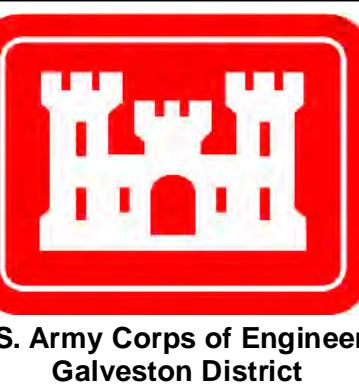


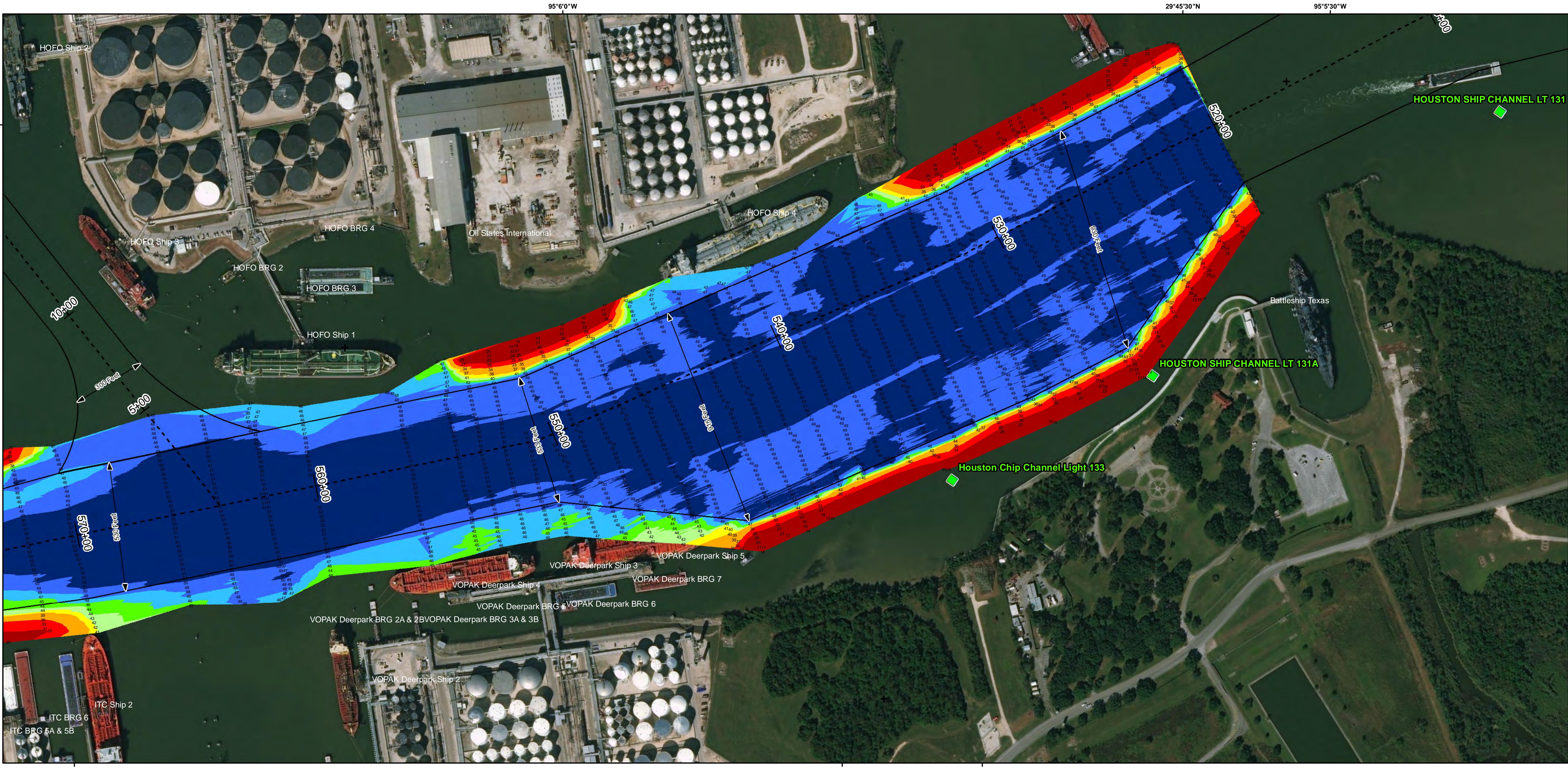
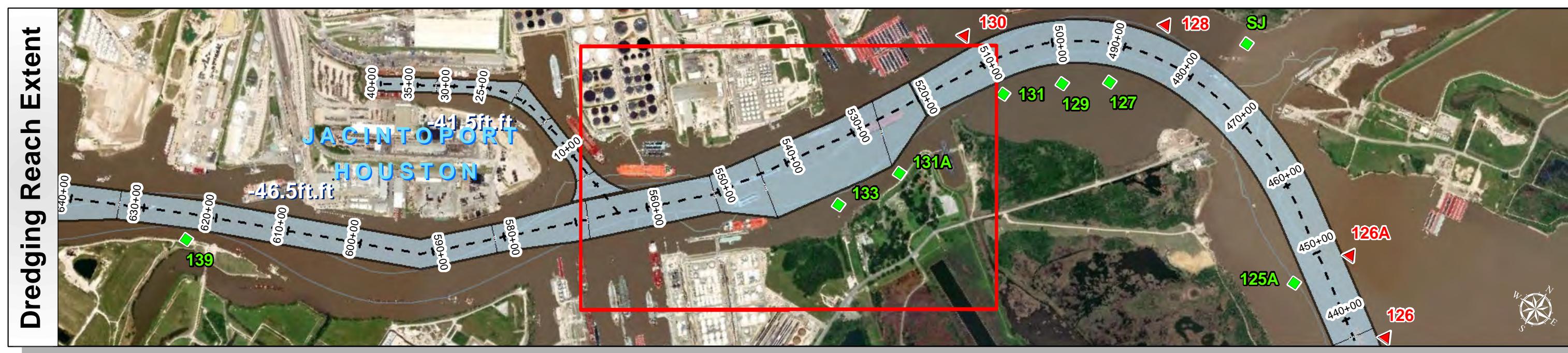
Houston Ship Channel: Carpenters Bayou to Boggy Bayou



