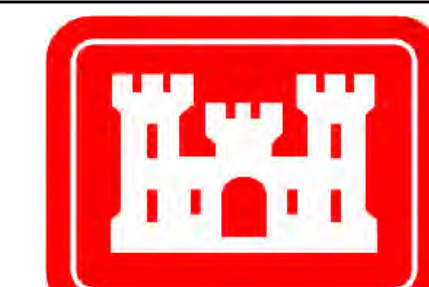
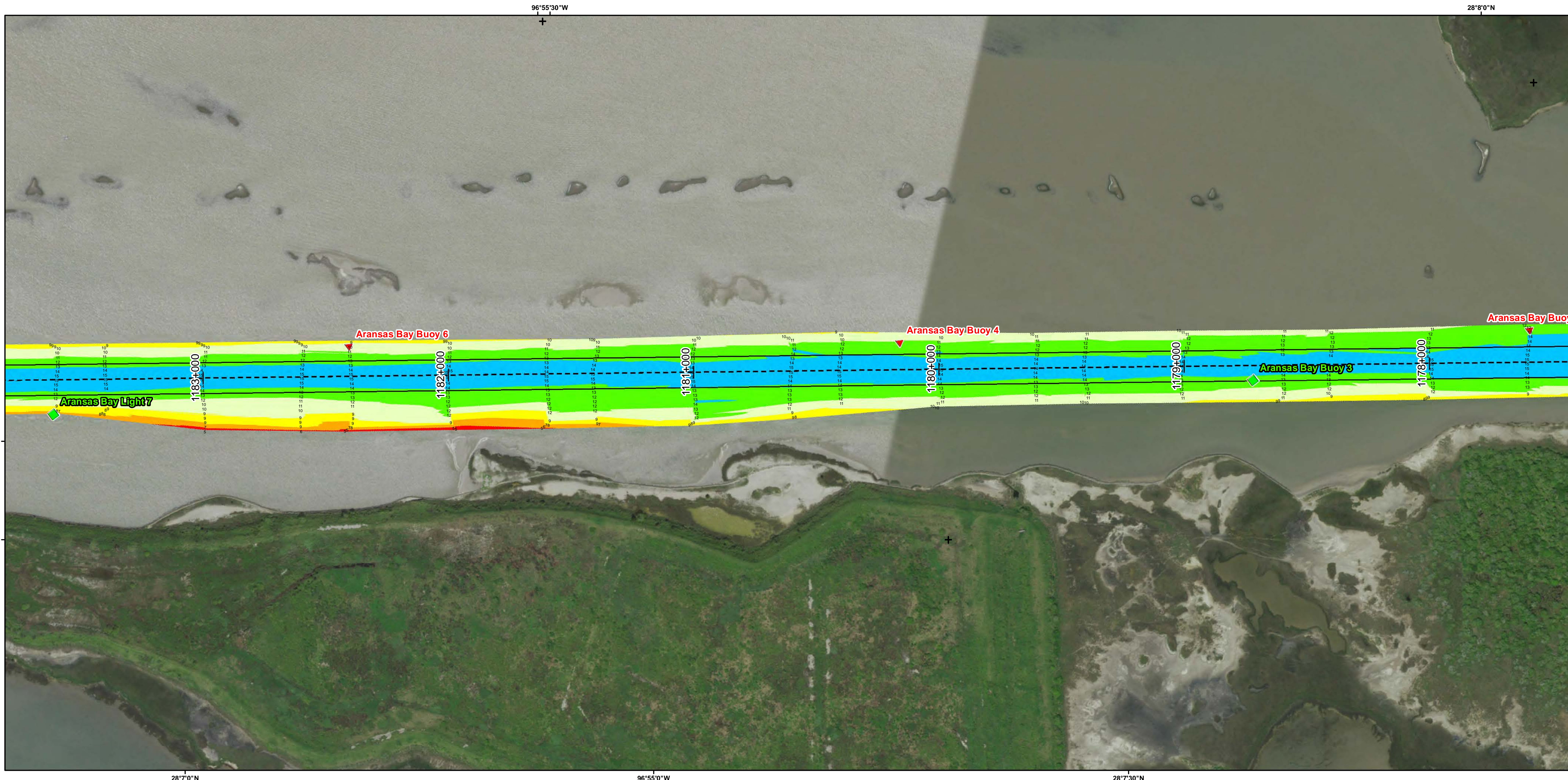
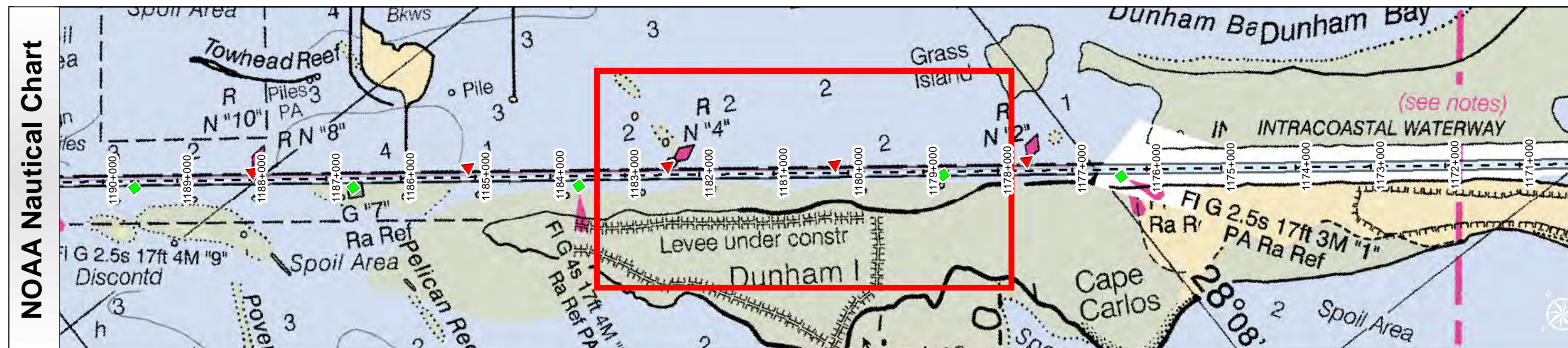
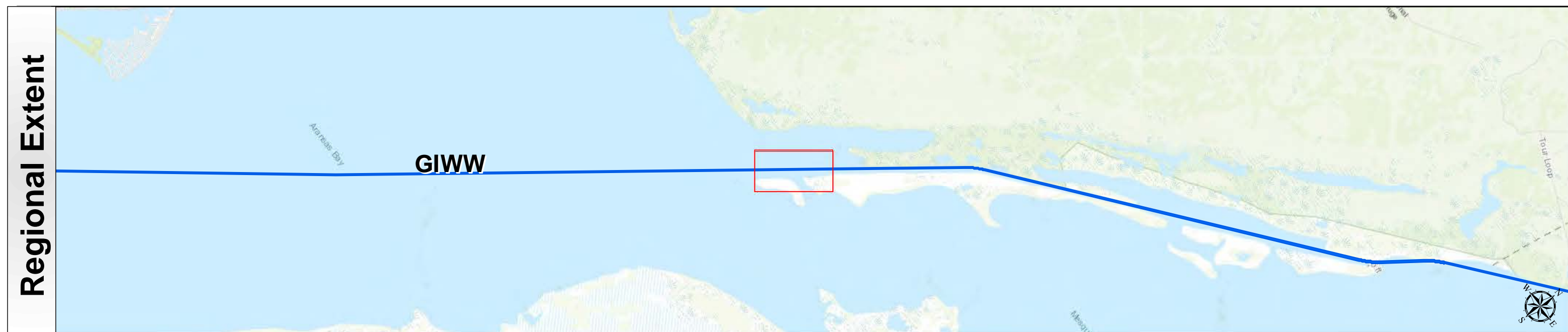


Gulf Intracoastal Waterway: Across Aransas Bay



U.S. Army Corps of Engineers
Galveston District



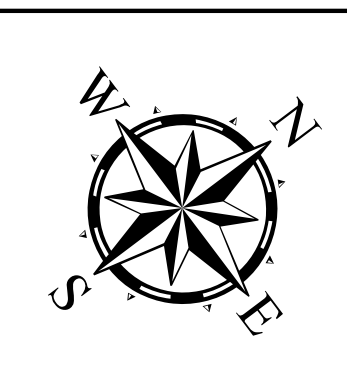
Survey Date(s): 16 October 2018	Authorized Depth: -1.4ft.
Page: 169 of 190	Side Slope Ratio: (Rise : Run)
Map:	Additional Imagery: © DigitalGlobe Inc.
Scale: 1:2,400	Print Date: 10/19/2018
Mapped by: MSAOX PAC	
Additional Info:	

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

NOTES:

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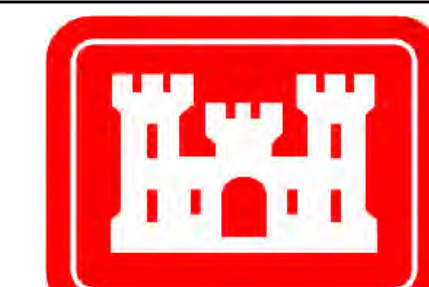


Coordinate System: NAD 1983 StatePlane Texas South Central FIPS 4204 Feet Projection: Lambert Conformal Conic / Datum: North American 1983	
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Hydrographic Survey Extent	0 200 400 800 Feet

