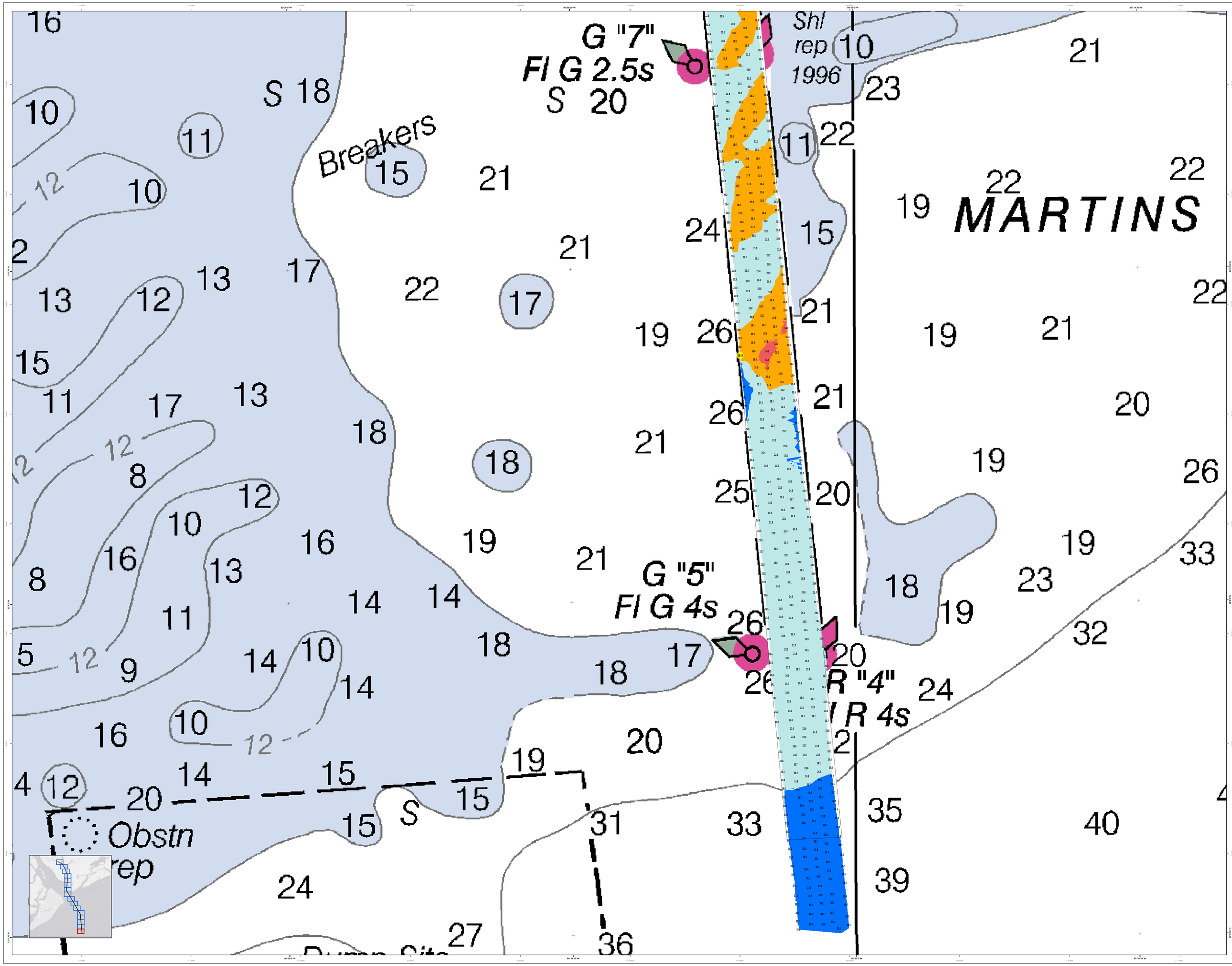


U.S. Army Corps of Engineers
Charleston District

Production Notes:
Layers were created using ESRI ArcGIS for geodetic purposes only. Product is for planning purposes only. Soundings are based on the most recent survey conducted by the U.S. Army Corps of Engineers. Depths on Soundings are in feet and tenths. Soundings are referenced to Mean Lower Low Water (MLLW).
Data Source: Hydro Lidar, USACE, NOAA, Image service 12/16 and 01/17

N

0 125 250 500 750 1,000 Feet

Depth in the Main Channel
- Less than 10.0
- 10.1 to 15.0
- 15.1 to 20.0
- 20.1 to 27.0
- Greater than 27.0

USCG Buoys
- Green
- Red
- White

Federal Navigation Channel
- Left TOC Line
- Right TOC Line
- True Centerline

USCG Aids
- Green
- Red
- White
- Yellow
- USCG Light
- Closed Guard Room

Legend
Bathymetric Sounding
- Soundings
Soundings may cover several square miles and are spaced per project specifications.

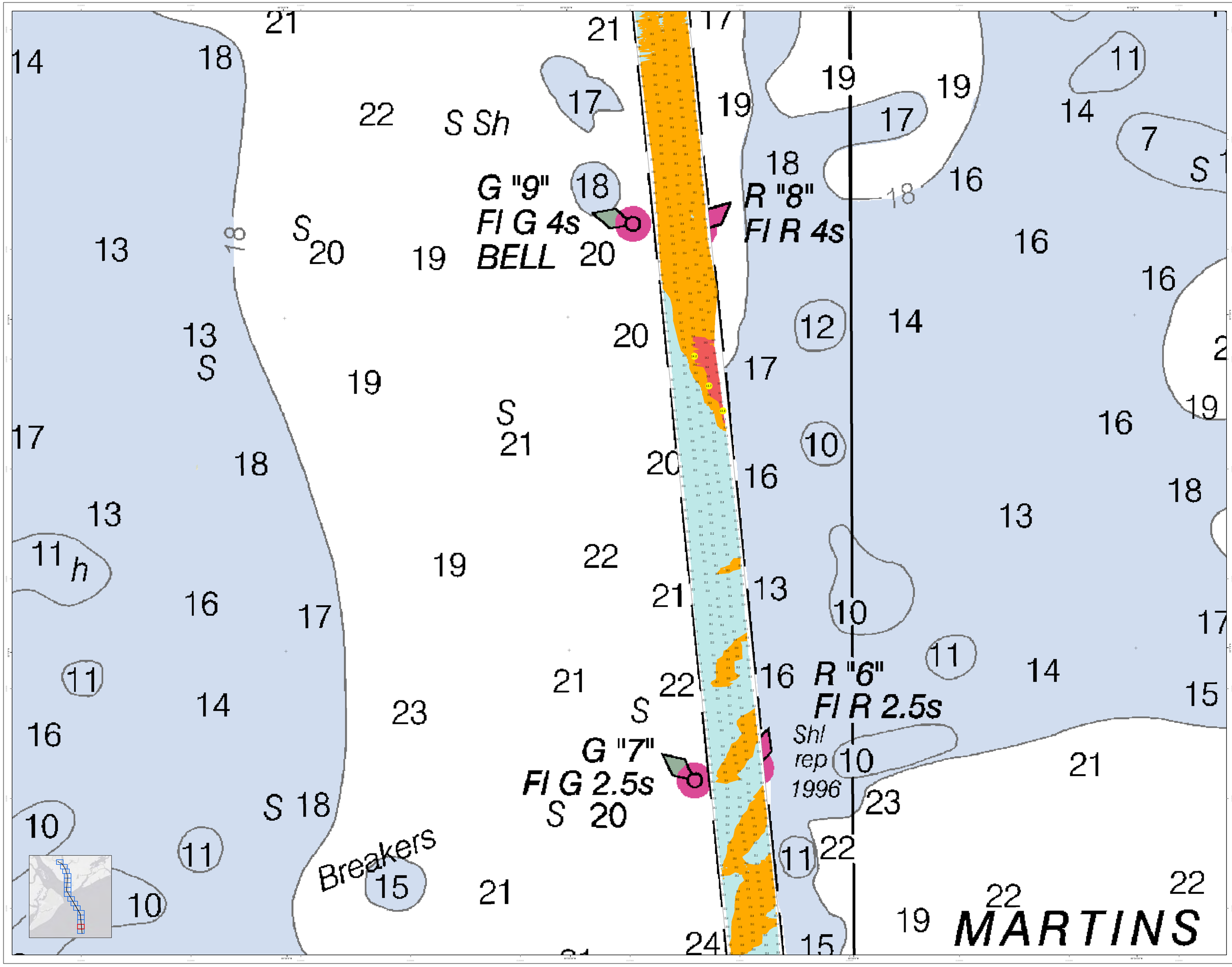
Observation Points
- Obstruction
- Wreck/Submerged

In no event shall the U.S. Army Corps of Engineers, Charleston District Office, Spatial Data Branch be liable for direct, indirect, special, incidental, or consequential damages resulting from the use of the data provided herein, including but not limited to, loss of anticipated profits or benefits arising out of the use of this data or any part thereof.
These data sets have been developed from the best available source data and are subject to change without notice. While these datasets are accurate and reliable, errors and variable conditions may exist in the source data. Users should exercise caution when using these datasets and report any errors or deficiencies encountered in the data to USACE.
Mariners are encouraged to use all prudent safety measures.

U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS CHARLESTON, SOUTH CAROLINA	Designed By: eHydro Software v3.82	Survey Date: 30 JUL 2019
	Reviewed By: CCW	Production Date: 02 AUG 2019
SPATIAL DATA BRANCH 69A HASCOSD AVE CHARLESTON, SC 29403	Reference Scale: 1 inch = 250 feet	Project Reference Number: CESAC-PA-0014
CESAC-GIS@USACE.ARMY.MIL	Projection: NAD 1983 StatePlane South Carolina FIPS 3900 Feet	Survey Type: Condition

Port Royal Harbor Channel Survey
The information depicted on this 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.
Concluded on: **30 JULY 2019**
Port Royal, South Carolina

SHEET REFERENCE NUMBER
C012
SHEET 1 OF 16



U.S. Army Corps of Engineers

Charleston District

In no event shall the U.S. Army Corps of Engineers, Charleston District Office, Spatial Data Branch be liable for direct, indirect, incidental, special, exemplary, or consequential damages arising, but not limited to, loss of anticipated profits or benefits arising out of the use of this data set.

These data sets have been developed from the best available source data and are subject to change without notice. While these datasets are accurate and reliable, errors and variable conditions may exist in the source data. Users should exercise caution when utilized in the data support.

This data set is not to be used for navigation.

Mariners are encouraged to use all posted safety measures.

Production Notes:

1. Soundings are referenced to mean low low water (MLLW).
2. Depths are based on most recent hydrographic survey data available.
3. Soundings are in feet and tenths.
4. Horizontal datum is North American Datum 1983 (NAD83).
5. Vertical datum is Mean Lower Low Water (MLLW).
6. Aids to Navigation are USCG Range service (1234) and USCG.

N

0 125 250 500 750 1,000 Feet

Sounding Data
Less than 10.0
10.1 to 15.0
15.1 to 20.0
20.1 to 27.0
Greater than 27.0

USCG Buoys
Green
Red
White

Federal Navigation Channel
Left of Centerline
Right TOC Line
True Centerline

USCG Aids
Green (reverse)
Red (reverse)
Red
White
Yellow
USCG Light
Closed Guard Room

Legend
Station Features
Sounding
Soundings may cover several hundred square feet or just cover a quarter area.
Environmental Features
Cliff
Cliff Edge
Wreck (Submerged)

Designed By: eHydro Software v3.82
Reviewed By: CWP
Absolute Scale: 1:1,000
Survey Date: 30 JUL 2019
Production Date: 02 AUG 2019
Project Reference Number: CESAC-PBA-2019
Reference Scale: 1 inch = 250 feet
Survey Type: Condition
Projection: NAD 1983 StatePlane South Carolina FIPS 3900 Feet

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CHARLESTON, SOUTH CAROLINA

SPATIAL DATA BRANCH
69A HAGOOD AVE
CHARLESTON, SC 29403
CESAC-GIS@USACE.ARMY.MIL

Port Royal Harbor Channel Survey

The information depicted on this 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.

