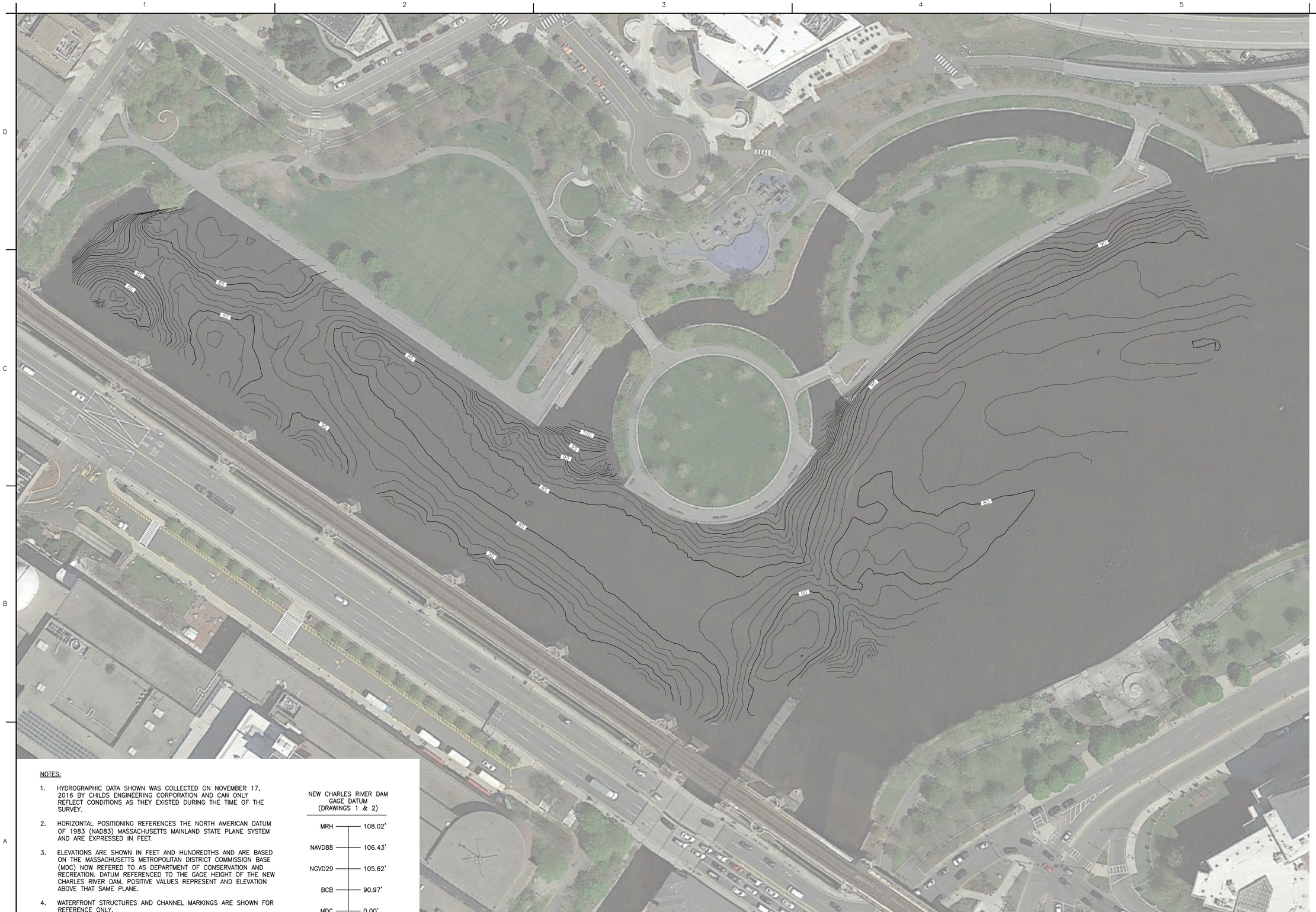


NOTES:

1. HYDROGRAPHIC DATA SHOWN WAS COLLECTED ON NOVEMBER 17, 2016 BY CHILDS ENGINEERING CORPORATION AND CAN ONLY REFLECT CONDITIONS AS THEY EXISTED DURING THE TIME OF THE SURVEY.
2. HORIZONTAL POSITIONING REFERENCES THE NORTH AMERICAN DATUM OF 1983 (NAD83) MASSACHUSETTS MAINLAND STATE PLANE SYSTEM AND ARE EXPRESSED IN FEET.
3. ELEVATIONS ARE SHOWN IN FEET AND HUNDREDTHS AND ARE BASED ON THE MASSACHUSETTS METROPOLITAN DISTRICT COMMISSION BASE (MDC) NOW REFERED TO AS DEPARTMENT OF CONSERVATION AND RECREATION. DATUM REFERENCED TO THE GAGE HEIGHT OF THE NEW CHARLES RIVER DAM. POSITIVE VALUES REPRESENT AND ELEVATION ABOVE THAT SAME PLANE.
4. WATERFRONT STRUCTURES AND CHANNEL MARKINGS ARE SHOWN FOR REFERENCE ONLY.
5. ALL DATA WAS COLLECTED AND PROCESSED USING HYPACK 2016A SOFTWARE USING REAL-TIME KINEMATIC POSITION CORRECTION FROM THE MTS NETWORK.

NEW CHARLES RIVER DAM
GAGE DATUM
(DRAWINGS 1 & 2)

MRH	108.02'
NAVD88	106.43'
NGVD29	105.62'
BCB	90.97'
MDC	0.00'

PLAN
SCALE: 1"=50'-0"

N

1"=50'-0" 50 0 50 100 SCALE IN FEET

CHILDS ENGINEERING CORPORATION
34 WILLIAM WAY, BELLINGHAM, MA 02019 U.S.A.
Phone: (508) 966-9092 Fax: (508) 966-9096
E-mail: mail@childseng.com

Mark	Description	Date	Appr.

