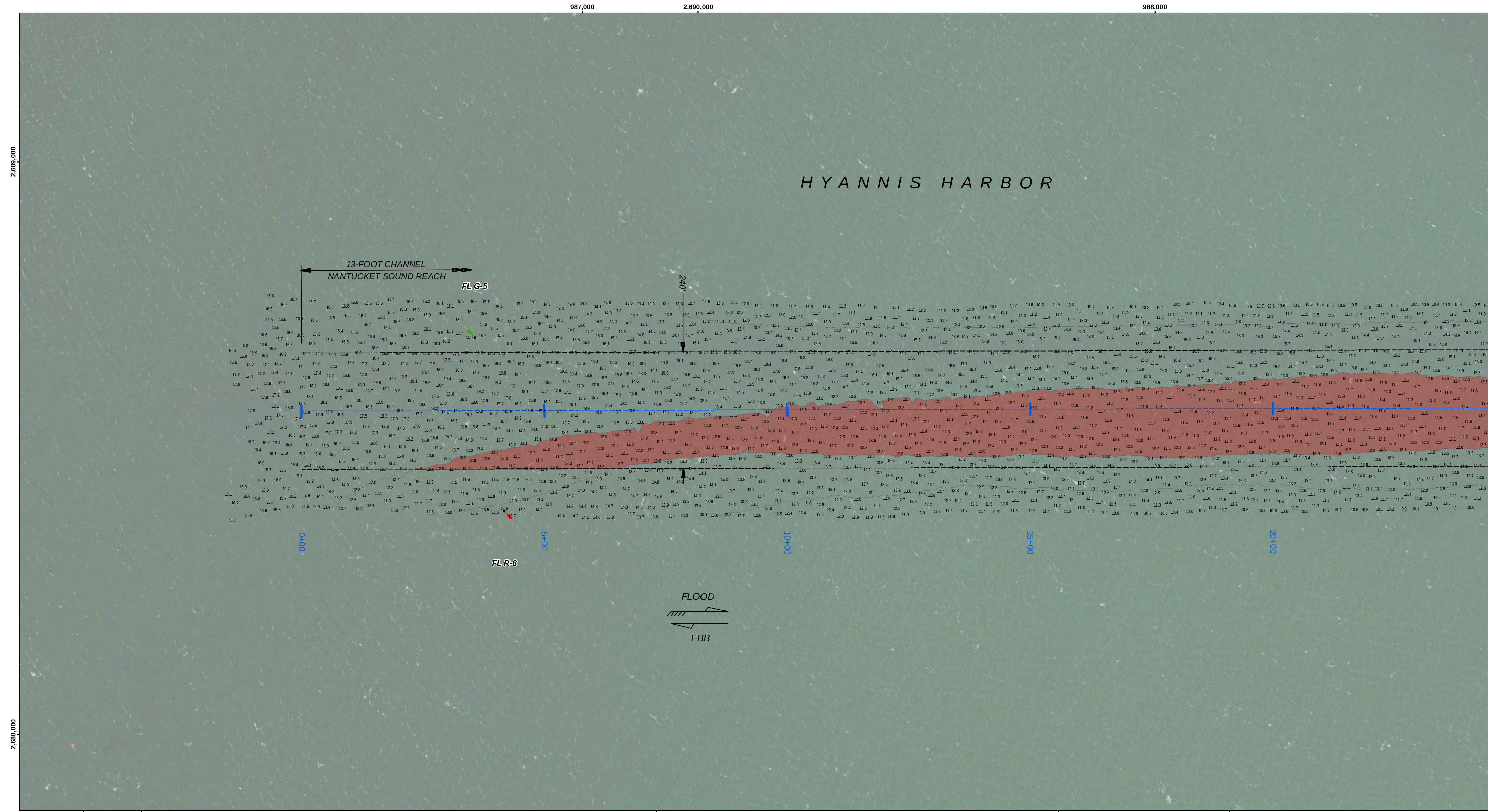




LEGEND

--- Federal Navigation Channel

--- Channel Center Line

..... Cable/Pipeline Area

— Contour Line

⊗ Obstruction Point

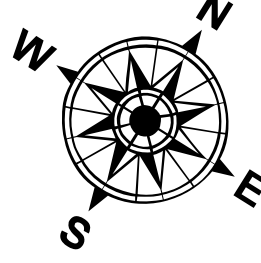
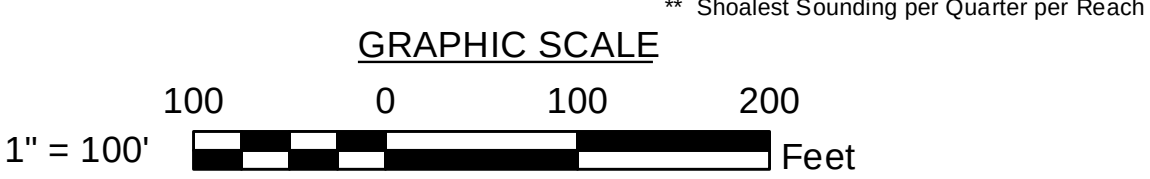
⊗ Fixed Navigation Aids

! Red Navigation Buoy

! Green Navigation Buoy

Shoaling Area

● Shoalest Sounding**



Notes:
Horizontal Datum: Mass Mainland, MA-2001 NAD 83
Distance Units: U.S. Survey Feet
Vertical Datum: MLLW
Depth Units: U.S. Survey Feet
Vessel Name: KEEGAN
Sonar System: Reson T50 (Multibeam Sonar)
Sounding Frequency: 400 kHz
Survey Method: RTK GPS Tides
GPS System: Trimble SPS 855 (RTK)
RTK Base Station: Smartnet Max
Software Used: Hypack
Sounding Sort Distance: 20'
Field Books: R&H 4213
Survey No.: HYA_CS_2019_006
Reference NOAA Chart No.: 13229

General Notes
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Water Level Information
Tides were recorded using RTK GPS. The MLLW to NAVD88 corrections for this project range from 2.21 feet to 2.25 feet. These corrections are referenced from NOAA's V-Datum Model Version 3.9, ME/NH/MA region Version 1.3, in the vicinity of Hyannis Harbor. NAVD88 is above MLLW; therefore the correction should be added to NAVD88 to convert to MLLW. No tide gauges were used on this project.

Project Remarks
None

U.S. ARMY CORPS OF ENGINEERS NEW ENGLAND DISTRICT		HYANNIS HARBOR (HYANNIS) AND YARMOUTH, MASSACHUSETTS	
SUBMITTED BY: William Walker		SURVEYED BY: PELJ	
APPROVED BY: NAE Survey		CHECKED BY: WHW	
MAP DOCUMENT MA_48_HYA_20190730_CS_2019_006		ISSUE DATE: 9/11/2019	
SIZE A1S1D			

