## AGREEMENT FOR MAINTENANCE OF STORM WATER DETENTION SYSTEM

This agreement is made on this 20th day of March, 2025, by 10 E. AUBURN ROAD ACQUISITIONS, LLC, a Michigan limited liability company, whose address is 6400 Telegraph Road, Suite 2000, Bloomfield Hills, Michigan 48367 ("Owner"), CLEAN EXPRESS AUTO WASH, LLC, an Ohio limited liability company, whose address is 13375 National Road, Suite D, Etna, OH 43068 ("Applicant"), and the CITY OF ROCHESTER HILLS (the "City"), whose address is 1000 Rochester Hills Drive, Rochester Hills, MI 48309.

#### **RECITALS:**

WHEREAS, Owner owns the property commonly known as 10 East Auburn Road, Rochester Hills, Michigan 48307, being parcel 15-35-100-003 and depicted and described on the attached **Exhibit A** (the "**Property**");

WHEREAS, Applicant is leasing the Property from Owner and developing a car wash on the site pursuant to a certain ground lease between the Owner and Applicant;

WHEREAS, Owner and Applicant have proposed, and the City has approved, a storm water drainage and detention system (the system) for the Property as described and depicted in the attached Exhibit B; and

WHEREAS, the parties will benefit from the proper use and maintenance of the System and desire to enter into this agreement to provide for the same.

THEREFORE, the parties agree:

1. <u>Use of the System:</u> Components of the System, including any and all water conveyance, detention and water quality treatment facilities and devices, storm sewer pipe, catch basins, manholes, and swales, shall be used solely for the purpose of detaining storm and surface water on the Property until such time as: (i) The City may determine and advise Owner and Applicant or their successors, grantees or assigns, in writing that it is no longer necessary to use the detention system to detain storm or surface water; and (ii) An adequate alternative for draining storm and surface water has been provided which is acceptable to the City and which includes the granting of such easements to the City or third parties for the alternative drainage system as may be necessary.

#### 2. Maintenance:

- A. Owner and Applicant shall be responsible for the proper maintenance, repair and replacement of the System and any part thereof as detailed in the Maintenance Plan attached as **Exhibit** C.
- B. Proper maintenance of the System shall include, but not limited to: (i) Removing accumulated sediment, trash and debris from the detention system and at inlet pipes; (ii) Maintaining storm sewer and structures; (iii) Controlling the effects of erosion; (iv) Inspection and cleaning of the water quality treatment device; (v) Inspection of inlet and outlet pipes for structural integrity; (vi) Inspection and cleaning of the storm sewer and catch basins upstream from the detention system; and (vii) Any other maintenance that is reasonable and necessary to facilitate and continue the proper operation and use of the System.
- 3. Action by City: In the event Owner and Applicant or their successors, grantees, or assigns, neglect or fail at any time to properly maintain the System or any part thereof, the City shall notify Owner and Applicant or their successors, grantees or assigns, in writing, and the notice shall include a listing and description of maintenance deficiencies and a demand that they must be corrected within thirty (30) days or such longer time as may be indicated by the City. The notice shall further specify the date and place for a hearing to be held at least fourteen (14) days after the date of the notice before the City Council, or such other board or official to whom the City Council may delegate responsibility. At the hearing, the City Council (or other board or official) may endorse or modify the listing and description of deficiencies to be corrected and, for good cause, may extend the time within which the deficiencies must be corrected.

Thereafter, if the maintenance deficiencies are not corrected within the time allowed, the City may undertake and make the necessary corrections, and may maintain the System for a period not to exceed one (1) year. Such maintenance of the System by the City shall not be deemed a taking of the Property, nor shall the City's actions be deemed to vest in the public any right to use the Property. If the City determines maintenance of the system by the City should continue beyond one year, the City shall hold, and provide advance written notice of, a further hearing at which Owner and Applicant or their successors, grantees or assigns, will not or cannot properly maintain the System, the City may continue to maintain the System for another year, and subject to a similar hearing and determination, in subsequent years.

In the event the City determines an emergency condition caused by or relating to the System threatens the public health, safety or general welfare, the City shall have the right to immediately and without notice enter the Property and undertake appropriate corrective action.

