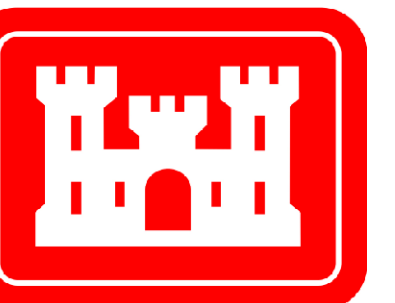
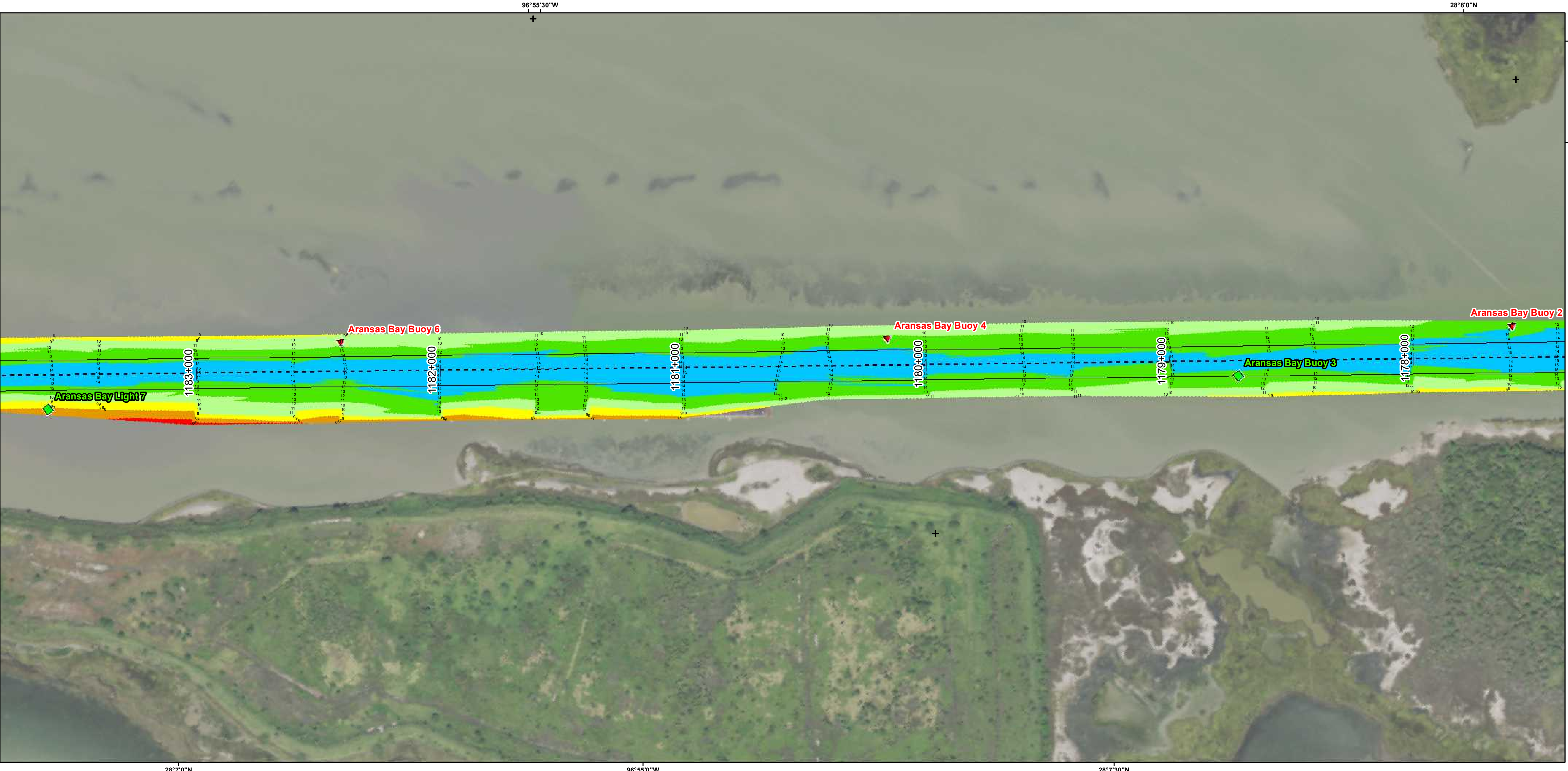


Gulf Intracoastal Waterway: Across Aransas Bay



U.S. Army Corps of Engineers
Galveston District



Survey Date(s): 09 April 2018	Authorized Depth: -14ft.
Page: 169 of 190	Side Slope Ratio: (Rise : Run)
Scale: 1:2,400	Additional Imagery: TNRIS NAIP 2016
Mapped by: m3odmnm	Print Date: 4/11/2018
Additional Info:	

Channel Features

- Channel Toe
- Channel Center Line
- Channel Station Lines
- Channel Dimensions

Aids to Navigation

- Lights
- Red Side Aids
- Green Side Aids
- Mooring Buoy

MLLW

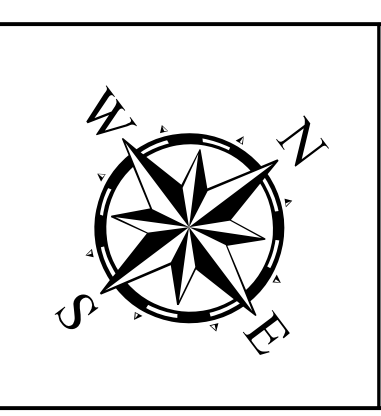
NOAA Bathymetry (DREDGING REACH EXTENT)

< 4	4 - 6	6 - 8	8 - 10	10 - 12	12 - 14	14 - 16	16 - 18	> 18
-----	-------	-------	--------	---------	---------	---------	---------	------

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.
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Service Layer Credits:

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

Dredging Reach Extent

0 0.5 1 Miles

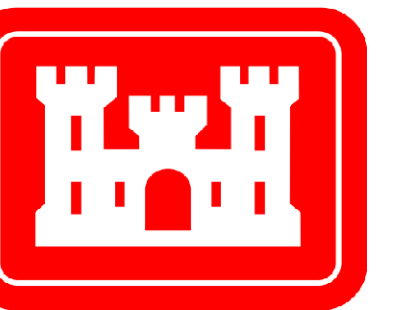
Hydrographic Survey Extent

0 150 300 600 Feet

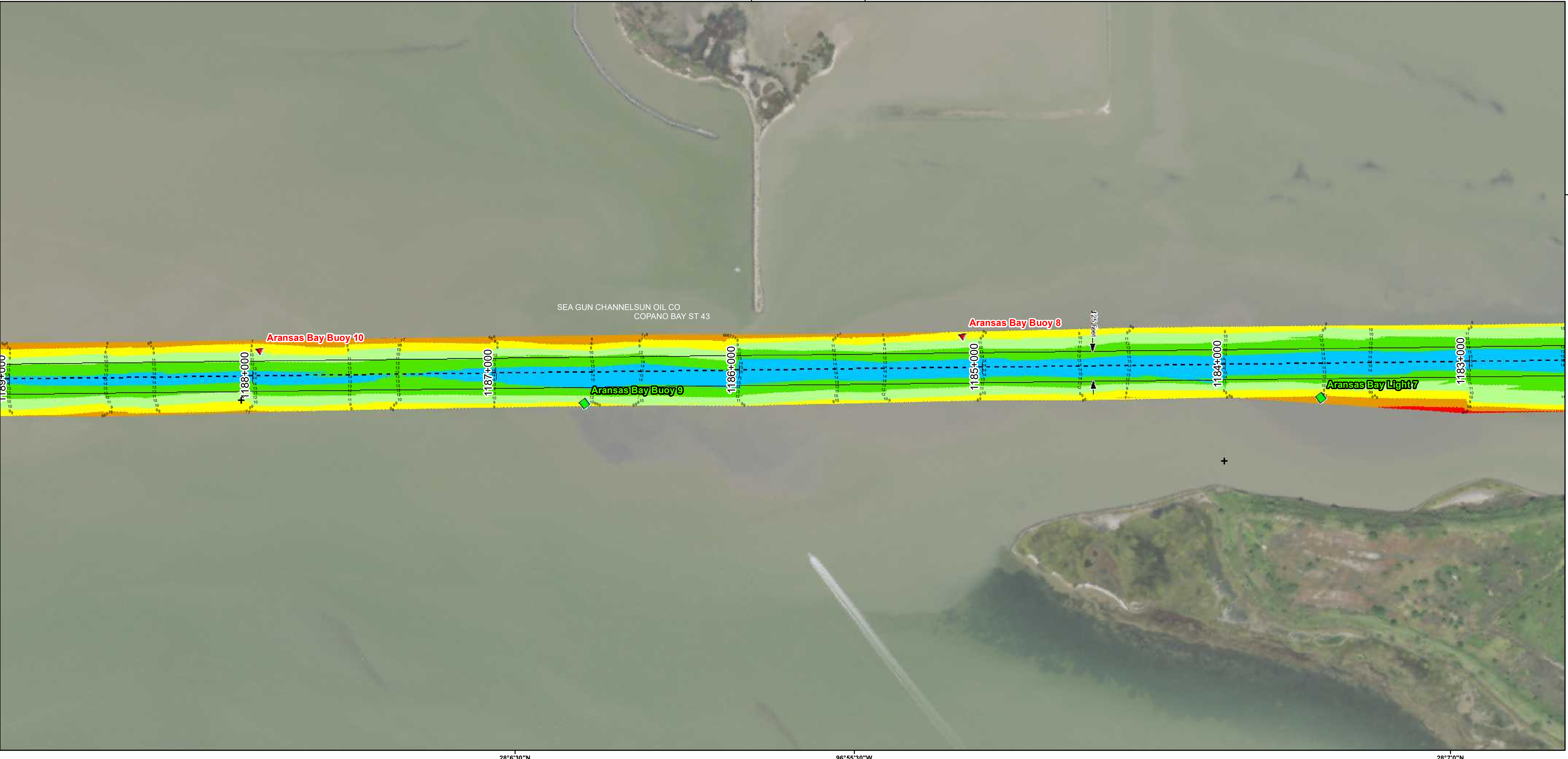
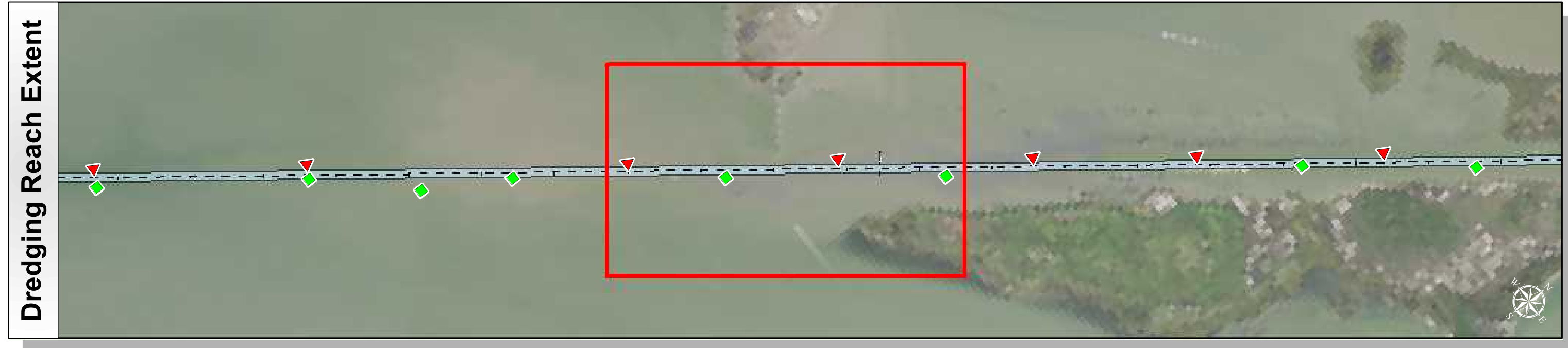
HYDROGRAPHIC SURVEY
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
GALVESTON, TEXAS
Across Aransas Bay

