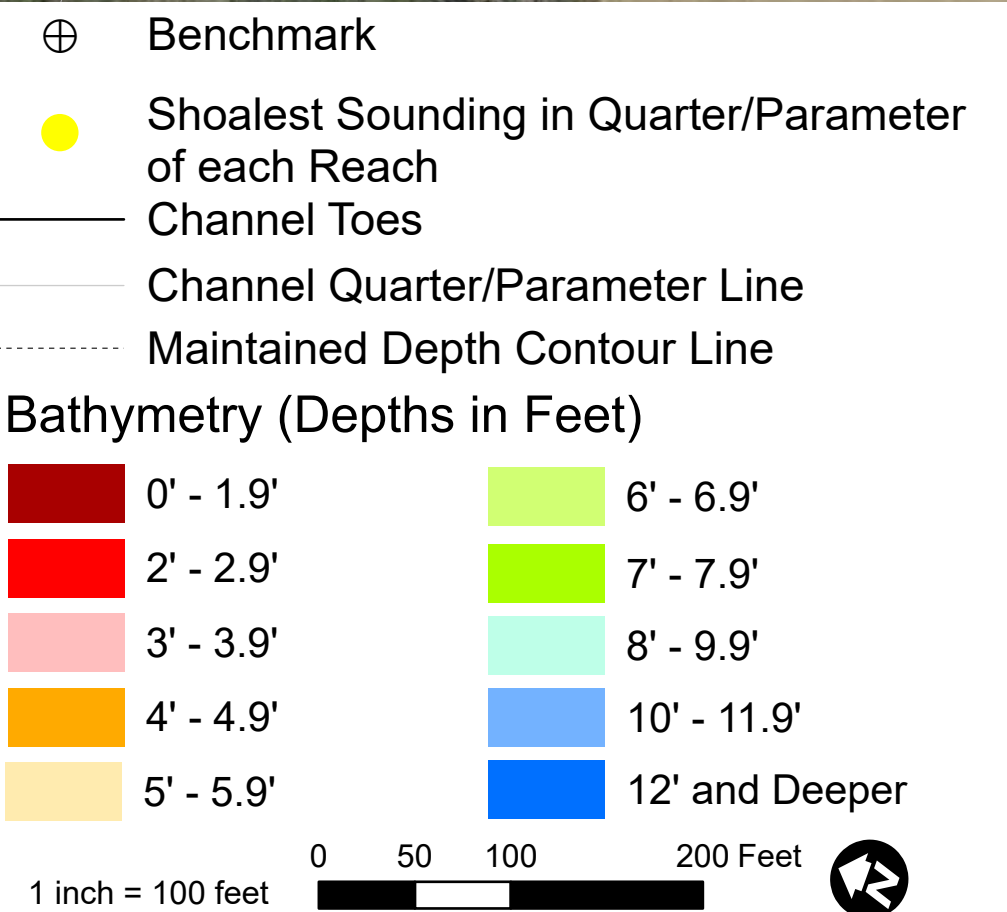
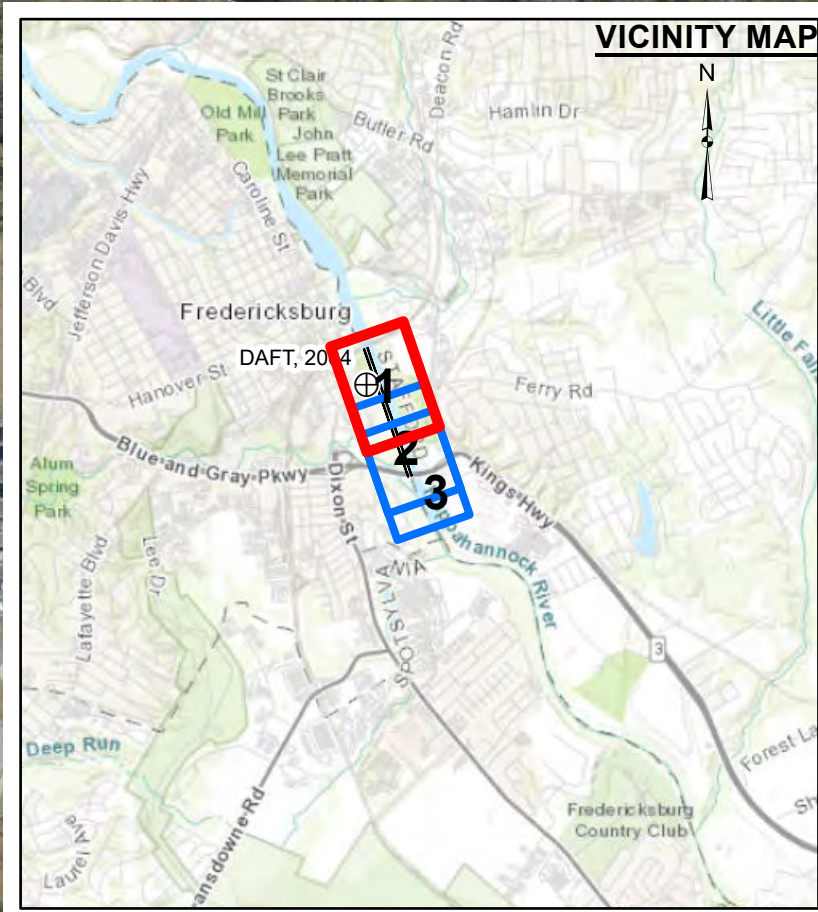
