ADDENDUM NO. 2

Quonochontaug Boat Launch Improvements
Charlestown, RI

September 17, 2019

PREPARED BY:

Fuss and O'Neill, Inc.
317 Iron Horse Way, Suite 204
Providence, RI 02908

NOTICE TO PROSPECTIVE BIDDERS

ADDENDUM NO. 2

Prospective Bidders and all concerned are hereby notified of the following amendments and interpretations to the Contract Documents of the QUONOCHONTAUG BOAT LAUNCH IMPROVEMENTS, CHARLESTOWN, RI dated June 2019. These amendments and interpretations shall be incorporated in and shall become an integral part of the Contract Documents. The addendum number (No. 2) and date (September 17, 2019) of this addendum must be entered into the space provided on the Bid Form.

GENERAL INFORMATION

1. Bidders are advised of the following requirements/conditions applying to the work, which are to be incorporated into prepared bids. The items listed below do not include all items of discussion at the pre-bid meeting, nor any other critical and binding requirements under the original Contract Documents.

2. A copy of the project boring logs is attached as Exhibit A.

3. A Figure of the CRMC Post Dredge Elevations is attached as Exhibit B.

PREBID MEETING QUESTIONS AND ANSWERS

Responses to questions received at the September 9, 2019 pre-bid meeting and received on or before the required time of 5:00 P.M. on September 11, 2019 are provided below. Questions are shown in italics, responses are provided following the questions.

4. Question #1 – *Are there any additional permits required for the water control plan?*

   The Contractor shall submit a water control plan that has been designed and stamped by a qualified professional engineer. There are no permits required for the water control plan as long as the contractor stays within the Limit of Disturbance that is displayed on the approved Project Drawings.

5. Question #2 – *Were there subsurface investigation borings completed as part of this Project?*

   The subsurface geotechnical borings are provided as Exhibit A.

6. Question #3 – *What is the anticipated start date of the Project?*

   The PO of the Project is anticipated in early November 2019.

7. Question #4 – *Describe the dredging that was completed in the area adjacent to the proposed boat launch location?*

   A Figure showing the post dredge elevations within the CRMC dredge limits is provided in Exhibit B. Please note that this post dredge survey was completed in Winter 2018/2019 and the bathymetry elevations may have changed in the interim.

8. Question #5 – *Where is the form work for the boat launch panels located?*

   The RIDEM form work is located at Durastone Corporation, 150 Higginson Ave, Lincoln, RI. This company has provided the pre-cast concrete slabs for the newly constructed DEM boat ramps in recent years. If a different manufacturer is contracted for this project, the

vendor will be responsible for picking up and transporting the formwork from this location.

9. Question #6 – *Is all funding for the project in place?*

   All funding required is in place to complete the Project.

10. Question #7 – *What are the proposed finished grades in the parking lot?*

    The proposed finished grade at the top of the proposed boat ramp is EL. 2.26. The remaining area around the top of the boat ramp shall tie into the existing grades and be graded to drain as indicated on the Project Drawings.

11. Question #8 – *What are the longitudinal dimensions on Sheet CX-101, Profile A?*

    Profile A on Sheet CX-101 is drawn to scale as indicated on the Project Drawings. The vertical elevations are shown on the right side of Profile A.

12. Question #9 – *Confirm toe excavation to EL. -11.5± on Sheet CX-101?*

    Profiles and Sections on Sheet CX-101 are drawn to scale as indicated on the Project Drawings. The Contractor shall excavate as needed to install the ACB matting and anchor/toe stones as indicated on the Articulating Concrete Block Matting Apron Detail on Sheet CX-101.

13. Question #10 – *On Sheet CX-101 Profile E & F, what are the toe elevations?*

    Profile F and Section E on Sheet CX-101 are drawn to scale as indicated on the Project Drawings.

14. Question #11 – *Specification Section 02300 references R-3, R-7, and R-8 rip rap, where do these apply?*

    The R-8 riprap shall be used as Riprap Slope and Scour Protection. R-3 and R-7 riprap are not currently proposed for use.

