIME. THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS Dredging Reach Extent Channel Toe DUE TO SHOALING EVENTS. A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION PROVIDED HERE. REQUIRED BY 33 CFR 209.325 0.175 0.35 2. ELEVATIONS ARE REFERENCED TO MEAN LOWER LOW TIDE (MLLW) DATUM. 5. FOR THE MOST UP TO DATE INFORMATION PLEASE CHECK OUR WEBSITE AT: – – Channel Center Line User Community B. THIS PROJECT WAS DESIGNED BY THE GALVESTON DISTRICT OF THE U.S. ARMY HTTP://WWW.SWG.USACE.ARMY.MIL/MISSIONS/NAVIGATION/HYDROGRAPHICSURVEYS/ CORPS OF ENGINEERS. THE INITIALS AND SIGNATURES AND REGISTRATION Esri, Garmin, GEBCO, NOAA NGDC, and other contributors Hydrographic Survey Extent DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN 6. NOAA BATHYMETRY CONTOURS PRODUCED FROM HISTORIC BATHYMETRIC (HYDROGRAPHIC) —— Channel Station Lines THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER1110-1-8152. 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. NOAA Bathymetry (DREDGING REACH EXTENT) **←** Channel Dimensions

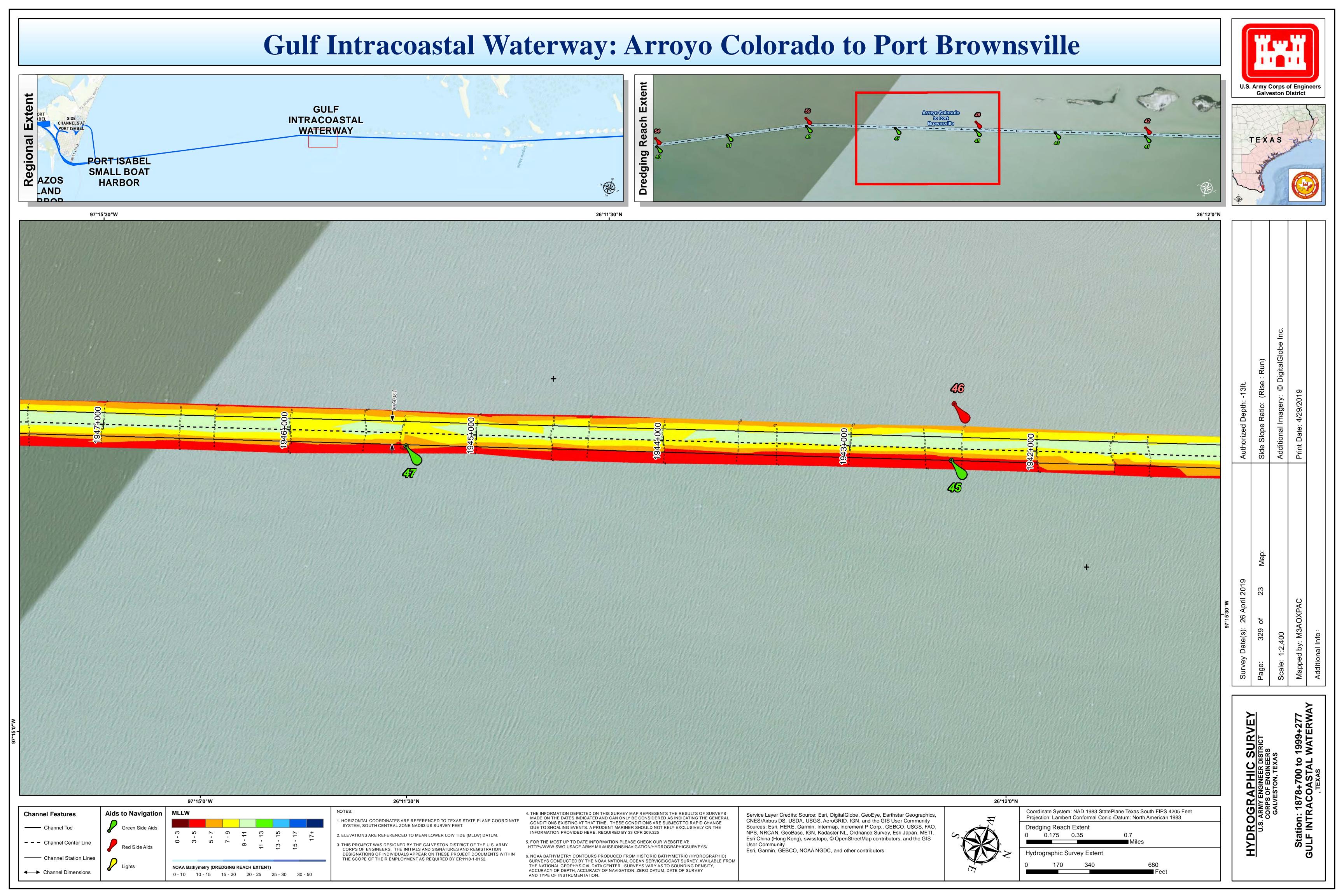
## Gulf Intracoastal Waterway: Arroyo Colorado to Port Brownsville GULF INTRACOASTAL WATERWAY HARLINGEN HYDROGRAPHIC SURVE U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS GALVESTON, TEXAS 26°15'30"N 26°16'0"N Coordinate System: NAD 1983 StatePlane Texas South FIPS 4205 Feet Aids to Navigation | MLLW 4. THE INFORMATION DEPICTED ON THIS SURVEY MAP REPRESENTS THE RESULTS OF SURVEYS Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community Channel Features Projection: Lambert Conformal Conic /Datum: North American 1983 MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL I. HORIZONTAL COORDINATES ARE REFERENCED TO TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE NAD83 US SURVEY FEET. CONDITIONS EXISTING AT THAT TIME. THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, Dredging Reach Extent Channel Toe DUE TO SHOALING EVENTS. A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION PROVIDED HERE. REQUIRED BY 33 CFR 209.325 NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, 0.175 0.35 2. ELEVATIONS ARE REFERENCED TO MEAN LOWER LOW TIDE (MLLW) DATUM. Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS 5. FOR THE MOST UP TO DATE INFORMATION PLEASE CHECK OUR WEBSITE AT: – – Channel Center Line HTTP://WWW.SWG.USACE.ARMY.MIL/MISSIONS/NAVIGATION/HYDROGRAPHICSURVEYS/ CORPS OF ENGINEERS. THE INITIALS AND SIGNATURES AND REGISTRATION Esri, Garmin, GEBCO, NOAA NGDC, and other contributors Hydrographic Survey Extent DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN 6. NOAA BATHYMETRY CONTOURS PRODUCED FROM HISTORIC BATHYMETRIC (HYDROGRAPHIC) —— Channel Station Lines THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER1110-1-8152. 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. NOAA Bathymetry (DREDGING REACH EXTENT) ← Channel Dimensions