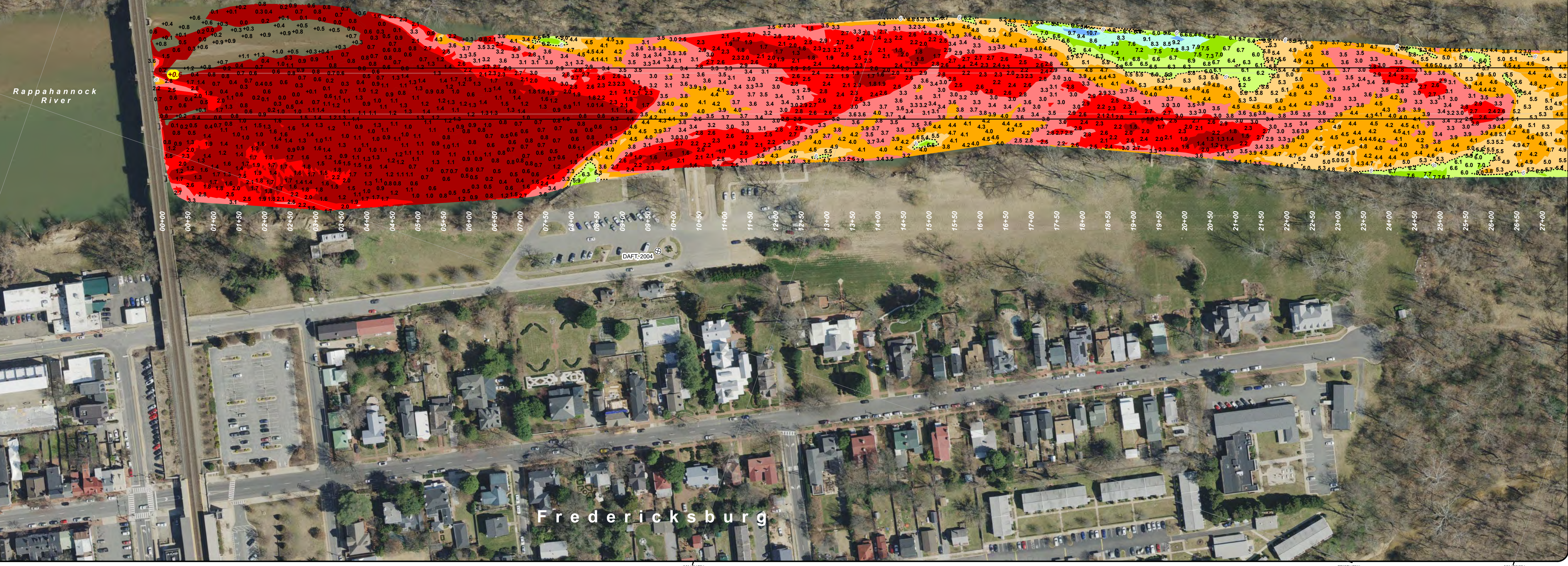




