



May 10, 2022
Mr. Leo Cosentini
California State Water Resources Control Board
Division of Water Quality
P.O. Box 100
Sacramento, CA 95812-0100

Dear Mr. Cosentini,

Thank you for the opportunity for Fabco Industries, Inc. to submit our application for the Fabco StormBasin for certification as a Full Capture System -Trash Treatment Control Device. The Fabco StormBasin is a catch basin insert installed at the grate frame opening of a catch basin to screen and retain any trash, debris, or particles larger than 5 mm in diameter or greater with replaceable Fabco filter cartridges. The device allows for a flow rate equal to or greater than the peak flow of the storm drain in which it is installed. Provisions have also been made to ensure that Mosquito Vector Control personnel are easily able to inspect the device without needing to lift grates or perform confined space entry. The Fabco StormBasin has been installed and successfully protects waterways in stormwater infrastructure projects nationwide, including in California within the cities of San Clemente, Lemon Grove, and San Diego.

Within our application below we have spoken to each of the submittal requirements within the Trash Treatment Control Device Certification and Fact Sheet Update Requirements and maintained the requested layout.

Thank you again for your consideration and time taken to review our application. If any additional information is needed, please do not hesitate to contact myself Hilme Athar or our V.P. of Engineering, John Peters. Both of our contact information can be found within the application below.

Sincere regards,

A handwritten signature in black ink that reads "Hilme Athar". The signature is written in a cursive, flowing style.

Hilme Athar
Sales Engineer
24 Central Drive
Farmingdale, NY 11735
(631) 393-6024
hathar@fabco-industries.com

1. Cover Letter

1.A. Device Name and General Description

The Fabco StormBasin is a full capture trash screening device designed and manufactured by Fabco Industries, Inc. The device is a catch basin insert installed at the grate frame opening of a catch basin. It is comprised of an aluminum mounting frame, an aluminum basin body, and replaceable filtration cartridges. The entire surface runoff design flow of the catch basin is directed downwards through the filter cartridges, capturing any trash 5 mm or larger in diameter. The device is designed to be easily installed and maintained.

1.B. Applicant's Contact Information and Location

Owner Information:

John Peters
V.P. of Engineering
24 Central Drive
Farmingdale, NY 11735
(631) 393-6024
johnp@fabco-industries.com

Authorized Representative(s) Contact Information:

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Farmingdale, NY 11735
(631) 393-6024
rwilliamson@fabco-industries.com

Hilme Athar
Sales Engineer
24 Central Drive
Farmingdale, NY 11735
(631) 393-6024
hathar@fabco-industries.com

1.C. Manufacturer's Website Page for Device

<https://fabco-industries.com/cartridge-based-inlet-filtration-stormbasin/>

1.D. Device's Manufacturing Location

Fabco Industries, Inc.
24 Central Drive
Farmingdale, NY 11735
(631) 393-6024

1.E. Brief Summary of Field/Lab Testing Results

The Fabco StormBasin is designed to capture trash utilizing replaceable filter cartridges manufactured by Fabco Industries. The trash filter cartridges are comprised of an injection-molded housing body with plastic grilles and layers of screens inside for filtration. Fabco filter cartridges only differ in the additional target-pollutant capture media added within a specified cartridge. The screens are manufactured from perforated aluminum sheet metal with the first having $\text{\O}1/2''$ round holes, the second having $\text{\O}3/4''$ round holes, and the final screen having $\text{\O}3/16''$ (approximately $\text{\O}4.8\text{mm}$) round holes. When installed within a catch basin, the entire surface runoff design flow is directed downwards into the basin of the device and downwards through the cartridge(s).

This flow path ensures that all trash 5 mm or greater in diameter is captured from the peak design flow. No lab testing is required as all trash 5 mm and greater in diameter are physically blocked by the screening material from flowing forward.