In the exercise of the rights granted hereunder by the City, (i) the City shall take all reasonable steps to minimize any disruptions to the business of the Owner (or any tenants of the Property) conducted on the Property and (ii) all portions of the Property disturbed or altered, shall be restored by the City to their immediately prior condition.

- 4. <u>Charges:</u> The City shall charge to the Applicant or the current owner of the Property the reasonable cost of maintenance or other corrective action undertaken by the City in accordance with Paragraph 3 above, plus a ten percent (10%) administrative fee. If not timely paid, the City may assess the charges on the City's tax roll, which charges shall be a lien on the Property and shall be collectable and enforceable in the same manner general property taxes are collected and enforced.
- 5. **Notice:** Any notices required under this agreement shall be sent by certified mail to the address for each party set forth below, or to such other addresses as such party may notify the other parties in writing:

To Owner:

10 E. AUBURN ROAD ACQUISITIONS, LLC

6400 Telegraph Road, Suite 2000

Bloomfield Hills, MI 48367

Attn: Brian Brodsky

To Applicant:

CLEAN EXPRESS AUTO WASH, LLC

13375 National Road, Suite D

Etna, OH 43068

To the City:

Clerk

City of Rochester Hills 1000 Rochester Hills Drive Rochester Hills, MI 48309

- 6. <u>Successors and Assigns:</u> This agreement shall bind and inure to the benefit of the parties and their respective successors, grantees and assigns. The rights, obligations and responsibilities hereunder shall run with the land and shall bind all current and future owners of the Property.
- 7. **Recording of Agreement:** This agreement shall be recorded at the Oakland County Register of Deeds.

Signature Pages to Follow

# 10 E. AUBURN ROAD ACQUISITIONS, LLC, a Michigan limited liability company

Signature:	6	
	James Bellinson	
Title:	Authorized Member	

# STATE OF MICHIGAN COUNTY OF OAKLAND

The foregoing instrument was acknowledged before me this 26th day of March, 2025, by James Bellinson, who is an authorized member of 10 E. Acquisitions, LLC, a Michigan limited liability company, on behalf of the company.

Brian L. Brodsky, Notary Public State of Michigan County of Oakland My commission expires: 10/19/2027 Acting on the County of Oakland

> BRIAN L. BRODSKY Notary Public, State of Michigan County of Oakland My Commission Expires Oct. 19, 2927 Acting in the County of **Oct. 19**, 2027

# CLEAN EXPRESS AUTO WASH, LLC, a Michigan limited liability company

Signature:

Print or type name:

Patrick McKay

Title:

Attorney and Authorized Representative

# STATE OF MICHIGAN COUNTY OF MACOMB

The foregoing instrument was acknowledged before me this 26% day of March, 2025, by Patrick McKay who is an authorized attorney and representative of Clean Express Auto Wash, LLC, an Ohio limited liability company, on behalf of the company.

Carol A. Welson

Carol A. Wilson Notary Public

State of Michigan County of Macomb

My commission expires: 4-3-2028

Acting on the County of Macomb

CAROL A. WILSON
NOTARY PUBLIC, STATE OF MI
COUNTY OF MACOMB
MY COMMISSION EXPIRES APR 3, 2028
ACTING IN COUNTY OF LA COMB

## CITY OF ROCHESTER HILLS

Ву:		
STATE OF MICHIGAN COUNTY OF OAKLAND	Bryan K. Barnett, Mayor	
This agreement was acknowledged before me 2025, by Bryan K. Barnett, Mayor, of the City		of the City.
		notary public County, Michigan
	My commission expires:	
Drafted by:		
Patrick S. McKay, Esq. Kirk Huth Lange & Badalamenti PLC 19500 Hall Road, Suite 100 Clinton Township, MI 48038		
When recorded, return to:		
Clerks Dept. City of Rochester Hills 1000 Rochester Hills Drive Rochester Hills MI 48309		
7. Day Christ Approved 4/11/25		
rippionece TIII 125		

