APPENDIX H

Field Forms

FIELD LOG SHEET

Project Name: BioPod Bio-Filtration System **Project #:** 15-05988-000

Site Location: WSDOT TEST FACILITY **Client:** Rotondo Enviromental Solutions, LLC

Site ID: WB **Event ID:** 2017-05-11

HERRERA

Pre-Storm Visit

Date: 5-10-17 Time: 16:00 Field Staff: M Mullen Weather: sunny 68°

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Sampler Battery Volt. (V):	—	Sampler Battery Volt. (V):	—	Rain Gauge Level?	Yes No
Primary Device Level?	no flow gage at this station	Primary Device Level?	(Yes) No	Rain Gauge Unobstructed?	Yes No
Offset Before Adj. (ft):	no flow gage at this station	Offset Before Adj. (ft):	—		
Offset AfterAdj. (ft):	no flow gage at this station	Offset AfterAdj. (ft):	—		
Actual Pump Vol (ml):	—	Actual Pump Vol (ml)	—	X	
Pump Vol Before Adj. (ml):	—	Pump Vol Before Adj. (ml)	—		
Pump Vol After Adj. (ml):	—	Pump Vol After Adj. (ml)	—		
Intake Checked?	(Yes) No	Intake Checked?	(Yes) No		
Desiccant Dry?	no flow gage at this station	Desiccant Dry?	(Yes) No		
Sample Line Rinsed?	(Yes) No	Sample Line Rinsed?	(Yes) No		
Clean Bottle?	(Yes) No	Clean Bottle?	(Yes) No		
Pacing (cf):	—	Pacing (cf):	—		
Ice Added?	(Yes) No	Ice Added?	(Yes) No		
Program Started?	(Yes) No	Program Started?	(Yes) No		
Tubing Connected?	(Yes) No	Tubing Connected?	(Yes) No		
Flow Conditions:	Rise Peak Fall (None)	Flow Conditions:	Rise Peak Fall (None)		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

changed mulch

valve opened 1.25 turns

↓

5-11-17 → opened to 2.25 turns

Post-Storm Visit

Date: Time: Field Staff: Weather:

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Date/Time End:	5-11-17 18:51	Date/Time End:	5-11-17 18:50	Rain Gauge Level?	Yes No
# of Samples:	52	# of Samples:	51	Rain Gauge Unobstructed?	X Yes No
Sampled Without Error?	(Yes) No	Sampled Without Error?	(Yes) No		
Offset Before Adj. (ft):	no gage at this station	Offset Before Adj. (ft):	—		
Offset AfterAdj. (ft):	no gage at this station	Offset AfterAdj. (ft).	—		
Est. Sample Vol (L):	10	Est. Sample Vol (L):	12		
Visual Condition:	drk grey	Visual Condition:	light grey		
Bottles Replaced?	Yes (No)	Bottles Replaced?	Yes (No)		
Sent to Lab?	(Yes) No	Sent to Lab?	(Yes) No		
Duplicate Sample?	Yes (No)	Duplicate Sample?	Yes (No)		
Flow Conditions:	Rise Peak Fall (None)	Flow Conditions:	Rise Peak Fall (None)		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

closed valve

need to replace IN tubing

Grab Sample Visit

Date: 5-11-17 Time: 11:45 Field Staff: M Mullen Weather: rainy, 58°

Station	Parameter	Time collected	Bottle Type	# of Bottles	Bottle Volume (ml)	Duplicated	Flow Conditions
WB	NWTPH-Dx	11:45	HDPE (Glass)	2	500	(yes) no	Rise (Peak) Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None

Notes/Visual Conditions: (note any calibrations or maintenance on back)

pH IN: 7.48
OUT: 7.48

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Chain of Custody Record

Project Name:	Project Number:	Client:
Rotondo BioPod	15-05988-000	Herrera Environmental
Report To:		**Copy To:**
Dylan Ahearn		
Sampled By:		**Delivery Method:**
M Mullen		ice cooler, hand
Laboratory:	**Requested Completion Date:**	**Total No. of Containers:**
Analytical Resources Inc.		4

Lab Use:							Analyses Requested										
Sample ID	Date	Time	Sample Type (see codes)	Preserv-ative? (Y/N)	Matrix (see codes)	Number of Containers	NWTPH-Dx										Lab ID No.
WB-IN	5.11.17	11:45	G	N	SW	2	X										
WB-OUT	5.11.17	11:45	G	N	SW	2	X										

Comments/Special Instructions:

Relinquished by (Name/CO/	Signature	Date/Time	Received By (Name/CO)	Signature	Date/Time
Meghan Mullen / Herrera	Meghan Mullen	5.11.17 / 13:20	Paul Mark / ARI	Paul Mark	5/11/2017 13:20
Relinquished by (Name/CO/	Signature	Date/Time	Received By (Name/CO)	Signature	Date/Time

Sample Type: G=Grab C=Composite

Matrix Codes: A=Air GW=Groundwater SE=Sediment SO=Soil SW=Surface Water W=Water (blanks) M=Material O=Other (specify)

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Chain of Custody Record

Project Name:	Project Number:	Client:
Rotondo BioPod	15-05988-000	Herrera Environmental
Report To:		**Page:**
Dylan Ahearn		1/1
Sampled By:		**Delivery Method:**
M Muller		Ice, hand
Laboratory:	**Requested Completion Date:**	**Total No. of Containers:**
Analytical Resources Inc.		3

Lab Use:						Analyses Requested											
Sample ID	Date	Time	Sample Type (see codes)	Preserv ative? (Y/N)	Matrix (see codes)	Total Suspended Solids- SM 2540D	Particle size Distribution - ASTM D422	Total phosphorus - SM 4500P-F	Orthophosphorus - SM 4500P-F	Hardness as CaCO3-SM 2340B	Copper, dissolved - EPA 200.8	Copper, total - EPA 200.8	Zinc, dissolved - EPA 200.8	Zinc, total - EPA 200.8			
WB-IN	5·12·17	11:00	C	N	SW	X	X	X	X	X	X	X	X	X			
WB-OUT	5·12·17	11:00	C	N	SW	X	X	X	X	X	X	X	X	X			
WB-OUT (DUP)	5·12·17	11:00	C	N	SW	X	X	X	X	X	X	X	X	X			

Comments/Special Instructions:

Send 1 liter to ETS, Inc. 975 Transport Way, Suite 2, Petaluma, CA for PSD, TSS. PSD to be run for >500, 500-125, 125-62.5, 62.5-4, <4.

Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time
Meghan Muller / Herrera	Megan Muller	5-12-17 / 16:40		Paul Mark / ARI	Paul Mark	5/12/2017 16:40
Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time

Sample Type: G=Grab C=Composite **Matrix Codes:** A=Air GW=Groundwater SE=Sediment SO=Soil SW=Surface Water W=Water (blanks) M=Material O=Other (specify)

FIELD LOG SHEET

Project Name: BioPod Bio-Filtration System **Project #:** 15-05988-000

Site Location: WSDOT TEST FACILITY **Client:** Rotondo Enviromental Solutions, LLC

Site ID: WB **Event ID:** 2017-05-15

HERRERA

Pre-Storm Visit

Date: 2017.05.12 Time: 15:00 Field Staff: J BUNN Weather: PT CLOUDY

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Sampler Battery Volt. (V):		Sampler Battery Volt. (V):		Rain Gauge Level?	Yes No
Primary Device Level?	no flow gage at this station	Primary Device Level?	Yes No	Rain Gauge Unobstructed?	Yes No
Offset Before Adj. (ft):	no flow gage at this station	Offset Before Adj. (ft):			
Offset AfterAdj. (ft):	no flow gage at this station	Offset AfterAdj. (ft):			
Actual Pump Vol (ml):		Actual Pump Vol (ml)			
Pump Vol Before Adj. (ml):		Pump Vol Before Adj. (ml)			
Pump Vol After Adj. (ml):		Pump Vol After Adj (ml)			
Intake Checked?	Yes No	Intake Checked?	Yes No		
Desiccant Dry?	no flow gage at this station	Desiccant Dry?	Yes No		
Sample Line Rinsed?	Yes No	Sample Line Rinsed?	Yes No		
Clean Bottle?	Yes No	Clean Bottle?	Yes No		
Pacing (cf):		Pacing (cf):			
Ice Added?	Yes No	Ice Added?	Yes No		
Program Started?	Yes No	Program Started?	Yes No		
Tubing Connected?	Yes No	Tubing Connected?	Yes No		
Flow Conditions:	Rise Peak Fall None	Flow Conditions:	Rise Peak Fall None		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

Post-Storm Visit

Date: 5.16.17 Time: 14:15 Field Staff: MM + KW Weather:

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Date/Time End: 10:40	~~5.16.17 / 14:45~~	Date/Time End: 11:19	~~5.16.17 / 14:30~~	Rain Gauge Level?	Yes No
# of Samples:	60	# of Samples:	58	Rain Gauge Unobstructed?	Yes No
Sampled Without Error?	Yes No	Sampled Without Error?	Yes No		
Offset Before Adj. (ft):	no gage at this station	Offset Before Adj. (ft):	—		
Offset AfterAdj. (ft):	no gage at this station	Offset AfterAdj. (ft):	—		
Est. Sample Vol (L):	9	Est. Sample Vol (L):	11		
Visual Condition:	dark grey	Visual Condition:	light grey		
Bottles Replaced?	Yes No	Bottles Replaced?	Yes No		
Sent to Lab?	Yes No	Sent to Lab?	Yes No		
Duplicate Sample?	Yes No	Duplicate Sample?	Yes No		
Flow Conditions:	Rise Peak Fall None	Flow Conditions:	Rise Peak Fall None		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

closed valve

Grab Sample Visit

Date: Time: Field Staff: Weather:

Station	Parameter	Time collected	Bottle Type	# of Bottles	Bottle Volume (ml)	Duplicate?	Flow Conditions
	NWTPH-Dx		HDPE Glass	2		yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None

Notes/Visual Conditions: (note any calibrations or maintenance on back)

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Chain of Custody Record

Project Name:	Project Number:	Client:
Rotondo BioPod	15-05988-000	Herrera Environmental

Report To:	Page:
Dylan Ahearn	1/1

Sampled By:	Delivery Method:
M. Mullen and K. Wingrave	Ice cooler, hand delivered

Laboratory:	Requested Completion Date:	Total No. of Containers:
Analytical Resources Inc.		2

Lab Use:						Analyses Requested											
Sample ID	Date	Time	Sample Type (see codes)	Preservative? (Y/N)	Matrix (see codes)	Total Suspended Solids- SM 2540D	Particle size Distribution - ASTM D422	Total phosphorus - SM 4500P-F	Orthophosphorus - SM 4500P-F	Hardness as CaCO3-SM 2340B	Copper, dissolved - EPA 200.8	Copper, total - EPA 200.8	Zinc, dissolved - EPA 200.8	Zinc, total - EPA 200.8			
~~WB-IN~~ stormgarden-IN	5.16.17	14:15	C	N	SW	X	X	X	X	X	X	X	X	X			
~~WB-OUT~~ stormgarden-OUT	5.16.17	14:20	C	N	SW	X	X	X	X	X	X	X	X	X			

Comments/Special Instructions:

Send 1 liter to ETS, Inc. 975 Transport Way, Suite 2, Petaluma, CA for PSD, TSS. PSD to be run for >500, 500-125, 125-62.5, 62.5-4, <4.

Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time
Meghan Mullen / Herrera	Meghan Mullen	5.16.17 16:40		Paul Mark / ARI	Paul Mark	5/16/2017 16:40
Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time

Sample Type: G=Grab C=Composite

Matrix Codes: A=Air GW=Groundwater SE=Sediment SO=Soil SW=Surface Water W=Water (blanks) M=Material O=Other (specify)

FIELD LOG SHEET

Project Name: BioPod Bio-Filtration System **Project #:** 15-05988-000

Site Location: WSDOT TEST FACILITY **Client:** Rotondo Enviromental Solutions, LLC

Site ID: WB **Event ID:** 2017-06-08

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Pre-Storm Visit

Date: 10-7-17 Time: 17:00 Field Staff: M Mullen + K Wingrove Weather: sunny 80-

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Sampler Battery Volt. (V):	—	Sampler Battery Volt. (V):	—	Rain Gauge Level?	Yes No
Primary Device Level?	no flow gage at this station	Primary Device Level?	(Yes) No	Rain Gauge Unobstructed? X	Yes No
Offset Before Adj. (ft):	no flow gage at this station	Offset Before Adj. (ft):	—		
Offset AfterAdj (ft):	no flow gage at this station	Offset AfterAdj. (ft):	—		
Actual Pump Vol (ml):	—	Actual Pump Vol (ml)	—		
Pump Vol Before Adj. (ml):	—	Pump Vol Before Adj (ml)	—		
Pump Vol After Adj (ml):	—	Pump Vol After Adj (ml)	—		
Intake Checked?	(Yes) No	Intake Checked?	(Yes) No		
Desiccant Dry?	no flow gage at this station	Desiccant Dry?	(Yes) No		
Sample Line Rinsed?	(Yes) No	Sample Line Rinsed?	(Yes) No		
Clean Bottle?	(Yes) No	Clean Bottle?	(Yes) No		
Pacing (cf):		Pacing (cf):			
Ice Added?	(Yes) No	Ice Added?	(Yes) No		
Program Started?	(Yes) No	Program Started?	(Yes) No		
Tubing Connected?	(Yes) No	Tubing Connected?	(Yes) No		
Flow Conditions:	Rise Peak Fall (None)	Flow Conditions:	Rise Peak Fall (None)		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

valve open 2.25 turns

Post-Storm Visit

Date: Time: Field Staff: Weather:

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Date/Time End:	6-8-17 8:56	Date/Time End:	6-8-17 8:58	Rain Gauge Level?	Yes No
# of Samples:	53	# of Samples:	17	Rain Gauge Unobstructed? X	Yes No
Sampled Without Error?	Yes (No)	Sampled Without Error?	(Yes) No		
Offset Before Adj. (ft):	no gage at this station	Offset Before Adj. (ft):	—		
Offset AfterAdj. (ft):	no gage at this station	Offset AfterAdj. (ft):	—		
Est. Sample Vol (L).	12	Est. Sample Vol (L):	11		
Visual Condition:	drk grey	Visual Condition:	light grey		
Bottles Replaced?	Yes (No)	Bottles Replaced?	Yes (No)		
Sent to Lab?	(Yes) No	Sent to Lab?	(Yes) No		
Duplicate Sample?	(Yes) No	Duplicate Sample?	Yes (No)		
Flow Conditions:	Rise Peak Fall (None)	Flow Conditions:	Rise Peak Fall (None)		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

closed valve

IN: sample error message

Grab Sample Visit

Date: 6-8-17 Time: 6:20 Field Staff: M Mullen Weather: rainy

Station	Parameter	Time collected	Bottle Type	# of Bottles	Bottle Volume (ml)	Duplicated	Flow Conditions
WB-IN	NWTPH-Dx	6:20	HDPE (Glass)	2	500	(yes) no	Rise (Peak) Fall None
WB-OUT	NWTPH-Dx	6:20	HDPE (Glass)	2	500	(yes) no	Rise (Peak) Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None

Notes/Visual Conditions: (note any calibrations or maintenance on back)

pH in: 7.69

pH out: 7.54

for pH: took grab sample measured later

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Chain of Custody Record

Project Name:	Project Number:	Client:
Rotondo BioPod	15-05988-000	Herrera Environmental

Report To: Dylan Ahearn

Page: 1/1

Sampled By: M Mullen

Delivery Method: ice cooler hand delivered

Laboratory: Analytical Resources Inc.

Requested Completion Date:

Total No. of Containers: 3

Lab Use:

Sample ID	Date	Time	Sample Type (see codes)	Preservative? (Y/N)	Matrix (see codes)	Total Suspended Solids- SM 2540D	Particle size Distribution - ASTM D422	Total phosphorus - SM 4500P-F	Orthophosphorus - SM 4500P-F	Hardness as CaCO3-SM 2340B	Copper, dissolved - EPA 200.8	Copper, total - EPA 200.8	Zinc, dissolved - EPA 200.8	Zinc, total - EPA 200.8			
						Analyses Requested											
WB-IN	6-9-17	11:00	C	N	SW	X	X	X	X	X	X	X	X	X			
WB-OUT	6-9-17	11:00	C	N	SW	X	X	X	X	X	X	X	X	X			
WB-IN (QA)	6-9-17	11:00	C	N	SW	X	X	X	X	X	X	X	X	X			

Comments/Special Instructions: split sample for duplicate (QA)

Send 1 liter to ETS, Inc. 975 Transport Way, Suite 2, Petaluma, CA for PSD, TSS. PSD to be run for >500, 500-125, 125-62.5, 62.5-4, <4.

Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time
Meghan Mullen /Herrera	Megan Mullen	6-9-17 12:00		A. Volgardsen/ARI		6/9/17 1200
Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time

Sample Type: G=Grab C=Composite

Matrix Codes: A=Air GW=Groundwater SE=Sediment SO=Soil SW=Surface Water W=Water (blanks) M=Material O=Other (specify)

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Chain of Custody Record

Project Name:	Project Number:	Client:
Rotondo BioPod	15-05988-000	Herrera Environmental

Report To:	Copy To:
Dylan Ahearn	

Sampled By:	Delivery Method:
M Muller	Ice cooler hand delivered

Laboratory:	Requested Completion Date:	Total No. of Containers:
Analytical Resources Inc.		4

Lab Use:							Analyses Requested										
Sample ID	Date	Time	Sample Type (see codes)	Preserv-ative? (Y/N)	Matrix (see codes)	Number of Containers	NWTPH-Dx										Lab ID No.
WB-IN	6.8.17	6:20	G	N	SW	2	X										
WB-OUT	6.8.17	6:20	G	N	SW	2	X										

Comments/Special Instructions:

Relinquished by (Name/CO/	Signature	Date/Time	Received By (Name/CO)	Signature	Date/Time
Meghan Muller/Herrera	Meghan Muller	6.8.17 7:15	Brittney Hall / ARI	Brittney Hall	6/8/17 7:15
Relinquished by (Name/CO/	Signature	Date/Time	Received By (Name/CO)	Signature	Date/Time

Sample Type: G=Grab C=Composite

Matrix Codes: A=Air GW=Groundwater SE=Sediment SO=Soil SW=Surface Water W=Water (blanks) M=Material O=Other (specify)

FIELD LOG SHEET

Project Name: BioPod Bio-Filtration System **Project #:** 15-05988-000

Site Location: WSDOT TEST FACILITY **Client:** Rotondo Enviromental Solutions, LLC

Site ID: WB **Event ID:** 20170615

HERRERA

Pre-Storm Visit

Date: 6-14-17 Time: 16:30 Field Staff: M Muller Weather: sunny 60°

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Sampler Battery Volt. (V):	—	Sampler Battery Volt. (V):	—	Rain Gauge Level?	Yes No
Primary Device Level?	no flow gage at this station	Primary Device Level?	Yes (No)	Rain Gauge Unobstructed? X	Yes No
Offset Before Adj. (ft):	no flow gage at this station	Offset Before Adj. (ft):	0.002		
Offset AfterAdj. (ft):	no flow gage at this station	Offset AfterAdj. (ft):	0.000		
Actual Pump Vol (ml):	~~205~~ 200	Actual Pump Vol (ml)	200		
Pump Vol Before Adj. (ml):	~~200~~ 205	Pump Vol Before Adj. (ml)	~~2~~		
Pump Vol After Adj. (ml):	200	Pump Vol After Adj. (ml)	—		
Intake Checked?	(Yes) No	Intake Checked?	(Yes) No		
Desiccant Dry?	no flow gage at this station	Desiccant Dry?	(Yes) No		
Sample Line Rinsed?	(Yes) No	Sample Line Rinsed?	(Yes) No		
Clean Bottle?	(Yes) No	Clean Bottle?	(Yes) No		
Pacing (cf):	—	Pacing (cf):	—		
Ice Added?	(Yes) No	Ice Added?	(Yes) No		
Program Started?	(Yes) No	Program Started?	(Yes) No		
Tubing Connected?	(Yes) No	Tubing Connected?	(Yes) No		
Flow Conditions:	Rise Peak Fall (None)	Flow Conditions:	Rise Peak Fall (None)		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

↑ not enough water to calibrate

Post-Storm Visit

Date: 6/16/17 Time: 10:30 Field Staff: KW + MM Weather: Sunny 60°

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Date/Time End:	6/16/17 7:26	Date/Time End:	6/15/17 21:08	Rain Gauge Level?	Yes No
# of Samples:	4	# of Samples:	5	Rain Gauge Unobstructed?	Yes No
Sampled Without Error?	Yes (No)	Sampled Without Error?	Yes (No)		
Offset Before Adj. (ft):	no gage at this station	Offset Before Adj. (ft):	—		
Offset AfterAdj. (ft):	no gage at this station	Offset AfterAdj. (ft):	—		
Est. Sample Vol (L):	~1	Est. Sample Vol (L):	~1		
Visual Condition:	Grey	Visual Condition:	Grey		
Bottles Replaced?	Yes (No)	Bottles Replaced?	Yes (No)		
Sent to Lab?	Yes (No)	Sent to Lab?	Yes (No)		
Duplicate Sample?	Yes (No)	Duplicate Sample?	Yes (No)		
Flow Conditions:	Rise Peak Fall (None)	Flow Conditions:	Rise Peak Fall (None)		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

very small sample, clogged valve (removed)

Grab Sample Visit

Date: 6/15/17 Time: 14:30 Field Staff: Katie Wingfield Weather: light storm

Station	Parameter	Time collected	Bottle Type	# of Bottles	Bottle Volume (ml)	Duplicated	Flow Conditions
	NWTPH-Dx		HDPE Glass	2		yes no	Rise Peak Fall None
WB-IN	TPH	14:30	HDPE (Glass)	2		(yes) no	Rise (Peak) Fall None
WB-out	TPH	14:45	HDPE (Glass)	2		(yes) no	Rise (Peak) Fall None
WB-IN	pH	14:55	(HDPE) Glass			yes (no)	Rise (Peak) Fall None
WB-out	pH	14:50	(HDPE) Glass			yes (no)	Rise (Peak) Fall None
			HDPE Glass			yes no	Rise Peak Fall None

Notes/Visual Conditions: (note any calibrations or maintenance on back)

pH in: 6.58
pH out: 6.93

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Chain of Custody Record

Project Name:	Project Number:	Client:
Rotondo BioPod	15-05988-000	Herrera Environmental
Report To:		**Copy To:**
Dylan Ahearn		
Sampled By:		**Delivery Method:**
Katie Wingrove		hand delivery ice cooler
Laboratory:	**Requested Completion Date:**	**Total No. of Containers:**
Analytical Resources Inc.		4

Lab Use:							Analyses Requested											
Sample ID	Date	Time	Sample Type (see codes)	Preserv-ative? (Y/N)	Matrix (see codes)	Number of Containers	NWTPH-Dx											Lab ID No.
WB-IN	6/15/17	14:30	G	N	SW	2	X											
WB-OUT	6/15/17	14:45	G	N	SW	2	X											

Comments/Special Instructions:

Relinquished by (Name/CO/	Signature	Date/Time	Received By (Name/CO)	Signature	Date/Time
Katie Wingrove / Herrera	Katie Wingrove	6/15/17 17:00	A. Volgardsen/ARI		6/15/17 1700
Relinquished by (Name/CO/	Signature	Date/Time	Received By (Name/CO)	Signature	Date/Time

Sample Type: G=Grab C=Composite

Matrix Codes: A=Air GW=Groundwater SE=Sediment SO=Soil SW=Surface Water W=Water (blanks) M=Material O=Other (specify)

FIELD LOG SHEET

Project Name: StormGarden Bio-Filtration System **Project #:** 15-05988-000

Site Location: WSDOT TEST FACILITY **Client:** Rotondo Enviromental Solutions, LLC

Site ID: WB **Event ID:** 20171102

HERRERA

Pre-Storm Visit

Date: ~~11.01.17~~ 11.2.17 Time: ~~12:30~~ 9:00 Field Staff: M Mullen Weather: ~~Raining~~ Cloudy 50°

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Sampler Battery Volt. (V):	—	Sampler Battery Volt. (V):	—	Rain Gauge Level?	Yes No
Primary Device Level?	no flow gage at this station	Primary Device Level?	(Yes) No	Rain Gauge Unobstructed?	Yes No
Offset Before Adj. (ft):	no flow gage at this station	Offset Before Adj. (ft):	—		
Offset AfterAdj. (ft):	no flow gage at this station	Offset AfterAdj. (ft):	—		
Actual Pump Vol (ml):	—	Actual Pump Vol (ml)	—		
Pump Vol Before Adj. (ml):	—	Pump Vol Before Adj. (ml)	—		
Pump Vol After Adj. (ml):	—	Pump Vol After Adj. (ml)	—		
Intake Checked?	(Yes) No	Intake Checked?	(Yes) No		
Desiccant Dry?	no flow gage at this station	Desiccant Dry?	(Yes) No		
Sample Line Rinsed?	(Yes) No	Sample Line Rinsed?	(Yes) No		
Clean Bottle?	(Yes) No	Clean Bottle?	(Yes) No		
Pacing (cf):	—	Pacing (cf):	—		
Ice Added?	(Yes) No	Ice Added?	(Yes) No		
Program Started?	(Yes) No	Program Started?	(Yes) No		
Tubing Connected?	(Yes) No	Tubing Connected?	(Yes) No		
Flow Conditions:	Rise Peak (Fall) None	Flow Conditions:	Rise Peak (Fall) None		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

open 1.75 turns

Post-Storm Visit

Date: 11.3.17 Time: 10:40 Field Staff: M Mullen Weather: cloudy 40°

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Date/Time End:	11.3.17 11:02:33	Date/Time End:	11.3.17 11:02:23	Rain Gauge Level?	X Yes No
# of Samples:	81	# of Samples:	80	Rain Gauge Unobstructed?	Yes No
Sampled Without Error?	(Yes) No	Sampled Without Error?	(Yes) No		
Offset Before Adj. (ft):	no gage at this station	Offset Before Adj. (ft):	—		
Offset AfterAdj. (ft):	no gage at this station	Offset AfterAdj. (ft):	—		
Est. Sample Vol (L):	14	Est. Sample Vol (L):	16		
Visual Condition:	dark grey	Visual Condition:	grey		
Bottles Replaced?	(Yes) No	Bottles Replaced?	(Yes) No		
Sent to Lab?	(Yes) No	Sent to Lab?	(Yes) No		
Duplicate Sample?	(Yes) No	Duplicate Sample?	Yes (No)		
Flow Conditions:	Rise Peak Fall (None)	Flow Conditions:	Rise Peak Fall (None)		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

Grab Sample Visit

Date: 11.2.17 Time: 13:30 Field Staff: M Mullen Weather: cloudy

Station	Parameter	Time collected	Bottle Type	# of Bottles	Bottle Volume (ml)	Duplicated	Flow Conditions
WB-IN	NWTPH-Dx	13:30	HDPE (Glass)	2	500	yes (no)	Rise Peak (Fall) None
WB-OUT	"	13:30	HDPE (Glass)	2	500	yes (no)	Rise Peak (Fall) None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None

Notes/Visual Conditions: (note any calibrations or maintenance on back)

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Chain of Custody Record

Project Name:	Project Number:	Client:
Rotondo BioPod	15-05988-000	Herrera Environmental
Report To:		**Copy To:**
Dylan Ahearn		
Sampled By:		**Delivery Method:**
M Muller		ice cooler, hand
Laboratory:	**Requested Completion Date:**	**Total No. of Containers:**
Analytical Resources Inc.		4

Lab Use:							Analyses Requested											
Sample ID	Date	Time	Sample Type (see codes)	Preserv-ative? (Y/N)	Matrix (see codes)	Number of Containers	NWTPH-Dx											Lab ID No.
WB-IN	11.2.17	13:30	G	N	SW	2	X											
WB-OUT	11.2.17	13:30	G	N	SW	2	X											

Comments/Special Instructions:

Relinquished by (Name/CO/	Signature	Date/Time	Received By (Name/CO)	Signature	Date/Time
Meghan Muller/ Herrera	Meghan Muller	11.2.17 15:00			
Relinquished by (Name/CO/	Signature	Date/Time	Received By (Name/CO)	Signature	Date/Time
Stephanie Fishel ARI		11/2/17 1508			

Sample Type: G=Grab C=Composite **Matrix Codes:** A=Air GW=Groundwater SE=Sediment SO=Soil SW=Surface Water W=Water (blanks) M=Material O=Other (specify)

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Chain of Custody Record

Project Name:	Project Number:	Client:
Rotondo BioPod	15-05988-000	Herrera Environmental
Report To:		**Page:**
Dylan Ahearn		1/1
Sampled By:		**Delivery Method:**
M Mullen		ice cooler hand delivered
Laboratory:	**Requested Completion Date:**	**Total No. of Containers:**
Analytical Resources Inc.		3

Lab Use:			Sample Type (see codes)	Preservative? (Y/N)	Matrix (see codes)	Analyses Requested											
Sample ID	Date	Time				Total Suspended Solids- SM 2540D	Particle size Distribution - ASTM D422	Total phosphorus - SM 4500P-F	Orthophosphorus - SM 4500P-F	Hardness as CaCO3-SM 2340B	Copper, dissolved - EPA 200.8	Copper, total - EPA 200.8	Zinc, dissolved - EPA 200.8	Zinc, total - EPA 200.8			
WB-IN	11.3.17	16:20	C	N	SW	X	X	X	X	X	X	X	X	X			
WB-OUT	11.3.17	16:20	C	N	SW	X	X	X	X	X	X	X	X	X			
WB-IN QA	11.3.17	16:20	C	N	SW	X	X	X	X	X	X	X	X	X			

Comments/Special Instructions:

Send 1 liter to ETS, Inc. 975 Transport Way, Suite 2, Petaluma, CA for PSD, TSS. PSD to be run for >500, 500-125, 125-62.5, 62.5-4, <4.

Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time
Meghan Mullen / Herrera	Meghan Mullen	11.4.17 8:00		Vaw Spahn		11/4/17 7:55
Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time

Sample Type: G=Grab C=Composite

Matrix Codes: A=Air GW=Groundwater SE=Sediment SO=Soil SW=Surface Water W=Water (blanks) M=Material O=Other (specify)

FIELD LOG SHEET

Project Name: StormGarden Bio-Filtration System **Project #:** 15-05988-000

Site Location: WSDOT TEST FACILITY **Client:** Rotondo Enviromental Solutions, LLC

Site ID: WB **Event ID:** 20171104

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Pre-Storm Visit

Date: 11.03.17 Time: 16:40 Field Staff: M Muller Weather: cloudy 40°

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Sampler Battery Volt. (V):	—	Sampler Battery Volt. (V):	—	Rain Gauge Level?	X Yes No
Primary Device Level?	no flow gage at this station	Primary Device Level?	(Yes) No	Rain Gauge Unobstructed?	Yes No
Offset Before Adj. (ft):	no flow gage at this station	Offset Before Adj. (ft):	—		
Offset AfterAdj. (ft):	no flow gage at this station	Offset AfterAdj. (ft):	—		
Actual Pump Vol (ml):	—	Actual Pump Vol (ml)	—		
Pump Vol Before Adj. (ml):	—	Pump Vol Before Adj. (ml)	—		
Pump Vol After Adj (ml):	—	Pump Vol After Adj. (ml)	—		
Intake Checked?	(Yes) No	Intake Checked?	(Yes) No		
Desiccant Dry?	no flow gage at this station	Desiccant Dry?	(Yes) No		
Sample Line Rinsed?	(Yes) No	Sample Line Rinsed?	(Yes) No		
Clean Bottle?	(Yes) No	Clean Bottle?	(Yes) No		
Pacing (cf):	—	Pacing (cf):	—		
Ice Added?	(Yes) No	Ice Added?	(Yes) No		
Program Started?	(Yes) No	Program Started?	(Yes) No		
Tubing Connected?	(Yes) No	Tubing Connected?	(Yes) No		
Flow Conditions:	Rise Peak Fall (None)	Flow Conditions:	Rise Peak Fall (None)		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

open 1.75
(did not adjust)

Post-Storm Visit

Date: 11.6.2017 Time: 9:30 Field Staff: Katie W, Meghan M Weather: sunny 50°

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Date/Time End:	11.05.17/18:59:53	Date/Time End:	11/5/17/18:59:54	Rain Gauge Level?	Yes No
# of Samples:	84	# of Samples:	83	Rain Gauge Unobstructed?	Yes No
Sampled Without Error?	(Yes) No	Sampled Without Error?	(Yes) No		
Offset Before Adj. (ft):	no gage at this station	Offset Before Adj. (ft):	—		
Offset AfterAdj. (ft):	no gage at this station	Offset AfterAdj. (ft):	—		
Est. Sample Vol (L):	18	Est. Sample Vol (L):	19		
Visual Condition:	dark grey	Visual Condition:	light grey		
Bottles Replaced?	(Yes) No	Bottles Replaced?	(Yes) No		
Sent to Lab?	(Yes) No	Sent to Lab?	(Yes) No		
Duplicate Sample?	Yes (No)	Duplicate Sample?	Yes (No)		
Flow Conditions:	Rise Peak Fall (None)	Flow Conditions:	Rise Peak Fall (None)		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

WB-IN: pump change alarm

Grab Sample Visit

Date: Time: Field Staff: Weather:

Station	Parameter	Time collected	Bottle Type	# of Bottles	Bottle Volume (ml)	Duplicated	Flow Conditions
	NWTPH-Dx		HDPE Glass	2		yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None

Notes/Visual Conditions: (note any calibrations or maintenance on back)

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Chain of Custody Record

Project Name:	Project Number:	Client:
Rotondo BioPod	15-05988-000	Herrera Environmental
Report To:		**Page:**
Dylan Ahearn		1/1
Sampled By:		**Delivery Method:**
Katie W., Meghan M.		ice cooler, hand delivered
Laboratory:	**Requested Completion Date:**	**Total No. of Containers:**
Analytical Resources Inc.		2
Lab Use:		

Sample ID	Date	Time	Sample Type (see codes)	Preservative? (Y/N)	Matrix (see codes)	Total Suspended Solids- SM 2540D	Particle size Distribution - ASTM D422	Total phosphorus - SM 4500P-F	Orthophosphorus - SM 4500P-F	Hardness as CaCO3-SM 2340B	Copper, dissolved - EPA 200.8	Copper, total - EPA 200.8	Zinc, dissolved - EPA 200.8	Zinc, total - EPA 200.8			
						Analyses Requested											
WB-IN	11.6.17	9:30	C	N	SW	X	X	X	X	X	X	X	X	X			
WB-OUT	11.6.17	9:30	C	N	SW	X	X	X	X	X	X	X	X	X			

Comments/Special Instructions:

Send 1 liter to ETS, Inc. 975 Transport Way, Suite 2, Petaluma, CA for PSD, TSS. PSD to be run for >500, 500-125, 125-62.5, 62.5-4, <4.

Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time
Meghan Miller/Herrera	Meghan Miller	11.6.17 11:25		Brandon Fisk/ARI		11/6/17 1125
Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time

Sample Type: G=Grab C=Composite **Matrix Codes:** A=Air GW=Groundwater SE=Sediment SO=Soil SW=Surface Water W=Water (blanks) M=Material O=Other (specify)

FIELD LOG SHEET

Project Name: BioPod Bio-Filtration System **Project #:** 15-05988-000

Site Location: WSDOT TEST FACILITY **Client:** Rotondo Enviromental Solutions, LLC

Site ID: WB **Event ID:** 20171108

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Pre-Storm Visit

Date: 11.6.17 Time: 10:30 Field Staff: Katie W, Meghan M Weather: sunny 50°

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Sampler Battery Volt. (V):	—	Sampler Battery Volt. (V):	—	Rain Gauge Level?	Yes No
Primary Device Level?	no flow gage at this station	Primary Device Level?	Yes No	Rain Gauge Unobstructed?	Yes No
Offset Before Adj. (ft):	no flow gage at this station	Offset Before Adj. (ft):	—		
Offset AfterAdj. (ft):	no flow gage at this station	Offset AfterAdj. (ft):	—		
Actual Pump Vol (ml):	—	Actual Pump Vol (ml)	—		
Pump Vol Before Adj. (ml):	—	Pump Vol Before Adj. (ml)	—		
Pump Vol After Adj. (ml):	—	Pump Vol After Adj (ml)	—		
Intake Checked?	(Yes) No	Intake Checked?	(Yes) No		
Desiccant Dry?	no flow gage at this station	Desiccant Dry?	(Yes) No		
Sample Line Rinsed?	(Yes) No	Sample Line Rinsed?	(Yes) No		
Clean Bottle?	(Yes) No	Clean Bottle?	(Yes) No		
Pacing (cf):	—	Pacing (cf):	—		
Ice Added?	Yes (No)	Ice Added?	Yes (No)		
Program Started?	(Yes) No	Program Started?	(Yes) No		
Tubing Connected?	(Yes) No	Tubing Connected?	(Yes) No		
Flow Conditions:	Rise Peak Fall (None)	Flow Conditions:	Rise Peak Fall (None)		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

No ice added (add before storm) * added ice 11.8.17

valve is closed (open before storm)

Post-Storm Visit

Date: 11.10.17 Time: 9:45 Field Staff: M Nvilen Weather: cloudy 40°

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Date/Time End:	11.10.17 1:18	Date/Time End:	11.10.17 00:47	Rain Gauge Level?	Yes No
# of Samples:	~~86~~ 93	# of Samples:	86	Rain Gauge Unobstructed?	Yes No
Sampled Without Error?	(Yes) No	Sampled Without Error?	(Yes) No		
Offset Before Adj. (ft):	no gage at this station	Offset Before Adj. (ft):	—		
Offset AfterAdj. (ft):	no gage at this station	Offset AfterAdj. (ft):	—		
Est. Sample Vol (L):	19	Est. Sample Vol (L):	20		
Visual Condition:	dark grey	Visual Condition:	yellow grey		
Bottles Replaced?	(Yes) No	Bottles Replaced?	(Yes) No		
Sent to Lab?	(Yes) No	Sent to Lab?	(Yes) No		
Duplicate Sample?	(Yes) No	Duplicate Sample?	(Yes) No		
Flow Conditions:	Rise Peak Fall (None)	Flow Conditions:	Rise Peak Fall (None)		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

4 changed tubing

Grab Sample Visit

Date: Time: Field Staff: Weather:

Station	Parameter	Time collected	Bottle Type	# of Bottles	Bottle Volume (ml)	Duplicated	Flow Conditions
	NWTPH-Dx		HDPE Glass	2		yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None

Notes/Visual Conditions: (note any calibrations or maintenance on back)

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Chain of Custody Record

Project Name:	Project Number:	Client:
Hydro International Up-flo Filter	13-05605-000	Herrera Environmental
Report To:		**Copy To:**
Dylan Ahearn		
Sampled By:		**Delivery Method:**
M Mullen		Ice cooler hand delivered
Laboratory:	**Requested Completion Date:**	**Total No. of Containers:**
Analytical Resources Inc.		2

Lab Use:							Analyses Requested											
Sample ID	Date	Time	Sample Type (see codes)	Preser-vative? (Y/N)	Matrix (see codes)	Total Suspended Solids- SM 2540D	Suspended Sediment Concentration - SMD3977	Total volatile Suspended solids - SM2540-E	Particle size Distribution - ASTM 3977	Total phosphorus - EPA 365.3	Orthophosphorus - EPA 365.3	Hardness as CaCO3-SM 2340B	Copper, dissolved - EPA 200.8	Copper, total - EPA 200.8	Zinc, dissolved - EPA 200.8	Zinc, total - EPA 200.8	Lab ID No.
WUFF-IN	11.10.17	10:00	C	N	SW	x	X	x	X	X	X	X	X	X	X	X	
WUFF-OUT	11.10.17	10:00	C	N	SW	x	X	X	X	X	X	X	X	X	X	X	
WUFF-IN DUP	11.10.17	10:00	C	N	SW	x	X	x	x	x	x	x	x	x	x	x	

Comments/Special Instructions:

Send 1 liter to ETS, Inc 975 Transport Way, Suite 2, Petaluma, CA for PSD, TSS, and TVSS. PSD to be run for >500, 500-125, 125-62.5, 62.5-4, <4.

Relinquished by (Name/CO/	Signature	Date/Time	Received By (Name/CO)	Signature	Date/Time
Megan Mullen / Herrera	Megan Mullen	11.10.17 11:00	Brandon Fisk ARI		11/10/17 1190
Relinquished by (Name/CO/	Signature	Date/Time	Received By (Name/CO)	Signature	Date/Time

Sample Type: G=Grab C=Composite **Matrix Codes:** A=Air GW=Groundwater SE=Sediment SO=Soil SW=Surface Water W=Water (blanks) M=Material O=Other (specify)

FIELD LOG SHEET

Project Name: BioPod Bio-Filtration System **Project #:** 15-05988-000

Site Location: WSDOT TEST FACILITY **Client:** Rotondo Enviromental Solutions, LLC

Site ID: WB **Event ID:** 20171112

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Pre-Storm Visit

Date: 11.10.17 Time: 9:45 Field Staff: M Mullen Weather: cloudy 60°

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Sampler Battery Volt. (V):	–	Sampler Battery Volt. (V):	–	Rain Gauge Level?	Yes No
Primary Device Level?	no flow gage at this station	Primary Device Level?	(Yes) No	Rain Gauge Unobstructed?	Yes No
Offset Before Adj. (ft):	no flow gage at this station	Offset Before Adj. (ft):	–		
Offset AfterAdj. (ft):	no flow gage at this station	Offset AfterAdj. (ft):	–		
Actual Pump Vol (ml):	–	Actual Pump Vol (ml)	–		
Pump Vol Before Adj. (ml):	–	Pump Vol Before Adj. (ml)	–		
Pump Vol After Adj. (ml):	–	Pump Vol After Adj. (ml)	–		
Intake Checked?	(Yes) No	Intake Checked?	(Yes) No		
Desiccant Dry?	no flow gage at this station	Desiccant Dry?	(Yes) No		
Sample Line Rinsed?	(Yes) No	Sample Line Rinsed?	(Yes) No		
Clean Bottle?	(Yes) No	Clean Bottle?	(Yes) No		
Pacing (cf):	–	Pacing (cf):	–		
Ice Added?	(Yes) No	Ice Added?	(Yes) No		
Program Started?	(Yes) No	Program Started?	(Yes) No		
Tubing Connected?	(Yes) No	Tubing Connected?	(Yes) No		
Flow Conditions:	Rise Peak Fall (None)	Flow Conditions:	Rise Peak Fall (None)		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

changed pump tubing

Post-Storm Visit

Date: 11.13.17 Time: 13:00 Field Staff: M Mullen Weather: cloudy, windy, 58°

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Date/Time End:	11.12.17 9:38	Date/Time End:	11.12.17 9:39	Rain Gauge Level?	Yes No
# of Samples:	17	# of Samples:	16	Rain Gauge Unobstructed?	Yes No
Sampled Without Error?	Yes No	Sampled Without Error?	Yes No		
Offset Before Adj. (ft):	no gage at this station	Offset Before Adj. (ft):	–		
Offset AfterAdj. (ft):	no gage at this station	Offset AfterAdj. (ft):	–		
Est. Sample Vol (L):	~~2~~ 4	Est. Sample Vol (L):	4		
Visual Condition:	dark grey	Visual Condition.	light grey		
Bottles Replaced?	Yes (No)	Bottles Replaced?	(Yes) No		
Sent to Lab?	Yes No	Sent to Lab?	(Yes) No		
Duplicate Sample?	Yes No	Duplicate Sample?	Yes (No)		
Flow Conditions:	Rise Peak Fall None	Flow Conditions:	Rise Peak Fall (None)		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

cleaned valve, opened 1.5 (instead of 1.75)

NO PSD at lab

Grab Sample Visit

Date: Time: Field Staff: Weather:

Station	Parameter	Time collected	Bottle Type	# of Bottles	Bottle Volume (ml)	Duplicated	Flow Conditions
	NWTPH-Dx		HDPE Glass	2		yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None

Notes/Visual Conditions: (note any calibrations or maintenance on back)

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Chain of Custody Record

Project Name:	Project Number:	Client:
Rotondo ~~BioPod~~ Stormgarden	15-05988-000	Herrera Environmental

Report To: Dylan Ahearn
Page: 1/1
Sampled By: Meghan Mullen
Delivery Method: Ice cooler hand delivered
Laboratory: Analytical Resources Inc.
Requested Completion Date:
Total No. of Containers: 2
Lab Use:

Sample ID	Date	Time	Sample Type (see codes)	Preservative? (Y/N)	Matrix (see codes)	Analyses Requested: Total Suspended Solids- SM 2540D	[redacted]	Total phosphorus - SM 4500P-F	Orthophosphorus - SM 4500P-F	Hardness as CaCO3-SM 2340B	Copper, dissolved - EPA 200.8	Copper, total - EPA 200.8	Zinc, dissolved - EPA 200.8	Zinc, total - EPA 200.8			
WB-IN	11.13.17	13:00	C	N	SW	X	[redacted]	X	X	X	X	X	X	X			
WB-OUT	11.13.17	13:00	C	N	SW	X	[redacted]	X	X	X	X	X	X	X			

Comments/Special Instructions:
Send 1 liter to ETS, Inc. 975 Transport Way, Suite 2, Petaluma, CA for PSD, TSS. PSD to be run for >500, 500-125, 125-62.5, 62.5-4, <4.

Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time
Meghan Muller/Herrera	[signature]	11.17.17 2:06		Brandon Fisk/ARI	[signature]	11/13/17 1406 / 1606 BF
Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time

Sample Type: G=Grab C=Composite
Matrix Codes: A=Air GW=Groundwater SE=Sediment SO=Soil SW=Surface Water W=Water (blanks) M=Material O=Other (specify)

FIELD LOG SHEET

Project Name: StormGarden Bio-Filtration System **Project #:** 15-05988-000

Site Location: WSDOT TEST FACILITY **Client:** Rotondo Enviromental Solutions, LLC

Site ID: WB **Event ID:** 20171119

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Pre-Storm Visit

Date: 11-14-17 Time: 12:45 Field Staff: M Mullen Weather: cloudy 60°

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Sampler Battery Volt. (V):	—	Sampler Battery Volt. (V):	—	Rain Gauge Level?	Yes No
Primary Device Level?	no flow gage at this station	Primary Device Level?	(Yes) No	Rain Gauge Unobstructed?	Yes No
Offset Before Adj. (ft):	no flow gage at this station	Offset Before Adj. (ft):	—		
Offset AfterAdj. (ft):	no flow gage at this station	Offset AfterAdj. (ft):	—		
Actual Pump Vol (ml):	* 200	Actual Pump Vol (ml)	200		
Pump Vol Before Adj. (ml):	200	Pump Vol Before Adj (ml)	240		
Pump Vol After Adj. (ml):	200	Pump Vol After Adj. (ml)	200		
Intake Checked?	(Yes) No	Intake Checked?	(Yes) No		
Desiccant Dry?	no flow gage at this station	Desiccant Dry?	(Yes) No		
Sample Line Rinsed?	(Yes) No	Sample Line Rinsed?	(Yes) No		
Clean Bottle?	(Yes) No	Clean Bottle?	(Yes) No		
Pacing (cf):		Pacing (cf):			
Ice Added?	(Yes) No	Ice Added?	(Yes) No		
Program Started?	(Yes) No	Program Started?	(Yes) No		
Tubing Connected?	(Yes) No	Tubing Connected?	(Yes) No		
Flow Conditions:	Rise Peak Fall (None)	Flow Conditions:	Rise Peak Fall (None)		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

* no water left valve open 1.5 turns.

Post-Storm Visit

Date: 11-20-17 Time: 14:30 Field Staff: M Mullen Weather: cloudy 60°

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Date/Time End:	11-20-17 1:44	Date/Time End:	11-20-17 1:28	Rain Gauge Level?	Yes No
# of Samples:	8 39	# of Samples:	12 12	Rain Gauge Unobstructed?	Yes No
Sampled Without Error?	(Yes) No	Sampled Without Error?	(Yes) No		
Offset Before Adj. (ft):	no gage at this station	Offset Before Adj. (ft):	—		
Offset AfterAdj. (ft):	no gage at this station	Offset AfterAdj. (ft):	—		
Est. Sample Vol (L):	3	Est. Sample Vol (L):	3		
Visual Condition:	dark grey	Visual Condition:	light grey		
Bottles Replaced?	(Yes) No	Bottles Replaced?	(Yes) No		
Sent to Lab?	(Yes) No	Sent to Lab?	(Yes) No		
Duplicate Sample?	Yes (No)	Duplicate Sample?	Yes (No)		
Flow Conditions:	Rise Peak Fall (None)	Flow Conditions:	Rise Peak Fall (None)		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

changed mulch
open 1.5 turns.

Grab Sample Visit

Date: Time: Field Staff: Weather:

Station	Parameter	Time collected	Bottle Type	# of Bottles	Bottle Volume (ml)	Duplicated	Flow Conditions
	NWTPH-Dx		HDPE Glass	2		yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None

Notes/Visual Conditions: (note any calibrations or maintenance on back)

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Chain of Custody Record

Project Name:	Project Number:	Client:
Rotondo ~~BioPod~~ Stormgarden	15-05988-000	Herrera Environmental

Report To: Dylan Ahearn
Page: 1/1
Sampled By: M Mullen
Delivery Method: ice cooler hand delivered
Laboratory: Analytical Resources Inc.
Requested Completion Date:
Total No. of Containers: 2
Lab Use:

Sample ID	Date	Time	Sample Type (see codes)	Preservative? (Y/N)	Matrix (see codes)	Analyses Requested: Total Suspended Solids- SM 2540D	Particle Size Distribution - ASTM-D422	Total phosphorus - SM 4500P-F	Orthophosphorus - SM 4500P-F	Hardness as CaCO3-SM 2340B	Copper, dissolved - EPA 200.8	Copper, total - EPA 200.8	Zinc, dissolved - EPA 200.8	Zinc, total - EPA 200.8			
WB-IN	11.20.17	14:30	C	N	SW	X	X	X	X	X	X	X	X	X			
WB-OUT	11.20.17	14:30	C	N	SW	X	X	X	X	X	X	X	X	X			

Comments/Special Instructions:
Send 1 liter to ETS, Inc. 975 Transport Way, Suite 2, Petaluma, CA for PSD, TSS. PSD to be run for >500, 500-125, 125-62.5, 62.5-4, <4.

Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time
Meghan Mullen / Herrera		11.20.17 15:35		Brandon Fisk/ARI		1535 11/20/17
Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time

Sample Type: G=Grab C=Composite
Matrix Codes: A=Air GW=Groundwater SE=Sediment SO=Soil SW=Surface Water W=Water (blanks) M=Material O=Other (specify)

FIELD LOG SHEET

Project Name: StormGarden Bio-Filtration System **Project #:** 15-05988-000

Site Location: WSDOT TEST FACILITY **Client:** Rotondo Enviromental Solutions, LLC

Site ID: WB **Event ID:** 20171121

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Pre-Storm Visit

Date: 11.20.17 Time: 14:30 Field Staff: M Mullen Weather: cloudy 60°

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Sampler Battery Volt. (V):	—	Sampler Battery Volt. (V):	—	Rain Gauge Level?	Yes No
Primary Device Level?	no flow gage at this station	Primary Device Level?	Yes No	Rain Gauge Unobstructed?	Yes No
Offset Before Adj. (ft):	no flow gage at this station	Offset Before Adj. (ft):	—		
Offset AfterAdj. (ft):	no flow gage at this station	Offset AfterAdj. (ft):	—		
Actual Pump Vol (ml):	—	Actual Pump Vol (ml)	—		
Pump Vol Before Adj (ml)	—	Pump Vol Before Adj (ml)	—		
Pump Vol After Adj. (ml):	—	Pump Vol After Adj. (ml)	—		
Intake Checked?	Yes No	Intake Checked?	Yes No		
Desiccant Dry?	no flow gage at this station	Desiccant Dry?	Yes No		
Sample Line Rinsed?	Yes No	Sample Line Rinsed?	Yes No		
Clean Bottle?	Yes No	Clean Bottle?	Yes No		
Pacing (cf).	—	Pacing (cf):	—		
Ice Added?	Yes No	Ice Added?	Yes No		
Program Started?	Yes No	Program Started?	Yes No		
Tubing Connected?	Yes No	Tubing Connected?	Yes No		
Flow Conditions:	Rise Peak Fall None	Flow Conditions:	Rise Peak Fall None		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

Post-Storm Visit

Date: 11.22.17 Time: 11:00 Field Staff: B. Bland Weather: cloudy 51°F

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Date/Time End:	11.22.17 8:46	Date/Time End:	11.22.17 8:40	Rain Gauge Level?	Yes No
# of Samples:	24	# of Samples:	23	Rain Gauge Unobstructed?	Yes No
Sampled Without Error?	Yes No	Sampled Without Error?	Yes No		
Offset Before Adj. (ft):	no gage at this station	Offset Before Adj. (ft):	—		
Offset AfterAdj. (ft):	no gage at this station	Offset AfterAdj. (ft):	—		
Est. Sample Vol (L):	5	Est. Sample Vol (L):	5		
Visual Condition:	light gray	Visual Condition:	light gray clear		
Bottles Replaced?	Yes No	Bottles Replaced?	Yes No		
Sent to Lab?	Yes No	Sent to Lab?	Yes No		
Duplicate Sample?	Yes No	Duplicate Sample?	Yes No		
Flow Conditions:	Rise Peak Fall None	Flow Conditions:	Rise Peak Fall None		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

Grab Sample Visit

Date: 11.21.17 Time: 13:00 Field Staff: M Mullen Weather: rainy 40°

Station	Parameter	Time collected	Bottle Type	# of Bottles	Bottle Volume (ml)	Duplicated	Flow Conditions
11.21.17	NWTPH-Dx	13:00	HDPE Glass	2	500	yes* no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None

Notes/Visual Conditions: (note any calibrations or maintenance on back)

* yes for inlet

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Chain of Custody Record

Project Name:	Project Number:	Client:
Rotondo BioPod	15-05988-000	Herrera Environmental
Report To: Dylan Ahearn		Page: 1/1
Sampled By:		Delivery Method:
Laboratory: Analytical Resources Inc.	Requested Completion Date:	Total No. of Containers:

Lab Use:						Analyses Requested											
Sample ID	Date	Time	Sample Type (see codes)	Preserv ative? (Y/N)	Matrix (see codes)	Total Suspended Solids- SM 2540D	Particle size Distribution - ASTM D422	Total phosphorus - SM 4500P-F	Orthophosphorus - SM 4500P-F	Hardness as CaCO3-SM 2340B	Copper, dissolved - EPA 200.8	Copper, total - EPA 200.8	Zinc, dissolved - EPA 200.8	Zinc, total - EPA 200.8			
WB-IN	11.22.17	8:40	C	N	SW	X	X	X	X	X	X	X	X	X			
WB-OUT	11.22.17	8:40	C	N	SW	X	X	X	X	X	X	X	X	X			

Comments/Special Instructions:

Send 1 liter to ETS, Inc. 975 Transport Way, Suite 2, Petaluma, CA for PSD, TSS. PSD to be run for >500, 500-125, 125-62.5, 62.5-4, <4.

Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time
Brianna Blaud		11.22.17/11:40		Brandon Fisk/AR		11/22/17 1140
Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time

Sample Type: G=Grab C=Composite **Matrix Codes:** A=Air GW=Groundwater SE=Sediment SO=Soil SW=Surface Water W=Water (blanks) M=Material O=Other (specify)

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Chain of Custody Record

Project Name:	Project Number:	Client:
Rotondo BioPod	15-05988-000	Herrera Environmental
Report To:		**Copy To:**
Dylan Ahearn		
Sampled By:		**Delivery Method:**
M Mullen		ice cooler, hand
Laboratory:	**Requested Completion Date:**	**Total No. of Containers:**
Analytical Resources Inc.		6

Lab Use:							Analyses Requested											
Sample ID	Date	Time	Sample Type (see codes)	Preserv-ative? (Y/N)	Matrix (see codes)	Number of Containers	NWTPH-Dx											Lab ID No.
WB-IN	11.21.17	13:00	G	N	SW	2	X											
WB-OUT	11.21.17	13:00	G	N	SW	2	X											
* WB-IN QA	11.21.17	13:00	G	N	SW	2	X											

Comments/Special Instructions: * duplicate from the field

Relinquished by (Name/CO/	Signature	Date/Time	Received By (Name/CO)	Signature	Date/Time
Meghan Muller / Herrera		11.21.17 14:00	Brayton Fisk / ARI		11/21/17 1400
Relinquished by (Name/CO/	Signature	Date/Time	Received By (Name/CO)	Signature	Date/Time

Sample Type: G=Grab C=Composite

Matrix Codes: A=Air GW=Groundwater SE=Sediment SO=Soil SW=Surface Water W=Water (blanks) M=Material O=Other (specify)

FIELD LOG SHEET

Project Name: StormGarden Bio-Filtration System **Project #:** 15-05988-000

Site Location: WSDOT TEST FACILITY **Client:** Rotondo Enviromental Solutions, LLC

Site ID: WB **Event ID:** 20171130

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Pre-Storm Visit

Date: 11.29.17 Time: 2:45 Field Staff: M Mullen Weather: sunny 55°

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Sampler Battery Volt. (V):	–	Sampler Battery Volt. (V):	–	Rain Gauge Level?	Yes No
Primary Device Level?	no flow gage at this station	Primary Device Level?	(Yes) No	Rain Gauge Unobstructed?	Yes No
Offset Before Adj. (ft):	no flow gage at this station	Offset Before Adj. (ft):	–		
Offset AfterAdj. (ft):	no flow gage at this station	Offset AfterAdj. (ft):	–		
Actual Pump Vol (ml):	–	Actual Pump Vol (ml)	–		
Pump Vol Before Adj. (ml):	–	Pump Vol Before Adj. (ml)	–		
Pump Vol After Adj. (ml):	–	Pump Vol After Adj. (ml)	–		
Intake Checked?	(Yes) No	Intake Checked?	(Yes) No		
Desiccant Dry?	no flow gage at this station	Desiccant Dry?	(Yes) No		
Sample Line Rinsed?	(Yes) No	Sample Line Rinsed?	(Yes) No		
Clean Bottle?	(Yes) No	Clean Bottle?	(Yes) No		
Pacing (cf):	–	Pacing (cf):	–		
Ice Added?	(Yes) No	Ice Added?	(Yes) No		
Program Started?	(Yes) No	Program Started?	(Yes) No		
Tubing Connected?	(Yes) No	Tubing Connected?	(Yes) No		
Flow Conditions:	Rise Peak Fall (None)	Flow Conditions:	Rise Peak Fall (None)		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

opened valve 1.5 turns

Post-Storm Visit

Date: 12.1.17 Time: 11:45 Field Staff: M Mullen Weather: cloudy 50°

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Date/Time End:		Date/Time End:		Rain Gauge Level?	Yes No
# of Samples:	88	# of Samples:	87	Rain Gauge Unobstructed?	Yes No
Sampled Without Error?	(Yes) No	Sampled Without Error?	(Yes) No		
Offset Before Adj. (ft):	no gage at this station	Offset Before Adj. (ft):	–		
Offset AfterAdj. (ft):	no gage at this station	Offset AfterAdj. (ft):	–		
Est. Sample Vol (L):	18	Est. Sample Vol (L):	18		
Visual Condition.	drk grey	Visual Condition:	pale yellow		
Bottles Replaced?	(Yes) No	Bottles Replaced?	(Yes) No		
Sent to Lab?	(Yes) No	Sent to Lab?	(Yes) No		
Duplicate Sample?	Yes (No)	Duplicate Sample?	Yes (No)		
Flow Conditions:	Rise Peak Fall (None)	Flow Conditions:	Rise Peak Fall (None)		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

cleaned out valve

* need date/time of end

Grab Sample Visit

Date: 11.30.17 Time: 9:05 Field Staff: Katie W + Meghan M. Weather: Rain

Station	Parameter	Time collected	Bottle Type	# of Bottles	Bottle Volume (ml)	Duplicated	Flow Conditions
WB-IN	NWTPH-Dx	9:05	HDPE (Glass)	2	500	yes (no)	Rise (Peak) Fall None
WB-OUT	NWTPH-Dx	9:05	HDPE (Glass)	2	500	yes (no)	Rise (Peak) Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None

Notes/Visual Conditions: (note any calibrations or maintenance on back)

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Chain of Custody Record

Project Name:	Project Number:	Client:
Rotondo ~~BioPod~~ Stormgarden	15-05988-000	Herrera Environmental
Report To:		**Copy To:**
Dylan Ahearn		
Sampled By:		**Delivery Method:**
M Mullen		ice cooler hand delivered
Laboratory:	**Requested Completion Date:**	**Total No. of Containers:**
Analytical Resources Inc.		2

Lab Use:

Sample ID	Date	Time	Sample Type (see codes)	Preserv-ative? (Y/N)	Matrix (see codes)	Number of Containers	~~ENVIRON~~	Total Suspended Solids - SM 2540D	Particle Size Distribution - ASTM D422	Total Phosphorus - SM A500P-F	Orthophosphorus - SM A500P-F	Hardness as $CaCO_3$ - SM 2340B	Copper, Dissolved - EPA 200.8	Zinc, Dissolved - EPA 200.8	Copper, Total - EPA 200.8	Zinc, Total - EPA 200.8	Lab ID No.
WB-IN	12.1.17	11:45	G C	N	SW	2	~~X~~	X	X	X	X	X	X	X	X	X	
WB-OUT	12.1.17	11:45	G C	N	SW	2	~~X~~	X	X	X	X	X	X	X	X	X	

Comments/Special Instructions:

Relinquished by (Name/CO/	Signature	Date/Time	Received By (Name/CO)	Signature	Date/Time
Megan Mullen/ Herrera		12.01.17 12:45	Brandon Fick / AR		12/01/17 1245
Relinquished by (Name/CO/	Signature	Date/Time	Received By (Name/CO)	Signature	Date/Time

Sample Type: G=Grab C=Composite **Matrix Codes:** A=Air GW=Groundwater SE=Sediment SO=Soil SW=Surface Water W=Water (blanks) M=Material O=Other (specify)

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Chain of Custody Record

Project Name:	Project Number:	Client:
Rotondo BioPod	15-05988-000	Herrera Environmental
Report To:		**Copy To:**
Dylan Ahearn		
Sampled By:		**Delivery Method:**
Katie Wingrove + Meghan Mullen		ice cooler / hand deliver
Laboratory:	**Requested Completion Date:**	**Total No. of Containers:**
Analytical Resources Inc.		4

Lab Use:

Sample ID	Date	Time	Sample Type (see codes)	Preserv-ative? (Y/N)	Matrix (see codes)	Number of Containers	Analyses Requested: NWTPH-Dx	Lab ID No.
WB-IN	11.30.17	9:05	G	N	SW	2	X	
WB-OUT	11.30.17	9:05	G	N	SW	2	X	

Comments/Special Instructions:

Relinquished by (Name/CO/	Signature	Date/Time	Received By (Name/CO)	Signature	Date/Time
Meghan Mullen / Herrera		11.30.17 10:15	Stephanie Fisher Kinn		1015 11/30/17
Relinquished by (Name/CO/	Signature	Date/Time	Received By (Name/CO)	Signature	Date/Time

Sample Type: G=Grab C=Composite

Matrix Codes: A=Air GW=Groundwater SE=Sediment SO=Soil SW=Surface Water W=Water (blanks) M=Material O=Other (specify)

FIELD LOG SHEET

Project Name: StormGarden Bio-Filtration System **Project #:** 15-05988-000

Site Location: WSDOT TEST FACILITY **Client:** Rotondo Enviromental Solutions, LLC

Site ID: WB **Event ID:** 20171202

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Pre-Storm Visit

Date: 12.1.17 Time: 11:45 Field Staff: M Mullen Weather: Cloudy 50°

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Sampler Battery Volt. (V):	–	Sampler Battery Volt. (V):	–	Rain Gauge Level?	Yes No
Primary Device Level?	no flow gage at this station	Primary Device Level?	(Yes) No	Rain Gauge Unobstructed?	Yes No
Offset Before Adj. (ft):	no flow gage at this station	Offset Before Adj. (ft):	–		
Offset AfterAdj. (ft):	no flow gage at this station	Offset AfterAdj. (ft):	–		
Actual Pump Vol (ml):	–	Actual Pump Vol (ml)	–		
Pump Vol Before Adj. (ml):	–	Pump Vol Before Adj. (ml)	–		
Pump Vol After Adj. (ml):	–	Pump Vol After Adj. (ml)	–		
Intake Checked?	(Yes) No	Intake Checked?	(Yes) No		
Desiccant Dry?	no flow gage at this station	Desiccant Dry?	(Yes) No		
Sample Line Rinsed?	(Yes) No	Sample Line Rinsed?	(Yes) No		
Clean Bottle?	(Yes) No	Clean Bottle?	(Yes) No		
Pacing (cf):	–	Pacing (cf):	–		
Ice Added?	(Yes) No	Ice Added?	(Yes) No		
Program Started?	(Yes) No	Program Started?	(Yes) No		
Tubing Connected?	(Yes) No	Tubing Connected?	(Yes) No		
Flow Conditions:	Rise Peak Fall (None)	Flow Conditions:	Rise Peak Fall (None)		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

Post-Storm Visit

Date: 12.04.17 Time: 11:45 Field Staff: M Mullen Weather: cloudy 45°

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Date/Time End:	12.03.17 1:14	Date/Time End:	12.03.17 1:14	Rain Gauge Level?	Yes No
# of Samples:	29	# of Samples:	39	Rain Gauge Unobstructed?	Yes No
Sampled Without Error?	Yes No	Sampled Without Error?	Yes No		
Offset Before Adj. (ft):	no gage at this station	Offset Before Adj. (ft):	–		
Offset AfterAdj. (ft):	no gage at this station	Offset AfterAdj. (ft):	–		
Est. Sample Vol (L):	8	Est. Sample Vol (L):	10		
Visual Condition:	dark grey	Visual Condition:	pale yellow		
Bottles Replaced?	Yes (No)	Bottles Replaced?	Yes (No)		
Sent to Lab?	(Yes) No	Sent to Lab?	(Yes) No		
Duplicate Sample?	Yes (No)	Duplicate Sample?	Yes (No)		
Flow Conditions:	Rise Peak Fall (None)	Flow Conditions:	Rise Peak Fall (None)		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

closed valve

Grab Sample Visit

Date: Time: Field Staff: Weather:

Station	Parameter	Time collected	Bottle Type	# of Bottles	Bottle Volume (ml)	Duplicated	Flow Conditions
	NWTPH-Dx		HDPE Glass	2		yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None

Notes/Visual Conditions: (note any calibrations or maintenance on back)

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Chain of Custody Record

Project Name:	Project Number:	Client:
Rotondo BioPod	15-05988-000	Herrera Environmental
Report To:		**Copy To:**
Dylan Ahearn		
Sampled By:		**Delivery Method:**
M Mullen		ice cooler hand delivered
Laboratory:	**Requested Completion Date:**	**Total No. of Containers:**
Analytical Resources Inc.		

Lab Use:

Sample ID	Date	Time	Sample Type (see codes)	Preserv-ative? (Y/N)	Matrix (see codes)	Number of Containers	Analyses Requested: ~~NWTPH-Dx~~	Total Suspended Solids - SM 2540D	Particle Size Distribution - ASTM D422	Total Phosphorus - SM 4500-P F	Orthophosphorus - SM 4500-P F	Hardness as $CaCO_3$ - SM 2340B	Copper, dissolved - EPA 200.8	Copper, total - EPA 200.8	Zinc, dissolved - EPA 200.8	Zinc, total - EPA 200.8	Lab ID No.
WB-IN	12.04.17	11:45	G C	N	SW	2	X	X	X	X	X	X	X	X	X	X	
WB-OUT	12.04.17	11:45	G C	N	SW	2	X	X	X	X	X	X	X	X	X	X	

Comments/Special Instructions:

Relinquished by (Name/CO/	Signature	Date/Time	Received By (Name/CO)	Signature	Date/Time
Meghan Mullen / Herrera		12.04.17 12:35	Brandon Fisk / ARI		12/4/17 1235
Relinquished by (Name/CO/	Signature	Date/Time	Received By (Name/CO)	Signature	Date/Time

Sample Type: G=Grab C=Composite

Matrix Codes: A=Air GW=Groundwater SE=Sediment SO=Soil SW=Surface Water W=Water (blanks) M=Material O=Other (specify)

FIELD LOG SHEET

Project Name: StormGarden Bio-Filtration System **Project #:** 15-05988-000

Site Location: WSDOT TEST FACILITY **Client:** Rotondo Enviromental Solutions, LLC

Site ID: WB **Event ID:** 2017128

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Pre-Storm Visit

Date: 12/29/17 Time: 1:30 Field Staff: A Svendsen D Ahearn Weather: cloudy

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Sampler Battery Volt. (V):	13.2	Sampler Battery Volt. (V):	13.2	Rain Gauge Level?	Yes No
Primary Device Level?	no flow gage at this station	Primary Device Level?	Yes No	Rain Gauge Unobstructed?	Yes No
Offset Before Adj. (ft):	no flow gage at this station	Offset Before Adj. (ft):	calibrated		
Offset AfterAdj. (ft):	no flow gage at this station	Offset AfterAdj. (ft):			
Actual Pump Vol (ml):		Actual Pump Vol (ml)			
Pump Vol Before Adj. (ml):		Pump Vol Before Adj. (ml)			
Pump Vol After Adj. (ml):		Pump Vol After Adj (ml)			
Intake Checked?	Yes No	Intake Checked?	Yes No		
Desiccant Dry?	no flow gage at this station	Desiccant Dry?	Yes No		
Sample Line Rinsed?	Yes No	Sample Line Rinsed?	Yes No		
Clean Bottle?	Yes No	Clean Bottle?	Yes No		
Pacing (cf):	NA	Pacing (cf):	NA		
Ice Added?	Yes No	Ice Added?	Yes No		
Program Started?	Yes No	Program Started?	Yes No		
Tubing Connected?	Yes No	Tubing Connected?	Yes No		
Flow Conditions:	Rise Peak Fall None	Flow Conditions:	Rise Peak Fall None		

Bypass weir calibrated as well

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

Post-Storm Visit

Date: 12/29/17 Time: 10:15 Field Staff: D. Ahearn Weather: Rain

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Date/Time End:	12/29/17 10:25	Date/Time End:		Rain Gauge Level?	Yes No
# of Samples:	13	# of Samples:	12	Rain Gauge Unobstructed?	Yes No
Sampled Without Error?	Yes No	Sampled Without Error?	Yes No		
Offset Before Adj. (ft):	no gage at this station	Offset Before Adj. (ft):			
Offset AfterAdj. (ft):	no gage at this station	Offset AfterAdj. (ft):			
Est. Sample Vol (L):	2.5	Est. Sample Vol (L):	2.5		
Visual Condition:	dark grey	Visual Condition:	light gray		
Bottles Replaced?	Yes No	Bottles Replaced?	Yes No		
Sent to Lab?	Yes No	Sent to Lab?	Yes No		
Duplicate Sample?	Yes No	Duplicate Sample?	Yes No		
Flow Conditions:	Rise Peak Fall None	Flow Conditions:	Rise Peak Fall None		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

High flow discrete sample collected at 35 gpm (design flow rate)

Grab Sample Visit

Date: 12/29/17 Time: 10:25 Field Staff: D. Ahearn Weather: Rain

Station	Parameter	Time collected	Bottle Type	# of Bottles	Bottle Volume (ml)	Duplicated	Flow Conditions
WB-IN	NWTPH-Dx	12/29/17 10:25	HDPE Glass	2	500 ml	yes no	Rise Peak Fall None
WB-OUT	NWTPH-Dx	12/29/17 10:30	HDPE Glass	2	500 ml	yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None

Notes/Visual Conditions: (note any calibrations or maintenance on back)

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Chain of Custody Record

Project Name:	Project Number:	Client:
Rotondo StormGarden	15-05988-000	Herrera Environmental
Report To: Dylan Ahearn		Page: 1/1
Sampled By: Dylan Ahearn		Delivery Method:
Laboratory: Analytical Resources Inc.	Requested Completion Date: 1/12/18	Total No. of Containers: 2

Lab Use:						Analyses Requested											
Sample ID	Date	Time	Sample Type (see codes)	Preservative? (Y/N)	Matrix (see codes)	Total Suspended Solids- SM 2540D	Particle size Distribution - ASTM D422	Total phosphorus - SM 4500P-F	Orthophosphorus - SM 4500P-F	Hardness as CaCO3-SM 2340B	Copper, dissolved - EPA 200.8	Copper, total - EPA 200.8	Zinc, dissolved - EPA 200.8	Zinc, total - EPA 200.8			
WB-IN	12/29/17	10:29	C	N	SW	X	X	X	X	X	X	X	X	X			
WB-OUT	12/29/17	10:29	C	N	SW	X	X	X	X	X	X	X	X	X			

Comments/Special Instructions:
Send 1 liter to ETS, Inc. 975 Transport Way, Suite 2, Petaluma, CA for PSD, TSS. PSD to be run for >500, 500-125, 125-62.5, 62.5-4, <4.

Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time
Dylan Ahearn		12/29/17 12:56		Stephanie Fisher		12/29/17 1756
Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time

Sample Type: G=Grab C=Composite **Matrix Codes:** A=Air GW=Groundwater SE=Sediment SO=Soil SW=Surface Water W=Water (blanks) M=Material O=Other (specify)

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Chain of Custody Record

Project Name:	Project Number:	Client:
Rotondo StormGarden	15-05988-000	Herrera Environmental
Report To:		Copy To:
Dylan Ahearn		
Sampled By: Dylan Ahearn		Delivery Method:
Laboratory:	Requested Completion Date:	Total No. of Containers:
Analytical Resources Inc.	1/12/18	4

Lab Use:							Analyses Requested										
Sample ID	Date	Time	Sample Type (see codes)	Preserv-ative? (Y/N)	Matrix (see codes)	Number of Containers	NWTPH-Dx										Lab ID No.
WB-IN	12/29/17	10:25	G	N	SW	2	X										
WB-OUT	12/29/17	10:30	G	N	SW	2	X										

Comments/Special Instructions:

Relinquished by (Name/CO/	Signature	Date/Time	Received By (Name/CO)	Signature	Date/Time
Dylan Ahearn		12/27/17 12:56	Stephanie Fisher	HARI	12/29/17 12:56
Relinquished by (Name/CO/	Signature	Date/Time	Received By (Name/CO)	Signature	Date/Time

Sample Type: G=Grab C=Composite

Matrix Codes: A=Air GW=Groundwater SE=Sediment SO=Soil SW=Surface Water W=Water (blanks) M=Material O=Other (specify)

FIELD LOG SHEET

Project Name: StormGarden Bio-Filtration System **Project #:** 15-05988-000

Site Location: WSDOT TEST FACILITY **Client:** Rotondo Enviromental Solutions, LLC

Site ID: WB **Event ID:** 20180104

HERRERA

Pre-Storm Visit

Date: 1/4/18 Time: 1400 Field Staff: A. SVENDSEN Weather: OVERCAST

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Sampler Battery Volt. (V):	—	Sampler Battery Volt. (V):	—	Rain Gauge Level?	Yes No
Primary Device Level?	no flow gage at this station	Primary Device Level?	Yes No	Rain Gauge Unobstructed?	Yes No
Offset Before Adj. (ft):	no flow gage at this station	Offset Before Adj. (ft):	—		
Offset AfterAdj (ft):	no flow gage at this station	Offset AfterAdj (ft):	—		
Actual Pump Vol (ml):	—	Actual Pump Vol (ml)	—		
Pump Vol Before Adj. (ml):	—	Pump Vol Before Adj. (ml)	—		
Pump Vol After Adj. (ml):	—	Pump Vol After Adj (ml)	—		
Intake Checked?	Yes No	Intake Checked?	Yes No		
Desiccant Dry?	no flow gage at this station	Desiccant Dry?	Yes No		
Sample Line Rinsed?	Yes No	Sample Line Rinsed?	Yes No		
Clean Bottle?	Yes No	Clean Bottle?	Yes No		
Pacing (cf):		Pacing (cf).			
Ice Added?	Yes No	Ice Added?	Yes No		
Program Started?	Yes No	Program Started?	Yes No		
Tubing Connected?	Yes No	Tubing Connected?	Yes No		
Flow Conditions:	Rise Peak Fall None	Flow Conditions:	Rise Peak Fall None		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

Post-Storm Visit

Date: 1/5/18 Time: 1200 Field Staff: A. SVENDSEN Weather: SHOWERS, ~49°F

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Date/Time End:	1/5/18 0540	Date/Time End:	1/5/18 0725	Rain Gauge Level?	Yes No
# of Samples:	100	# of Samples:	99	Rain Gauge Unobstructed?	Yes No
Sampled Without Error?	Yes No	Sampled Without Error?	Yes No		
Offset Before Adj. (ft):	no gage at this station	Offset Before Adj. (ft):	—		
Offset AfterAdj. (ft):	no gage at this station	Offset AfterAdj. (ft):	—		
Est. Sample Vol (L):	20	Est. Sample Vol (L):	20		
Visual Condition:	VERY TURBID	Visual Condition:	MOD. TURBID		
Bottles Replaced?	Yes No	Bottles Replaced?	Yes No		
Sent to Lab?	Yes No	Sent to Lab?	Yes No		
Duplicate Sample?	Yes No	Duplicate Sample?	Yes No		
Flow Conditions:	Rise Peak Fall None	Flow Conditions:	Rise Peak Fall None		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

Grab Sample Visit

Date: Time: Field Staff: Weather:

Station	Parameters	Time collected	Bottle Type	# of Bottles	Bottle Volume (ml)	Duplicated	Flow Conditions
	NWTPH-Dx		HDPE Glass	2		yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None

Notes/Visual Conditions: (note any calibrations or maintenance on back)

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Chain of Custody Record

Project Name:	Project Number:	Client:
Rotondo StormGarden	15-05988-000	Herrera Environmental
Report To: Dylan Ahearn		**Page:** 1/1
Sampled By: A. Svendsen		**Delivery Method:** cooler w/ ice
Laboratory: Analytical Resources Inc.	**Requested Completion Date:**	**Total No. of Containers:** 2

Lab Use:

Sample ID	Date	Time	Sample Type (see codes)	Preservative? (Y/N)	Matrix (see codes)	Analyses Requested: Total Suspended Solids- SM 2540D	Particle size Distribution - ASTM D422	Total phosphorus - SM 4500P-F	Orthophosphorus - SM 4500P-F	Hardness as CaCO3-SM 2340B	Copper, dissolved - EPA 200.8	Copper, total - EPA 200.8	Zinc, dissolved - EPA 200.8	Zinc, total - EPA 200.8			
WB-IN	1/5/18	0540	C	N	SW	X	X	X	X	X	X	X	X	X			
WB-OUT	1/5/18	0725	C	N	SW	X	X	X	X	X	X	X	X	X			

Comments/Special Instructions:
Send 1 liter to ETS, Inc. 975 Transport Way, Suite 2, Petaluma, CA for PSD, TSS. PSD to be run for >500, 500-125, 125-62.5, 62.5-4, <4.

Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time
Alex Svendsen / HEC		1/5/18 1400		Brandon Fisk / ARI		1/5/18 1400
Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time

Sample Type: G=Grab C=Composite **Matrix Codes:** A=Air GW=Groundwater SE=Sediment SO=Soil SW=Surface Water W=Water (blanks) M=Material O=Other (specify)

FIELD LOG SHEET

Project Name: StormGarden Bio-Filtration System **Project #:** 15-05988-000

Site Location: WSDOT TEST FACILITY **Client:** Rotondo Enviromental Solutions, LLC

Site ID: WB **Event ID:** 20180108

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Pre-Storm Visit

Date: 1/8/2018 Time: 1130 Field Staff: A. SVENDSEN Weather: PARTLY CLOUDY, 46°F

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Sampler Battery Volt. (V):	—	Sampler Battery Volt. (V):	—	Rain Gauge Level?	Yes No
Primary Device Level?	no flow gage at this station	Primary Device Level?	Yes No	Rain Gauge Unobstructed?	Yes No
Offset Before Adj. (ft):	no flow gage at this station	Offset Before Adj. (ft):	—		
Offset AfterAdj. (ft):	no flow gage at this station	Offset AfterAdj. (ft):	—		
Actual Pump Vol (ml):	—	Actual Pump Vol (ml)	—		
Pump Vol Before Adj. (ml)	—	Pump Vol Before Adj. (ml)	—		
Pump Vol After Adj. (ml):	—	Pump Vol After Adj. (ml)	—		
Intake Checked?	Yes (No)	Intake Checked?	(Yes) No		
Desiccant Dry?	no flow gage at this station	Desiccant Dry?	(Yes) No		
Sample Line Rinsed?	(Yes) No	Sample Line Rinsed?	(Yes) No		
Clean Bottle?	(Yes) No	Clean Bottle?	(Yes) No		
Pacing (cf)		Pacing (cf)			
Ice Added?	(Yes) No	Ice Added?	(Yes) No		
Program Started?	(Yes) No	Program Started?	(Yes) No		
Tubing Connected?	(Yes) No	Tubing Connected?	(Yes) No		
Flow Conditions:	Rise Peak (Fall) None	Flow Conditions:	Rise Peak (Fall) None		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

VALVE SET @ 1.25 TURNS, CLEANED DRAWBRIDGE TO PREVENT BASEFLOW FROM FLOWING THROUGH FILTRATION DEVICE BETWEEN STORMS

Post-Storm Visit

Date: 1/9/18 Time: 1030 Field Staff: A. SVENDSEN Weather: SHOWERS, 46°F

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Date/Time End:	1/9/18 0427	Date/Time End:	1/9/18 0543	Rain Gauge Level?	Yes No
# of Samples:	35	# of Samples:	27	Rain Gauge Unobstructed?	Yes No
Sampled Without Error?	(Yes) No	Sampled Without Error?	(Yes) No		
Offset Before Adj. (ft):	no gage at this station	Offset Before Adj. (ft):	—		
Offset AfterAdj. (ft):	no gage at this station	Offset AfterAdj. (ft):	—		
Est. Sample Vol (L):	10	Est. Sample Vol (L):	7		
Visual Condition:	SLIGHTLY TURBID	Visual Condition.	SLIGHTLY TURBID		
Bottles Replaced?	(Yes) No	Bottles Replaced?	(Yes) No		
Sent to Lab?	(Yes) No	Sent to Lab?	(Yes) No		
Duplicate Sample?	Yes (No)	Duplicate Sample?	Yes (No)		
Flow Conditions:	Rise Peak (Fall) None	Flow Conditions:	Rise Peak (Fall) None		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

Grab Sample Visit

Date: Time: Field Staff: Weather:

Station	Analytes	Duplicate?	Bottle Type	Bottles	Sampled	Flow Conditions
	NWTPH-Dx		HDPE Glass	2	yes no	Rise Peak Fall None
			HDPE Glass		yes no	Rise Peak Fall None
			HDPE Glass		yes no	Rise Peak Fall None
			HDPE Glass		yes no	Rise Peak Fall None
			HDPE Glass		yes no	Rise Peak Fall None
			HDPE Glass		yes no	Rise Peak Fall None

Notes/Visual Conditions: (note any calibrations or maintenance on back)

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Chain of Custody Record

Project Name:	Project Number:	Client:
Rotondo StormGarden	15-05988-000	Herrera Environmental

Report To: Dylan Ahearn

Page: 1/1

Sampled By: A. SVENDSEN

Delivery Method: IN COOLER w/ICE

Laboratory: Analytical Resources Inc.

Requested Completion Date:

Total No. of Containers: 2

Lab Use:

Sample ID	Date	Time	Sample Type (see codes)	Preserv ative? (Y/N)	Matrix (see codes)	Analyses Requested: Total Suspended Solids- SM 2540D	Particle size Distribution - ASTM D422	Total phosphorus - SM 4500P-F	Orthophosphorus - SM 4500P-F	Hardness as CaCO3-SM 2340B	Copper, dissolved - EPA 200.8	Copper, total - EPA 200.8	Zinc, dissolved - EPA 200.8	Zinc, total - EPA 200.8			
WB-IN	1/9/18	0427	C	N	SW	X	X	X	X	X	X	X	X	X			
WB-OUT	1/9/18	0543	C	N	SW	X	X	X	X	X	X	X	X	X			

Comments/Special Instructions:

Send 1 liter to ETS, Inc. 975 Transport Way, Suite 2, Petaluma, CA for PSD, TSS. PSD to be run for >500, 500-125, 125-62.5, 62.5-4, <4.

Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time
ALEX SVENDSEN/HEC		1/9/18 1305		BRANDON FRK/HR		1/9/18 1305
Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time

Sample Type: G=Grab C=Composite

Matrix Codes: A=Air GW=Groundwater SE=Sediment SO=Soil SW=Surface Water W=Water (blanks) M=Material O=Other (specify)

FIELD LOG SHEET

Project Name: StormGarden Bio-Filtration System **Project #:** 15-05988-000

Site Location: WSDOT TEST FACILITY **Client:** Rotondo Enviromental Solutions, LLC

Site ID: WB **Event ID:** 20181017

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Pre-Storm Visit

Date: 1/17/18 Time: 8:30 Field Staff: B. Blaud Weather: cloudy, 50°F

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Sampler Battery Volt (V):	—	Sampler Battery Volt (V):	—	Rain Gauge Level?	Yes No
Primary Device Level?	no flow gage at this station	Primary Device Level?	(Yes) No	Rain Gauge Unobstructed?	Yes No
Offset Before Adj. (ft):	no flow gage at this station	Offset Before Adj. (ft)	—		
Offset AfterAdj. (ft):	no flow gage at this station	Offset AfterAdj. (ft):	—		
Actual Pump Vol (ml):	—	Actual Pump Vol (ml)	—		
Pump Vol Before Adj. (ml):	—	Pump Vol Before Adj. (ml)	—		
Pump Vol After Adj. (ml)	—	Pump Vol After Adj. (ml)	—		
Intake Checked?	Yes (No)	Intake Checked?	(Yes) No		
Desiccant Dry?	no flow gage at this station	Desiccant Dry?	(Yes) No		
Sample Line Rinsed?	Yes (No)	Sample Line Rinsed?	Yes (No)		
Clean Bottle?	(Yes) No	Clean Bottle?	(Yes) No		
Pacing (cf):		Pacing (cf):			
Ice Added?	(Yes) No	Ice Added?	(Yes) No		
Program Started?	(Yes) No	Program Started?	(Yes) No		
Tubing Connected?	(Yes) No	Tubing Connected?	(Yes) No		
Flow Conditions:	Rise Peak Fall (None)	Flow Conditions:	Rise Peak Fall (None)		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

Post-Storm Visit

Date: 1/18/18 Time: 1300 Field Staff: A. SVENDSEN Weather: LIGHT RAIN, ~45°F

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Date/Time End:	1/18/18 1047	Date/Time End:	1/18/18 1049	Rain Gauge Level?	Yes No
# of Samples:	92	# of Samples:	87	Rain Gauge Unobstructed?	Yes No
Sampled Without Error?	(Yes) No	Sampled Without Error?	(Yes) No		
Offset Before Adj. (ft):	no gage at this station	Offset Before Adj. (ft):	—		
Offset AfterAdj. (ft):	no gage at this station	Offset AfterAdj. (ft):	—		
Est. Sample Vol (L):	20	Est. Sample Vol (L):	19		
Visual Condition:	TURBID, DARK BROWN	Visual Condition:	MOD. TURBID, BROWN		
Bottles Replaced?	Yes (No)	Bottles Replaced?	Yes (No)		
Sent to Lab?	(Yes) No	Sent to Lab?	(Yes) No		
Duplicate Sample?	Yes (No)	Duplicate Sample?	Yes (No)		
Flow Conditions:	Rise Peak (Fall) None	Flow Conditions:	Rise Peak (Fall) None		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

Grab Sample Visit

Date: 1/17/18 Time: 1613 Field Staff: A. SVENDSEN Weather: HEAVY RAIN

Station	Parameter	Time Collected	Bottle Type		# Bottles	Vol (ml)	Duplicate?	Flow Conditions
WB-OUT	NWTPH-Dx	1625	HDPE	Glass	2	500	yes (no)	(Rise) Peak Fall None
WB-IN	NWTPH-Dx	1635	HDPE	Glass	2	500	yes (no)	(Rise) Peak Fall None
			HDPE	Glass			yes no	Rise Peak Fall None
			HDPE	Glass			yes no	Rise Peak Fall None
			HDPE	Glass			yes no	Rise Peak Fall None
			HDPE	Glass			yes no	Rise Peak Fall None

Notes/Visual Conditions: (note any calibrations or maintenance on back)

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Chain of Custody Record

Project Name:	Project Number:	Client:
Rotondo StormGarden	15-05988-000	Herrera Environmental

Report To:	Copy To:
Dylan Ahearn	

Sampled By:	Delivery Method:
A. SVENDSEN	IN COOLER W/ ICE

Laboratory:	Requested Completion Date:	Total No. of Containers:
Analytical Resources Inc.		4

Lab Use:

Sample ID	Date	Time	Sample Type (see codes)	Preserv-ative? (Y/N)	Matrix (see codes)	Number of Containers	Analyses Requested: NWTPH-Dx	Lab ID No.
WB-IN	1/17/18	1635	G	Y ~~N~~	SW	2	X	
WB-OUT	1/17/18	1625	G	Y ~~N~~	SW	2	X	

Comments/Special Instructions:
- GRAB SAMPLES PRESERVED W/ H_2SO_4

Relinquished by (Name/CO/	Signature	Date/Time	Received By (Name/CO)	Signature	Date/Time
ALEX SVENDSEN/HEC		1/18/18 1425	ARI	B. Gordon Fish	1/18/18 1425
Relinquished by (Name/CO/	Signature	Date/Time	Received By (Name/CO)	Signature	Date/Time

Sample Type: G=Grab C=Composite

Matrix Codes: A=Air GW=Groundwater SE=Sediment SO=Soil SW=Surface Water W=Water (blanks) M=Material O=Other (specify)

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Chain of Custody Record

Project Name:	Project Number:	Client:
Rotondo StormGarden	15-05988-000	Herrera Environmental

Report To: Dylan Ahearn
Page: 1/1
Sampled By: A. Svendsen
Delivery Method: IN TOTE W/ ICE
Laboratory: Analytical Resources Inc.
Requested Completion Date:
Total No. of Containers: 2
Lab Use:

Sample ID	Date	Time	Sample Type (see codes)	Preservative? (Y/N)	Matrix (see codes)	Total Suspended Solids- SM 2540D	Particle size Distribution - ASTM D422	Total phosphorus - SM 4500P-F	Orthophosphorus - SM 4500P-F	Hardness as CaCO3-SM 2340B	Copper, dissolved - EPA 200.8	Copper, total - EPA 200.8	Zinc, dissolved - EPA 200.8	Zinc, total - EPA 200.8			
						Analyses Requested											
WB-IN	1/18/18	1047	C	N	SW	X	X	X	X	X	X	X	X	X			
WB-OUT	1/18/18	1049	C	N	SW	X	X	X	X	X	X	X	X	X			

Comments/Special Instructions:
Send 1 liter to ETS, Inc. 975 Transport Way, Suite 2, Petaluma, CA for PSD, TSS. PSD to be run for >500, 500-125, 125-62.5, 62.5-4, <4.

Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time
Alex Svendsen / HEC		1/18/18 1425		Brandon Fisk / ARI		1/18/18 1425
Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time

Sample Type: G=Grab C=Composite
Matrix Codes: A=Air GW=Groundwater SE=Sediment SO=Soil SW=Surface Water W=Water (blanks) M=Material O=Other (specify)

Project Name: StormGarden Bio-Filtration System **Project #:** 15-05988-000

Site Location: WSDOT TEST FACILITY **Client:** Rotondo Enviromental Solutions, LLC

Site ID: WB **Event ID:** 20180123

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Pre-Storm Visit

Date: 1/22/18 Time: 1000 Field Staff: A. SVENDSEN Weather: PARTLY CLOUDY, 45°F

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Sampler Battery Volt. (V):	—	Sampler Battery Volt (V):	—	Rain Gauge Level?	Yes No
Primary Device Level?	no flow gage at this station	Primary Device Level?	Yes No	Rain Gauge Unobstructed?	Yes No
Offset Before Adj. (ft):	no flow gage at this station	Offset Before Adj. (ft):	—		
Offset AfterAdj. (ft):	no flow gage at this station	Offset AfterAdj. (ft):	—		
Actual Pump Vol (ml):	—	Actual Pump Vol (ml)	—		
Pump Vol Before Adj (ml):	—	Pump Vol Before Adj (ml)	—		
Pump Vol After Adj (ml):	—	Pump Vol After Adj (ml)	—		
Intake Checked?	Yes (No)	Intake Checked?	(Yes) No		
Desiccant Dry?	no flow gage at this station	Desiccant Dry?	(Yes) No		
Sample Line Rinsed?	(Yes) No	Sample Line Rinsed?	(Yes) No		
Clean Bottle?	(Yes) No	Clean Bottle?	(Yes) No		
Pacing (cf):		Pacing (cf)			
Ice Added?	(Yes) No	Ice Added?	(Yes) No		
Program Started?	(Yes) No	Program Started?	(Yes) No		
Tubing Connected?	(Yes) No	Tubing Connected?	(Yes) No		
Flow Conditions:	Rise Peak Fall (None)	Flow Conditions:	Rise Peak Fall (None)		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

- CHANGED OUT PUMP-HEAD TUBING @ IN + OUT ISCO SAMPLERS
- ROUGHENED MULCH LAYER
- CHECKED DRAWBRIDGE/INTAKE + CLEANED, SET VALVE @ 1.25 TURNS

Post-Storm Visit

Date: 1/24/18 Time: 1315 Field Staff: A. SVENDSEN Weather:

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Date/Time End:	1/24/18 0841	Date/Time End:	1/24/18 0842	Rain Gauge Level?	Yes No
# of Samples:		# of Samples:		Rain Gauge Unobstructed?	Yes No
Sampled Without Error?	(Yes) No	Sampled Without Error?	(Yes) No		
Offset Before Adj. (ft):	no gage at this station	Offset Before Adj (ft):	—		
Offset AfterAdj. (ft):	no gage at this station	Offset AfterAdj. (ft):	—		
Est. Sample Vol (L):	F	Est. Sample Vol (L):	F		
Visual Condition	TURBID, DARK BROWN	Visual Condition	SLIGHTLY TURBID, LIGHT BROWN		
Bottles Replaced?	Yes (No)	Bottles Replaced?	Yes (No)		
Sent to Lab?	(Yes) No	Sent to Lab?	(Yes) No		
Duplicate Sample?	Yes (No)	Duplicate Sample?	Yes (No)		
Flow Conditions:	Rise Peak (Fall) None	Flow Conditions:	Rise Peak (Fall) None		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

Grab Sample Visit

Date: Time: Field Staff: Weather:

Station	Analysis	Date collected	Bottle Type	Bottles		Sample OK?	Flow Conditions
	NWTPH-Dx		HDPE Glass	2		yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None

Notes/Visual Conditions: (note any calibrations or maintenance on back)

NO GRAB SAMPLES COLLECTED

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Chain of Custody Record

Project Name:	Project Number:	Client:
Rotondo StormGarden	15-05988-000	Herrera Environmental
Report To:		Page:
Dylan Ahearn		1/1
Sampled By:		Delivery Method:
A. SVENDSEN		IN TOTE W/ICE
Laboratory:	Requested Completion Date:	Total No. of Containers:
Analytical Resources Inc.		2

Lab Use:

Sample ID	Date	Time	Sample Type (see codes)	Preservative? (Y/N)	Matrix (see codes)	Analyses Requested: Total Suspended Solids- SM 2540D	Particle size Distribution - ASTM D422	Total phosphorus - SM 4500P-F	Orthophosphorus - SM 4500P-F	Hardness as CaCO3-SM 2340B	Copper, dissolved - EPA 200.8	Copper, total - EPA 200.8	Zinc, dissolved - EPA 200.8	Zinc, total - EPA 200.8			
WB-IN	1/24/18	0141	C	N	SW	X	X	X	X	X	X	X	X	X			
WB-OUT	1/24/18	0142	C	N	SW	X	X	X	X	X	X	X	X	X			

Comments/Special Instructions:

Send 1 liter to ETS, Inc. 975 Transport Way, Suite 2, Petaluma, CA for PSD, TSS. PSD to be run for >500, 500-125, 125-62.5, 62.5-4, <4.

Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time
Alex SVENDSEN/HER		1/24/18 1430		Brandon Fisk/ARI		1/24/18 1480
Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time

Sample Type: G=Grab C=Composite **Matrix Codes:** A=Air GW=Groundwater SE=Sediment SO=Soil SW=Surface Water W=Water (blanks) M=Material O=Other (specify)

Project Name: StormGarden Bio-Filtration System **Project #:** 15-05988-000

Site Location: WSDOT TEST FACILITY **Client:** Rotondo Enviromental Solutions, LLC

Site ID: WB **Event ID:**

HERRERA

Pre-Storm Visit

Date: 1/26/18 Time: 1000 Field Staff: A. SVENDSEN Weather: OVERCAST, 42°F

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Sampler Battery Volt (V)	—	Sampler Battery Volt (V)	—	Rain Gauge Level?	Yes No
Primary Device Level?	no flow gage at this station	Primary Device Level?	Yes No	Rain Gauge Unobstructed?	Yes No
Offset Before Adj (ft)	no flow gage at this station	Offset Before Adj (ft)	—		
Offset AfterAdj (ft)	no flow gage at this station	Offset AfterAdj (ft)	—		
Actual Pump Vol (ml)	—	Actual Pump Vol (ml)	—		
Pump Vol Before Adj (ml)	—	Pump Vol Before Adj (ml)	—		
Pump Vol After Adj (ml)	—	Pump Vol After Adj (ml)	—		
Intake Checked?	Yes No	Intake Checked?	Yes No		
Desiccant Dry?	no flow gage at this station	Desiccant Dry?	Yes No		
Sample Line Rinsed?	Yes No	Sample Line Rinsed?	Yes No		
Clean Bottle?	Yes No	Clean Bottle?	Yes No		
Pacing (cf)		Pacing (cf)			
Ice Added?	Yes No	Ice Added?	Yes No		
Program Started?	Yes No	Program Started?	Yes No		
Tubing Connected?	Yes No	Tubing Connected?	Yes No		
Flow Conditions:	Rise Peak Fall None	Flow Conditions:	Rise Peak Fall None		

Notes/Visual Conditions (if no to any questions above, explain why and remedial actions taken)

- CHECKED DRAIN - BRIDGE (INTAKE); APPEARS CLEAN W/NO BASE FLOW ENTERING SYSTEM
- SET VALVE @ 1.25 TURNS

Post-Storm Visit

Date: 1·29·18 Time: 1245 Field Staff: B Bland Weather: Rain, 49°F

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Date/Time End:	1·27·18 | 7:45	Date/Time End:	1·27·18 | 7:45	Rain Gauge Level?	Yes No
# of Samples:	20	# of Samples:	19	Rain Gauge Unobstructed?	Yes No
Sampled Without Error?	Yes No	Sampled Without Error?	Yes No		
Offset Before Adj (ft):	no gage at this station	Offset Before Adj (ft)	—		
Offset AfterAdj (ft)	no gage at this station	Offset AfterAdj (ft)	—		
Est. Sample Vol (L)	5	Est. Sample Vol (L)	5		
Visual Condition	light yellow clear	Visual Condition	gray, clear		
Bottles Replaced?	Yes No	Bottles Replaced?	Yes No		
Sent to Lab?	Yes No	Sent to Lab?	Yes No		
Duplicate Sample?	Yes No	Duplicate Sample?	Yes No		
Flow Conditions	Rise Peak Fall None	Flow Conditions	Rise Peak Fall None		

Notes/Visual Conditions (if no to any questions above, explain why and remedial actions taken)

Grab Sample Visit

Date: Time: Field Staff: Weather:

	NWTPH-Dx		HDPE Glass	2		yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None

Notes/Visual Conditions (note any calibrations or maintenance on back)

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Chain of Custody Record

Project Name:	Project Number:	Client:
Rotondo StormGarden	15-05988-000	Herrera Environmental
Report To: Dylan Ahearn		Page: 1/1
Sampled By: B. Blaud		Delivery Method:
Laboratory: Analytical Resources Inc.	Requested Completion Date:	Total No. of Containers:
Lab Use:		

Sample ID	Date	Time	Sample Type (see codes)	Preservative? (Y/N)	Matrix (see codes)	Total Suspended Solids- SM 2540D	Particle size Distribution - ASTM D422	Total phosphorus - SM 4500P-F	Orthophosphorus - SM 4500P-F	Hardness as CaCO3-SM 2340B	Copper, dissolved - EPA 200.8	Copper, total - EPA 200.8	Zinc, dissolved - EPA 200.8	Zinc, total - EPA 200.8			
						Analyses Requested											
WB-IN	1.27.18	7:45	C	N	SW	X	X	X	X	X	X	X	X	X			
WB-OUT	1.27.18	7:45	C	N	SW	X	X	X	X	X	X	X	X	X			

Comments/Special Instructions:

Send 1 liter to ETS, Inc. 975 Transport Way, Suite 2, Petaluma, CA for PSD, TSS. PSD to be run for >500, 500-125, 125-62.5, 62.5-4, <4.

Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time
Brianna Blaud		1.27.18/1515		Stephanie Fisher		1/29/18 1515
Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time

Sample Type: G=Grab C=Composite

Matrix Codes: A=Air GW=Groundwater SE=Sediment SO=Soil SW=Surface Water W=Water (blanks) M=Material O=Other (specify)

Project Name: StormGarden Bio-Filtration System **Project #:** 15-05988-000

Site Location: WSDOT TEST FACILITY **Client:** Rotondo Enviromental Solutions, LLC

Site ID: WB **Event ID:** 20180201

HERRERA

Pre-Storm Visit

Date: 1/31/18 Time: 1100 Field Staff: A. SVENDSEN Weather: OVERCAST, 46°F

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Sampler Battery Volt. (V):	NA	Sampler Battery Volt. (V):	NA	Rain Gauge Level?	Yes No
Primary Device Level?	no flow gage at this station	Primary Device Level?	(Yes) No	Rain Gauge Unobstructed?	Yes No
Offset Before Adj. (ft):	no flow gage at this station	Offset Before Adj. (ft)	—		
Offset AfterAdj. (ft):	no flow gage at this station	Offset AfterAdj (ft)	—		
Actual Pump Vol (ml):	—	Actual Pump Vol (ml)	—		
Pump Vol Before Adj (ml):	—	Pump Vol Before Adj (ml)	—		
Pump Vol After Adj (ml):	—	Pump Vol After Adj (ml)	—		
Intake Checked?	(Yes) No	Intake Checked?	(Yes) No		
Desiccant Dry?	no flow gage at this station	Desiccant Dry?	(Yes) No		
Sample Line Rinsed?	(Yes) No	Sample Line Rinsed?	(Yes) No		
Clean Bottle?	(Yes) No	Clean Bottle?	(Yes) No		
Pacing (cf):		Pacing (cf):			
Ice Added?	(Yes) No	Ice Added?	(Yes) No		
Program Started?	(Yes) No	Program Started?	(Yes) No		
Tubing Connected?	(Yes) No	Tubing Connected?	(Yes) No		
Flow Conditions:	Rise Peak Fall (None)	Flow Conditions:	Rise Peak Fall (None)		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

- MOVED INTAKE INTO HATCH/PIPE INLET

Post-Storm Visit

Date: 2/2/18 Time: 1200 Field Staff: A. SVENDSEN Weather: PARTLY CLOUDY, 54°F

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Date/Time End:	2/1/18 2218	Date/Time End:	2/1/18 2218	Rain Gauge Level?	Yes No
# of Samples:	27	# of Samples:	36	Rain Gauge Unobstructed?	Yes No
Sampled Without Error?	(Yes) No	Sampled Without Error?	(Yes) No		
Offset Before Adj (ft):	no gage at this station	Offset Before Adj (ft):	—		
Offset AfterAdj (ft):	no gage at this station	Offset AfterAdj (ft):	—		
Est. Sample Vol (L):	7	Est. Sample Vol (L):	7		
Visual Condition	TURBID, DARK BROWN	Visual Condition	HIGHLY TURBID		
Bottles Replaced?	(Yes) No	Bottles Replaced?	(Yes) No		
Sent to Lab?	(Yes) No	Sent to Lab?	(Yes) No		
Duplicate Sample?	Yes (No)	Duplicate Sample?	Yes (No)		
Flow Conditions	Rise Peak Fall (None)	Flow Conditions:	Rise Peak Fall (None)		

Notes/Visual Conditions. (if 'no' to any questions above, explain why and remedial actions taken)

Grab Sample Visit

Date: Time: Field Staff: Weather:

	NWTPH-Dx		HDPE Glass	2		yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None

Notes/Visual Conditions: (note any calibrations or maintenance on back)

- NO GRAB SAMPLES COLLECTED

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Chain of Custody Record

Project Name:	Project Number:	Client:
Rotondo StormGarden	15-05988-000	Herrera Environmental

Report To: Dylan Ahearn

Page: 1/1

Sampled By: A. SVENDSEN

Delivery Method: IN TOTE W/ICE

Laboratory: Analytical Resources Inc.

Requested Completion Date:

Total No. of Containers: 2

Lab Use:

Sample ID	Date	Time	Sample Type (see codes)	Preservative? (Y/N)	Matrix (see codes)	Analyses Requested: Total Suspended Solids- SM 2540D	Particle size Distribution - ASTM D422	Total phosphorus - SM 4500P-F	Orthophosphorus - SM 4500P-F	Hardness as CaCO3-SM 2340B	Copper, dissolved - EPA 200.8	Copper, total - EPA 200.8	Zinc, dissolved - EPA 200.8	Zinc, total - EPA 200.8			
WB-IN	2/1/18	2218	C	N	SW	X	X	X	X	X	X	X	X	X			
WB-OUT	2/1/18	2218	C	N	SW	X	X	X	X	X	X	X	X	X			

Comments/Special Instructions:

Send 1 liter to ETS, Inc. 975 Transport Way, Suite 2, Petaluma, CA for PSD, TSS. PSD to be run for >500, 500-125, 125-62.5, 62.5-4, <4.

Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time
ALEX SVENDSEN/HERR		2/2/18 1440		Stephanie Fisher		2/2/18 1440
Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time

Sample Type: G=Grab C=Composite

Matrix Codes: A=Air GW=Groundwater SE=Sediment SO=Soil SW=Surface Water W=Water (blanks) M=Material O=Other (specify)

FIELD LOG SHEET

Project Name: StormGarden Bio-Filtration System **Project #:** 15-05988-000

Site Location: WSDOT TEST FACILITY **Client:** Rotondo Enviromental Solutions, LLC

Site ID: WB **Event ID:** 20180203

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Pre-Storm Visit

Date: 2/2/18 Time: 1300 Field Staff: A. SVENDSEN Weather: PARTLY CLOUDY, 54°F

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Sampler Battery Volt. (V)	—	Sampler Battery Volt (V)	—	Rain Gauge Level?	Yes No
Primary Device Level?	no flow gage at this station	Primary Device Level?	Yes No	Rain Gauge Unobstructed?	Yes No
Offset Before Adj. (ft)	no flow gage at this station	Offset Before Adj (ft)	—		
Offset AfterAdj. (ft)	no flow gage at this station	Offset AfterAdj (ft)	—		
Actual Pump Vol (ml)	—	Actual Pump Vol (ml)	—		
Pump Vol Before Adj (ml)	—	Pump Vol Before Adj (ml)	—		
Pump Vol After Adj (ml)	—	Pump Vol After Adj (ml)	—		
Intake Checked?	Yes No	Intake Checked?	Yes No		
Desiccant Dry?	no flow gage at this station	Desiccant Dry?	Yes No		
Sample Line Rinsed?	Yes No	Sample Line Rinsed?	Yes No		
Clean Bottle?	Yes No	Clean Bottle?	Yes No		
Pacing (cf)		Pacing (cf)			
Ice Added?	Yes No	Ice Added?	Yes No		
Program Started?	Yes No	Program Started?	Yes No		
Tubing Connected?	Yes No	Tubing Connected?	Yes No		
Flow Conditions:	Rise Peak Fall None	Flow Conditions:	Rise Peak Fall None		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

Post-Storm Visit

Date: 2/5/18 Time: 1030 Field Staff: A. SVENDSEN Weather: OVERCAST, 50°F

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Date/Time End:	2/3/18 2301	Date/Time End	2/3/18 2301	Rain Gauge Level?	Yes No
# of Samples:	17	# of Samples:	16	Rain Gauge Unobstructed?	Yes No
Sampled Without Error?	Yes No	Sampled Without Error?	Yes No		
Offset Before Adj. (ft):	no gage at this station	Offset Before Adj (ft)			
Offset AfterAdj (ft):	no gage at this station	Offset AfterAdj (ft)	—		
Est. Sample Vol (L):	4	Est. Sample Vol (L):	4		
Visual Condition	TURBID	Visual Condition	SLIGHTLY TURBID		
Bottles Replaced?	Yes No	Bottles Replaced?	Yes No		
Sent to Lab?	Yes No	Sent to Lab?	Yes No		
Duplicate Sample?	Yes No	Duplicate Sample?	Yes No		
Flow Conditions	Rise Peak Fall None	Flow Conditions:	Rise Peak Fall None		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

Grab Sample Visit

Date: Time: Field Staff: Weather:

	NWTPH-Dx		HDPE Glass	2		yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None

Notes/Visual Conditions: (note any calibrations or maintenance on back)

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Chain of Custody Record

Project Name:	Project Number:	Client:
Rotondo StormGarden	15-05988-000	Herrera Environmental
Report To:		Page:
Dylan Ahearn		1/1
Sampled By:		Delivery Method:
A. Svendsen		IN TOTE W/ICE
Laboratory:	Requested Completion Date:	Total No. of Containers:
Analytical Resources Inc.		2

Lab Use:						Analyses Requested											
Sample ID	Date	Time	Sample Type (see codes)	Preserv ative? (Y/N)	Matrix (see codes)	Total Suspended Solids- SM 2540D	Particle size Distribution - ASTM D422	Total phosphorus - SM 4500P-F	Orthophosphorus - SM 4500P-F	Hardness as CaCO3-SM 2340B	Copper, dissolved - EPA 200.8	Copper, total - EPA 200.8	Zinc, dissolved - EPA 200.8	Zinc, total - EPA 200.8			
WB-IN	2/3/18	2301	C	N	SW	X	X	X	X	X	X	X	X	X			
WB-OUT	2/3/18	2301	C	N	SW	X	X	X	X	X	X	X	X	X			

Comments/Special Instructions:

Send 1 liter to ETS, Inc. 975 Transport Way, Suite 2, Petaluma, CA for PSD, TSS. PSD to be run for >500, 500-125, 125-62.5, 62.5-4, <4.

Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time
Alex Svendsen / HEC		2/5/18 1200		Brandon Fisk / ARI		2/5/18 1200
Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time

Sample Type: G=Grab C=Composite **Matrix Codes:** A=Air GW=Groundwater SE=Sediment SO=Soil SW=Surface Water W=Water (blanks) M=Material O=Other (specify)

Project Name: StormGarden Bio-Filtration System **Project #:** 15-05988-000

Site Location: WSDOT TEST FACILITY **Client:** Rotondo Enviromental Solutions, LLC

Site ID: WB **Event ID:** 20180213

HERRERA

Pre-Storm Visit

Date: 2/13/18 Time: 1315 Field Staff: A SVENDSEN Weather: MOSTLY SUNNY

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Sampler Battery Volt. (V):	—	Sampler Battery Volt. (V):	—	Rain Gauge Level?	Yes No
Primary Device Level?	no flow gage at this station	Primary Device Level?	(Yes) No	Rain Gauge Unobstructed?	Yes No
Offset Before Adj. (ft)	no flow gage at this station	Offset Before Adj. (ft):	—		
Offset AfterAdj. (ft)	no flow gage at this station	Offset AfterAdj. (ft):	—		
Actual Pump Vol (ml):	—	Actual Pump Vol (ml)	—		
Pump Vol Before Adj. (ml)	—	Pump Vol Before Adj. (ml)	—		
Pump Vol After Adj. (ml)	—	Pump Vol After Adj. (ml)	—		
Intake Checked?	(Yes) No	Intake Checked?	(Yes) No		
Desiccant Dry?	no flow gage at this station	Desiccant Dry?	(Yes) No		
Sample Line Rinsed?	(Yes) No	Sample Line Rinsed?	(Yes) No		
Clean Bottle?	(Yes) No	Clean Bottle?	(Yes) No		
Pacing (cf)		Pacing (cf).			
Ice Added?	(Yes) No	Ice Added?	(Yes) No		
Program Started?	(Yes) No	Program Started?	(Yes) No		
Tubing Connected?	(Yes) No	Tubing Connected?	(Yes) No		
Flow Conditions	Rise Peak Fall (None)	Flow Conditions	Rise Peak Fall (None)		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

Post-Storm Visit

Date: 2/14/18 Time: 1045 Field Staff: A. SVENDSEN Weather: OVERCAST W/SHOWERS, 42°F

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Date/Time End:	2/14/18 0206	Date/Time End:	2/14/18 0206	Rain Gauge Level?	Yes No
# of Samples	23	# of Samples:	22	Rain Gauge Unobstructed?	Yes No
Sampled Without Error?	(Yes) No	Sampled Without Error?	(Yes) No		
Offset Before Adj. (ft):	no gage at this station	Offset Before Adj (ft):	—		
Offset AfterAdj (ft):	no gage at this station	Offset AfterAdj (ft):	—		
Est. Sample Vol (L):	5	Est. Sample Vol (L)	5		
Visual Condition	SLIGHTLY TURBID	Visual Condition	SLIGHTLY TURBID		
Bottles Replaced?	Yes (No)	Bottles Replaced?	Yes (No)		
Sent to Lab?	(Yes) No	Sent to Lab?	(Yes) No		
Duplicate Sample?	Yes (No)	Duplicate Sample?	Yes (No)		
Flow Conditions	Rise Peak Fall (None)	Flow Conditions	Rise Peak Fall (None)		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

Grab Sample Visit

Date: Time: Field Staff: Weather:

	NWTPH-Dx		HDPE Glass	2		yes no	Rise Peak Fall None	
			HDPE Glass			yes no	Rise Peak Fall None	
			HDPE Glass			yes no	Rise Peak Fall None	
			HDPE Glass			yes no	Rise Peak Fall None	
			HDPE Glass			yes no	Rise Peak Fall None	
			HDPE Glass			yes no	Rise Peak Fall None	

Notes/Visual Conditions: (note any calibrations or maintenance on back)

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Chain of Custody Record

Project Name:	Project Number:	Client:
Rotondo StormGarden	15-05988-000	Herrera Environmental
Report To: Dylan Ahearn		Page: 1/1
Sampled By: A. Svendsen		Delivery Method: IN TOTE W/ICE
Laboratory: Analytical Resources Inc.	Requested Completion Date:	Total No. of Containers: 2

Sample ID	Date	Time	Sample Type (see codes)	Preservative? (Y/N)	Matrix (see codes)	Analyses Requested: Total Suspended Solids- SM 2540D	Particle size Distribution - ASTM D422	Total phosphorus - SM 4500P-F	Orthophosphorus - SM 4500P-F	Hardness as CaCO3-SM 2340B	Copper, dissolved - EPA 200.8	Copper, total - EPA 200.8	Zinc, dissolved - EPA 200.8	Zinc, total - EPA 200.8			
WB-IN	2/14/18	0206	C	N	SW	X	X	X	X	X	X	X	X	X			
WB-OUT	2/14/18	0206	C	N	SW	X	X	X	X	X	X	X	X	X			

Comments/Special Instructions:

Send 1 liter to ETS, Inc. 975 Transport Way, Suite 2, Petaluma, CA for PSD, TSS. PSD to be run for >500, 500-125, 125-62.5, 62.5-4, <4.

Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO/	Signature	Date/Time
Alex Svendsen/HEC		2/14/18 1205		ARI Stephanie Fisher		2/14/18 1205
Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time

Sample Type: G=Grab C=Composite **Matrix Codes:** A=Air GW=Groundwater SE=Sediment SO=Soil SW=Surface Water W=Water (blanks) M=Material O=Other (specify)

FIELD LOG SHEET

Project Name: StormGarden Bio-Filtration System **Project #:** 15-05988-000

Site Location: WSDOT TEST FACILITY **Client:** Rotondo Enviromental Solutions, LLC

Site ID: WB **Event ID:** 20181122

HERRERA

Pre-Storm Visit

Date: 11/22/18 Time: 13:00 Field Staff: D. Ahearn Weather: cloudy

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Sampler Battery Volt. (V):		Sampler Battery Volt. (V):		Rain Gauge Level?	~~Yes~~ ~~No~~
Primary Device Level?	no flow gage at this station	Primary Device Level?	(Yes) No	Rain Gauge Unobstructed?	~~Yes~~ ~~No~~
Offset Before Adj. (ft):	no flow gage at this station	Offset Before Adj. (ft):	—		
Offset AfterAdj. (ft):	no flow gage at this station	Offset AfterAdj. (ft):	—		
Actual Pump Vol (ml):	210	Actual Pump Vol (ml)	210		
Pump Vol Before Adj. (ml):	230	Pump Vol Before Adj. (ml)	260		
Pump Vol After Adj. (ml):	210	Pump Vol After Adj. (ml)	210		
Intake Checked?	(Yes) No	Intake Checked?	(Yes) No		
Desiccant Dry?	no flow gage at this station	Desiccant Dry?	(Yes) No		
Sample Line Rinsed?	(Yes) No	Sample Line Rinsed?	(Yes) No		
Clean Bottle?	(Yes) No	Clean Bottle?	(Yes) No		
Pacing (cf): 1 gal	180	Pacing (cf):	180		
Ice Added?	(Yes) No	Ice Added?	(Yes) No		
Program Started?	(Yes) No	Program Started?	(Yes) No		
Tubing Connected?	(Yes) No	Tubing Connected?	(Yes) No		
Flow Conditions:	Rise Peak Fall (None)	Flow Conditions:	Rise Peak Fall (None)		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

small amount of "baseflow" occuring on arival

6" Valve set at 3 turns

Post-Storm Visit

Date: 11/23/18 Time: 12:00 Field Staff: D. Ahearn Weather: clear

Station Name: WB-In		Station Name: WB-Out		Station Name: Wall-RG	
Date/Time End:	11/22/18 21:25	Date/Time End:	11/22/18 21:49	Rain Gauge Level?	~~Yes~~ ~~No~~
# of Samples:	59	# of Samples:	36	Rain Gauge Unobstructed?	~~Yes~~ ~~No~~
Sampled Without Error?	(Yes) No	Sampled Without Error?	(Yes) No		
Offset Before Adj. (ft):	no gage at this station	Offset Before Adj. (ft):	—		
Offset AfterAdj. (ft):	no gage at this station	Offset AfterAdj. (ft):	—		
Est. Sample Vol (L):	11 L	Est. Sample Vol (L):	5 L		
Visual Condition:	cloudy	Visual Condition:	clear		
Bottles Replaced?	Yes (No)	Bottles Replaced?	Yes (No)		
Sent to Lab?	(Yes) No	Sent to Lab?	(Yes) No		
Duplicate Sample?	Yes (No)	Duplicate Sample?	Yes (No)		
Flow Conditions:	Rise Peak (Fall) None	Flow Conditions:	Rise Peak (Fall) None		

Notes/Visual Conditions: (if 'no' to any questions above, explain why and remedial actions taken)

Grab Sample Visit

Date: Time: Field Staff: Weather:

Station	Parameter	Time collected	Bottle Type	# of Bottles	Bottle Volume (ml)	Duplicated	Flow Conditions
	NWTPH-Dx		HDPE Glass	2		yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None
			HDPE Glass			yes no	Rise Peak Fall None

Notes/Visual Conditions: (note any calibrations or maintenance on back)

HERRERA
2200 Sixth Avenue | Suite 1100
Seattle, Washington | 98121
p 206 441 9080 | f 206 441 9108

Chain of Custody Record

Project Name:	Project Number:	Client:
Rotondo StormGarden	15-05988-000	Herrera Environmental

Report To: Dylan Ahearn

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Sampled By: Dylan Ahearn

Delivery Method: Cooler

Laboratory: Analytical Resources Inc.

Requested Completion Date: 2 week

Total No. of Containers: 2

Lab Use:

Sample ID	Date	Time	Sample Type (see codes)	Preservative? (Y/N)	Matrix (see codes)	Analyses Requested: Total Suspended Solids- SM 2540D	Particle size distribution - ASTM D422	Total phosphorus - SM 4500P-F	Orthophosphorus - SM 4500P-F	Hardness as CaCO3-SM 2340B	Copper, dissolved - EPA 200.8	Copper, total - EPA 200.8	Zinc, dissolved - EPA 200.8	Zinc, total - EPA 200.8			
WB-IN	11/22/18	21:25	C	N	SW	X	X	X	X	X	X	X	X	X			
WB-OUT	11/22/18	21:49	C	N	SW	X	X	X	X	X	X	X	X	X			

Comments/Special Instructions:

~~Send 1 liter to ETS, Inc. 975 Transport Way, Suite 2, Petaluma, CA for PSD, TSS. PSD to be run for >500, 500-125, 125-62.5, 62.5-4, <4.~~

Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time
Dylan Ahearn		11/23/18 12:35		Stephanie Fisher	Stephanie Fisher	11-23-18 1236
Relinquished by (Name/CO/	Signature	Date/Time		Received By (Name/CO)	Signature	Date/Time

Sample Type: G=Grab C=Composite

Matrix Codes: A=Air GW=Groundwater SE=Sediment SO=Soil SW=Surface Water W=Water (blanks) M=Material O=Other (specify)