U.S. Army Corps of Engineers
Galveston District



Regional Extent



Survey Date(s): 20 June 2018	Authorized Depth: -46.5ft.
Page: 35 of 56	Map:
Scale: 1:2,400	Additional Imagery: © DigitalGlobe Inc.
Mapped by: M3AOXPAC	Print Date: 6/21/2018
Additional Info:	

HYDROGRAPHIC SURVEY	
U.S. ARMY ENGINEER DISTRICT	CORPS OF ENGINEERS
Galveston, Texas	Carpenter Bayou to Boggy Bayou
Station: 520+00 to 684+03.19	Houston, Texas

Channel Features	Aids to Navigation	MLLW	NOTES:	Service Layer Credits: 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 User Community.	Coordinate System: NAD 1983 StatePlane Texas South Central FIPS 4204 Feet Projection: Lambert Conformal Conic /Datum: North American 1983
Channel Toe	Lights	0 - 30	1. HORIZONTAL COORDINATES ARE REFERENCED TO TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE NAD83 US SURVEY FEET.		Dredging Reach Extent
Channel Center Line	Red Side Aids	30 - 35	2. ELEVATIONS ARE REFERENCED TO MEAN LOWER LOW TIDE (MLLW) DATUM.	0 0.5 1 Miles	Hydrographic Survey Extent
Channel Station Lines	Green Side Aids	40 - 42	3. 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 ER110-1-8152.	0 150 300 600 Feet	
Channel Dimensions	Mooring Buoy	42 - 44	4. THE INFORMATION DEPICTED ON THIS SURVEY MAP REPRESENTS THE RESULTS OF SURVEYS MADE AND INTERPRETED AND CAN NOT BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THE 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		
		44 - 46	5. FOR THE MOST UP TO DATE INFORMATION PLEASE CHECK OUR WEBSITE AT: HTTP://WWW.SWNG.USACE.ARMY.MIL/MISSESS/NAVIGATION/HYDROGRAPHICSURVEYS/		
		46 - 48	6. NOAA BATHYMETRY CONTOURS PRODUCED FROM HISTORIC BATHYMETRIC (HYDROGRAPHIC) SURVEYS CONDUCTED BY THE NOAA NATIONAL OCEAN SERVICE/COAST SURVEY AVAILABLE FROM THE NOAA GENERAL BATHYMETRIC CENTER. SURVEYS VARY AS TO SOUNDING DENSITY, ACCURACY OF DEPTH, ACCURACY OF NAVIGATION, ZERO DATUM, DATE OF SURVEY, AND TYPE OF INSTRUMENTATION.		
		48 - 50			
		50 ▲			
NOAA Bathymetry (DREDGING REACH EXTENT)		0 - 10 10 - 15 15 - 20 20 - 25 25 - 30 30 - 50			