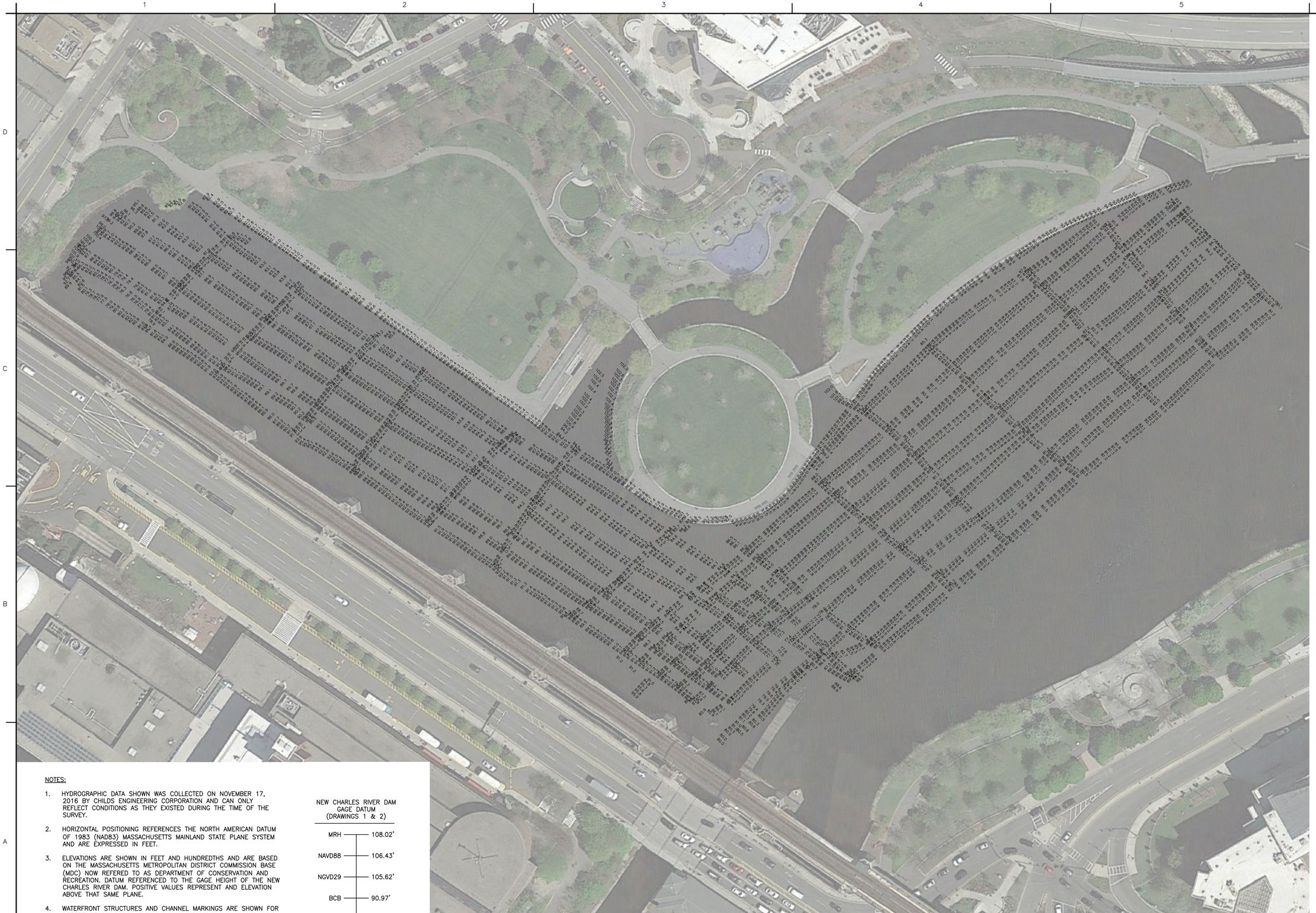
Designed by: ARN		Date: 11/30/16	
Dwn by: TEQ	Ckd by: ARN	Design file no. 270916 X-101	
Reviewed by: RGF		Scale: 1"=50'-0"	

CHARLES RIVER CONSERVANCY
SWIM PARK AT NORTH POINT
BATHYMETRIC SURVEY

CONTOURS PLAN – MDC

Sheet reference number:
X-101
Sheet 1 of 5

TOM QUINN K:\2709-16.00 HYDRO AND SIDE SCAN SURVEY-CHARLES RIVER CONSER\CADD\CURRENT WORKING DWGS\270916 X-101CHARLES RIVER HYDRO.DWG Dec 01, 2016 - 1:36pm



NOTES:

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5. ALL DATA WAS COLLECTED AND PROCESSED USING HYPACK 2016A SOFTWARE USING REAL-TIME KINEMATIC POSITION CORRECTION FROM THE MTS NETWORK.

NEW CHARLES RIVER DAM GAGE DATUM (DRAWINGS 1 & 2)

MRH	108.02'
NAVD88	106.43'
NGVD29	105.62'
BCB	90.97'
MDC	0.00'

PLAN

SCALE: 1"=50'-0"

