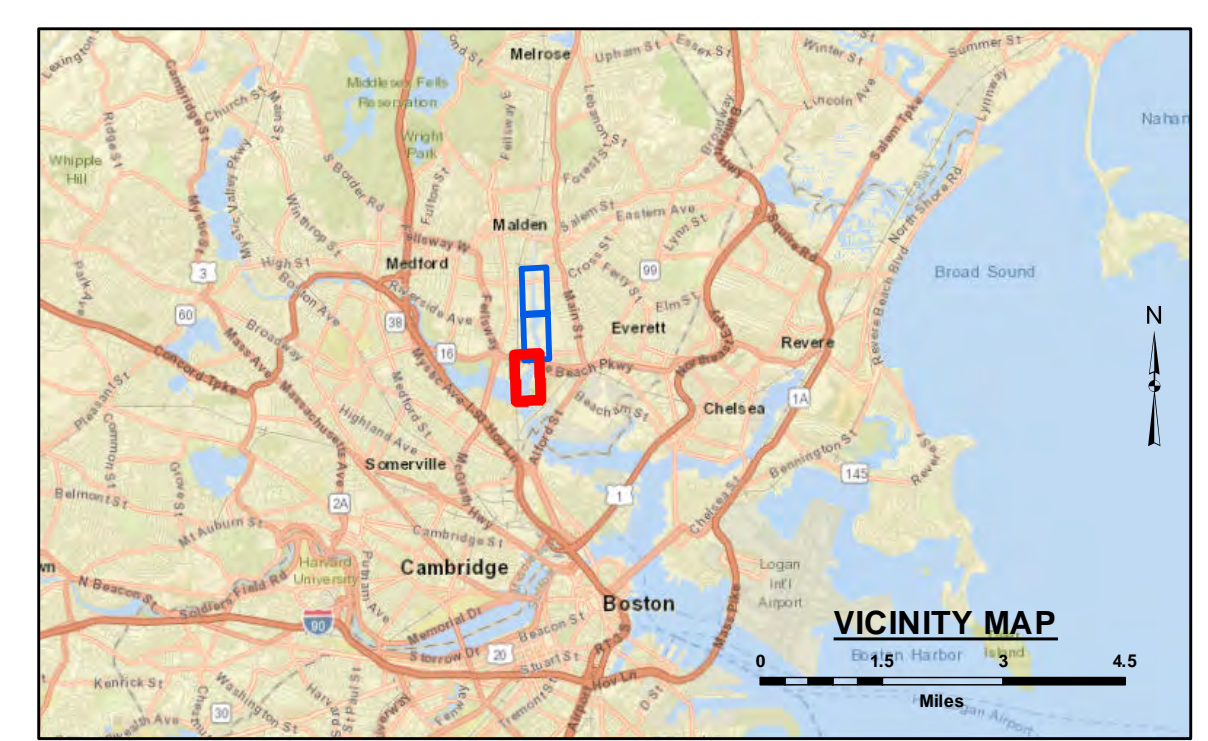


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SURVEYED BY: FWP		CHECKED BY: KRW		ISSUE DATE: 4/8/2016
SUBMITTED BY: Arthur Baines		APPROVED BY: NAE Survey		MAP DOCUMENT: MA_15_MAL_2017015_CS_20
SIZE: ANSI D				

MALDEN RIVER
MALDEN, MEDFORD AND EVERETT, MA
CONDITION SURVEY
6-FOOT CHANNEL
File Name: MA_15_MAL_2017015_CS_20

SHEET IDENTIFICATION
Malden River
Sheet 1 of 3



LEGEND

--- Federal Navigation Channel	✕ Fixed Navigation Aids
..... Cable Submarine	⊗ Obstruction Point
- - - Cable Overhead	🚩 Red Navigation Buoy
--- Pipes (Gas/Sewer)	🟢 Green Navigation Buoy
— Contour Line	🔴 Shoaling Area
	● Shoalest Sounding**

