LBFH

Lindahl, Browning, Ferrari & Hellstrom, Inc.

DATE: September 29, 1995

To:

Wade Diekman Via FAX (407) 286-1139 (1 page)

FROM:

Joseph R. Rossano



SUBJECT:

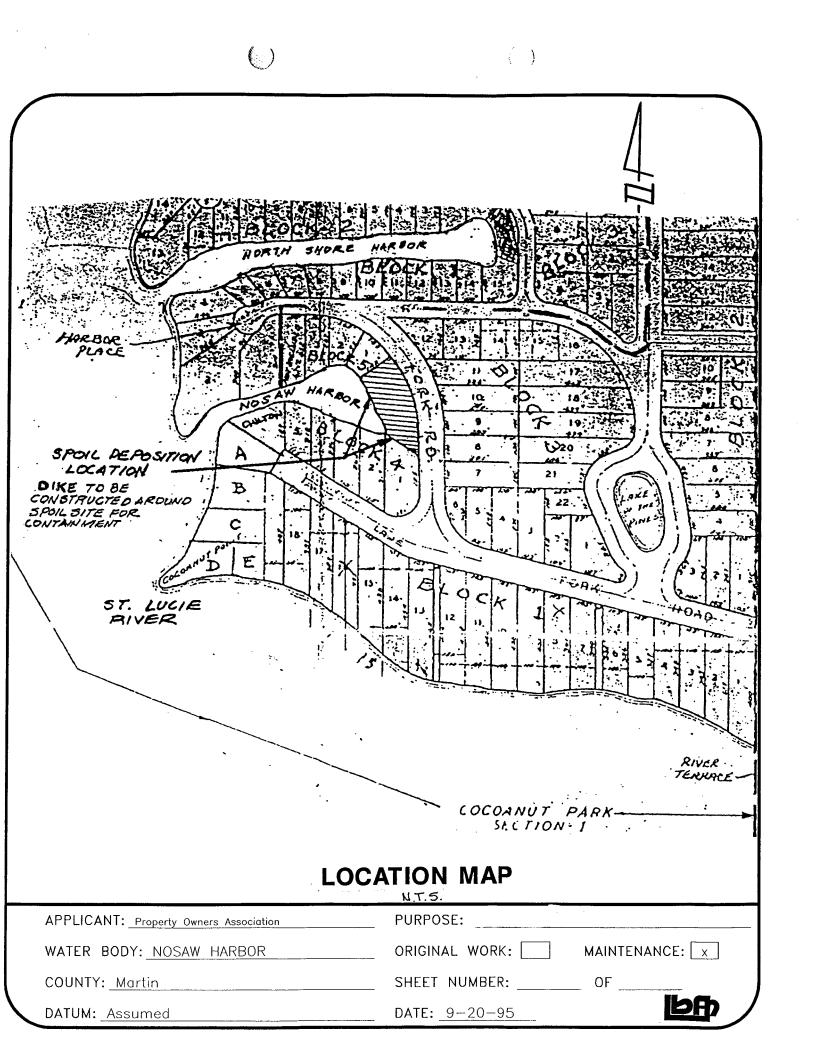
North River Shores-Maintenance Dredging

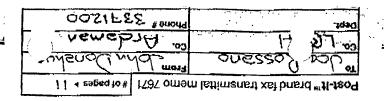
Enclosed are the following items for your review and comment:

- 1. Spoil site location plan on Nosaw Harbor (partial Item 5).
- 2. Soil sampling logs, sieve analysis, organic content tests (Item 3 and hydrographic Item 1).
- 3. Sedimentation Control Plan including perimeter berm, control structure, and, turbidity barrier detail (Item 4).

We can make any necessary revisions on or before Monday, October 2, 1995. Please call if there are any questions or comments.

JRR/jrr P:\95-0274\M3.WPD





BORING Sample 1

PROJECT: North River Shores Dredging Project

BORING NO.: Sample 1

BORING LOCATION: Site #1 - Nosaw Harbor

DEPTH TO WATER TABLE: N/A

DRILLER: Blue Water Marine Construction

FILE NO.: 95-5710

DATE: 9-21-95

ELEV .: N/A

DATE CHECKED: 9-21-95

ELEVATION SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	uscs	SOIL DESCRIPTION
- 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	SW ····	DARK BROWN SILTY FINE SAND WITH TRACES OF SHELL FRAGMENTS
	SP/ SM	BROWN SLIGHTY STLTY FINE SAND WITH TRACES OF DREANICS

BORING Sample 2

PROJECT: North River Shores Dredging Project FILE NO.: 95-5710

BORING NO.: Sample 2

BORING LOCATION: Site #2 - North Shore Harbor

DEPTH TO WATER TABLE: N/A

DRILLER: Blue Water Marine Construction

DATE: 9-21-95

ELEV.: N/A

DATE CHECKED: 9-21-95

BROWN SITE OF SHELL FRAGMENTS SP WITH TRACES OF SHELL FRAGMENTS SP WITH TRACES OF SHELL FRAGMENTS	ELEVATION SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	uscs	SDIL DESCRIPTION
	DEPTH AND FIELD TEST DATA	3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5	BROWN SLIGHTLY SILTY FINE SAND WITH SHELL FRAGMENTS BROWN FINE SAND WITH THACES OF SHELL FRAGMENTS LIGHT GRAY FINE SAND WITH TRACES OF SHELL FRAGMENTS

SAMPLE TERMINATED AT A DEPTH OF 2 FEET BELOW BAY BOTTOM

Ardaman & Associates, Inc.

BORING Sample 3

PROJECT: North River Shores Dredging Project

BORING NO.: Sample 3

BORING LOCATION: Site #3 - Citadel Bay

DEPTH TO WATER TABLE: N/A

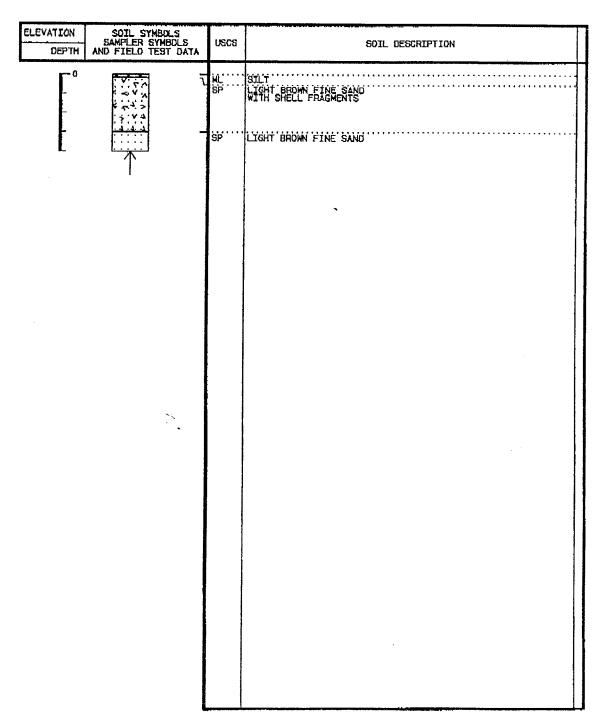
DRILLER: Blue Water Marine Construction

FILE NO.: 95-5710

DATE: 9-21-95

ELEV.: N/A

DATE CHECKED: 9-21-95



SAMPLE TERMINATED AT A DEPTH OF 2 FEET BELOW BAY BOTTOM

Ardaman & Associates, Inc. "

BORING Sample 4

PROJECT: North River Shores Dredging Project FILE NO.: 95-5710

BORING NO.: Sample 4

BORING LOCATION: Site #4 - Santa Lugia Cove

DEPTH TO WATER TABLE: N/A

DRILLER: Blue Water Marine Construction

DATE: 9-21-95

ELEV.: N/A

DATE CHECKED: 9-21-95

SP LIGHT BROWN FINE SAND SP BROWN FINE SAND SC BROWN CLAYEY FINE SAND

SAMPLE TERMINATED AT A DEPTH OF 2 FEET BELOW BAY BOTTOM

🕳 Ardaman & Associates. Inc. 🕳

Legend:

Symbol: Description: Symbol: Description:

SLIGHTY SILTY FINE SAND

FINE SAND

WITH SHELL FRAGMENTS

FINE SAND

FINE SAND

FINE SAND

CLAYEY FINE SAND

CLAYEY FINE SAND

<u>*</u>

Water measured on data indicated



End of boring

Notes:

- The soil boring logs represent our interpretation of the field boring logs and the laboratory examinations of the recovered samples by a geotechnical engineer. The stratification lines represent the approximate boundary between soil types.
- 2. The soil boring logs represent the soil conditions at the specific locations and depths indicated. They do not reflect any variations which may occur adjacent to or between borings. Variations are characteristic of the soils in the region and should be expected.
- 3. Boring locations are approximate and were located in the field by measuring from existing features or property boundaries.
- 4. These boring logs are subject to the limitations, conclusions, and recommendations in this report. They are not to be used for purposes other than those indicated in the report.

Sample No.

1-Composite

Date Sampled:

Sampled By:

September 21, 1995
Blue Water Marine Construction

Tested By:

D. Summerlin

Date Tested:

U.S. Sieve Size	Percent Retained	Percent Passing
3/4 "	2.2	97.8
3/8 "	2.5 ,	97.5
#4	3.3	96.7
#10	4.9	95.1
#20	7.0	93.0
#40	11.2	88.8
#60	27.0	73.0
#100	53.3	46.7
#140	75.6	24.4
#200	81.1	18.9

Sample No.

Date Sampled:

Sampled By:

2-Composite September 21, 1995 Blue Water Marine Construction

D. Summerlin

Tested By: Date Tested:

U.S. Sieve Size	Percent Retained	Percent Passing
3/4 "	0.4	99.6
3/8 #	0.4 ·	99.6
#4	1.4	98.6
#10	4.0	96.0
#20	6.6	93.4
#40	12.3	87.7
#60	36.1	63.9
#100	72.8	27.2
#140	94.9	5.1
#200	98.2	1.8

Sample No.
Date Sampled:
Sampled By:
Tested By:
Date Tested:

3-Composite September 21, 1995 Blue Water Marine Construction

D. Summerlin

U.S. Sieve Size	Percent Retained	Percent Passing
3/4 "	0.3	99.7
3/8 "	0.5 ,	99. 5
#4	1.4	98.6
#10	5.3	94.7
#20	8.4	91.6
#40	18.8	81.2
#60	51.1	48.9
#100	77.1	22.9
#140	94.4	5.5
#200	97.4	2.6

Sample No.

4-Composite

Date Sampled:

September 21, 1995

Sampled By:

Blue Water Marine Construction

Tested By:

D. Summerlin

Date Tested:

U.S. Sieve Size	Percent Retained	Percent Passing
3/4 "	0.1	99.9
3/8 "	0.2	99.8
#4	0.4	99.6
#10	1.0	99.0
#20	1.7	98.3
#40	14.2	85.8
#60	53.7	46.3
#100	77.4	22.6
#140	93.7	6.3
#200	96.6	3.4

ORGANIC CONTENT TEST RESULTS NORTH RIVER SHORES DREDGING PROJECT LINDAHL, BROWNING, FERRARI & HELLSTROM, INC. File No. 95-5710

Composite Sample No.	Organic Content
1	7.6%
2	1.1%
3	0.1%
4	0.1%

FINES CONTENT DETERMINATION RESULTS NORTH RIVER SHORES DREDGING PROJECT LINDAHL, BROWNING, FERRARI & HELLSTROM, INC. File No. 95-5710

Composite Sample No.	Fines Content
1	18.9%
2	1.8%
3	2.6%
4	3.4%