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): 09 April 2018	Authorized Depth: -14ft.
Page: 170 of 190	Side Slope Ratio: (Rise : Run)
Map:	Additional Imagery: TNIRIS NAIP 2016
Scale: 1:2,400	Print Date: 4/11/2018
Mapped by: m3odmmg	
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

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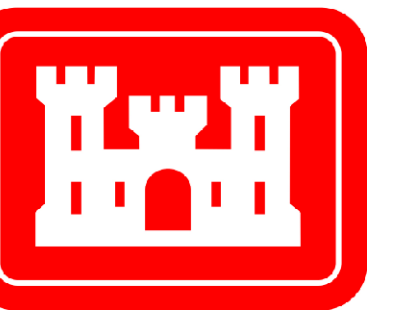
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Hydrographic Survey Extent 0 150 300 600 Feet

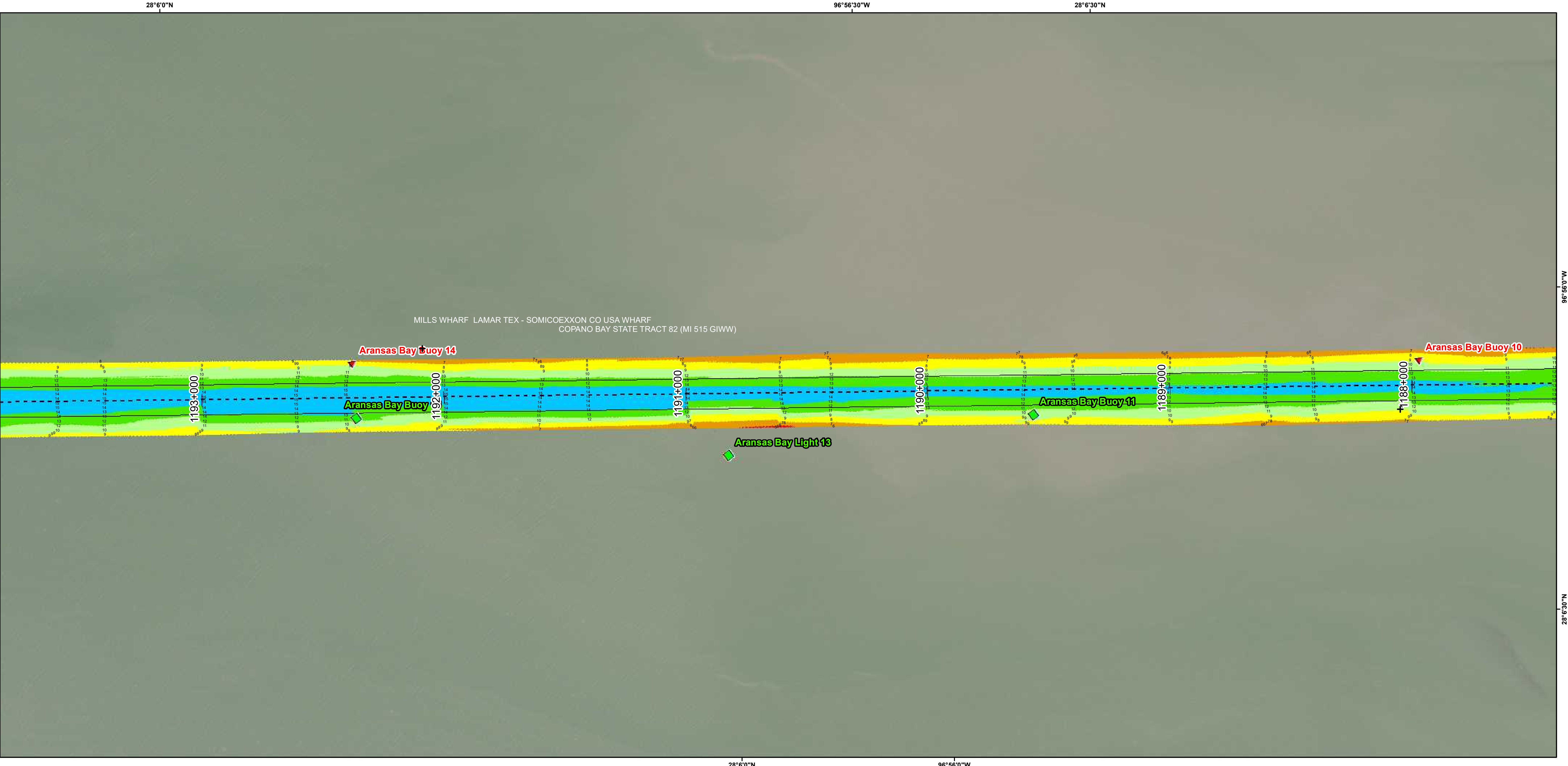
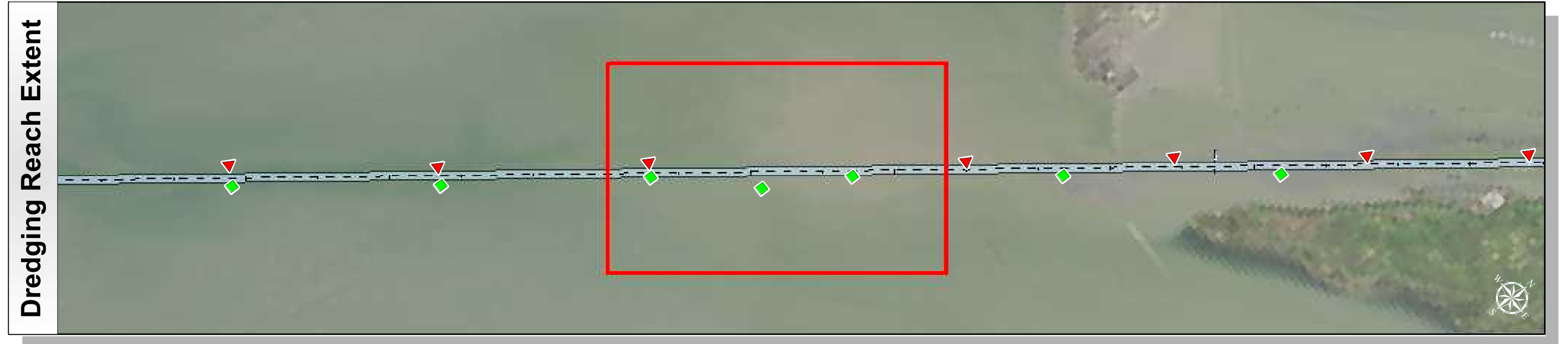
HYDROGRAPHIC SURVEY
 U.S. ARMY ENGINEER DISTRICT
 CORPS OF ENGINEERS
 GALVESTON, TEXAS
 Across Aransas Bay

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): 09 April 2018	Authorized Depth: -14ft.
Page: 171 of 190	Side Slope Ratio: (Rise : Run)
Scale: 1:2,400	Additional Imagery: TNIRIS NAIP 2016
Mapped by: m3odnmng	Print Date: 4/11/2018
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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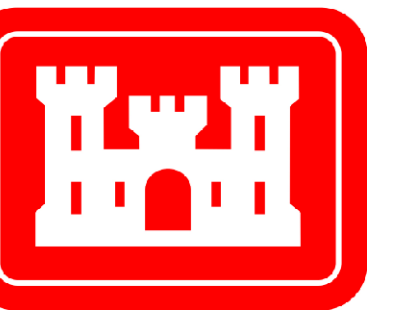
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Coordinate System: NAD 1983 StatePlane Texas South Central FIPS 4204 Feet Projection: Lambert Conformal Conic /Datum: North American 1983
Dredging Reach Extent 0 0.5 1 Miles
Hydrographic Survey Extent 0 150 300 600 Feet

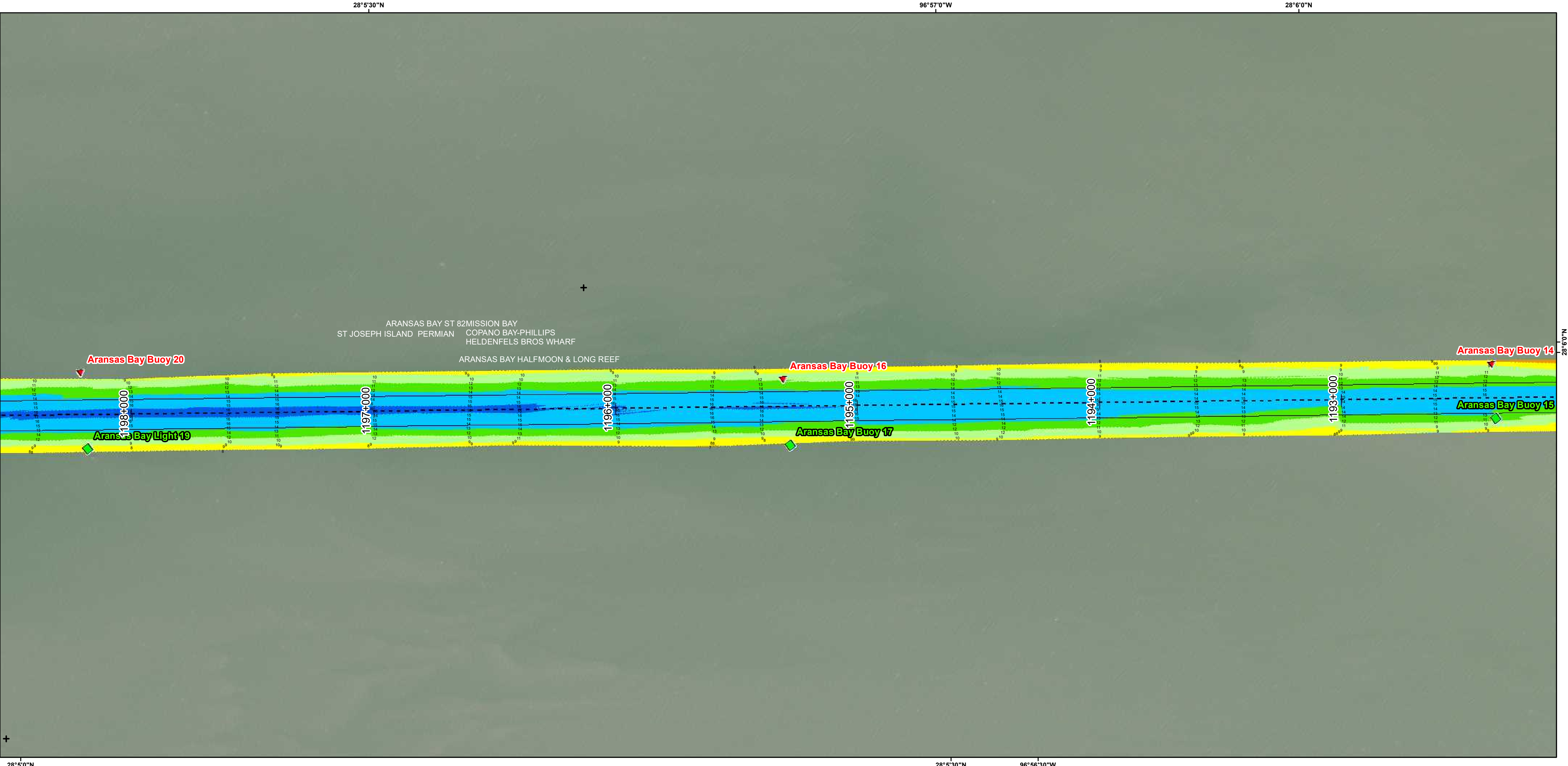
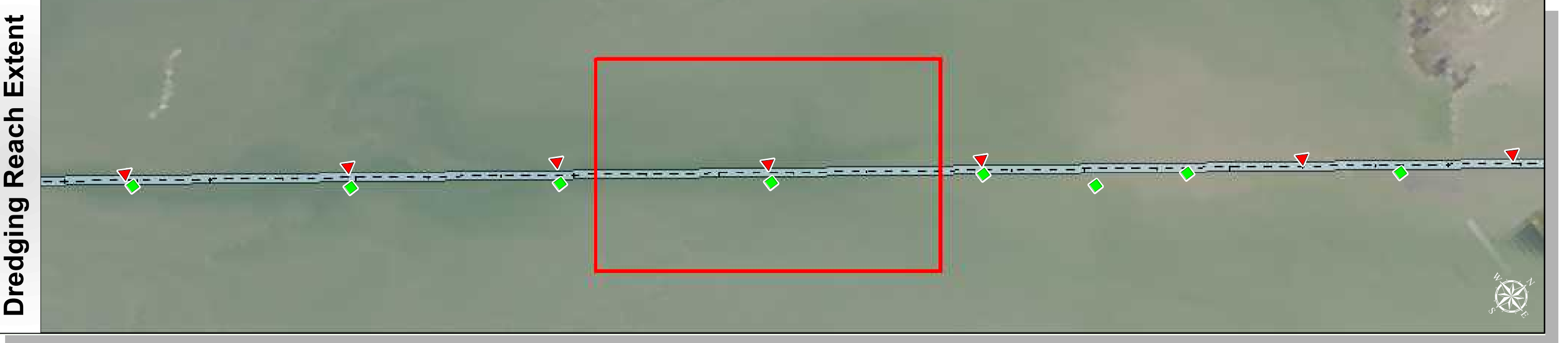
HYDROGRAPHIC SURVEY
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
GALVESTON, TEXAS
Across Aransas Bay