** Shoalest Sounding per Quarter per Reach

GRAPHIC SCALE
1" = 100'
0 100 200 Feet

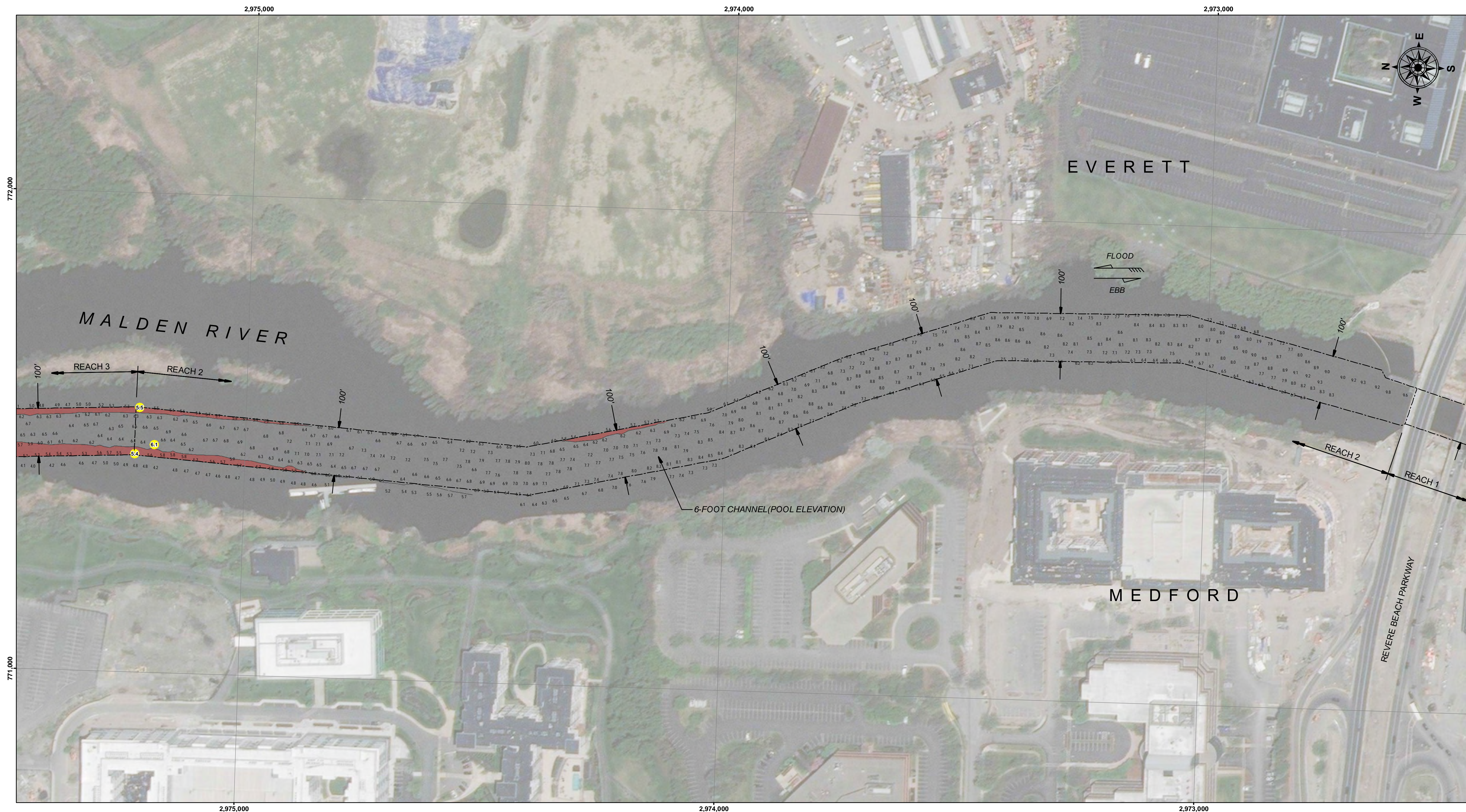
Notes:
Horizontal Datum: Mass Mainland, MA-2001
Distance Units: U.S. Survey Feet
Vertical Datum: Pool Elevation 6.0 FT
Depth Units: U.S. Survey Feet
Vessel Name: Popham Beach
Sonaar System: Odom Mk III (Single Trace)
Sounding Frequency: 200 MHz
Survey Method: RTK GPS TIDES
GPS System: Trimble SPS 855 (RTK)
RTK Base Station: Station MTS Woburn
Software Used: Software_Used
Sounding Sort Distance: 20'
Field Books: R&H 5102
Survey No.: 17-2476
Reference NOAA Chart No.: Reference_NOAA_Chart

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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Bench Mark Information
Soundings upstream of the Amelia Earhart Dam are referenced to a Pool Elevation of 6.0 feet. RTK tides based on NAVD88 were recorded during the surveys but turned off during the editing process allowing for the tide gauge adjustment to be made so that all final depths are based upon a pool level of 6.0 feet.