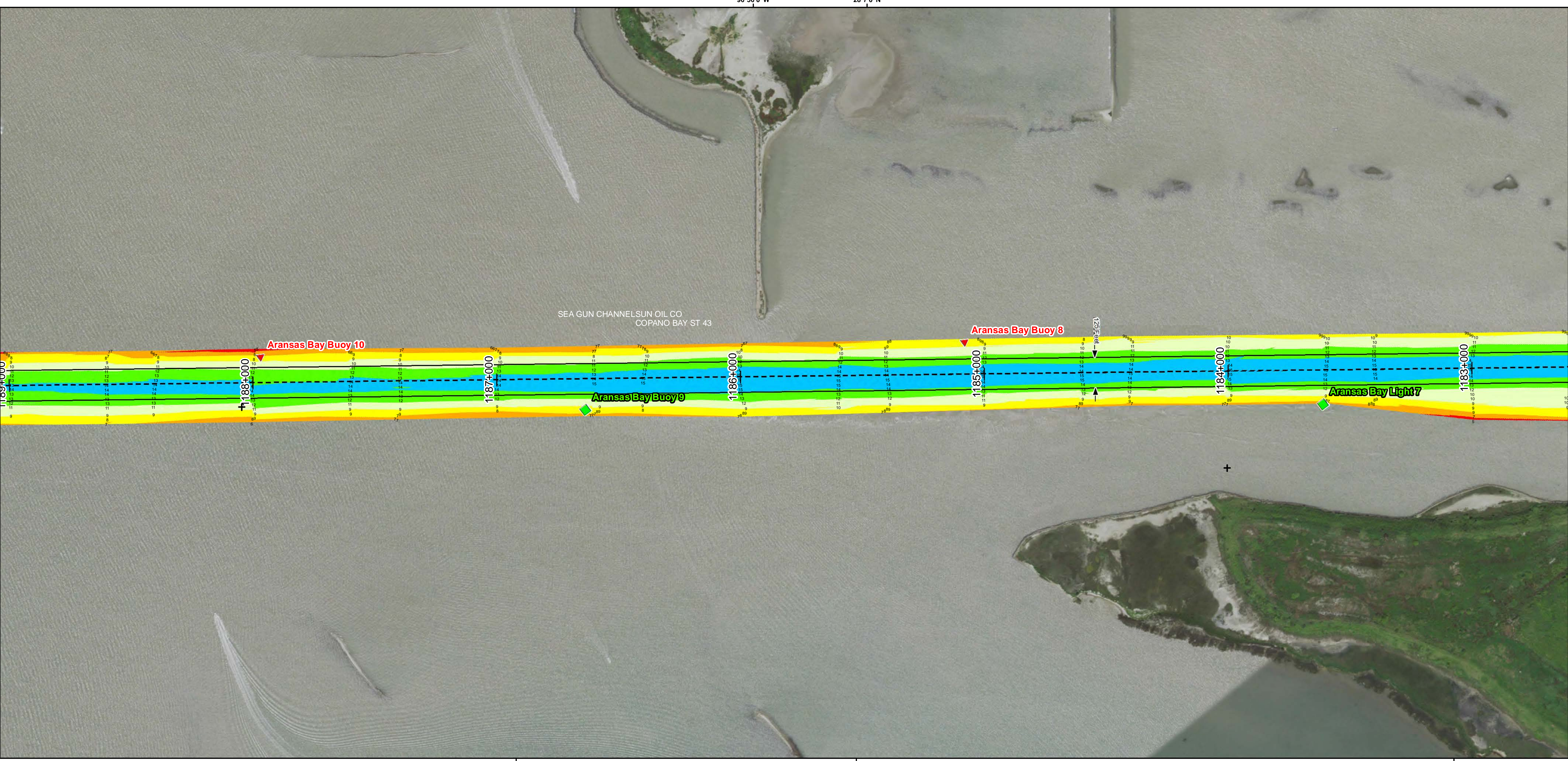
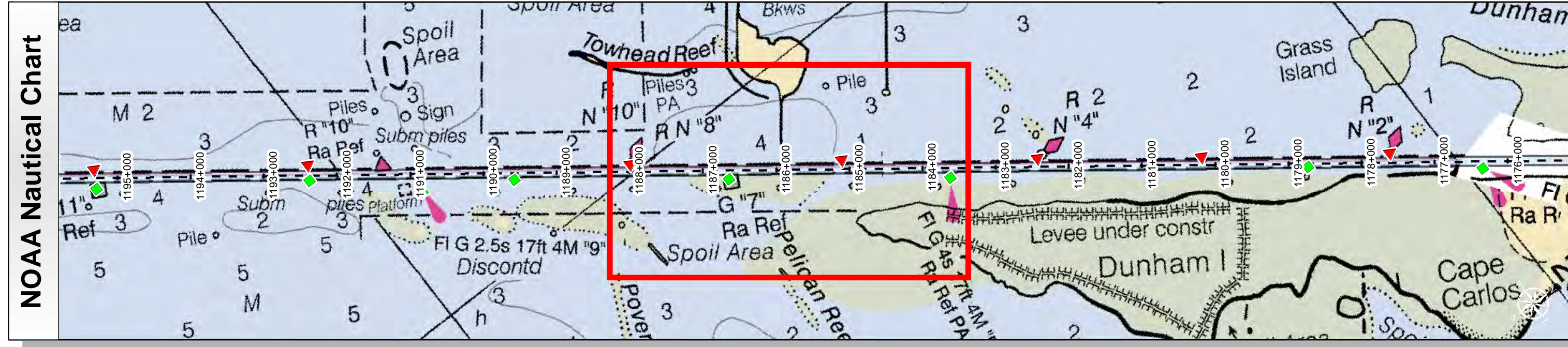
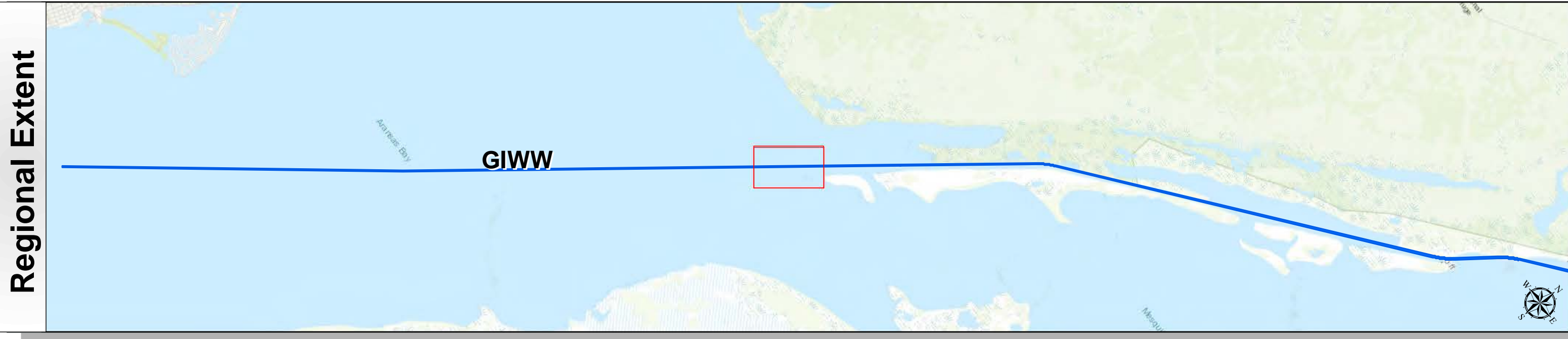
HYDROGRAPHIC SURVEY
 U.S. ARMY ENGINEER DISTRICT
 CORPS OF ENGINEERS
 GALVESTON, TEXAS

Station: 1178+000 to 1236+611
 GIWW
 TEXAS

Gulf Intracoastal Waterway: Across Aransas Bay



U.S. Army Corps of Engineers
Galveston District

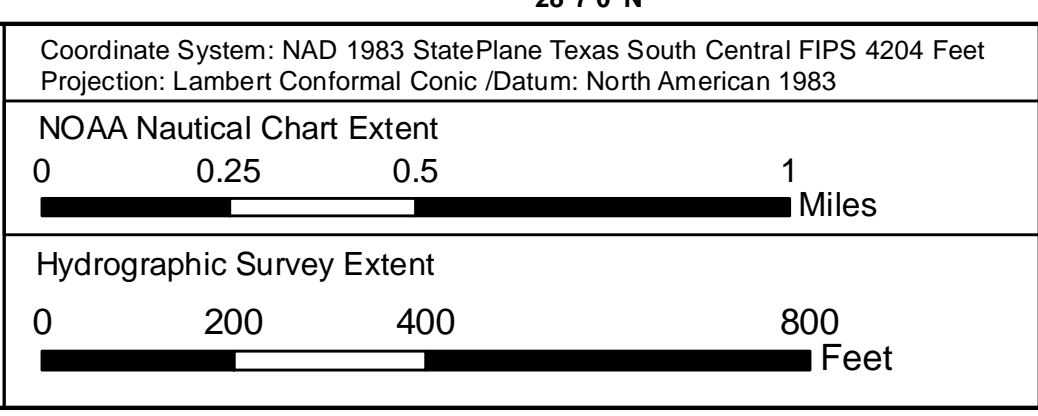
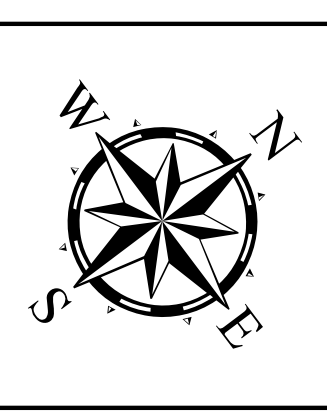


Channel Features	Aids to Navigation	MLLW
— Channel Toe	★ Lights	
- - - Channel Center Line	▲ Red Side Aids	
— Channel Station Lines	■ Green Side Aids	
↔ Channel Dimensions	◆ Mooring Buoy	

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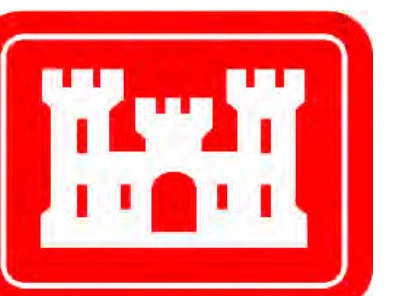


Survey Date(s): 16 October 2018	Authorized Depth: -1.4ft.
Page: 170 of 190	Side Slope Ratio: (Rise : Run)
Scale: 1:2,400	Additional Imagery: © DigitalGlobe Inc.
Mapped by: MSAOXFAC	Print Date: 10/19/2018
Additional Info:	

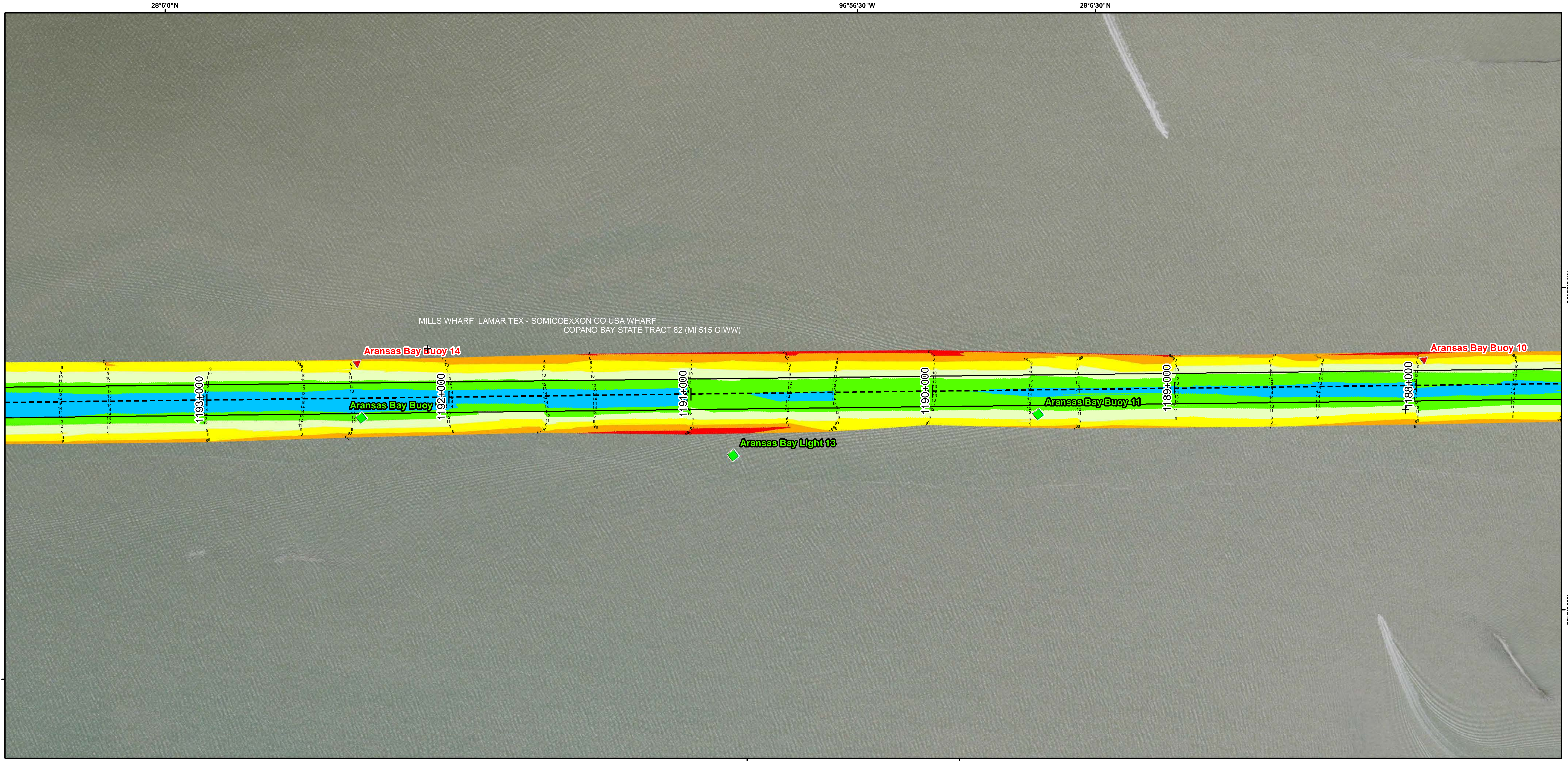
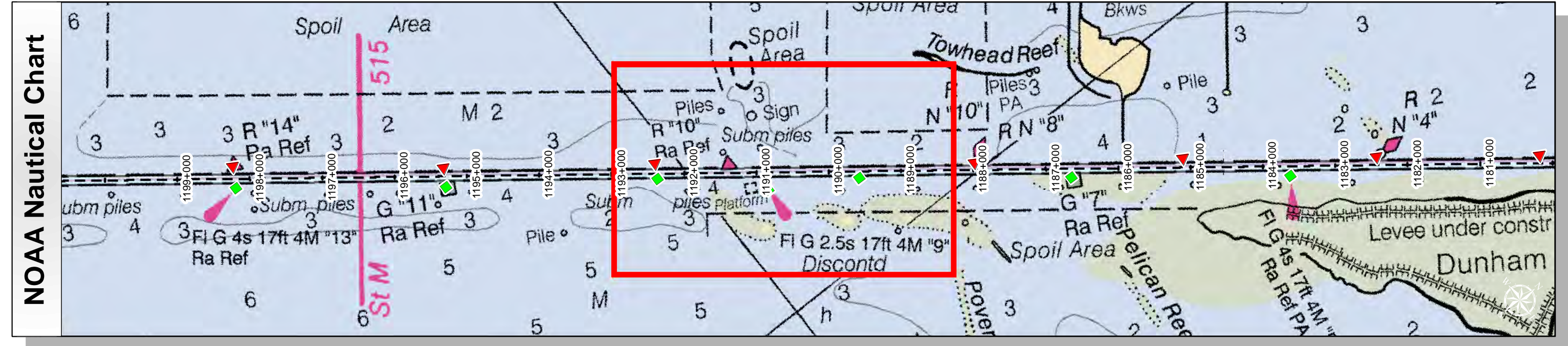
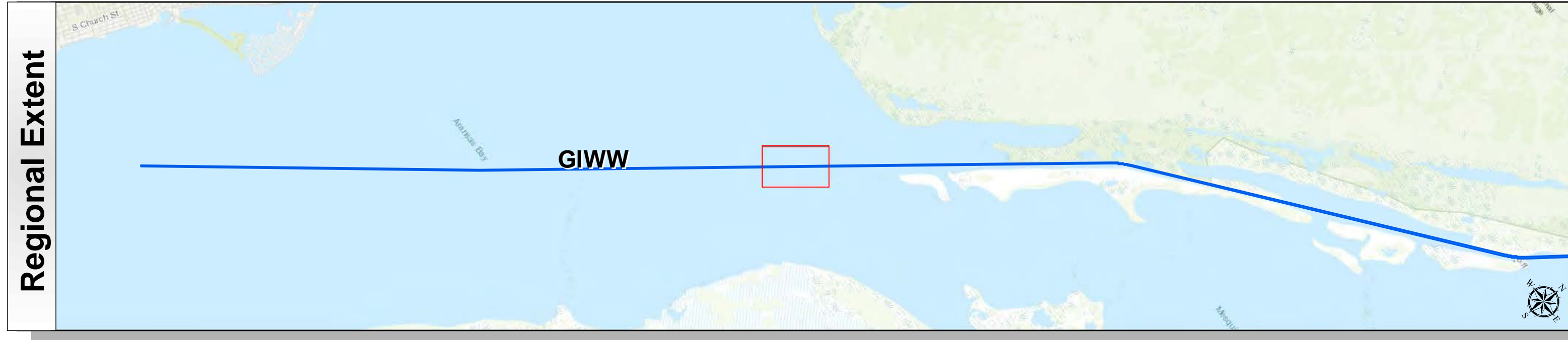
HYDROGRAPHIC SURVEY
 U.S. ARMY ENGINEER DISTRICT
 CORPS OF ENGINEERS
 GALVESTON, TEXAS