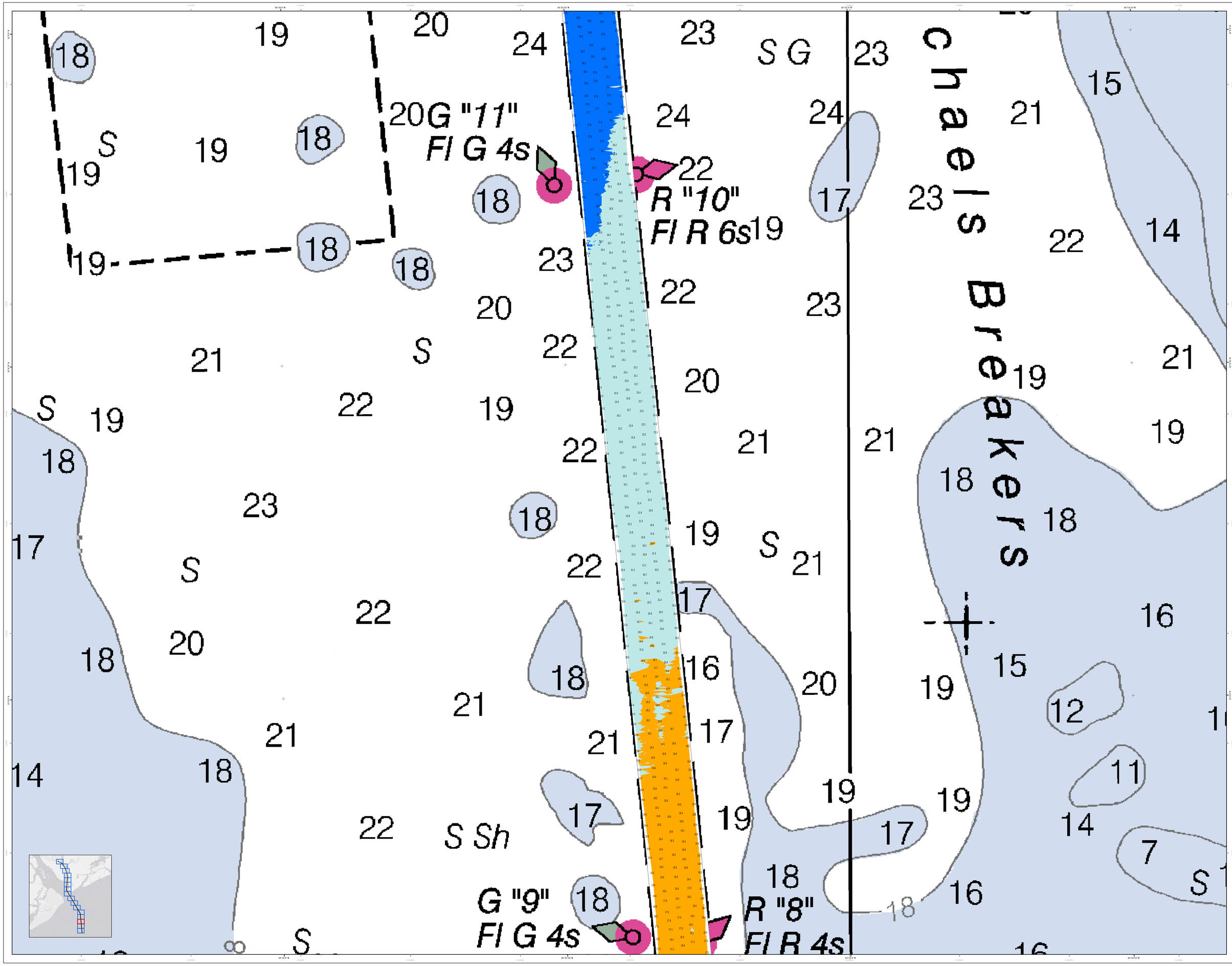
Concluded on: 30 JULY 2019

Port Royal, South Carolina

SHEET REFERENCE NUMBER

C012

SHEET 2 OF 16



U.S. Army Corps of Engineers
Charleston District

Legend
Station Sounding
Soundings
Sounding may cover several stations and be displayed per match sounder area
Buoys
Green
Red
White
Beacons
Green
Red
White
Yellow
Wrecks/Submerged
USCG Lights
Coast Guard Racon

Projection Notes:
1. Projection is Lambert conformal conic, shown in feet, and intended for plotting purposes only.
2. Soundings are in feet and tenths, from surveys conducted by the Corps of Engineers, Charleston District.
3. Soundings are in feet and tenths, referenced to Mean Lower Low Water (MLLW).
4. Depth Units: Feet, Vertical Datum: MLLW, Range Service: LESS and ULT

N

0 125 250 500 750 1,000 Feet

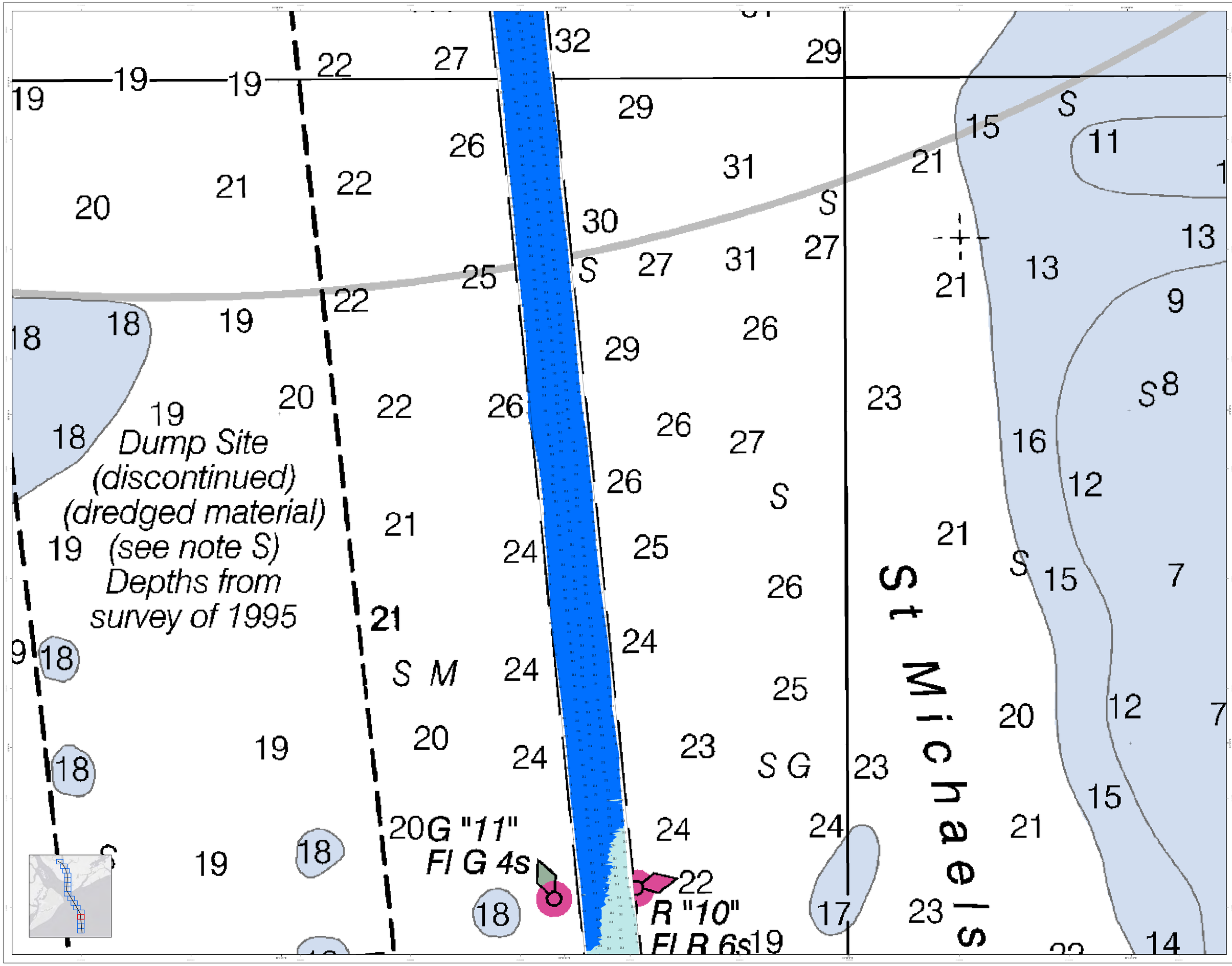
Depth Key
Less than 10.0
10.1 to 15.0
15.1 to 20.0
20.1 to 27.0
Greater than 27.0

In no event shall the U.S. Army Corps of Engineers, Charleston District Office, Spatial Data Branch be liable for direct, indirect, incidental, special, exemplary, or consequential damages, including but not limited to, loss of anticipated profits or benefits arising out of the use of these data sets.
These data sets have been developed from the best available source data and are intended for navigation purposes. Although these datasets are accurate and reliable, errors and variable conditions may exist in the source data. Users should exercise caution when utilized in the data sources.
Mariners are encouraged to use all present safety measures.

U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS CHARLESTON, SOUTH CAROLINA	Designed By: eHydro Software v3.82	Survey Date: 30 JUL 2019
	Reviewed By: CWM	Production Date: 02 AUG 2019
SPATIAL DATA BRANCH 69A HAGOOD AVE CHARLESTON, SC 29403 CESAC-GIS@USACE.ARMY.MIL	Reference Scale: 1:24000	Project Reference Number: CESAC-PDA-0018
	Reference Scale: 1 inch = 250 feet	Survey Type: Condition
	Projection: NAD 1983 StatePlane South Carolina FIPS 3900 Feet	

Port Royal Harbor Channel Survey
The information depicted on this map represents the results of surveys made on the dates indicated and can only be considered as indicating the general conditions existing at the time.
Concluded on: 30 JULY 2019
Port Royal, South Carolina

SHEET REFERENCE NUMBER
C012
SHEET 3 OF 16



U.S. Army Corps of Engineers
Charleston District

Legend
Shoaled Soundings
Sounding may have moved since survey due to shoaling per mach quarter area
Structures
Wreck-Submerged
USCG Buoys
Green
Red
White
Yellow
USCG Light
Crest Guard Racon
Feature Symbols
Left TOC Line
Right TOC Line
True Centerline

Depth Key
Less than 10.0
10.1 to 15.0
15.1 to 20.0
20.1 to 27.0
Greater than 27.0

