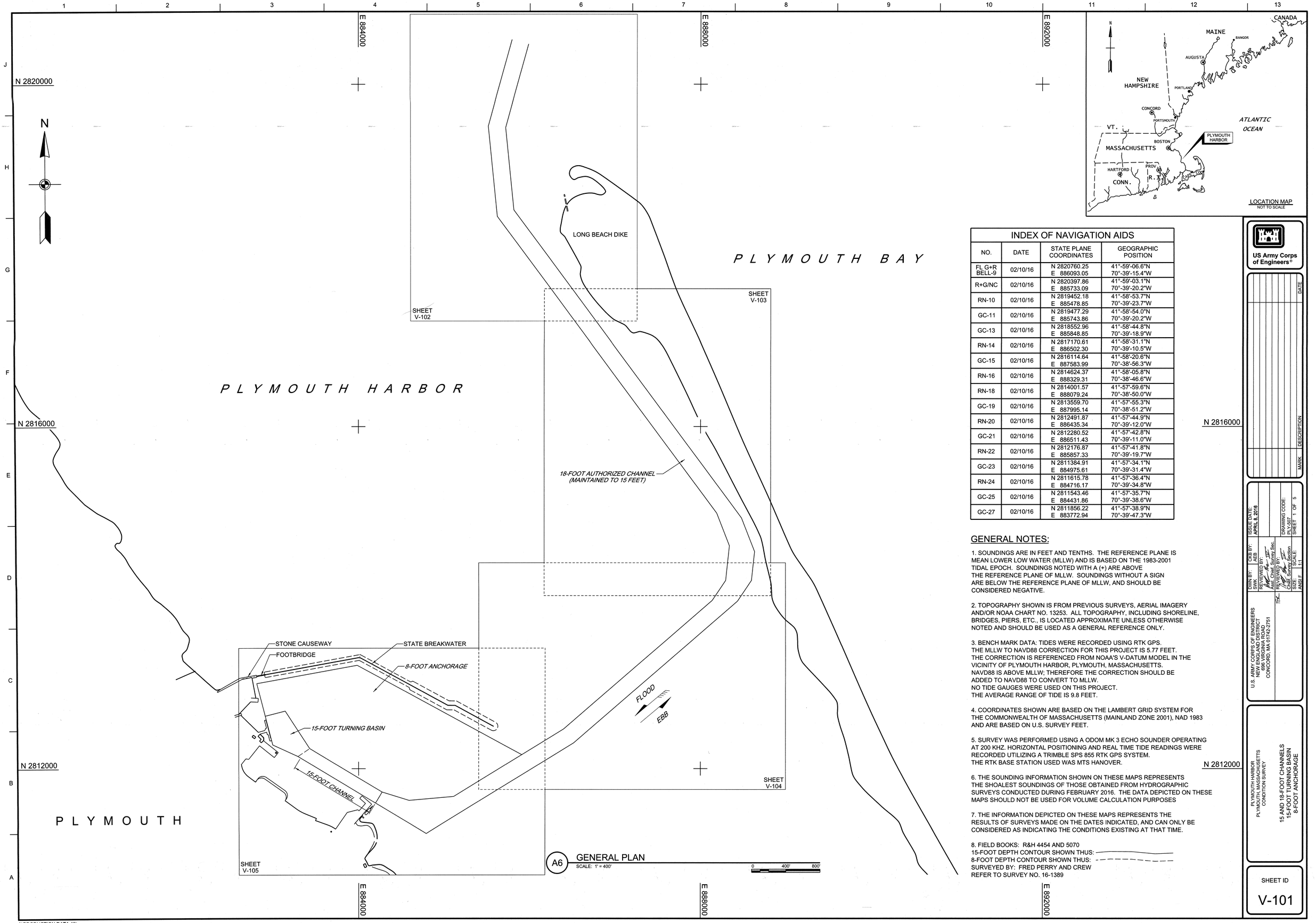


INDEX OF NAVIGATION AIDS

NO.	DATE	STATE PLANE COORDINATES	GEOGRAPHIC POSITION
FL G+R BELL-9	02/10/16	N 2820760.25 E 886093.05	41°-59'-06.6"N 70°-39'-15.4"W
R+G/NC	02/10/16	N 2820397.86 E 885733.09	41°-59'-03.1"N 70°-39'-20.2"W
RN-10	02/10/16	N 2819452.18 E 885478.85	41°-58'-53.7"N 70°-39'-23.7"W
GC-11	02/10/16	N 2819477.29 E 885743.86	41°-58'-54.0"N 70°-39'-20.2"W
GC-13	02/10/16	N 2818552.96 E 885848.85	41°-58'-44.8"N 70°-39'-18.9"W
RN-14	02/10/16	N 2817170.61 E 886502.30	41°-58'-31.1"N 70°-39'-10.5"W
GC-15	02/10/16	N 2816114.64 E 887583.99	41°-58'-20.6"N 70°-38'-56.3"W
RN-16	02/10/16	N 2814624.37 E 888329.31	41°-58'-05.8"N 70°-38'-46.6"W
RN-18	02/10/16	N 2814001.57 E 888079.24	41°-57'-59.6"N 70°-38'-50.0"W
GC-19	02/10/16	N 2813559.70 E 887995.14	41°-57'-55.3"N 70°-38'-51.2"W
RN-20	02/10/16	N 2812491.87 E 886435.34	41°-57'-44.9"N 70°-39'-12.0"W
GC-21	02/10/16	N 2812280.52 E 886511.43	41°-57'-42.8"N 70°-39'-11.0"W
RN-22	02/10/16	N 2812176.87 E 885857.33	41°-57'-41.8"N 70°-39'-19.7"W
GC-23	02/10/16	N 2811384.91 E 884975.61	41°-57'-34.1"N 70°-39'-31.4"W
RN-24	02/10/16	N 2811615.78 E 884716.17	41°-57'-36.4"N 70°-39'-34.8"W
GC-25	02/10/16	N 2811543.46 E 884431.86	41°-57'-35.7"N 70°-39'-38.6"W
GC-27	02/10/16	N 2811856.22 E 883772.94	41°-57'-38.9"N 70°-39'-47.3"W

GENERAL NOTES:

1. SOUNDINGS ARE IN FEET AND TENTHS. THE REFERENCE PLANE IS MEAN LOWER LOW WATER (MLLW) AND IS BASED ON THE 1983-2001 TIDAL EPOCH. SOUNDINGS NOTED WITH A (+) ARE ABOVE THE REFERENCE PLANE OF MLLW. SOUNDINGS WITHOUT A SIGN ARE BELOW THE REFERENCE PLANE OF MLLW, AND SHOULD BE CONSIDERED NEGATIVE.

2. TOPOGRAPHY SHOWN IS FROM PREVIOUS SURVEYS, AERIAL IMAGERY AND/OR NOAA CHART NO. 13253. ALL TOPOGRAPHY, INCLUDING SHORELINE, BRIDGES, PIERS, ETC., IS LOCATED APPROXIMATE UNLESS OTHERWISE NOTED AND SHOULD BE USED AS A GENERAL REFERENCE ONLY.

3. BENCH MARK DATA: TIDES WERE RECORDED USING RTK GPS.
THE MLLW TO NAVD88 CORRECTION FOR THIS PROJECT IS 5.77 FEET.
THE CORRECTION IS REFERENCED FROM NOAA'S V-DATUM MODEL IN THE VICINITY OF PLYMOUTH HARBOR, PLYMOUTH, MASSACHUSETTS.
NAVD88 IS ABOVE MLLW; THEREFORE THE CORRECTION SHOULD BE ADDED TO NAVD88 TO CONVERT TO MLLW.
NO TIDE GAUGES WERE USED ON THIS PROJECT.
THE AVERAGE RANGE OF TIDE IS 9.8 FEET.

4. COORDINATES SHOWN ARE BASED ON THE LAMBERT GRID SYSTEM FOR THE COMMONWEALTH OF MASSACHUSETTS (MAINLAND ZONE 2001), NAD 1983 AND ARE BASED ON U.S. SURVEY FEET.

5. SURVEY WAS PERFORMED USING A ODOM MK 3 ECHO SOUNDER OPERATING AT 200 KHZ. HORIZONTAL POSITIONING AND REAL TIME TIDE READINGS WERE RECORDED UTILIZING A TRIMBLE SPS 855 RTK GPS SYSTEM.
THE RTK BASE STATION USED WAS MTS HANOVER.