15. Question #12 – *Is the intent to reuse excavated material on site?*

    If Bid Alternate No. 1 is awarded, a portion of the excavated material may be reused on-site. Otherwise, all excess material shall be removed from the site.

16. Question #13 – *Request sections at 25 foot intervals for take offs?*

    Sections at 25 foot intervals will not be provided.

17. Question #14 – *What is the scope of Bid Alternate No. 1?*

    The scope of work for Bid Alternate No. 1 is described on sheet DEM-1, "Shoreline Enhancement Site Plan and Details."

18. Question #15 – *Suggest changing unit of measure for all unit price items to "ton"?*

    The unit of measure for all unit price items shall remain as stated in the Project Manual.

19. Question #16 – *Does the dredge material need to be tested for contaminates? If so, will the general contractor be responsible for the cost?*

    If Bid Alternate No. 1 is awarded, the dredge material will need to be tested for contaminates. The Contractor shall be responsible for the cost of contaminates testing.

20. Question #17 – *Can the existing boat ramp be removed at the start of the project?*

    The existing boat ramp can be removed at the start of the project.

21. Question #18 – *During installation of the timber piles, will the 20 foot embedment still be required if refusal is hit?*

    A refusal during installation of the timber piles would be considered a change in condition and shall be evaluated on a case by case basis during construction.

ISSUED BY: _____**Date: 09/17/2019**
Engineer's Signature

END OF ADDENDUM NO. 2

Exhibit A

Project Boring Logs

File Path: J:\DWG\P2014\1224\C10\Civil\Figures\20141224C10_BORING LOCATIONS.dwg Layout: FIGURE 1 Plotted: Mon, September 17, 2018 - 8:07 AM User: dnewhall
Plotter: DWG TO PDF.PC3 CTB File: FO.STB
MS VIEW: LAYER STATE:

SCALE:	
HORZ.: ?" - ??'	
VERT.:	
DATUM:	
HORZ.:	
VERT.:	

0 ?? ??
GRAPHIC SCALE

FUSS & O'NEILL
317 IRON HORSE WAY, SUITE 204
PROVIDENCE, RI 02908
401.861.3070
www.fando.com

THE NATURE CONSERVENCY - RHODE ISLAND

BORING LOCATION PLAN

QUONOCHONTAUG BOAT LAUNCH IMPROVEMENTS

CHARLESTOWN RHODE ISLAND

PROJ. No.: 20141224.C10
DATE: SEPTEMBER 2018

Fig. 1

FUSS & O'NEILL

317 Iron Horse Way, Suite 204, Providence, RI 02908

BORING LOG

Project: Quonochontaug Boat Launch

Location: Charlestown, RI

Boring ID: B-1

Sheet 1 of 2

Project No.: 20141224.C10

Contractor: Soll Exploration Corp.
Operator: Pat
F&O Rep.: Derek Newhall
Drilling Method: HSA
Sampling Method: Split Spoon (2" OD)
Hammer Wt.: 140 lbs Hammer Fall (in.): 30
Boring Location: See Plan
Ground Elevation: 2' (NAVD88)
Date Start: 8/21/18 Date Finish: 8/21/2018