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

Gulf Intracoastal Waterway: Across Aransas Bay



U.S. Army Corps of Engineers
Galveston District



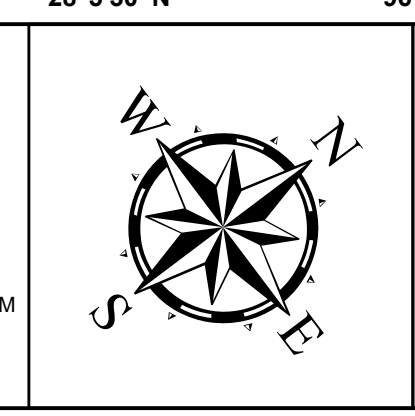
ARANSAS BAY ST MISSION BAY
ST JOSEPH ISLAND PERMIAN COPANO BAY-PHILLIPS
HELDENFELS BROS WHARF

ARANSAS BAY HALFMOON & LONG REEF

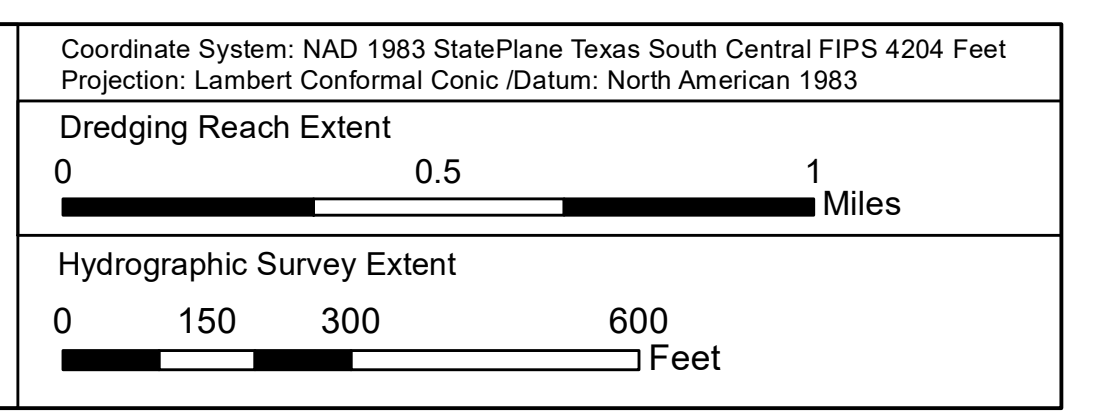
Channel Features	Aids to Navigation	MLLW
— Channel Toe	★ Lights	< 4
- - - Channel Center Line	▲ Red Side Aids	4 - 6
— Channel Station Lines	■ Green Side Aids	6 - 8
↔ Channel Dimensions	◆ Mooring Buoy	8 - 10
		10 - 12
		12 - 14
		14 - 16
		16 - 18
		> 18

NOTES:
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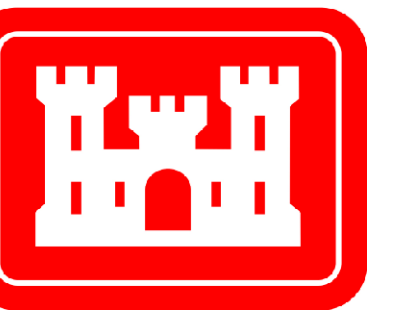


Survey Date(s): 09 April 2018	Authorized Depth: -14ft.
Page: 172 of 190	Side Slope Ratio: (Rise : Run)
Map:	Additional Imagery: TNIRIS NAIP 2016
Scale: 1:2,400	Print Date: 4/11/2018
Mapped by: m3odmmg	
Additional Info:	

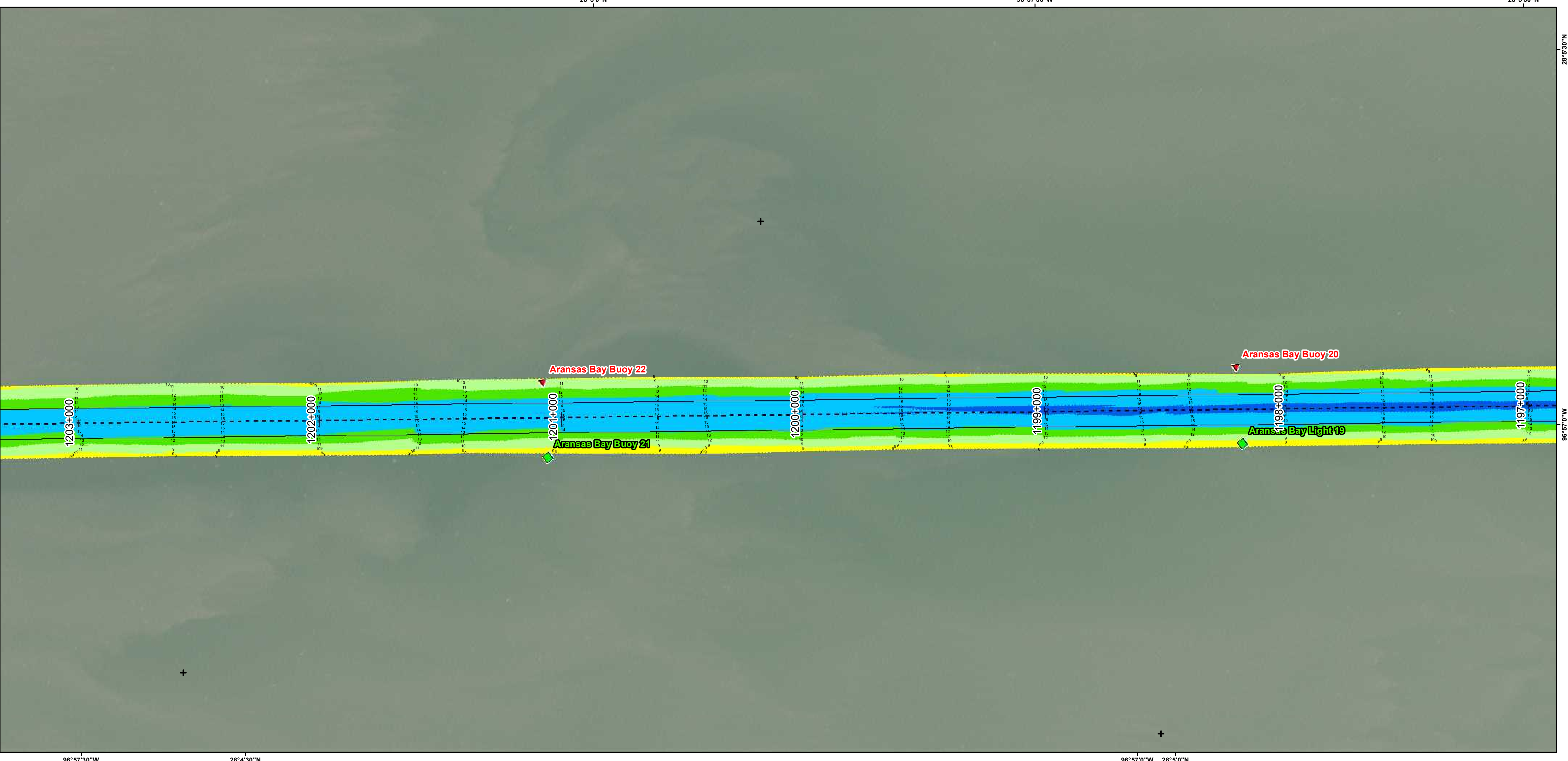
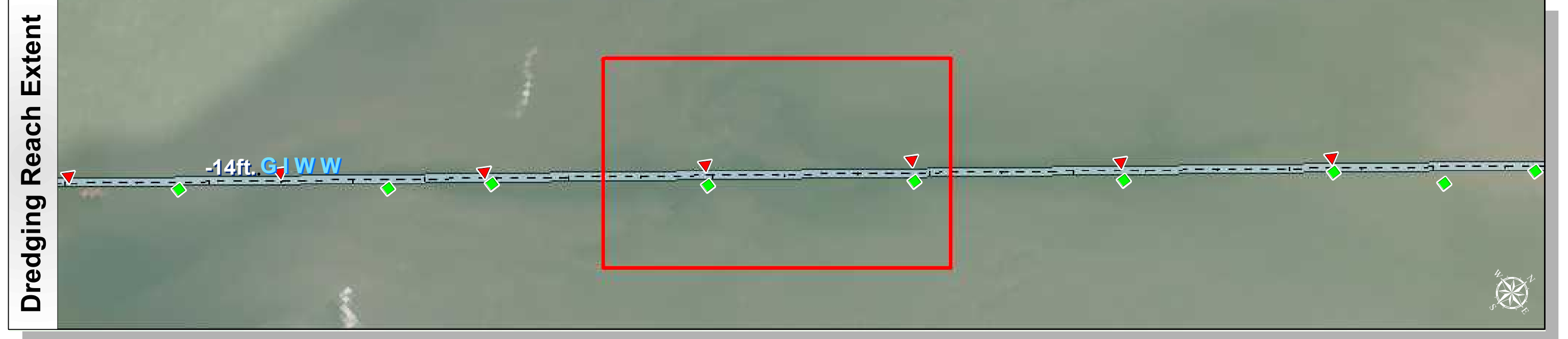
HYDROGRAPHIC SURVEY
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
GALVESTON, TEXAS
Across Aransas Bay

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

Gulf Intracoastal Waterway: Across Aransas Bay

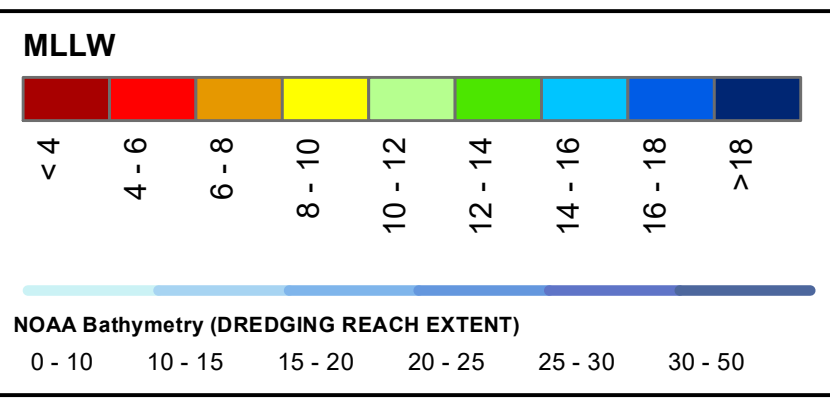


U.S. Army Corps of Engineers
Galveston District



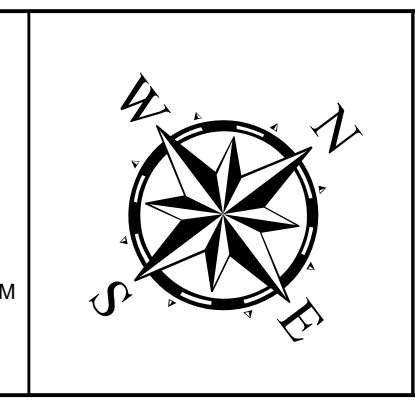
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Page: 173 of 190	Side Slope Ratio: (Rise : Run)
Scale: 1:2,400	Additional Imagery: TNIRIS NAIP 2016
Mapped by: m3odnm	Print Date: 4/11/2018
Additional Info:	