Station: 1178+000 to 1236+611
 GIWW
 TEXAS

Gulf Intracoastal Waterway: Across Aransas Bay



U.S. Army Corps of Engineers
Galveston District



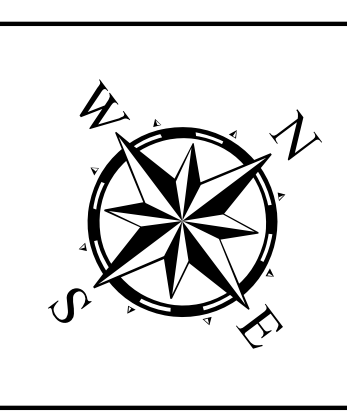
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Page: 171 of 190	Side Slope Ratio: (Rise : Run)
Scale: 1:2,400	Additional Imagery: © DigitalGlobe Inc.
Mapped by: MSAOX PAC	Print Date: 10/19/2018
Additional Info:	

Channel Features	Aids to Navigation	MLLW
— Channel Toe	★ Lights	Color scale for depth (feet)
- - - Channel Center Line	▲ Red Side Aids	> 4
— Channel Station Lines	■ Green Side Aids	4 - 6
↔ Channel Dimensions	◆ Mooring Buoy	6 - 8
		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

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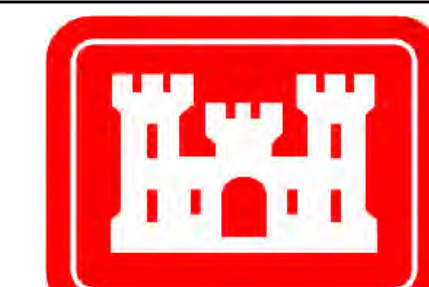


Coordinate System: NAD 1983 StatePlane Texas South Central FIPS 4204 Feet Projection: Lambert Conformal Conic /Datum: North American 1983	
NOAA Nautical Chart Extent	0 0.25 0.5 1 Miles
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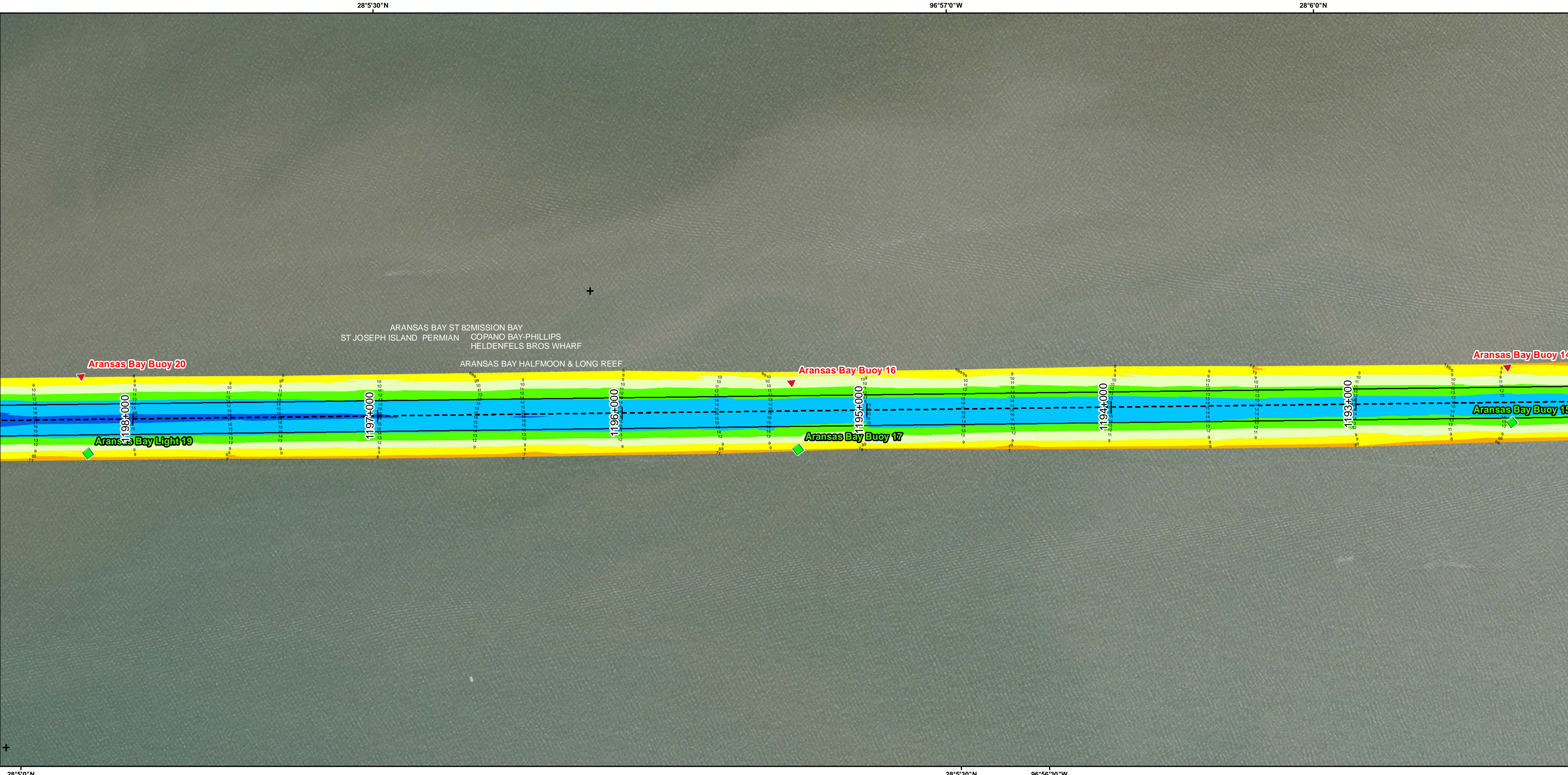
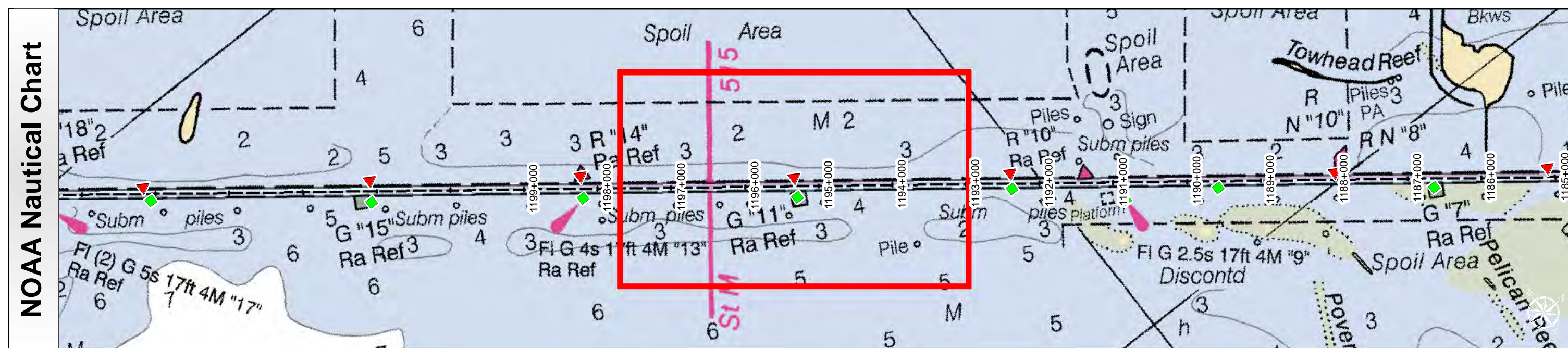
HYDROGRAPHIC SURVEY
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
GALVESTON, TEXAS

Station: 1178+000 to 1236+611
GIWW
, TEXAS

Gulf Intracoastal Waterway: Across Aransas Bay



U.S. Army Corps of Engineers
Galveston District



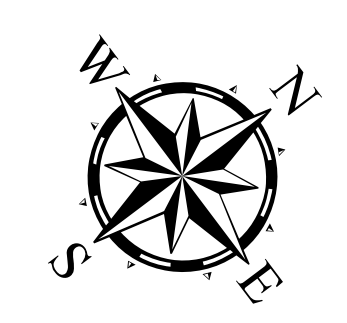
Channel Features	Aids to Navigation	MLLW
<ul style="list-style-type: none"> Channel Toe Channel Center Line Channel Station Lines Channel Dimensions 	<ul style="list-style-type: none"> Lights Red Side Aids Green Side Aids Mooring Buoy 	<p>NOAA Bathymetry (DREDGING REACH EXTENT)</p> <p>0 - 10 10 - 15 15 - 20 20 - 25 25 - 30 30 - 50</p>

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

NOAA Nautical Chart Extent

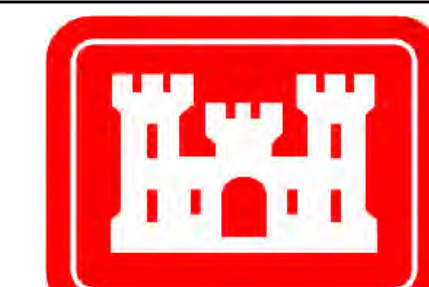
Hydrographic Survey Extent

Survey Date(s): 16 October 2018	Authorized Depth: -1.4ft.
Page: 172 of 190	Side Slope Ratio: (Rise : Run)
Scale: 1:2,400	Additional Imagery: © DigitalGlobe Inc.
Mapped by: MSAOXFAC	Print Date: 10/19/2018
Additional Info:	