N

1"=50'-0" 50 0 50 100 SCALE IN FEET

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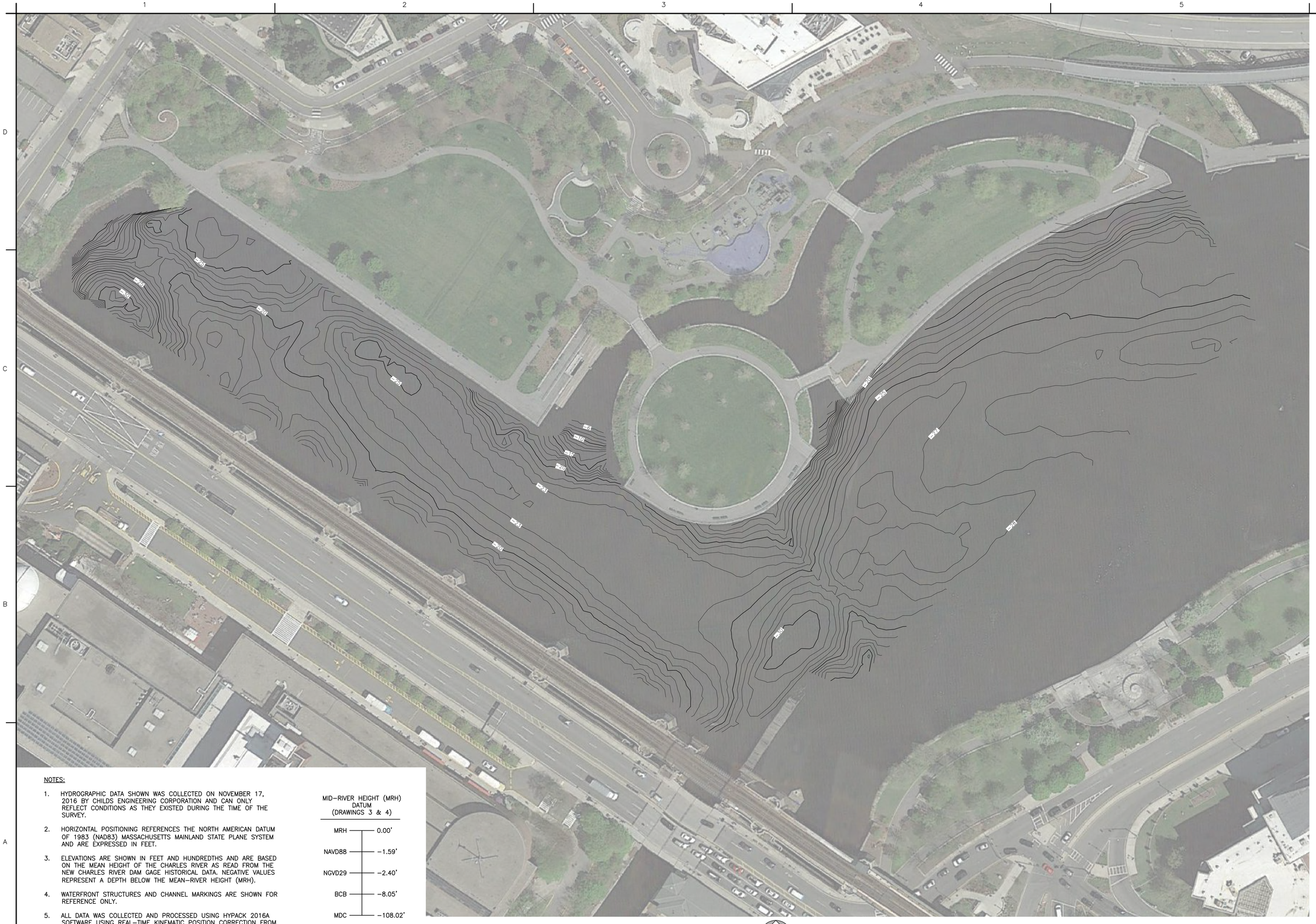
Reviewed by: RGF	Design file no. 270916 X-101
	Scale: 1"=50'-0"

CHARLES RIVER CONSERVANCY
SWIM PARK AT NORTH POINT
BATHYMETRIC SURVEY

POINTS PLAN - MDC

Sheet reference number:
X-102
Sheet 2 of 5

TOM QUINN K:\2709-16.00 HYDRO AND SIDE SCAN SURVEY-CHARLES RIVER CONSER\CADD\CURRENT WORKING DWGS\270916 X-101CHARLES RIVER HYDRO.DWG Dec 01, 2016 - 1:38pm