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

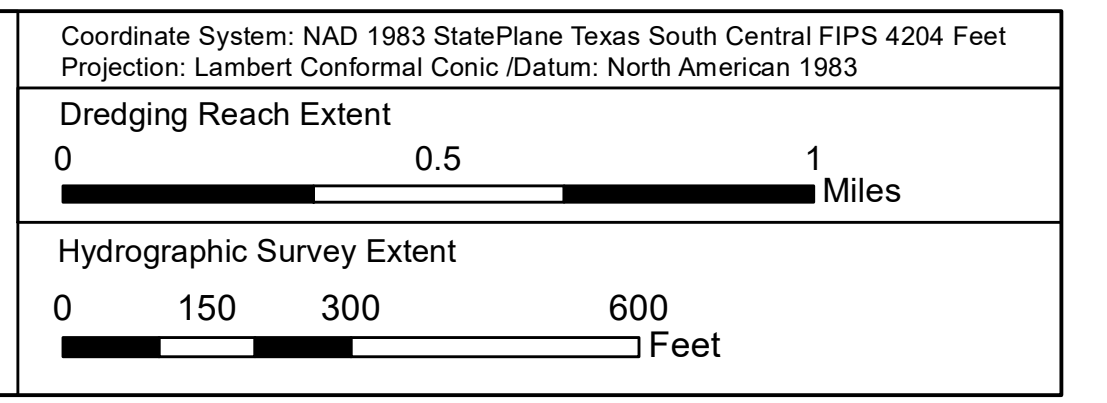


NOTES:
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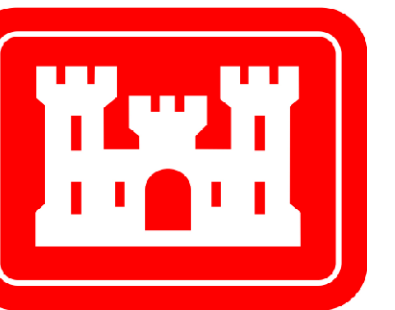


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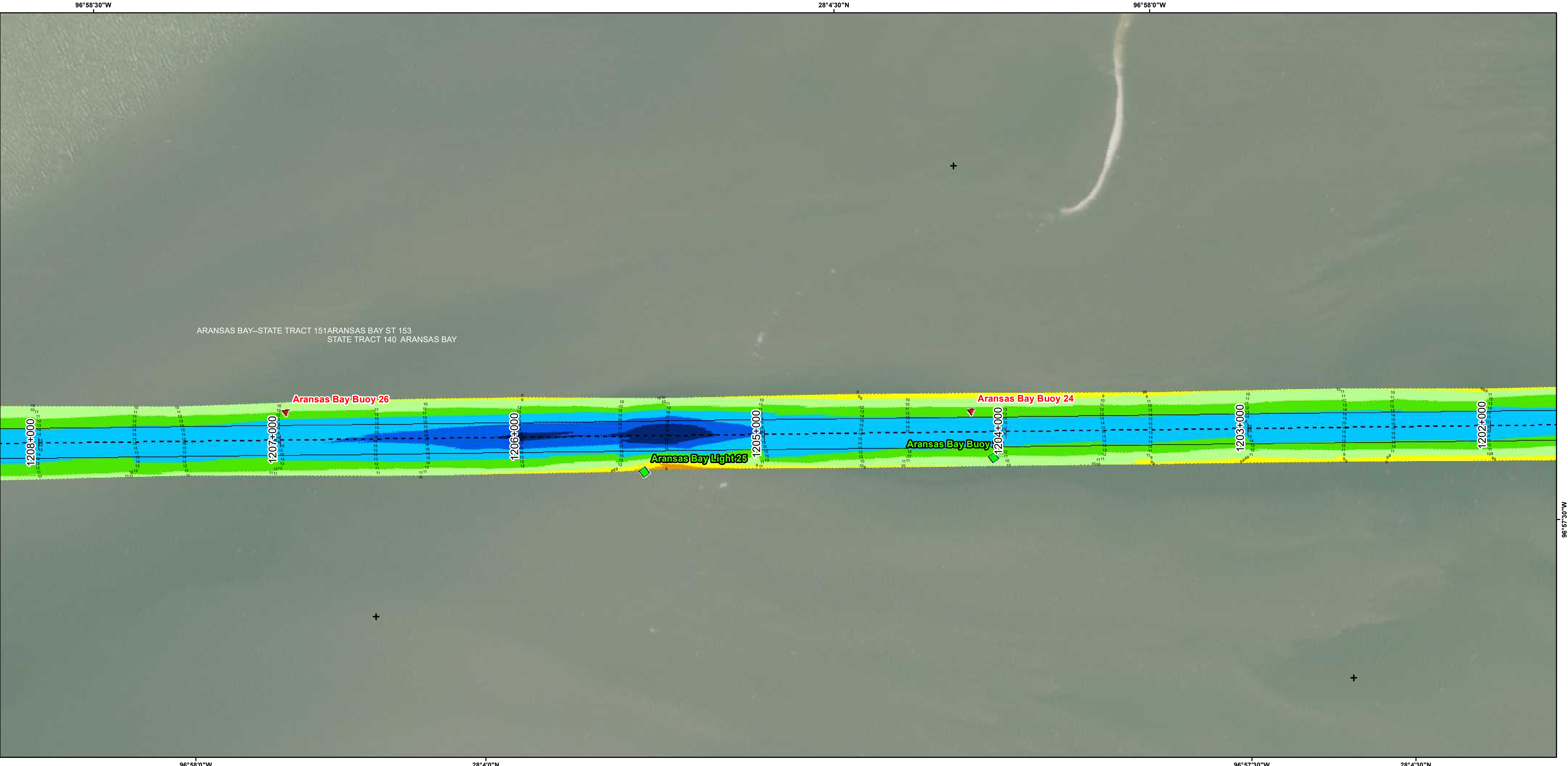
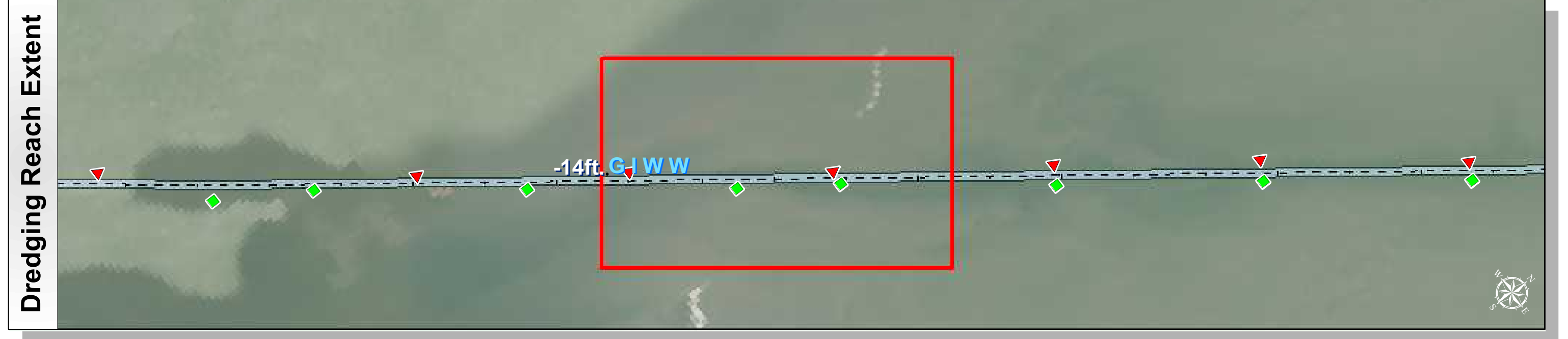


HYDROGRAPHIC SURVEY
 U.S. ARMY ENGINEER DISTRICT
 CORPS OF ENGINEERS
 GALVESTON, TEXAS
 Across Aransas Bay
Station: 1178+000 to 1236+611
 GIWW
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Gulf Intracoastal Waterway: Across Aransas Bay



U.S. Army Corps of Engineers
Galveston District



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

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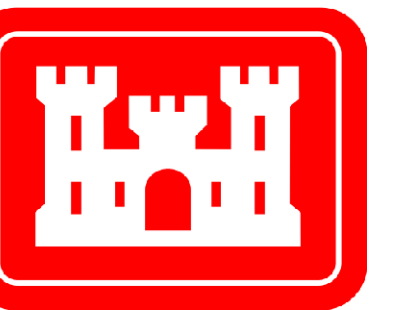
Coordinate System: NAD 1983 StatePlane Texas South Central FIPS 4204 Feet Projection: Lambert Conformal Conic /Datum: North American 1983	
Dredging Reach Extent	0 0.5 1 Miles
Hydrographic Survey Extent	0 150 300 600 Feet

Survey Date(s): 09 April 2018	Authorized Depth: -14ft.
Page: 174 of 190	Side Slope Ratio: (Rise : Run)
Scale: 1:2,400	Additional Imagery: TNIRIS NAIP 2016
Mapped by: m3odnmng	Print Date: 4/11/2018
Additional Info:	

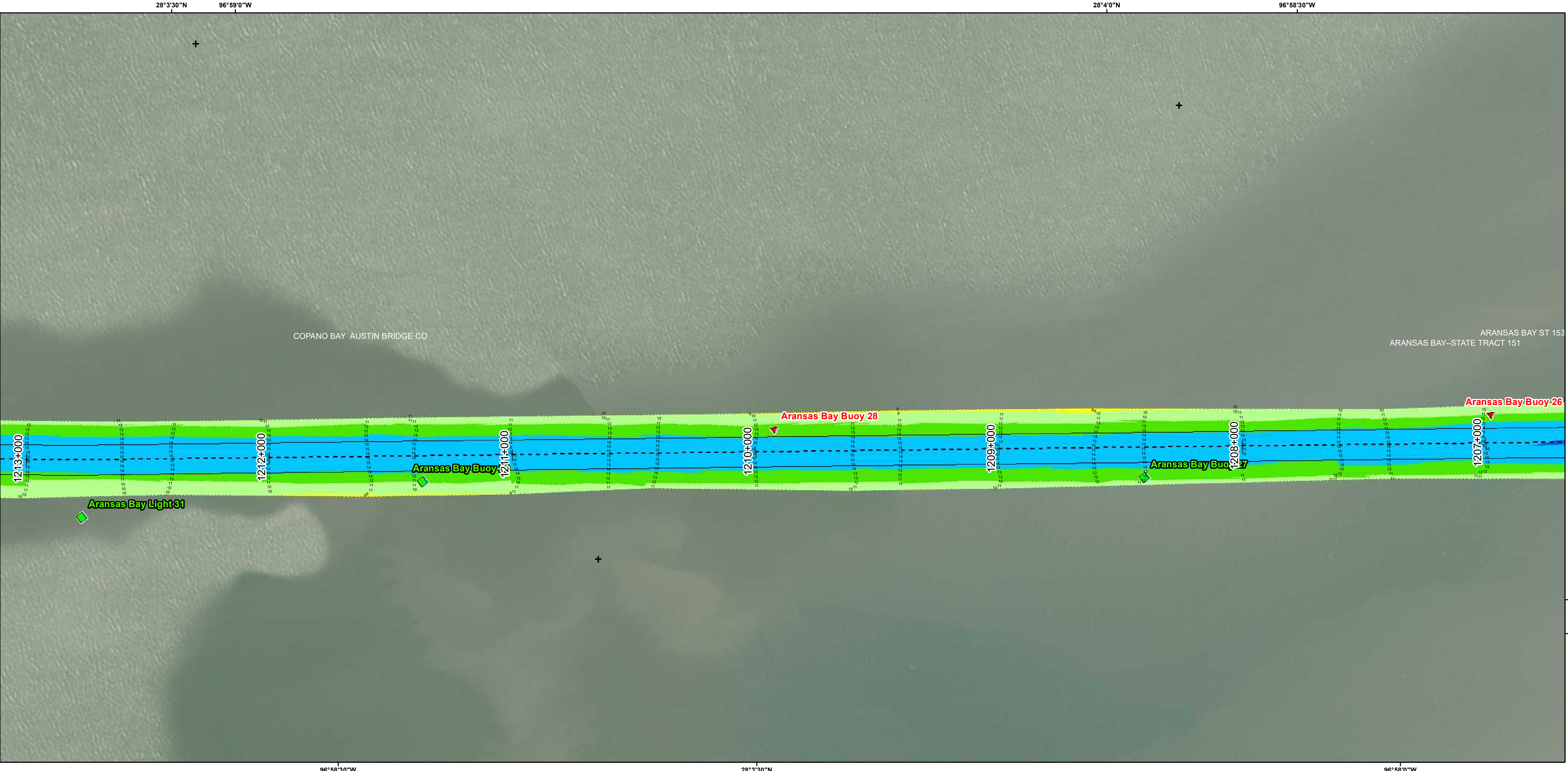
HYDROGRAPHIC SURVEY
 U.S. ARMY ENGINEER DISTRICT
 CORPS OF ENGINEERS
 GALVESTON, TEXAS
 Across Aransas Bay