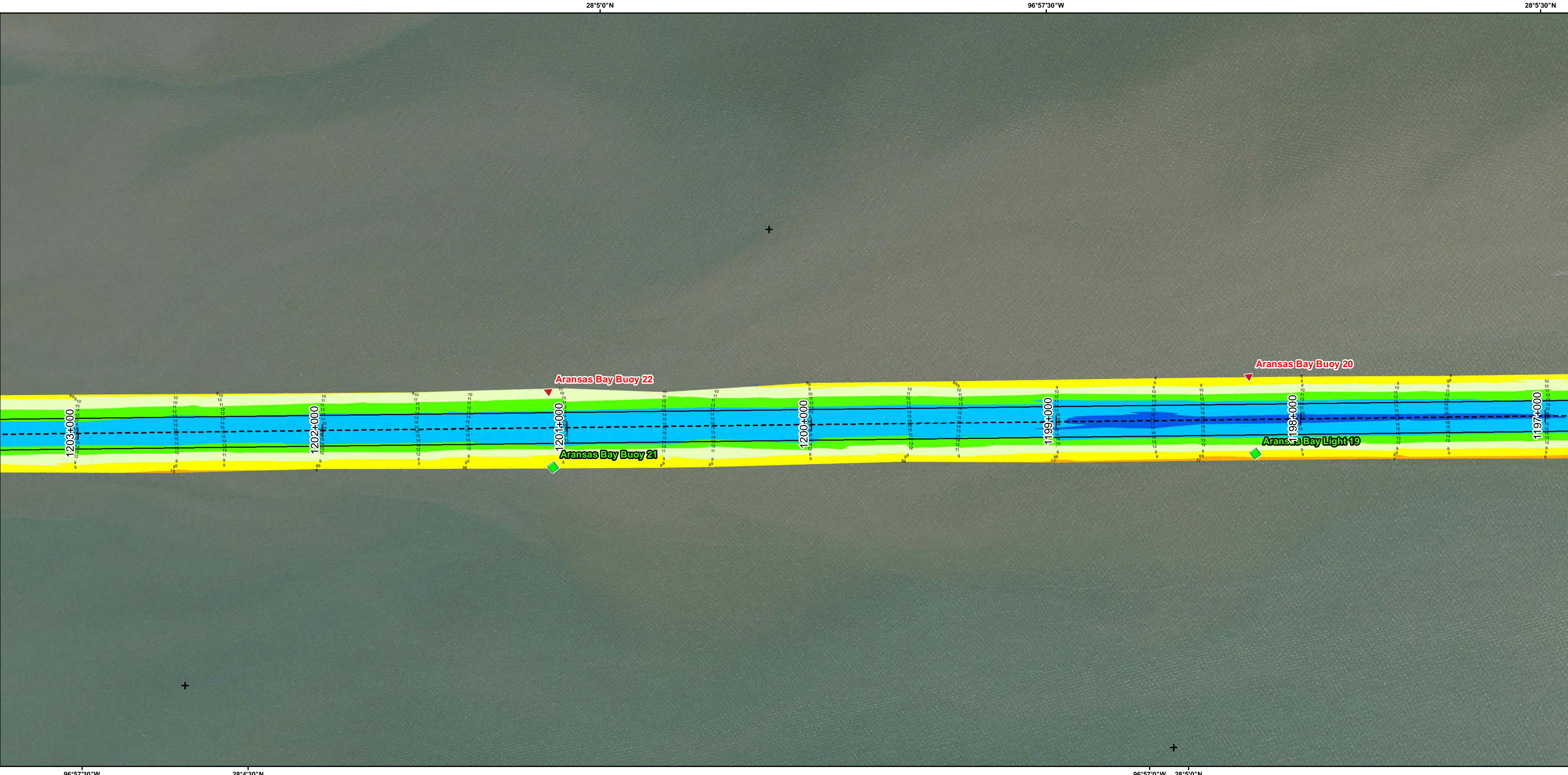
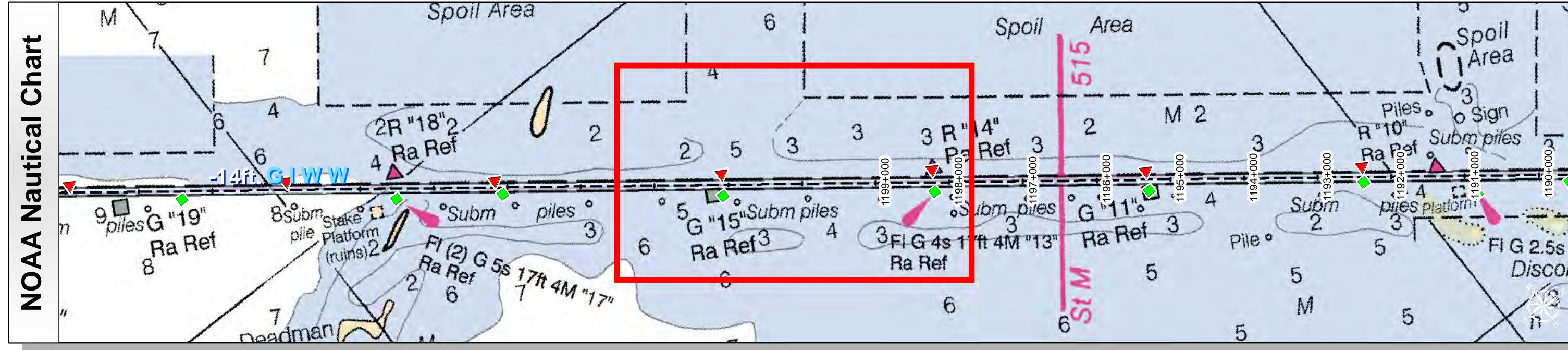
HYDROGRAPHIC SURVEY
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
GALVESTON, TEXAS

Station: 1178+000 to 1236+611
GIWW
, TEXAS

Gulf Intracoastal Waterway: Across Aransas Bay



U.S. Army Corps of Engineers
Galveston District



Survey Date(s): 16 October 2018	Authorized Depth: -14ft.
Page: 173 of 190	Side Slope Ratio: (Rise : Run)
Scale: 1:2,400	Additional Imagery: © DigitalGlobe Inc.
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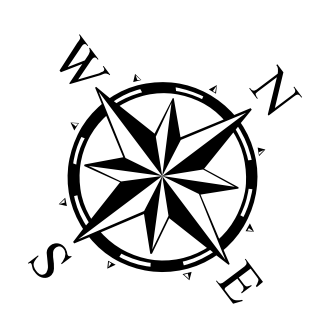
Channel Features	Aids to Navigation	MLLW
<ul style="list-style-type: none"> Channel Toe Channel Center Line Channel Station Lines Channel Dimensions 	<ul style="list-style-type: none"> Lights Red Side Aids Green Side Aids Mooring Buoy 	<p>NOAA Bathymetry (DREDGING REACH EXTENT)</p> <p>0 - 10 10 - 15 15 - 20 20 - 25 25 - 30 30 - 50</p>

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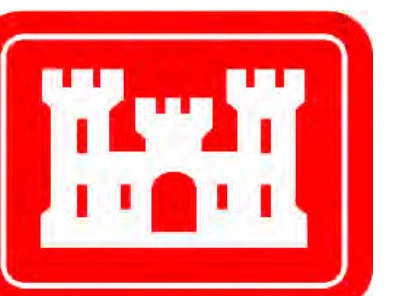


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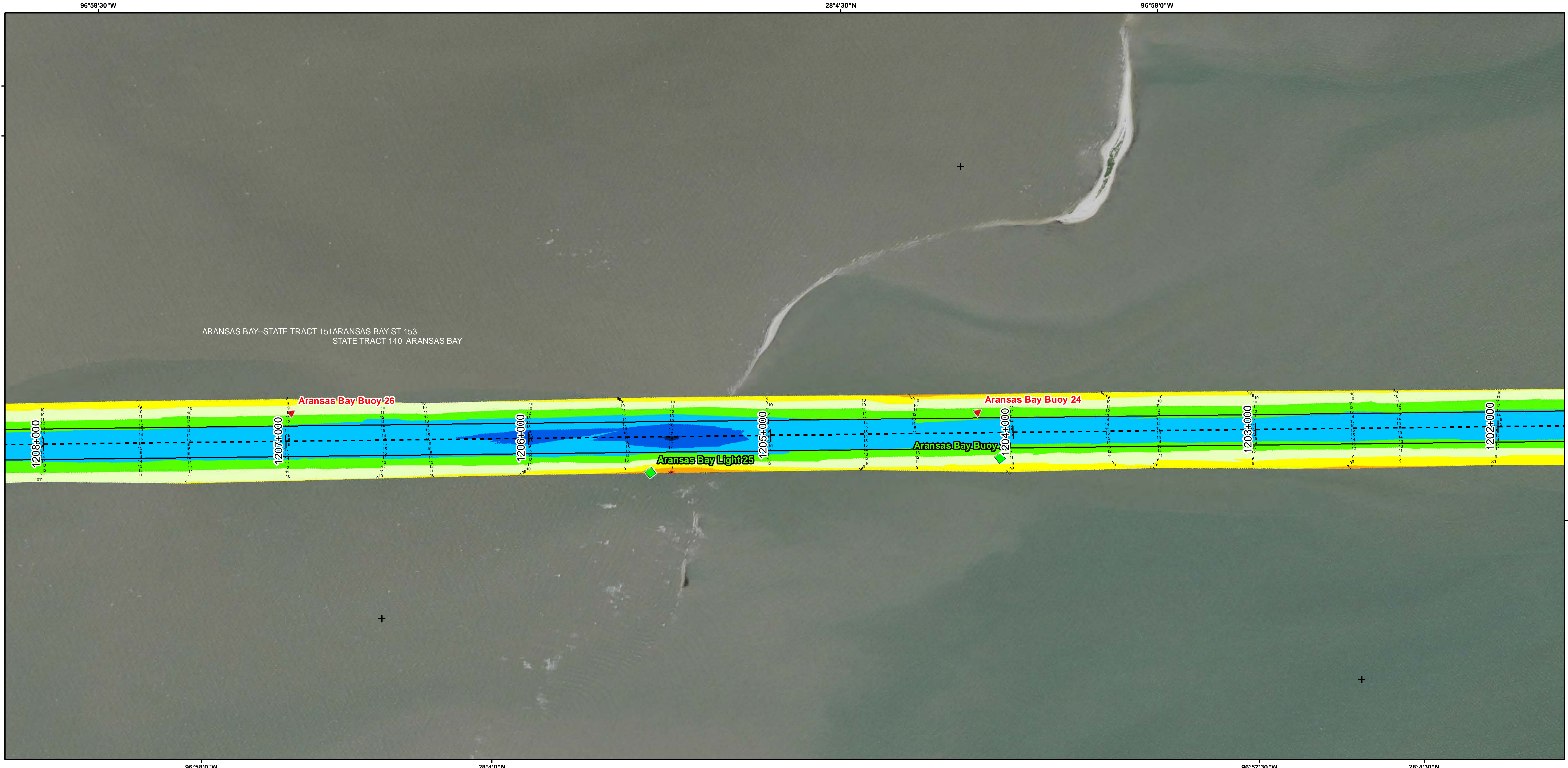
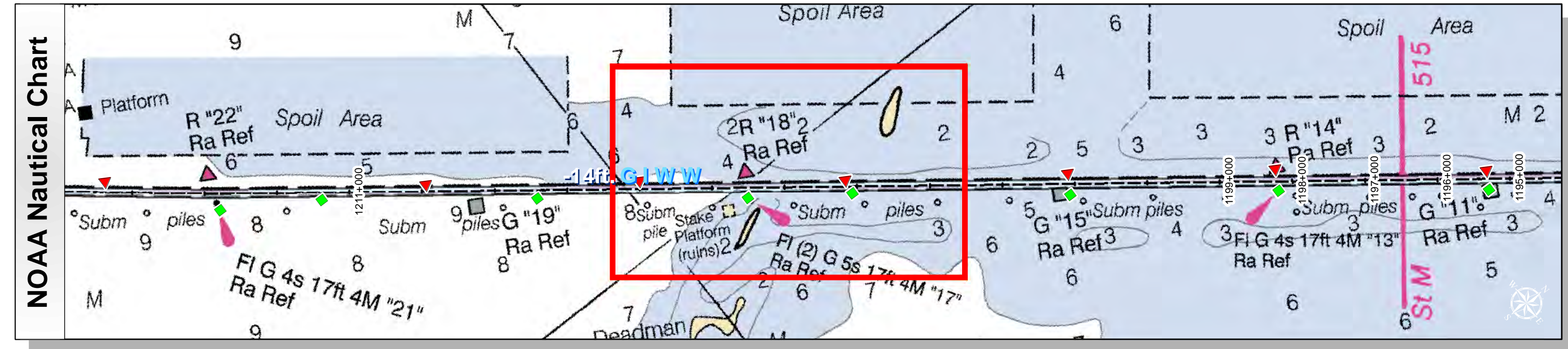
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Galveston District