6. THE SOUNDING INFORMATION SHOWN ON THESE MAPS REPRESENTS THE SHOALEST SOUNDINGS OF THOSE OBTAINED FROM HYDROGRAPHIC SURVEYS CONDUCTED DURING FEBRUARY 2016. THE DATA DEPICTED ON THESE MAPS SHOULD NOT BE USED FOR VOLUME CALCULATION PURPOSES

7. THE INFORMATION DEPICTED ON THESE MAPS REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED, AND CAN ONLY BE CONSIDERED AS INDICATING THE CONDITIONS EXISTING AT THAT TIME.

8. FIELD BOOKS: R&H 4454 AND 5070
15-FOOT DEPTH CONTOUR SHOWN THUS: ——
8-FOOT DEPTH CONTOUR SHOWN THUS: - - - -
SURVEYED BY: FRED PERRY AND CREW
REFER TO SURVEY NO. 16-1389

US Army Corps of Engineers®

DATE | DESCRIPTION | MARK

U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
696 VIRGINIA ROAD
CONCORD, MA 01742-2751

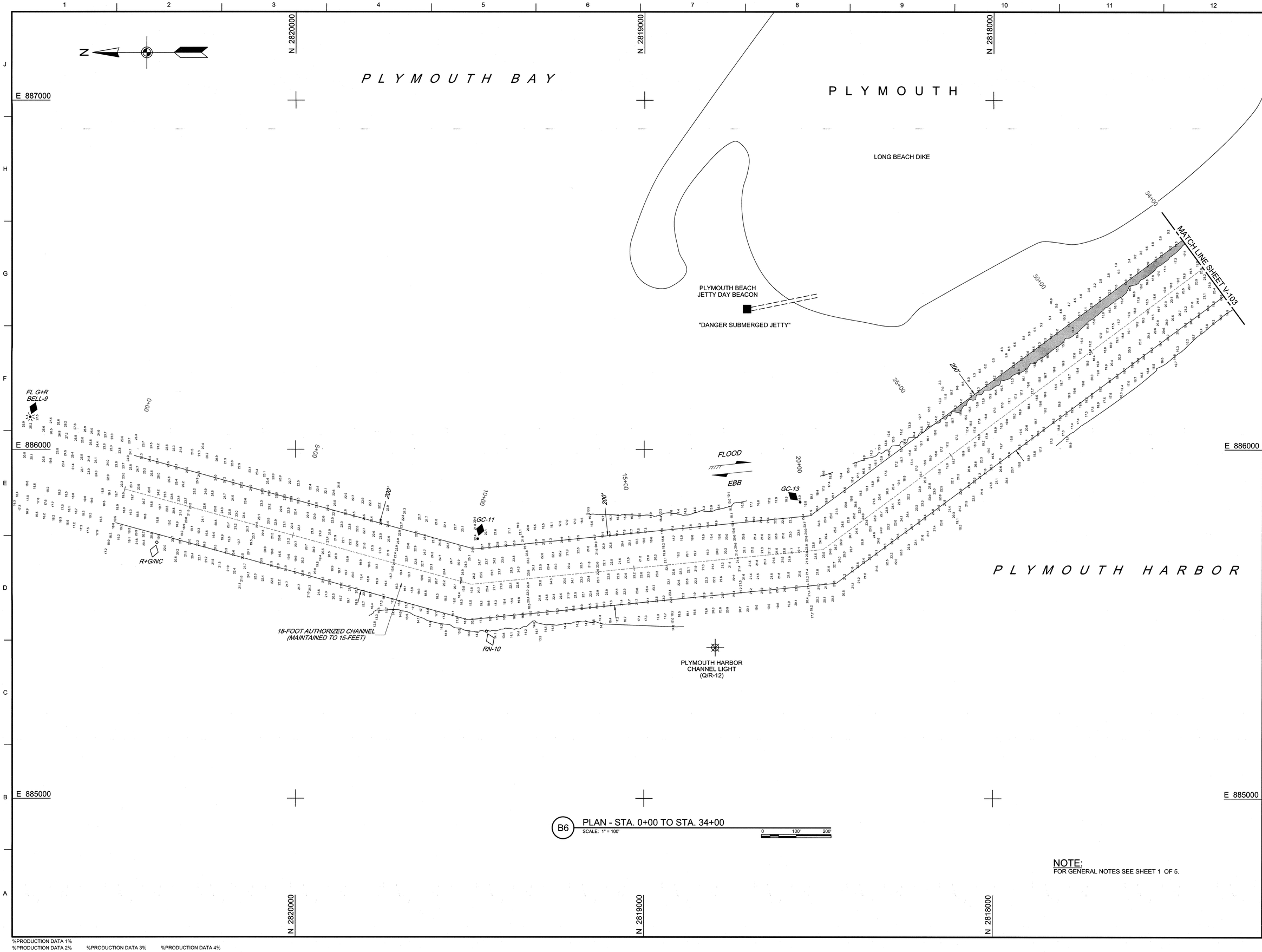
DWN BY: SWK | CKD BY: JEB
REVIEWED BY: Acting Chief, Survey Sec.
APPROVED BY: Chief, Survey Section
SIZE: E | SCALE: 1:1
ISSUE DATE: APRIL 4, 2016
DRAWING CODE: PLY-507
SHEET 1 OF 5