Water Level Measurements

Date	Ref. Pt.	Depth	Time
8/21/2018	Ground	2.5	8:30 am

Time & Date of Completion: 8/21/18 10:30 am

Depth (ft)	Sample No.	Sample Depth (ft)	Rec/ Pen	Blows/ 6"	Sample Description	Strata Change	USCS Class.	Remarks
0	S1	0-2	24/6	10 8 5 1	Medium Dense, Light Brown, fine to coarse SAND, trace Fine Gravel, trace Silt. Moist.	Fill	FL	
1								
2	S2	2-4	24/13	10 8 8 9	Medium Dense, Dark Gray, Fine SAND, trace Gravel, trace Silt. Wet.	Fine Sand	SP	* 1
3								
4	S3	4-6	24/12	3 4 6 2	Loose, Dark Grey, Fine to medium SAND, trace Silt, trace Gravel. Wet.		SP	
5								
6	S4	6-8	24/17	3 8 10 13	Medium Dense, Dark Grey, Fine to medium SAND, trace Silt, trace Gravel. Wet.		SP	
7								
8	S5	8-10	24/17	3 2 4 10	Loose, Dark Grey, Fine to Mediume SAND, trace Silt, trace Gravel. Wet.		SP	* 2
9								
10	S6	10-12	24/21	5 6 4 7	Loose, Dark Grey, Fine to Medium SAND, trace Gravel, trace Silt. Wet.		SP	
11								
12								
13								
14								
15	S7	15-17	24/14	3 7 3 4	Loose, Dark Grey, Fine to medium SAND, little Silt, trace Gravel, trace Organics. Wet.		SP	

MINOR CONSTITUENT PROPORTIONS:

Trace	0 to 10%	Some	20 to 35%
Little	10 to 20%	And	35 to 50%

BLOWS/FT DENSITY (GRANULAR SOILS)

V. Loose	0-4	Dense	**30-50**
Loose	4-10	V. Dense	**>50**
M. Dense	10-30		

REMARKS:

Hammer type: Autohammer

* 1: Bottom 3" has trace Organics, Bottom 8" matches S3
* 2: 2" from bottom of spoon has 1" Organics

FUSS & O'NEILL

317 Iron Horse Way, Suite 204, Providence, RI 02908

BORING LOG

Project: Quonochontaug Boat Launch
Location: Charlestown, RI

Boring ID: B-1
Sheet 2 of 2
Project No.: 20141224.C10

Contractor: Soll Ex
Operator: Pat
F&O Rep.: Derek Newhall
Drilling Method: HSA
Sampling Method: Split Spoon (2" OD)
Hammer Wt.: 140 lbs Hammer Fall (in.): 30
Boring Location: See Plan
Ground Elevation: 2' (NAVD88)
Date Start: 8/21/18 Date Finish: 8/21/2018

Water Level Measurements

Date	Ref. Pt.	Depth	Time
8/21/2018	Ground	2.5	8:30 am

Time & Date of Completion: 8/21/18 10:30 am

Depth (ft)	Sample No.	Sample Depth (ft)	Rec/ Pen	Blows/ 6"	Sample Description	Strata Change	USCS Class.	Remarks
16						Fine Sand		
17								
18								
19								
20	S8-A	20-20.5	24/19	3 3 3 2	loose, Brown to Gray, fine to medium SAND, little Silt, trace Gravel. Wet.		SP	
21	S8-B	20.5-22			Loose, Brown to Gray, fine to medium SAND AND SILT, trace Organics. Wet.	Fine Sand and Organic Silt	SM - OL	
22	S9	22-24	24/24	1 2 3 2	Loose, Dark Gray, fine to medium SAND AND SILT, trace Organics. Wet.		SM - OL	
23								
24								
25	S10	25-27	24/24	2 1 2 3	Very Loose, Dark Gray, fine to medium SAND AND SILT, trace Organics. Wet.		SM - OL	
26								
27	S11	27-29	24/24	1 2 2 1	Very Loose, Dark Gray, fine to medium SAND AND SILT, trace Organics. Wet.		SM - OL	
28								
29								
30	S12A	30-31	24/24	WOH12" 10 17	Loose,Grey, fine to medium SAND AND SILT, trace Organics. Wet.		SM - OL	*4
31	S12B	31-32			Loose, Gray, fine to coarse SAND AND SILT, trace fine Gravel. Wet.	Silty Sand	SM	
32					End of Exploration @ 32'			

MINOR CONSTITUENT PROPORTIONS:

Trace	0 to 10%	Some	20 to 35%
Little	10 to 20%	And	35 to 50%

BLOWS/FT DENSITY (GRANULAR SOILS)