To: Navigation Interests		From: USACE, Norfolk District 803 Front St Norfolk, VA 23510			
RIVER/HARBOR NAME AND STATE RAPPAHANNOCK RIVER - FREDERICKSBURG BAR VIRGINIA				MINIMUM DEPTHS (FT) 80% OF CHANNEL ENTERING FROM SEAWARD	
NAME OF CHANNEL	DATE OF SURVEY	PROJECT			80% of Project Width - 40% on Either Side of Center Line
		WIDTH (feet)	LENGTH (miles)	DEPTH (feet)	
Rappahannock River Fredricksburg Bar	04-16-2024	100	0.7	6.0	+0.6
Remarks: All Depths at Mean Lower Low Water (MLLW), 1983-2001 Tidal Epoch					

Reach: Fredericksburg Bar
Maintained Depth: 6 Feet



US Army Corps
of Engineers
Norfolk District

NOTES:

1. PROJECT A CHANNEL 12 FEET DEEP MAINTAINED AT 6 FEET AND 200 FEET WIDE FROM THE MOUTH TO PORT ROYAL, VA 17 MILES; THENCE 12 FEET DEEP AND 100 FEET WIDE TO FREDERICKSBURG, VA 30 MILES. THE CONSTRUCTION OF 20,401 LINEAR FEET OF CRIB AND PILE DIKES AND 1,066 LINEAR FEET OF RIPRAP STONE DIKE.
2. NOT FOR NAVIGATION USE. THE INFORMATION DERIVED 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.
3. SOUNDINGS SHOWN IN FEET CENTERED ON POINT OF SHOALEST DEPTH IN 15 FT RADIUS GENERATED FROM HYDRO SURVEY DATA.
4. BACKGROUND VIRGINIA BASE MAPPING PROGRAM MOST RECENT IMAGERY GIS WEB SERVICE.
5. AIDS TO NAVIGATION LOCATED WITH SURVEY VESSEL +/- 10 FEET ON DATE OF SURVEY.
6. SURVEY XYZ (+, Y, Z) AND METADATA (+, MET) FILE NAME REFERENCED BY eHYDRO FILE NAME.

VERTICAL REFERENCE DATUM	NOS MLLW	POSITIONING SYSTEM	SYSTEM METHOD	MEAN RANGE OF TIDE
885,000	NAVD83	3D	MLLW	2.79'
333	NAVD83	3D	MLLW	
00+00 to 97+70				

PROJECTED COORDINATE SYSTEM	STATE PLANE	VIRGINIA SOUTH ZONE	US SURVEY FEET	IMPLIED HORIZONTAL ACCURACY	IMPLIED VERTICAL ACCURACY
885,000	885,000	885,000	885,000	4'-1 FOOT	4'-0.5 FEET

MONUMENT	GEODETIC CONTROL	MONUMENTS	NAVD83	MEAN RANGE OF TIDE
CE DAFT, 2004	13.08'	11.52' (GEOD18)		

