Houston Ship Channel: Lower End Morgans Point to Alexander Island CEDAR BAYOU TEXAS HOUSTON BARBOURS HYDROGRAPHIC U.S. ARMY ENGINEER I CORPS OF ENGINE 94°59'0"W 94°59**'**30"W 29°41'0"N Coordinate System: NAD 1983 StatePlane Texas South Central FIPS 4204 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 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, Channel Toe Dredging Reach Extent 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. – – Channel Center Line 5. FOR THE MOST UP TO DATE INFORMATION PLEASE CHECK OUR WEBSITE AT: 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

Houston Ship Channel: Lower End Morgans Point to Alexander Island **CEDAR BAYOU** TEXAS HYDROGR/ U.S. ARMY E 95°0'0"W 95°0'30"W Coordinate System: NAD 1983 StatePlane Texas South Central FIPS 4204 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, Channel Toe Dredging Reach Extent 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 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

Houston Ship Channel: Lower End Morgans Point to Alexander Island CEDAR BAYOU TEXAS HOUSTON BARBOURS 103 HYDROGR/ U.S. ARMY E 95°1'30"W 95°1[']0"W 29°42'0"N Coordinate System: NAD 1983 StatePlane Texas South Central FIPS 4204 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, 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 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

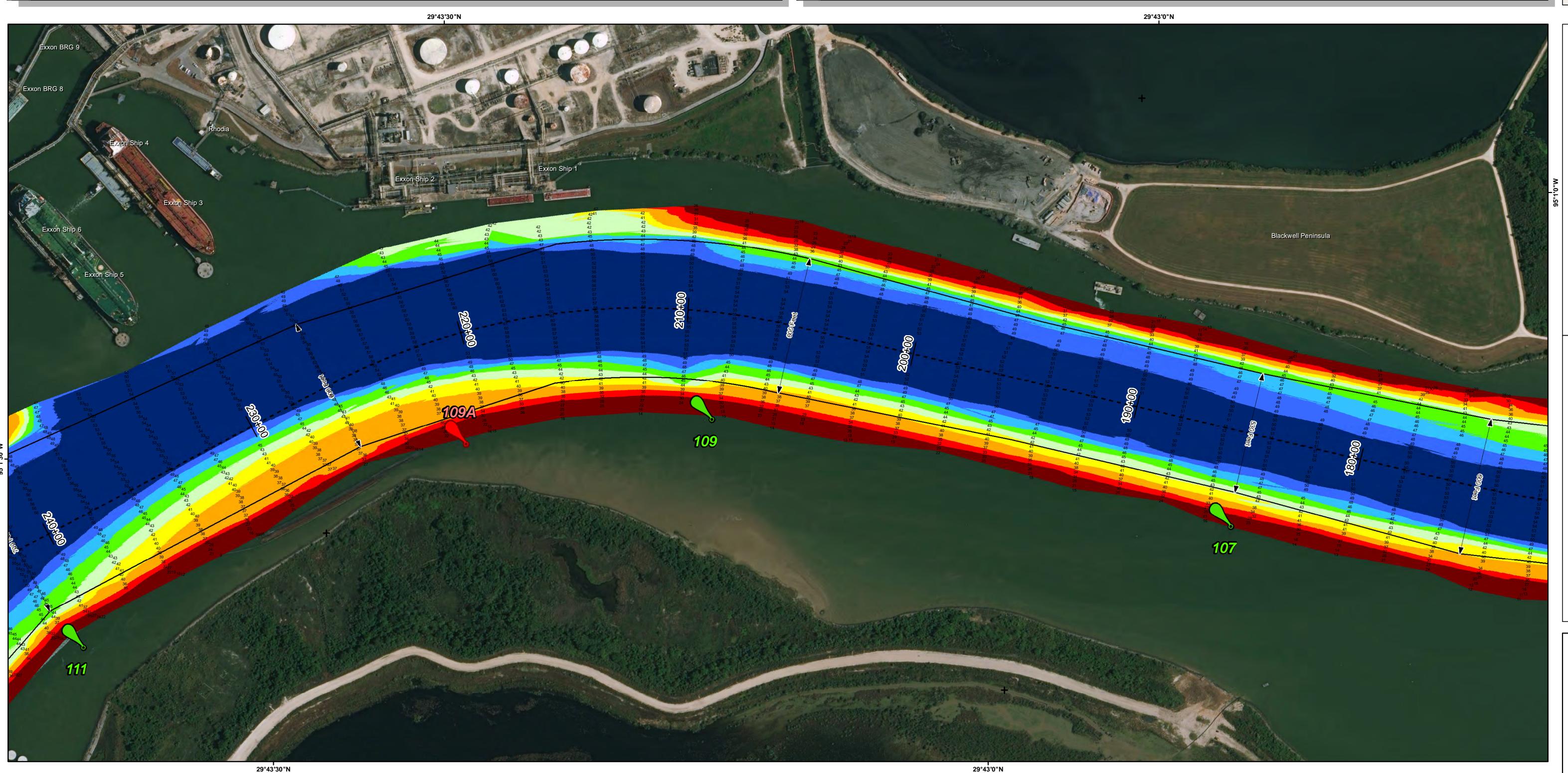
Houston Ship Channel: Lower End Morgans Point to Alexander Island