Existing installations of the Fabco StormBasin, including project sites in California, have yielded only positive results. All filtered flow rates reported in the hydraulic capacity table (Section 3.C.) have been calculated using the percent open area of the perforated metal in the cartridge, head pressure measured to the bypass of the device, a standard coefficient of discharge of 0.62 for the orifice equation, and multiplying by the number of cartridges in a Fabco StormBasin unit.

1.F. Brief Summary of Device Limitations, and Operational, Sizing, and Maintenance Considerations

The Fabco StormBasin is available in standard sizes for various grate inlet sizes. Custom units are also regularly engineered to meet site-specific design flows and dimensional requirements. Accessibility within an installation site is taken into high consideration and all designs ensure the greatest ease of installation at each site. A mandatory vector control corner filler is utilized and required for all projects in California to allow access to the bottom of a catch basin by Mosquito Vector Control Personnel without the need for lifting grates or confined space entry.

Regular maintenance is necessary for the Fabco StormBasin to function properly. Fabco typically suggests maintenance be scheduled twice a year and replacement of cartridges annually, but true necessary maintenance/replacement frequency will depend on site-specific conditions. The applicable Municipal Stormwater permit may specify more frequent maintenance and replacement intervals as well. The filtered flowrate of the Fabco StormBasin is designed to completely screen at least the trash treatment peak design flow. Fabco StormBasin units are sized to trap trash 5 mm or greater in diameter for flows generated from the 1 year, 1 hour storm. In addition, Fabco StormBasin units are sized to maintain hydraulic capacity prior to required maintenance as specified in the applicable Municipal Stormwater permit. Fabco Industries recommends use of a vacuum truck to most easily clean captured trash within the catch basin insert.


1.G. Description, or List of Locations, where Device has been installed

Fabco StormBasin units have been installed for several stormwater management projects throughout California and nationally. Below are some example current install sites within the state of California:

Current Install Sites	
Project	Contact
City of San Clemente, CA	Kevin Rettig Director of Operations California Filtration Specialists LLC Phone: 858-705-6483 Email: kevin@cafiltrationspecialists.com
Lemon Grove Way, Lemon Grove, CA	
Gatchell Road, San Diego, CA	

1.H. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons that manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

X  _____

John Peters

V.P. of Engineering

(631) 393-6024

johnp@fabco-industries.com

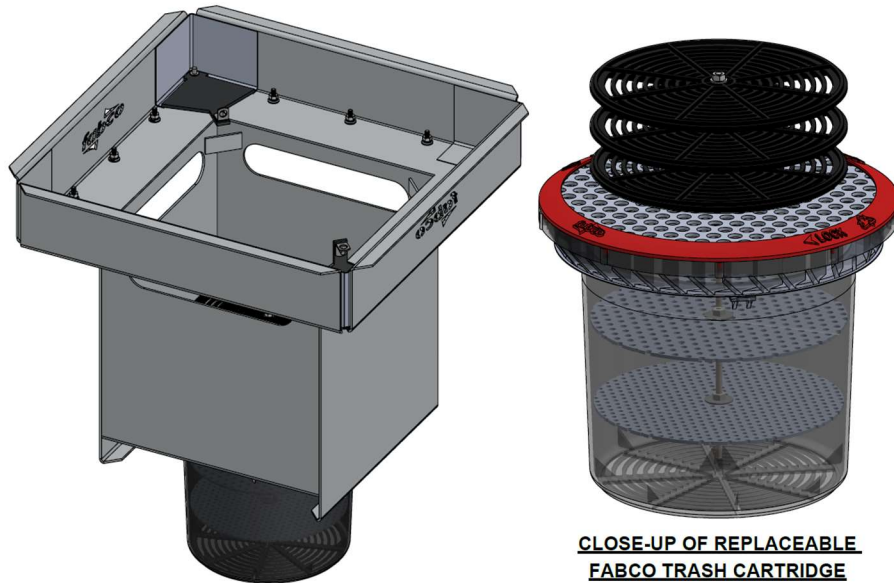
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3. Physical Description