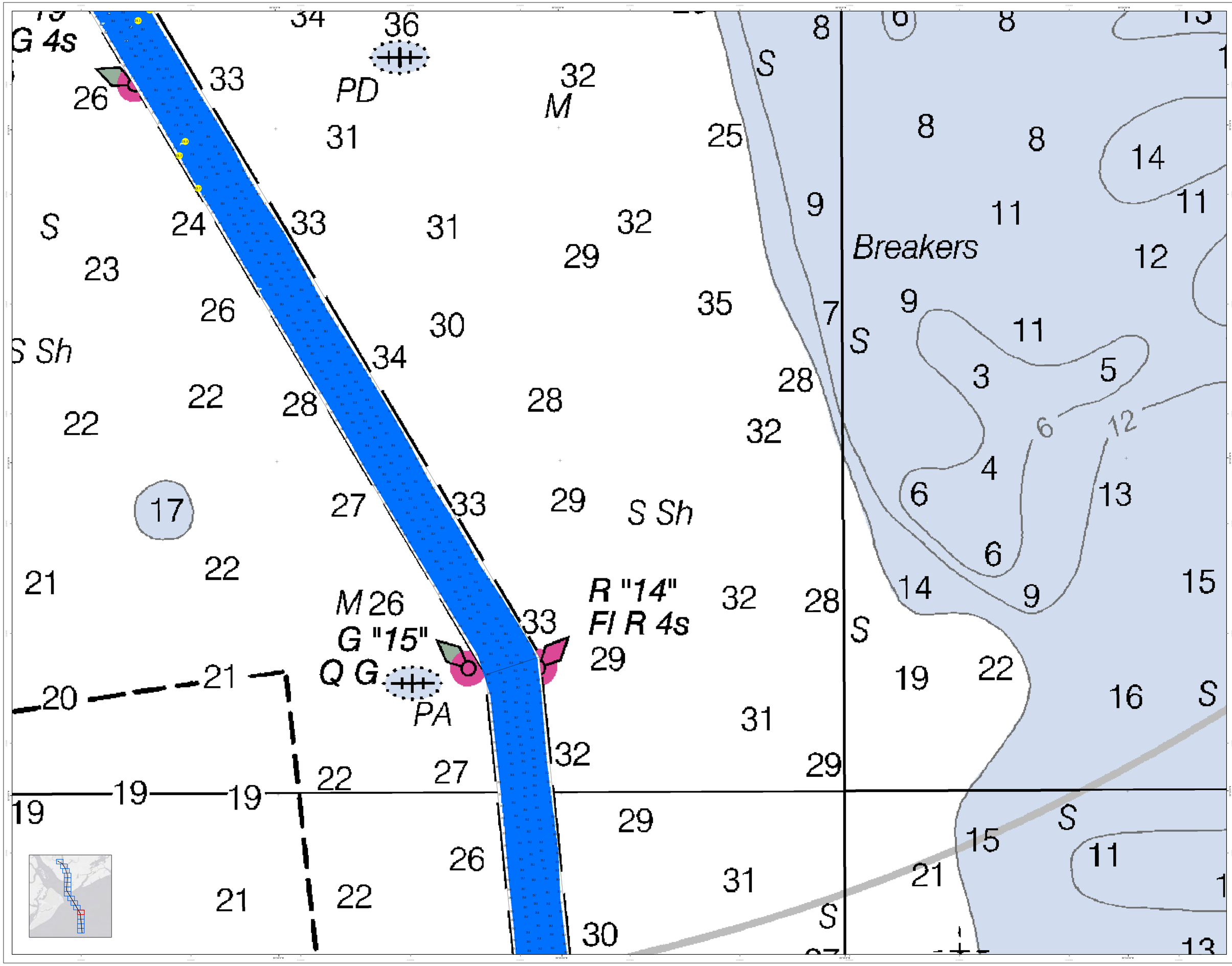
Projection Notes:
1. Projection and datum used on this product is for plotting purposes only. Project coordinates should be based on survey conducted by the Charleston District, Corps of Engineers.
2. Soundings are in feet and tenths.
3. Soundings are referenced to Mean Lower Low Water (MLLW).
4. Local datum is Mean Lower Low Water, stage service 13156 and 13157.

In no event shall the U.S. Army Corps of Engineers, Charleston District Office, Spatial Data Branch be liable for direct, indirect, incidental, special, exemplary, or consequential damages arising out of or in connection with the use of the data, including, but not limited to, loss of anticipated profits or benefits arising out of the use of this data or any part thereof.
These data sets have been developed from the best available source data and are subject to change as more current data and datums are accurate and reliable, errors and outdated conditions may exist in the data. Users should exercise caution when using data collected in the data support.
Mariners are encouraged to use all printed safety measures.

U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS CHARLESTON, SOUTH CAROLINA	Designed By: ehydro Software v3.82 / Reviewed By: CDM / Survey Date: 30 JUL 2019 / Production Date: 02 AUG 2019
SPATIAL DATA BRANCH 69A HAGOOD AVE CHARLESTON, SC 29403 CESAC-GIS@USACE.ARMY.MIL	Reference Scale: 1 inch = 250 feet / Projection: NAD 1983 StatePlane South Carolina FIPS 3900 Feet / Project Reference Number: CESAC-PROJ-0014 / Survey Type: Condition

Port Royal Harbor Channel Survey
The information depicted on this map represents the results of surveys made on the dates indicated and can only be considered as indicating the general condition of the waterway on that date.
Concluded on: 30 JULY 2019
Port Royal, South Carolina

SHEET REFERENCE NUMBER
C012
SHEET 4 OF 16



U.S. Army Corps of Engineers
Charleston District

Legend

Soundings (Feet)
Soundings may cover several years and may not reflect current conditions.
Depth Area
Dredged Area
Obstruction
Wreck (Submerged)
USCG Buoys
Green
Red
White
Yellow
USCG Light
Fixed Structures
Right TOE Line
Toe Delineation
Coast Guard Beacon

Depth Tint

Feet (Fathoms)
Less than 10.0 (5.5)
10.1 to 15.0
15.1 to 20.0
20.1 to 27.0
Greater than 27.0

N

0 125 250 500 750 1,000 Feet

Production Notes:

1. This map was produced using only products for grading purposes only. Data sources include multibeam and lidar survey conducted by the USACE Charleston District and NOAA.
2. Soundings are in feet and tenths.
3. Soundings are referenced to Mean Lower Low Water (MLLW).

Data sources: USACE Multibeam LiDAR, NOAA Range survey 12356 and 12317

In no event shall the U.S. Army Corps of Engineers, Charleston District Office, Spatial Data Branch be liable for direct, indirect, incidental, special, exemplary, or consequential damages, including but not limited to, loss of anticipated profits or benefits arising out of the use of this data set.

These data sets have been developed from the best available information and are subject to continuous revision. While these datasets are accurate and reliable, errors and outdated conditions may exist. Users should exercise caution when using information collected in the data supplied.

This data set is not to be used for navigation.

Mariners are encouraged to use updated safety measures.

Designed By: eHydro Software v3.82	Survey Date: 30 JUL 2019	Production Date: 02 AUG 2019	
Reviewed By: CCM	Absolute Scale: 1:1,000	Project Reference Number: CESAC-PBA-2019	
Reference Scale: 1 inch = 250 feet	Survey Type: Condition		
Projection: NAD 1983 StatePlane South Carolina FIPS 3900 Feet			

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CHARLESTON, SOUTH CAROLINA

SPATIAL DATA BRANCH
69A HAGOOD AVE
CHARLESTON, SC 29403
CESAC-GIS@USACE.ARMY.MIL

Port Royal Harbor Channel Survey

The information depicted on this map represents the results of surveys made on the dates indicated and can only be considered as indicating the general conditions existing at the time.

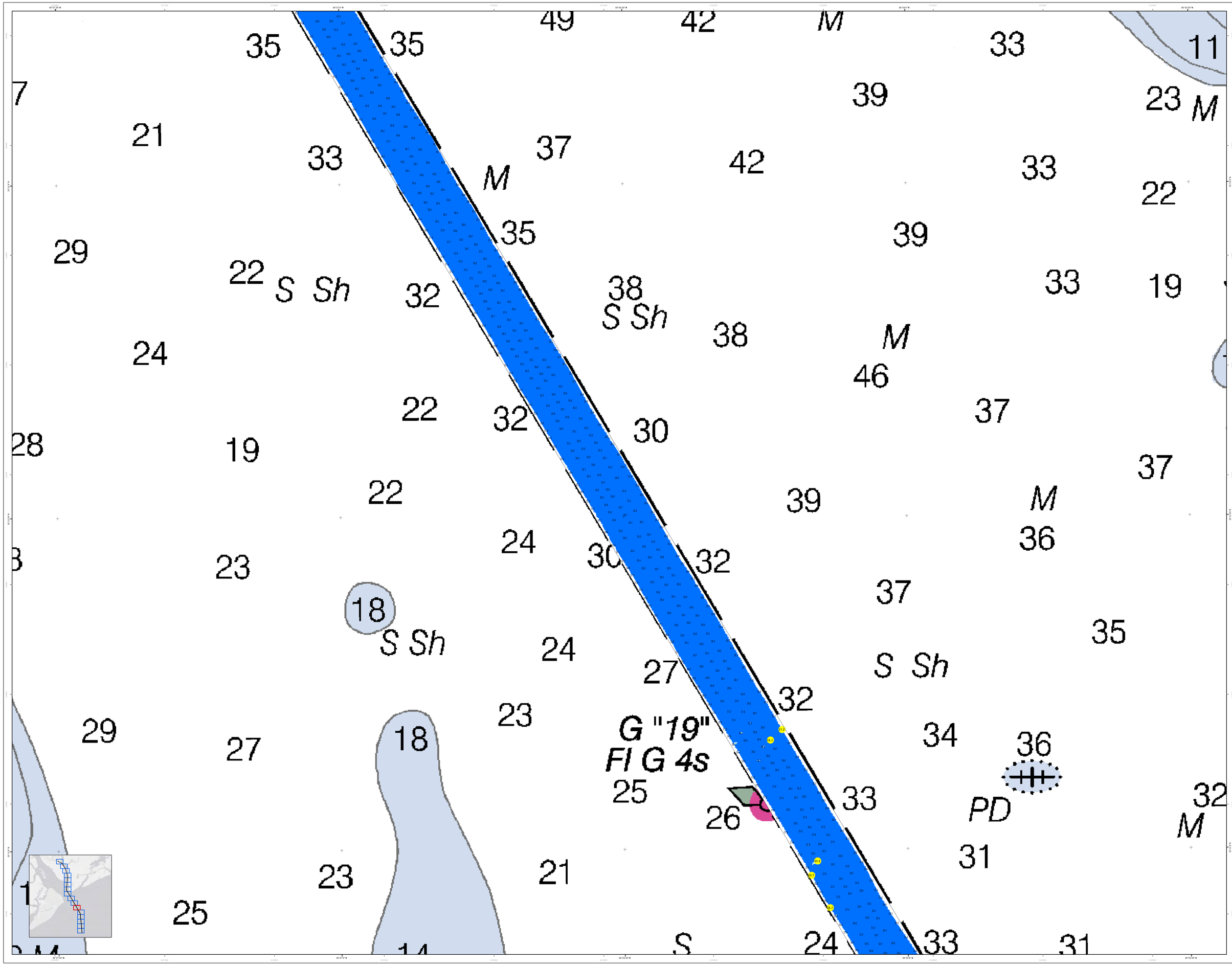
Conducted on: 30 JULY 2019

Port Royal, South Carolina

SHEET REFERENCE NUMBER

C012

SHEET 5 OF 16



U.S. Army Corps of Engineers
Charleston District

Legend

Hydrographic Sounding
Sounding may not represent the shallowest point in the area
Sounding Type
USGS Buoys
Green
Red
White
Yellow
USCG Light
Closed Guard Room
Aids to Navigation
Port Side (Red)
Less than 10.0
10.1 to 15.0
15.1 to 20.0
20.1 to 27.0
Greater than 27.0
Feature Symbols
Left TOC Line
Right TOC Line
True Centerline
Reference Points
Wrecks-Submerged

Projection Notes:

1. The data depicted on this map is projected for plotting purposes only. Project data was originally collected from survey conducted by the Charleston District using NAD 1983 State Plane South Carolina FIPS 3900 Feet.
2. Soundings are in feet and tenths.
3. Soundings are referenced to Mean Lower Low Water (MLLW).

Vertical datum used: Mean Lower Low Water (MLLW)
Range service: [illegible]

In no event shall the U.S. Army Corps of Engineers, Charleston District Office, Spatial Data Branch be liable for direct, indirect, incidental, special, exemplary, or consequential damages, including, but not limited to, loss of anticipated profits or benefits arising out of the use of this data set.

These data sets have been developed from the best available source data and are provided "as is" without warranty. While these datasets are accurate and reliable, errors and outdated conditions may exist in the source data. Use of these data sets should be exercised in the data supplied.

Warnings are encouraged to be used for navigation.

U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS CHARLESTON, SOUTH CAROLINA	Designed By: ehydro Software v3.82	Survey Date: 30 JUL 2019	Production Date: 02 AUG 2019
	Reviewed By: CCHA	Absolute Scale: 1:1,000	Project Reference Number: CHA-PRO-0024
SPATIAL DATA BRANCH 69A HAGOOD AVE CHARLESTON, SC 29403 CESAC-GIS@USACE.ARMY.MIL	Reference Scale: 1 inch = 250 feet	Survey Type: Condition	
	Projection: NAD 1983 StatePlane South Carolina FIPS 3900 Feet		

Port Royal Harbor Channel Survey

The information depicted on this map represents the results of surveys made on the dates indicated and can only be considered as indicating the general condition of the area at the time of the survey.