LEGEND

--- Federal Navigation Channel

--- Channel Center Line

..... Cable/Pipeline Area

— Contour Line

⊗ Obstruction Point

⊗ Fixed Navigation Aids

! Red Navigation Buoy

! Green Navigation Buoy

Shoaling Area

● Shoalest Sounding**

LEGEND

--- Federal Navigation Channel

--- Channel Center Line

..... Cable/Pipeline Area

— Contour Line

⊗ Obstruction Point

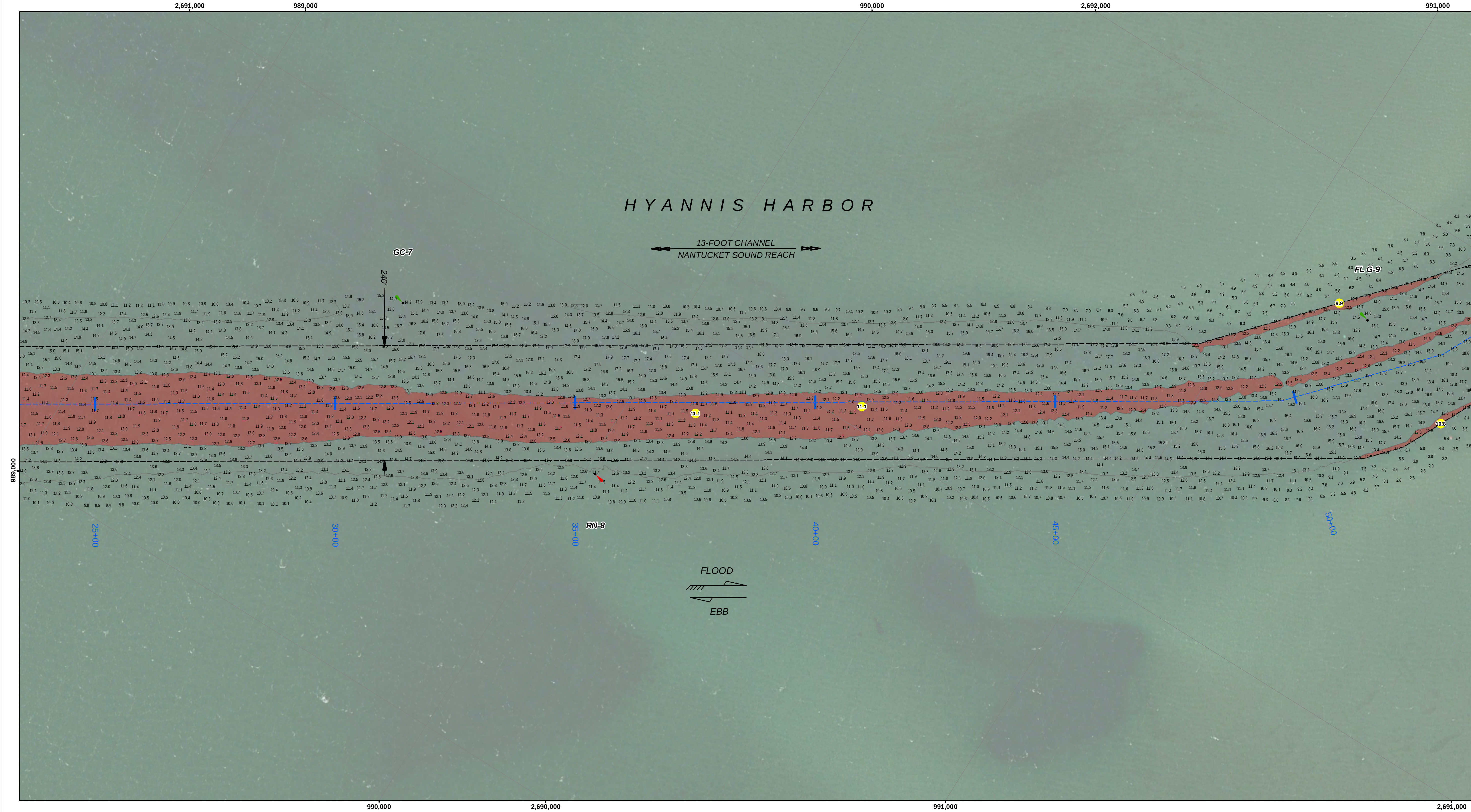
⊗ Fixed Navigation Aids

! Red Navigation Buoy

! Green Navigation Buoy

Shoaling Area

● Shoalest Sounding**



LEGEND

Channel Center Line

.....

Cable/Pipeline Area

—

Contour Line

⊗

Obstruction Point

⊗

Fixed Navigation Aids

📍

Red Navigation Buoy

📍

Green Navigation Buoy

🔴

Shoaling Area

🟡

Shoalest Sounding**

*** Shoalest Sounding per Quarter per Reach

GRAPHIC SCALE

0

100

200

0

100

200

1" = 100'

Feet

Notes:

Horizontal Datum: Mass Mainland, MA-2001 NAD 83
Distance Units: U.S. Survey Feet
Vertical Datum: MLLW
Depth Units: U.S. Survey Feet
Vessel Name: KEEGAN
Sonar System: Reson T50 (Multibeam Sonar)
Sounding Frequency: 400 kHz
Survey Method: RTK GPS Tides
GPS System: Trimble SPS 855 (RTK)
RTK Base Station: Smartnet Max
Software Used: Hypack
Sounding Sort Distance: 20'
Field Books: R&H 4213
Survey No.: HYA_CS_2019_006
Reference NOAA Chart No.: 13229

The information depicted on these charts represents the results of surveys made on the dates indicated, and can only be considered as indicating the conditions existing at that time.

General Notes

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Project Remarks

None

Water Level Information

Tides were recorded using RTK GPS. The MLLW to NAVD88 corrections for this project range from 2.21 feet to 2.25 feet. These corrections are referenced from NOAA's V-Datum Model Version 3.9, ME/NH/MA region Version 1.3, in the vicinity of Hyannis Harbor. NAVD88 is above MLLW; therefore the correction should be added to NAVD88 to convert to MLLW. No tide gauges were used on this project.