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3. ELEVATIONS ARE SHOWN IN FEET AND HUNDREDTHS AND ARE BASED ON THE MEAN HEIGHT OF THE CHARLES RIVER AS READ FROM THE NEW CHARLES RIVER DAM GAGE HISTORICAL DATA. NEGATIVE VALUES REPRESENT A DEPTH BELOW THE MEAN–RIVER HEIGHT (MRH).
4. WATERFRONT STRUCTURES AND CHANNEL MARKINGS ARE SHOWN FOR REFERENCE ONLY.
5. ALL DATA WAS COLLECTED AND PROCESSED USING HYPACK 2016A SOFTWARE USING REAL–TIME KINEMATIC POSITION CORRECTION FROM THE MTS NETWORK.

MID–RIVER HEIGHT (MRH) DATUM (DRAWINGS 3 & 4)

MRH	0.00'
NAVD88	–1.59'
NGVD29	–2.40'
BCB	–8.05'
MDC	–108.02'

PLAN

SCALE: 1"=50'–0"

N

1"=50'–0" 50 0 50 100 SCALE IN FEET

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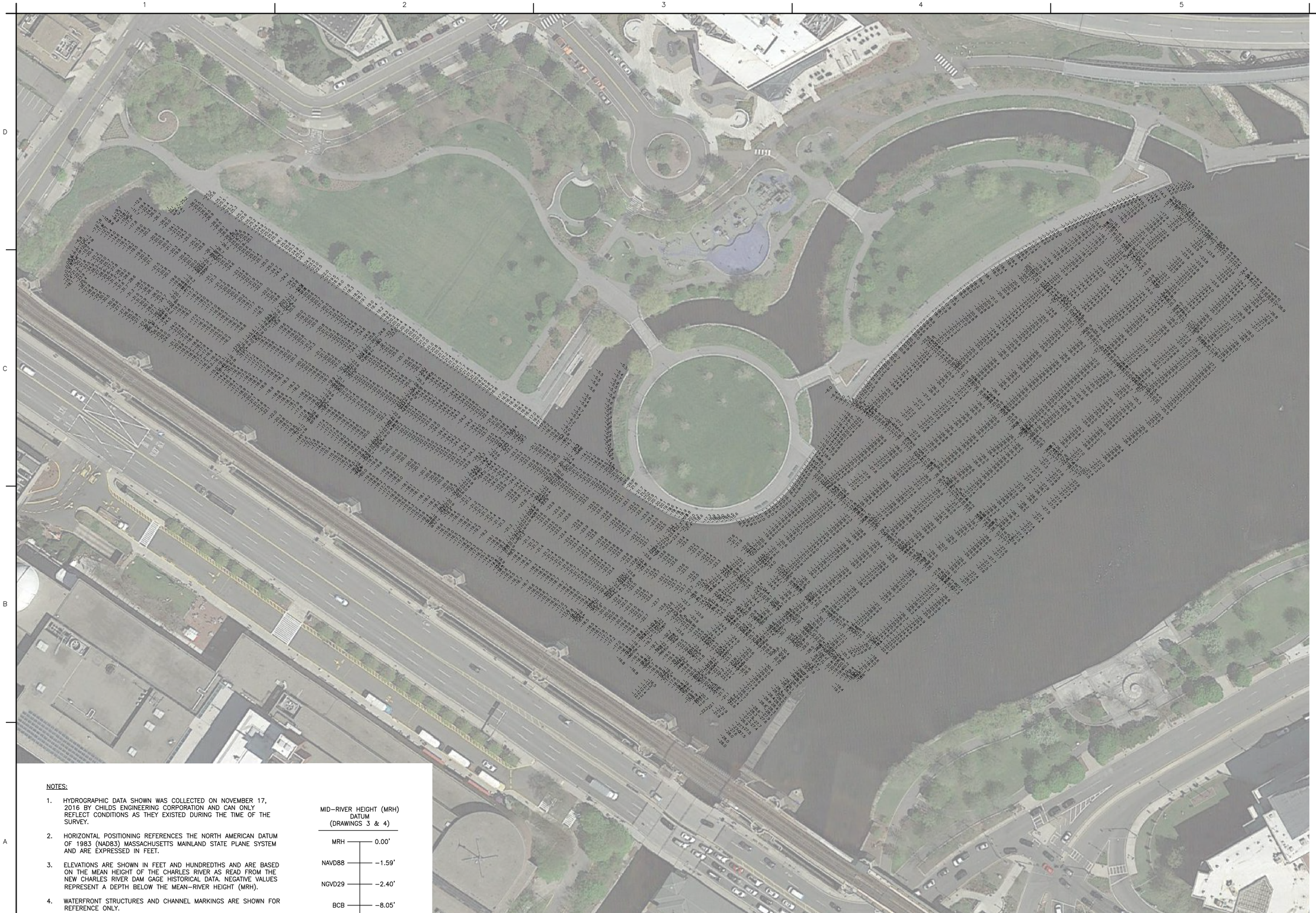
Reviewed by: RGF		Scale: 1"=50'–0"	