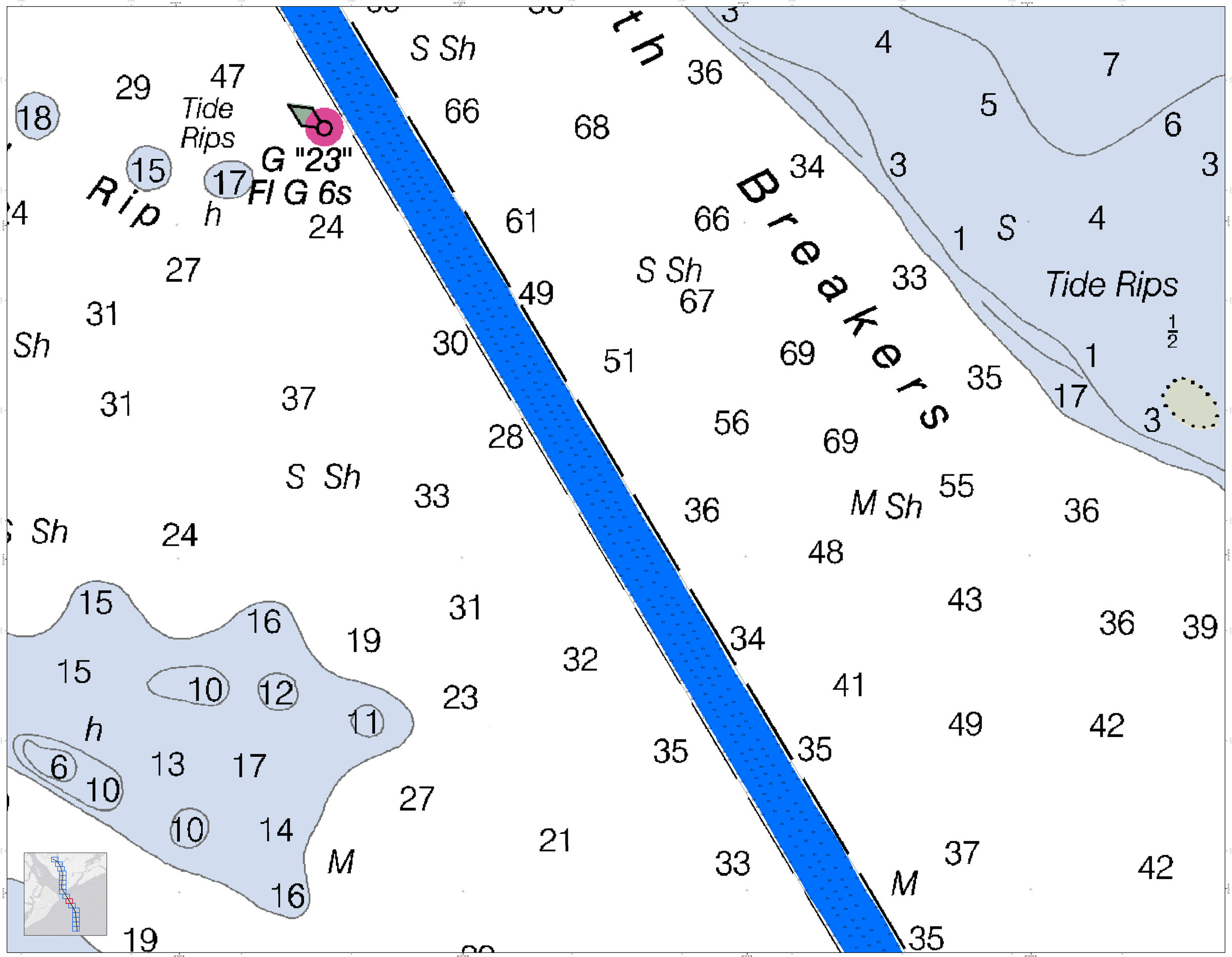
Concluded on: 30 JULY 2019

Port Royal, South Carolina

SHEET REFERENCE NUMBER

C012

SHEET 6 OF 16



U.S. Army Corps of Engineers
Charleston District

Legend

Depth Contours
Depth Areas
Aids to Navigation

Disclaimer:
In no event shall the U.S. Army Corps of Engineers, Charleston District Office, Spatial Data Branch be liable for direct, indirect, incidental, special, exemplary, or consequential damages arising out of or in any way connected with the use of these data, including, but not limited to, loss of anticipated profits or benefits arising out of the use of these data.
These data sets have been developed from the best available source data and are intended for navigation purposes only. Some datasets are accurate and reliable, errors and outdated conditions may exist in other datasets. Use caution when interpreting data collected in the data sources.
Warning: Electronic charts are not to be used for navigation. Mariners are encouraged to use all paper charts available.

Projection Notes:
1. Horizontal Datum: NAD 83 (Conus) Projection: Lambert Conformal Conic Units: Meters Spheroid: GRS 1980 Zone: South Carolina 3900 Feet
2. Soundings are in feet and tenths.
3. Soundings are referenced to Mean Lower Low Water (MLLW)
4. Elevations are referenced to North American Vertical Datum of 1988 (NAVD 88) Geoid Model: GEOID12B

N

0 125 250 500 750 1,000 Feet

Depth Key
Depth Areas
Less than 10.0
10.1 to 15.0
15.1 to 20.0
20.1 to 27.0
Greater than 27.0

Legend
Steven Lawrence
Soundings may not exceed the number displayed on any one square area.
Elevations in Feet
Elevations in Meters
Wreck
Wreck-Submerged
USCG Buoys
Green
Red
White
Yellow
USCG Light
Coast Guard Racon
Fairway Buoy
Port Hydrographic Channel
Right TOC Line
True Centerline

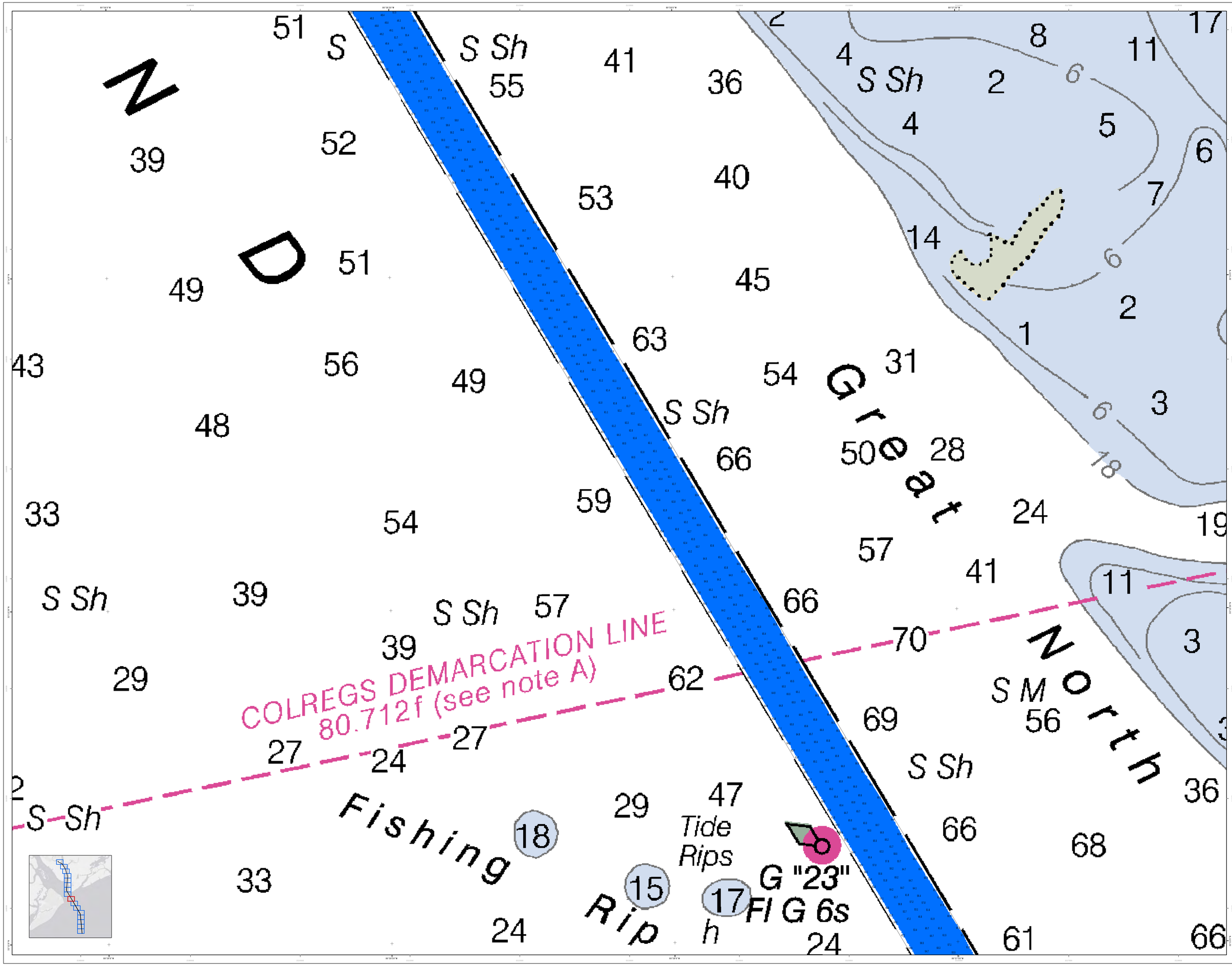
Designed By: ehydro Software v3.82	Survey Date: 30 JUL 2019	Production Date: 02 AUG 2019
Reviewed By: CCM	Approve Scale: 1:2,000	Project Reference Number: CHA-17-0-0014
Reference Scale: 1 inch = 250 feet		Survey Type: Condition
Projection: NAD 1983 StatePlane South Carolina FIPS 3900 Feet		

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CHARLESTON, SOUTH CAROLINA

SPATIAL DATA BRANCH
69A1HAGOOD AVE
CHARLESTON, SC 29403
CESAC-GIS@USACE.ARMY.MIL

Port Royal Harbor Channel Survey
The information depicted on this map represents the results of surveys made on the dates indicated and can only be considered as indicating the general condition of the waterway at the time.
Concluded on: 30 JULY 2019
Port Royal, South Carolina

SHEET REFERENCE NUMBER
C012
SHEET 7 OF 16



U.S. Army Corps of Engineers
Charleston District

In no event shall the U.S. Army Corps of Engineers, Charleston District Office, Spatial Data Branch be liable for direct, indirect, incidental, special, exemplary, or consequential damages arising out of or in connection with the use of this data, including, but not limited to, loss of anticipated profits or benefits arising out of the use of this data.

These data sets have been developed from the best available source data at the time of compilation and are believed to be accurate and reliable. Errors and outdated conditions may exist in the data supplied. Users should verify the currency of the data before using it.

Warnings are encouraged to be used for navigation.

Projection Notes:

1. Projection and Datum are shown only for plotting purposes only. Projects for plotting purposes only. Data surveys conducted by the Charleston District are referenced to State Plane Coordinates.
2. Soundings are in feet and tenths.
3. Soundings are referenced to Mean Lower Low Water (MLLW).
4. Coordinates are referenced to Mean Range (MRA) 1215E and 1317.