HYANNIS HARBOR (HYANNIS) AND YARMOUTH, MASSACHUSETTS

CONDITION SURVEY

13-FOOT CHANNELS AND TURNING BASIN

12-FOOT ANCHORAGES

SHEET IDENTIFICATION

Hyannis Harbor

Sheet 2 of 8

Revision Number: 4.0-20190322

US Army Corps of Engineers
District: CENAE

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	SUBMITTED BY: William Walker		
	APPROVED BY: NAE Survey		
	SIZE: A1S1D	MAP DOCUMENT: MA_48_HYA_20190730_CS_2019_006	

HYANNIS HARBOR (HYANNIS) AND YARMOUTH, MASSACHUSETTS

CONDITION SURVEY

13-FOOT CHANNELS AND TURNING BASIN

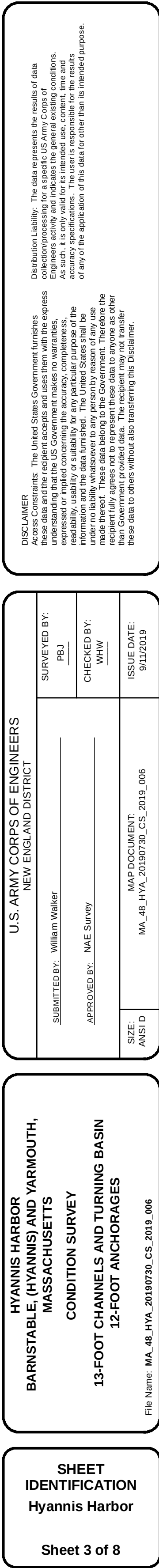
12-FOOT ANCHORAGES

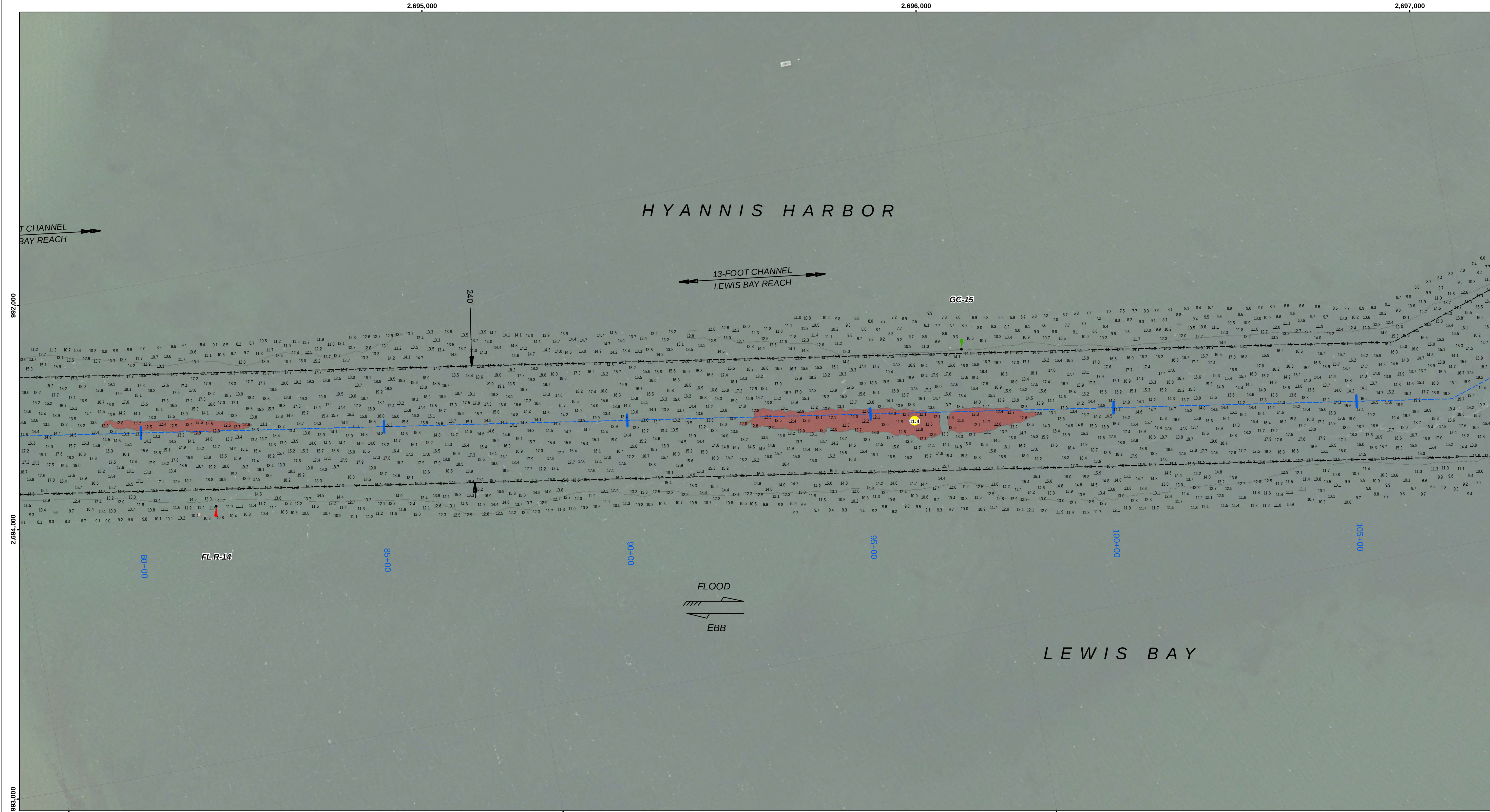
SHEET IDENTIFICATION

Hyannis Harbor

Sheet 2 of 8

File Name: MA_48_HYA_20190730_CS_2019_006







**US Army Corps
of Engineers**
District: CENAE

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U.S. ARMY CORPS OF ENGINEERS NEW ENGLAND DISTRICT	SUBMITTED BY: William Walker	CHECKED BY: WHW	ISSUE DATE: 9/11/2019
	APPROVED BY: NAE Survey		MAP DOCUMENT: MA_48_HYA_20180730_CS_2019_006
	SIZE: A1S1D		