BARBOURS









HYDROGR/ U.S. ARMY E

Coordinate System: NAD 1983 StatePlane Texas South Central FIPS 4204 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 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

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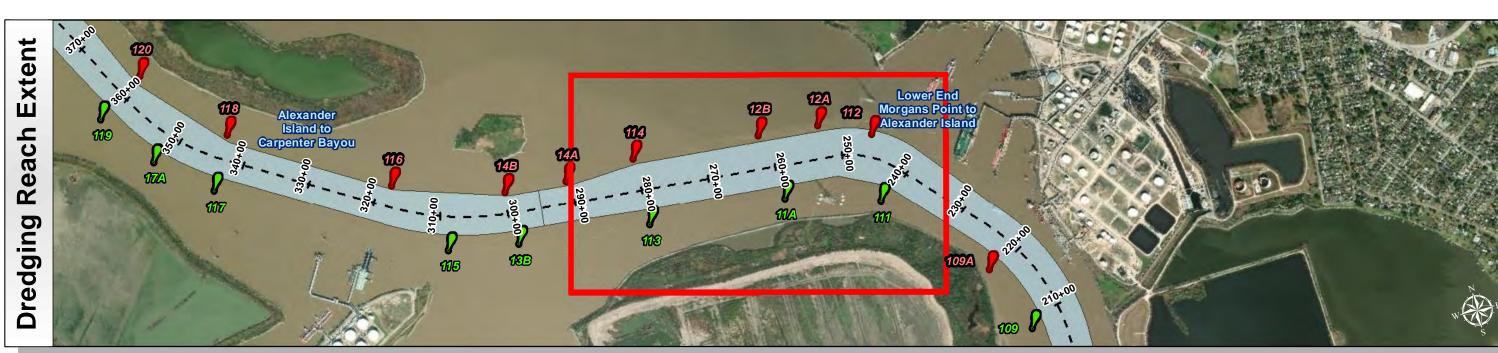
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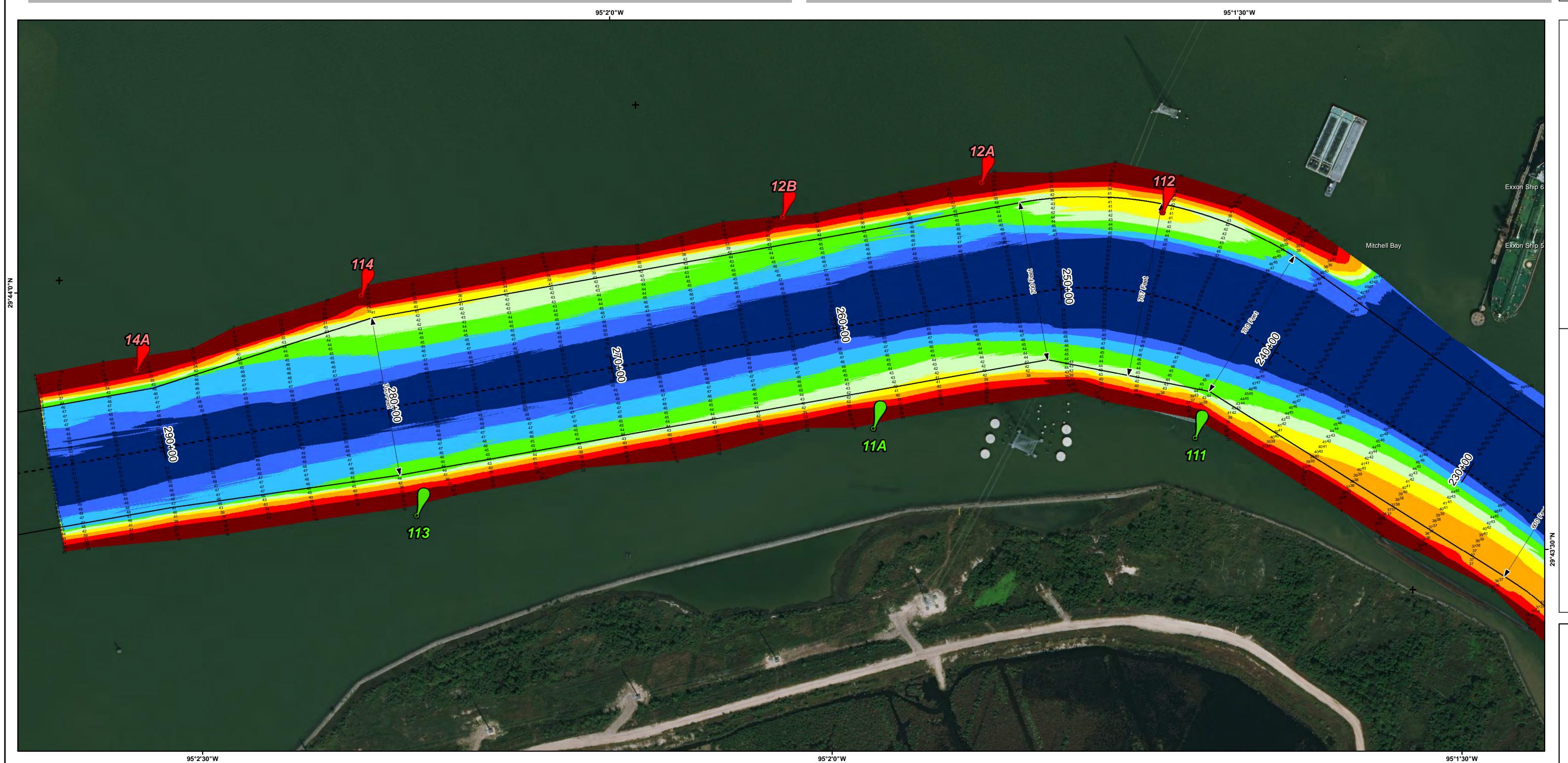
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Houston Ship Channel: Lower End Morgans Point to Alexander Island









HYDROGR/ U.S. ARMY E

Dredging Reach Extent

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95°2[']0"W

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Coordinate System: NAD 1983 StatePlane Texas South Central FIPS 4204 Feet Projection: Lambert Conformal Conic /Datum: North American 1983 Hydrographic Survey Extent

Channel Features Channel Toe – – Channel Center Line —— Channel Station Lines

← Channel Dimensions

JACINTOPORT

Aids to Navigation | MLLW

NOAA Bathymetry (DREDGING REACH EXTENT)

DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER1110-1-8152.

HOUSTON