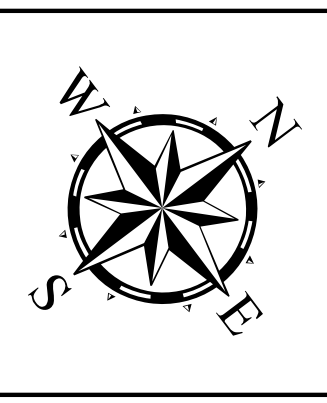


Channel Features	Aids to Navigation	MLLW
Channel Toe	Lights	Color scale for depth (4 to < 18)
Channel Center Line	Red Side Aids	NOAA Bathymetry (DREDGING REACH EXTENT)
Channel Station Lines	Green Side Aids	0 - 10, 10 - 15, 15 - 20, 20 - 25, 25 - 30, 30 - 50
Channel Dimensions	Mooring Buoy	

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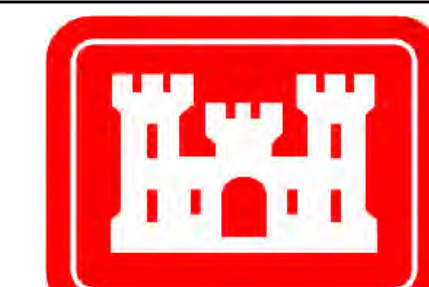


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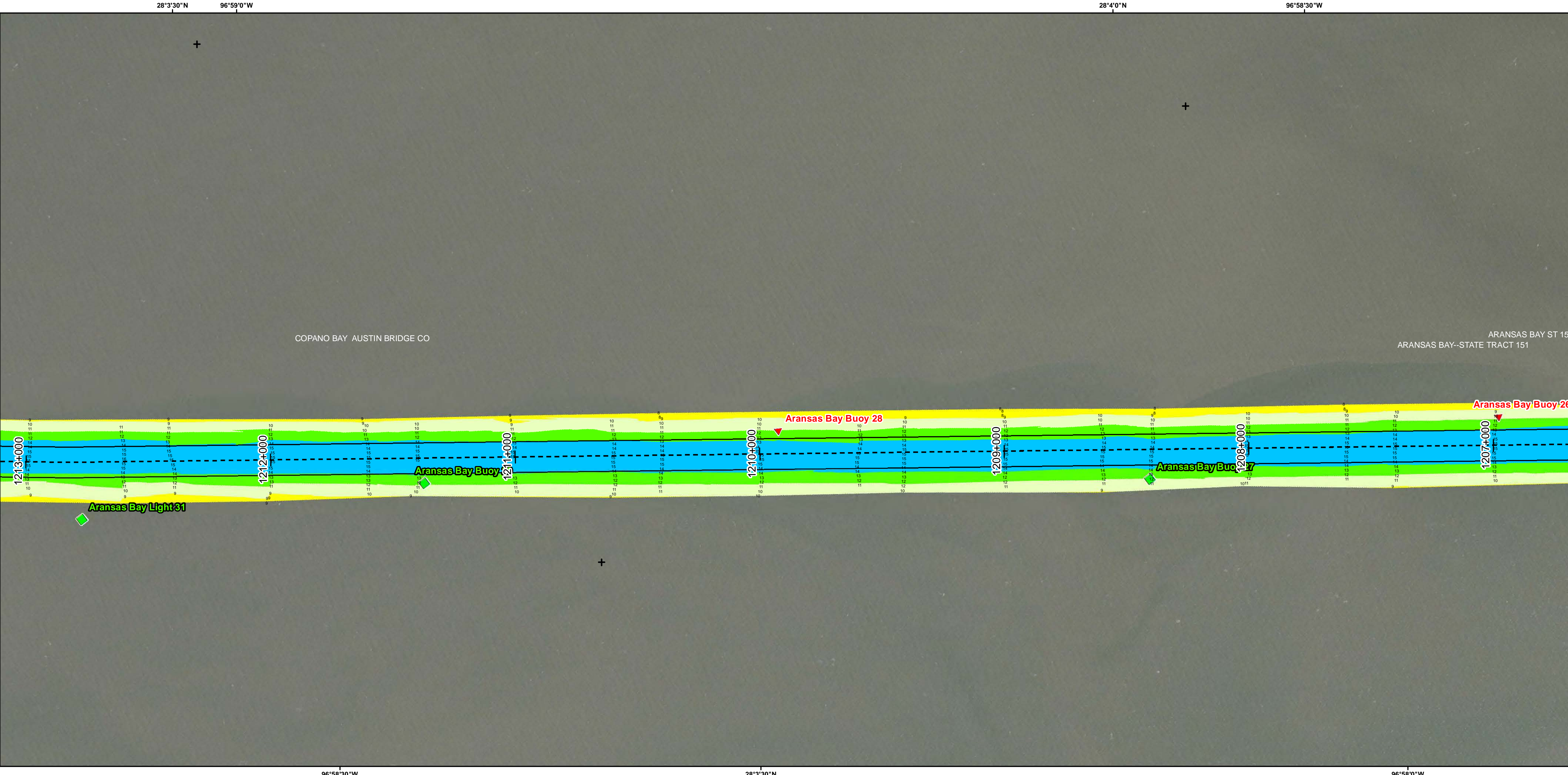
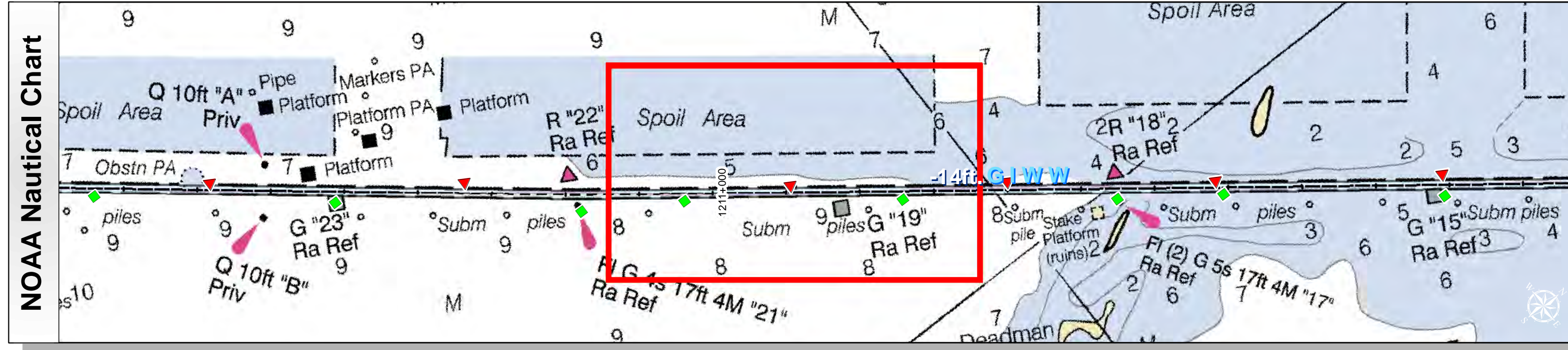
Survey Date(s): 16 October 2018	Authorized Depth: -14ft.
Page: 174 of 190	Side Slope Ratio: (Rise : Run)
Scale: 1:2,400	Additional Imagery: © DigitalGlobe Inc.
Map:	Print Date: 10/19/2018
Maped by: MSAOX PAC	
Additional Info:	

HYDROGRAPHIC SURVEY
 U.S. ARMY ENGINEER DISTRICT
 CORPS OF ENGINEERS
 GALVESTON, TEXAS
Station: 1178+000 to 1236+611
 GIWW
 TEXAS

Gulf Intracoastal Waterway: Across Aransas Bay



U.S. Army Corps of Engineers
Galveston District

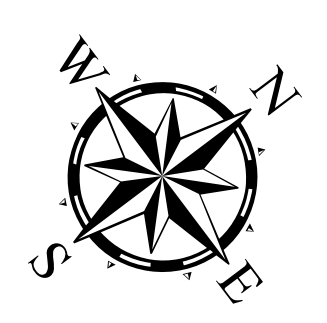


Channel Features	Aids to Navigation	MLLW
Channel Toe	Lights	4 - 18
Channel Center Line	Red Side Aids	4 - 6
Channel Station Lines	Green Side Aids	6 - 8
Channel Dimensions	Mooring Buoy	8 - 10
		10 - 12
		12 - 14
		14 - 16
		16 - 18
		< 18
		NOAA Bathymetry (DREDGING REACH EXTENT)
		0 - 10
		10 - 15
		15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

NOTES:

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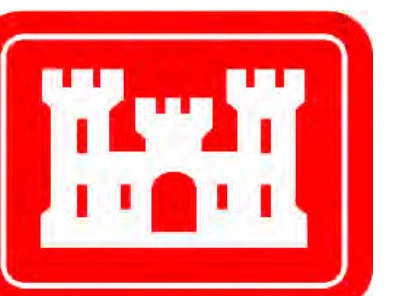
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NOAA Nautical Chart Extent
0 0.25 0.5 1 Miles
Hydrographic Survey Extent
0 200 400 800 Feet

Survey Date(s): 16 October 2018	Authorized Depth: -14ft.
Page: 175 of 190	Side Slope Ratio: (Rise : Run)
Map:	Additional Imagery: © DigitalGlobe Inc.
Scale: 1:2,400	Print Date: 10/19/2018
Mapped by: MSAOX PAC	
Additional Info:	

