Appendix E

Percent Moisture, Grain Size Distribution and Bulk Density Raw Data, Calculations and Graphs

GRAIN SIZE DISTRIBUTION TEST DATA

2/3/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-01
Sample Number: 20150060
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
163.38	108.83	#230	117.39	108.83	84.3	15.7

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

RF

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005 **Client:** OCC- Stone Harbor

Sample #: 20150060

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 163.38 (g)
Container Tare:- 108.83 (g)
Mortared Sample: 54.55 (g)
Initials/ Date: 12/31/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 117.39 (g)
Container Tare:- 108.83 (g)
Dry Material: 8.56 (g)
Initials/ Date: 12/3/15
15.71 12/3/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/3/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-01a
Sample Number: 20150061
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
161.86	102.87	#230	104.09	102.87	97.9	2.1

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005 **Client:** OCC- Stone Harbor

Sample #: 20150061

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 161.86 (g)
Container Tare:- 102.87 (g)
Mortared Sample: 58.99 (g)
Initials/ Date: 11/31/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 104.09 (g)
Container Tare:- 102.87 (g)
Dry Material: 1.22 (g)
Initials/ Date: 12/3/15
2.07 % 12/3/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/3/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-02
Sample Number: 20150062
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
159.66	109.55	#230	128.57	109.55	62.0	38.0

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005 **Client:** OCC- Stone Harbor

Sample #: 20150062

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 159.66 (g)
Container Tare:- 109.55 (g)
Mortared Sample: 50.11 (g)
Initials/ Date: JZ/1/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 128.57 (g)
Container Tare:- 109.55 (g)
Dry Material: 19.02 (g)
Initials/ Date: JZ/3/15
38.0% JZ/4/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/4/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-03
Sample Number: 20150063
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
160.50	107.96	#230	147.54	107.96	24.7	75.3

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005 **Client:** OCC- Stone Harbor

Sample #: 20150063

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 160.50 (g)
Container Tare:- 107.96 (g)
Mortared Sample: 52.54 (g)
Initials/ Date: 1/22/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 147.54 (g)
Container Tare:- 107.96 (g)
Dry Material: 39.58 (g)
Initials/ Date: 1/23/15
75.31

GRAIN SIZE DISTRIBUTION TEST DATA

2/3/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-04
Sample Number: 20150064
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
162.71	112.35	#230	122.11	112.35	80.6	19.4

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

RF

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005 **Client:** OCC- Stone Harbor

Sample #: 20150064

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 162.71 (g)
Container Tare:- 112.35 (g)
Mortared Sample: 50.36 (g)
Initials/ Date: 2/4/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 122.11 (g)
Container Tare:- 112.35 (g)
Dry Material: 9.76 (g)
Initials/ Date: 2/3/15
19.41. 2/3/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/3/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-05
Sample Number: 20150065
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
158.90	108.90	#230	116.30	108.90	85.2	14.8

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005 **Client:** OCC- Stone Harbor

Sample #: 20150065

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 158.90 (g)
Container Tare:- 108.90 (g)
Mortared Sample: 50.00 (g)
Initials/ Date: 4/2/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 116.30 (g)
Container Tare:- 108.90 (g)
Dry Material: 7.40 (g)
Initials/ Date: 4/2/3/15
14.81 4/2/3/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/3/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-05a
Sample Number: 20150066
Material Description: Sediment
Testing Remarks: sample contains some small rock, rock fragments and organic debris
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
171.55	112.49	#230	153.29	112.49	30.9	69.1

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005 **Client:** OCC- Stone Harbor

Sample #: 20150066

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 171.55 (g)
Container Tare:- 112.49 (g)
Mortared Sample: 59.06 (g)
Initials/ Date: 7/21/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 153.29 (g)
Container Tare:- 112.49 (g)
Dry Material: 40.80 (g)
Initials/ Date: 7/23/15

69.11 7/23/15

* Sample contains some small rock; rock frag; organic debris

GRAIN SIZE DISTRIBUTION TEST DATA

2/3/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-06
Sample Number: 20150067
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
151.88	100.96	#230	116.38	100.96	69.7	30.3

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

RF

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005 **Client:** OCC- Stone Harbor

Sample #: 20150067

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 151.88 (g)
Container Tare:- 100.96 (g)
Mortared Sample: 50.92 (g)
Initials/ Date: 1/22/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 116.38 (g)
Container Tare:- 100.96 (g)
Dry Material: 15.42 (g)
Initials/ Date: 1/22/15

30.3% 1/22/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/3/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-07
Sample Number: 20150068
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
172.28	114.44	#230	116.13	114.44	97.1	2.9

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

RF

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005 **Client:** OCC- Stone Harbor

Sample #: 20150068

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 172.28 (g)
Container Tare:- 114.44 (g)
Mortared Sample: 57.84 (g)
Initials/ Date: 12/2/14

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 116.13 (g)
Container Tare:- 114.44 (g)
Dry Material: 1.69 (g)
Initials/ Date: 12/3/15

2.92 i. 12/3/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/3/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-08
Sample Number: 20150069
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
168.69	108.94	#230	110.03	108.94	98.2	1.8

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

RF

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005 **Client:** OCC- Stone Harbor

Sample #: 20150069

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 168.69 (g)
Container Tare:- 108.94 (g)
Mortared Sample: 59.75 (g)
Initials/ Date: 7/22/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 110.03 (g)
Container Tare:- 108.94 (g)
Dry Material: 1.09 (g)
Initials/ Date: 7/23/15

1.821. 7/24/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/5/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-27
Sample Number: 20150070
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
242.92	137.83	#230	216.71	137.83	24.9	75.1

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

RF

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005

Client: OCC- Stone Harbor

Sample #: 20150070

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 242.92 (g)
Container Tare:- 137.83 (g)
Mortared Sample: 105.09 (g)
Initials/ Date: 12/4/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 216.71 (g)
Container Tare:- 137.83 (g)
Dry Material: 78.88 (g)
Initials/ Date: 12/5/15

75.11, 12/5/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/3/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-09
Sample Number: 20150071
Material Description: Sediment
Testing Remarks: small shell present
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
167.58	109.96	#230	150.14	109.96	30.3	69.7

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

RF

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005 **Client:** OCC- Stone Harbor

Sample #: 30150071

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 167.58 (g)
Container Tare:- 109.96 (g)
Mortared Sample: 57.62 (g)
Initials/ Date: 4/2/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 150.14 (g)
Container Tare:- 109.96 (g)
Dry Material: 40.18 (g)
Initials/ Date: 4/2/15

Small
* Shell present 4/2/15 69.71 4/2/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/3/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-10
Sample Number: 20150072
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
165.96	112.56	#230	126.43	112.56	74.0	26.0

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005 **Client:** OCC- Stone Harbor

Sample #: 20150072

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 165.96 (g)
Container Tare:- 112.56 (g)
Mortared Sample: 53.40 (g)
Initials/ Date: 12/2/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 126.43 (g)
Container Tare:- 112.56 (g)
Dry Material: 13.87 (g)
Initials/ Date: 12/3/15

26.07. 12/3/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/3/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-10a
Sample Number: 20150073
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
166.89	109.45	#230	115.99	109.45	88.6	11.4

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005 **Client:** OCC- Stone Harbor

Sample #: 20150073

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 166.89 (g)
Container Tare:- 109.45 (g)
Mortared Sample: 57.44 (g)
Initials/ Date: 11/2/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 115.99 (g)
Container Tare:- 109.45 (g)
Dry Material: 6.54 (g)
Initials/ Date: 11/2/3/15
11.41 11/2/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/5/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-11
Sample Number: 20150074
Material Description: Sediment
Testing Remarks: rock, shell material, some organics present
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
264.95	164.99	#230	249.56	164.99	15.4	84.6

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

RF

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005 **Client:** OCC- Stone Harbor

Sample #: 20150074

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 264.95 (g)
Container Tare:- 164.99 (g)
Mortared Sample: 99.96 (g)
Initials/ Date: 12/5/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 249.56 (g)
Container Tare:- 164.99 (g)
Dry Material: 84.57 (g)
Initials/ Date: 12/5/15

84.61 12/5/15

*Rock: shell material, some organics present

GRAIN SIZE DISTRIBUTION TEST DATA

2/3/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-12
Sample Number: 20150075
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
172.28	111.07	#230	126.51	111.07	74.8	25.2

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005 **Client:** OCC- Stone Harbor

Sample #: 20150075

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 172.28 (g)
Container Tare:- 111.07 (g)
Mortared Sample: 61.21 (g)
Initials/ Date: 4/2/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 126.51 (g)
Container Tare:- 111.07 (g)
Dry Material: 15.44 (g)
Initials/ Date: 4/2/15
25.21. 4/2/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/3/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-13
Sample Number: 20150076
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
208.25	100.62	#230	191.70	100.62	15.4	84.6

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005 **Client:** OCC- Stone Harbor

Sample #: 20150076

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 108.25 (g)
Container Tare:- 100.62 (g)
Mortared Sample: 107.63 (g)
Initials/ Date: 12/2/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 191.70 (g)
Container Tare:- 100.62 (g)
Dry Material: 91.08 (g)
Initials/ Date: 12/3/15
84.61. 12/4/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/3/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-14
Sample Number: 20150077
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
157.80	101.40	#230	102.68	101.40	97.7	2.3

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005 **Client:** OCC- Stone Harbor

Sample #: 20150077

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: X (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 157.80 (g)
Container Tare:- 101.40 (g)
Mortared Sample: 56.40 (g)
Initials/ Date: 4/22/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 102.68 (g)
Container Tare:- 101.40 (g)
Dry Material: 1.28 (g)
Initials/ Date: 4/23/15

2.27% 4/24/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/3/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-15
Sample Number: 20150078
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
166.10	111.88	#230	113.31	111.88	97.4	2.6

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005 **Client:** OCC- Stone Harbor

Sample #: 20150078

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 166.10 (g)
Container Tare:- 111.88 (g)
Mortared Sample: 54.22 (g)
Initials/ Date: 7/2/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 113.31 (g)
Container Tare:- 111.88 (g)
Dry Material: 1.43 (g)
Initials/ Date: 7/2/3/15
2.641. 7/2/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/4/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-17
Sample Number: 20150079
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
157.09	105.36	#230	111.49	105.36	88.2	11.8

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

Aqua Survey, Inc.

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005

Client: OCC- Stone Harbor

Sample #: 20150079

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 157.09 (g)
Container Tare:- 105.36 (g)
Mortared Sample: 51.73 (g)
Initials/ Date: 1/2/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 111.49 (g)
Container Tare:- 105.36 (g)
Dry Material: 6.13 (g)
Initials/ Date: 1/2/15

11.81 1/2/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/4/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-17a
Sample Number: 20150080
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
169.37	113.35	#230	120.90	113.35	86.5	13.5

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

CH

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005

Client: OCC- Stone Harbor

Sample #: 20150080

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 169.37 (g)
Container Tare:- 113.35 (g)
Mortared Sample: 56.02 (g)
Initials/ Date: 10/13/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 120.90 (g)
Container Tare:- 113.35 (g)
Dry Material: 7.55 (g)
Initials/ Date: 10/14/15

13.5% 10/14/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/4/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-18
Sample Number: 20150081
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
168.60	111.68	#230	113.38	111.68	97.0	3.0

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

Aqua Survey, Inc.

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005

Client: OCC- Stone Harbor

Sample #: 20150081

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 168.60 (g)
Container Tare:- 111.68 (g)
Mortared Sample: 56.92 (g)
Initials/ Date: 10/3/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 113.38 (g)
Container Tare:- 111.68 (g)
Dry Material: 1.70 (g)
Initials/ Date: 10/14/15

2.77 10/14/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/4/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-16 (0-3.4')
Sample Number: 20150082a
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
232.81	109.21	#230	210.63	109.21	17.9	82.1

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

CH

Aqua Survey, Inc.

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005 **Client:** OCC- Stone Harbor

Sample #: 20150082a

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: ~~109.21~~ 232.81 (g)
Container Tare:- 109.21 (g)
Mortared Sample: 123.60 (g)
Initials/ Date: 12/3/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 210.63 (g)
Container Tare:- 109.21 (g)
Dry Material: 101.42 (g)
Initials/ Date: 12/4/15

82.11 12/4/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/5/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-16 (3.4-7.4')
Sample Number: 20150082b
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
274.82	169.78	#230	265.53	169.78	8.8	91.2

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

Aqua Survey, Inc.

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005

Client: OCC- Stone Harbor

Sample #: 20150082b

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 274.82 (g)
Container Tare:- 169.78 (g)
Mortared Sample: 105.04 (g)
Initials/ Date: 12/3/14

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 265.53 (g)
Container Tare:- 169.78 (g)
Dry Material: 95.75 (g)
Initials/ Date: 12/4/15

91.21 12/4/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/4/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-16a
Sample Number: 20150083
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
269.83	169.06	#230	265.31	169.06	4.5	95.5

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

CH

Aqua Survey, Inc.

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005

Client: OCC- Stone Harbor

Sample #: 20150083

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 269.83 (g)
Container Tare:- 169.06 (g)
Mortared Sample: 100.77 (g)
Initials/ Date: 10/13/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 265.31 (g)
Container Tare:- 169.06 (g)
Dry Material: 96.25 (g)
Initials/ Date: 10/14/15

95.51 10/14/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/4/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-16a
Sample Number: 20150083 dup
Material Description: Sediment
Tested by: M. Thomas **Checked by:** C. Hall

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
235.53	135.25	#230	231.00	135.25	4.5	95.5

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

CH

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005

Client: OCC- Stone Harbor

Sample #: 20150083 dup

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 235.53 (g)
Container Tare:- 135.25 (g)
Mortared Sample: 100.28 (g)
Initials/ Date: 10/3/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 231.00 (g)
Container Tare:- 135.25 (g)
Dry Material: 95.75 (g)
Initials/ Date: 10/4/15

95.51 10/4/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/4/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-16a
Sample Number: 20150083 trip
Material Description: Sediment
Tested by: M. Thomas **Checked by:** C. Hall

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
271.78	171.61	#230	267.26	171.61	4.5	95.5

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

CH

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005 **Client:** OCC- Stone Harbor

Sample #: 20150083 trp

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 271.78 (g)
Container Tare:- 171.61 (g)
Mortared Sample: 100.17 (g)
Initials/ Date: 10/3/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 267.26 (g)
Container Tare:- 171.61 (g)
Dry Material: 95.65 (g)
Initials/ Date: 10/4/15
95.51. 10/4/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/4/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-16b
Sample Number: 20150084
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
250.48	136.73	#230	239.84	136.73	9.4	90.6

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

CH

Aqua Survey, Inc.

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005

Client: OCC- Stone Harbor

Sample #: 20150084

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 250.48 (g)
Container Tare:- 136.73 (g)
Mortared Sample: 113.75 (g)
Initials/ Date: 12/3/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 239.84 (g)
Container Tare:- 136.73 (g)
Dry Material: 103.11 (g)
Initials/ Date: 12/4/15
90.61 12/4/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/4/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-19
Sample Number: 20150085
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
183.03	134.25	#230	152.45	134.25	62.7	37.3

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

CH

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005

Client: OCC- Stone Harbor

Sample #: 20150085

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 183.03 (g)
Container Tare:- 134.25 (g)
Mortared Sample: 48.78 (g)
Initials/ Date: 2/3/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 152.45 (g)
Container Tare:- 134.25 (g)
Dry Material: 18.20 (g)
Initials/ Date: 2/4/15
37.31 2/4/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/4/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-20
Sample Number: 20150086
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
163.28	109.78	#230	113.50	109.78	93.0	7.0

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

CH

Aqua Survey, Inc.

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005 **Client:** OCC- Stone Harbor

Sample #: 20150086

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 163.28 (g)
Container Tare:- 109.78 (g)
Mortared Sample: 53.50 (g)
Initials/ Date: 10/2/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 113.50 (g)
Container Tare:- 109.78 (g)
Dry Material: 3.72 (g)
Initials/ Date: 10/4/15

6.95%
10/4/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/4/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-21
Sample Number: 20150087
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
271.96	163.62	#230	253.36	163.62	17.2	82.8

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

CH

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005

Client: OCC- Stone Harbor

Sample #: 20150087

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☐ Mortared Sample + Container: 271.96 (g)
Container Tare:- 163.62 (g)
Mortared Sample: 108.34 (g)
Initials/ Date: 7/2/3/15

☐ Sample soaked and washed
☐ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 253.36 (g)
Container Tare:- 163.62 (g)
Dry Material: 89.74 (g)
Initials/ Date: 7/2/4/15

82.81 7/24/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/4/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-22
Sample Number: 20150088
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
230.05	173.46	#230	189.68	173.46	71.3	28.7

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

Aqua Survey, Inc.

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005

Client: OCC- Stone Harbor

Sample #: 20150088

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 230.05 (g)
Container Tare:- 173.46 (g)
Mortared Sample: 56.59 (g)
Initials/ Date: 10/13/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 189.68 (g)
Container Tare:- 173.46 (g)
Dry Material: 16.22 (g)
Initials/ Date: 10/14/15
28.71 10/14/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/4/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-23
Sample Number: 20150089
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
270.86	142.18	#230	248.36	142.18	17.5	82.5

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

CH

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005 **Client:** OCC- Stone Harbor

Sample #: 20150089

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

- [x] Mortared Sample + Container: 270.86 (g)
  Container Tare:- 142.18 (g)
  Mortared Sample: 128.68 (g)
  Initials/ Date: 12/5/15

- [x] Sample soaked and washed
- [x] Sample back to oven
- [ ] Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 248.36 (g)
Container Tare:- 142.18 (g)
Dry Material: 106.18 (g)
Initials/ Date: 12/14/15

82.5% 12/14/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/5/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-24
Sample Number: 20150090
Material Description: Sediment
Testing Remarks: crushed shell frag present
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
280.25	166.33	#230	269.73	166.33	9.2	90.8

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

Aqua Survey, Inc.

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005

Client: OCC- Stone Harbor

Sample #: 20150090

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 280.25 (g)
Container Tare:- 166.33 (g)
Mortared Sample: 113.92 (g)
Initials/ Date: 12/3/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 269.73 (g)
Container Tare:- 166.33 (g)
Dry Material: 103.40 (g)
Initials/ Date: 12/4/15

* Crushed shell frag present 90.81 12/4/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/4/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-25
Sample Number: 20150091
Material Description: Sediment
Testing Remarks: very small amount of crushed shell fragments present
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
287.43	163.57	#230	282.95	163.57	3.6	96.4

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

CH

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005 **Client:** OCC- Stone Harbor

Sample #: 20150091

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 287.43 (g)
Container Tare:- 163.57 (g)
Mortared Sample: 123.86 (g)
Initials/ Date: 4/2/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 282.95 (g)
Container Tare:- 163.57 (g)
Dry Material: 119.38 (g)
Initials/ Date: 4/2/4/15

* Some crushed shell frag present (shell abrasion) 96.4% 4/2/4/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/4/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-26
Sample Number: 20150092
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
261.87	153.43	#230	253.54	153.43	7.7	92.3

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

CH

Aqua Survey, Inc.

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005 **Client:** OCC- Stone Harbor

Sample #: 20150092

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 261.87 (g)
Container Tare:- 153.43 (g)
Mortared Sample: 108.44 (g)
Initials/ Date: JJ 2/3/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 253.54 (g)
Container Tare:- 153.43 (g)
Dry Material: 100.11 (g)
Initials/ Date: JJ 2/4/15
92.5% 2/4/15

*Crushed shell frag. present

GRAIN SIZE DISTRIBUTION TEST DATA

2/3/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-28 (0-2.9')
Sample Number: 20150093a
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
246.37	146.10	#230	231.69	146.10	14.6	85.4

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005

Client: OCC- Stone Harbor

Sample #: 20150093a

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 246.37 (g)
Container Tare:- 146.10 (g)
Mortared Sample: 100.27 (g)
Initials/ Date: 1/26/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 231.69 (g)
Container Tare:- 146.10 (g)
Dry Material: 85.59 (g)
Initials/ Date: 1/26/15

85.41 1/26/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/3/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-28 (0-2.9')
Sample Number: 20150093a dup
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
245.69	145.67	#230	231.16	145.67	14.5	85.5

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005 **Client:** OCC- Stone Harbor

Sample #: 20150093adep

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 245.69 (g)
Container Tare:- 145.67 (g)
Mortared Sample: 100.02 (g)
Initials/ Date: 12/2/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 231.16 (g)
Container Tare:- 145.67 (g)
Dry Material: 85.49 (g)
Initials/ Date: 12/3/15

85.51 12/3/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/3/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-28 (0-2.9')
Sample Number: 20150093a trip
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
262.92	162.78	#230	248.56	162.78	14.3	85.7

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005

Client: OCC- Stone Harbor

Sample #: 20150093a trp

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 262.92 (g)
Container Tare:- 162.78 (g)
Mortared Sample: 100.14 (g)
Initials/ Date: 10/2/15

☑ Sample soaked and washed
☑ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 248.56 (g)
Container Tare:- 162.78 (g)
Dry Material: 85.78 (g)
Initials/ Date: 10/3/15

85.7% 10/3/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/4/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-28 (2.9-7.6')
Sample Number: 20150093b
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
248.51	139.81	#230	243.88	139.81	4.3	95.7

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005

Client: OCC- Stone Harbor

Sample #: 20150093b

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

- [x] Mortared Sample + Container: 248.51 (g)
  Container Tare:- 139.81 (g)
  Mortared Sample: 108.70 (g)
  Initials/ Date: 7/2/15

- [x] Sample soaked and washed
- [x] Sample back to oven
- [ ] Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 243.88 (g)
Container Tare:- 139.81 (g)
Dry Material: 104.07 (g)
Initials/ Date: 7/2/3/15

95.7% 7/23/15

GRAIN SIZE DISTRIBUTION TEST DATA

2/3/2015

Client: Ocean and Coastal Consultants
Project: Stone Harbor
Project Number: 35-005
Location: S-29
Sample Number: 20150094
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
224.09	168.98	#230	216.76	168.98	13.3	86.7

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}

Aqua Survey, Inc.
Special Studies Department
Grain Size

Job #: 35-005 **Client:** OCC- Stone Harbor

Sample #: 20150094

For % Moisture:

Wet Sample + Container: _____ (g)
Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

Dry Sample + Container: _____ (g)
Container Tare:- _____ (g)
Dry Sample: _____ (g)
Initials/ Date: _____

☑ Mortared Sample + Container: 224.09 (g)
Container Tare:- 168.98 (g)
Mortared Sample: 55.11 (g)
Initials/ Date: 4/22/15

☑ Sample soaked and washed
☐ Sample back to oven
☐ Sample re-mortared (after weighing below; prior to being put thru sieve nest)

#200 Sieve (Retained)

Dry Material + Container: _____ (g)
Container Tare:- _____ (g)
Dry Material: _____ (g)
Initials/ Date: _____

#230 Sieve (Retained)

Dry Material + Container: 216.76 (g)
Container Tare:- 168.98 (g)
Dry Material: 47.78 (g)
Initials/ Date: 4/23/15

86.71 4/23/15

PERCENT MOISTURE & HYGROSCOPIC MOISTURE

Balance: Mettler **Calibration: x Yes No** **Client: Occ Stone Harbor**
Drying Oven: Fisher 255G **Temperature: 105 degrees C** **ASI Job # 35-005**

Sample ID#	Pan Weight g	Wet Sample + Pan g	Air Dry Sample +Pan Weight g	First Oven Dry Sample +Pan Weight g	Final Oven Dry Weight +Pan Weight g	% Moisture*
20150060	1.3296	25.6510	11.8698	11.6500	11.6483	57.6
20150061	1.3029	22.7837	9.1256	8.9369	8.9344	64.5
20150062	1.3500	24.4502	12.1231	11.9487	11.9470	54.1
20150063	1.3167	31.7323	21.7231	21.6041	21.6038	33.3
20150064	1.3452	26.8640	12.5890	12.3245	12.3245	57.0
20150065	1.3466	24.2708	11.2003	10.9838	10.9830	58.0
20150066	1.3475	26.2229	16.3852	16.2476	16.2471	40.1
20150067	1.3378	25.9615	13.7022	13.4863	13.4841	50.7
20150068	1.3485	21.9568	8.9957	8.8131	8.8116	63.8
20150069	1.3284	20.2602	8.5266	8.3502	8.3500	62.9
20150070	1.3447	22.0036	14.7980	14.7080	14.7077	35.3
20150071	1.3271	25.3357	16.1395	16.0263	16.0249	38.8
20150072	1.3416	25.5525	12.1222	11.9232	11.9217	56.3
20150073	1.3715	23.5830	10.7739	10.5602	10.5607	58.6
20150074	1.3312	25.8744	19.0395	18.9670	18.9666	28.1
20150075	1.3037	26.1923	13.2090	12.9849	12.9850	53.1
20150076	1.3161	26.0149	19.3625	19.2868	19.2877	27.2
20150077	1.3352	25.4644	10.1281	9.9038	9.9061	64.5
20150078	1.3180	22.5290	9.2379	9.0449	9.0477	63.6
20150079	1.3374	21.5861	9.8590	9.6726	9.6739	58.8
20150079 dup	1.3173	20.4040	9.3571	9.1894	9.1910	58.8
20150079 trip	1.3008	20.1271	9.2341	9.0633	9.0678	58.8
20150080	1.3129	24.5900	11.0051	10.7805	10.7867	59.3
20150081	1.3411	20.1532	8.5412	8.3526	8.3584	62.7

$$* \% \text{ Moisture} = \frac{[\text{wet weight + pan - 2nd oven dry weight + pan}]}{[\text{wet weight + pan - pan}]}$$

RI

PERCENT MOISTURE & HYGROSCOPIC MOISTURE

Balance: Mettler
Drying Oven: Fisher 255G

Calibration: x Yes No
Temperature: 105 degrees C

Client: Occ Stone Harbor
ASI Job # 35-005

Sample ID#	Pan Weight g	Wet Sample + Pan g	Air Dry Sample +Pan Weight g	First Oven Dry Sample +Pan Weight g	Final Oven Dry Weight +Pan Weight g	% Moisture*
20150082a	1.3260	27.7557	20.2431	20.1589	20.1574	28.7
20150082b	1.3286	33.7172	26.0176	25.9489	25.9509	24.0
20150083	1.3467	24.0706	19.5038	19.4726	19.4724	20.2
20150084	1.3496	22.4619	17.1510	17.1088	17.1080	25.4
20150085	1.3475	28.1660	14.1921	13.9982	13.9788	52.9
20150086	1.3469	22.0404	9.0700	8.8863	8.8609	63.7
20150087	1.3133	29.8862	21.8443	21.7620	21.7445	28.5
20150088	1.3351	26.7403	11.8324	11.6512	11.6214	59.5
20150089	1.3352	27.7796	20.0823	20.0000	19.9831	29.5
20150090	1.3234	26.5831	21.2502	21.1994	21.1885	21.4
20150091	1.3066	26.6943	21.2294	21.1965	21.1906	21.7
20150092	1.3338	30.5213	24.0791	24.0249	24.0198	22.3
20150093a	1.3546	33.1342	24.1546	24.0813	24.0698	28.5
20150093b	1.3374	29.5898	23.3499	23.3188	23.3116	22.2
20150094	1.2948	34.8050	26.8081	26.7275	26.7156	24.1
20150097	1.3322	19.5784	8.6103	8.4400	8.4161	61.2
20150099	1.3500	22.8917	10.4301	10.1974	10.1747	59.0
20150100	1.3510	20.3280	8.4611	8.2538	8.2286	63.8
20150100 dup	1.3352	24.9813	10.1980	9.9391	9.9206	63.7
20150100 trip	1.3122	19.9226	8.2751	8.0904	8.0738	63.7
20150101	1.3402	22.2031	10.4213	10.2239	10.2162	57.5
20150103	1.3344	20.7552	8.4776	8.2926	8.2706	64.3
20150104	1.3518	20.8324	9.1855	8.9940	8.9814	60.8

$$* \% \text{ Moisture} = \frac{[\text{wet weight + pan - 2nd oven dry weight + pan}]}{[\text{wet weight + pan - pan}]}$$

RJ

PERCENT MOISTURE & HYGROSCOPIC MOISTURE

Balance: Mettler
Drying Oven: Fisher 255G

Calibration: x Yes No
Temperature: 105 degrees C

Client: Occ Stone Harbor
ASI Job # 35-005

Sample ID#	Pan Weight g	Wet Sample + Pan g	Air Dry Sample +Pan Weight g	First Oven Dry Sample +Pan Weight g	Final Oven Dry Weight +Pan Weight g	% Moisture*
20150109	1.3510	24.3685	18.3147	18.2658	18.2597	26.5
20150109 dup	1.3556	30.7647	23.1139	23.0516	23.0424	26.3
20150109 trip	1.2959	26.9314	20.2848	20.2312	20.2250	26.2

$$* \% \text{ Moisture} = \frac{[\text{wet weight + pan - 2nd oven dry weight + pan}]}{[\text{wet weight + pan - pan}]}$$

RS

AQUA SURVEY, INC.
PERCENT MOISTURE & HYDROSCOPIC CORRECTION FACTOR BENCHSHEET

Balance: Sartorious/ Mettler (circled)

Calibration: YES (circled) NO

Client: OCC - Stone Harbor

Drying Oven: ~~QL Model 40~~ Fisher Model 2556

Temperature: 105 °C

Job #: 35-005

Sample #	A	B	C	D	E	F	G	H	I	% Moisture*	HMCF**
20150060	1.3296	25.6510	11.8698	11.6500	11.6483						
20150061	1.3029	22.7837	9.1256	8.9369	8.9344						
20150062	1.3500	24.4502	12.1231	11.9487	11.9470						
20150063	1.3167	31.7323	21.7231	21.6041	21.6038						
20150064	1.3452	26.8640	12.5890	12.3245	12.3245						
20150065	1.3466	24.2708	11.2003	10.9838	10.9830						
20150066	1.3475	26.2229	16.3852	16.2476	16.2471						
20150067	1.3378	25.9615	13.7022	13.4863	13.4841						
20150068	1.3485	21.9568	8.9957	8.8131	8.8116						
20150069	1.3284	20.2602	8.5266	8.3502	8.3500						
20150070	1.3447	~~21.~~ ①	14.7980	14.7080	14.7077						
20150071	1.3271	25.3357	16.1395	16.0263	16.0249						
20150072	1.3416	25.5525	12.1222	11.9232	11.9217						
20150073	1.3715	23.5830	10.7739	10.5602	10.5607						
20150074	1.3312	25.8744	19.0395	18.9670	18.9666						
20150075	1.3037	26.1923	13.2090	12.9849	12.9850						
20150076	1.3161	26.0149	19.3625	19.2868	19.2877						
20150077	1.3352	25.4644	10.1281	9.9038	9.9061						
20150078	1.3180	22.5290	9.2379	9.0449	9.0477						
20150079	1.3374	21.5861	9.8590	9.6726	9.6739						
20150079 Dup	1.3173	20.4040	9.3571	9.1894	9.1910						
20150079 Trip	1.3008	20.1271	9.2341	9.0633	~~9.1910~~ ②						
20150080	1.3129	24.5900	11.0051	10.7805	10.7867						
20150081	1.3411	20.1532	8.5412	8.3526	8.3584						
Initials/ Date	DA 2/6/15	DA 2/6/15	DA 2/6/15	DA 2/17/15	DA 2/18/15						

A= Empty Pan (g)
B= Wet Sample + Pan (g)
C= Air Dry Sample + Pan (g)
D= First Oven Dry Sample + Pan (g)
E= Second Oven Dry Sample + Pan (g)

① 22.0036 DA 2/6/15
② 9.0678 DA 2/18/15

* % moisture = $\frac{\text{B- Final oven dry wt.}}{\text{B-A}}$ X100

** HMCF= (Final oven dry wt.- A)/ (C-A)

If oven dried sample is not ± 0.05g or at a constant weight after second oven dry, return samples to oven and use F, G, H, and I until requirement is met.

AQUA SURVEY, INC.
PERCENT MOISTURE & HYDROSCOPIC CORRECTION FACTOR BENCHSHEET

Balance: Sartorious/ Mettler

Calibration: YES NO

Client: OCC - Stone Harbor

Drying Oven: ~~QL Model 40~~ Fisher Model 255G

Temperature: 105 °C

Job #: 35-005

Sample #	A	B	C	D	E	F	G	H	I	% Moisture*	HMCF**
20150082a	1.3260	27.7557	20.2431	20.1589	20.1574						
20150082b	1.3286	33.7172	26.0176	25.9489	25.9509						
20150083	1.3467	24.0706	19.5038	19.4726	19.4724						
20150084	1.3496	22.4619	17.1510	17.1088	17.1080						
20150085	1.3475	28.1660	14.1921	13.9982	13.9788						
20150086	1.3469	22.0404	9.0700	8.8863	8.8609						
20150087	1.3133	29.8862	21.8443	21.7620	21.7445						
20150088	1.3351	26.7403	11.8324	11.6512	11.6214						
20150089	1.3352	27.7796	20.0823	20.0000	19.9831						
20150090	1.3234	26.5831	21.2502	21.1994	21.1885						
20150091	1.3066	26.6943	21.2294	21.1965	21.1906						
20150092	1.3338	30.5213	24.0791	24.0249	24.0198						
20150093a	1.3546	33.1342	24.1546	24.0813	24.0698						
20150093b	1.3374	29.5898	23.3499	23.3188	23.3116						
20150094	1.2948	34.8050	26.8081	26.7275	26.7156						
20150097	1.3322	19.5784	8.6103	8.4400	8.4161						
20150099	1.3500	22.8917	10.4301	10.1974	10.1747						
20150100	1.3510	20.3280	8.4611	8.2538	8.2286						
20150100Dup	1.3352	24.9813	10.1980	9.9391	9.9206						
20150100trip	1.3122	19.9226	8.2751	8.0904	8.0738						
20150101	1.3402	22.2031	10.4213	10.2239	10.2162						
20150103	1.3344	20.7552	8.4776	8.2926	8.2706						
20150104	1.3518	20.8324	9.1855	8.9940	8.9814						
Initials/ Date	DH 2/16/15	DH 2/16/15	DH 2/16/15	DH 2/17/15	DH 2/18/15						

A= Empty Pan (g)
B= Wet Sample + Pan (g)
C= Air Dry Sample + Pan (g)
D= First Oven Dry Sample + Pan (g)
E= Second Oven Dry Sample + Pan (g)

* % moisture = $\frac{\text{B- Final oven dry wt.}}{\text{B-A}}$ X100

** HMCF= (Final oven dry wt.- A)/ (C-A)

If oven dried sample is not ± 0.05g or at a constant weight after second oven dry, return samples to oven and use F, G, H, and I until requirement is met.

AQUA SURVEY, INC.
PERCENT MOISTURE & HYDROSCOPIC CORRECTION FACTOR BENCHSHEET

Balance: Sartorious/ Mettler

Calibration: YES NO

Client: OCC - Stone Harbor

Drying Oven: ~~QL Model 40~~ Fisher Model 255G

Temperature: 105 °C

Job #: 35-005

Sample #	A	B	C	D	E	F	G	H	I	% Moisture*	HMCF**
20150109	1.3510	24.3685	18.3147	18.2658	18.2597						
20150109Dup	1.3556	30.7647	23.1139	23.0516	23.0424						
20150109MS	1.2959	210.9314	20.2848	20.2312	20.2250						
Initials/ Date	DJ 2/6/15	DJ 2/6/15	DJ 2/6/15	DJ 2/17/15	DJ 2/18/15						

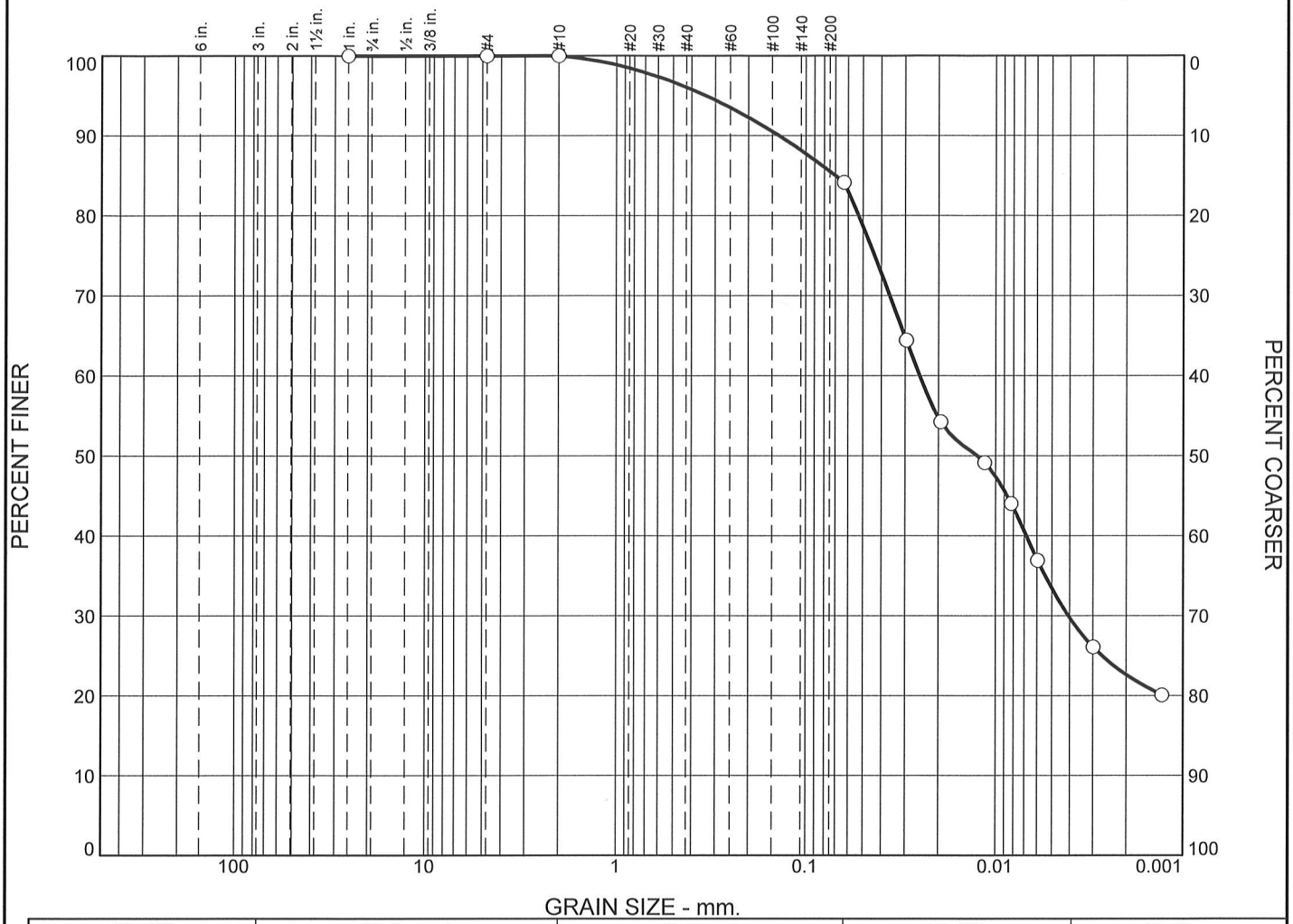
A= Empty Pan (g)
B= Wet Sample + Pan (g)
C= Air Dry Sample + Pan (g)
D= First Oven Dry Sample + Pan (g)
E= Second Oven Dry Sample + Pan (g)

* % moisture = $\frac{\text{B- Final oven dry wt.}}{\text{B-A}}$ X100

** HMCF= (Final oven dry wt.- A)/ (C-A)

If oven dried sample is not ± 0.05g or at a constant weight after second oven dry, return samples to oven and use F, G, H, and I until requirement is met.

Particle Size Distribution Report



	% +3"	% Gravel	% Sand	% Silt	% Clay
○	0.0	0.0	15.9	54.7	29.4

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.0700	0.0252	0.0125	0.0041				

Material Description	USCS	AASHTO
○ Sediment		

Project No. 35-005 **Client:** Ocean and Coastal Consultants, Inc.

Project: Stone Harbor

○ **Source of Sample:** S-01 **Sample Number:** 20150060

Remarks:

RF

Aqua Survey, Inc.

Flemington, NJ

Figure S-01

Tested By: M. Thomas **Checked By:** R. Fristrom

GRAIN SIZE DISTRIBUTION TEST DATA

2/26/2015

Client: Ocean and Coastal Consultants, Inc.
Project: Stone Harbor
Project Number: 35-005
Location: S-01
Sample Number: 20150060
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
71.32	11.54	1	0.00	0.00	100.0	0.0
		#4	11.54	11.54	100.0	0.0
		#10	11.54	11.54	100.0	0.0
50.00	0.00	#230	180.91	172.98	84.1	15.9

Hydrometer Test Data

Hydrometer test uses material passing #10
Percent passing #10 based upon complete sample = 100.0
Weight of hydrometer sample =50.0
Hygroscopic moisture correction:
Moist weight and tare = 11.87
Dry weight and tare = 11.65
Tare weight = 1.33
Hygroscopic moisture = 2.1%
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = -7
Meniscus correction only = 0.5
Specific gravity of solids = 2.65
Hydrometer type = 152H
Hydrometer effective depth equation: L = 16.294964 - 0.164 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer	Percent Retained
2.00	22.5	38.0	31.5	0.0132	38.5	10.0	0.0296	64.4	35.6
5.00	22.6	33.0	26.6	0.0132	33.5	10.8	0.0194	54.3	45.7
15.00	22.6	30.5	24.1	0.0132	31.0	11.2	0.0114	49.2	50.8
30.00	22.6	28.0	21.6	0.0132	28.5	11.6	0.0082	44.0	56.0
60.00	22.7	24.5	18.1	0.0132	25.0	12.2	0.0060	36.9	63.1
250.00	23.4	19.0	12.8	0.0131	19.5	13.1	0.0030	26.1	73.9
1440.00	21.7	16.5	9.8	0.0134	17.0	13.5	0.0013	20.1	79.9

Fractional Components

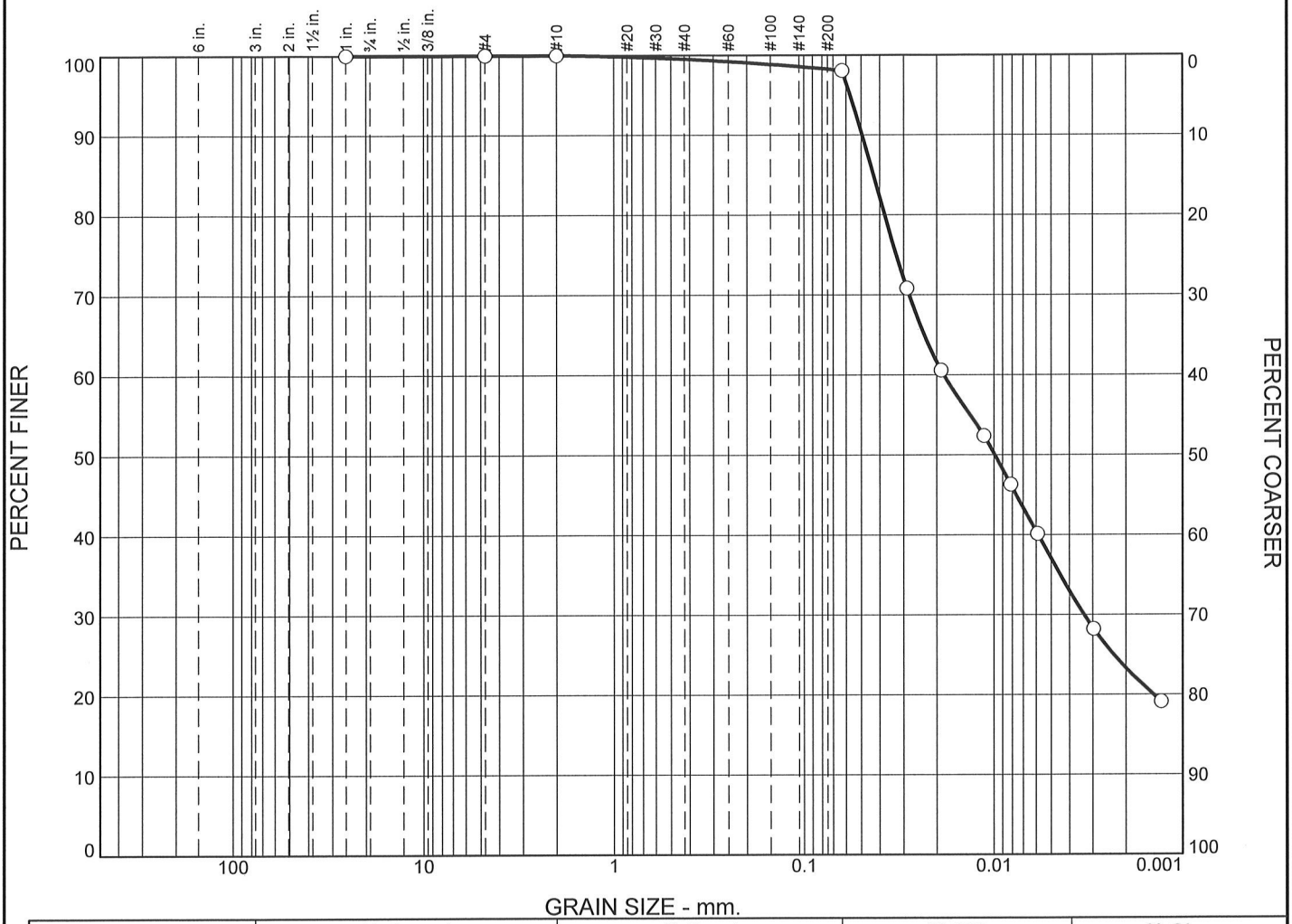
Cobbles	Gravel	Sand	Silt	Clay
0.0	0.0	15.9	54.7	29.4

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
			0.0041	0.0125	0.0252	0.0527	0.0700	0.1388	0.3370

Fineness Modulus
0.18

RF

Particle Size Distribution Report



	% +3"	% Gravel	% Sand	% Silt	% Clay
○	0.0	0.0	1.9	65.5	32.6

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.0432	0.0184	0.0099	0.0033				

Material Description	USCS	AASHTO
○ Sediment		

Project No. 35-005 **Client:** Ocean and Coastal Consultants, Inc.

Project: Stone Harbor

○ **Source of Sample:** S-01a **Sample Number:** 20150061

Remarks:

Aqua Survey, Inc.

Flemington, NJ

Figure S-01a

Tested By: M. Thomas **Checked By:** R. Fristrom

GRAIN SIZE DISTRIBUTION TEST DATA

2/26/2015

Client: Ocean and Coastal Consultants, Inc.
Project: Stone Harbor
Project Number: 35-005
Location: S-01a
Sample Number: 20150061
Material Description: Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
73.27	11.50	1	0.00	0.00	100.0	0.0
		#4	11.50	11.50	100.0	0.0
		#10	11.50	11.50	100.0	0.0
50.00	0.00	#230	169.01	168.05	98.1	1.9

Hydrometer Test Data

Hydrometer test uses material passing #10
Percent passing #10 based upon complete sample = 100.0
Weight of hydrometer sample =50.0
Hygroscopic moisture correction:
Moist weight and tare = 9.13
Dry weight and tare = 8.93
Tare weight = 1.30
Hygroscopic moisture = 2.5%
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = -7
Meniscus correction only = 0.5
Specific gravity of solids = 2.65
Hydrometer type = 152H
Hydrometer effective depth equation: L = 16.294964 - 0.164 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer	Percent Retained
2.00	22.6	41.0	34.6	0.0132	41.5	9.5	0.0288	70.8	29.2
5.00	22.6	36.0	29.6	0.0132	36.5	10.3	0.0190	60.6	39.4
15.00	22.6	32.0	25.6	0.0132	32.5	11.0	0.0113	52.4	47.6
30.00	22.7	29.0	22.6	0.0132	29.5	11.5	0.0082	46.3	53.7
60.00	22.7	26.0	19.6	0.0132	26.5	11.9	0.0059	40.2	59.8
250.00	23.4	20.0	13.8	0.0131	20.5	12.9	0.0030	28.2	71.8
1440.00	21.7	16.0	9.3	0.0134	16.5	13.6	0.0013	19.1	80.9

Fractional Components

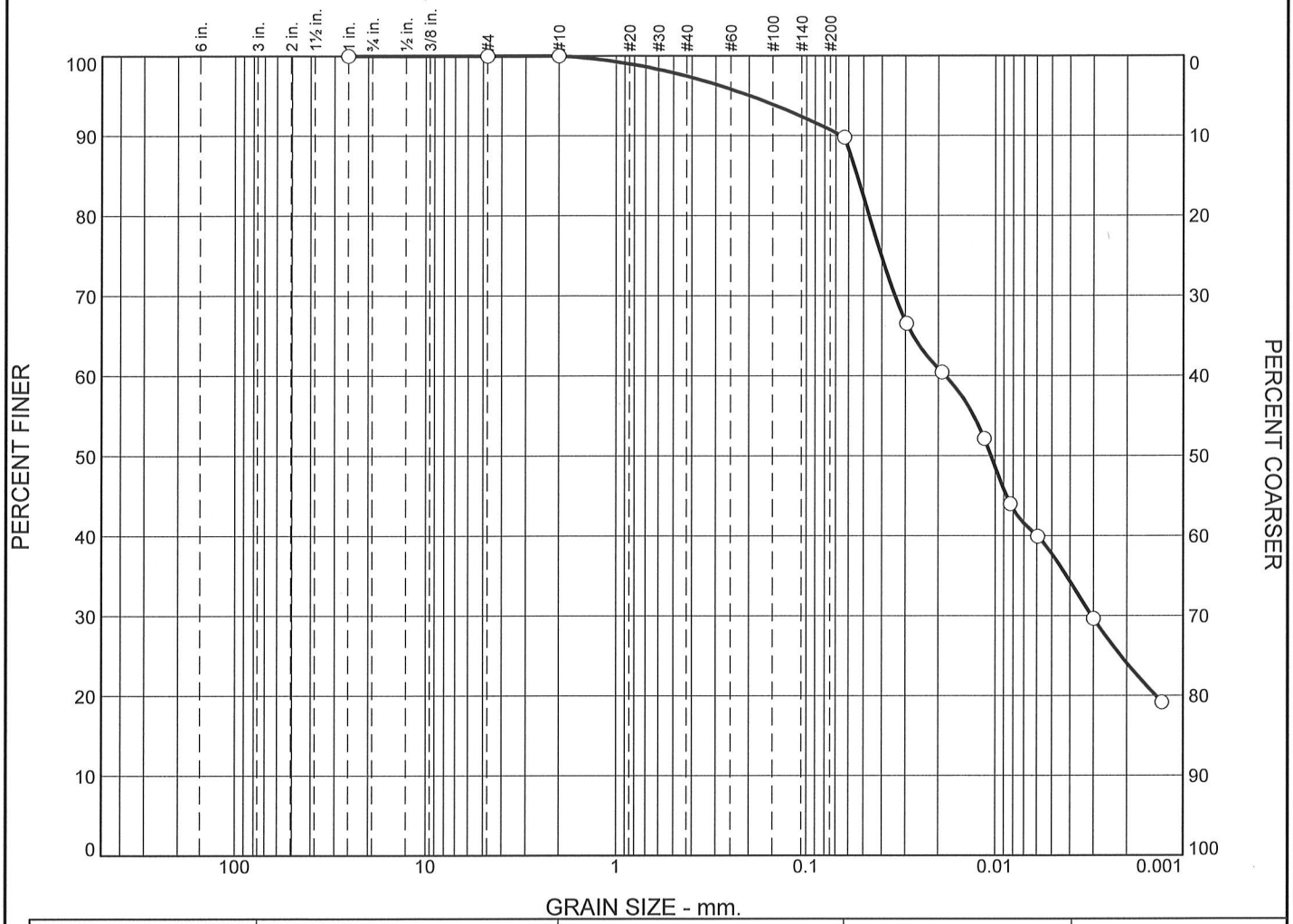
Cobbles	Gravel	Sand	Silt	Clay
0.0	0.0	1.9	65.5	32.6

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
		0.0014	0.0033	0.0099	0.0184	0.0377	0.0432	0.0495	0.0572

Fineness Modulus
0.02

Aqua Survey, Inc.

Particle Size Distribution Report



	% +3"	% Gravel	% Sand	% Silt	% Clay
○	0.0	0.0	10.2	55.9	33.9

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.0542	0.0184	0.0105	0.0031				

Material Description	USCS	AASHTO
○ Composite Sediment		

Project No. 35-005 **Client:** Ocean and Coastal Consultants, Inc.

Project: Stone Harbor

○ **Source of Sample:** Composite A **Sample Number:** 20150097

Remarks:

Aqua Survey, Inc.

Flemington, NJ

Figure Comp A

Tested By: M. Thomas **Checked By:** R. Fristrom

GRAIN SIZE DISTRIBUTION TEST DATA

2/26/2015

Client: Ocean and Coastal Consultants, Inc.
Project: Stone Harbor
Project Number: 35-005
Location: Composite A
Sample Number: 20150097
Material Description: Composite Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
65.75	11.53	1	0.00	0.00	100.0	0.0
		#4	11.53	11.53	100.0	0.0
		#10	11.53	11.53	100.0	0.0
50.00	0.00	#230	180.99	175.89	89.8	10.2

Hydrometer Test Data

Hydrometer test uses material passing #10
Percent passing #10 based upon complete sample = 100.0
Weight of hydrometer sample =50
Hygroscopic moisture correction:
Moist weight and tare = 8.61
Dry weight and tare = 8.42
Tare weight = 1.33
Hygroscopic moisture = 2.7%
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = -7
Meniscus correction only = 0.5
Specific gravity of solids = 2.65
Hydrometer type = 152H
Hydrometer effective depth equation: L = 16.294964 - 0.164 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer	Percent Retained
2.00	21.9	39.0	32.4	0.0133	39.5	9.8	0.0295	66.5	33.5
5.00	22.0	36.0	29.4	0.0133	36.5	10.3	0.0191	60.4	39.6
15.00	21.9	32.0	25.4	0.0133	32.5	11.0	0.0114	52.2	47.8
30.00	22.0	28.0	21.4	0.0133	28.5	11.6	0.0083	44.0	56.0
60.00	22.1	26.0	19.4	0.0133	26.5	11.9	0.0059	39.9	60.1
250.00	22.1	21.0	14.4	0.0133	21.5	12.8	0.0030	29.7	70.3
1440.00	21.7	16.0	9.3	0.0134	16.5	13.6	0.0013	19.2	80.8

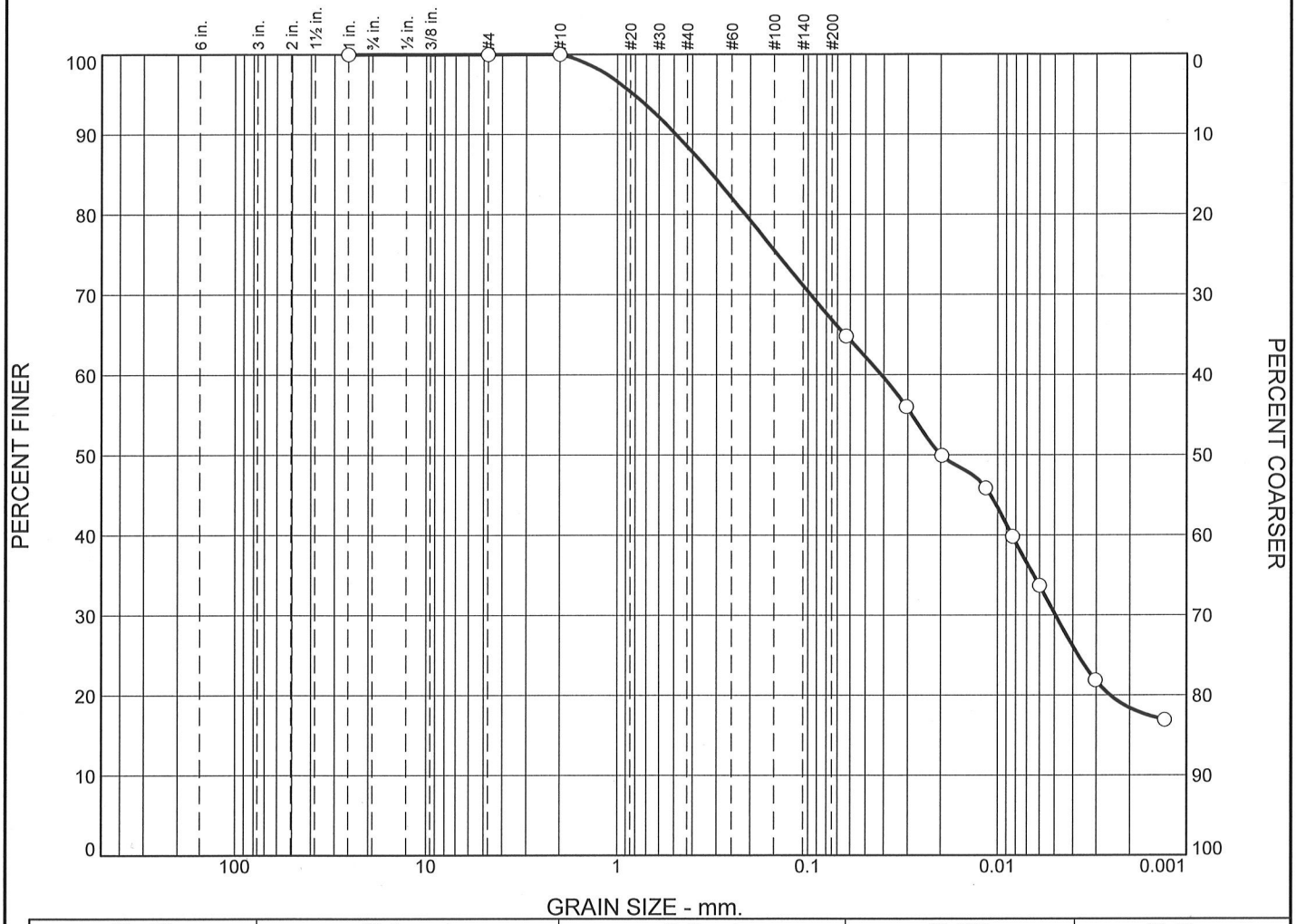
Fractional Components

Cobbles	Gravel	Sand	Silt	Clay
0.0	0.0	10.2	55.9	33.9

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
		0.0014	0.0031	0.0105	0.0184	0.0467	0.0542	0.0654	0.1988

Fineness Modulus
0.12

Particle Size Distribution Report



	% +3"	% Gravel	% Sand	% Silt	% Clay
○	0.0	0.0	35.2	39.1	25.7

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.3169	0.0411	0.0199	0.0049				

Material Description	USCS	AASHTO
○ Discrete Composite Sediment		

Project No. 35-005 **Client:** Ocean and Coastal Consultants, Inc.

Project: Stone Harbor

○ **Source of Sample:** Composite A-1/S-02 **Sample Number:** 20150062

Remarks:

RF

Aqua Survey, Inc.

Flemington, NJ

Figure Comp A-1

Tested By: M. Thomas **Checked By:** R. Fristrom

GRAIN SIZE DISTRIBUTION TEST DATA

2/26/2015

Client: Ocean and Coastal Consultants, Inc.
Project: Stone Harbor
Project Number: 35-005
Location: Composite A-1/S-02
Sample Number: 20150062
Material Description: Discrete Composite Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
67.66	11.40	1	0.00	0.00	100.0	0.0
		#4	11.40	11.40	100.0	0.0
		#10	11.40	11.40	100.0	0.0
50.00	0.00	#230	179.87	162.29	64.8	35.2

Hydrometer Test Data

Hydrometer test uses material passing #10
Percent passing #10 based upon complete sample = 100.0
Weight of hydrometer sample =50
Hygroscopic moisture correction:
Moist weight and tare = 12.12
Dry weight and tare = 11.95
Tare weight = 1.35
Hygroscopic moisture = 1.7%
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = -7
Meniscus correction only = 0.5
Specific gravity of solids = 2.65
Hydrometer type = 152H
Hydrometer effective depth equation: L = 16.294964 - 0.164 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer	Percent Retained
2.00	22.6	34.0	27.6	0.0132	34.5	10.6	0.0305	56.0	44.0
5.00	22.6	31.0	24.6	0.0132	31.5	11.1	0.0197	49.9	50.1
15.00	22.6	29.0	22.6	0.0132	29.5	11.5	0.0116	45.9	54.1
30.00	22.7	26.0	19.6	0.0132	26.5	11.9	0.0083	39.8	60.2
60.00	22.7	23.0	16.6	0.0132	23.5	12.4	0.0060	33.7	66.3
250.00	23.4	17.0	10.8	0.0131	17.5	13.4	0.0030	21.9	78.1
1440.00	21.7	15.0	8.3	0.0134	15.5	13.8	0.0013	17.0	83.0

Fractional Components

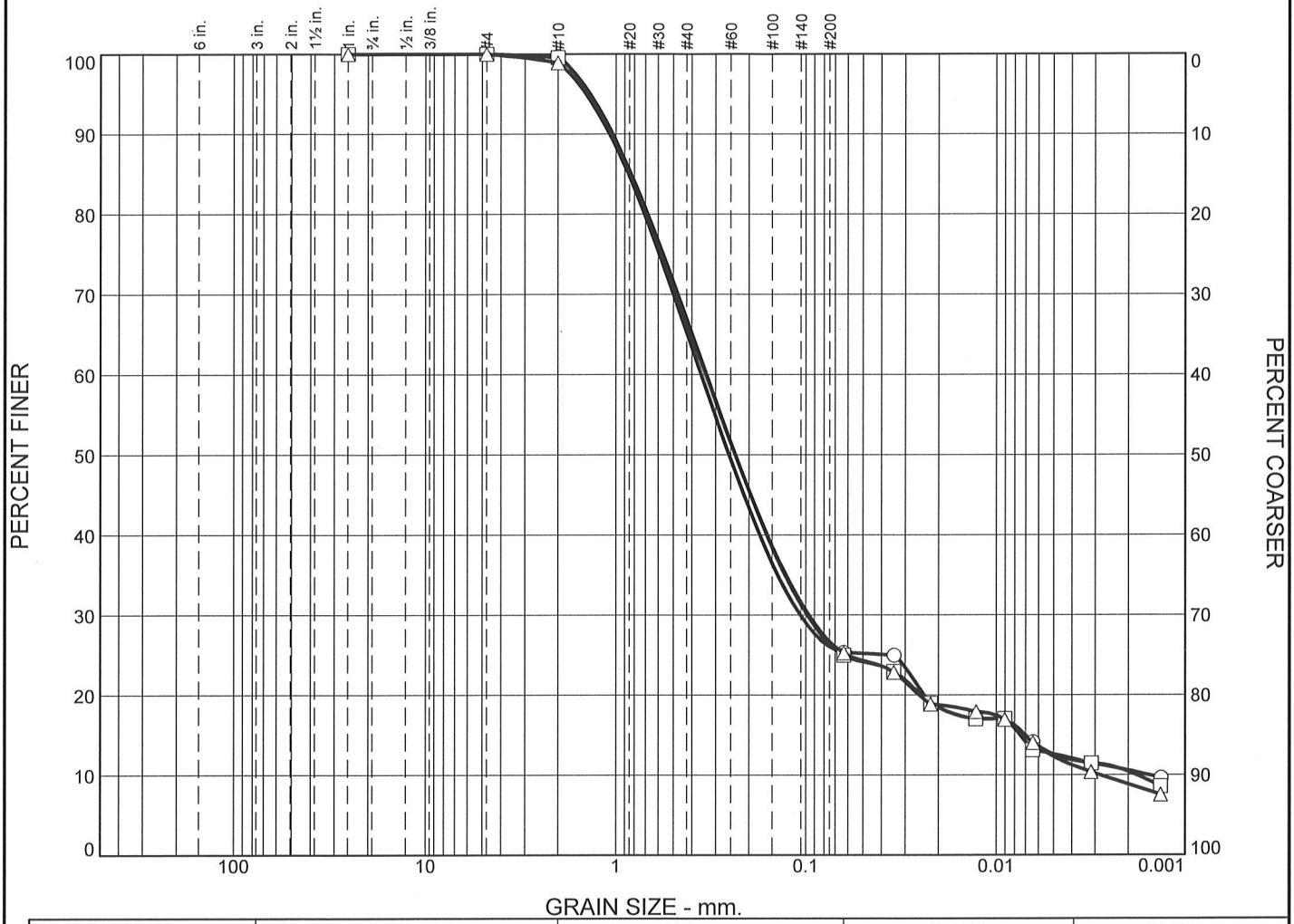
Cobbles	Gravel	Sand	Silt	Clay
0.0	0.0	35.2	39.1	25.7

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
		0.0025	0.0049	0.0199	0.0411	0.2123	0.3169	0.4887	0.8170

Fineness Modulus
0.50

Aqua Survey, Inc.

Particle Size Distribution Report



	% +3"	% Gravel	% Sand	% Silt	% Clay
○	0.0	0.3	74.4	13.5	11.8
□	0.0	0.4	74.6	13.0	12.0
△	0.0	1.1	73.6	14.1	11.2

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.8572	0.3574	0.2543	0.1068	0.0070	0.0016	20.54	230.20
□			0.8311	0.3349	0.2357	0.0982	0.0075	0.0018	15.91	185.08
△			0.8572	0.3379	0.2360	0.0963	0.0071	0.0028	9.71	119.62

Material Description	USCS	AASHTO
○ Discrete Composite Sediment		
□ Discrete Composite Sediment		
△ Discrete Composite Sediment		

Project No. 35-005 **Client:** Ocean and Coastal Consultants, Inc.

Project: Stone Harbor

○ **Source of Sample:** Composite A-2/S-03 **Sample Number:** 20150063

□ **Source of Sample:** Composite A-2/S-03 **Sample Number:** 20150063 Dup

△ **Source of Sample:** Composite A-2/S-03 **Sample Number:** 20150063 Trp

Remarks:

□ material retained on # 10 sieve: mix of wood & stone

△ material retained on # 10 sieve: mix of wood & stone

Aqua Survey, Inc.

Flemington, NJ

Figure Comp A-2

Tested By: M. Thomas **Checked By:** R. Fristrom

GRAIN SIZE DISTRIBUTION TEST DATA

2/26/2015

Client: Ocean and Coastal Consultants, Inc.
Project: Stone Harbor
Project Number: 35-005
Location: Composite A-2/S-03
Sample Number: 20150063
Material Description: Discrete Composite Sediment
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
72.48	11.32	1	0.00	0.00	100.0	0.0
		#4	11.32	11.32	100.0	0.0
		#10	11.50	11.32	99.7	0.3
50.00	0.00	#230	205.14	167.85	25.3	74.7

Hydrometer Test Data

Hydrometer test uses material passing #10
Percent passing #10 based upon complete sample = 99.7
Weight of hydrometer sample =50
Hygroscopic moisture correction:
Moist weight and tare = 21.72
Dry weight and tare = 21.60
Tare weight = 1.32
Hygroscopic moisture = 0.6%
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = -6
Meniscus correction only = 0.5
Specific gravity of solids = 2.65
Hydrometer type = 152H
Hydrometer effective depth equation: L = 16.294964 - 0.164 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer	Percent Retained
2.00	22.2	18.0	12.5	0.0133	18.5	13.3	0.0342	25.0	75.0
5.00	22.2	15.0	9.5	0.0133	15.5	13.8	0.0220	19.0	81.0
15.00	22.3	14.0	8.5	0.0133	14.5	13.9	0.0128	17.0	83.0
30.00	22.4	14.0	8.5	0.0132	14.5	13.9	0.0090	17.1	82.9
60.00	22.6	12.5	7.1	0.0132	13.0	14.2	0.0064	14.2	85.8
250.00	23.2	11.0	5.7	0.0131	11.5	14.4	0.0032	11.5	88.5
1440.00	21.6	10.5	4.8	0.0134	11.0	14.5	0.0013	9.7	90.3

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay
0.0	0.3	74.4	13.5	11.8

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0016	0.0070	0.0238	0.1068	0.2543	0.3574	0.7079	0.8572	1.0609	1.3722

Fineness Modulus	C_u	C_c
1.41	230.20	20.54

RF

Aqua Survey, Inc.

GRAIN SIZE DISTRIBUTION TEST DATA

2/26/2015

Client: Ocean and Coastal Consultants, Inc.
Project: Stone Harbor
Project Number: 35-005
Location: Composite A-2/S-03
Sample Number: 20150063 Dup
Material Description: Discrete Composite Sediment
Testing Remarks: material retained on # 10 sieve: mix of wood & stone
Tested by: M. Thomas **Checked by:** R. Fristrom

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer	Percent Retained
70.19	11.71	1	0.00	0.00	100.0	0.0
		#4	11.41	11.41	100.0	0.0
		#10	11.66	11.41	99.6	0.4
50.00	0.00	#230	213.53	176.08	25.0	75.0

Hydrometer Test Data

Hydrometer test uses material passing #10
Percent passing #10 based upon complete sample = 99.6
Weight of hydrometer sample =50
Hygroscopic moisture correction:
Moist weight and tare = 21.72
Dry weight and tare = 21.60
Tare weight = 1.32
Hygroscopic moisture = 0.6%
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = -6
Meniscus correction only = 0.5
Specific gravity of solids = 2.65
Hydrometer type = 152H
Hydrometer effective depth equation: L = 16.294964 - 0.164 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer	Percent Retained
2.00	22.2	17.0	11.5	0.0133	17.5	13.4	0.0344	23.0	77.0
5.00	22.2	15.0	9.5	0.0133	15.5	13.8	0.0220	18.9	81.1
15.00	22.3	14.0	8.5	0.0133	14.5	13.9	0.0128	17.0	83.0
30.00	22.4	14.0	8.5	0.0132	14.5	13.9	0.0090	17.0	83.0
60.00	22.6	12.0	6.6	0.0132	12.5	14.2	0.0064	13.1	86.9
250.00	23.2	11.0	5.7	0.0131	11.5	14.4	0.0032	11.5	88.5
1440.00	21.5	10.0	4.3	0.0134	10.5	14.6	0.0013	8.6	91.4

Fractional Components

Cobbles	Gravel	Sand	Silt	Clay
0.0	0.4	74.6	13.0	12.0

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0018	0.0075	0.0247	0.0982	0.2357	0.3349	0.6809	0.8311	1.0385	1.3603

Fineness Modulus	C_u	C_c
1.36	185.08	15.91

Aqua Survey, Inc.