## EXHIBIT A LEGAL DESCRIPTION OF PROPERTY

**Approved** 

SB

City of Rochester Hills 04/09/2025

### LEGAL DESCRIPTION

THE LAND SITUATED IN THE CITY OF ROCHESTER HILLS, COUNTY OF OAKLAND, STATE OF MICHIGAN, IS DESCRIBED AS FOLLOWS:

PART OF THE NORTHWEST & OF THE NORTHWEST & OF SECTION 35, TOWN 3 NORTH, RANGE 11 EAST, TOWNSHIP OF AVON, NOW CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN, DESCRIBED AS: BEGINNING AT A POINT ON THE NORTH LINE OF SAID SECTION, 458.42 FEET EAST OF THE NORTHWEST CORNER OF SAID SECTION; THENCE WEST ALONG SAID SECTION, 194.42 FEET; THENCE SOUTH PARALLEL WITH THE WEST LINE OF SAID SECTION, 362.45 FEET; THENCE EAST PARALLEL WITH THE NORTH LINE OF SAID SECTION, 198.17 FEET; THENCE NORTH TO THE POINT OF BEGINNING, EXCEPTING THEREFROM THE EAST 80 FEET THEREOF.

ALSO DESCRIBED FOR TAX PURPOSES AS FOLLOWS:

PART OF THE WEST 1 OF THE NORTHWEST 1 OF SECTION 35, TOWN 3 NORTH, RANGE 11 EAST, CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN, DESCRIBED AS: BEGINNING AT A POINT ON THE NORTH SECTION LINE DISTANCE EAST 264.00 FEET FROM THE NORTHWEST SECTION CORNER; THENCE EAST 114.42 FEET; THENCE SOUTH 00 DEGREES 28 MINUTES 00 SECONDS EAST 362.46 FEET; THENCE WEST 118.17 FEET: THENCE NORTH OO DEGREES O7 MINUTES 30 SECONDS EAST 362.45 FEET TO THE POINT OF BEGINNING.