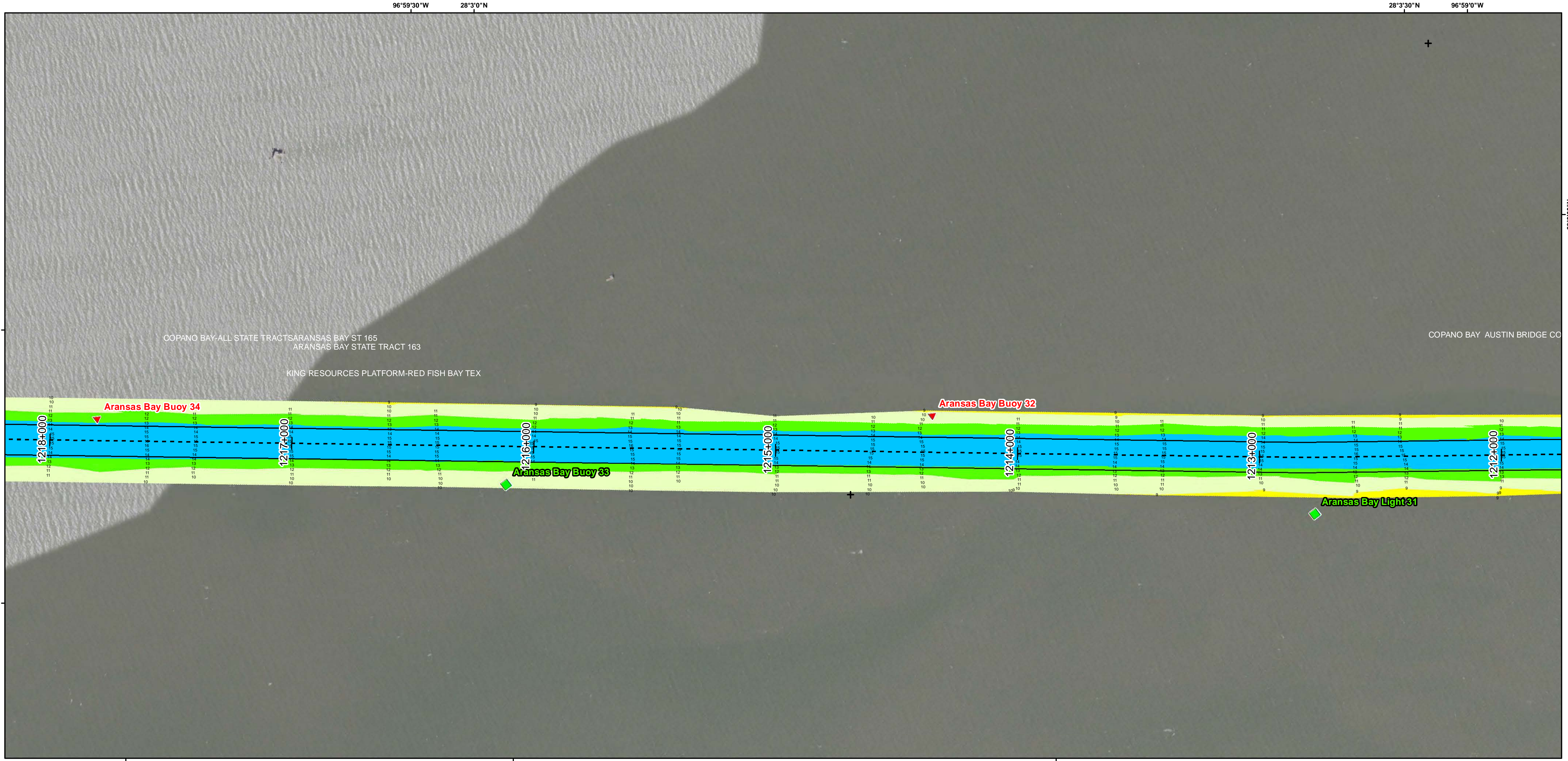
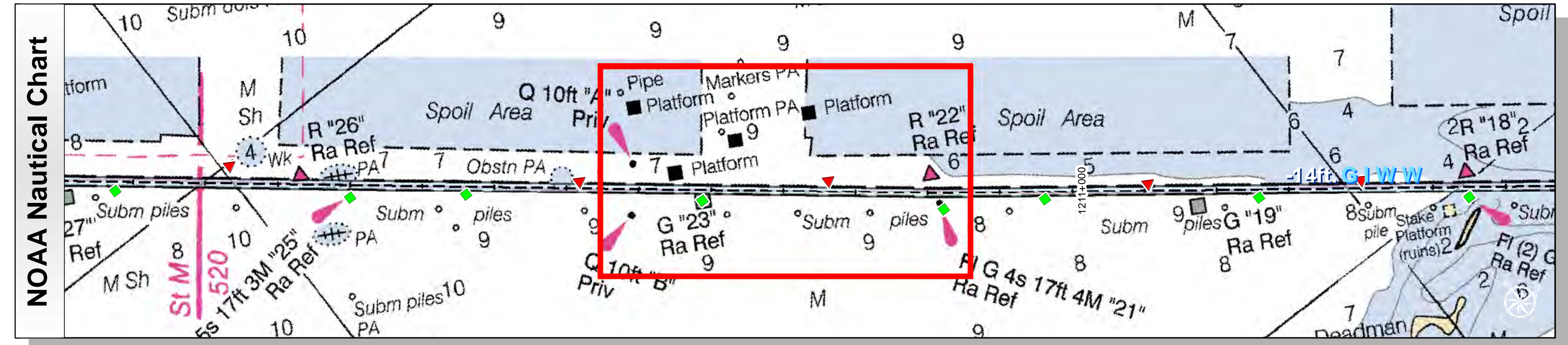
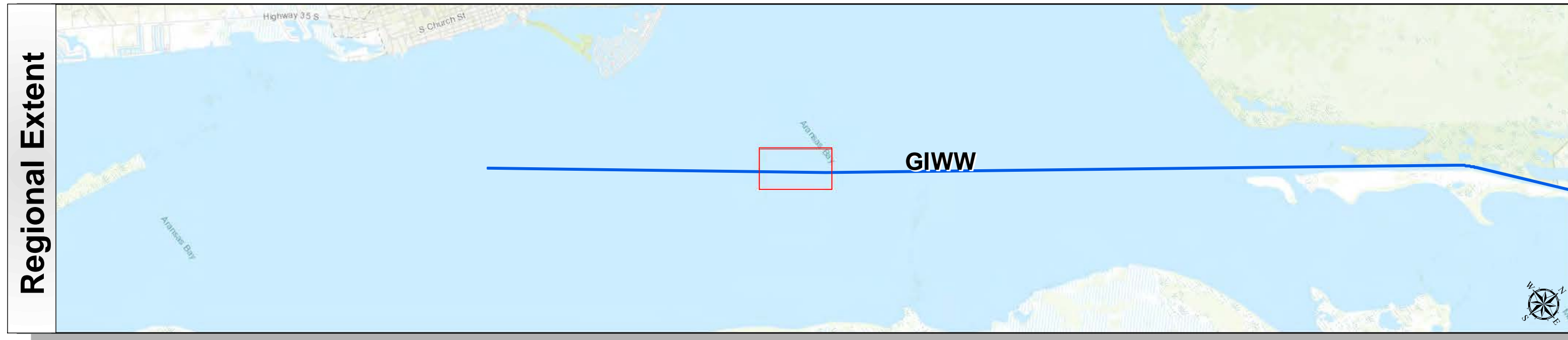
HYDROGRAPHIC SURVEY
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
GALVESTON, TEXAS

Station: 1178+000 to 1236+611
GIWW
, TEXAS

Gulf Intracoastal Waterway: Across Aransas Bay



U.S. Army Corps of Engineers
Galveston District



Survey Date(s): 16 October 2018	Authorized Depth: -1.4ft.
Page: 176 of 190	Side Slope Ratio: (Rise : Run)
Scale: 1:2,400	Additional Imagery: © DigitalGlobe Inc.
Mapped by: MSAOX PAC	Print Date: 10/19/2018
Additional Info:	

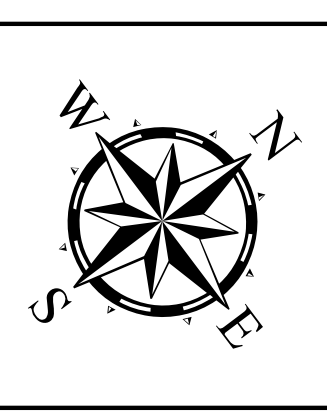
Channel Features	Aids to Navigation	MLLW
<ul style="list-style-type: none"> Channel Toe Channel Center Line Channel Station Lines Channel Dimensions 	<ul style="list-style-type: none"> Lights Red Side Aids Green Side Aids Mooring Buoy 	<p>NOAA Bathymetry (DREDGING REACH EXTENT)</p> <p>0 - 10 10 - 15 15 - 20 20 - 25 25 - 30 30 - 50</p>

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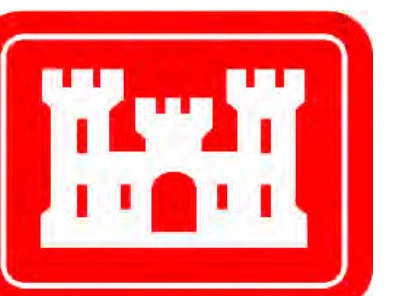


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NOAA Nautical Chart Extent	
Hydrographic Survey Extent	

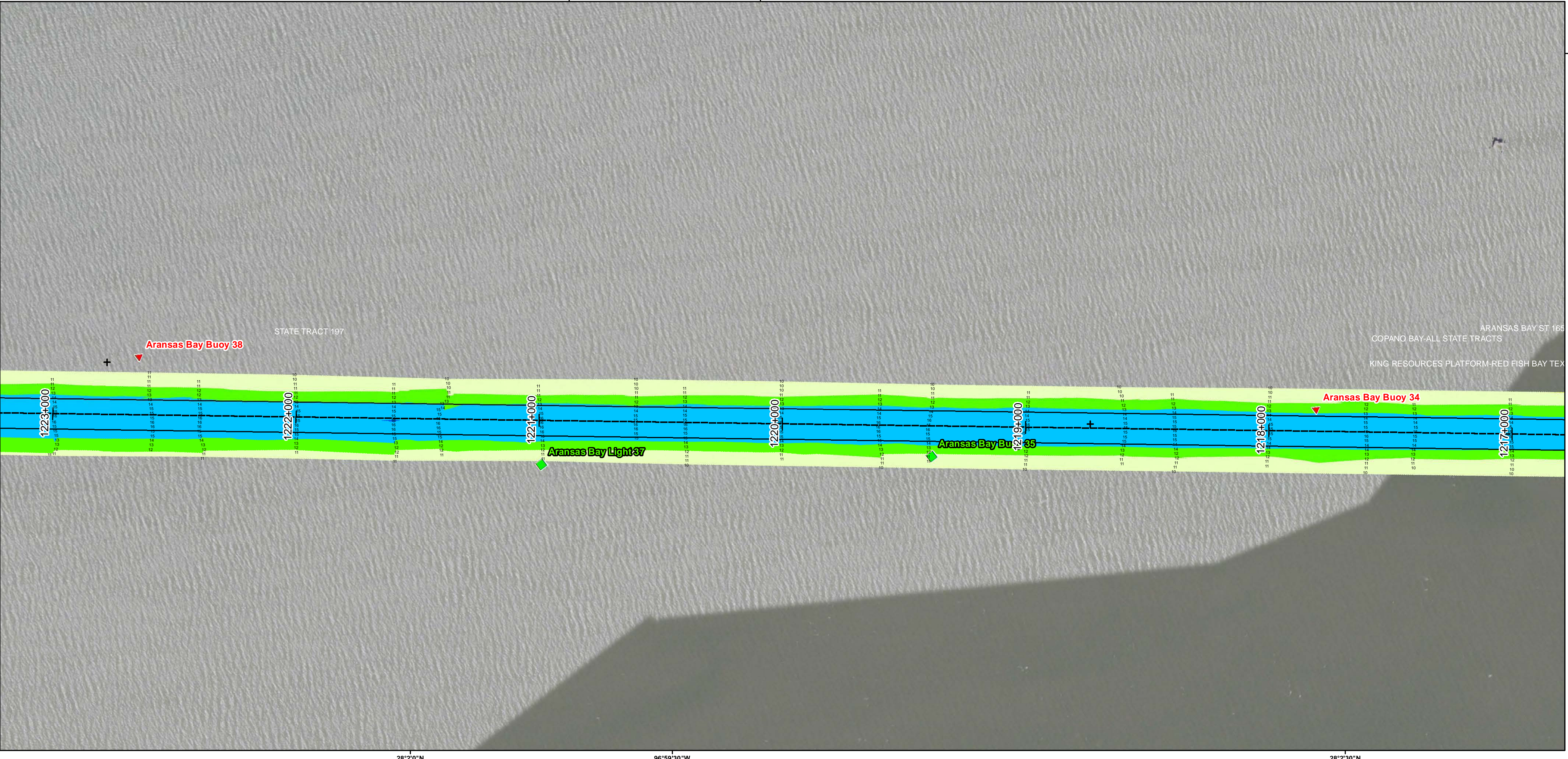
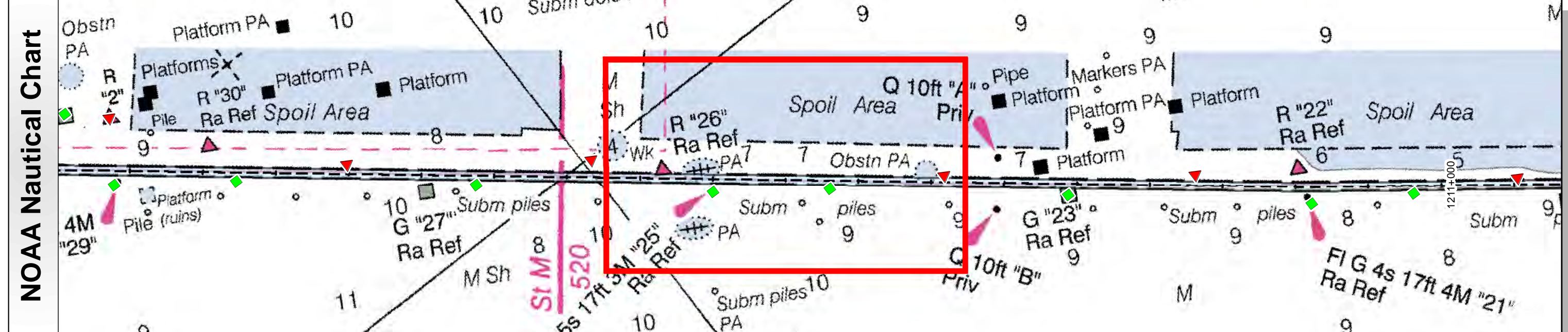
HYDROGRAPHIC SURVEY
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
GALVESTON, TEXAS