CHARLES RIVER CONSERVANCY
SWIM PARK AT NORTH POINT
BATHYMETRIC SURVEY

CONTOURS PLAN
MID–RIVER HEIGHT

Sheet reference number:
X–103
Sheet 3 of 5

TOM QUINN K:\2709–16.00 HYDRO AND SIDE SCAN SURVEY–CHARLES RIVER CONSER\CADD\CURRENT WORKING DWGS\270916 X–101CHARLES RIVER HYDRO.DWG Dec 01, 2016 – 1:46pm



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MID-RIVER HEIGHT (MRH) DATUM (DRAWINGS 3 & 4)

MRH	0.00'
NAVD88	-1.59'
NGVD29	-2.40'
BCB	-8.05'
MDC	-108.02'

PLAN

SCALE: 1"=50'-0"

N

1"=50'-0" 50 0 50 100 SCALE IN FEET

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Ckd by:	ARN
Reviewed by:	RGF
Date:	11/30/16
Design file no.	270916 X-101
Scale:	1"=50'-0"

CHARLES RIVER CONSERVANCY
SWIM PARK AT NORTH POINT
BATHYMETRIC SURVEY

POINTS PLAN
MID-RIVER HEIGHT

Sheet reference number:
X-104
Sheet 4 of 5

TOM QUINN K:\2709-16.00 HYDRO AND SIDE SCAN SURVEY-CHARLES RIVER CONSERV\CADD\CURRENT WORKING DWGS\270916 X-101CHARLES RIVER HYDRO.DWG Dec 01, 2016 - 1:46pm