Station: 1178+000 to 1236+611
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U.S. Army Corps of Engineers
Galveston District



Channel Features	Aids to Navigation	MLLW
— Channel Toe	★ Lights	< 4
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		0 - 10 10 - 15 15 - 20 20 - 25 25 - 30 30 - 50

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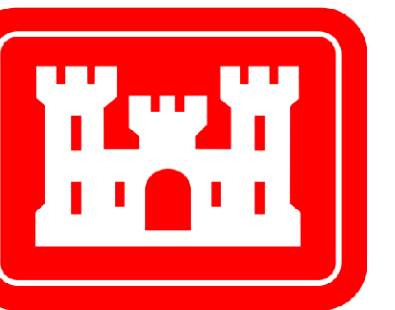
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 Dredging Reach Extent
 0 0.5 1 Miles
 Hydrographic Survey Extent
 0 150 300 600 Feet

Survey Date(s): 09 April 2018	Authorized Depth: -14ft.
Page: 175 of 190	Side Slope Ratio: (Rise : Run)
Scale: 1:2,400	Additional Imagery: TNRIS NAIP 2016
Mapped by: m3odmnm	Print Date: 4/11/2018
Additional Info:	

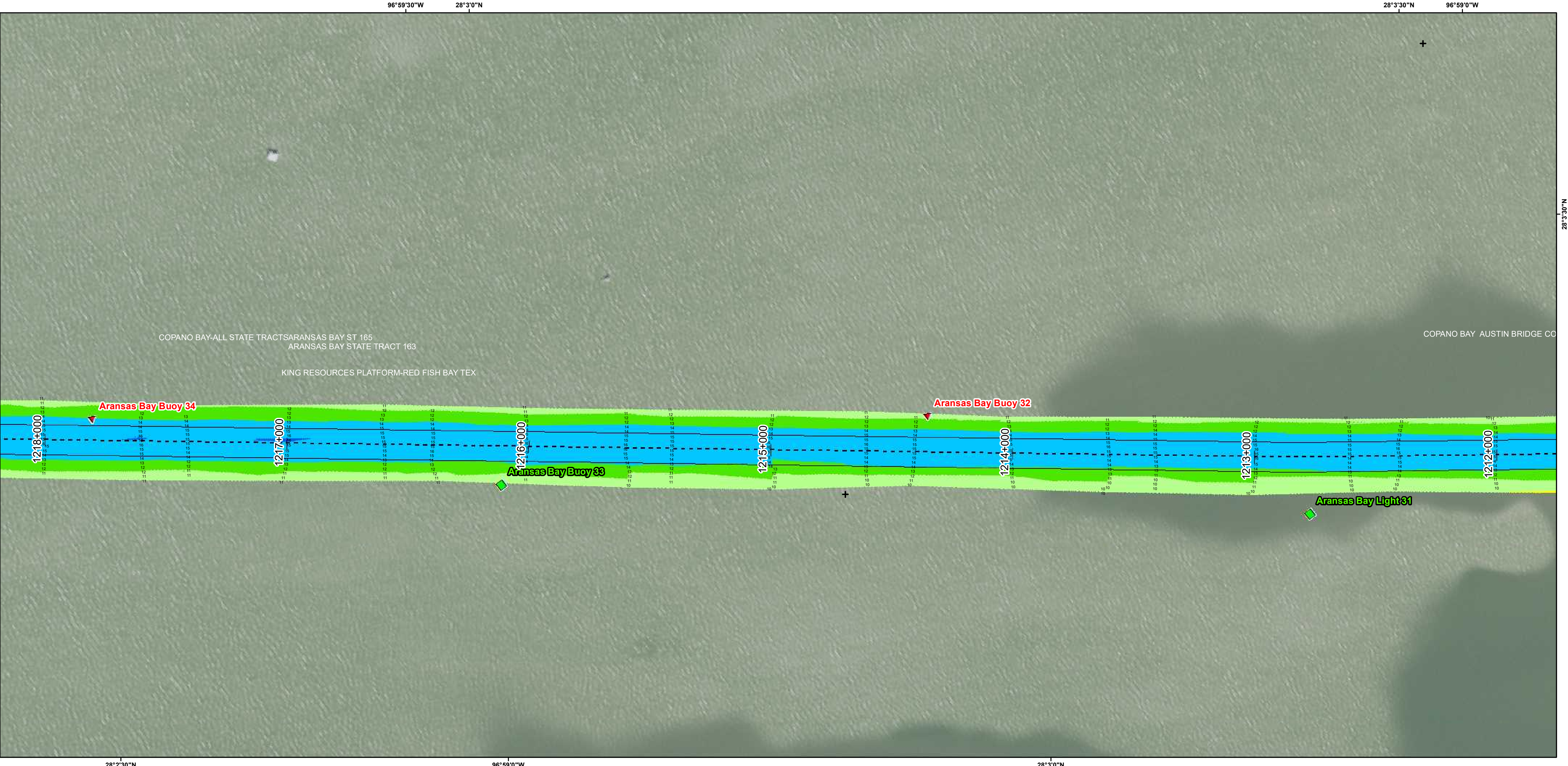
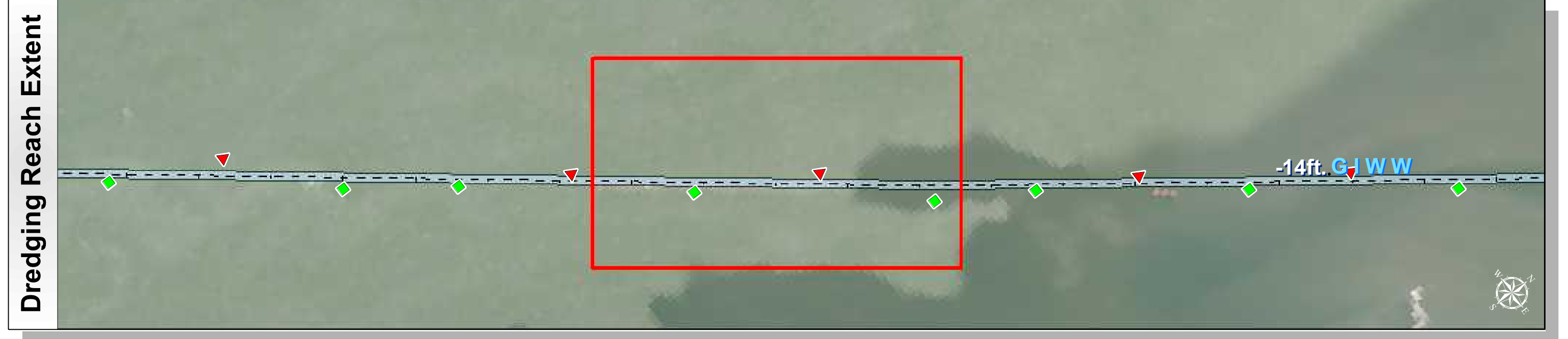
HYDROGRAPHIC SURVEY
 U.S. ARMY ENGINEER DISTRICT
 CORPS OF ENGINEERS
 GALVESTON, TEXAS
 Across Aransas Bay

Station: 1178+000 to 1236+611
 GIWW
 TEXAS

Gulf Intracoastal Waterway: Across Aransas Bay



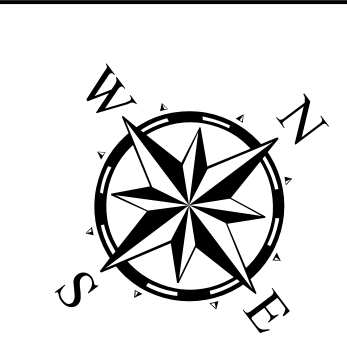
U.S. Army Corps of Engineers
Galveston District



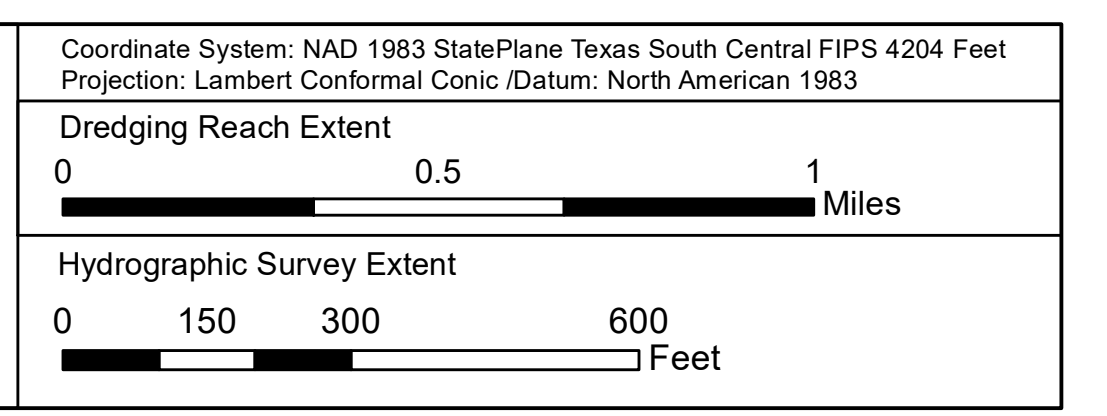
Channel Features	Aids to Navigation	MLLW
— Channel Toe	★ Lights	< 4
- - - Channel Center Line	▲ Red Side Aids	4 - 6
— Channel Station Lines	■ Green Side Aids	6 - 8
↔ Channel Dimensions	◆ Mooring Buoy	8 - 10
		10 - 12
		12 - 14
		14 - 16
		16 - 18
		> 18
		NOAA Bathymetry (DREDGING REACH EXTENT)
		0 -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

NOTES:

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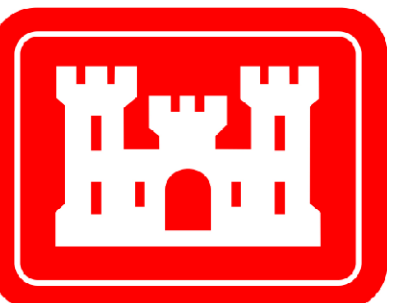