Station: 1178+000 to 1236+611
GIWW
, TEXAS

Gulf Intracoastal Waterway: Across Aransas Bay



U.S. Army Corps of Engineers
Galveston District

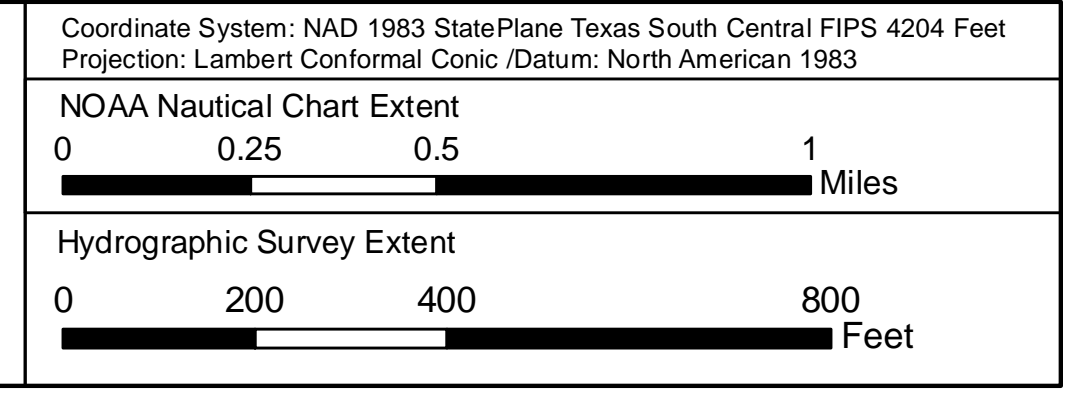
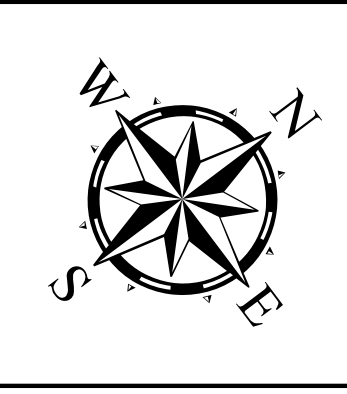


Channel Features	Aids to Navigation	MLLW
Channel Toe	Lights	> 4
Channel Center Line	Red Side Aids	4 - 6
Channel Station Lines	Green Side Aids	6 - 8
Channel Dimensions	Mooring Buoy	8 - 10
		10 - 12
		12 - 14
		14 - 16
		16 - 18
		< 18
		0 - 10
		10 - 15
		15 - 20
		20 - 25
		25 - 30
		30 - 50

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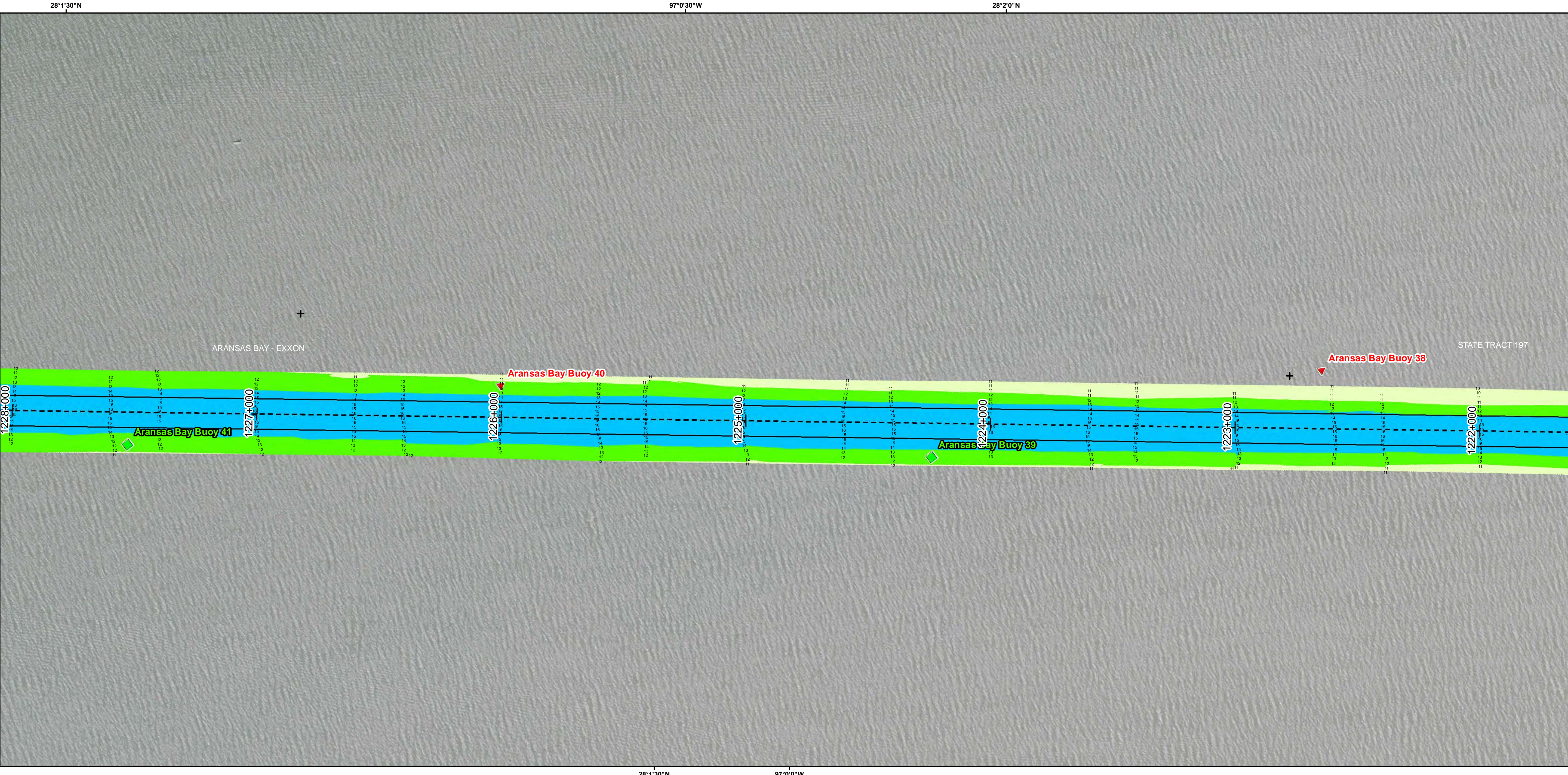
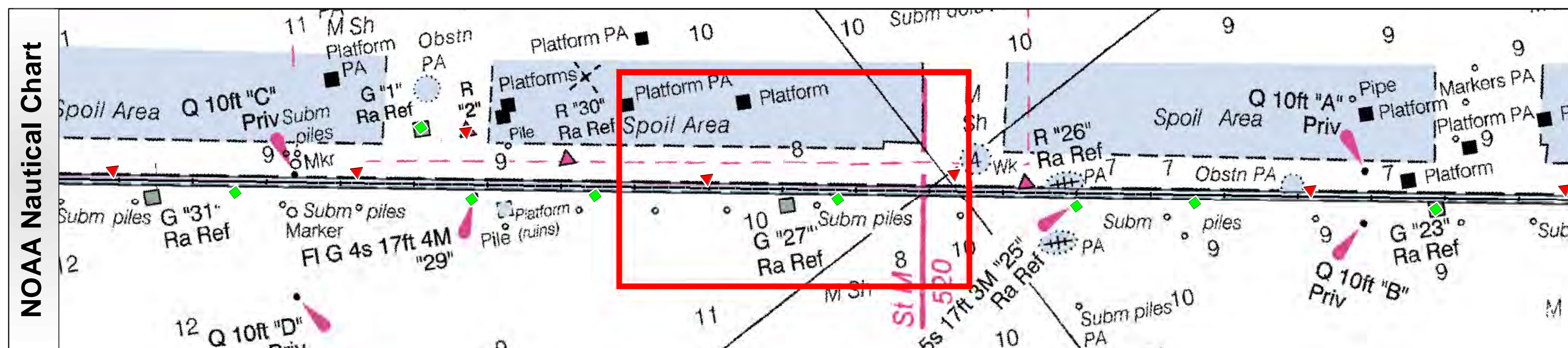


Survey Date(s): 16 October 2018	Authorized Depth: -1.4ft.
Page: 177 of 190	Side Slope Ratio: (Rise : Run)
Map:	Additional Imagery: © DigitalGlobe Inc.
Scale: 1:2,400	Print Date: 10/19/2018
Mapped by: MSAOXFAC	
Additional Info:	

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

Station: 1178+000 to 1236+611
 GIWW
 TEXAS

Gulf Intracoastal Waterway: Across Aransas Bay

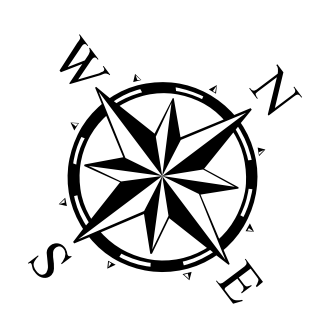


Channel Features	Aids to Navigation	MLLW
— Channel Toe	★ Lights	Color scale from > 4 to < 18
- - - Channel Center Line	▲ Red Side Aids	NOAA Bathymetry (DREDGING REACH EXTENT)
— Channel Station Lines	■ Green Side Aids	0 - 10 10 - 15 15 - 20 20 - 25 25 - 30 30 - 50
↔ Channel Dimensions	◆ Mooring Buoy	