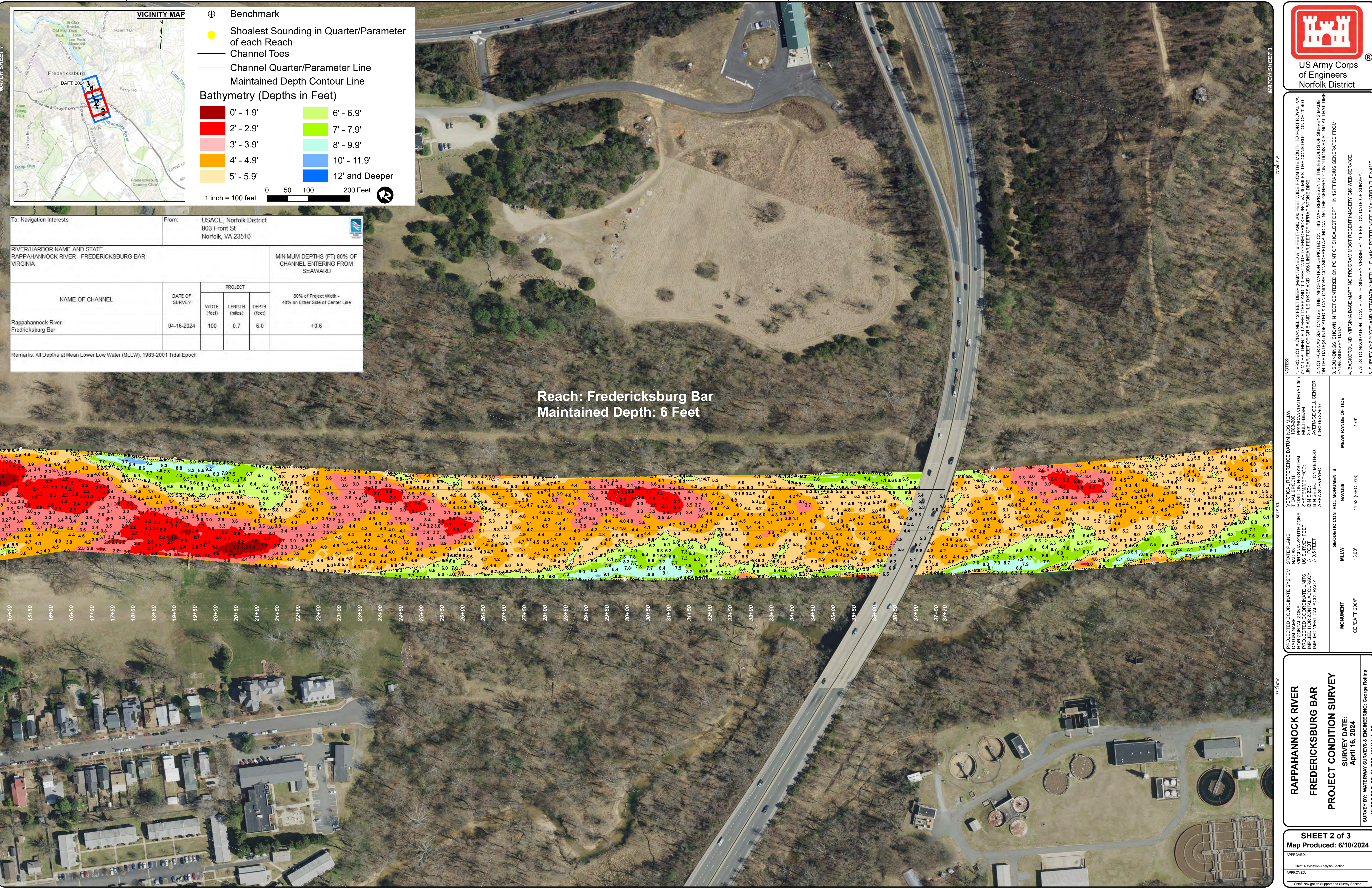
RAPPAHANNOCK RIVER
FREDERICKSBURG BAR
PROJECT CONDITION SURVEY
SURVEY DATE:
April 16, 2024

SHEET 1 of 3
Map Produced: 6/10/2024

APPROVED:
Eric Legaspi
Chief, Navigation Support and Survey Section

APPROVED:
Eric Legaspi
Chief, Navigation Support and Survey Section

SURVEY BY: WATERWAY SURVEYS & ENGINEERING, George Rollins
eHYDRO FILE: RR_88_RFB_3020416_CS



VICINITY MAP

⊕ Benchmark

● Shoalest Sounding in Quarter/Parameter of each Reach

— Channel Toes

— Channel Quarter/Parameter Line

----- Maintained Depth Contour Line

Bathymetry (Depths in Feet)

0' - 1.9'

2' - 2.9'

3' - 3.9'

4' - 4.9'

5' - 5.9'

6' - 6.9'

7' - 7.9'

8' - 9.9'

10' - 11.9'

12' and Deeper

1 inch = 100 feet

050100200

Feet

↻

To: Navigation Interests

From: USACE, Norfolk District
803 Front St
Norfolk, VA 23510

RIVER/HARBOR NAME AND STATE
RAPPAHANNOCK RIVER - FREDERICKSBURG BAR
VIRGINIA

MINIMUM DEPTHS (FT) 80% OF
CHANNEL ENTERING FROM
SEAWARD

NAME OF CHANNEL	DATE OF SURVEY	PROJECT			80% of Project Width - 40% on Either Side of Center Line
		WIDTH (feet)	LENGTH (miles)	DEPTH (feet)	
Rappahannock River Fredricksburg Bar	04-16-2024	100	0.7	6.0	+0.6

Remarks: All Depths at Mean Lower Low Water (MLLW), 1983-2001 Tidal Epoch

US Army Corps
of Engineers
Norfolk District

NOTES

1. PROJECT A CHANNEL 12 FEET DEEP MAINTAINED AT 6 FEET AND 200 FEET WIDE FROM THE MOUTH TO PORT ROYAL, VA 17 MILES; THENCE 12 FEET DEEP AND 100 FEET WIDE TO FREDERICKSBURG, VA 30 MILES. THE CONSTRUCTION OF 20,401 LINEAR FEET OF CRIB AND PILE DIKES AND 1,065 LINEAR FEET OF RIPRAP STONE DINE.