TAX IDENTIFICATION NUMBER: 15-35-100-003



CLEAN EXPRESS CAR WASH 10 E AUBURN RD ROCHESTER HILLS, MI 48307

DRAWN: JAR

CHECK: ESP

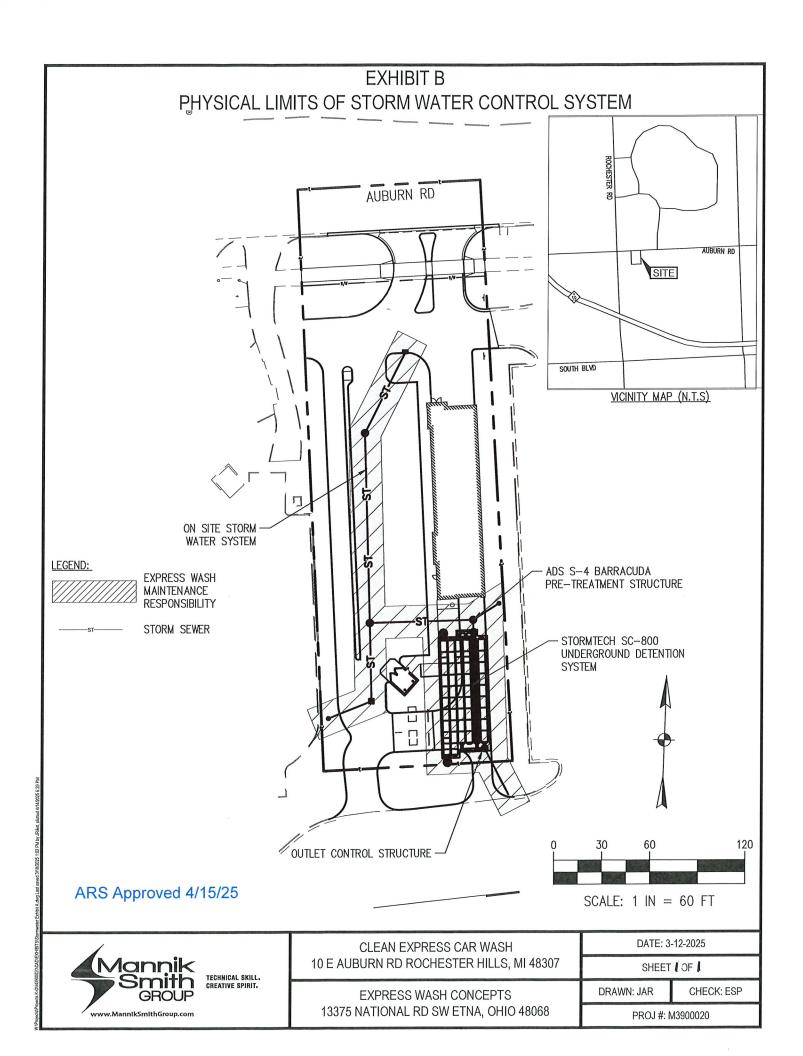
PROJ #: M3900020

DATE: 3-12-2025

SHEET 1 OF 1

**EXPRESS WASH CONCEPTS** 

13375 NATIONAL RD SW ETNA, OHIO 48068



## **EXHIBIT C**

## TO AGREEMENT FOR STORMWATER MAINTENANCE

### **Operations Stormwater Drainage and Maintenance Plan**

Clean Express Car Wash 10 E AUBURN RD, Rochester Hills, Michigan 48307

This long term operations and maintenance plan (O&M) shall use BMP's (Best Management Practices) to ensure that the stormwater management system performs and functions as designed. The stormwater management system is an effective way to enhance the water quality of the stormwater by effectively removing the sediment and pollutants from stormwater runoff. This will help ensure that we save our environment and help protect the valuable land and water resources. This O&M plan will outline the ownership and facility, underground detention system location, inspection and maintenance checklists, manufacturers O&M manuals. It will also outline the components of:

- System inspections.
- Removal of trash and litter debris from the site, including roadways/parking lot areas, stacking lanes, service/dumpster areas, and landscape beds.
- Removal of dirt and sediment in swales, catch basins, water quality unit and sewer pipes.
- Grass mowing and vegetated area maintenance.

Ownership/Facility Manager Contact Information

Applicant:

Express Wash Concepts 13375 National Rd SW Etna, Ohio 48068

**Property Owner:** 

10 E. Auburn Road Acquisitions, LLC 6400 Telegraph Rd, Suite 200 Bloomfield Hills, MI 48301

#### Stormwater Site Plan

The developer has proposed as shown in exhibit "B" of the stormwater maintenance agreement plan, a detailed drawing showing the location of the stormwater drainage and detention system comprised of stormwater detention and water quality treatment facilities and devices, storm sewer pipe, catch basins, manholes, end sections, swales for the Property as described and depicted in the Storm Water System Plan attached as Exhibit "B". Stormwater runoff is collected in the parking lot catch basins, swale inlets and roof drains and water is conveyed by a system of underground pipes to a stormwater quality unit. The stormwater quality unit provides treatment to the water by removing sediment, pollutants and floatables from the system to help assure adequate performance. The structures and sewers shall also be observed during large rain events to ensure proper operations of the system.

PROPERTY INFORMATION: Clean Express Car Wash 10 E Auburn Rd Rochester Hills, Michigan 48307 APPLICANT: Express Wash Concepts 13375 National Rd SW Etna, Ohio 48068



DATE: 3/12/25 SHEET: 1 of 3

## Stormwater System Inspections and Maintenance – Structures (Table 1)

Attached in Exhibit "C" is an inspection and maintenance plan outline for stormwater management structures. The outline of the schedule will give the frequency and description of areas to inspect and maintanin in order to ensure the system is functioning as designed. The maintenance checklist shall be performed by personnel that is responsible for the maintenance of the system and may need to be certified for the entry of a confined space. The inspection shall be recorded and maintained by the developer for a minimum of ten (10) years and copies shall be provided to the City of Rochester hills Engineering Department.