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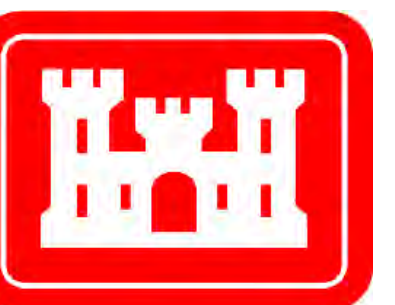
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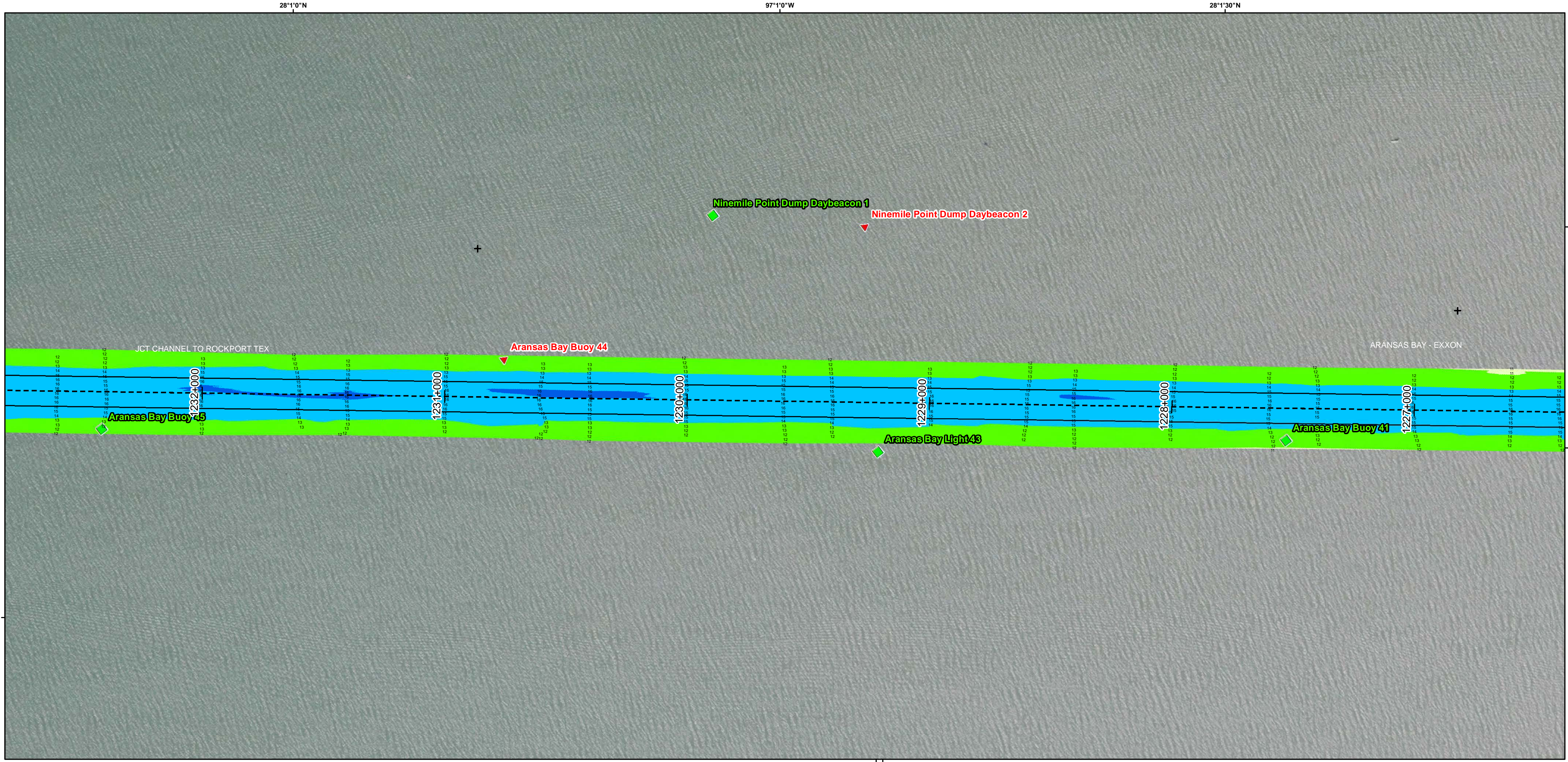
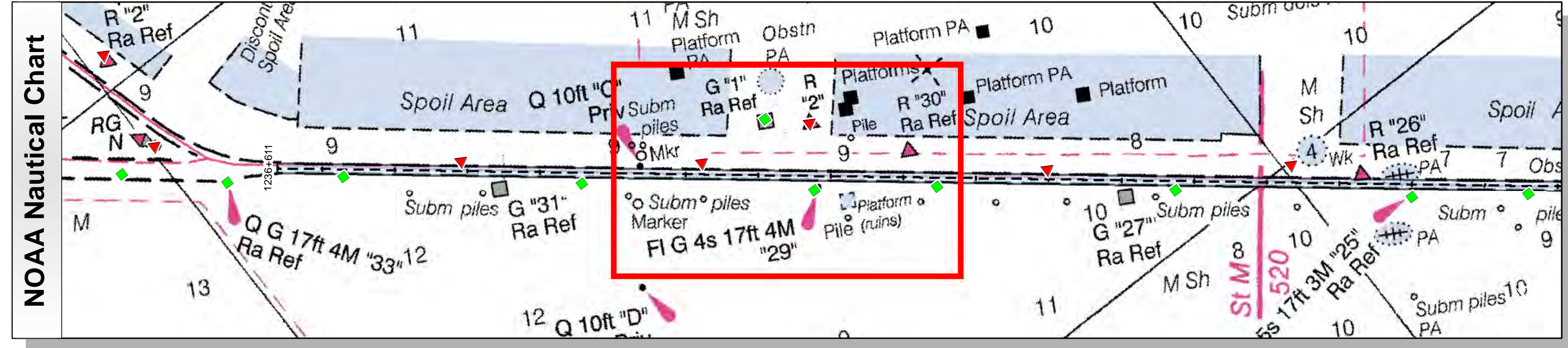
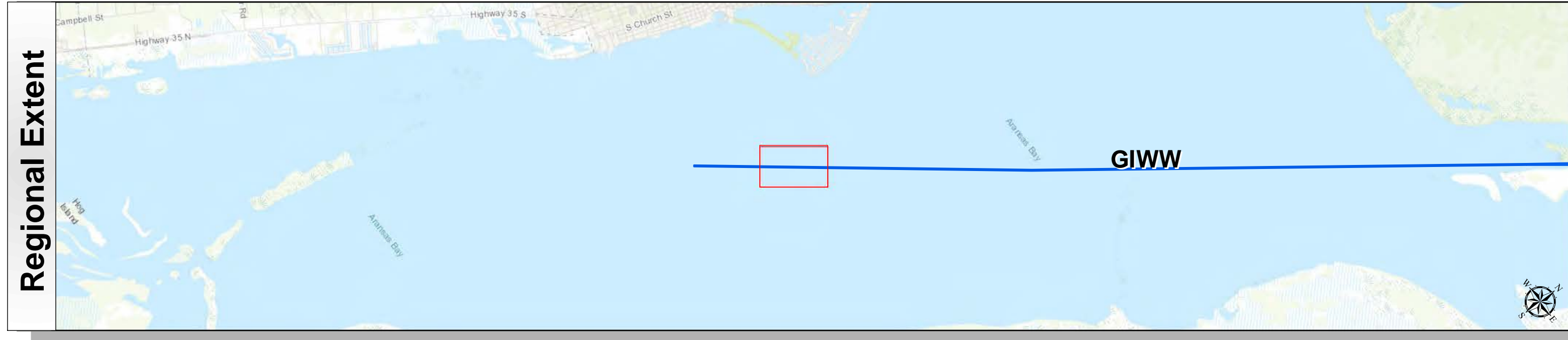
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 CORPS OF ENGINEERS
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Station: 1178+000 to 1236+611
 GIWW
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Gulf Intracoastal Waterway: Across Aransas Bay



U.S. Army Corps of Engineers
Galveston District



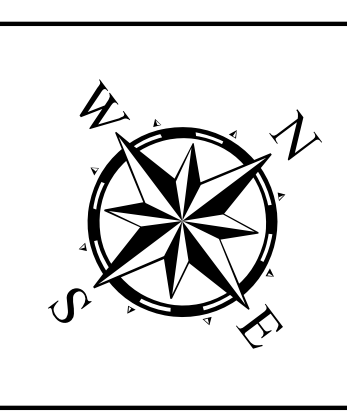
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Page: 179 of 190	Side Slope Ratio: (Rise : Run)
Scale: 1:2,400	Additional Imagery: © DigitalGlobe Inc.
Mapped by: MSAOX PAC	Print Date: 10/19/2018
Additional Info:	

Channel Features	Aids to Navigation	MLLW
— Channel Toe	★ Lights	> 4
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↔ Channel Dimensions	◆ Mooring Buoy	8 - 10
		10 - 12
		12 - 14
		14 - 16
		16 - 18
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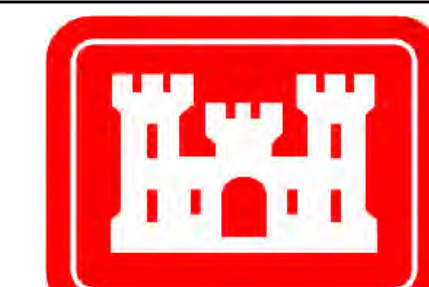


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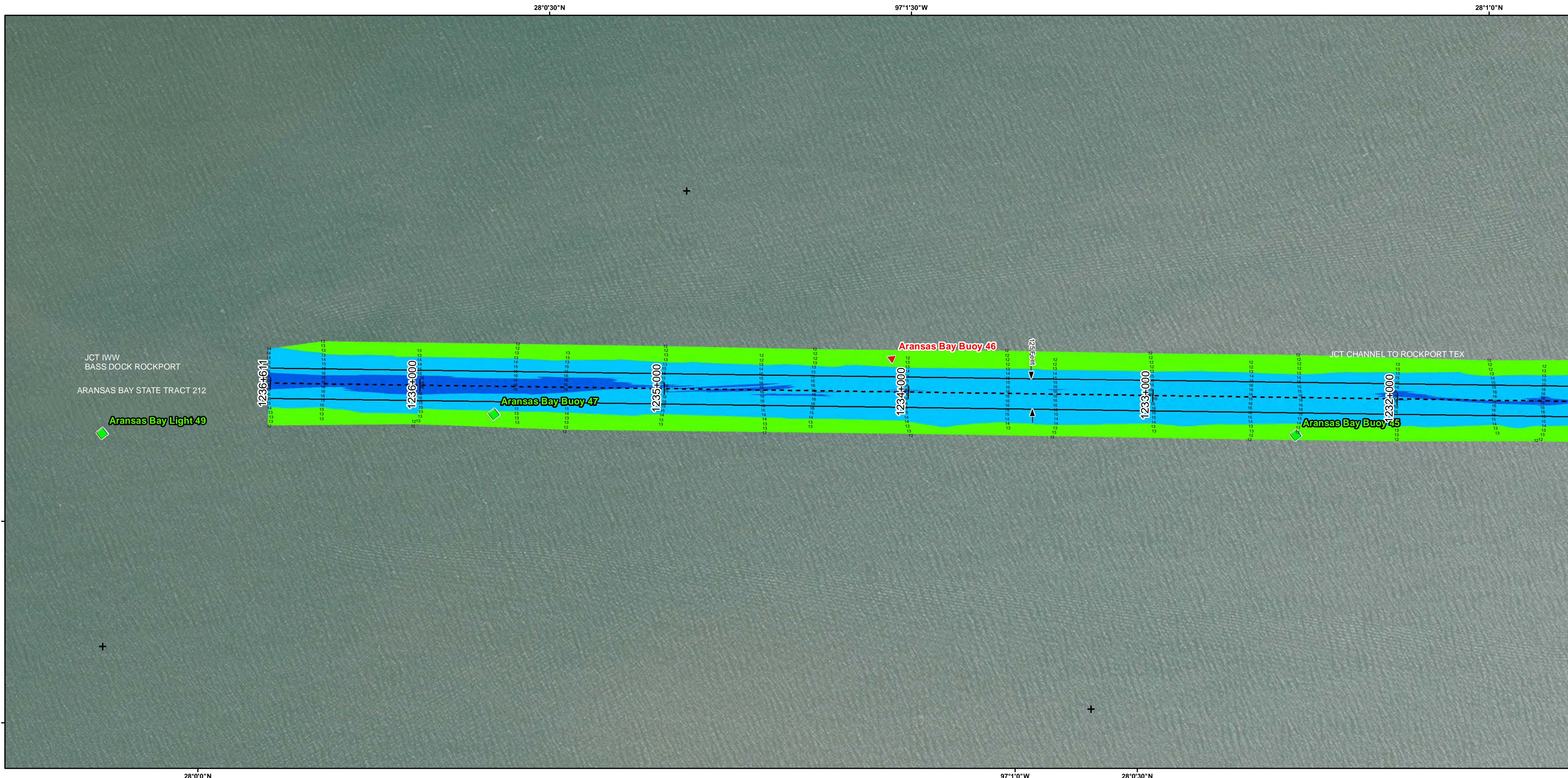
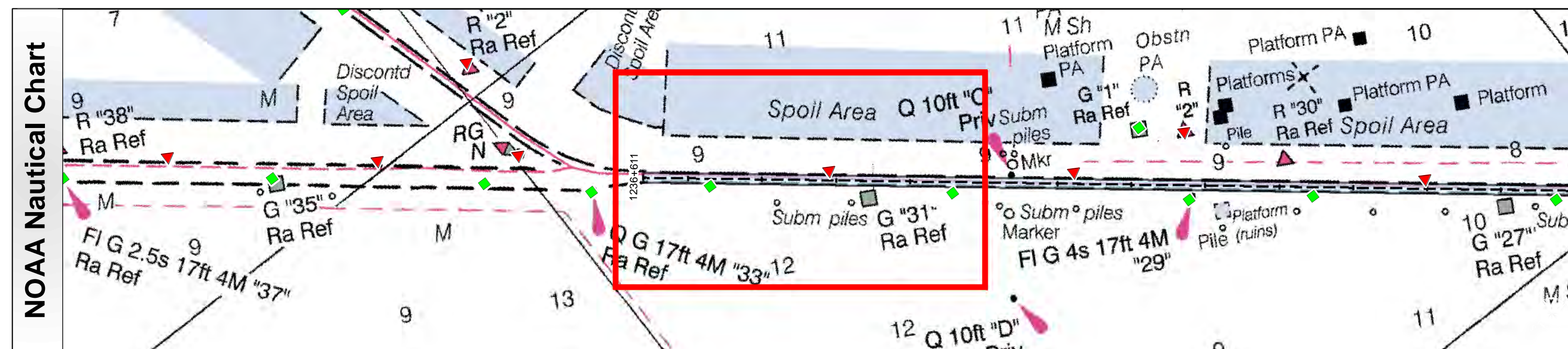
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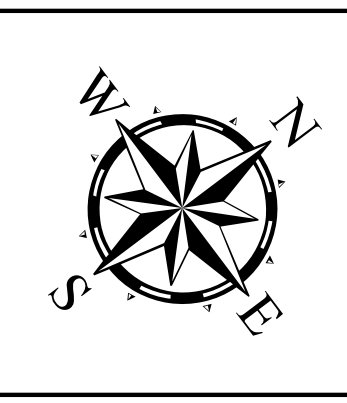
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Mapped by: MSAOX PAC	Print Date: 10/19/2018
Additional Info:	

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

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/HYDROGRAPHICS/SURVEYS/](http://www.swg.usace.army.mil/missions/navigation/hydrographics/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. NOAA NAUTICAL CHARTS PROVIDED VIA RNC MAP SERVICE

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



Coordinate System: NAD 1983 StatePlane Texas South Central FIPS 4204 Feet Projection: Lambert Conformal Conic /Datum: North American 1983	
NOAA Nautical Chart Extent	0 0.25 0.5 1 Miles
Hydrographic Survey Extent	0 200 400 800 Feet

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

Station: 1178+000 to 1236+611
GIWW
, TEXAS