2. NOT FOR NAVIGATION USE. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATE(S) INDICATED & CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.

3. SOUNDINGS SHOWN IN FEET CENTERED ON POINT OF SHOALEST DEPTH IN 15 FT RADIUS GENERATED FROM HYDRO-SURVEY DATA.

4. BACKGROUND VIRGINIA BASE MAPPING PROGRAM MOST RECENT MACREY GIS WEB SERVICE.

5. AIDS TO NAVIGATION LOCATED WITH SURVEY VESSEL +/- 10 FEET ON DATE OF SURVEY.

6. SURVEY XYZ (.XYZ) AND METADATA (.MET) FILE NAME REFERENCED BY eHYDRO FILE NAME.

VERTICAL REFERENCE DATUM: NOS MLLW
PRADA NAV DATUM (A.135)
POSITIONING SYSTEM: MULTI-BEAM
BIN SIZE: 33' (FACE CELL CENTER)
SYSTEM METHOD: 00+00 to 97+70

MEAN RANGE OF TIDE
2.79'

PROJECTED COORDINATE SYSTEM: STATE PLANE
VIRGINIA SOUTH ZONE
HORIZONTAL COORDINATE UNITS: US SURVEY FEET
PROJECTED HORIZONTAL ACCURACY: +/- 1 FOOT
IMPLIED VERTICAL ACCURACY: +/- 0.3 FEET

GEODETIC CONTROL MONUMENTS
NAVD83
11.52' (GEOD18)