#### Trash and Litter

The inspection for trash and litter on the property shall be a regular routine. Proper disposal of items shall meet all state and Federal regulations. Parking lot sweeping shall also be performed to help provide a more overall attractive appearance to the outside of the building. Parking lot curb gutters shall also be maintained and kept free of dirt and sediment. A periodic inspection of landscape beds for debris shall be performed as needed. Plants, shrubs and trees shall also be inspected for healthy growth.

## Stormwater System management Maintenance – Underground Detention

Attached is the operation and maintenance manual for the ADS underground storm system. This gives introduction, operation, and maintenance of the overall system. Refer to the manual for overview of the maintenance requirements of the different components to the stormwater system. An inspection and maintenance plan is attached for areas to inspect with a table for inspection timeline schedule, and corrective actions if needed.

## Stormwater Pre-Treatment Device (ADS Barracuda structure)

Refer to the attached manufacturer's maintenance manual for all inspection and maintenance requirements for the pre-treatment structure. A record of inspections and maintenance shall be kept for a minimum of ten (10) years.

PROPERTY INFORMATION: Clean Express Car Wash 10 E Auburn Rd Rochester Hills, Michigan 48307 APPLICANT: Express Wash Concepts 13375 National Rd SW Etna, Ohio 48068



<u>DATE:</u> 3/12/25 <u>SHEET:</u> 2 of 3

Table 1
Clean Express Car Wash
Rochester Hills, MI 48307

Catch Basins, Manholes, & Sewers
Swales & Vegetated Areas
Outlet Control Structure
Water Quality Structure
Underground Detention
Pavement Areas

**Maintenance Activity** 

Frequency

The state of the s	N.	lonitor	ing/Ing	specti	on	-	
Inspect for sediment accumulation	X	X	X	X	X		Annually
Inspect for floatables, dead vegetation and debris	Χ	X	Х	Х	Х		Annually and after major events
Inspect for erosion and integrity of system/banks and berms		X		Х	Χ		Annually and after major events
Inspect all components during wet weather and compare to as-built plans	Χ	X	X	X	Χ		Annually
Monitor plantings/vegetation		X					2 times per year
Ensure means of access for maintenance	Χ	X	Χ	X	Χ		Annually
	Pre	ventati	ve Ma	intena	nce		
Mowing		X				Seption 1	As needed
Remove accumulated sediment	Χ	X	Χ	X	Χ		As needed
Remove floatables, dead vegetation and debris	Χ	Х	Х	Χ	Χ		As needed
Replace subsurface components (e.g., soil, underdrain systems, etc.)					Χ		Every 5 years or as needed (e.g., when water ponds more than 6 hours)
Street sweeping of paved surfaces						X	Semi-annually
Remove invasive plant species		X		10.11			Annually
		Reme	dial A	ctions			
Repair/stabilize areas of erosion		X					As needed
Reseed bare areas		X					As needed
Structural repairs	Χ		Χ	X	Χ		As needed
Make adjustments/repairs to ensure proper functioning	Χ	X	Χ	Χ	Χ		As-needed

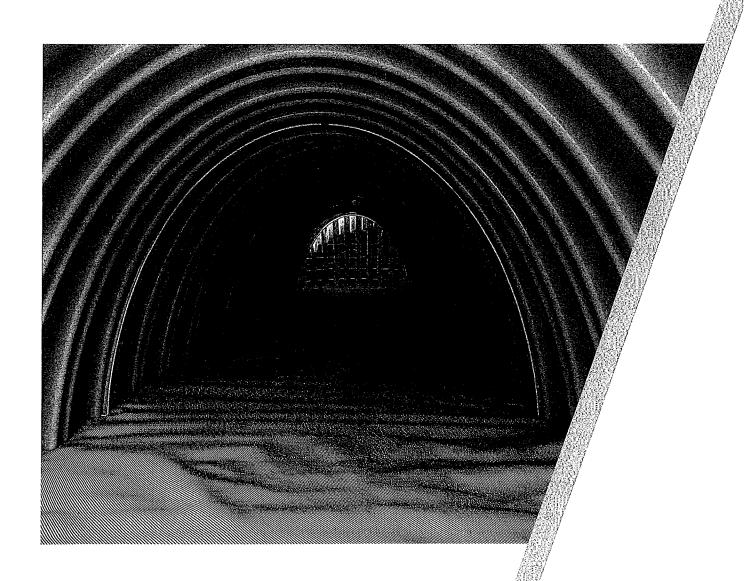
PROPERTY INFORMATION: Clean Express Car Wash 10 E Auburn Rd Rochester Hills, Michigan 48307 APPLICANT: Express Wash Concepts 13375 National Rd SW Etna, Ohio 48068