Project Remarks
A 6-Foot MLLW Channel was established prior to the installation of the Amelia Earhart Dam. After installation of the Dam, the soundings are now vertically referenced to a Pool Elevation of 6-Foot. A Pool Elevation of 6.0 Feet equals 4.9 Feet above MLLW.



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SURVEYED BY: FWP		CHECKED BY: KRW		ISSUE DATE: 4/2016
SUBMITTED BY: Arthur Baines		APPROVED BY: NAE Survey		MAP DOCUMENT: MA_15_MAL_20171015_CS_20
SIZE: ANSI D				

**MALDEN RIVER
MALDEN, MEDFORD AND EVERETT, MA**

CONDITION SURVEY

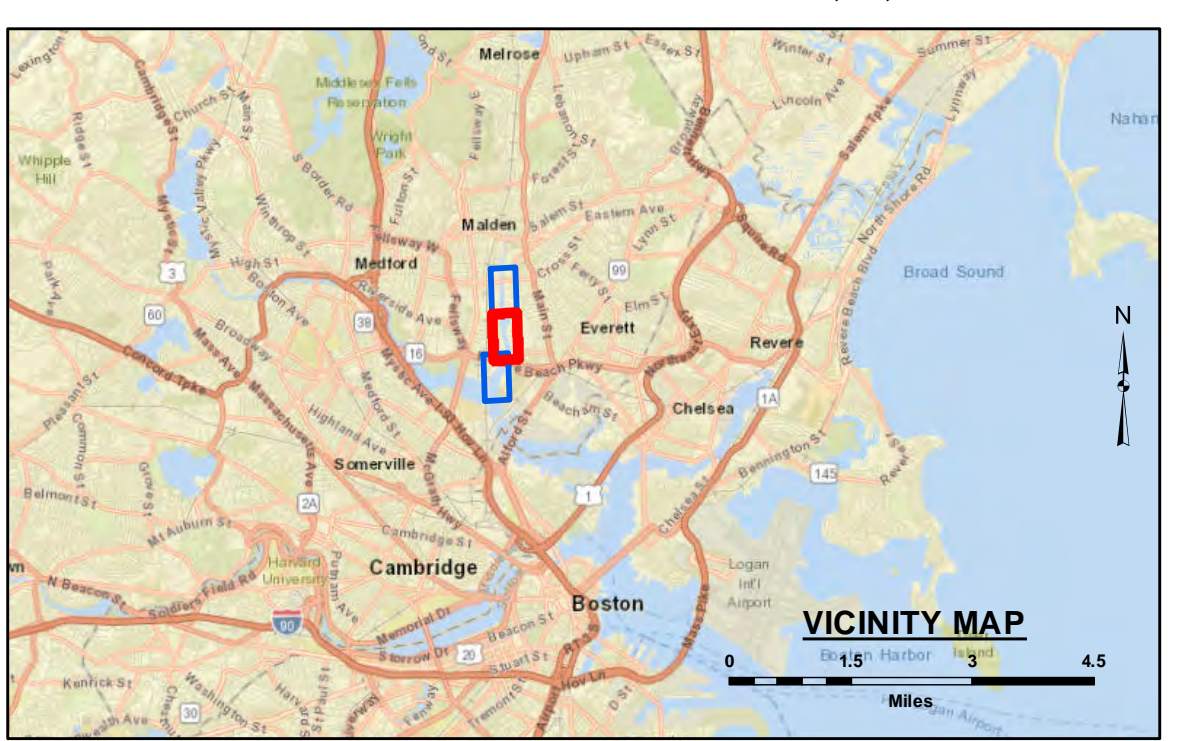
6-FOOT CHANNEL

File Name: MA_15_MAL_20171015_CS_20

SHEET IDENTIFICATION

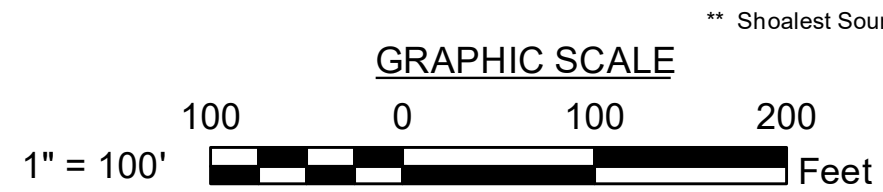
Malden River

Sheet 2 of 3



LEGEND

--- Federal Navigation Channel	✕ Fixed Navigation Aids
..... Cable Submarine	⊗ Obstruction Point
- - - Cable Overhead	🚩 Red Navigation Buoy
--- Pipes (Gas/Sewer)	🟢 Green Navigation Buoy
— Contour Line	🔴 Shoaling Area
	● Shoalest Sounding**