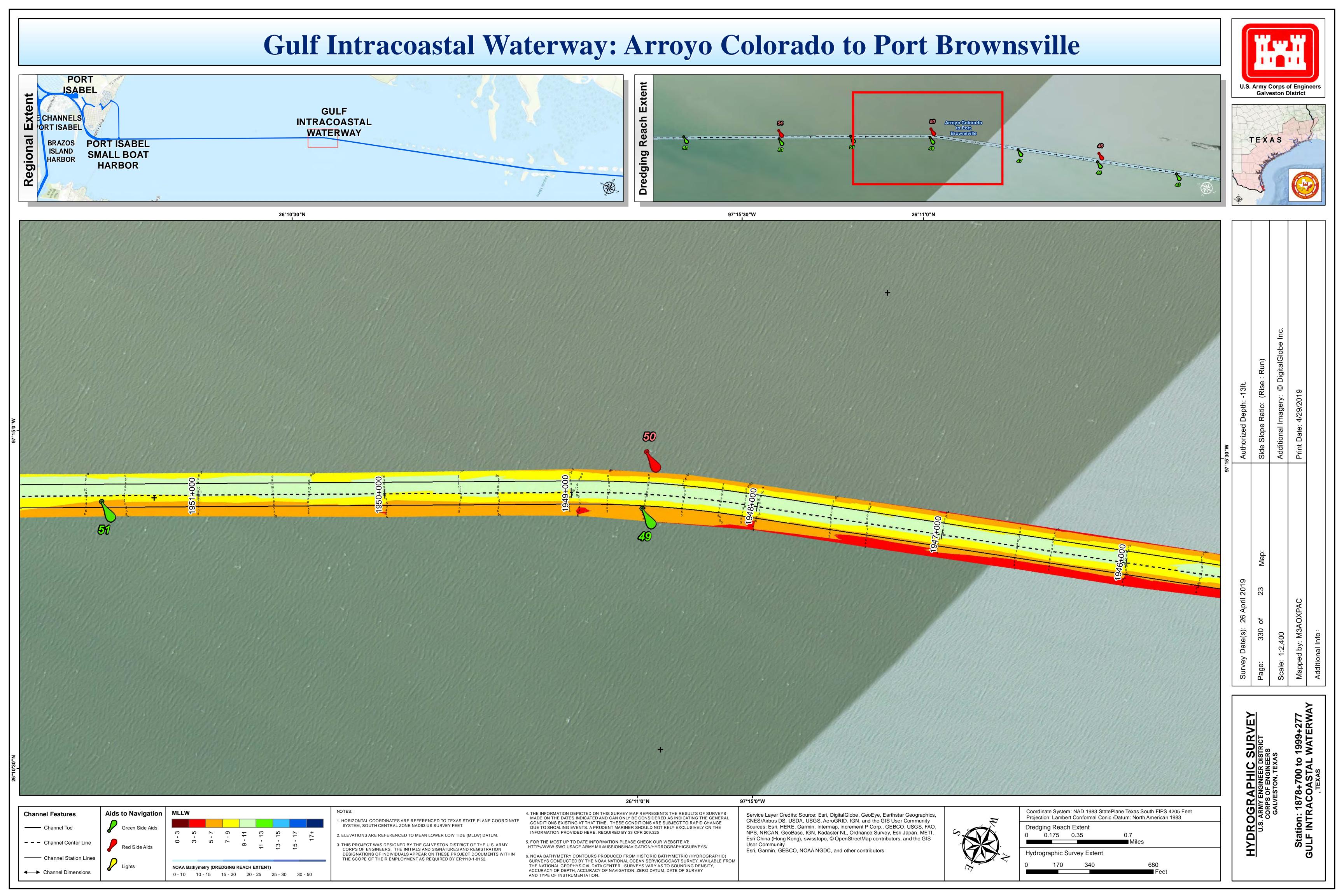
#### Gulf Intracoastal Waterway: Arroyo Colorado to Port Brownsville GULF INTRACOASTAL WATERWAY CHANNEL TO HARLINGEN 2019 HYDROGRAPHIC SURVEY U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS GALVESTON, TEXAS 26°14<sup>'</sup>30"N 26°15'0"N 97°16<sup>'</sup>30"W Coordinate System: NAD 1983 StatePlane Texas South FIPS 4205 Feet Aids to Navigation | MLLW 4. THE INFORMATION DEPICTED ON THIS SURVEY MAP REPRESENTS THE RESULTS OF SURVEYS **Channel Features** Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, Projection: Lambert Conformal Conic /Datum: North American 1983 MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL I. HORIZONTAL COORDINATES ARE REFERENCED TO TEXAS STATE PLANE COORDINATE CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community CONDITIONS EXISTING AT THAT TIME. THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE SYSTEM, SOUTH CENTRAL ZONE NAD83 US SURVEY FEET. Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, Dredging Reach Extent Channel Toe DUE TO SHOALING EVENTS. A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION PROVIDED HERE. REQUIRED BY 33 CFR 209.325 NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, 0.175 0.35 2. ELEVATIONS ARE REFERENCED TO MEAN LOWER LOW TIDE (MLLW) DATUM. Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS 5. FOR THE MOST UP TO DATE INFORMATION PLEASE CHECK OUR WEBSITE AT: – – Channel Center Line B. THIS PROJECT WAS DESIGNED BY THE GALVESTON DISTRICT OF THE U.S. ARMY User Community HTTP://WWW.SWG.USACE.ARMY.MIL/MISSIONS/NAVIGATION/HYDROGRAPHICSURVEYS/ CORPS OF ENGINEERS. THE INITIALS AND SIGNATURES AND REGISTRATION Esri, Garmin, GEBCO, NOAA NGDC, and other contributors Hydrographic Survey Extent DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN 6. NOAA BATHYMETRY CONTOURS PRODUCED FROM HISTORIC BATHYMETRIC (HYDROGRAPHIC) Channel Station Lines THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER1110-1-8152. 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. NOAA Bathymetry (DREDGING REACH EXTENT) **←** Channel Dimensions