PLYMOUTH HARBOR
PLYMOUTH, MASSACHUSETTS
CONDITION SURVEY

15 AND 18-FOOT CHANNELS
15-FOOT TURNING BASIN
8-FOOT ANCHORAGE

SHEET ID
V-101

%PRODUCTION DATA 1%
%PRODUCTION DATA 2% %PRODUCTION DATA 3% %PRODUCTION DATA 4%



B6 PLAN - STA. 0+00 TO STA. 34+00
SCALE: 1" = 100'
0 100' 200'

NOTE:
FOR GENERAL NOTES SEE SHEET 1 OF 5.

%PRODUCTION DATA 1%
%PRODUCTION DATA 2% %PRODUCTION DATA 3% %PRODUCTION DATA 4%

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MARK	DESCRIPTION	DATE

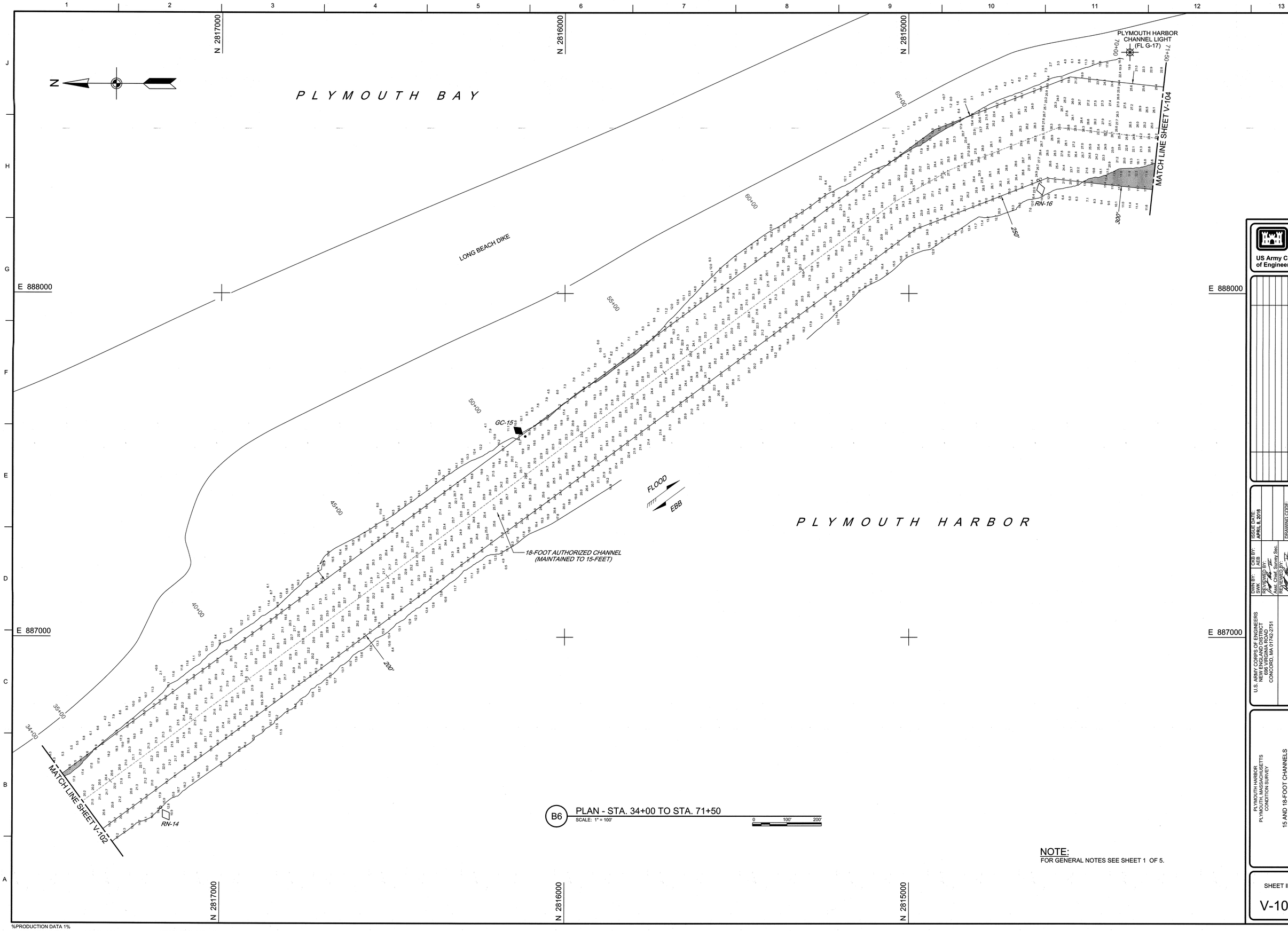
DSN BY: SWK	CKD BY: AEB	ISSUE DATE: APRIL 8, 2016
REVIEWED BY: Survey Sec.		
REVIEWED BY: Chief, Survey Section		DRAWING CODE: PLY-307
SIZE: ANSI F	SCALE: 1:1	SHEET 2 OF 5