N

0 125 250 500 750 1,000 Feet

Depth Key

Feet	Fathoms
less than 10.0	less than 1.8
10.1 to 15.0	1.8 to 2.7
15.1 to 20.0	2.8 to 3.6
20.1 to 27.0	3.7 to 4.9
Greater than 27.0	Greater than 5.0

Legend

Station Locations
Soundings
Sounding may cover several points, see Sounding Report for per-beach-quarter area
Elevations
Elevations
Wrecks
Wrecks
USCG Buoys
Green
Red
White
Yellow
Paths/Backstarers Channel
Right TOE Line
Left TOE Line
USCG Light
Coast Guard Beacon
True Centerline

Designed By: eHydro Software v3.82	Survey Date: 30 JUL 2019
Reviewed By: Jim Cox	Production Date: 02 AUG 2019
Approve Scale: 1:12000	Project Reference Number: COA-CHS-A-0013
Reference Scale: 1 inch = 250 feet	Survey Type: Condition
Projection: NAD 1983 StatePlane South Carolina FIPS 3900 Feet	

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CHARLESTON, SOUTH CAROLINA

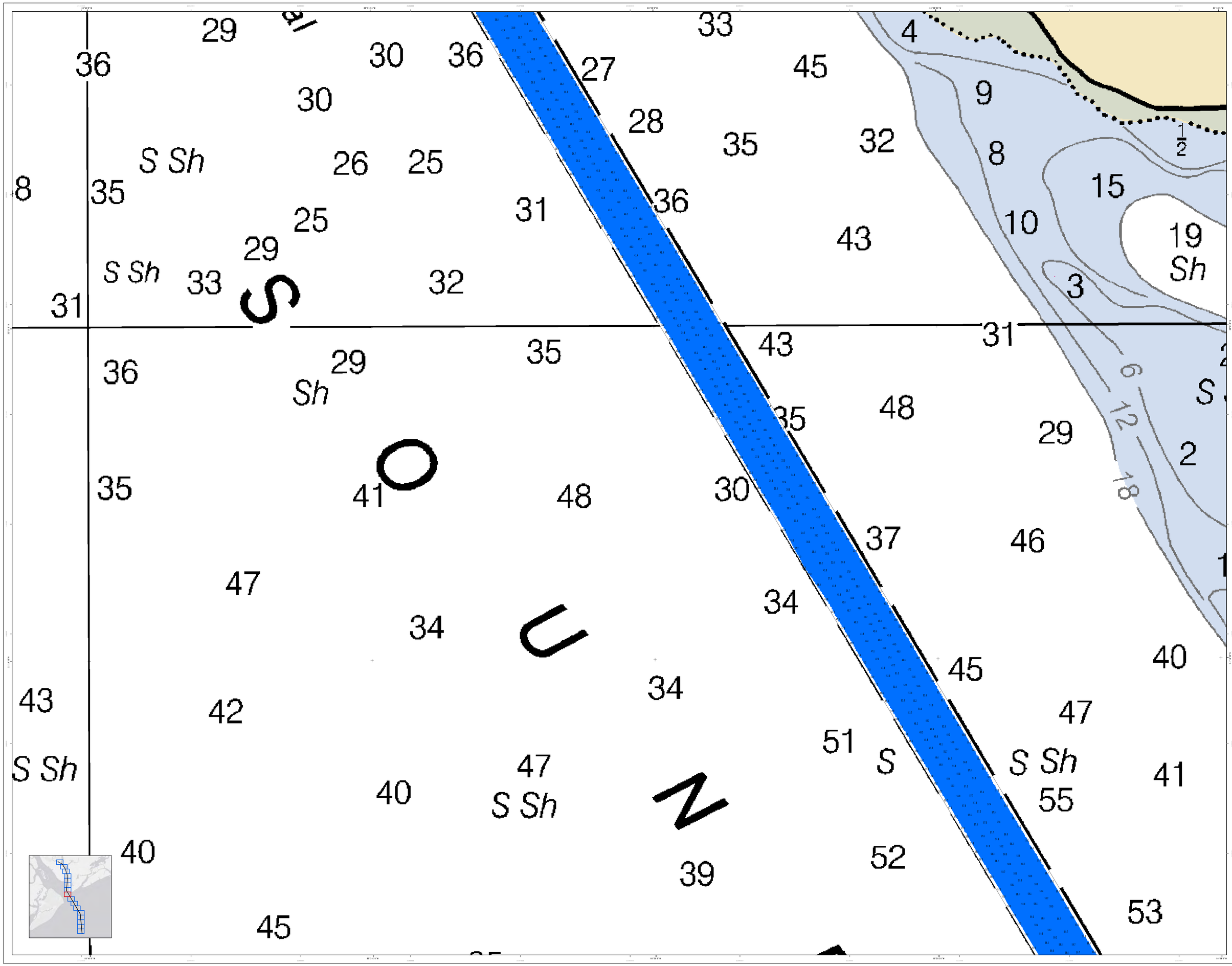
SPATIAL DATA BRANCH
69A HAGOOD AVE
CHARLESTON, SC 29403

CESAC-GIS@USACE.ARMY.MIL

Port Royal Harbor Channel Survey
The information depicted on this 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.
Concluded on: 30 JULY 2019
Port Royal, South Carolina

SHEET REFERENCE NUMBER
C012

SHEET 8 OF 16



U.S. Army Corps of Engineers
Charleston District

Legend
Station Sounding
Sounding
Sounding may cover several depths, shown in feet per each quarter area
0 0 0 0
Depth
Wreck-Submerged

USCG Buoys
Green
Red
White
Yellow
USCG Light
Closed Guard Room

USCG Aids
Green
Red
White
Yellow
Private Aids
Green
Red
White
Yellow
Wreck-Submerged

Depth Tint
Less than 10.0
10.1 to 15.0
15.1 to 20.0
20.1 to 27.0
Greater than 27.0

Projection Notes:
1. Projection is Lambert Conformal Conic. Data is for plotting purposes only. Positions should not be taken from survey conducted by the Charleston District Survey Branch.
2. Soundings are in feet and tenths.
3. Soundings are referenced to Mean Lower Low Water (MLLW).
4. Datum is Mean Lower Low Water. Range service 12156 and 0317.

N

0 125 250 500 750 1,000 Feet

In no event shall the U.S. Army Corps of Engineers, Charleston District Office, Spatial Data Branch be liable for direct, indirect, incidental, special, exemplary, or consequential damages arising out of or in any way connected with the use of these data, including, but not limited to, loss of anticipated profits or benefits arising out of the use of these data.
These data sets have been developed from the best available source data and are subject to change without notice. While these datasets are accurate and reliable, errors and variable conditions may exist in the source data. Users should exercise caution when utilized in the data support.
These data are not intended to be used for navigation.
Mariners are encouraged to use at present safety measures.

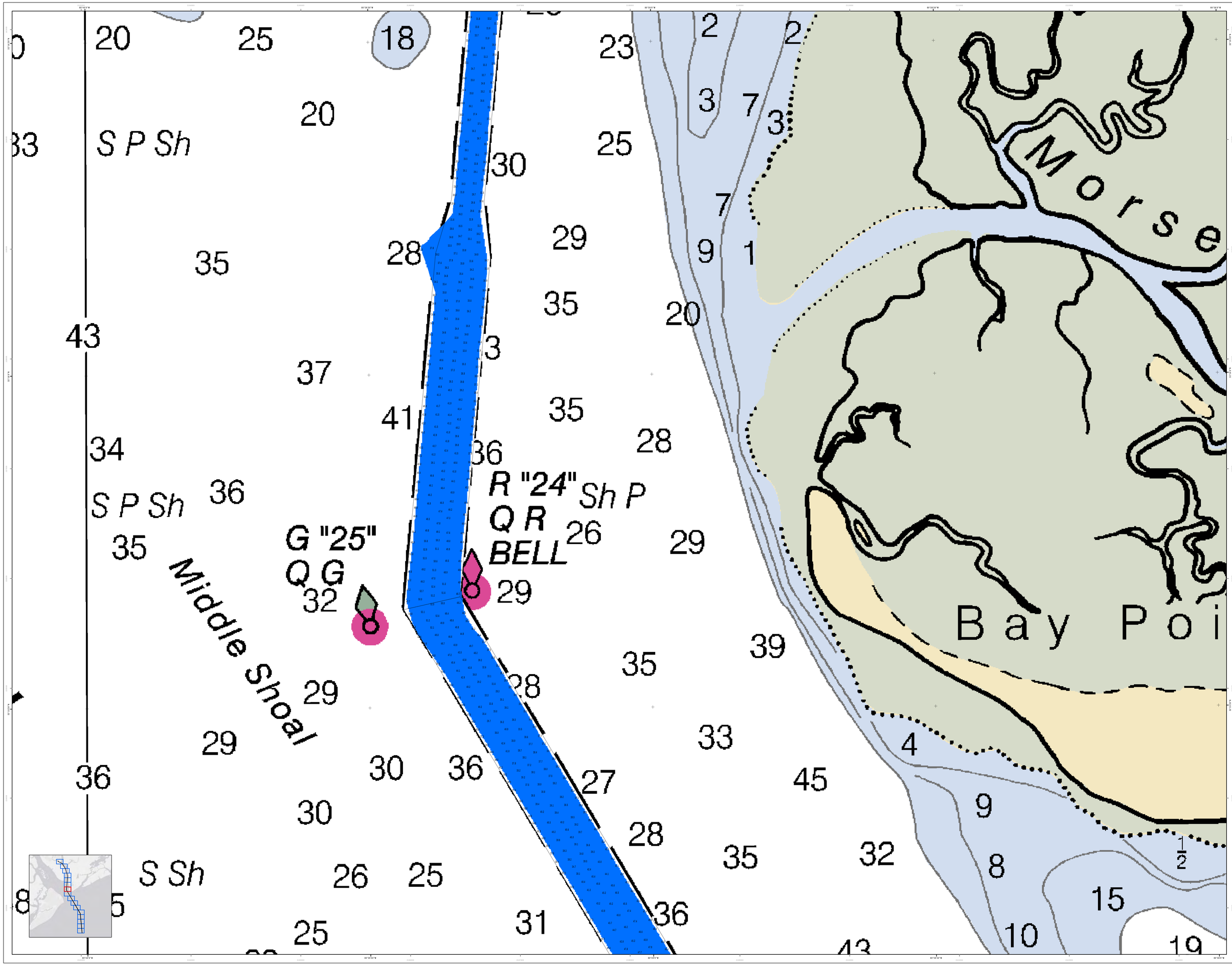
Designed By: eHydro Software v3.82	Reviewed By: CWP	Absolute Scale: 1:12000	Survey Date: 30 JUL 2019
Reference Scale: 1 inch = 250 feet	Survey Type: Condition	Projection: NAD 1983 StatePlane South Carolina FIPS 3900 Feet	Production Date: 02 AUG 2019
Project Reference Number: CESAC-PD-A-2018			

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CHARLESTON, SOUTH CAROLINA

SPATIAL DATA BRANCH
69A HAGOOD AVE
CHARLESTON, SC 29403
CESAC-GIS@USACE.ARMY.MIL

Port Royal Harbor Channel Survey
The information depicted on this map represents the results of surveys made on the dates indicated and can only be considered as indicating the general conditions existing at the time.
Concluded on: 30 JULY 2019
Port Royal, South Carolina

SHEET REFERENCE NUMBER
C012
SHEET 9 OF 16



U.S. Army Corps of Engineers
Charleston District

Legend

Survey Data

Soundings may cover several days and may not reflect past and/or current conditions

Depth Contours

Depth Curve

USCG Buoys

Green
Red
White
Yellow

USCG Light

Fixed Structures

Light TOC Line

Coast Guard Beacon

True Centerline

Vertical Clearance

Depth Ranges

Less than 10.0
10.1 to 15.0
15.1 to 20.0
20.1 to 27.0
Greater than 27.0

N

0 125 250 500 750 1,000 Feet

Predicted Depths:

Depths are predicted based on the products for grading polygons only. Depths are based on the most current survey conducted by the Charleston District and are based on 3-Soundings as in feet and tenths. Datum is Mean Lower Low Water (MLLW). Adjustment = MLLW - Chart datum (CD) = 2.0 feet.

In no event shall the U.S. Army Corps of Engineers, Charleston District Office, Spatial Data Branch be liable for direct, indirect, incidental, special, exemplary, or consequential damages, including but not limited to, loss of anticipated profits or benefits arising out of the use of these data sets.

These data sets have been developed from the best available sources and are believed to be accurate and reliable. However, these datasets are accurate and reliable, errors and variable conditions may exist in the data sources. Users should exercise caution when utilized in the data support.

Warning: Not intended or to be used for navigation.

Mariners are encouraged to use all printed safety messages.

Designed By: eHydro Software v3.82		Survey Date: 30 JUL 2019	Production Date: 02 AUG 2019
Reviewed By: CW	Absolute Scale: 1:1,000	Project Reference Number: CESAC-PD-HD-2019	
Reference Scale: 1 inch = 250 feet		Survey Type: Condition	
Projection: NAD 1983 StatePlane South Carolina FIPS 3900 Feet			

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CHARLESTON, SOUTH CAROLINA

SPATIAL DATA BRANCH
69A HAGOOD AVE
CHARLESTON, SC 29403
CESAC-GIS@USACE.ARMY.MIL

Port Royal Harbor Channel Survey

The information depicted on this 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.