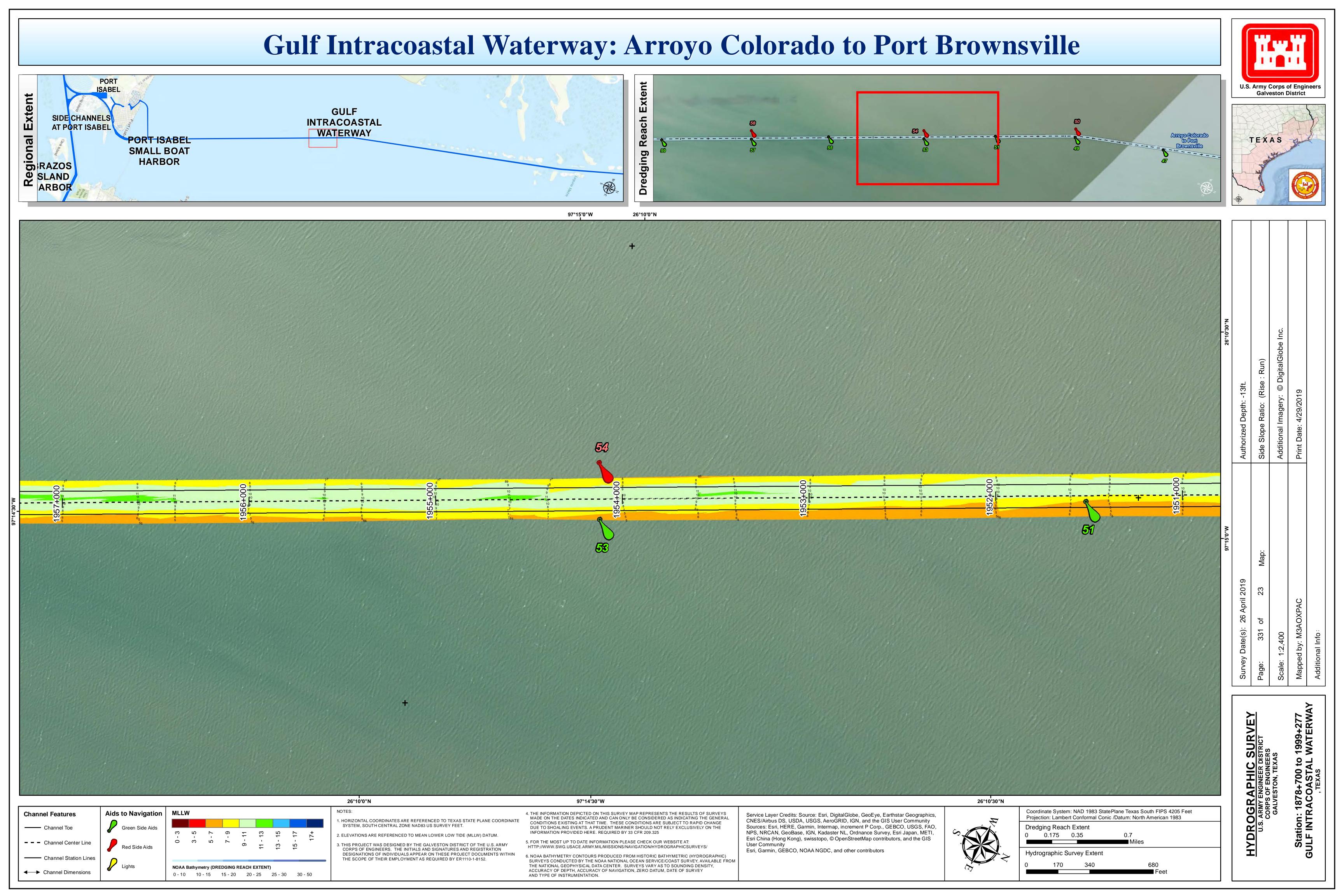


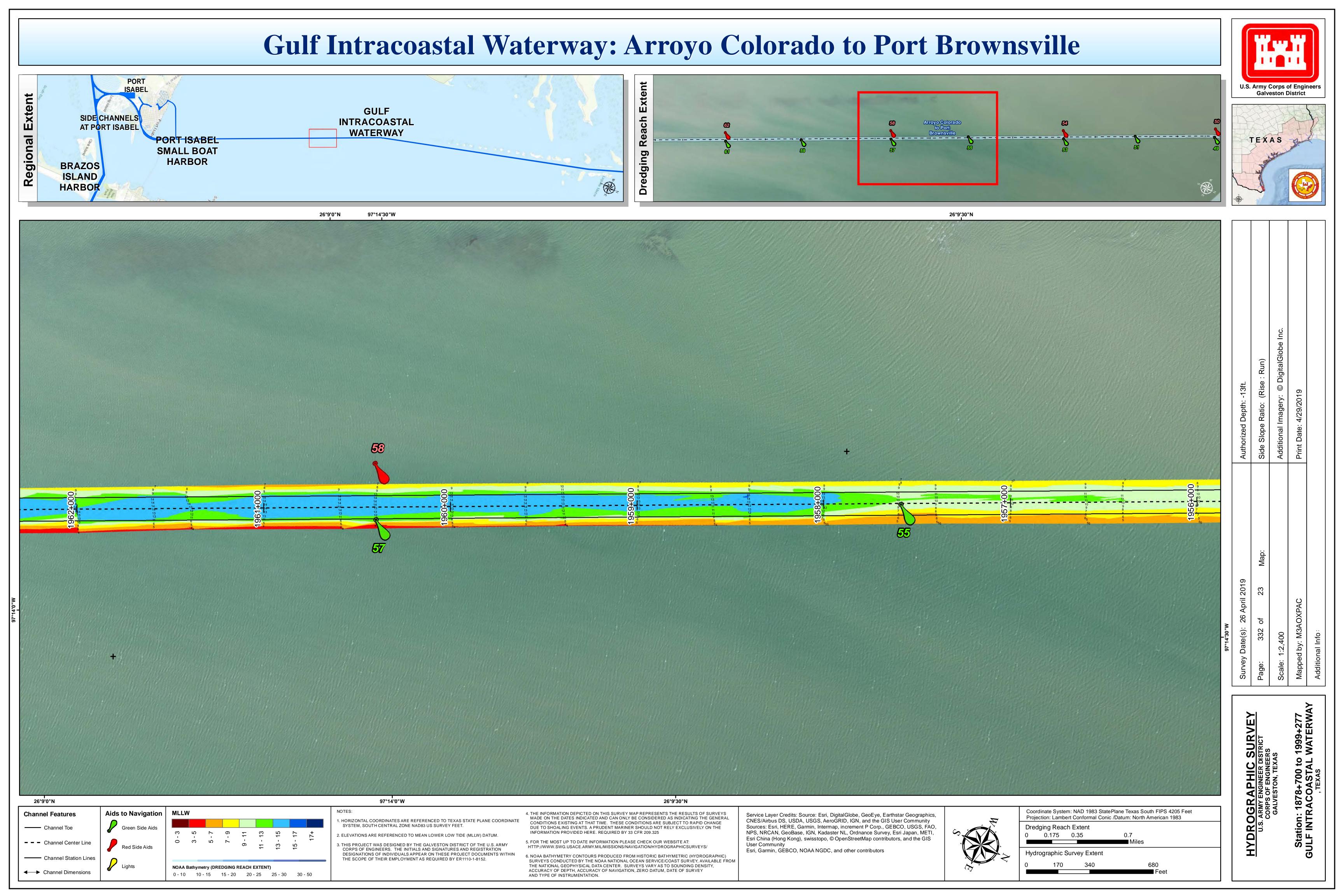


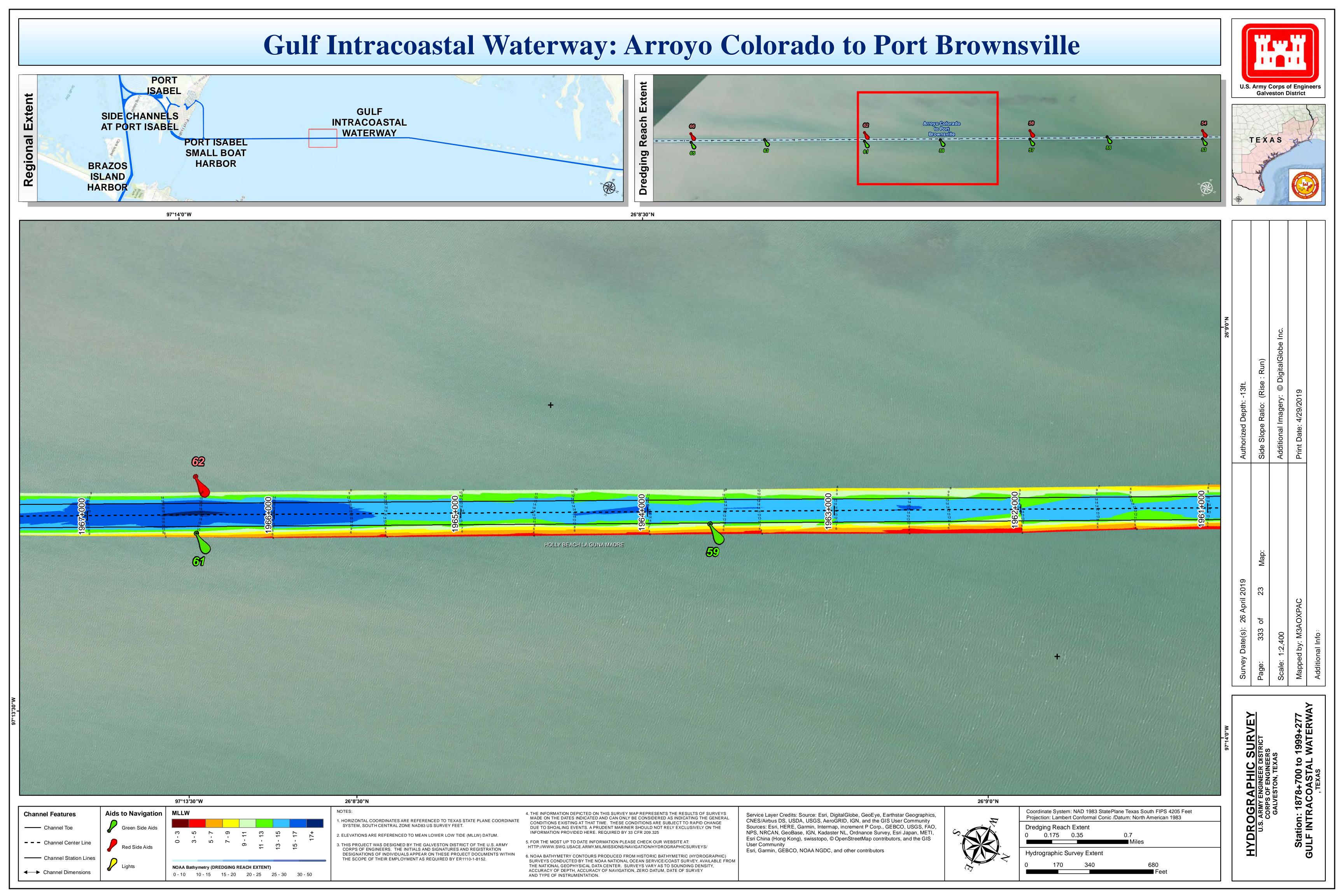


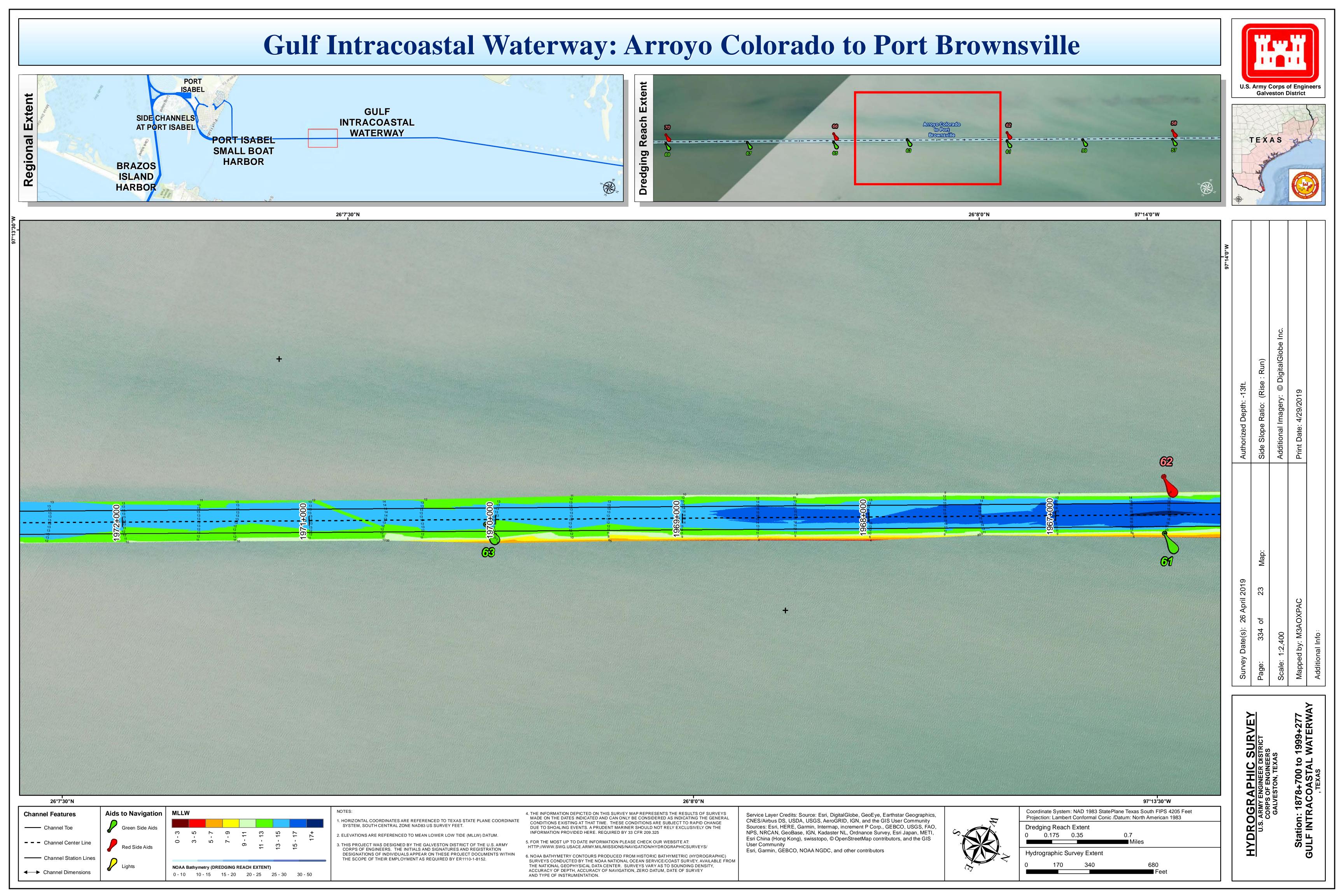


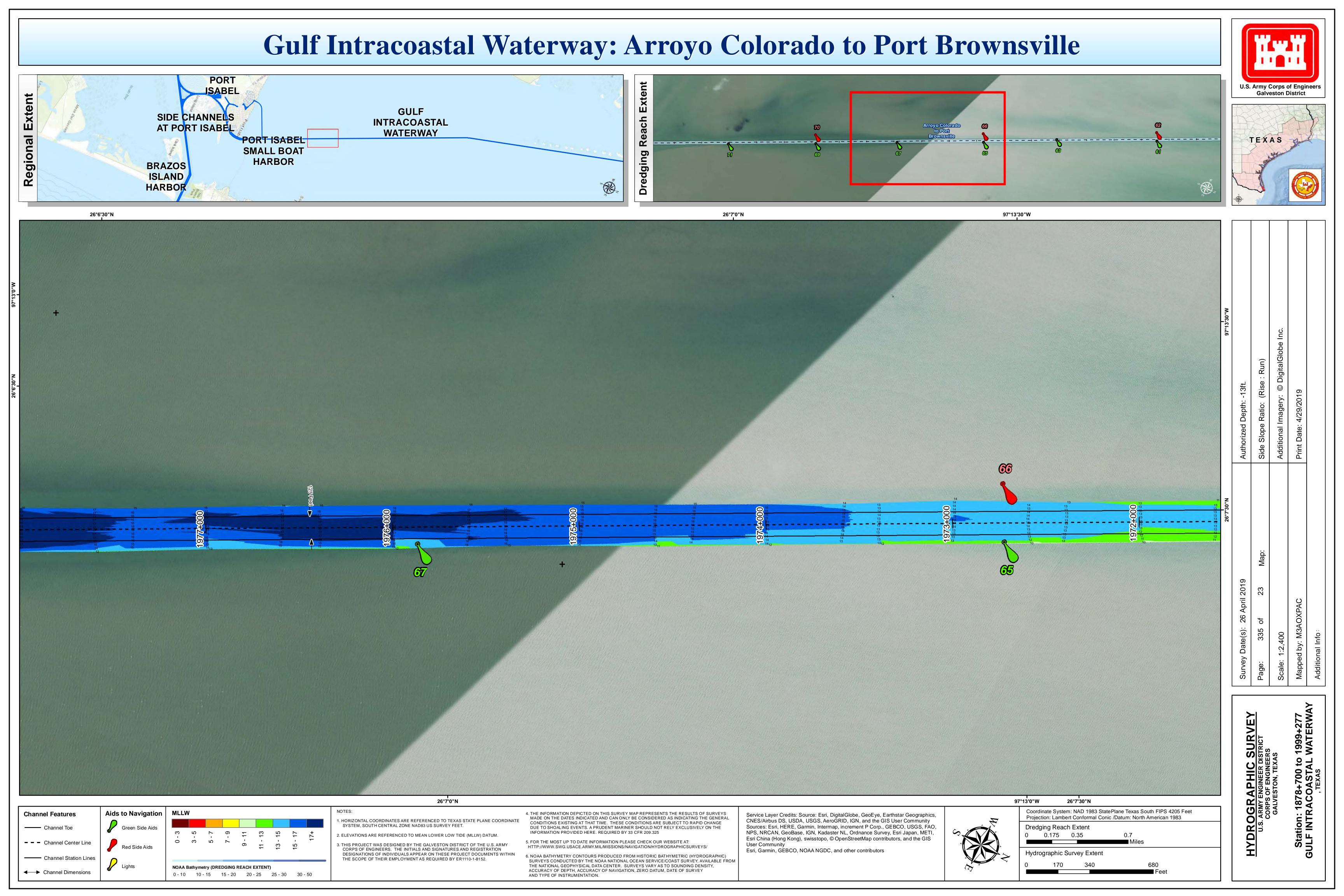


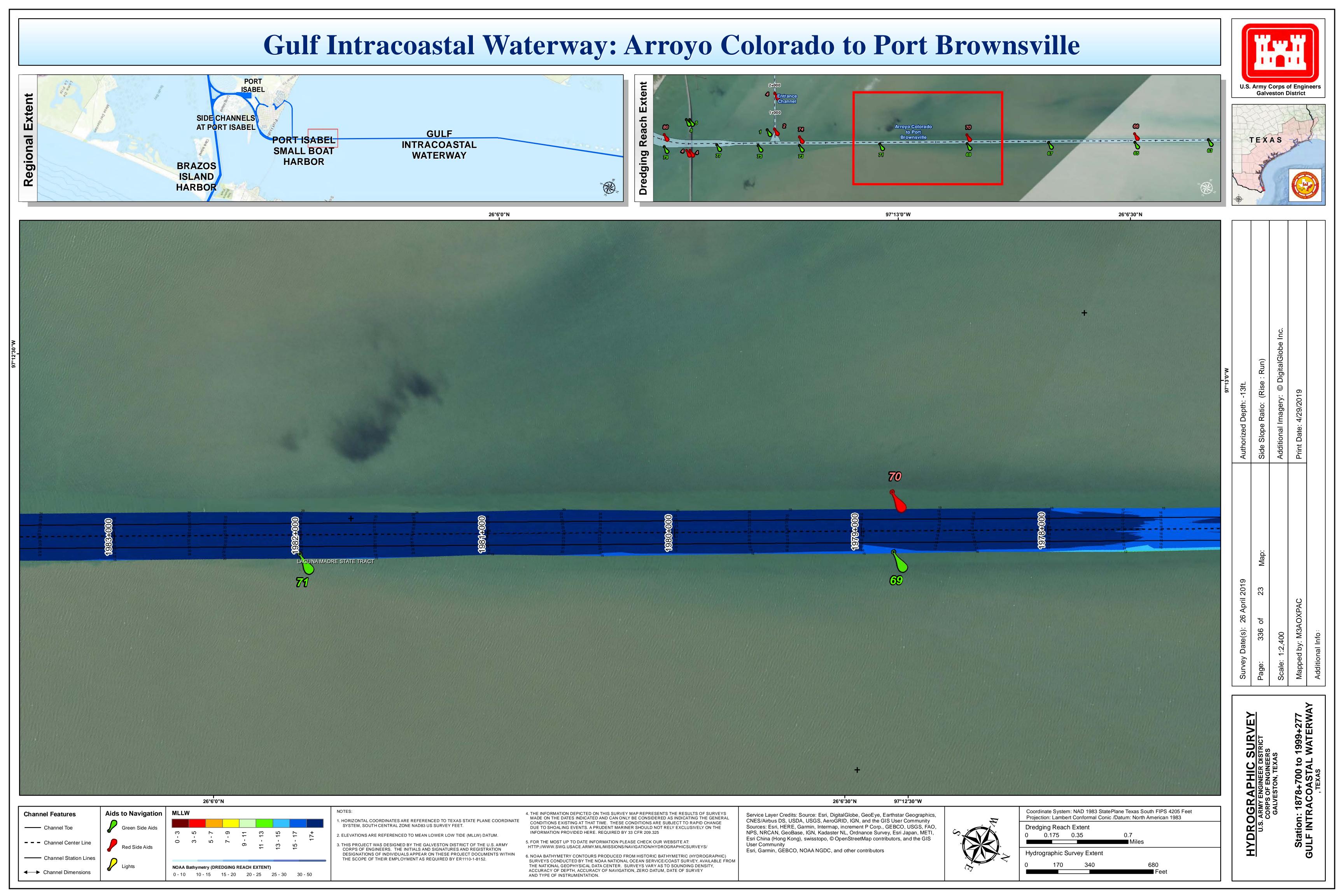


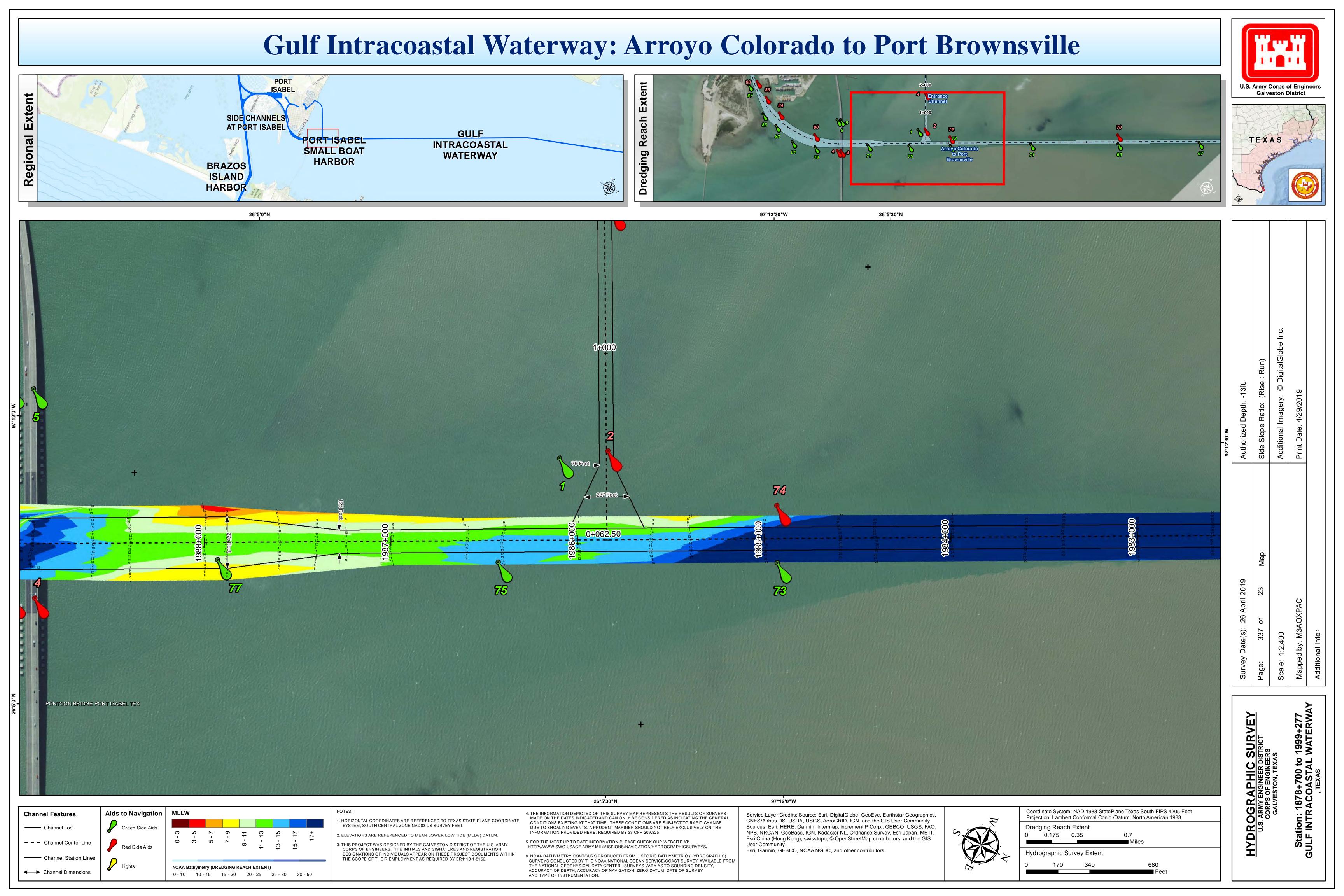






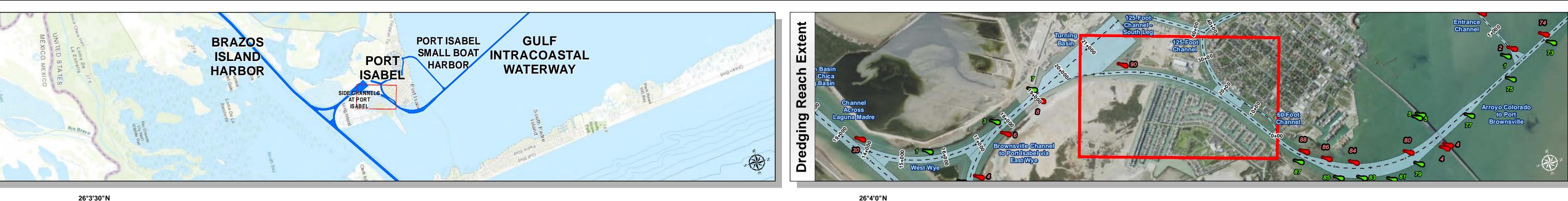






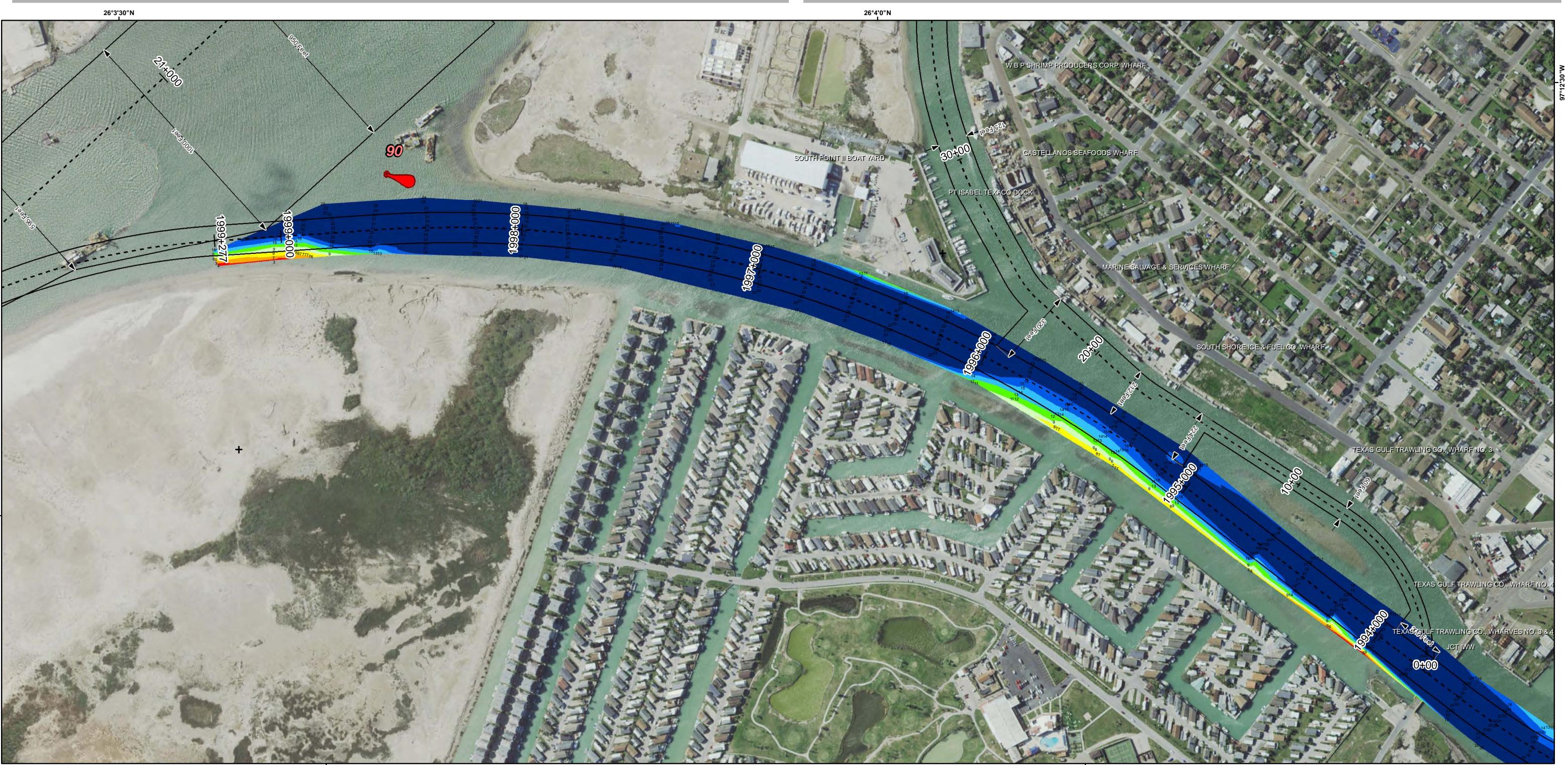
#### Gulf Intracoastal Waterway: Arroyo Colorado to Port Brownsville PORT SIDE CHANNELS AT PORT ISABEL GULF INTRACOASTAL