U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
696 VIRGINIA ROAD
CONCORD, MA 01742-2751

PLYMOUTH HARBOR
PLYMOUTH, MASSACHUSETTS
CONDITION SURVEY

15 AND 18-FOOT CHANNELS
15-FOOT TURNING BASIN
8-FOOT ANCHORAGE

SHEET ID
V-102



B6 PLAN - STA. 34+00 TO STA. 71+50
SCALE: 1" = 100'
0 100' 200'

NOTE:
FOR GENERAL NOTES SEE SHEET 1 OF 5.

%PRODUCTION DATA 1%
%PRODUCTION DATA 2% %PRODUCTION DATA 3% %PRODUCTION DATA 4%

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

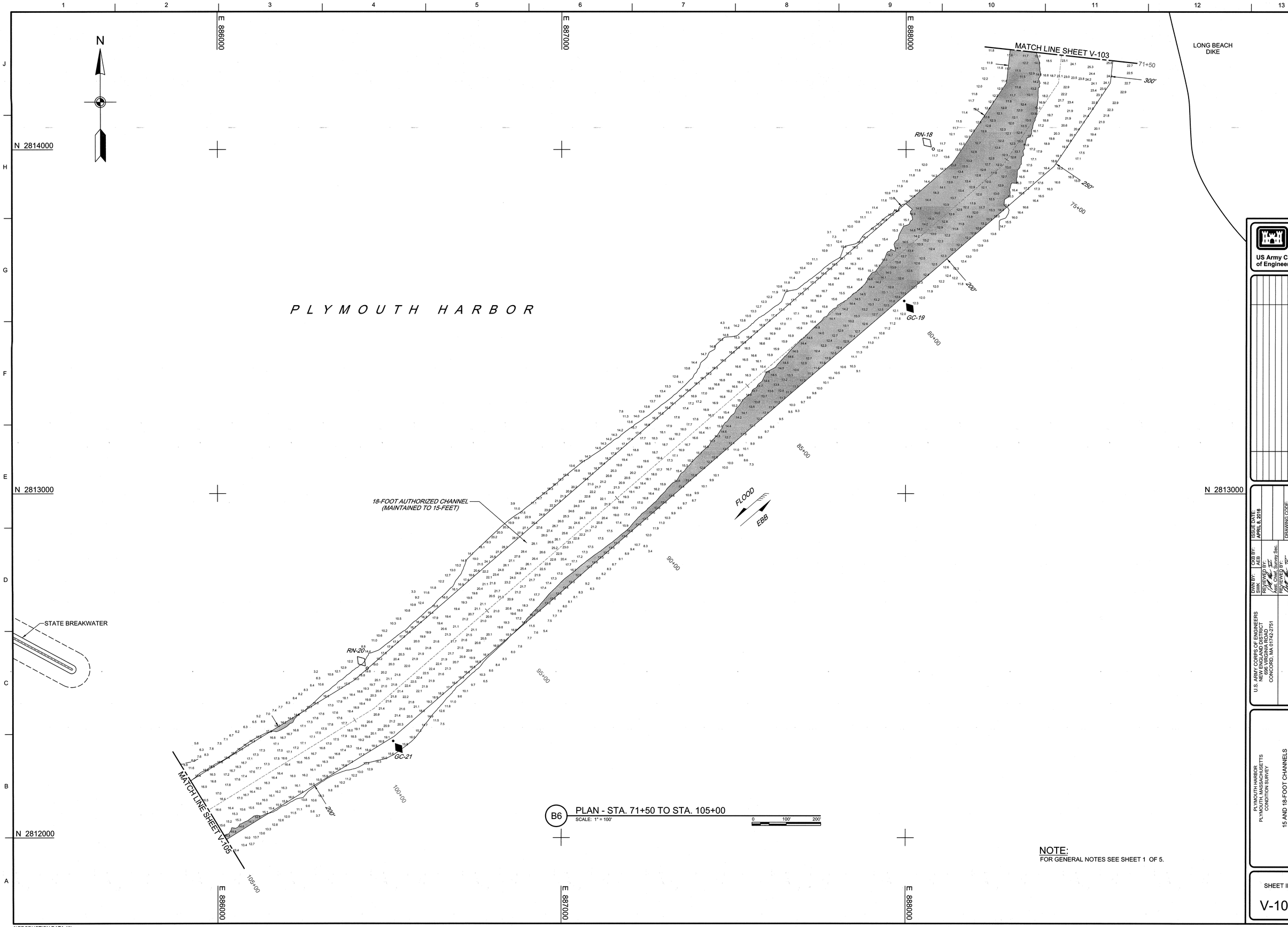
U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
696 VIRGINIA ROAD
CONCORD, MA 01742-2751

DWN BY: SWK | CHK BY: AEB
REVIEWED BY: Survey Sec.
REVIEWED BY: Chief, Survey Section
SIZE: ANSI F | SCALE: 1:1
ISSUE DATE: APRIL 8, 2016
DRAWING CODE: PLY-5577
SHEET 3 OF 5

PLYMOUTH HARBOR
PLYMOUTH, MASSACHUSETTS
CONDITION SURVEY

15 AND 18-FOOT CHANNELS
15-FOOT TURNING BASIN
8-FOOT ANCHORAGE

SHEET ID
V-103



B6 PLAN - STA. 71+50 TO STA. 105+00

SCALE: 1" = 100'

0 100' 200'

NOTE:
FOR GENERAL NOTES SEE SHEET 1 OF 5.

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DWN BY: SWK | CKD BY: AEB | ISSUE DATE: APRIL 8, 2016

REVIEWED BY: Asst. Chief, Survey Sec.

REVIEWED BY: Chief, Survey Section

SIZE: ANSI F | SCALE: 1:1 | DRAWING CODE: PLY-507 | SHEET 4 OF 5

U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
696 VIRGINIA ROAD
CONCORD, MA 01742-2751