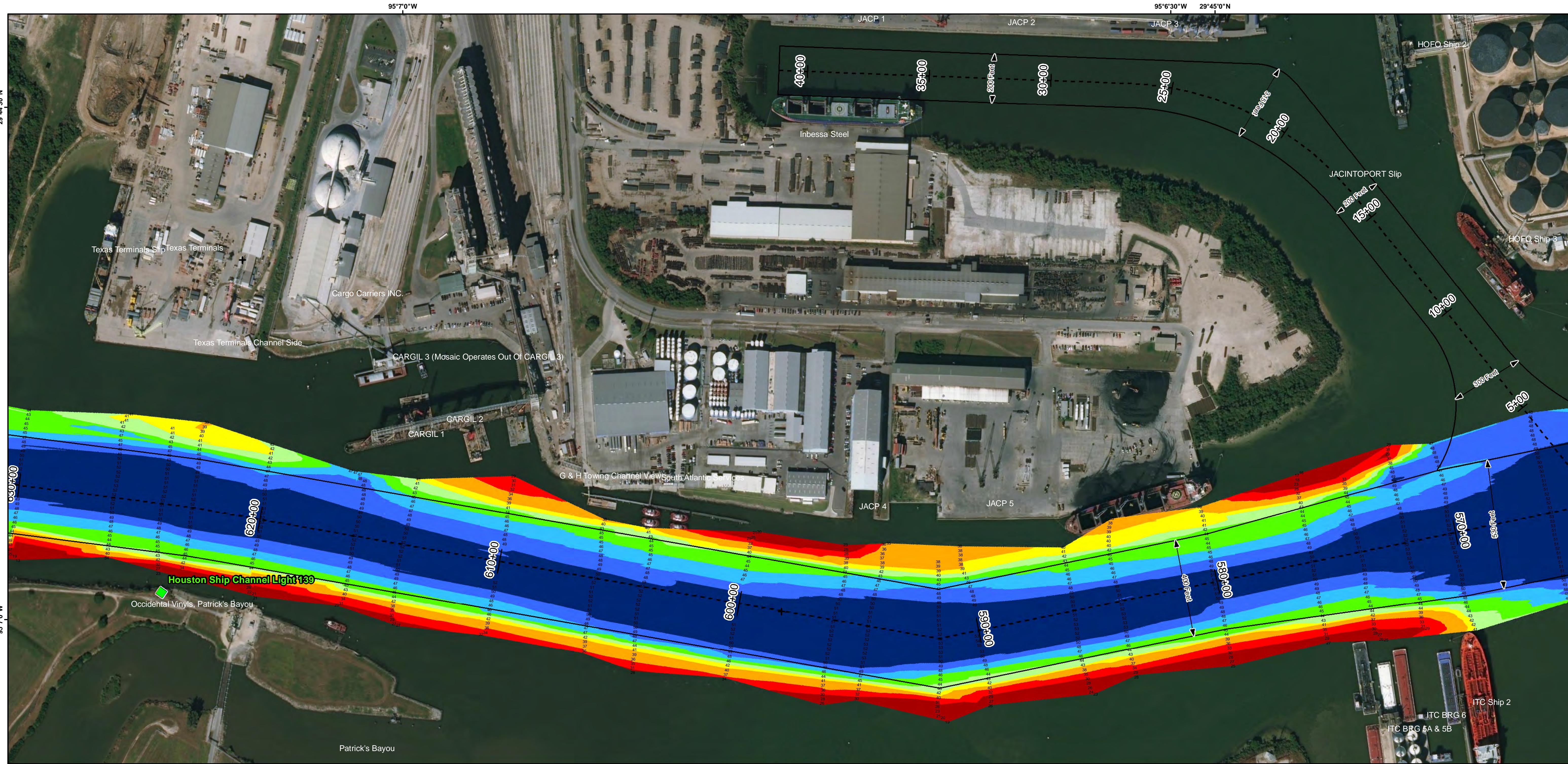
U.S. Army Corps of Engineers
Galveston District