<u>DATE;</u> 3/12/25 <u>SHEET:</u> 3 of 3

# Isolator® Row Plus

# O&M Manual



//ADS StormTech

### The Isolator® Row Plus

#### Introduction

An important component of any Stormwater Pollution Prevention Plan is inspection and maintenance. The StormTech Isolator Row Plus is a technique to inexpensively enhance Total Suspended Solids (TSS), Total Phosphorus (TP), Total Petroluem Hydrocarbons (TPH) and Total Nitrogen (TN) removal with easy access for inspection and maintenance.

#### The Isolator Row Plus

The Isolator Row Plus is a row of StormTech chambers, either SC-160, SC-310, SC-310-3, SC-740, DC-780, SC-800, MC-3500, MC-4500 or MC-7200 models, are lined with filter fabric and connected to a closely located manhole for easy access. The fabric lined chambers provide for sediment settling and filtration as stormwater rises in the Isolator Row Plus and passes through the filter fabric. The open bottom chambers allow stormwater to flow vertically out of the chambers. Sediments are captured in the Isolator Row Plus protecting the adjacent stone and chambers storage areas from sediment accumulation.

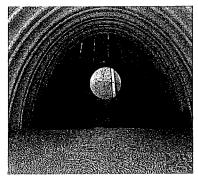
ADS Isolator Row and Plus fabric are placed between the stone and the Isolator Row Plus chambers. The woven geotextile provides a media for stormwater filtration, a durable surface for maintenance, prevents scour of the underlying stone and remains intact during high pressure jetting.

The Isolator Row Plus is designed to capture the "first flush" runoff and offers the versatility to be sized on a volume basis or a flow-rate basis. An upstream manhole provides access to the Isolator Row Plus and includes a high/low concept such that stormwater flow rates or volumes that exceed the capacity of the Isolator Row Plus bypass through a manifold to the other chambers. This is achieved with an elevated bypass manifold or a high-flow weir. This creates a differential between the Isolator Row Plus row of chambers and the manifold to the rest of the system, thus allowing for settlement time in the Isolator Row Plus. After Stormwater flows through the Isolator Row Plus and into the rest of the chamber system it is either exfiltrated into the soils below or passed at a controlled rate through an outlet manifold and outlet control structure.

The Isolator Row Plus Flamp™ is a flared end ramp apparatus attached to the inlet pipe on the inside of the chamber end cap. The FLAMP provides a smooth transition from pipe invert to fabric bottom. It is configured to improve chamber function performance by enhancing outflow of solid debris that would otherwise collect at the chamber's end, or more difficult to remove and require confined space entry into the chamber area. It also serves to improve the fluid and solid flow into the access pipe during maintenance and cleaning and to guide cleaning and inspection equipment back into the inlet pipe when complete.

The Isolator Row Plus may be part of a treatment train system. The treatment train design and pretreatment device selection by the design engineer is often driven by regulatory requirements. Whether pretreatment is used or not, StormTech recommend using the Isolator Row Plus to minimize maintenance requirements and maintenance costs.

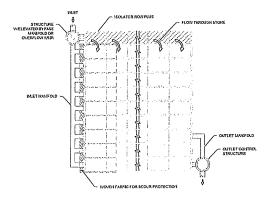
**Note:** See the StormTech Design Manual for detailed information on designing inlets for a StormTech system, including the Isolator Row Plus.



Looking down the Isolator Row Plus from the manhole opening, ADS Plus Fabric is shown between the chamber and stone base.