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Page: 176 of 190	Side Slope Ratio: (Rise : Run)
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Mapped by: m3odmmg	Print Date: 4/11/2018
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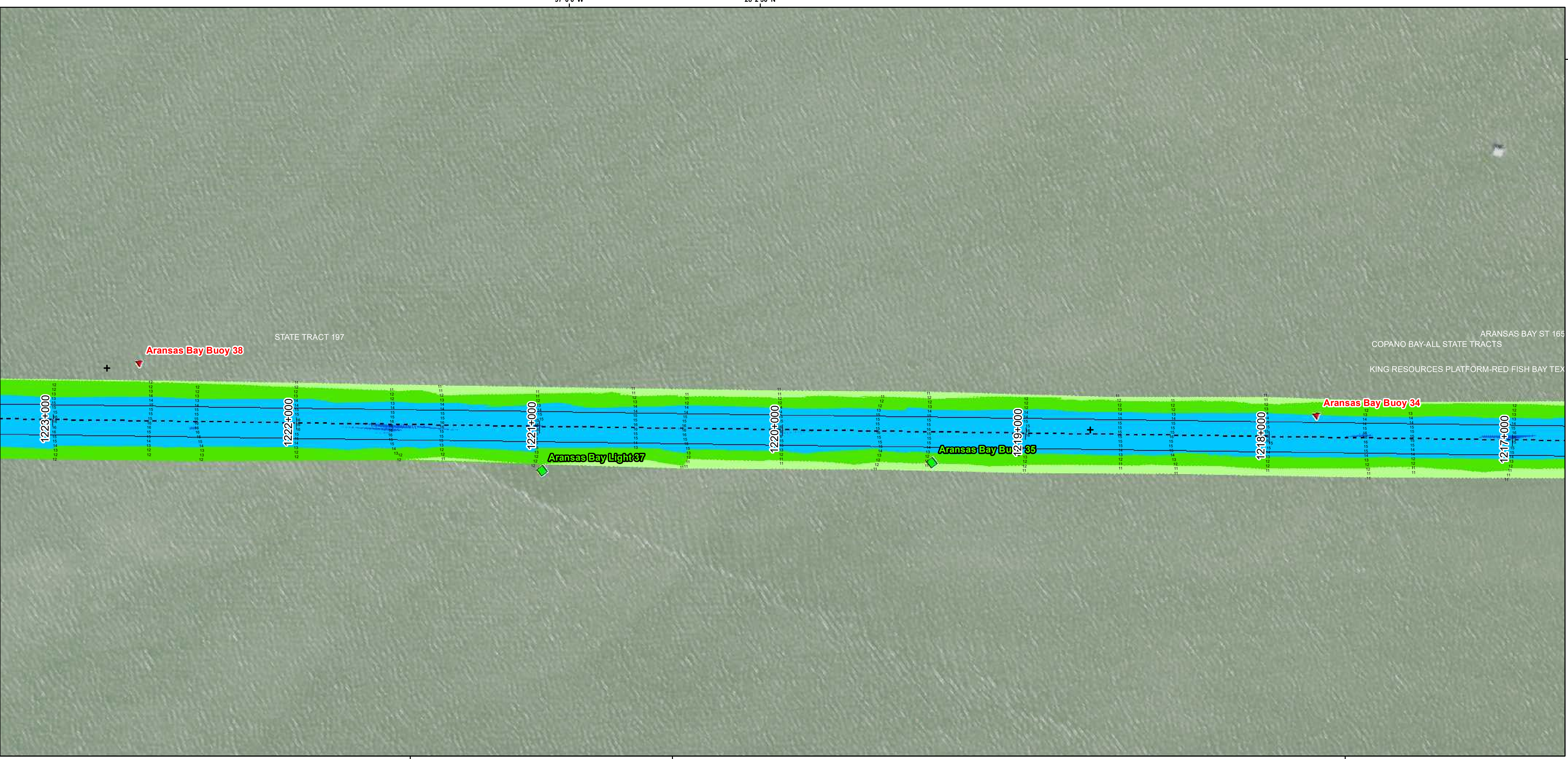
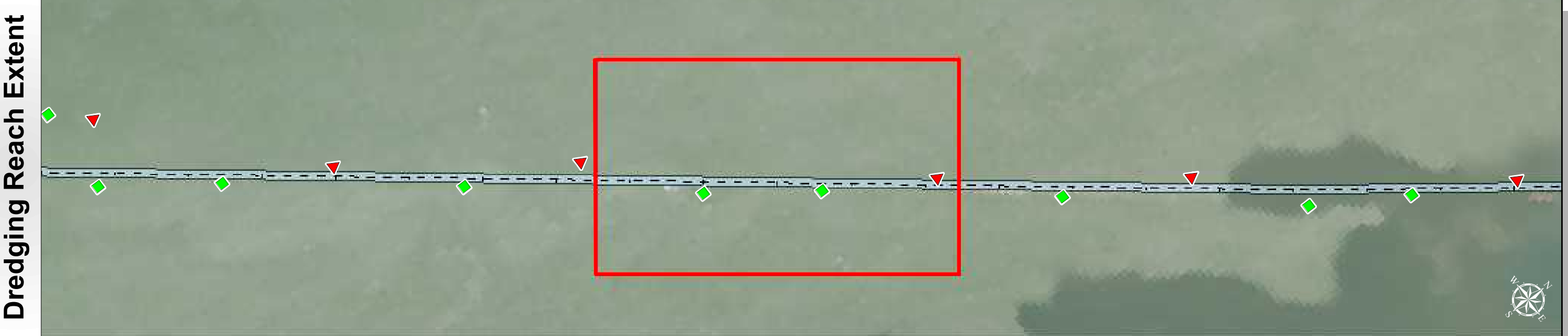
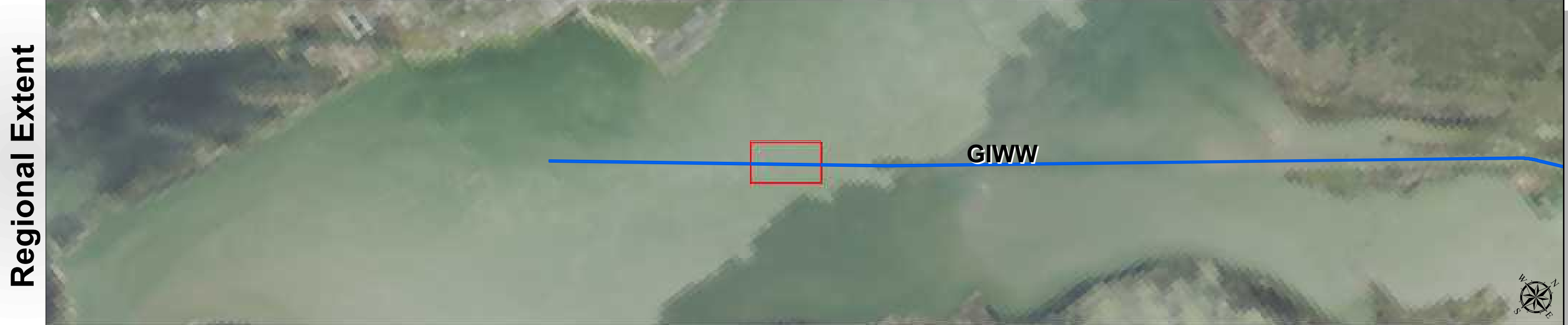
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CORPS OF ENGINEERS
GALVESTON, TEXAS
Across Aransas Bay

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
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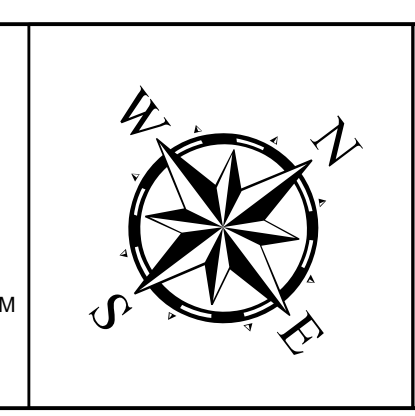
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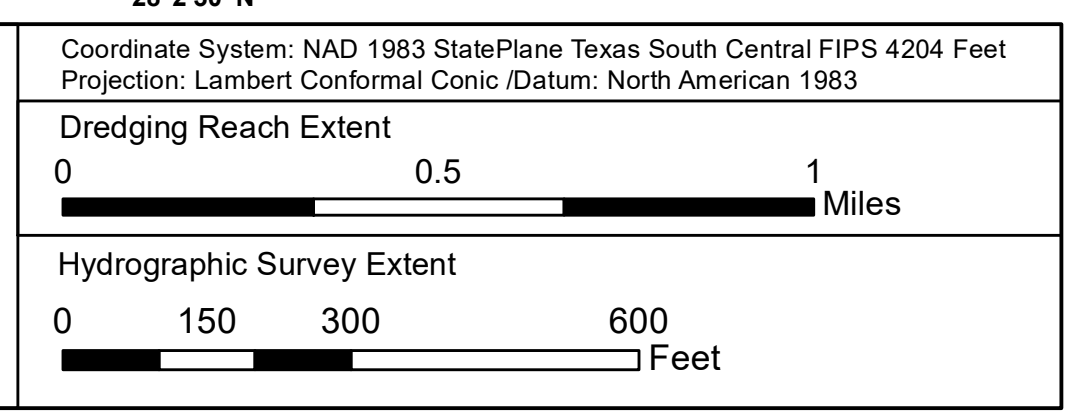
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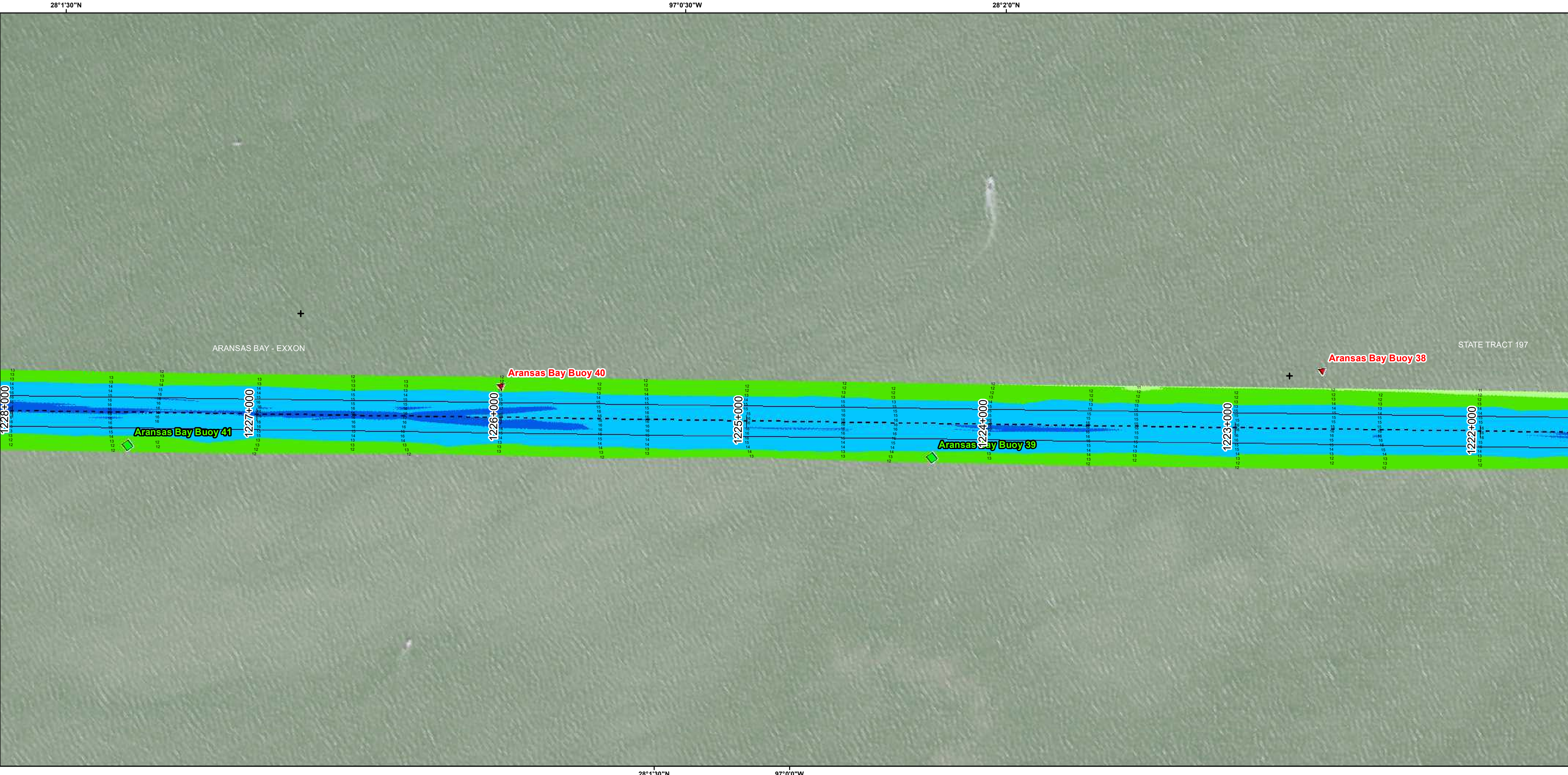
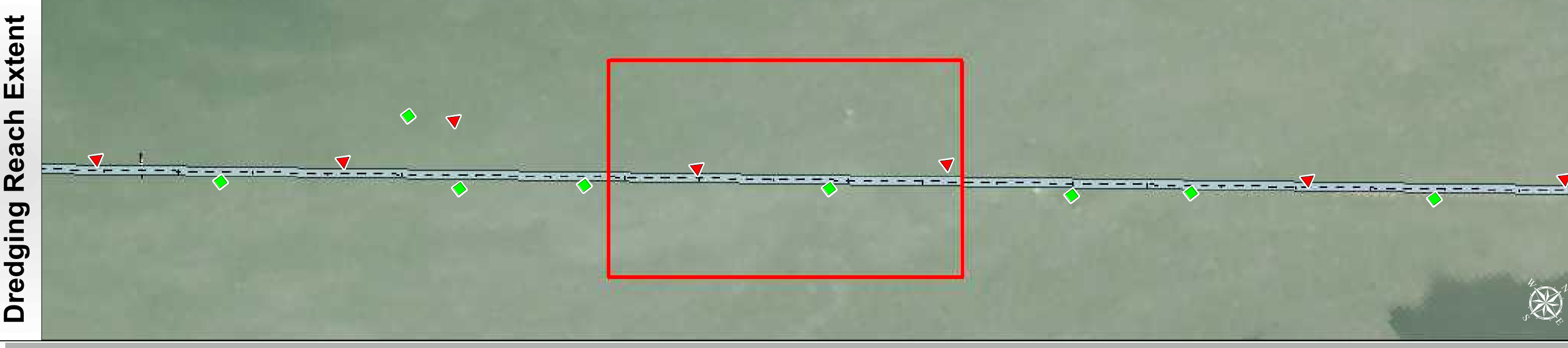
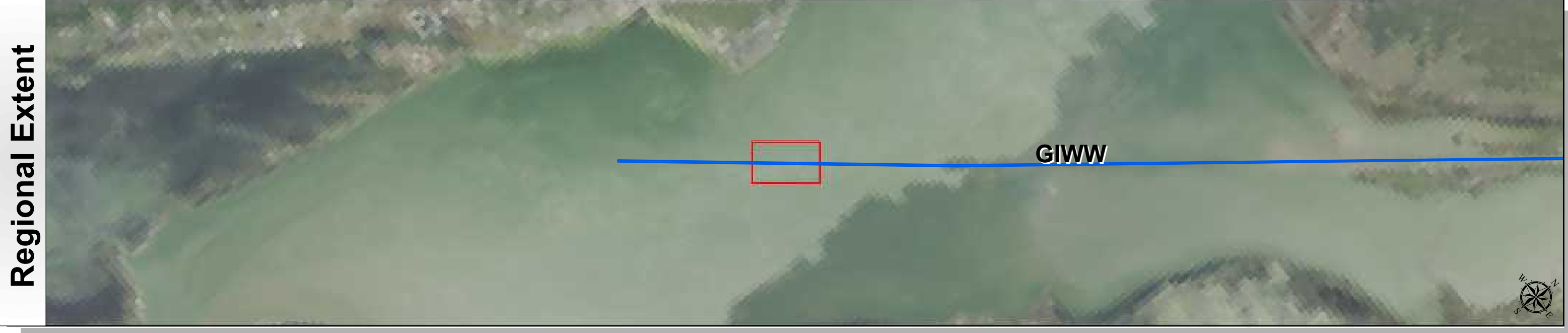