3.A. Trash Capture

The primary component of the Fabco StormBasin that captures trash 5 mm or greater in diameter is the perforated aluminum sheet metal within the replaceable filter cartridges of the device. The final layer of perforated sheet metal has $\text{Ø}3/16''$ (approximately $\text{Ø}4.8\text{mm}$) round holes. During a storm event, the entire design flow is directed through the cartridge downwards, trapping any trash particles 5mm or greater in diameter within the cartridge and basin and allowing water to flow past into the bottom of the catch basin. Below is an image of a typical Fabco StormBasin unit and a replaceable trash cartridge; as well as a descriptive feature list of all components comprising the device:



- The Fabco StormBasin is comprised of a basin, four slotted flanges for mounting, Fabco Filter Cartridges, and four corner filler pieces (two of which are designed for vector control access).
- The basin, slotted flanges, and corner fillers are fabricated from aluminum sheet metal.
- The vector control corner fillers utilize a neoprene rubber flap which can be pulled open to access a 3" diameter opening allowing visual and physical access to the bottom of a catch basin.
- Each slotted mounting flange is secured to the basin of the device using stainless steel carriage bolts, flat washers, lock washers, and hex nuts provided by Fabco.
- The cartridge has three perforated aluminum sheet metal layers which in descending order have $\text{Ø}1/2''$, $\text{Ø}3/8''$, and $\text{Ø}3/16''$ holes.

3.B. Peak Flows/Trash Volumes

Please see the table within Section 3.C. for the hydraulic capacity and recommended max trash storage volume of four representative standard size Fabco StormBasin units. The Fabco StormBasin is designed to ensure that the number of cartridges and maximum flowrate achievable will allow full capture of all trash 5 mm and greater from the peak design flow of the storm drain. The area of the bypass opening is also designed to be significantly greater than the peak design flow. Maximum trash volume is equal to the total open volume inside the basin, with height up to the bypass opening.

3.C. Hydraulic Capacity

Fabco StormBasin Standard Sizes						
Nominal Clear Space Size	Hydraulic Capacity					Recommended Max Trash Storage Volume (CF)
	Filtered Flow Rate				Bypass Flow Rate (CFS)	
	Empty (CFS)	25% Full (CFS)	50% Full (CFS)	75% Full (CFS)		
22" x 22" (1 Cartridge)	0.58	0.44	0.29	0.15	2.0	1.1
22" x 34" (2 Cartridges)	1.16	0.87	0.58	0.29	3.5	2.5
24" x 45" (3 Cartridges)	1.74	1.31	0.87	0.44	4.4	3.9
34" x 34" (4 Cartridges)	2.32	1.74	1.16	0.58	4.6	4.0

***Note: The Fabco StormBasin does not have any alternative configurations**

The orifice equation below is used to calculate the filtered flowrate of each trash filter cartridge and bypass flowrate of each Fabco StormBasin Unit.

$$Q = C_d A \sqrt{2gh}$$

where,

Q = flow rate [in^3/s] *converted to [CFS and GPM]

C_d = coefficient of discharge [0.62 used by Fabco Industries]

A = area of orifice or net open area [in^2]

g = acceleration from gravity [in/s^2]

h = head acting on centerline [in]

Example:

Filtered Flow Rate of a single trash filter cartridge:

$$Q = (0.62) * (23.74 [\text{in}^2]) * \sqrt{2 * \left(386.4 \left[\frac{\text{in}}{\text{s}^2}\right]\right) * (6 [\text{in}])}$$