MONUMENT
CE DAFT, 2004

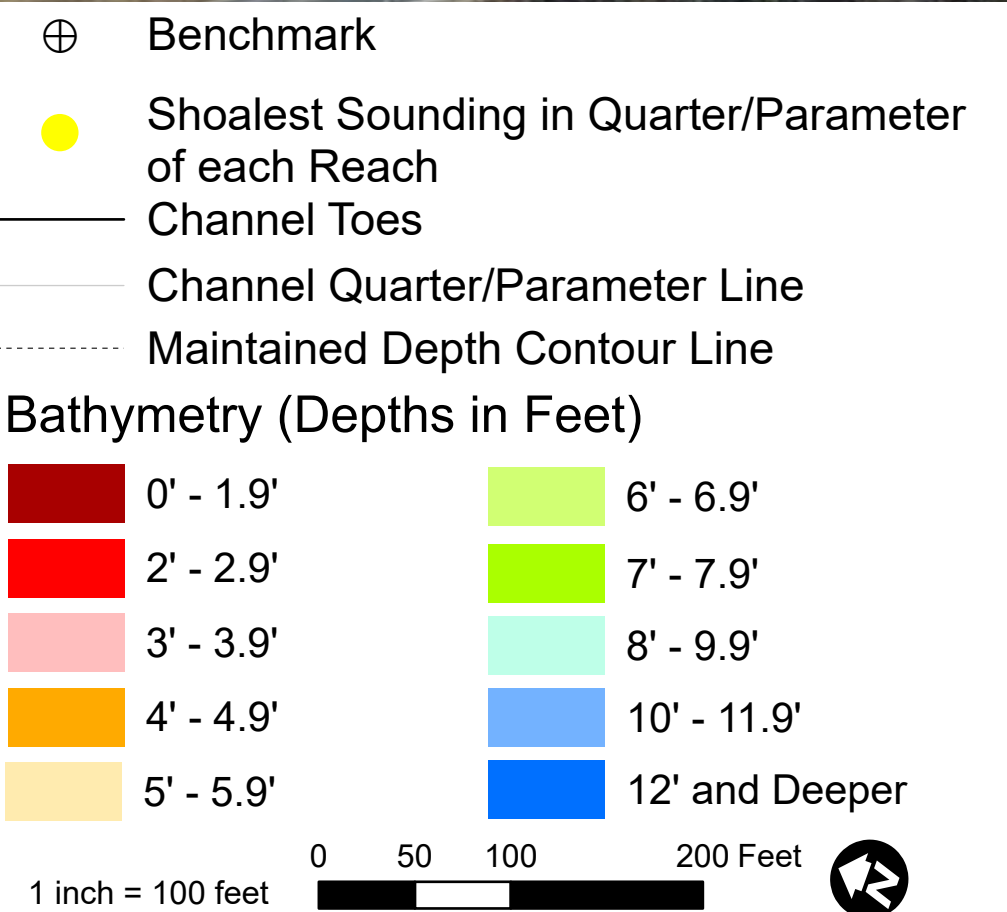
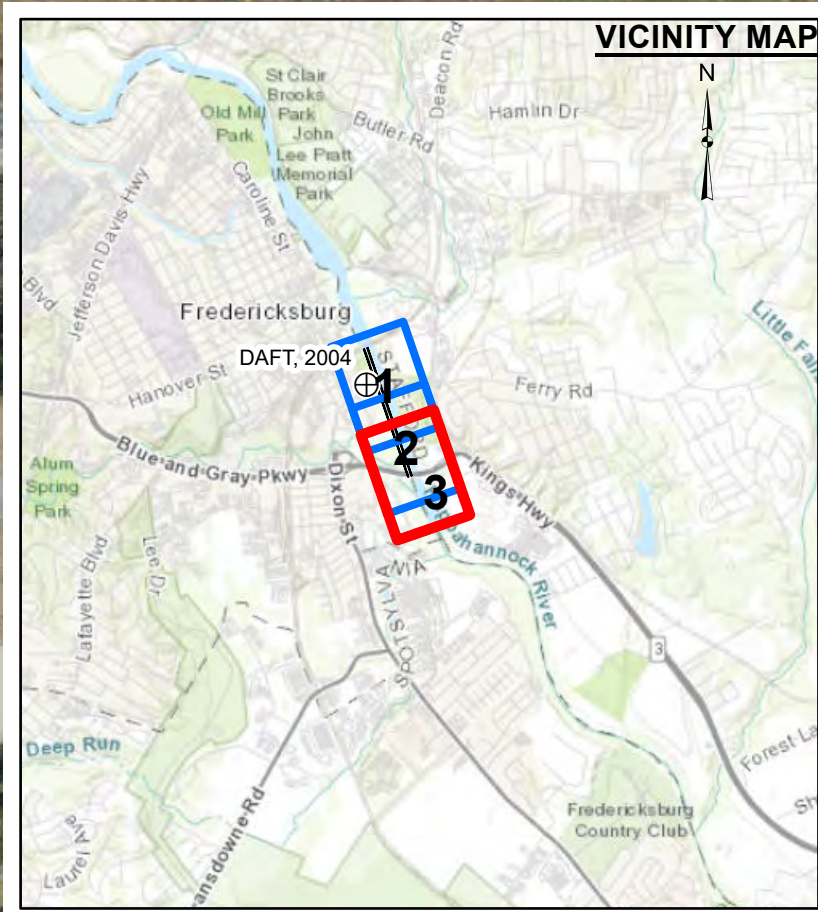
MLLW
13.08'