V. Loose	0-4	Dense	**30-50**
Loose	4-10	V. Dense	**>50**
M. Dense	10-30		

REMARKS:
Hammer type: Autohammer

* 4: Change from Organic Silt to medium dense sand at 31'

FUSS & O'NEILL

317 Iron Horse Way, Suite 204, Providence, RI 02908

BORING LOG

Project: Quonochontaug Boat Launch

Location: Charlestown, RI

Boring ID: B-2

Sheet 1 of 2

Project No.: 20141224.C10

Contractor: Soll Ex
Operator: Pat
F&O Rep.: Derek Newhall
Drilling Method: HSA
Sampling Method: Split Spoon (2" OD)
Hammer Wt.: 140 lbs Hammer Fall (in.): 30
Boring Location: See Plan
Ground Elevation: 0.5' (NAVD88)
Date Start: 8/21/18 Date Finish: 8/21/2018

Water Level Measurements

Date	Ref. Pt.	Depth	Time
8/21/2018	Ground	1.5	11:45 am

Time & Date of Completion: 8/21/18 12:00 pm

Depth (ft)	Sample No.	Sample Depth (ft)	Rec/ Pen	Blows/ 6"	Sample Description	Strata Change	USCS Class.	Remarks
0	S1	0-2	24/18	1 2 4 5	Loose, Dark Gray, Fine SAND, trace Silt trace Organics. Wet.	Fine Sand	SP	
1								
2	S2	2-4	24/20	4 5 7 6	Medium Dense, Dark Gray, Fine to Medium SAND, trace Silt, trace fine Gravel. Wet.		SP	
3								
4	S3	4-6	24/20	6 7 8 13	Medium Dense, Dark Gray, Fine to Medium SAND, trace Silt. Wet.		SP	
5								
6	S4	6-8	24/24	6 6 5 11	Medium Dense, Dark Gray, Fine to Medium SAND, trace Silt. Wet.		SP	
7								
8	S5	8-10	24/16	2 2 6 5	Loose, Dark Gray, Fine to medium SAND, trace Silt, trace Organics. Wet.		SP	
9								
10	S6	10-12	24.13	1 6 5 9	Medium Dense, Dark Gray to Brown, Fine to medium SAND, trace Silt, trace Organics. Wet.		SP	
11								
12								
13								
14								
15	S7	15-17	24/11	1 1 3 2	Loose, Dark Gray to Brown, Fine to medium SAND, litlte Silt, trace Organics. Wet.		SP	

MINOR CONSTITUENT PROPORTIONS:

Trace	0 to 10%	Some	20 to 35%
Little	10 to 20%	And	35 to 50%

BLOWS/FT DENSITY (GRANULAR SOILS)

V. Loose	0-4	Dense	**30-50**
Loose	4-10	V. Dense	**>50**
M. Dense	10-30		

REMARKS:

Hammer type: Autohammer

FUSS & O'NEILL

317 Iron Horse Way, Suite 204, Providence, RI 02908

BORING LOG

Project: Quonochontaug Boat Launch

Location: Charlestown, RI

Boring ID: B-2

Sheet 2 of 2

Project No.: 20141224.C10

Contractor: Soll Ex
Operator: Pat
F&O Rep.: Derek Newhall
Drilling Method: HSA
Sampling Method: Split Spoon (2" OD)
Hammer Wt.: 140 lbs Hammer Fall (in.): 30
Boring Location: See Plan
Ground Elevation: 0.5' (NAVD88)
Date Start: 8/21/18 Date Finish: 8/21/2018

Water Level Measurements

Date	Ref. Pt.	Depth	Time
8/21/2018	Ground	1.5	11:45 am

Time & Date of Completion: 8/21/18 12:00 pm

Depth (ft)	Sample No.	Sample Depth (ft)	Rec/ Pen	Blows/ 6"	Sample Description	Strata Change	USCS Class.	Remarks
16						**Fine Sand**		
17	S8	17-19	24/24	2 2 1 1	Very Loose, Dark Gray, fine to medium SAND AND SILT, trace Organics. Wet.	**Fine Sand and Organic Silt**	**SM - OL**	
18								
19								
20	S9	20-22	24/11	1 1 1 1	Very Loose, Dark Gray to Gray, fine to SAND AND SILT, trace Organics. Wet.		**SM - OL**	
21								
22					End of Exploration @ 22'			
23								
24								
25								
26								
27								
28								
29								
30								
31								