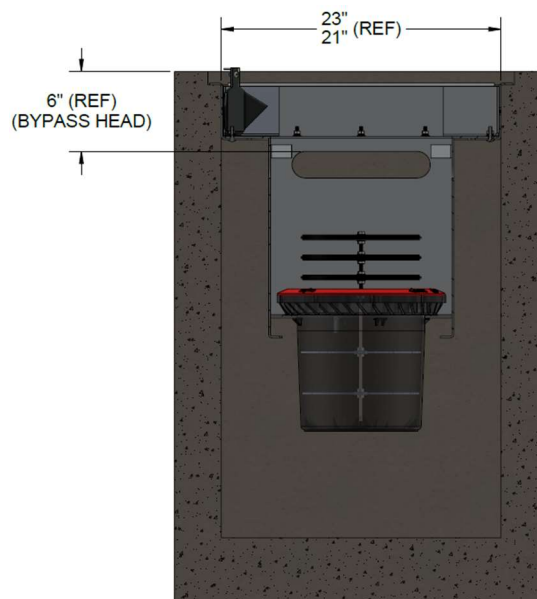
$$Q = 1002.24 \left[\frac{\text{in}^3}{\text{s}}\right] \div 1728 \left[\frac{\text{in}^3}{\text{ft}^3}\right]$$

$$Q = 0.58 \left[\frac{\text{ft}^3}{\text{s}}\right]$$

Bypass Flow Rate for a 22" x 22" Fabco StormBasin:

$$Q_B = (0.62) * (81.56 [\text{in}^2]) * \sqrt{2 * \left(386.4 \left[\frac{\text{in}}{\text{s}^2}\right]\right) * (6 [\text{in}])}$$

$$Q_B = 3443.33 \left[\frac{\text{in}^3}{\text{s}}\right] \div 1728 \left[\frac{\text{in}^3}{\text{ft}^3}\right]$$



REFERENCE VIEW

$$Q_B = 2.0 \left[\frac{ft^3}{s} \right]$$

3.D. Comparison Table

Please see table in Section 3.C. for hydraulic capacity of four representative sizes of the Fabco StormBasin.

3.E. Design Drawings

Please refer to Appendix A for a representative design drawing of the Fabco StormBasin for 22" x 22" Nominal Clear Space with mandatory vector control corner fillers.

3.F. Alternative Configurations

The Fabco StormBasin does not have any alternative configurations.

3.G. Internal Bypass

The bypass of the Fabco StormBasin is found near the top of the basin below the mounting flanges of the Fabco StormBasin. The open area available from the bypass openings allow for flow rate greater than the filter cartridges used in the device. The bypass openings of the Fabco StormBasin are only in use when flow into the catch basin exceeds the peak design flow or when peak flows occur after the device has not been maintained to keep blinding to a minimum.

3.H. Previously Trapped Trash

The only scenario in which previously trapped trash can be re-introduced to the downstream stormwater infrastructure is if there is floating trash which rises above and through the bypass opening when a bypass flow scenario occurs as explained in Section 3.G.

3.I. Calibration Feature

The Fabco StormBasin uses slotted mounting flanges which allow each flange to adjust within a 1" range. This allows the device to have a total of 2" adjustability in the length and width dimensions of the catch basin grate frame. When installing the Fabco StormBasin, the flanges are to be adjusted to fit flush with the grate frame opening before inserting the device into the catch basin and placing in the corner fillers. To adjust the flanges, a 7/16" socket wrench, or equivalent tool can be used to loosen the hex nuts securing each flange. The flanges can then be slid into the necessary position and the hex nuts can be re-tightened to secure the flanges in place.