Houston Ship Channel: Carpenters Bayou to Boggy Bayou



Survey Date(s): 20 June 2018	Authorized Depth: -46.5ft.
Page: 36 of 56	Map:
Scale: 1:12,400	Additional Imagery: © DigitalGlobe Inc.
Mapped by: M3AOXPAC	Print Date: 6/21/2018
Additional Info:	



Channel Features	Aids to Navigation	MLLW
Channel Toe	Lights	0 - 30
Channel Center Line	Red Side Aids	30 - 35
Channel Station Lines	Green Side Aids	40 - 42
Channel Dimensions	Mooring Buoy	42 - 44 44 - 46 46 - 48 48 - 50 50 ▲
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.
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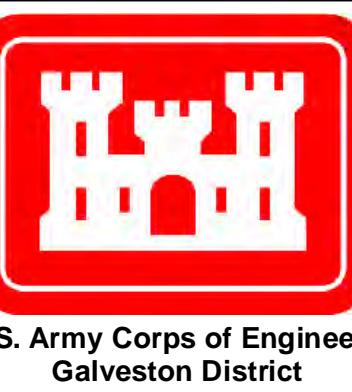
Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community.
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Source: 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

Dredging Reach Extent
0 0.5 1 Miles

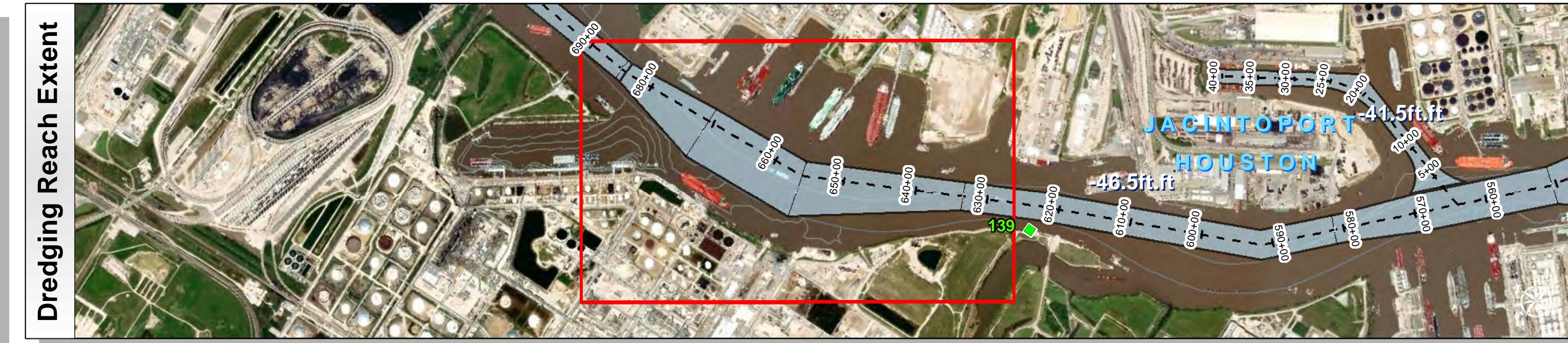
Hydrographic Survey Extent
0 150 300 600 Feet

HYDROGRAPHIC SURVEY
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
GALVESTON, TEXAS
Carpenter Bayou to Boggy Bayou
Houston, Texas
Station: 520+00 to 684+03.19
HOUSTON, TEXAS