MINOR CONSTITUENT PROPORTIONS:

Trace	0 to 10%	Some	20 to 35%
Little	10 to 20%	And	35 to 50%

BLOWS/FT DENSITY (GRANULAR SOILS)

V. Loose	0-4	Dense	**30-50**
Loose	4-10	V. Dense	**>50**
M. Dense	10-30		

REMARKS:

Hammer type: Autohammer

FUSS & O'NEILL

317 Iron Horse Way, Suite 204, Providence, RI 02908

BORING LOG

Project: Quonochontaug Boat Launch

Location: Charlestown, RI

Boring ID: B-3

Sheet 1 of 2

Project No.: 20141224.C10

Contractor: Soll Ex
Operator: Pat
F&O Rep.: Derek Newhall
Drilling Method: HSA
Sampling Method: Split Spoon (2" OD)
Hammer Wt.: 140 lbs Hammer Fall (in.): 30
Boring Location: See Plan
Ground Elevation: -1' (NAVD88)
Date Start: 8/21/18 Date Finish: 8/21/2018

Water Level Measurements

Date	Ref. Pt.	Depth	Time
8/21/2018	Ground surface	0.0'	2:00 pm

Time & Date of Completion: 8/21/18 2:00 pm

Depth (ft)	Sample No.	Sample Depth (ft)	Rec/ Pen	Blows/ 6"	Sample Description	Strata Change	USCS Class.	Remarks
0	S1	0-2	24/11	3 3 6 7	Loose, Dark Gray, fine to medium SAND, trace Gravel, trace Silt, trace Organics. Wet.		**SP**	1*
1								
2	S2	2-4	24/18	5 3 2 3	Loose, Dark Gray, fine to medium SAND, trace Silt, trace Organics. Wet.		**SP**	2*
3								
4	S3	4-6	24/18	6 7 8 8	Medium Dense, Dark Gray, Fine to medium SAND, trace Silt. Wet.		**SP**	
5								
6	S4	6-8	24/24	8 5 5 11	Medium Dense, Dark Gray, Fine to Medium SAND, trace Silt, trace Organnics. Wet.		**SP**	
7						**Fine Sand**		
8	S5	8-10	24/15	1 2 4 4	Loose, Dark Gray, Fine to Medium SAND, trace Silt, trace Organnics. Wet.		**SP**	
9								
10	S6	10-12	24/18	2 2 2 4	Medium Dense, Dark Gray to Brown, fine to medium SAND, trace Silt, trace Organics. Wet.		**SP**	3*
11								
12								
13								
14								
15	S7	15-17	24/11	1 1 3 2	Loose, Dark Gray, fine to medium SAND, AND SILT, trace Organics. Wet.		**SM - OL**	

MINOR CONSTITUENT PROPORTIONS:

Trace	0 to 10%	Some	20 to 35%
Little	10 to 20%	And	35 to 50%

BLOWS/FT DENSITY (GRANULAR SOILS)

V. Loose	0-4	Dense	**30-50**
Loose	4-10	V. Dense	**>50**
M. Dense	10-30		

REMARKS:

Hammer type: Autohammer

* 1: 1" Gravel, 2" Organics from top of spoon
*2: Grass organics scattered through spoon
*3. Half inch band of organics 1 inch from bottom of spoon, Half inch band of organics at 5 inches from bottom of spoon.