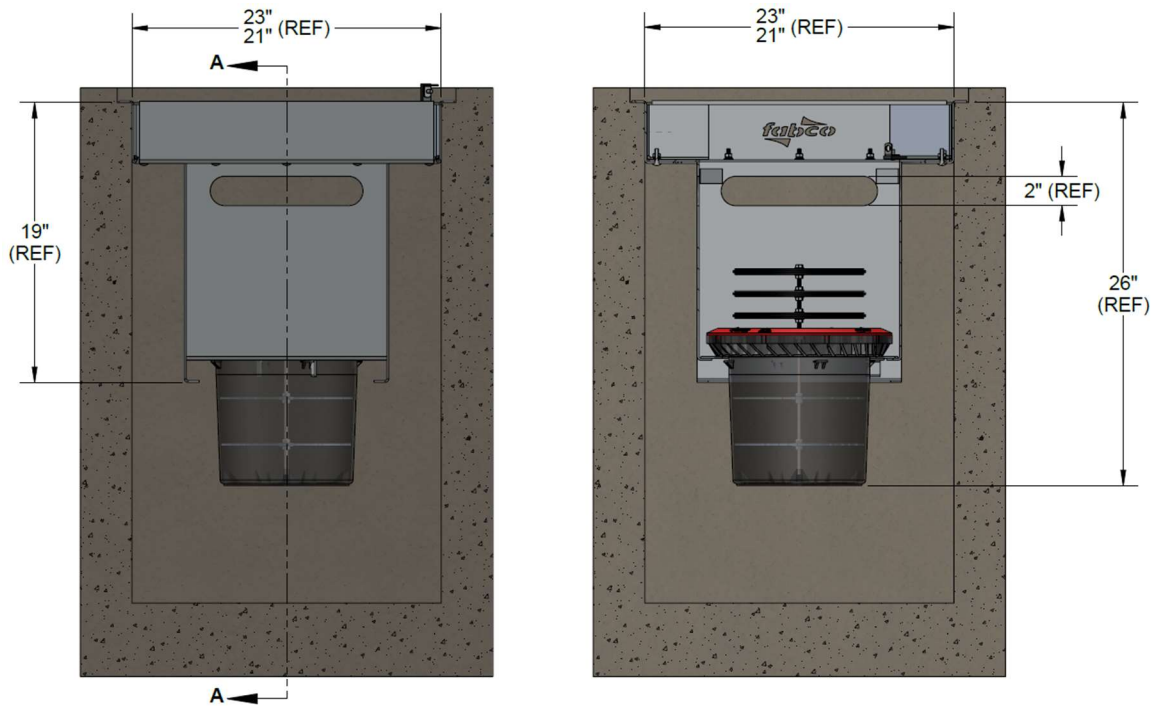
3.J. Photos



Top and Side View of Fabco StormBasin w/ Cartridges Removed

**No Mandatory Vector Control Corner Fillers Shown*

Reference Diagram:



SECTION A-A

3.K. Material Type

Below is a list of all materials which comprise the Fabco StormBasin and where the materials are used on the device:

- Basin: 1/8" Thick Aluminum Sheet Metal
- Mounting Flanges: 1/8" Thick Aluminum Sheet Metal
- Hardware: 18-8 Stainless Steel Carriage Bolts, Flat Washers, Lock Washers, and Hex Nuts.
- Standard Corner Fillers: 1/16" Thick Aluminum Sheet Metal
- Vector Control Corner Filler Flap: 1/8" Thick Neoprene Rubber
- Vector Control Corner Filler Hooking Point: Zinc-Plated Steel Corner Bracket
- Fabco Cartridge Body: Polypropylene Copolymer
- Fabco Cartridge Grilles: Polypropylene Copolymer
- Fabco Cartridge Primary Trash Capture Materials:
 - 1/8" Thick Perforated Aluminum Sheet Metal with $\text{\textcircled{1/2}}$ " Round Holes
 - 1/8" Thick Perforated Aluminum Sheet Metal with $\text{\textcircled{1/4}}$ " Round Holes
 - 1/8" Thick Perforated Aluminum Sheet Metal with $\text{\textcircled{3/16}}$ " ($\sim\text{\textcircled{4.8}}$ mm) Round Holes
- Aluminum tape is also provided to help fill any unwanted gaps after installation.

3.L. Design Life

With expected stormwater conditions and regular maintenance, the metal body of the Fabco StormBasin has an expected design life of approximately 10 years. Filter cartridges are recommended to be replaced annually from installation day.