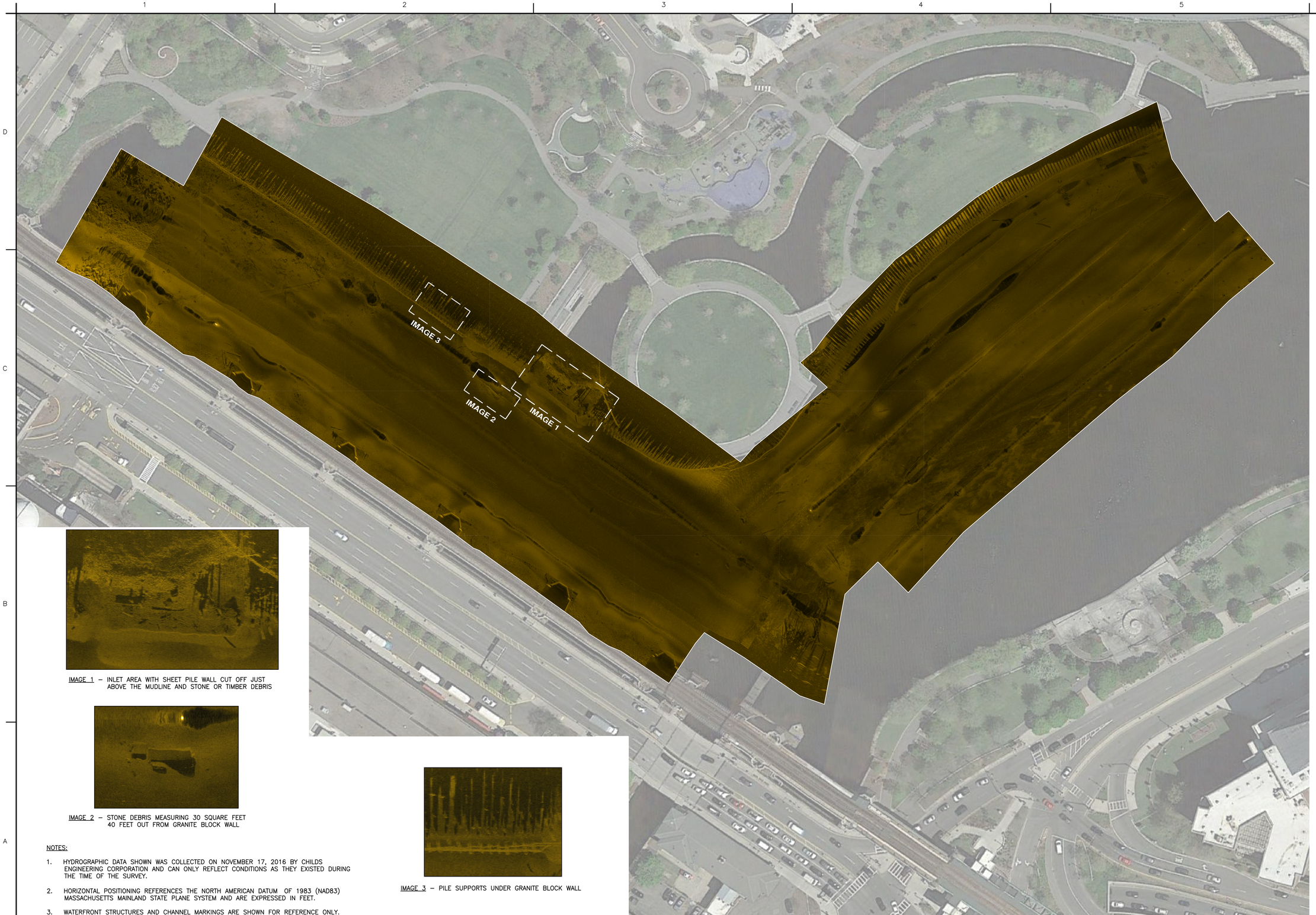

IMAGE 1 – INLET AREA WITH SHEET PILE WALL CUT OFF JUST ABOVE THE MUDLINE AND STONE OR TIMBER DEBRIS

IMAGE 2 – STONE DEBRIS MEASURING 30 SQUARE FEET 40 FEET OUT FROM GRANITE BLOCK WALL

IMAGE 3 – PILE SUPPORTS UNDER GRANITE BLOCK WALL

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PLAN

SCALE: 1"=50'-0"

N

1"=50'-0" 50 0 50 100 SCALE IN FEET

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CHARLES RIVER CONSERVANCY
SWIM PARK AT NORTH POINT
BATHYMETRIC SURVEY

SIDE SCAN SURVEY PLAN

Sheet reference number:
X-105
Sheet 5 of 5

TOM QUINN K:\2709-16.00 HYDRO AND SIDE SCAN SURVEY-CHARLES RIVER CONSER\CADD\CURRENT WORKING DWGS\270916 X-101CHARLES RIVER HYDRO.DWG Dec 01, 2016 - 1:46pm