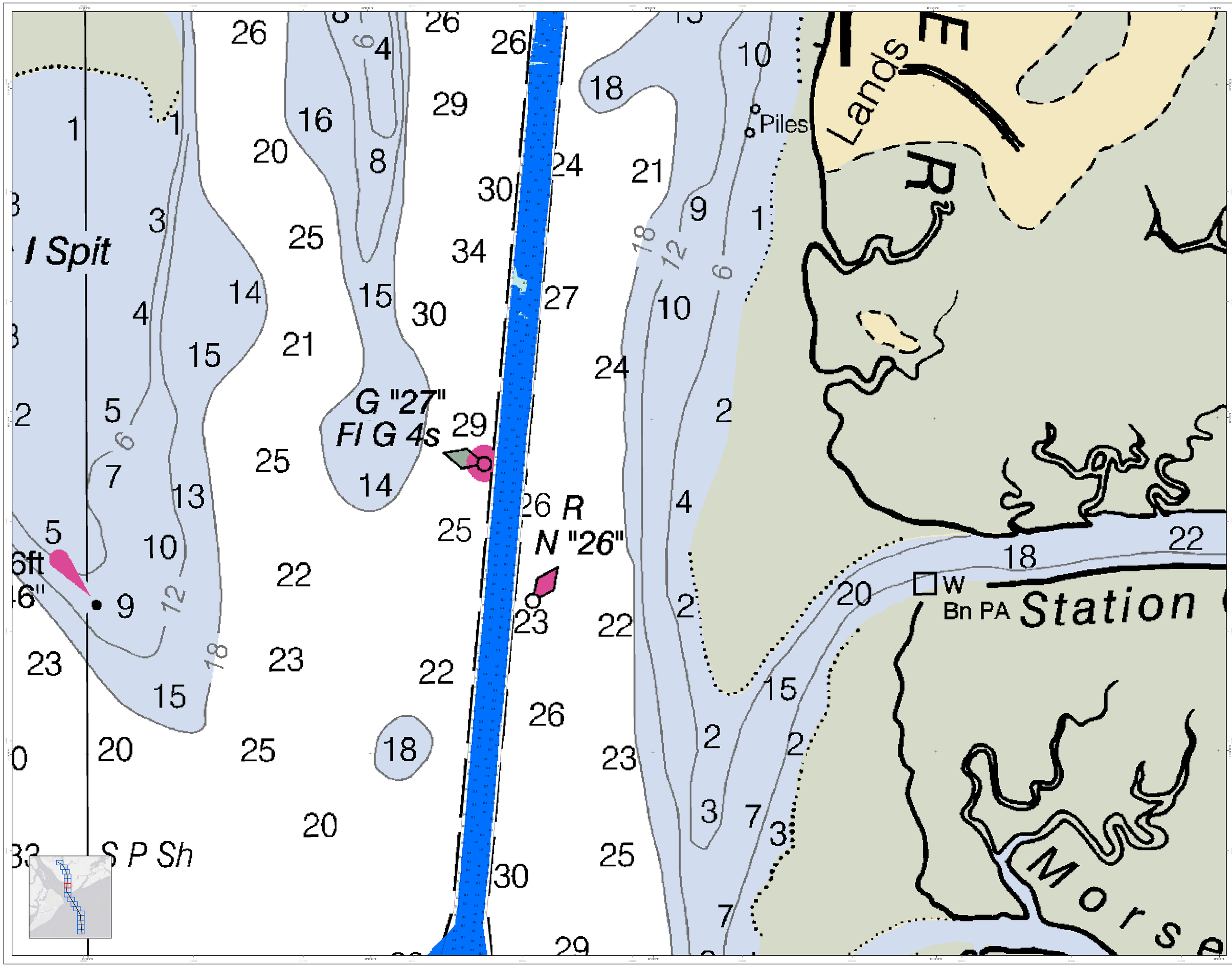
Concluded on: 30 JULY 2019

Port Royal, South Carolina

SHEET REFERENCE NUMBER

C012

SHEET 10 OF 16



U.S. Army Corps of Engineers
Charleston District

Legend

Navigation Facility
Lighted
Unlighted
Sounding may not be carried out in this area due to insufficient water or presence of obstructions
Reference Point
Shoreline Construction
USCG Buoys
Green
Red
White
Yellow
USCG Light
Coast Guard Racon
Range Buoy
Right TOC Line
True Centerline

Less than 10.0
10.1 to 15.0
15.1 to 20.0
20.1 to 27.0
Greater than 27.0

0 125 250 500 750 1,000 Feet

N

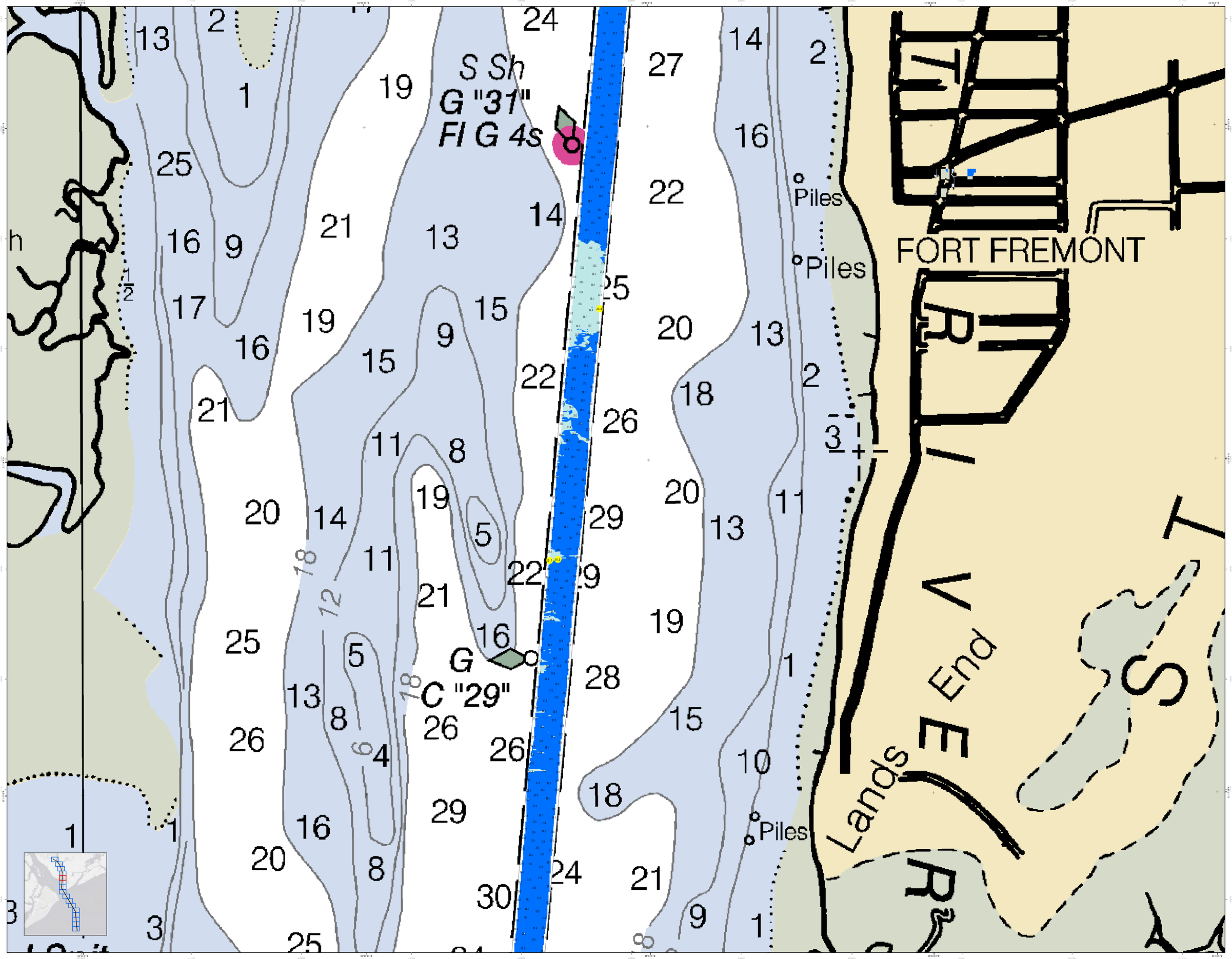
Prototype Data:
Data used to produce this map was provided by project engineers for planning purposes only. Data was collected by the Corps of Engineers and should not be used for navigation purposes. 1. Soundings are in feet and tenths. 2. Coordinates are in North American Datum 1983 (NAD83). 3. Datum is Mean Lower Low Water (MLLW). 4. Water levels are referenced to Fort Pulaski, Georgia (USGS gauge station 02196001).

In no event shall the U.S. Army Corps of Engineers, Charleston District Office, Spatial Data Branch be liable for direct, indirect, incidental, special, consequential, or punitive damages including, but not limited to, loss of anticipated profits or benefits arising out of the use of this map or data.
These data sets have been developed from the best available source data and are subject to revision as more current and accurate data becomes available. Errors and outdated conditions may be encountered in the data supplied.
Mariners are encouraged to use other navigation aids in addition to the data supplied.

U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS CHARLESTON, SOUTH CAROLINA	Designed By: eHydro Software v3.82	Survey Date: 30 JUL 2019	Production Date: 02 AUG 2019
	Reviewed by: CCW	Absolute Scale: 1:1,000	Project Reference Number: CESAC-PD-SDB-19013
SPATIAL DATA BRANCH 69A HASCOID AVE CHARLESTON, SC 29403 CESAC-GIS@USACE.ARMY.MIL	Reference Scale: 1 inch = 250 feet	Survey Type: Condition	
	Projection: NAD 1983 StatePlane South Carolina FIPS 3900 Feet		

Port Royal Harbor Channel Survey
The information depicted on this map represents the results of surveys made on the dates indicated and can only be considered as indicating the general conditions existing at the time.
Concluded on: **30 JULY 2019**
Port Royal, South Carolina

SHEET REFERENCE NUMBER
C012
SHEET 11 OF 16



U.S. Army Corps of Engineers
Charleston District

Legend

Station Sounding
Sounding may cover several stations, or stations may just match quarter area
Station Area
Station Boundary
Wreck/Submerged

USCG Buoys
Green
Red
White
Yellow
USCG Light
Coast Guard Buoys

Feature Descriptions (Charts)
Light/Beacon
Light TOC Line
Right TOC Line
True Centerline

USCG Buoys
Green
Red
White
Yellow
Feature Descriptions (Charts)
Light/Beacon
Light TOC Line
Right TOC Line
True Centerline

Disclaimer:
In no event shall the U.S. Army Corps of Engineers, Charleston District Office, Spatial Data Branch be liable for direct, indirect, incidental, special, exemplary, or consequential damages, including but not limited to, loss of anticipated profits or benefits arising out of the use of these data sets.
These data sets have been developed from the best available information and are subject to continuous revision. While these datasets are accurate and reliable, errors and variable conditions may exist in the source data. Users should exercise caution when utilized in the data supplied.
Mariners are encouraged to be used for navigation.
Mariners are encouraged to use at present safety measures.

Projection Notes:
1. Coordinates shown on this map are only intended for plotting purposes only. Positions for plotting purposes are from surveys conducted by the Corps of Engineers and other agencies.
2. Soundings are in feet and tenths.
3. Coordinates are based on North American Datum 1983 (NAD83) Universal Transverse Mercator (UTM) projection, zone 17 (CSRS Adjustment, Range zone 2, EPSG:26917).