4. Installation Guidance

4.A. Standard Device Installation Procedures and Considerations

The Fabco StormBasin is designed and manufactured to fit within the specific dimensions of each installation site. Fabco requires that before any purchase, a survey form is filled out reporting measurements of the catch basin(s) on site.

Standard installation of a Fabco StormBasin follows the procedure steps below:

1. Ensure all site safety requirements are set in place before beginning installation.
2. Follow all proper road safety rules & regulations during installation.
3. Begin by removing the catch basin grate.
4. Carefully place the grate on the ground away from the work area.
5. Measure and record the catch basin frame clear opening length, width, and depth.
6. Using the clear opening measurements recorded in step 4, adjust the flanges on the Fabco StormBasin to fit flush within the grate frame and rest securely upon the grate support ledges. To adjust the flanges, a 7/16" socket wrench or equivalent tool can be used to loosen the hex nuts securing each flange. The flanges can then be slid into the necessary position and the hex nuts can be re-tightened to secure the flanges in place.
7. Place the adjusted Fabco StormBasin into the catch basin.
8. Verify each flange is secure and the unit is snug with little movement in the drain.
9. Install corner fillers by using the double-sided tape found on each corner filler.
10. (If necessary) use provided aluminum tape to fill any unwanted gaps that may remain after installation.
11. Reinstall the catch basin grate directly on the StormBasin adjustable mounting flanges.

4.B. Description of Device Installation Limitations and Non-Standard Device Installation Procedure

Installation of a Fabco StormBasin may be limited by the existing protrusions within a catch basin and/or the lack of grate support ledges. If any non-standard installation is required, the installer should please contact their respective sales representative or Fabco sales support at sales@fabco-industries.com or (631) 393-6024. Installation procedure may differ, but design of the Fabco StormBasin cannot change.

4.C. Methods for Diagnosing and Correcting Installation Errors

Once installed, ensure a proper installation by performing a visual inspection of the entire installed unit. Confirm the device is centered within the catch basin and is sitting securely on the grate support ledges. If the Fabco StormBasin does not fit securely within the catch basin, clear the opening, remove it, and reinstall it again following the instructions in Section 4.A. If issues persist, contact Fabco sales support to further identify possible solutions. If any critical questions at all arise during or after installation, the install team should please contact their respective sales representative or Fabco sales support (Email: sales@fabco-industries.com; Phone: (631) 393-6024) for project specific assistance.

5. Operation and Maintenance Information

5.A. Inspection Procedures and Frequency Considerations

Fabco recommends that an installed Fabco StormBasin is inspected and maintained at a minimum of two times a year on a recurring basis for the life expectancy of the unit. It is recommended that the first inspection and maintenance of the year take place at the start of the local rainy season. The second inspection and maintenance of the year should take place at the end of the local rainy season. If there is no definite rainy season at the install location, Fabco suggests that the two minimum inspections and maintenance should be evenly spaced throughout the year. However, the Municipal Storm Water permit may specify more frequent maintenance intervals.

True necessary inspection and maintenance frequency will depend on the amount of stormwater runoff, pollutant loading, and blinding from trash occurring at the installation site. It is recommended that during the first year after installation a higher frequency of inspections is performed (typically, at least 3-4). This is to ascertain the necessary inspection and maintenance frequency for the install site and determine a baseline expected trash load.

Please note no confined entry is required to inspect the Fabco StormBasin. Below is the standard inspection procedure:

1. Ensure all site safety requirements are set in place before beginning.
2. Follow all proper road safety rules & regulations during the inspection.
3. Remove the catch basin grate to gain visual access to the Fabco StormBasin.
4. Visually inspect the device for any damage or unfastening that may have occurred.
5. Keep a record of inspection, noting any irregularity, damage, or loss of secure mounting.
6. Visually inspect the inside of the Fabco StormBasin for heavy sediment, trash, and debris loading. A battery powered flashlight or droplight is recommended for thorough inspection.
7. Measure the trash load using a tape measure or equivalent trash measurement tool.
8. Record trash load measurement.
9. Ensure view ports are easily opened and accessible.