** Shoalest Sounding per Quarter per Reach

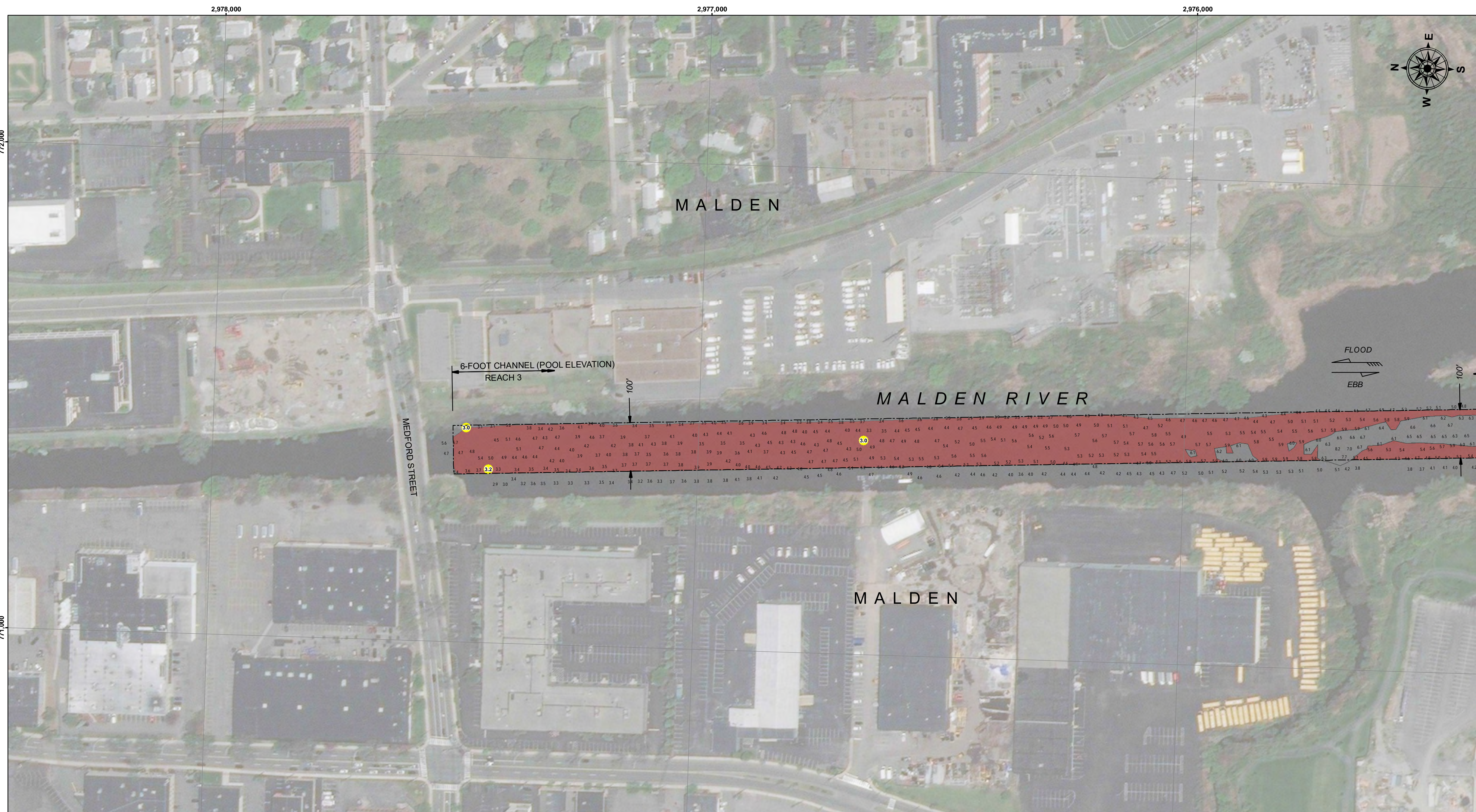
Notes:
 Horizontal Datum: Mass Mainland, MA-2001
 Distance Units: U.S. Survey Feet
 Vertical Datum: Pool Elevation 6.0 FT
 Depth Units: U.S. Survey Feet
 Vessel Name: Popham Beach
 Sonar System: Odom Mk III (Single Trace)
 Sounding Frequency: 200 MHz
 Survey Method: RTK GPS TIDES
 GPS System: Trimble SPS 855 (RTK)
 RTK Base Station: Station MTS Woburn
 Software Used: Software_Used
 Sounding Sort Distance: 20'
 Field Books: R&H 5102
 Survey No.: 17-2476
 Reference NOAA Chart No.: Reference_NOAA_Chart