StormTech Isolator Row Plus with Overflow Structure (not to scale)



## Isolator Row Plus Inspection/Maintenance

#### Inspection

The frequency of inspection and maintenance varies by location. A routine inspection schedule needs to be established for each individual location based upon site specific variables. The type of land use (i.e. industrial, commercial, residential), anticipated pollutant load, percent imperviousness, climate, etc. all play a critical role in determining the actual frequency of inspection and maintenance practices.

At a minimum, StormTech recommends annual inspections. Initially, the Isolator Row Plus should be inspected every 6 months for the first year of operation. For subsequent years, the inspection should be adjusted based upon previous observation of sediment deposition.

The Isolator Row Plus incorporates a combination of standard manhole(s) and strategically located inspection ports (as needed). The inspection ports allow for easy access to the system from the surface, eliminating the need to perform a confined space entry for inspection purposes.

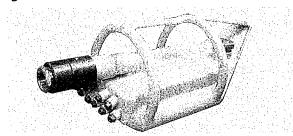
If upon visual inspection it is found that sediment has accumulated, a stadia rod should be inserted to determine the depth of sediment. When the average depth of sediment exceeds 3" (75 mm) throughout the length of the Isolator Row Plus, clean-out should be performed.

#### Maintenance

The Isolator Row Plus was designed to reduce the cost of periodic maintenance. By "isolating" sediments to just one row, costs are dramatically reduced by eliminating the need to clean out each row of the entire storage bed. If inspection indicates the potential need for maintenance, access is provided

via a manhole(s) located on the end(s) of the row for cleanout. If entry into the manhole is required, please follow local and OSHA rules for a confined space entry.

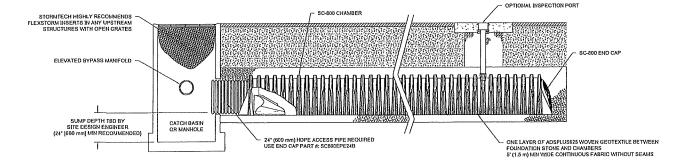
Maintenance is accomplished with the JetVac process. The JetVac process utilizes a high pressure water nozzle to propel itself down the Isolator Row Plus while scouring and suspending sediments. As the nozzle is retrieved, the captured pollutants are flushed back into the manhole for vacuuming. Most sewer and pipe maintenance companies have vacuum/letVac combination vehicles. Selection of an appropriate letVac nozzle will improve maintenance efficiency. Fixed nozzles designed for culverts or large diameter pipe cleaning are preferable. Rear facing jets with an effective spread of at least 45" are best. StormTech recommends a maximum nozzle pressure of 2000 psi be utilized during cleaning. JetVac reels can vary in length. For ease of maintenance, ADS recommends Isolator Row Plus lengths up to 200' (61 m). The JetVac process shall only be performed on StormTech Isolator Row Plus that have ADS Plus Fabric (as specified by StormTech) over their angular base stone.







#### StormTech Isolator Row Plus (not to scale)



## Isolator Row Plus Step By Step Maintenance Procedures

#### Step 1

Inspect Isolator Row Plus for sediment.

- A) Inspection ports (if present)
  - i. Remove lid from floor box frame
  - ii. Remove cap from inspection riser
  - iii. Using a flashlight and stadia rod, measure depth of sediment and record results on maintenance log.
  - iv. If sediment is at or above 3 inch depth, proceed to Step 2. If not, proceed to Step 3.
- B) All Isolator Row Plus
  - i. Remove cover from manhole at upstream end of Isolator Row Plus
  - ii. Using a flashlight, inspect down Isolator Row Plus through outlet pipe
    - 1. Mirrors on poles or cameras may be used to avoid a confined space entry
    - 2. Follow OSHA regulations for confined space entry if entering manhole
  - iii. If sediment is at or above the lower row of sidewall holes (approximately 3 inches), proceed to Step 2.

If not, proceed to Step 3.

#### Step 2

Clean out Isolator Row Plus using the JetVac process.

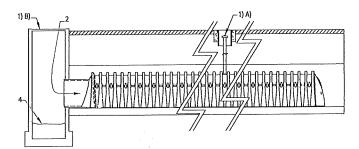
- A) A fixed floor cleaning nozzle with rear facing nozzle spread of 45 inches or more is preferable
- B) Apply multiple passes of JetVac until backflush water is clean
- C) Vacuum manhole sump as required

#### Step 3

Replace all caps, lids and covers, record observations and actions.