FUSS & O'NEILL

317 Iron Horse Way, Suite 204, Providence, RI 02908

BORING LOG

Project: Quonochontaug Boat Launch

Location: Charlestown, RI

Boring ID: B-3

Sheet 1 of 2

Project No.: 20141224.C10

Contractor: Soll Ex
Operator: Pat
F&O Rep.: Derek Newhall
Drilling Method: HSA
Sampling Method: Split Spoon (2" OD)
Hammer Wt.: 140 lbs Hammer Fall (in.): 30
Boring Location: See Plan
Ground Elevation: -1' (NAVD88)
Date Start: 8/21/18 Date Finish: 8/21/2018

Water Level Measurements

Date	Ref. Pt.	Depth	Time

Time & Date of Completion: 8/21/18 2:00 pm

Depth (ft)	Sample No.	Sample Depth (ft)	Rec/ Pen	Blows/ 6"	Sample Description	Strata Change	USCS Class.	Remarks
16						Fine Sand and Organic Silt		
17								
18								
19								
20	S8	20-22	24/24	3 2 2 1	Loose, Dark Gray, fine to medium SAND AND SILT, trace Organics. Wet.		**SM - OL**	
21								
22								
23								
24	S9	25-27	24/24	2 2 2 2	Loose, Dark Gray, fine to medium SAND AND SILT, trace Organics. Wet.		**SM - OL**	
25								
26								
27								
28								
29								
30	S10	29-31	24/24	1 11 13 19	Medium Dense, Dark Gray, fine to coarse SAND AND SILT, trace Gravel. Wet.	**Silty Sand**	**SM**	*4
31					End of Exploration @ 31'			

MINOR CONSTITUENT PROPORTIONS:

Trace	0 to 10%	Some	20 to 35%
Little	10 to 20%	And	35 to 50%

BLOWS/FT DENSITY (GRANULAR SOILS)

V. Loose	0-4	Dense	**30-50**
Loose	4-10	V. Dense	**>50**
M. Dense	10-30		

REMARKS:

Hammer type: Autohammer

* 4: Hit Dense material at 28'. Driller felt grinding on Auger

FUSS & O'NEILL

317 Iron Horse Way, Suite 204, Providence, RI 02908

BORING LOG

Project: Quonochontaug Boat Launch

Location: Charlestown, RI

Boring ID: B-4

Sheet 1 of 2

Project No.: 20141224.C10

Contractor: Soll Ex
Operator: Pat
F&O Rep.: Derek Newhall
Drilling Method: HSA
Sampling Method: Split Spoon (2" OD)
Hammer Wt.: 140 lbs Hammer Fall (in.): 30
Boring Location: See Plan
Ground Elevation: 2' (NAVD 88)
Date Start: 8/21/18 Date Finish: 8/21/2018

Water Level Measurements

Date	Ref. Pt.	Depth	Time
8/21/2018	Ground	2.81	3:02 pm

Time & Date of Completion: 8/21/18 3:10 pm

Depth (ft)	Sample No.	Sample Depth (ft)	Rec/ Pen	Blows/ 6"	Sample Description	Strata Change	USCS Class.	Remarks
0	S1	0-2	24/15	5 4 4 3	Loose, Brown to Light Gray, fine to course SAND, trace Silt, trace Gravel. Dry.	Fill	FL	*1
1								
2	S2	2-4	24/11	2 5 6 8	Medium Dense, Dark Gray, fine to medium SAND, trace Silt, trace Organics. Wet.	Fine Sand	SP	
3								
4	S3	4-6	24/17	2 3 5 8	Loose, Dark Gray, fine to medium SAND, trace Silt. Wet.		SP	
5								
6	S4	6-8	24/19	4 11 12 11	Medium Dense, Dark Gray, fine to medium SAND, trace Silt. Wet.		SP	
7								
8	S5	8-10	24/20	3 5 6 6	Medium Dense, Dark Gray, fine to medium SAND, trace Silt. Wet.		SP	
9								
10	S6	10-12	24/12	3 3 3 9	Loose,Dark Gray, fine to course SAND, trace Silt. Wet.		SP	
11								
12								
13								
14								
15	S7	15-17	24/11	4 3 3 2	Loose, Dark Gray, fine to medium SAND, trace Silt. Wet.		SP	

MINOR CONSTITUENT PROPORTIONS:

Trace	0 to 10%	Some	20 to 35%
Little	10 to 20%	And	35 to 50%

BLOWS/FT DENSITY (GRANULAR SOILS)

V. Loose	0-4	Dense	**30-50**
Loose	4-10	V. Dense	**>50**
M. Dense	10-30		

REMARKS:

Hammer type: Autohammer

*1: 1 inch of sand at top of spoon.