**HYANNIS HARBOR
(HYANNIS) AND YARMOUTH,
MASSACHUSETTS**

CONDITION SURVEY

13-FOOT CHANNELS AND TURNING BASIN

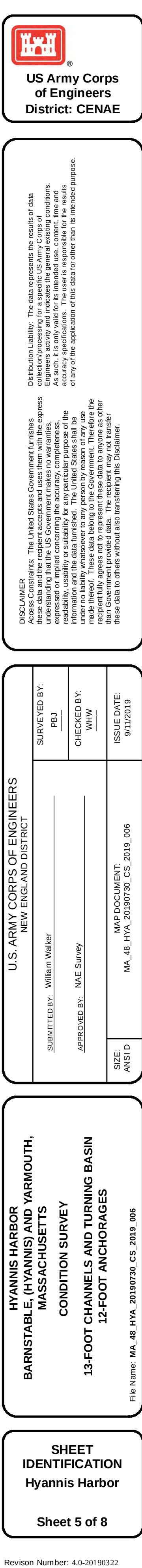
12-FOOT ANCHORAGES

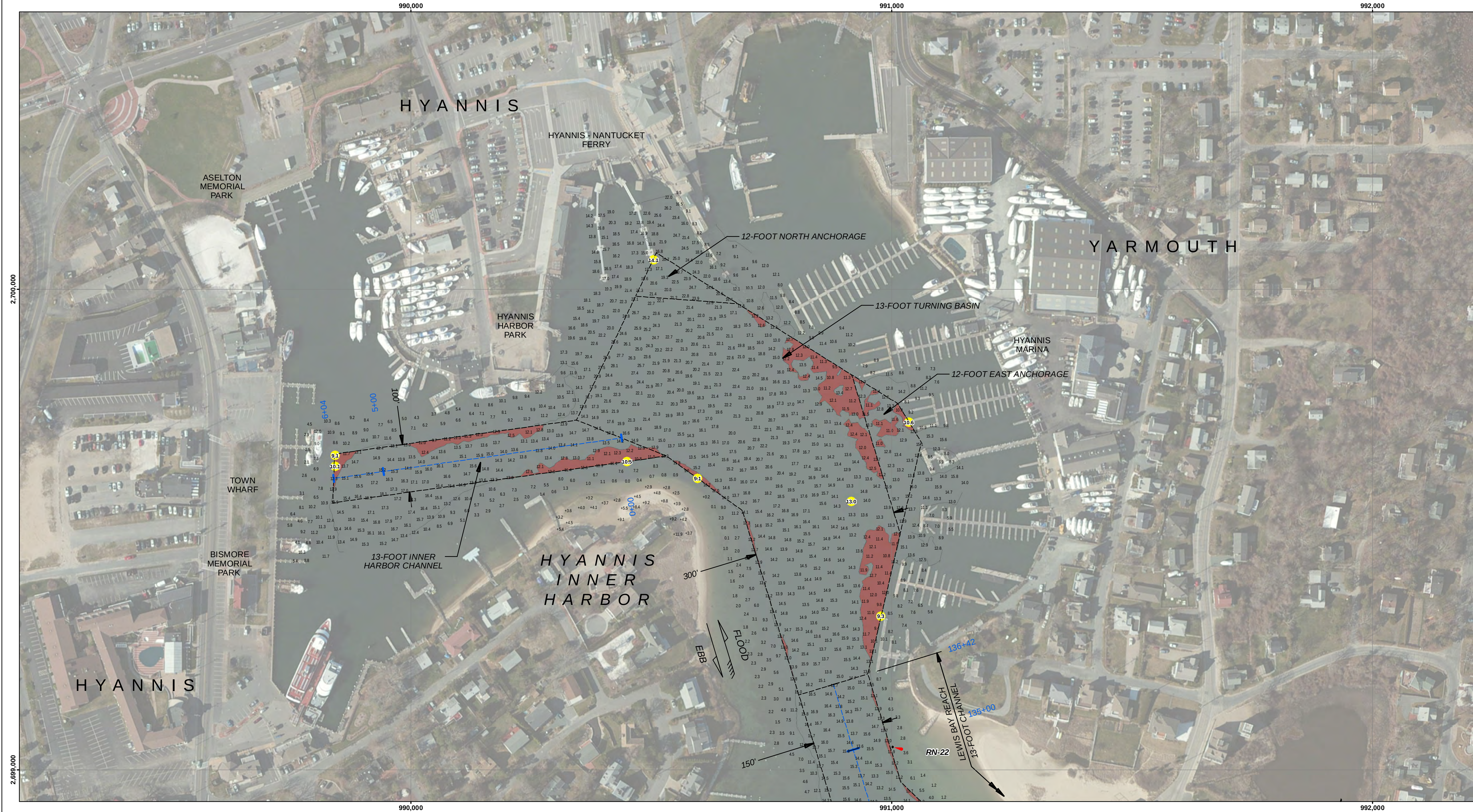
File Name: MA_48_HYA_20180730_CS_2019_006

**SHEET
IDENTIFICATION**

Hyannis Harbor

Sheet 4 of 8





LEGEND

--- Federal Navigation Channel

--- Channel Center Line

..... Cable/Pipeline Area

— Contour Line

⊗ Obstruction Point

⊗ Fixed Navigation Aids

📍 Red Navigation Buoy

📍 Green Navigation Buoy

🔴 Shoaling Area

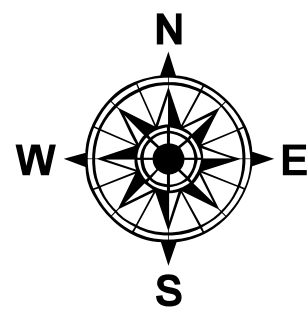
🟡 Shoalest Sounding**

GRAPHIC SCALE

1" = 100'

0 100 200 Feet

** Shoalest Sounding per Quarter per Reach



Notes:
Horizontal Datum: Mass Mainland, MA-2001 NAD 83
Distance Units: U.S. Survey Feet
Vertical Datum: MLLW
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Project Remarks
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**HYANNIS HARBOR
BARNSTABLE, (HYANNIS) AND YARMOUTH,
MASSACHUSETTS
CONDITION SURVEY
13-FOOT CHANNELS AND TURNING BASIN
12-FOOT ANCHORAGES**

**SHEET
IDENTIFICATION
Hyannis Harbor**

Sheet 6 of 8



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U.S. ARMY CORPS OF ENGINEERS NEW ENGLAND DISTRICT			
SUBMITTED BY: William Walker		SURVEYED BY: PEJ	
APPROVED BY: NAE Survey		CHECKED BY: WHW	
SIZE: ANS1D	MAP DOCUMENT: MA_48_HYA_20190730_CS_2019_006		ISSUE DATE: 9/11/2019