#### Sten 4

Inspect & clean catch basins and manholes upstream of the StormTech system.



#### Sample Maintenance Log

3/15/11	6.3 ft	none		New installation, Fixed point is CI frame at grade	MCG
9/24/11		6.2	0,1 ft	Some grit felt	SM
6/20/13		5,8	0.5 ft	Mucky feel, debris visible in manhole and in Isolator Row Plus, maintenance due	ΝУ
7/7/13	6,3 ft		0	System jetted and vacuumed	MCG

adspipe.com 800-821-6710



# Barracuda<sup>®</sup> Max & Barracuda

# Maintenance Guide

One of Barracuda's advantages is the ease of maintenance. Like any system that collects pollutants, the Barracuda must be maintained for continued effectiveness. Maintenance is a simple procedure performed using a vacuum truck or similar equipment. The systems were designed to minimize the volume of water removed during routine maintenance, reducing disposal costs.

Contractors can access the pollutants stored in the manhole through the manhole cover. This allows them to gain vacuum hose access to the bottom of the manhole to remove sediment and trash. There is no confined space entry necessary for inspection or maintenance.

The entire maintenance procedure typically takes 2 to 4 hours, depending on the system's size, the captured material, and the vacuum truck's capacity.

Local regulations may apply to the maintenance procedure. Safe and legal disposal of pollutants is the responsibility of the maintenance contractor. Maintenance should be performed only by a qualified contractor.

## **Inspection and Cleaning Cycle**

Periodic inspection is needed to determine the need for and frequency of maintenance. You should begin inspecting as soon as construction is complete and then on an annual basis. Typically, the system needs to be cleaned every 1-3 years.

Excessive oils, fuels or sediments may reduce the maintenance cycle. Periodic inspection is important.

## **Determining When to Clean**

To determine the sediment depth, the maintenance contractor should lower a stadia rod into the manhole until it contacts the top of the captured sediment and mark that spot on the rod. Then push the probe through to the bottom of the sump and mark that spot to determine sediment depth.

Maintenance should occur when the sediment has reached the levels indicated in the Storage Capacity Chart.



### **Barracuda Storage Capacities**

Model	Manhole Diameter in. (mm)	Total System Volume Gallons (Liters)	Treatment Chamber Capacity Gallons (Liters)	Standard Sediment Capacity (20" depth) Yards³ (meters³)	NJDEP Sediment Capacity (50% of standard depth) Yards³ (meters³)
S3	36 (900)	264 (999)	212 (803)	0.44 (0.34)	0,22 (0.17)
S4	48 (1200)	665 (2517)	564 (2135)	0.78 (0.60)	0.39 (0.30)
S6	72 (1800)	1497 (5667)	1269 (4804)	1.75 (1.34)	0.88 (0.67)
S8	96 (2400)	4196 (15884)	3835 (14517)	3.10 (2.37)	1.55 (1.19)

#### **Maintenance Instructions**

- 1. Remove the manhole cover to provide access to the pollutant storage. Pollutants are stored in the sump, below the bowl assembly visible from the surface. Access this area through the 8" (200 mm), 10" (250 mm), 15" (375 mm) or 20" (500 mm) diameter access cylinder.
- 2. Use a vacuum truck or other similar equipment to remove all water, debris, oils and sediment. See figure 1.
- 3. Use a high pressure hose to clean the manhole of all the remaining sediment and debris. Then, use the vacuum truck to remove the water.
- 4. Fill the cleaned manhole with water until the level reaches the invert of the outlet pipe.
- 5. Replace the manhole cover.
- 6. Dispose of the polluted water, oils, sediment and trash at an approved facility.
  - a. Local regulations prohibit the discharge of solid material into the sanitary system. Check with the local sewer authority for authority to discharge the liquid.
  - b. Some localities treat the pollutants as leachate. Check with local regulators about disposal requirements.
  - c. Additional local regulations may apply to the maintenance procedure.