Survey Date(s): 09 April 2018	Authorized Depth: -14ft.
Page: 177 of 190	Side Slope Ratio: (Rise : Run)
Scale: 1:2,400	Additional Imagery: TNIRIS NAIP 2016
Mapped by: m3odmnm	Print Date: 4/11/2018
Additional Info:	

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GIWW
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Gulf Intracoastal Waterway: Across Aransas Bay

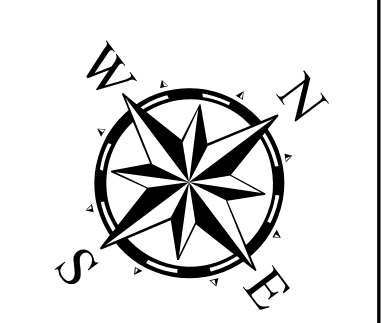


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Page: 178 of 190	Side Slope Ratio: (Rise : Run)
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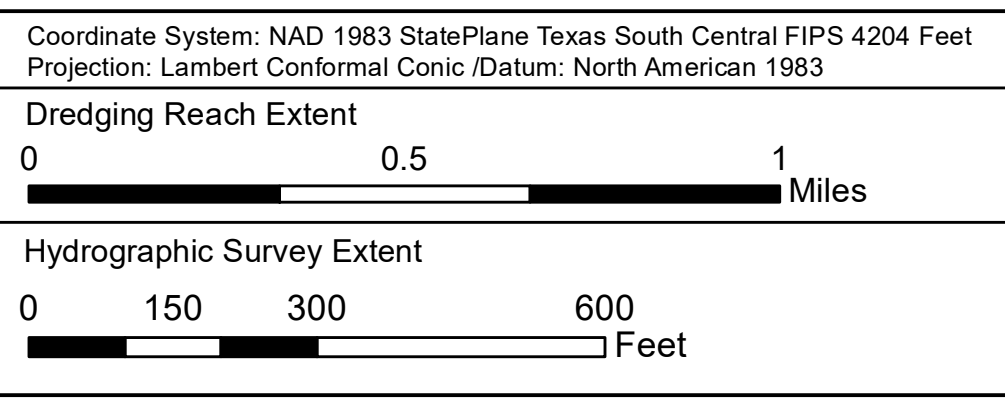
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NOAA Bathymetry (DREDGING REACH EXTENT) 0 - 10 10 - 15 15 - 20 20 - 25 25 - 30 30 - 50		

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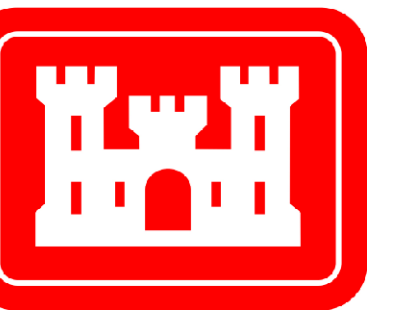
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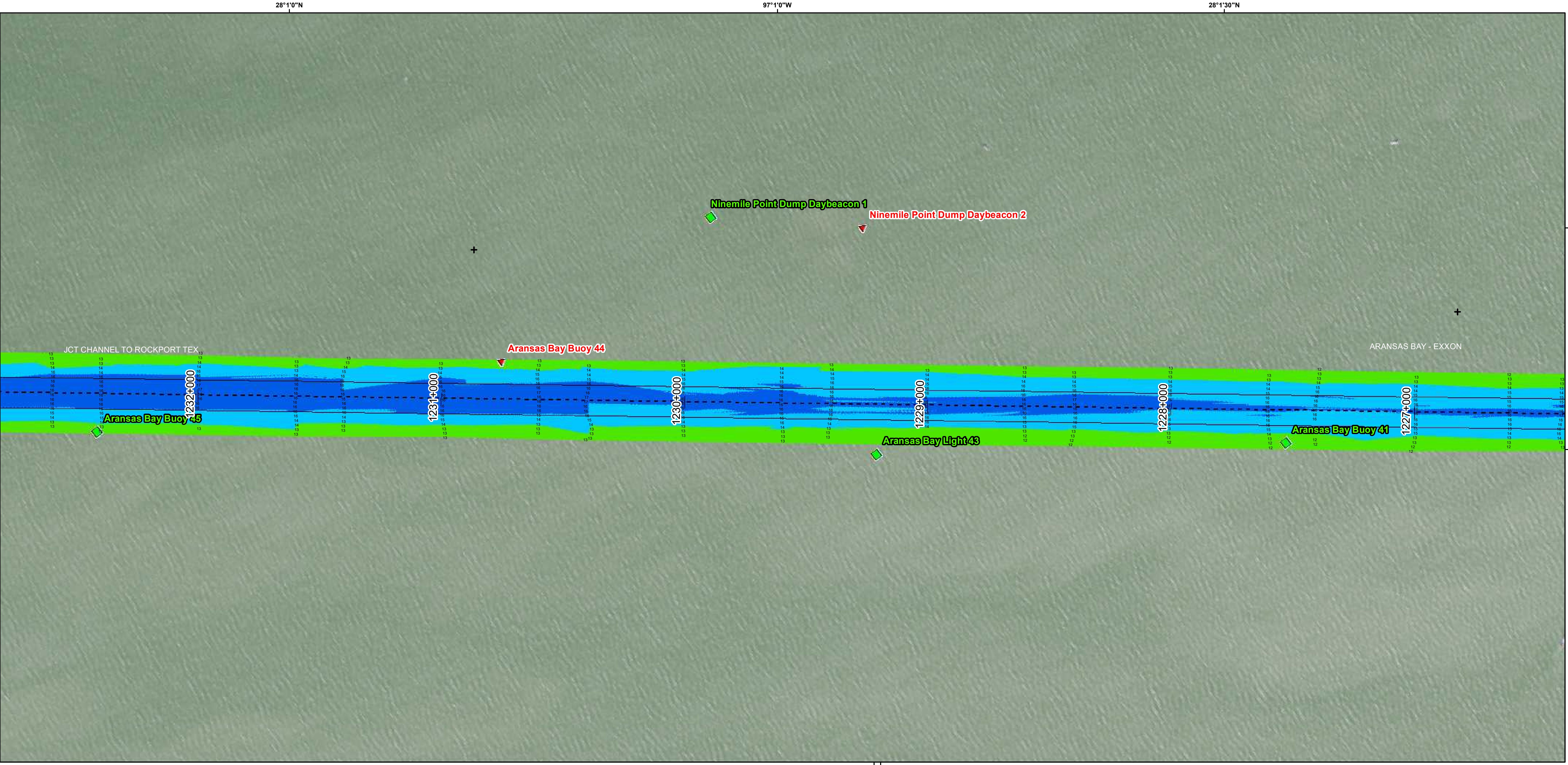
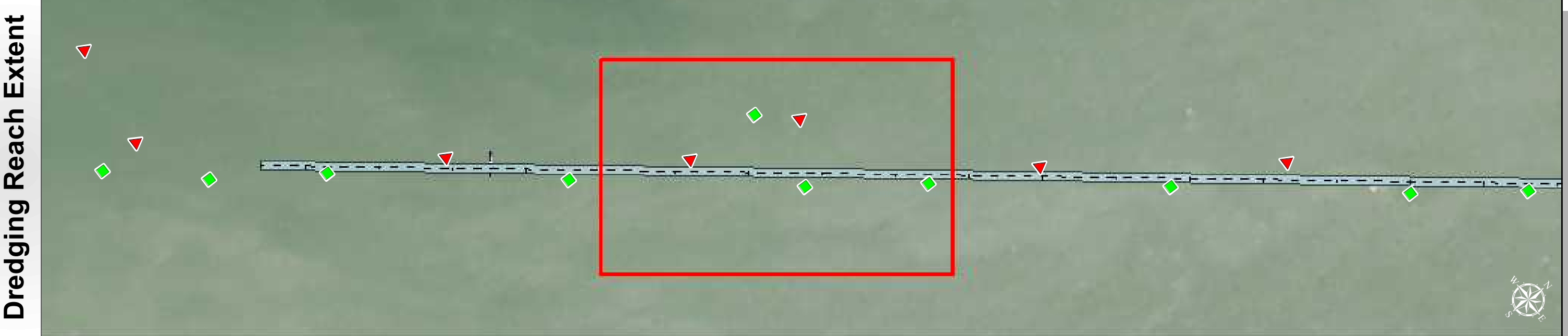
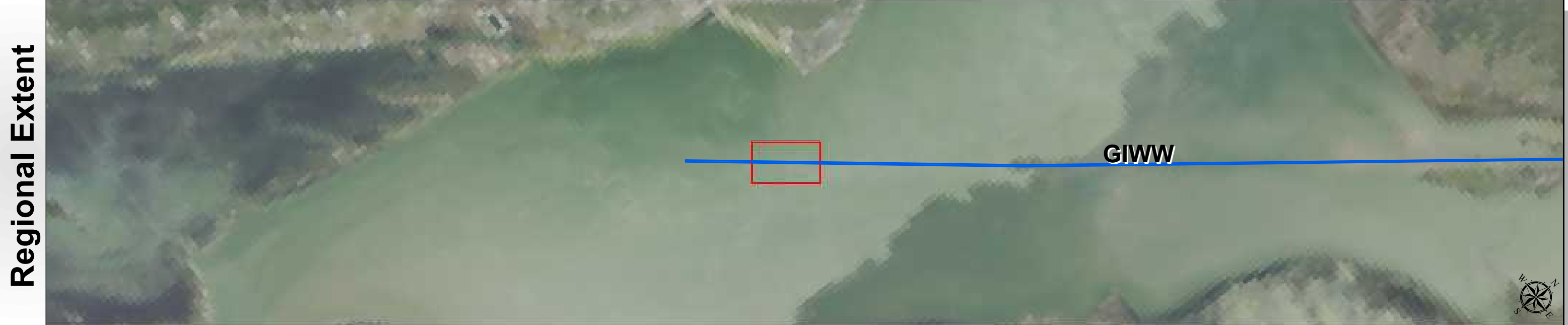
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U.S. Army Corps of Engineers
Galveston District