RAPPAHANNOCK RIVER
FREDERICKSBURG BAR
PROJECT CONDITION SURVEY
SURVEY DATE:
April 16, 2024

SURVEY BY: WATERWAY SURVEYS & ENGINEERING, George Rollins
eHYDRO FILE: RR_98_RFB_20240416_CS

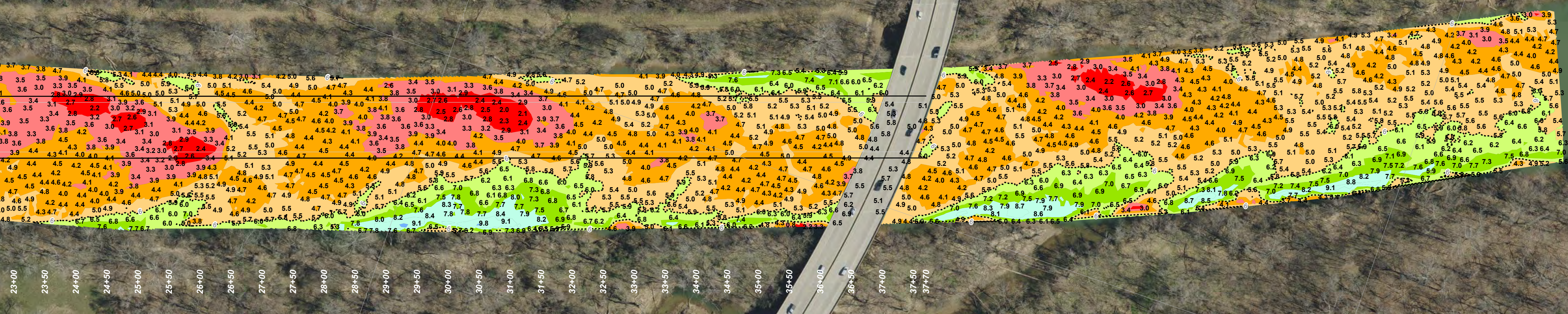
SHEET 2 of 3
Map Produced: 6/10/2024

APPROVED:
Chief, Navigation Analysis Section
APPROVED:
Chief, Navigation Support and Survey Section



To: Navigation Interests		From: USACE, Norfolk District 803 Front St Norfolk, VA 23510			
RIVER/HARBOR NAME AND STATE RAPPAHANNOCK RIVER - FREDERICKSBURG BAR VIRGINIA				MINIMUM DEPTHS (FT) 80% OF CHANNEL ENTERING FROM SEAWARD	
NAME OF CHANNEL	DATE OF SURVEY	PROJECT			80% of Project Width - 40% on Either Side of Center Line
		WIDTH (feet)	LENGTH (miles)	DEPTH (feet)	
Rappahannock River Fredricksburg Bar	04-16-2024	100	0.7	6.0	+0.6
Remarks: All Depths at Mean Lower Low Water (MLLW), 1983-2001 Tidal Epoch					

Reach: Fredericksburg Bar
Maintained Depth: 6 Feet



NOTES:

1. PROJECT A CHANNEL 12 FEET DEEP MAINTAINED AT 6 FEET AND 200 FEET WIDE FROM THE MOUTH TO PORT ROYAL, VA 77 MILES; THENCE 12 FEET DEEP AND 100 FEET WIDE TO FREDERICKSBURG, VA 30 MILES. THE CONSTRUCTION OF 20,401 LINEAR FEET OF CRIB AND PILE DIKES AND 1,000 LINEAR FEET OF RIPRAP STONE DIKE.
2. NOT FOR NAVIGATION USE. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATE(S) INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
3. SOUNDINGS SHOWN IN FEET CENTERED ON POINT OF SHOALEST DEPTH IN 15 FT RADIUS GENERATED FROM HYDRO SURVEY DATA.
4. BACKGROUND: VIRGINIA BASE MAPPING PROGRAM MOST RECENT MACREY GIS WEB SERVICE.
5. AIDS TO NAVIGATION LOCATED WITH SURVEY VESSEL +/- 10 FEET ON DATE OF SURVEY.
6. SURVEY XYZ (+, -) AND METADATA (+, -) METI FILE NAME REFERENCED BY eHYDRO FILE NAME.

VERTICAL REFERENCE DATUM: NOS MLLW POSITIONING SYSTEM: PRKADAN DATUM (A 1.35) MULTI-BEAM SONAR: 333 BIN SIZE: 0.5 METERS AREA SURVEYED: 00+00 to 37+70	MEAN RANGE OF TIDE 2.79'
PROJECTED COORDINATE SYSTEM: STATE PLANE HORIZONTAL ZONE: VIRGINIA SOUTH ZONE PROJECTED HORIZONTAL UNITS: US SURVEY FEET IMPLIED HORIZONTAL ACCURACY: +/- 1.0 FOOT IMPLIED VERTICAL ACCURACY: +/- 0.3 FOOT	GEODETIC CONTROL MONUMENTS NAVD83 11.52' (GEOD18)
MONUMENT CE DAFT, 2004"	MLLW 13.08'

RAPPAHANNOCK RIVER
FREDERICKSBURG BAR
PROJECT CONDITION SURVEY
SURVEY DATE:
April 16, 2024
SURVEY BY: WATERWAY SURVEYS & ENGINEERING, George Rollins
eHYDRO FILE: RR_38_RFB_20240416_CS

SHEET 3 of 3
Map Produced: 6/10/2024
APPROVED:
Chief, Navigation Analysis Section
APPROVED:
Chief, Navigation Support and Survey Section