PLYMOUTH HARBOR
PLYMOUTH, MASSACHUSETTS
CONDITION SURVEY

15 AND 18-FOOT CHANNELS
15-FOOT TURNING BASIN
8-FOOT ANCHORAGE

SHEET ID
V-104

%PRODUCTION DATA 1%
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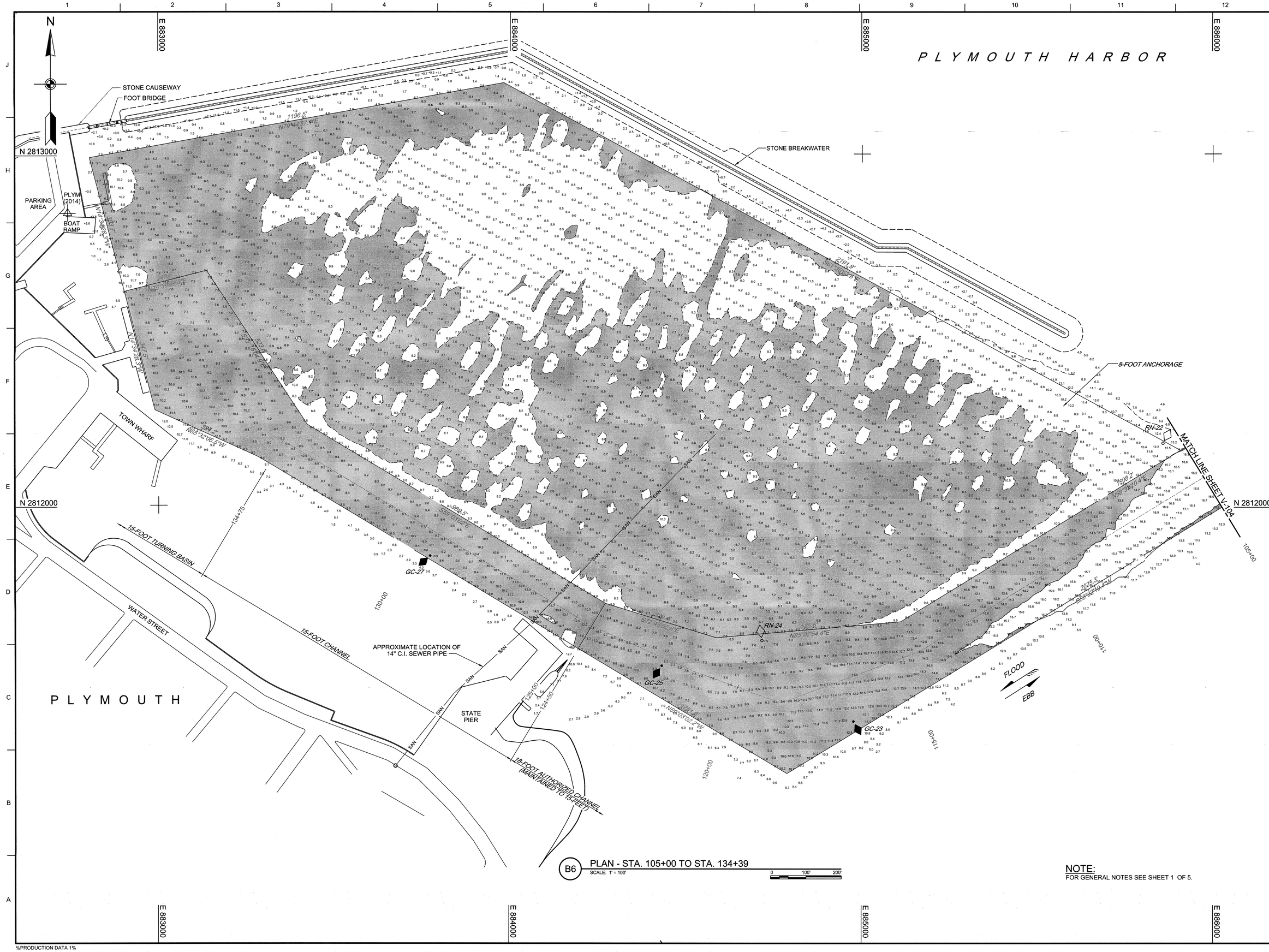

B6 PLAN - STA. 105+00 TO STA. 134+39

SCALE: 1" = 100'

0 100' 200'

NOTE:
FOR GENERAL NOTES SEE SHEET 1 OF 5.

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DWN BY: SWK | CKB BY: AEB | ISSUE DATE: APRIL 8, 2016
REVIEWED BY: Asst. Chief, Survey Sec.
REVIEWED BY: Chief, Survey Section
SIZE: ANSI F | SCALE: 1:1 | DRAWING CODE: PLY-507 | SHEET 5 OF 5

PLYMOUTH HARBOR
PLYMOUTH, MASSACHUSETTS
CONDITION SURVEY

15 AND 18-FOOT CHANNELS
15-FOOT TURNING BASIN
8-FOOT ANCHORAGE

SHEET ID
V-105

%PRODUCTION DATA 1%
%PRODUCTION DATA 2% %PRODUCTION DATA 3% %PRODUCTION DATA 4%