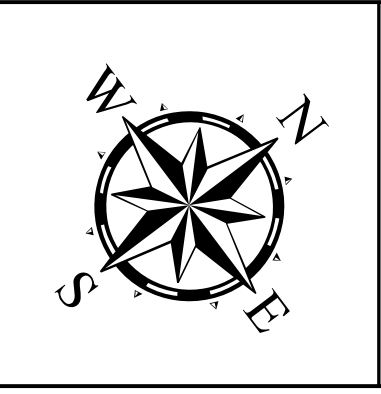


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Page: 179 of 190	Side Slope Ratio: (Rise : Run)
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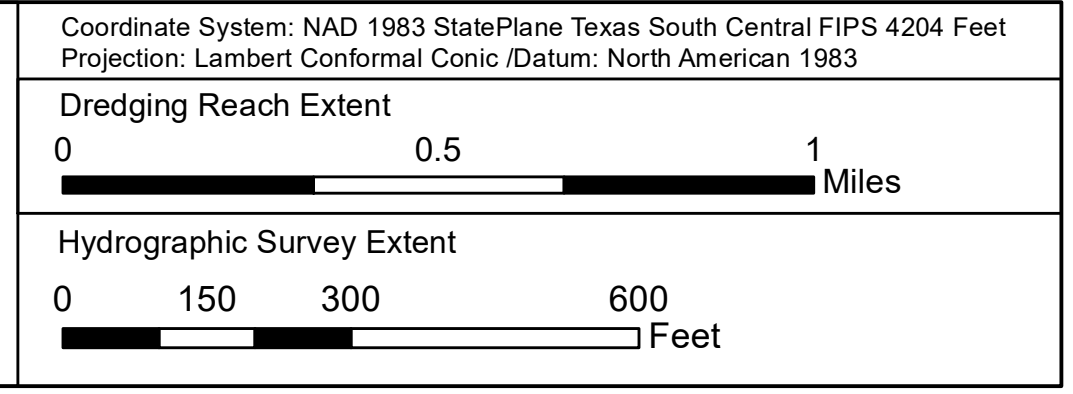
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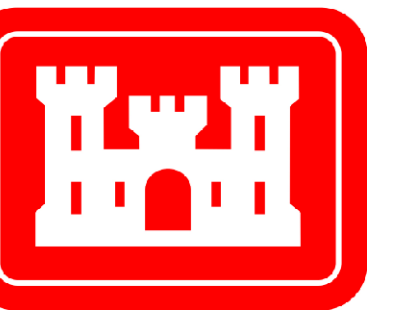
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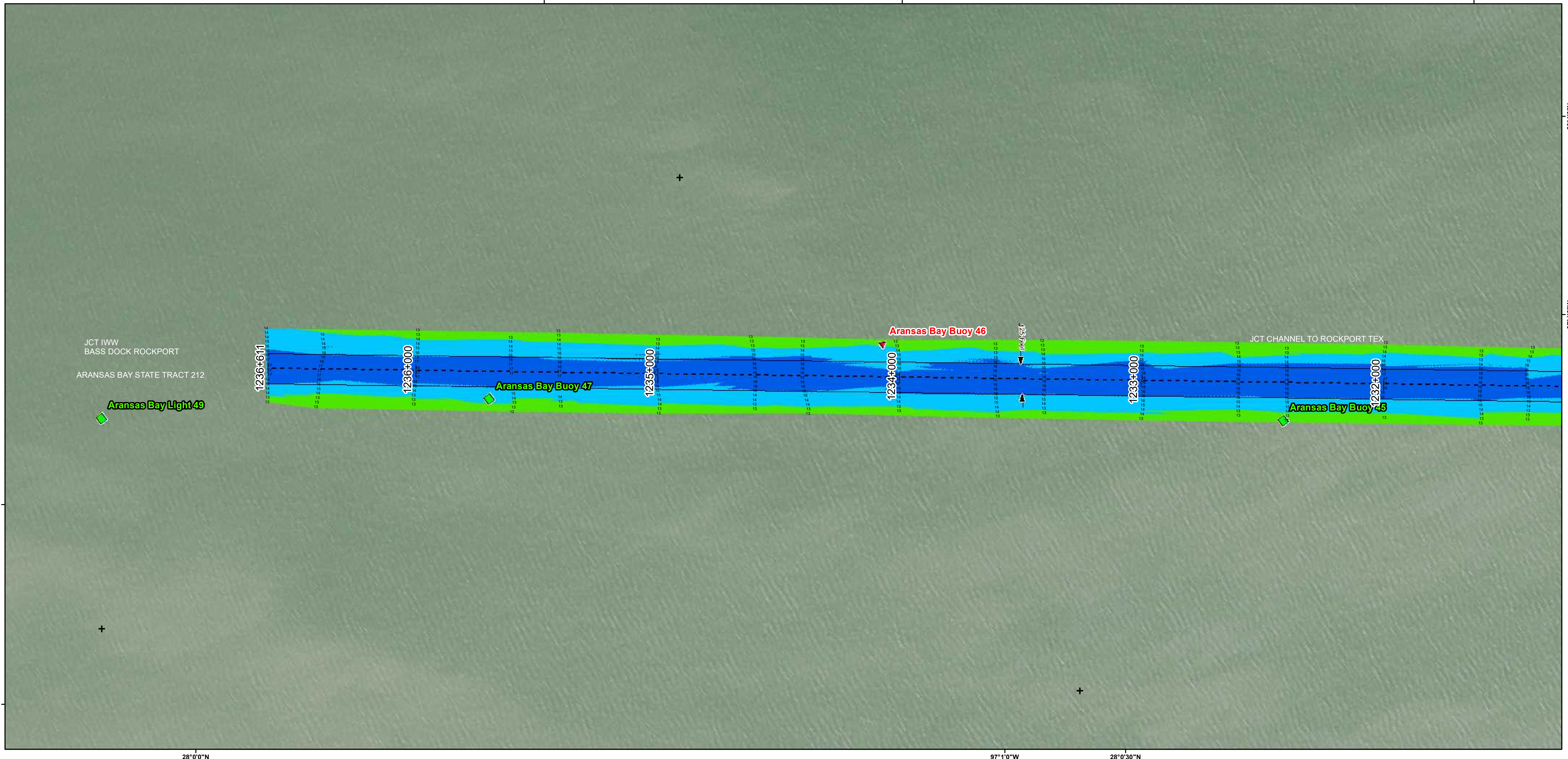
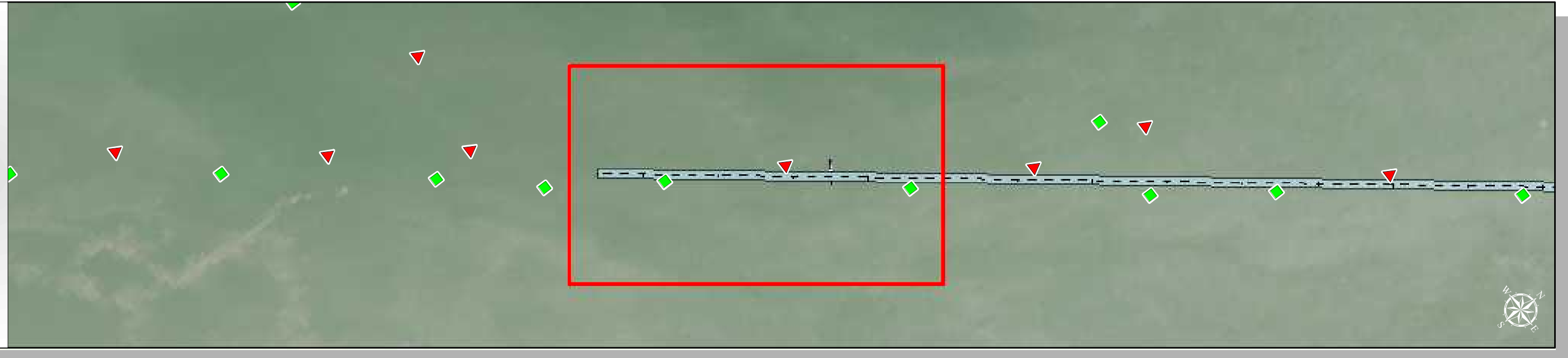
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Regional Extent



Dredging Reach Extent



Survey Date(s): 09 April 2018	Authorized Depth: -14ft.
Page: 180 of 190	Side Slope Ratio: (Rise : Run)
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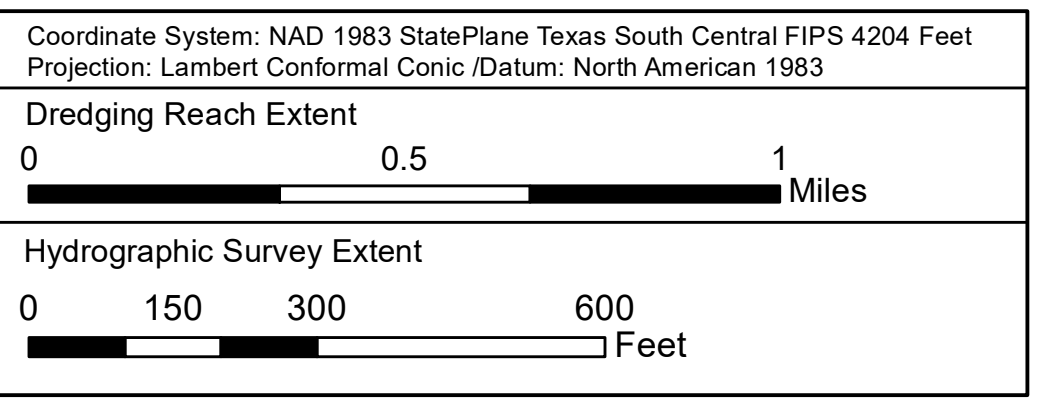
Channel Features	Aids to Navigation	MLLW									
<ul style="list-style-type: none"> Channel Toe Channel Center Line Channel Station Lines Channel Dimensions 	<ul style="list-style-type: none"> Lights Red Side Aids Green Side Aids Mooring Buoy 	<p>NOAA Bathymetry (DREDGING REACH EXTENT)</p> <table border="1"> <tr> <td>< 4</td> <td>4 - 6</td> <td>6 - 8</td> <td>8 - 10</td> <td>10 - 12</td> <td>12 - 14</td> <td>14 - 16</td> <td>16 - 18</td> <td>> 18</td> </tr> </table> <p>0 - 10 10 - 15 15 - 20 20 - 25 25 - 30 30 - 50</p>	< 4	4 - 6	6 - 8	8 - 10	10 - 12	12 - 14	14 - 16	16 - 18	> 18
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