FUSS & O'NEILL

317 Iron Horse Way, Suite 204, Providence, RI 02908

BORING LOG

Project: Quonochontaug Boat Launch
Location: Charlestown, RI

Boring ID: B-4
Sheet 2 of 2
Project No.: 20141224.C10

Contractor: Soll Ex
Operator: Pat
F&O Rep.: Derek Newhall
Drilling Method: HSA
Sampling Method: Split Spoon (2" OD)
Hammer Wt.: 140 lbs Hammer Fall (in.): 30
Boring Location: See Plan
Ground Elevation: 2' (NAVD88)
Date Start: 8/21/18 Date Finish: 8/21/2018

Water Level Measurements

Date	Ref. Pt.	Depth	Time
8/21/2018	Ground	2.81	3:02 pm

Time & Date of Completion: 8/21/18 3:10 pm

Depth (ft)	Sample No.	Sample Depth (ft)	Rec/ Pen	Blows/ 6"	Sample Description	Strata Change	USCS Class.	Remarks
16						Fine Sand		
17								
18								
19								
20	S8	20-22	24/24	2 3 4 7	Loose, Dark Gray, fine to medium SAND AND SILT, trace Organics. Wet.	Fine Sand and Organic Silt	SM - OL	
21								
22					End of Exploration @ 22'			
23								
24								
25								
26								
27								
28								
29								
30								
31								

MINOR CONSTITUENT PROPORTIONS:

Trace	0 to 10%	Some	20 to 35%
Little	10 to 20%	And	35 to 50%

BLOWS/FT DENSITY (GRANULAR SOILS)

V. Loose	0-4	Dense	**30-50**
Loose	4-10	V. Dense	**>50**
M. Dense	10-30		

REMARKS:
Hammer type: Autohammer

Exhibit B

Post Dredge Elevations

NOTES

1. THE CRMC POST–DREDGE BATHYMETRIC INFORMATION SHOWN ON THIS FIGURE WAS COMPLETED BY J.F. BRENNAN COMPANY IN WINTER 2018/2019. ACTUAL BATHYMETRIC GRADES ARE LIKELY TO DIFFER. THE CONTRACTOR SHALL FIELD VERIFY BATHYMETRY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IF GRADES VARY SUCH THAT ADJUSTMENTS ARE REQUIRED TO CONSTRUCT THE PROPOSED IMPROVEMENTS.

SCALE:	
HORZ.:	1" = 10'
VERT.:	
DATUM:	
HORZ.:	NAD 83
VERT.:	NAVD88

0 5 10
GRAPHIC SCALE

FUSS & O'NEILL
317 IRON HORSE WAY, SUITE 204
PROVIDENCE, RI 02908
401.861.3070
www.fando.com

THE NATURE CONSERVENCY - RHODE ISLAND

POST DREDGE ELEVATIONS
SITE PLAN

QUONOCHONTAUG BOAT LAUNCH IMPROVEMENTS

CHARLESTOWN RHODE ISLAND

PROJ. No.: 20141224.C10
DATE: SEPTEMBER 2019

FIG. 1

File Path: J:\DWG\P2014\1224\C10\Civil\Plan\20141224C10_STP01.dwg Layout: 11X17-P Plotted: Mon, September 16, 2019 - 5:30 PM User: dnewhall
Plotter: AUTOCAD PDF (GENERAL DOCUMENTATION).PC3 CTB File: FO.STB
MS VIEW: LAYER STATE: