



DiPrete Engineering

June 8, 2023

Department of Environmental Protection
Box 4062
Boston, MA 02211

RE: Main Street Office Building
580 Main Street Bolton, Massachusetts 01740
Stormwater Management Letter
DE Project # 2933-008

To Whom it May Concern:

DiPrete Engineering respectfully submits this letter on behalf of our client and applicant, Condyne Engineering Group, LLC, to summarize stormwater management for the proposed construction of the Main Street Office Building and corresponding site improvements.

The site is located at 580 Main Street Bolton, MA and is an existing office building with associate parking.

The client proposes to demolish a portion of the existing office building, remodel the remaining portion, and reconfigure the parking area. New impervious areas on the site will be offset by the proposed removal of existing impervious areas, resulting in a net decrease in impervious areas as part of the proposed site improvements. The site's entire existing stormwater runoff flows towards the south existing 30" RCP and is collected on existing detention basin. The proposed runoff will be treated by new proprietary device prior to discharge onto the existing stormwater detention basin.

Under proposed conditions, the required water quality volume will be treated by a hydrodynamic separator device before discharge to a detention basin on site. The site doesn't contain any LUHPPL areas on site. Overall, drainage patterns will be maintained, and peak runoff rate and volumes will be reduced from pre-development to post development conditions due to the decrease in impervious area.

Under the MASWMS standard 7, the site is considered a redevelopment since it will modify a previously developed site and will result in no net increase in impervious area. This redevelopment project is required to meet the following stormwater management standards only to the maximum extent practicable: standards 2,3,4,5,6. The project will also utilize existing stormwater discharges and therefore Standard 1 is only required to be met to the maximum extent practicable.

Stormwater treatment will be provided by utilizing Best Management Practices (BMPs) as established by the Massachusetts Stormwater Handbook. BMPs will consist of existing catch basin, proposed proprietary structures, and existing detention pond.

Minimum Standard 1: No New Untreated Discharges

There are no new untreated discharges from the proposed development.

Minimum Standard 2: Peak Rate Attenuation

Due to the overall impervious reduction along with the use of BMP's, this redevelopment site will result in a decrease in stormwater runoff for all storm events.

Minimum Standard 3: Recharge

Note that standard 3 is only required to be met to the maximum extend practicable. This redevelopment site will result in a decrease impervious area and increase pervious area with the result more infiltration of the existing conditions.

Minimum Standard 4: Water Quality

The required water quality from the redevelopment area is to be treated through an approved BMP before being discharged to the existing drainage system. The site has been designed to use a proprietary device to provide water quality treatment.

The stormwater management system is required to provide a minimum of 80% TSS removal per Standard 4. See Appendix A3.4 for TSS Removal Calculation Worksheets.

For water quality volume requirements, per the Massachusetts Stormwater Handbook:

The required water quality volume equals 1.0 inch of runoff times the total impervious area of the post development project site for a discharge –

- From a land use with a higher potential pollutant load
- Within an area with a rapid infiltration rate (greater than 2.4 inches per hour)
- Within a Zone II or Interim Wellhead Protection Area
- Near or to the following critical areas:
 - Outstanding Resource Waters
 - Special Resource Waters
 - Bathing beaches

- Shellfish growing areas.
- Cold-water fisheries

For all other discharges the required water quality volume equals 0.5 inches of runoff times the total impervious area of the post development site.

Since this site includes rapid infiltration rates, the 1.0-inch rule applies.

The stormwater management system is also required to provide a minimum of 80% TSS removal per Standard 4.

Existing Impervious Area: 2.06 AC

Proposed Impervious Area: 1.73 AC

Impervious Reduction: 0.33 AC

WQ Required (Redevelopment): 2.09 CFS

Total WQ Provided: 3.50 CSF

See appendix A for water quality documents.

Minimum Standard 5: Land Uses with Higher Potential Pollutant Loads (LUHPPLs)

The site is not considered a LUHPPL.

Minimum Standard 6: Critical Areas

The site is not located within a critical resource area.

If you have any further questions on this matter, please feel free to contact me at your earliest convenience.

Sincerely,
DiPrete Engineering Associates, Inc.



Frederich Y. Aybar
Project Engineer
faybar@diprete-eng.com



Brandon Carr, PE, LEED AP
Principal
bcarr@diprete-eng.com

Appendix A – Water Quality Documents

Purpose: To calculate the water quality flow rate (WQF) over a given site area. In this situation the WQF is derived from the first 1" of runoff from the contributing impervious surface.

Reference: Massachusetts Dept. of Environmental Protection Wetlands Program / United States Department of Agriculture Natural Resources Conservation Service TR-55 Manual

Procedure: Determine unit peak discharge using Figure 1 or 2. Figure 2 is in tabular form so is preferred. Using the t_c , read the unit peak discharge (q_u) from Figure 1 or Table in Figure 2. q_u is expressed in the following units: cfs/mi²/watershed inches (csm/in).

Compute Q Rate using the following equation:

$$Q = (q_u) (A) (WQV)$$

where:

Q = flow rate associated with first 1" of runoff

q_u = the unit peak discharge, in csm/in.

A = impervious surface drainage area (in square miles)

WQV = water quality volume in watershed inches (1" in this case)

Structure Name	Impv. (acres)	A (miles ²)	t_c (min)	t_c (hr)	WQV (in)	q_u (csm/in.)	Q (cfs)
WQU #1	0.84	0.0013125	6.0	0.100	1.00	774.00	1.02
WQU #2	0.24	0.0003750	6.0	0.100	1.00	774.00	0.29
WQU B	1.73	0.0027047	6.0	0.100	1.00	774.00	2.09
ROOF	0.64	0.0010000	6.0	0.100	1.00	774.00	0.77

The WQf sizing calculation selects the minimum size CDS/Cascade/StormCeptor model capable of operating at the computed WQf peak flowrate prior to bypassing. It assumes free discharge of the WQf through the unit and ignores the routing effect of any upstream storm drain piping. As with all hydrodynamic separators, there will be some impact to the Hydraulic Gradient of the corresponding drainage system, and evaluation of this impact should be considered in the design.



**Estimated Net Annual Solids Load Reduction
Based on the Rational Rainfall Method**



**580 MAIN STREET
BOLTON, MA
WQ**

AREA	1.73	acres	SCICLONEX MODEL	SCX-4	
WEIGHTED C	0.95		PARTICLE SIZE	110	microns
TC	6.00	minutes	RAINFALL STATION	71	

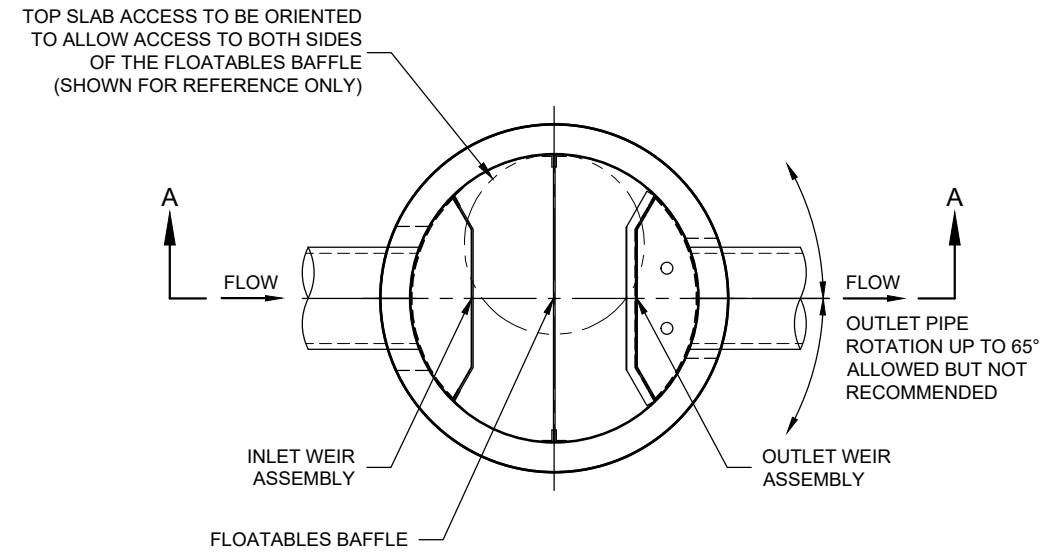
Rainfall Intensity ¹ (in/hr)	Percent Rainfall Volume ¹	Hydraulic Loading Rate (gpm/ft ²)	Removal Efficiency (%)	Incremental Removal (%)
0.08	37.6%	4.70	100.0	37.6
0.16	22.6%	9.40	100.0	22.6
0.24	11.9%	14.10	98.0	11.7
0.32	7.6%	18.80	94.5	7.2
0.40	4.3%	23.49	90.9	4.0
0.48	2.3%	28.19	87.3	2.0
0.56	1.8%	32.89	83.7	1.5
0.64	1.4%	37.59	80.2	1.1
0.72	0.9%	42.29	76.6	0.7
0.80	1.2%	46.99	73.0	0.8
0.88	1.5%	51.69	69.5	1.0
0.96	0.9%	56.39	65.9	0.6
1.04	0.4%	61.08	62.3	0.2
1.12	0.4%	65.78	58.7	0.2
1.20	0.6%	70.48	55.2	0.3
1.28	0.3%	75.18	51.6	0.2
1.36	0.2%	79.88	48.0	0.1
1.44	0.9%	84.58	44.5	0.4
1.52	0.6%	89.28	40.9	0.2
1.60	0.4%	93.98	37.3	0.1
1.80	0.2%	105.72	28.4	0.1
2.00	0.9%	117.47	19.5	0.2
				92.9
				Removal Efficiency Adjustment ² = 0.0%
				Predicted % Annual Rainfall Treated = 98.8%
				Predicted Net Annual Load Removal Efficiency = 92.9%

1 - Based on 13 years of 15 minute precipitation data for Station 0666, Birch Hill Dam, Worcester County, MA

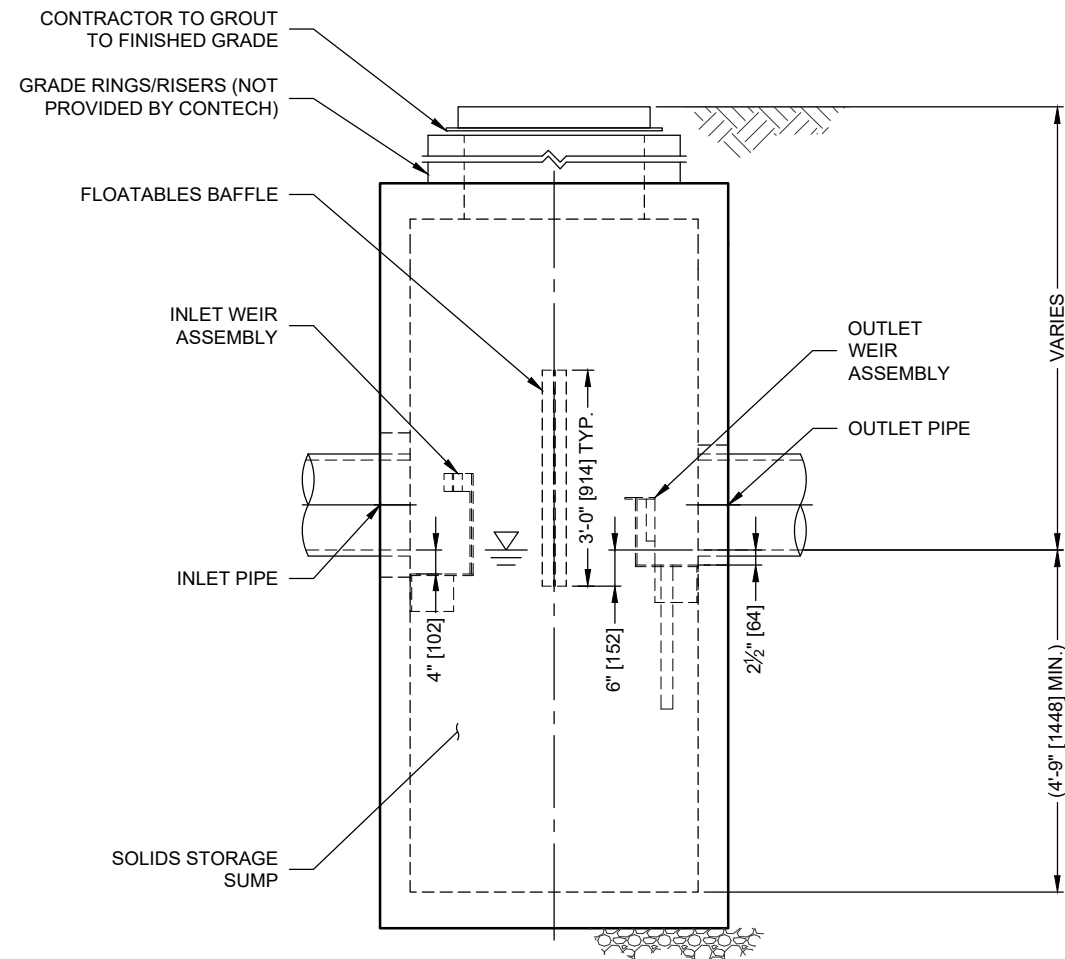
2 - Reduction due to use of 60-minute data for a site that has a time of concentration less than 30-minutes.

SCICLONEX DESIGN NOTES

THE STANDARD SCX-04 CONFIGURATION IS SHOWN.

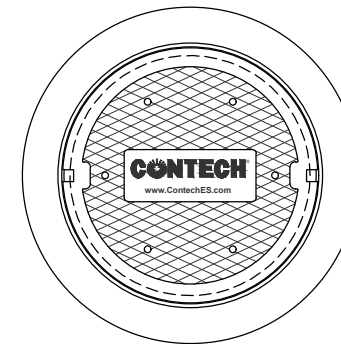


PLAN VIEW
TOP SLAB NOT SHOWN



SECTION A-A

SciCloneX™
FOR PATENT INFORMATION, GO TO www.ContechES.com/IP



FRAME AND COVER
(MAY VARY)
NOT TO SCALE

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID			
WATER QUALITY FLOW RATE (cfs [L/s])			
PEAK FLOW RATE (cfs [L/s])			
RETURN PERIOD OF PEAK FLOW (yrs)			
RIM ELEVATION			
PIPE DATA:	INVERT	MATERIAL	DIAMETER
INLET PIPE 1			
INLET PIPE 2			
OUTLET PIPE			

NOTES / SPECIAL REQUIREMENTS:

GENERAL NOTES

- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
- SCICLONEX WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
- SCICLONEX STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2' [610], AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
- SCICLONEX STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C478 AND AASHTO LOAD FACTOR DESIGN METHOD.
- ALTERNATE UNITS ARE SHOWN IN MILLIMETERS [mm].

INSTALLATION NOTES

- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE SCICLONEX MANHOLE STRUCTURE.
- CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
- CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
- CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH
ENGINEERED SOLUTIONS LLC
www.ContechES.com

8301 State Highway 29 North, Alexandria, MN 56308
800-328-2047 320-852-7500 320-852-7067 FAX

SCX-04
SCICLONEX
STANDARD DETAIL



Rhode Island Department of Environmental Management
Office of Water Resources – Stormwater Technology Review Committee
235 Promenade St. Providence, RI 02908 Ph: 401-222-4700

Alternative Stormwater Technology Certification

Vendor Contact:

Mr. Chris French
National Regulatory Manager
BioClean Environmental, a Forterra Company
10364 Design Road
Ashland, VA 23005
chris.french@forterrabp.com
www.biocleanenvironmental.com
Ph: 804-466-2099

Technology Name:

SciCloneX™ Hydrodynamic Separator

Approval Type:

Pretreatment/Retrofits

Certification Dates:

Issued: February 7, 2022

Revised: May 25, 2022

Expires: February 7, 2027

CERTIFICATION:

The Rhode Island Stormwater Technology Review Committee which consists of members from the Department of Environmental Management (DEM), Department of Transportation (DOT) and the Coastal Resources Management Council (CRMC) have reviewed the **SciCloneX™ Separator** application for certification of its Technology Approval and accepted use for Stormwater Treatment in the State of Rhode Island.

In accordance with Stormwater Rule 250-RICR-150-10-8.9B, **BioClean Environmental** has petitioned the permitting agencies to certify the **SciCloneX™ Separator** as an acceptable structural stormwater control described in Stormwater Rule 250-RICR-150-10-8.31. They have submitted monitoring results and supporting information developed in accordance with the provisions of the Technology Assessment Protocol (TAP) for Innovative and Emerging Technologies as described in Stormwater Rule 250-RICR-150-10 Sections 8.39 and 8.40.

The **SciCloneX™ Separator** is granted reciprocity in Rhode Island as a proprietary stormwater treatment technology, given that it has been issued an MTD (manufactured treatment device) Lab Certification from the New Jersey Department of Environmental Protection (NJDEP) effective June 10, 2021 as a result of the *NJCAT Technology Verification – SciCloneX Hydrodynamic Separator* study from October 2021, performed by BioClean Laboratories with third party verification performed by Michael Kimberlain. The study was conducted in accordance with the NJDEP “Laboratory Protocol to Assess Total Suspended Solids Removal by a Hydrodynamic Sedimentation Manufactured Treatment Device” from January 2013. This NJDEP MTD Lab Certification recognizes the **SciCloneX™ Separator** as a stormwater treatment technology which provides 50% removal of total suspended solids when operating at the maximum treatment flow rate for each device specified in the attached **Table 1: SciCloneX™ Separator Sizing Table for 50% TSS Removal**. The State of New Jersey is a member of the Technology Acceptance Reciprocity Partnership (TARP). As per Stormwater Rule 250-RICR-150-10-8.39, both TAPE and TARP approved devices are allowed reciprocity consideration in Rhode Island.

The **SciCloneX™ Separator** is a pre-treatment or retrofit device that captures TSS from stormwater runoff as described in Stormwater Rule 250-RICR-150-10-8.31. It is a vertically oriented cylindrical structure manufactured from pre-cast reinforced concrete and plastic, designed to remove trash and sediment from stormwater. This product was developed by **BioClean Environmental**. The **SciCloneX™ Separator** is approved for online and off-line use.

The manufacturer has demonstrated that this product meets the minimum water quality standards for pretreatment as described in Stormwater Rule 250-RICR-150-10-8.31. The **SciCloneX™ Separator** is approved for **50%** removal of total suspended solids (TSS) when designed using flow rates specified in the attached **Table 1: SciCloneX™ Separator Sizing Table for 50% TSS Removal**. The **SciCloneX™ Separator** is NOT recognized for removal of Pathogens, Total Phosphorus or Nitrogen. This device may be used as pretreatment or retrofit device

provided that the design, installation, and maintenance are conducted in accordance with the following terms and conditions:

I. GENERAL CERTIFICATION REQUIREMENTS

1. The system must adhere to the manufacturer's specification for the **SciCloneX™ Separator**, which can be found on at: <https://biocleanenvironmental.com/wp-content/uploads/2021/03/Specifications-SciClone-Separator-Standard-Metric.pdf>
2. The system must be installed in accordance with the manufacturer's installation manual for the **SciCloneX™ Separator**, which can be found at: <https://biocleanenvironmental.com/wp-content/uploads/2021/05/Installation-Manual-SciCloneX.pdf>
3. The **SciCloneX™ Separator** is **certified as a pretreatment** device in accordance with Stormwater Rule 250-RICR-150-10-8.31, provided the device treats the flow of the first inch of runoff from the capture area, unless waived by the state permitting agency. The system's design must utilize flow rates, impervious catchment sizes, and maximum sediment capacities listed in the attached **Table 1: SciCloneX™ Separator Sizing Table for 50% TSS Removal**.
4. The applicant must provide the RI specific manufacturers design sheet for Departmental review or provide the manufacturer's review approval. All units that capture greater than one acre of impervious cover must be reviewed by the manufacturer.
5. This device is **certified as a retrofit device** in accordance with Stormwater Rule 250-RICR-150-10-8.6A. Retrofits are allowed flexibility with regards to the eleven minimum standards described in Sections 8.6 through 8.17 of Stormwater Rule 250-RICR-150-10, but in general they are considered effective if they capture at least 50% of the catchment and meet the target water quality treatment of at least the first 0.5 inches of the water quality volume.
6. The approved devices shall be located such that they are accessible for maintenance and/or emergency removal of oil or chemical spills.
7. The device cannot be used in series with another Hydrodynamic separator to achieve enhanced removal rates for TSS.

II. MAINTENANCE REQUIREMENTS

1. Standard permitting conditions for inclusion of this technology will, at a minimum include the following:
 - a. Each individual owner must ensure that any and all of their proprietary stormwater treatment devices are maintained in accordance with the manufacturer's specifications, which are provided in the **SciCloneX™ Separator** Operation & Maintenance Manual: https://biocleanenvironmental.com/wp-content/uploads/2021/05/SciCloneX-Operation-Maintenance-Manual_3-23-2021-v1.pdf
 - b. Each individual owner must ensure that any and all of their proprietary stormwater pre-treatment devices' are maintained in accordance with the requirements stated in Stormwater Rule 250-RICR-150-10-8.31-C, which requires the sump to be inspected a minimum of 2 times per year. Additionally, the device must be cleaned out when either pollutant removal capacity is reduced by 50% or more, or when 50% or more of the device's pollutant storage capacity is filled or displaced.

- c. All material removed from the unit must be properly disposed of and is the responsibility of the owner.
 - d. The applicant must include a copy of the **SciCloneX™ Separator** Inspection and Maintenance Guide in their project specific long term operation and maintenance plan.
2. The applicant must provide evidence of a maintenance contract which extends for a minimum of two years. The contracted maintenance provider must receive training by **BioClean Environmental** on how to properly maintain **SciCloneX™ Separator** devices. This requirement excludes maintenance providers recognized by the RIDEM to be qualified in maintenance of **SciCloneX™ Separator** devices.

III. REPORTING REQUIREMENTS

1. Upon request from the owner of any **SciCloneX™ Separator** system installed in the State of Rhode Island, the vendor shall provide the owner with a recommended maintenance schedule after the first year of the device's operation. If a recommended maintenance schedule is requested by the owner after the first year of the device's operation, then the owner is responsible for notifying the vendor of any additional pollutant loading sites where contributing drainage areas may be subject to further development (i.e., strip malls).
2. The Vendor shall provide a listing to the RIDEM Office of Water Resources of all systems installed within the State of Rhode Island on an annual basis.
3. The Vendor shall provide an annual listing to the RIDEM Office of Water Resources of all Rhode Island maintenance providers that they trained in **SciCloneX™ Separator** maintenance.
4. The Vendor shall immediately notify the RIDEM Office of Water Resources if and when any changes are made to the model name or number of any **SciCloneX™ Separator** device for all models applicable to this certification.
5. The Vendor shall immediately notify the RIDEM Office of Water Resources if and when any revisions are made to the design, installation operation and maintenance manuals for all models applicable to this certification. Revisions deemed by the RIDEM to be substantial, may require re-application to the Alternative Stormwater Technology Program.
6. The Vendor shall notify the RIDEM at least thirty (30) days following any proposed transfer of ownership of the Component technology. Notification shall include the name and address of the new owner and a written agreement between the existing and new owner specifying a date for transfer of ownership, responsibility, and liability for the Component. All provisions of this Certification shall be applicable to any new owners.

IV. RIGHTS OF THE RIDEM AND CRMC

1. The RIDEM may suspend, modify, or revoke this approval for cause, including but not limited to non-compliance with any of the conditions or provisions of this approval, mis-representation, or failure to fully disclose all relevant data, or receipt of new information indicating that the use of the **SciCloneX™ Separator** system is contrary to the public interest, public health, or the environment.
2. This approval does not represent an endorsement of the **SciCloneX™ Separator** system by the RIDEM, RIDOT or CRMC. This letter of approval may be reproduced only in its entirety.

3. The **SciCloneX™ Separator** General Specification and **SciCloneX™ Separator** Inspection and Maintenance Guide referenced herein are approved upon the date of approval of this Certification.
4. The RIDEM reserves the right to suspend or revoke this Certification if updated design, installation, and O&M manuals are not provided to the RIDEM within thirty (30) days of RIDEM request or one hundred and eighty (180) days prior to the expiration date of this Certification. All revisions must be reviewed and approved by the RIDEM prior to re-certification.

Eric A. Beck, P.E.
 Administrator of Groundwater and Freshwater Wetlands Protection

Date

ATTACHMENTS:

Table 1: SciCloneX™ Separator Sizing Table for 50% TSS Removal

Model #	Structure Inside Diameter (ft)	Maximum Treatment Flow Rate (cfs)	Maximum Impervious Treatment Area (acres)	50% of Max Sediment Storage Volume (ft³)
SCX-3	3	1.02	0.931	7.1
SCX-4	4	1.82	1.661	12.6
SCX-5	5	2.84	2.592	19.6
SCX-6	6	4.09	3.733	28.3
SCX-7	7	5.56	5.075	38.5
SCX-8	8	7.27	6.635	50.3
SCX-10	10	11.36	10.371	78.5
SCX-12	12	16.35	14.929	113.1
SCX-14	14	22.25	20.321	153.9

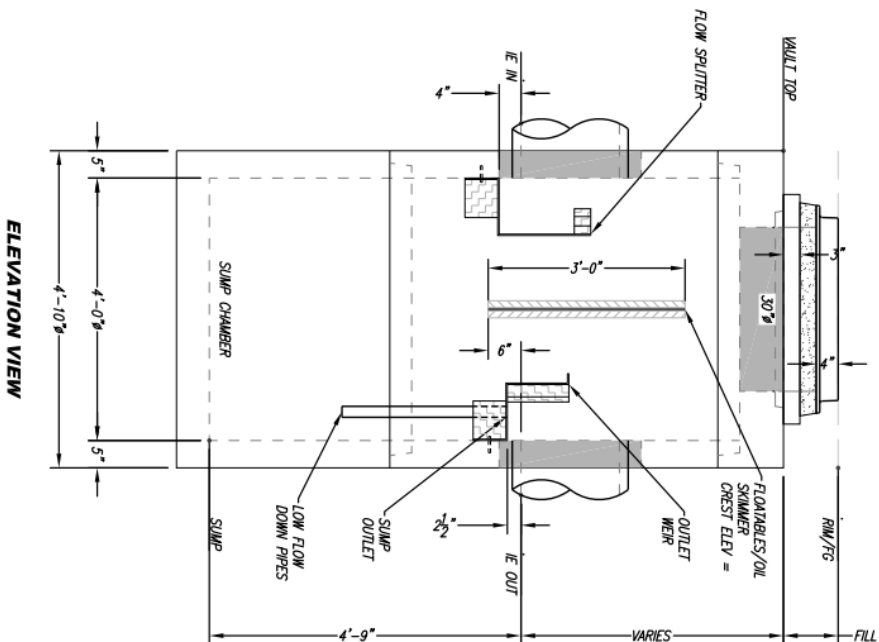
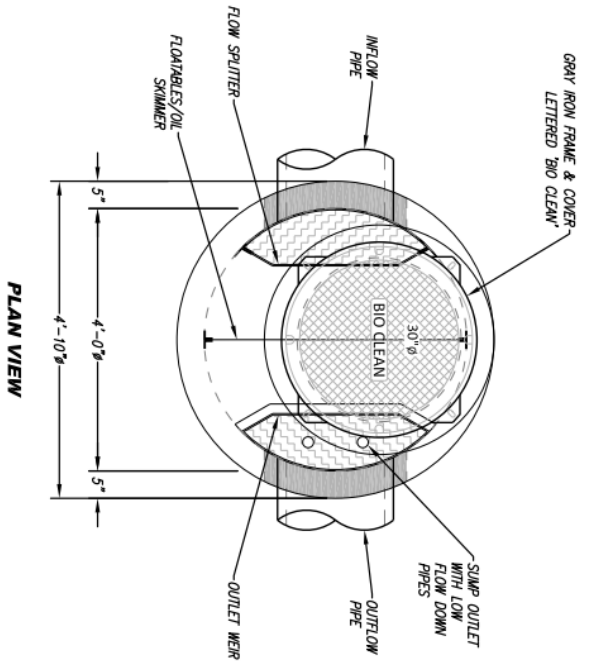


SITE SPECIFIC DATA*

PROJECT NUMBER			
PROJECT NAME			
PROJECT LOCATION			
STRUCTURE ID	SCX-04		
WATER QUALITY FLOW RATE (GFS)	1.82		
PEAK FLOW RATE (GFS)			
PEAK STORM DURATION (YEARS)			
PIPE DATA	I.E.	MATERIAL	DIAMETER
INFLOW PIPE 1			
OUTFLOW PIPE 1			
RIM ELEVATION			
SUMP ELEVATION			
SURFACE LOADING REQUIREMENT	H320		
FRAME AND COVER	(1) #30"		
SKIMMER WALL HEIGHT	STANDARD		
KNOWN GROUNDWATER ELEVATION	NA		
NOTES: CONCEPT ONLY. NOT FOR CONSTRUCTION.			
PER ENGINEER OF RECORD			
PERFORMANCE DATA			
TREATMENT FLOW RATE (GFS)	1.82		
TSS REMOVAL EFFICIENCY	50%		
HYDRAULIC GRADE LINE			
SUMP CHAMBER CAPACITY			
DIAMETER (FT)	AREA (SF)	HEIGHT (FT)	TOTAL (CF)
4	12.56	4.75	59.7

INSTALLATION NOTES

1. CONTRACTOR TO PROVIDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS REQUIRED TO OHLAND AND INSTALL THE SCICLONE UNIT AND APPURTENANCES IN ACCORDANCE WITH THIS DRAWING AND THE MANUFACTURER'S SPECIFICATIONS, UNLESS OTHERWISE STATED IN MANUFACTURER'S CONTRACT.
2. MANUFACTURER RECOMMENDS A 6" LEVEL ROCK BASE UNLESS SPECIFIED BY THE PROJECT ENGINEER. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PROJECT ENGINEER'S RECOMMENDED BASE SPECIFICATIONS.
3. ALL PIPES MUST BE FLUSH WITH INSIDE SURFACE OF CONCRETE (PIPES CANNOT INTRUDE BEYOND FLUSH).
4. ALL GAPS AROUND PIPES SHALL BE SEALED WATER-TIGHT WITH A NON-SHRINK GROUT PER MANUFACTURER'S STANDARD CONNECTION DETAIL AND SHALL MEET OR EXCEED REGIONAL PIPE CONNECTION STANDARDS.
5. CONTRACTOR RESPONSIBLE FOR INSTALLATION OF ALL RISERS AND MANHOLES. ALL COVERS SHALL BE SHIPPED LOOSE. CONTRACTOR TO GROUT ALL MANHOLES TO MATCH FINISHED SURFACE UNLESS SPECIFIED OTHERWISE.



GENERAL NOTES

1. BIO CLEAN TO PROVIDE ALL MATERIALS UNLESS OTHERWISE NOTED.
2. ALL DIMENSIONS, ELEVATIONS, SPECIFICATIONS, AND CAPACITIES ARE SUBJECT TO CHANGE. FOR PROJECT SPECIFIC DRAWINGS DETAILING EXACT DIMENSIONS, WEIGHTS, AND ACCESSORIES PLEASE CONTACT BIO CLEAN.

THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING US PATENTS: 15,700,146; 10,344,466; B-0020 (RELATED FOREIGN PATENTS IN OTHER PATENT JURISDICTIONS)

PROPRIETARY AND CONFIDENTIAL: THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE SOLE PROPERTY OF FORTUNA AND ITS COMPANIES. THIS DOCUMENT, NOR ANY PART THEREOF, MAY BE REPRODUCED OR TRANSMITTED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF FORTUNA.



SCICLONE SCX-04
HYDRODYNAMIC SEPARATOR
STANDARD DETAIL

CTDOT LIST OF QUALIFIED HYDRODYNAMIC SEPARATORS

HYDRODYNAMIC SEPARATOR NAME	COMPANY INFORMATION
Barracuda	BaySaver Technologies, LLC 1030 Deer Hollow Drive Mt. Airy, MD 21771 (800)-229-7283 https://baysaver.com/
Cascade	Contech Engineered Solutions 9025 Centre Point Dr. West Chester, OH 45069
CDS	(800)-338-1122 https://www.conteches.com/
Concentrator	AquaShield Inc. 2733 Kanasita Drive Suite 111 Chattanooga, TN 37343
Xcelerator	(423)-870-8888 https://www.aquashieldinc.com/
Downstream Defender	Hydro International 94 Hutchins Drive Portland, ME 04102
First Defense	(207)-756-6200 https://hydro-int.com/en
DVS	Oldcastle Infrastructure 7000 Central Prkwy, Suite 800 Atlanta, GA 30328 (888)-965-3227 https://oldcastleinfrastructure.com/
HydroStorm	Hydroworks, LLC 257 Cox St. Roselle, NJ 07203 (848)-235-5950 https://hydroworks.com/
SciClone	BioClean Envr. Services 5796 Armada Dr. Suite 250 Carlsbad, CA 92008 (855)-566-3938 https://biocleanenvironmental.com/