N

0 125 250 500 750 1,000 Feet

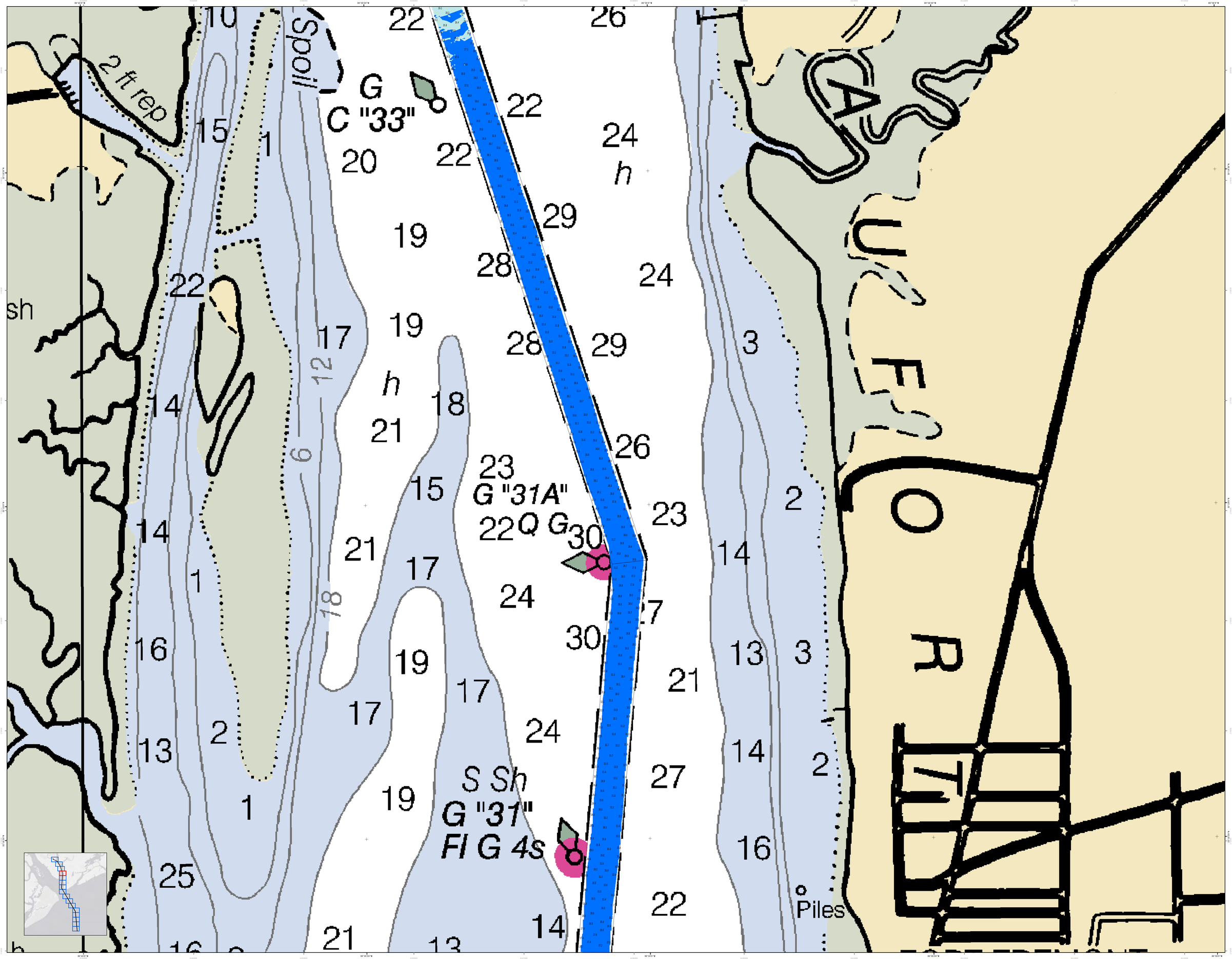
Designed By: eHydro Software v3.82		Survey Date: 30 JUL 2019	Production Date: 02 AUG 2019
Reviewed By: CWO	Absolute Scale: 1:1,000	Project Reference Number: CESAC-PRA-2019	
	Reference Scale: 1 inch = 250 feet	Survey Type: Condition	
	Projection: NAD 1983 StatePlane South Carolina FIPS 3900 Feet		

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CHARLESTON, SOUTH CAROLINA

SPATIAL DATA BRANCH
69A HAGOOD AVE
CHARLESTON, SC 29403
CESAC-GIS@USACE.ARMY.MIL

Port Royal Harbor Channel Survey
The information depicted on this 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.
Concluded on: 30 JULY 2019
Port Royal, South Carolina

SHEET REFERENCE NUMBER
C012
SHEET 12 OF 16



U.S. Army Corps of Engineers
Charleston District

Prototype Notes:
1. Data shown on this map is only intended for planning purposes and not for navigation purposes. Data is from surveys conducted by the Charleston District, unless otherwise noted.
2. Soundings are in feet and tenths, referenced to Mean Lower Low Water (MLLW).
3. Elevations are referenced to North American Vertical Datum of 1988 (NAVD 88).

In no event shall the U.S. Army Corps of Engineers, Charleston District Office, Spatial Data Branch be liable for direct, indirect, special, incidental, or consequential damages arising out of the use of or inability to use the information provided, including, but not limited to, loss of anticipated profits or benefits arising out of the use of or inability to use the information.
These data sets have been developed from the best available source materials and are subject to revision as new information becomes available and as time and conditions warrant. Users are encouraged to ensure that the data sets they are using are current, accurate and reliable, errors and outdated conditions are inherent in all data sets. No warranty is expressed or implied for the data supplied.
Mariners are encouraged to use at present safe measures.

N

0 125 250 500 750 1,000 Feet

Legend
Shoaling Sounding
Soundings may cover several years and be collected per match-barge area.
Feature Type
Wreck
Wreck-Submerged

USCG Buoys
Green
Red
White
Yellow
USCG Light
Closed Guard Room

USCG Marks
Green
Red
White
Yellow
USCG Light
Wreck-Submerged

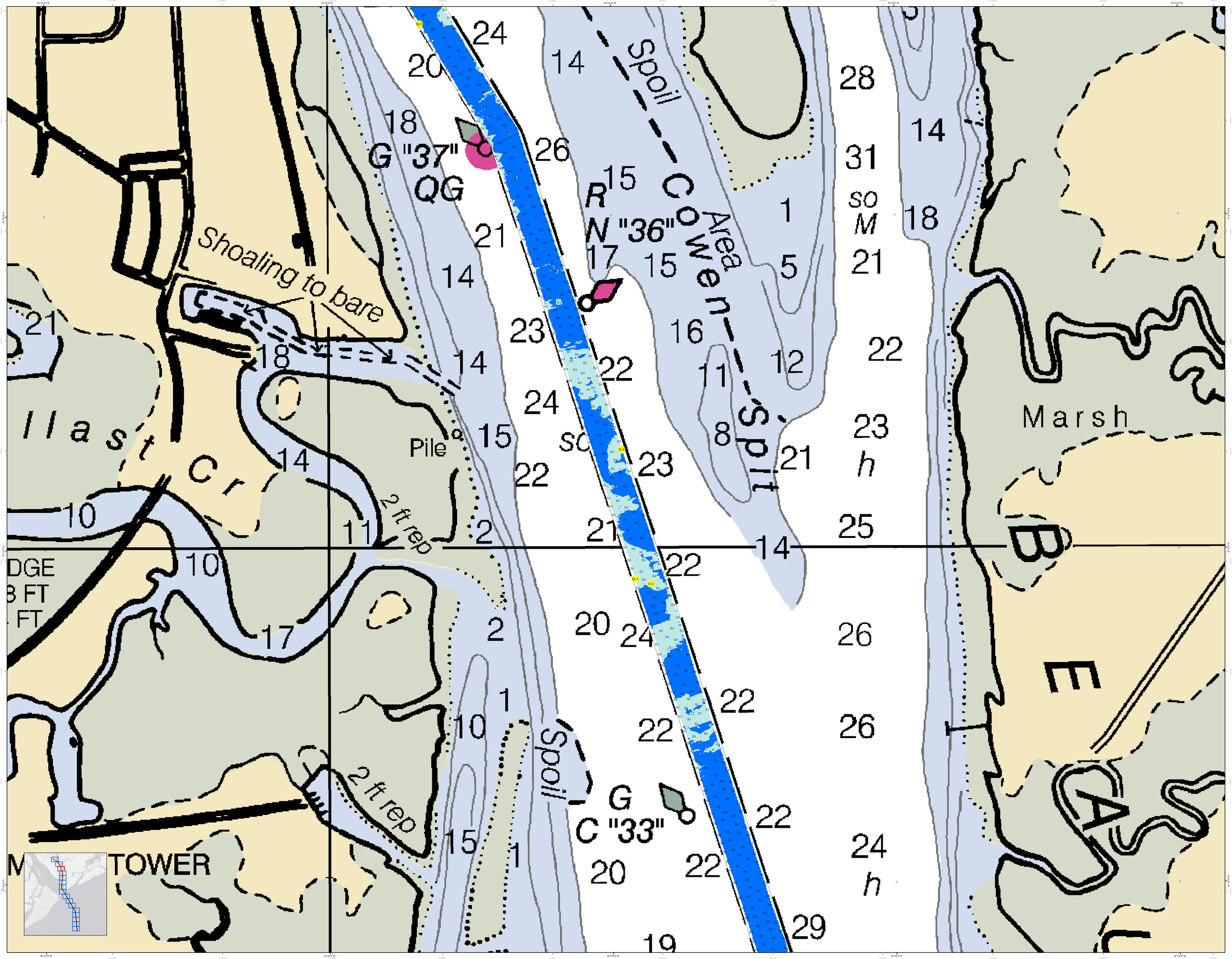
Feature Descriptions (Charts)
Left of Channel
Right TOC Line
True Centerline

Depth Key
Less than 10.0
10.1 to 15.0
15.1 to 20.0
20.1 to 27.0
Greater than 27.0

U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS CHARLESTON, SOUTH CAROLINA	Designed By: eHydro Software v3.82	Survey Date: 30 JUL 2019	Production Date: 02 AUG 2019
	Reviewed By: CWP	Absolute Scale: 1:12000	Project Reference Number: CHS-F-PRA-2019
SPATIAL DATA BRANCH 69A HAGOOD AVE CHARLESTON, SC 29403	Reference Scale: 1 inch = 250 feet		Survey Type: Condition
CESAC-GIS@USACE.ARMY.MIL	Projection: NAD 1983 StatePlane South Carolina FIPS 3900 Feet		

Port Royal Harbor Channel Survey
The information depicted on this map represents the results of surveys made on the dates indicated and can only be considered as indicating the general conditions existing at the time.
Concluded on: **30 JULY 2019**
Port Royal, South Carolina

SHEET REFERENCE NUMBER
C012
SHEET 13 OF 16



U.S. Army Corps of Engineers
Charleston District

Predictive Nature:
1. Survey results are valid only for products for grading purposes only. Products are based on data from survey conducted by the U.S. Army Corps of Engineers.
2. Soundings are in feet and tenths.
3. Soundings are referenced to Mean Lower Low Water (MLLW).
4. Datum: North American Vertical Datum 1988 (NAVD 88)

N

0 125 250 500 750 1,000 Feet

DEPTH TINT
Depth (Feet)
Less than 10.0
10.1 to 15.0
15.1 to 20.0
20.1 to 27.0
Greater than 27.0