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Project Remarks
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Third Party Information: These data belong to the Government. Therefore the recipient may not transfer these data to others without also transferring this Disclaimer.

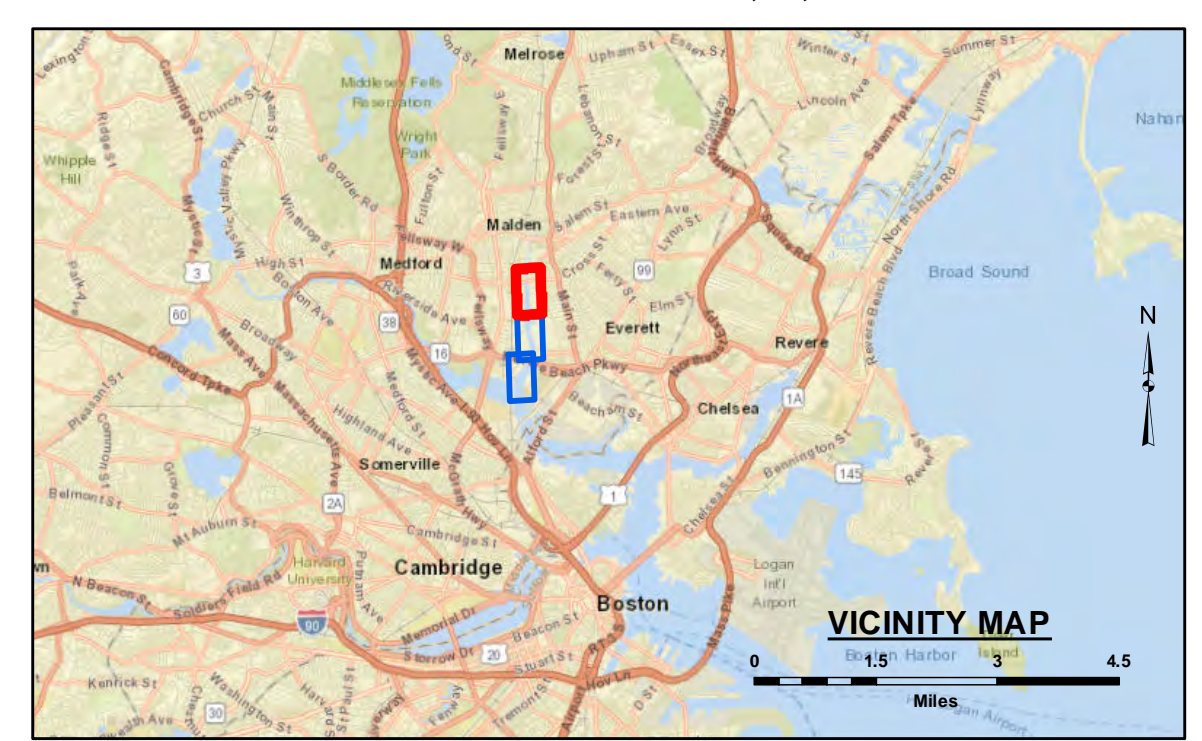
SURVEYED BY: FMP		CHECKED BY: KEW		ISSUE DATE: 4/20/16	
SUBMITTED BY: Arthur Baines		APPROVED BY: NAE Survey		MAP DOCUMENT: MA_15_MAL_2017_015_CS_20	
SIZE: ANSI D					

**MALDEN RIVER
MALDEN, MEDFORD AND EVERETT, MA**

CONDITION SURVEY

6-FOOT CHANNEL

File Name: MA_15_MAL_2017_015_CS_20



LEGEND

--- Federal Navigation Channel	✂ Fixed Navigation Aids
..... Cable Submarine	⊗ Obstruction Point
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** Shoalest Sounding per Quarter per Reach

GRAPHIC SCALE

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0 100 200 Feet

Notes:
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