PORT ISABEL BRAZOS ISLAND **SMALL BOAT** WATERWAY HARBOR HARBOR HYDROGRAPHIC U.S. ARMY ENGINEEF 97°11<sup>'</sup>30"W 26°4'30"N Coordinate System: NAD 1983 StatePlane Texas South FIPS 4205 Feet Aids to Navigation | MLLW 4. THE INFORMATION DEPICTED ON THIS SURVEY MAP REPRESENTS THE RESULTS OF SURVEYS **Channel Features** Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community Projection: Lambert Conformal Conic /Datum: North American 1983 MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL I. HORIZONTAL COORDINATES ARE REFERENCED TO TEXAS STATE PLANE COORDINATE CONDITIONS EXISTING AT THAT TIME. THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE SYSTEM, SOUTH CENTRAL ZONE NAD83 US SURVEY FEET. Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, Dredging Reach Extent Channel Toe DUE TO SHOALING EVENTS. A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS INFORMATION PROVIDED HERE. REQUIRED BY 33 CFR 209.325 2. ELEVATIONS ARE REFERENCED TO MEAN LOWER LOW TIDE (MLLW) DATUM. 5. FOR THE MOST UP TO DATE INFORMATION PLEASE CHECK OUR WEBSITE AT: – – Channel Center Line User Community B. THIS PROJECT WAS DESIGNED BY THE GALVESTON DISTRICT OF THE U.S. ARMY HTTP://WWW.SWG.USACE.ARMY.MIL/MISSIONS/NAVIGATION/HYDROGRAPHICSURVEYS/ CORPS OF ENGINEERS. THE INITIALS AND SIGNATURES AND REGISTRATION Esri, Garmin, GEBCO, NOAA NGDC, and other contributors Hydrographic Survey Extent DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN 6. NOAA BATHYMETRY CONTOURS PRODUCED FROM HISTORIC BATHYMETRIC (HYDROGRAPHIC) —— Channel Station Lines THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER1110-1-8152. 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. NOAA Bathymetry (DREDGING REACH EXTENT) **←** Channel Dimensions

# Gulf Intracoastal Waterway: Arroyo Colorado to Port Brownsville









Coordinate System: NAD 1983 StatePlane Texas South FIPS 4205 Feet Projection: Lambert Conformal Conic /Datum: North American 1983 Dredging Reach Extent Hydrographic Survey Extent

**Channel Features** Channel Toe – – Channel Center Line

—— Channel Station Lines **←** Channel Dimensions

Aids to Navigation | MLLW

26°3'30"N

NOAA Bathymetry (DREDGING REACH EXTENT)

1. HORIZONTAL COORDINATES ARE REFERENCED TO TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE NAD83 US SURVEY FEET.

2. ELEVATIONS ARE REFERENCED TO MEAN LOWER LOW TIDE (MLLW) DATUM.

B. 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.

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26°4'0"N

HYDROGRAPH U.S. ARMY ENGINE