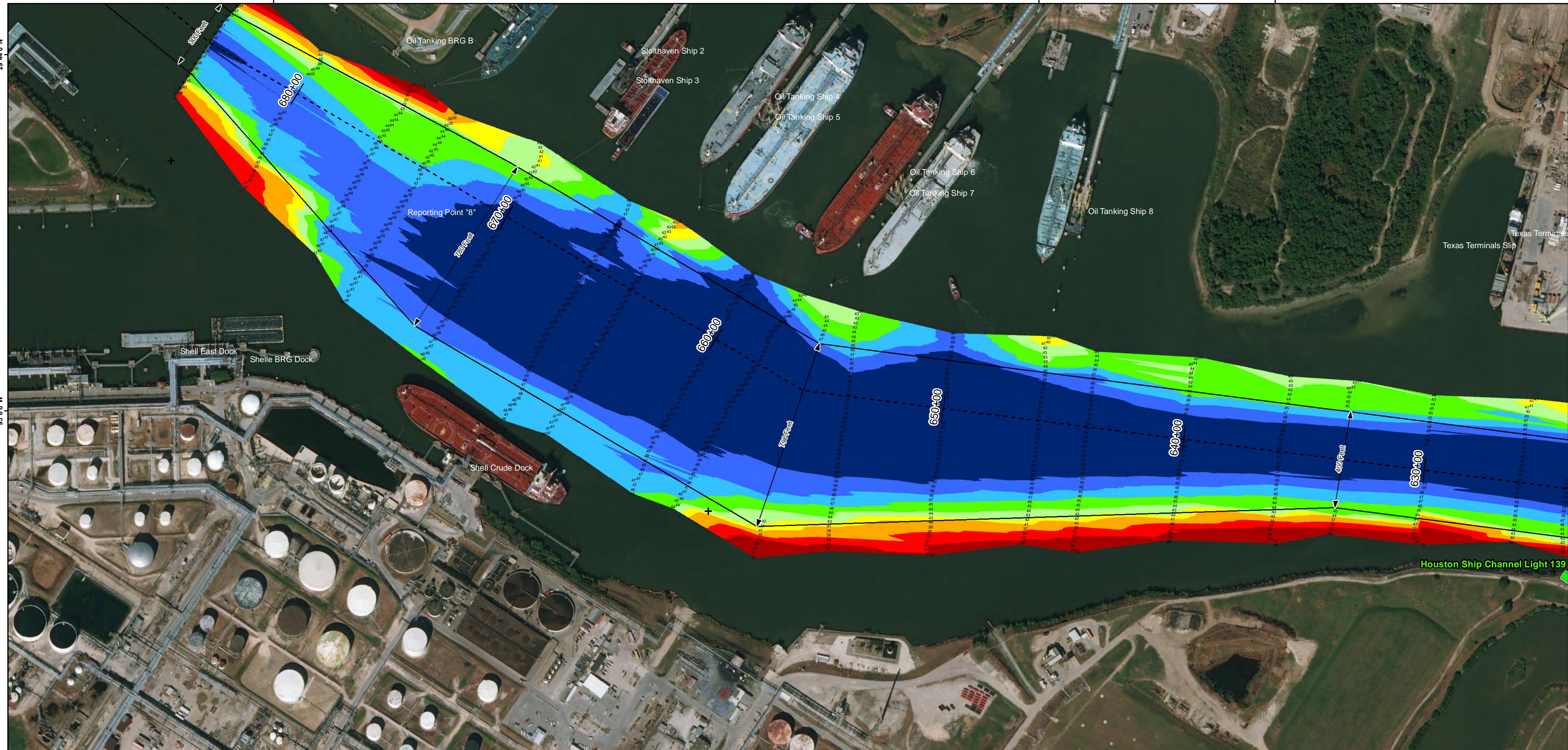


U.S. Army Corps of Engineers
Galveston District

Houston Ship Channel: Carpenters Bayou to Boggy Bayou



Survey Date(s): 20 June 2018	Authorized Depth: -46.5ft.
Page: 37 of 56	Map:
Scale: 1:12,400	Additional Imagery: © DigitalGlobe Inc.
Mapped by: M3AOXPAC	Print Date: 6/21/2018
Additional Info:	

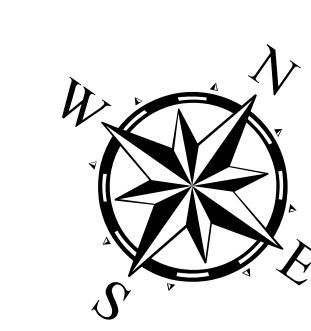


HYDROGRAPHIC SURVEY	
U.S. ARMY ENGINEER DISTRICT	CORPS OF ENGINEERS
Galveston, Texas	Carpenter Bayou to Boggy Bayou
Station: 520+00 to 684+03.19	Houston, Texas
Coordinate System: NAD 1983 StatePlane Texas South Central FIPS 4204 Feet	Projection: Lambert Conformal Conic /Datum: North American 1983
Dredging Reach Extent	0 0.5 1 Miles
Hydrographic Survey Extent	0 150 300 600 Feet

Channel Features	Aids to Navigation	MLLW
Channel Toe	Lights	0 - 30
Channel Center Line	Red Side Aids	30 - 35
Channel Station Lines	Green Side Aids	40 - 42
Channel Dimensions	Mooring Buoy	42 - 44 44 - 46 46 - 48 48 - 50 50+
NOAA Bathymetry (DREDGING REACH EXTENT)		
0 - 10 10 - 15 15 - 20 20 - 25 25 - 30 30 - 50		

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