USCG Buoys
Green
Red
White
Yellow
USCG Light
Closed Guard Room

Fixed Structures (Charted)
Fixed Structure
Right TOC Line
True Centerline

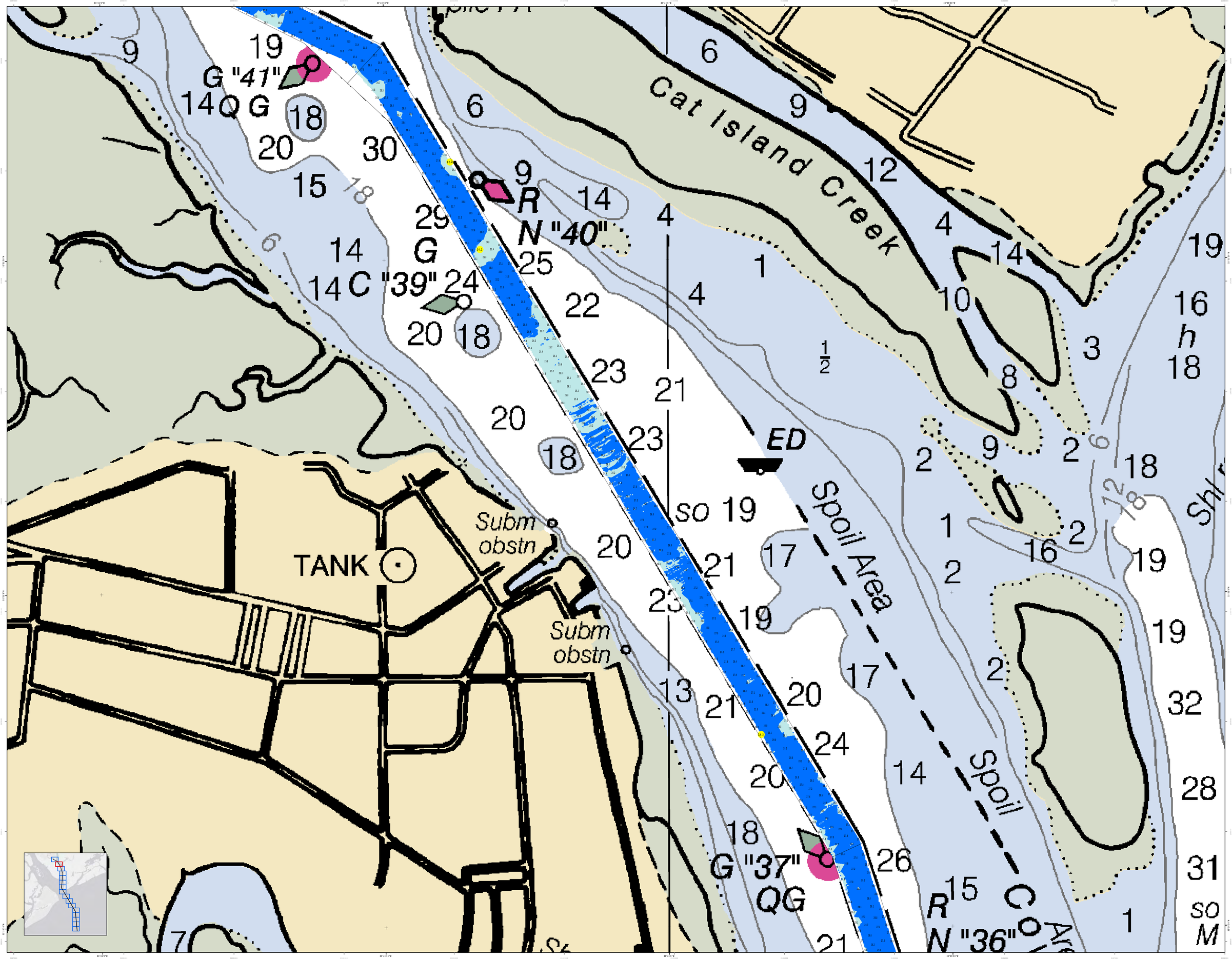
Legend
Shoaling / Scouring
Shoaling
Scouring
Scouring may cover several adjacent buoys and/or span entire quarter area.
Structures
Structure
Wreck-Submerged

In no event shall the U.S. Army Corps of Engineers, Charleston District Office, Spatial Data Branch be liable for direct, indirect, incidental, special, exemplary, or consequential damages, including but not limited to, loss of anticipated profits or benefits arising out of the use of this data set.
These data sets have been developed from the best available source materials and are provided "as is" without warranty of any kind. Although these data sets are accurate and reliable, errors and variable conditions may exist in the source materials and may be inadvertently introduced into the data sets.
These data sets are not intended to be used for navigation.
Mariners are encouraged to use all printed safety measures.

U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS CHARLESTON, SOUTH CAROLINA	Designed By: eHydro Software v3.82	Survey Date: 30 JUL 2019	Production Date: 02 AUG 2019
	Reviewed By: COW	Rescue Scale: 1:12000	Project Reference Number: CESAC-PRA-2018
SPATIAL DATA BRANCH 69A THAGOOD AVE CHARLESTON, SC 29403	Reference Scale: 1 inch = 250 feet		Survey Type: Condition
CESAC-GIS@USACE.ARMY.MIL	Projection: NAD 1983 StatePlane South Carolina FIPS 3900 Feet		

Port Royal Harbor Channel Survey
The information depicted on this map represents the results of surveys made on the dates indicated and can only be considered as indicating the general condition of the channel at the time.
Concluded on: **30 JULY 2019**
Port Royal, South Carolina

SHEET REFERENCE NUMBER
C012
SHEET 14 OF 16



U.S. Army Corps of Engineers
Charleston District

In no event shall the U.S. Army Corps of Engineers, Charleston District Office, Spatial Data Branch be liable for direct, indirect, incidental, special, exemplary, or consequential damages including but not limited to, loss of anticipated profits or benefits arising out of the use of this map or data.

These data sets have been developed from the best available source data and are subject to revision without notice. While these datasets are accurate and reliable, errors and variable conditions may exist in the source data. Users should exercise caution when utilized in the data support.

Warnings are encouraged to be used for navigation.

Projection Notes:

1. Coordinates are in decimal degrees only. Projection for plotting purposes only. Positions should not be plotted from this survey conducted by the Charleston District using this projection.
2. Soundings are in feet and tenths.
3. Datum: North American Datum 1983 (NAD83) Datum Ellipsoid: GRS80 Map Projection: Lambert Conformal Conic Origin latitude 33°00'0.0" Origin longitude 81°00'0.0"

N

0 125 250 500 750 1,000 Feet

Depth Tint
Depth Range (Feet)
Less than 10.0
10.1 to 15.0
15.1 to 20.0
20.1 to 27.0
Greater than 27.0

USCG Buoys
Green
Red
White
Fixed Structures (Aids)
Red
White
Yellow
Fixed Structure
Light TOC Line
True Centerline
USCG Light
Coast Guard Beacon

Legend
Bathymetry
Soundings
Soundings may course unusual because they are located in part outside quarter area
Fixed Structures
Fixed Structure
Wreck (Submerged)

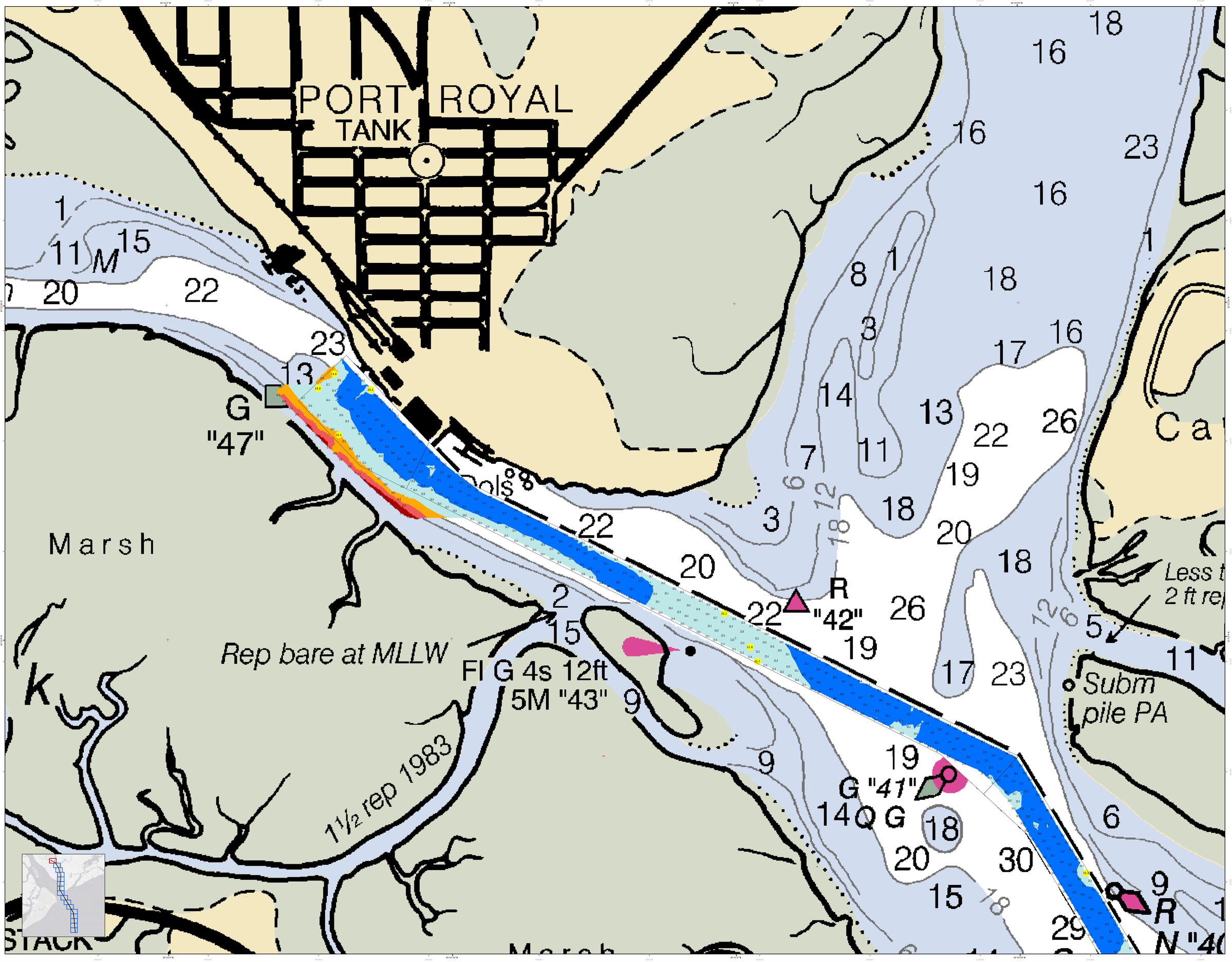
Designed By: eHydro Software v3.82	Survey Date: 30 JUL 2019
Reviewed By: COM	Production Date: 02 AUG 2019
Absolute Scale: 1:12,000	Project Reference Number: CESAC-F-00-2019
Reference Scale: 1 inch = 250 feet	Survey Type: Condition
Projection: NAD 1983 StatePlane South Carolina FIPS 3900 Feet	

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CHARLESTON, SOUTH CAROLINA
29401

SPATIAL DATA BRANCH
69A HAGOOD AVE.
CHARLESTON, SC 29403
CESAC-GIS@USACE.ARMY.MIL

Port Royal Harbor Channel Survey
The information depicted on this map represents the results of surveys made on the dates indicated and can only be considered as indicating the general condition of the waterway.
Concluded on: 30 JULY 2019
Port Royal, South Carolina

SHEET REFERENCE NUMBER
C012
SHEET 15 OF 16



U.S. Army Corps of Engineers

Charleston District

In no event shall the U.S. Army Corps of Engineers, Charleston District Office, Spatial Data Branch be liable for direct, indirect, incidental, special, exemplary, or consequential damages including, but not limited to, loss of anticipated profits or benefits arising out of the use of this data set.

These data sets have been developed from the best available source data at the time of compilation and are believed to be accurate and reliable. Errors and outdated conditions may exist in the data supplied. Users should exercise caution when using these datasets as they are not to be used for navigation.

Warnings are encouraged to be used for planning purposes.

Projection Notes:

1. Projection information is provided only for plotting purposes and may not be the same as the projection used for survey computations by the Corps of Engineers Charleston District.
2. Soundings are in feet and tenths.
3. Datum: Mean Lower Low Water (MLLW) Tidal Datum: LOCAL Mean Range (MHW-MLLW) = 6.1 feet

N

0 125 250 500 750 1,000 Feet

Legend

Beacons & Buoys

- Buoy
- Beacon
- Structure

Sounding may not represent the least depth of water for all marks quarter area.

Expression Marks

- Rock
- Wreck-Submerged

USCG Buoys

- Green
- Red
- White

Fixed Structures (Charts)

- Light
- Red
- White
- Yellow

USCG Light

Right TOC Line

Crest Guard Recon

True Centerline

Depth Key (MLLW feet)

- Less than 10.0
- 10.1 to 15.0
- 15.1 to 20.0
- 20.1 to 27.0
- Greater than 27.0

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CHARLESTON, SOUTH CAROLINA

SPATIAL DATA BRANCH
69A HAGOOD AVE
CHARLESTON, SC 29403
CESAC-GIS@USACE.ARMY.MIL

Designed By: ehydro Software v3.82
Reviewed By: CESAC
Issuance Suite: 1.1.0.0.6
Reference Scale: 1 inch = 250 feet
Projection: NAD 1983 StatePlane South Carolina FIPS 3900 Feet

Survey Date: 30 JUL 2019
Project Reference Number: CESAC-19-0-0014
Survey Type: Condition

Production Date: 02 AUG 2019

Port Royal Harbor Channel Survey

The information depicted on this map represents the results of surveys made on the dates indicated and can only be considered as indicating the general condition of the waterway on that date.

Concluded on: 30 JULY 2019

Port Royal, South Carolina

SHEET REFERENCE NUMBER

C012

SHEET 16 OF 16