10. (If necessary) take photos and keep on record.
11. Perform vector control inspection if applicable and keep records.
12. Reinstall catch basin grate.

5.B. Description of Maintenance Frequency Considerations

Recurring maintenance is needed to make sure the Fabco StormBasin can function properly in capturing the trash treatment design flow of the drainage structure in which it's installed. Fabco suggests a minimum maintenance schedule of at least two times a year by removing the trash and debris, sand and silt with a vacuum assisted device. Typically, the maintenance should be scheduled for once at the start of the local rainy season and once at the end of the local rainy season. If there is no defined rainy season, the maintenance can be scheduled equally spaced throughout the year. Fabco also suggests that any filter cartridges used in a unit be replaced annually from the day of installation. The Municipal Storm Water permit may specify more frequent maintenance and replacement intervals for the device. Because actual trash load on a drain can vary from site to site, the inspection record can be used to properly plan the needed maintenance schedule. To minimize maintenance costs Fabco generally suggests that the clean outs take place any time the device is at 50% full trash capacity.

5.C. Maintenance Procedures

Prior to performing the maintenance procedure, all safety and local traffic control protocols should be put into place. Also ensure local PPE requirements are being met by the maintenance team. Below is the step-by step maintenance procedure for the Fabco StormBasin:

1. Remove the catch basin grate and set safely to the side of the drainage access point.
2. Visually inspect the Fabco StormBasin for heavy sediment, trash, and debris loading. A battery powered flashlight or droplight is recommended for thorough inspection.
3. Remove the sediment, trash, and debris from the system. This can be done manually by hand with shovels and buckets; however, for large scale implementation the most efficient method is to use a vacuum system such as a Vactor truck.
4. Visually inspect the device after cleaning and record any damage or unfastening of the device.
5. If deemed necessary, a power washer can be used to clean the system further.
6. If applicable to replace the filter cartridge, simply twist each cartridge counterclockwise to unlock. The used cartridges can then be lifted out vertically for disposal.
7. New cartridges can be placed into the opening within the Fabco StormBasin and locked in by twisting clockwise.
8. If no other critical issues are present or any concerns remain, reinstall the removed catch basin grate.
9. All liquid, oils, sediment, debris, trash and other accumulates removed from the catch basin must be handled and disposed of in accordance with local, state, and federal regulations.

Disposal considerations must be part of a well-planned and scheduled maintenance regime. Solid waste disposal can typically be coordinated with a local landfill, whereas liquid waste can be disposed of at either a wastewater treatment plant, or a municipal vacuum truck decant facility.

5.D. Essential Equipment and Materials for Proper Maintenance Activities

Fabco Industries recommends the following equipment for maintenance of the Fabco StormBasin:

- Proper safety equipment including but not limited to hardhats, safety vests, gloves, and eye protection.
- Any required traffic control equipment.
- A battery powered flashlight or drop light.
- Shovels and buckets or industrial vacuum.
- Pressure washer (optional).
- Storm grate removal/reinstallation tools.

5.E. Description of the Effects of Deferred Maintenance on Device Structural Integrity, Performance, Odors, Etc.

If maintenance is deferred for the Fabco StormBasin, the full trash and debris capacity of the Fabco StormBasin can be reached causing a bypass event when a rainstorm occurs. During a bypass event, debris and trash will flow through the bypass openings of the Fabco StormBasin and discharge into any downstream stormwater infrastructure or water body. Deferred maintenance will not affect the structural integrity of the Fabco StormBasin.

5.F. Repair Procedures for Device's Structural and Screening Components

If during inspection or maintenance of the Fabco StormBasin it's found that the device needs repair, photographs and documentation should be sent to the Fabco assistance team at: sales@fabco-industries.com. The Fabco engineering and technical support team can then assess the damage and suggest a repair plan or begin a warranty repair or replacement.

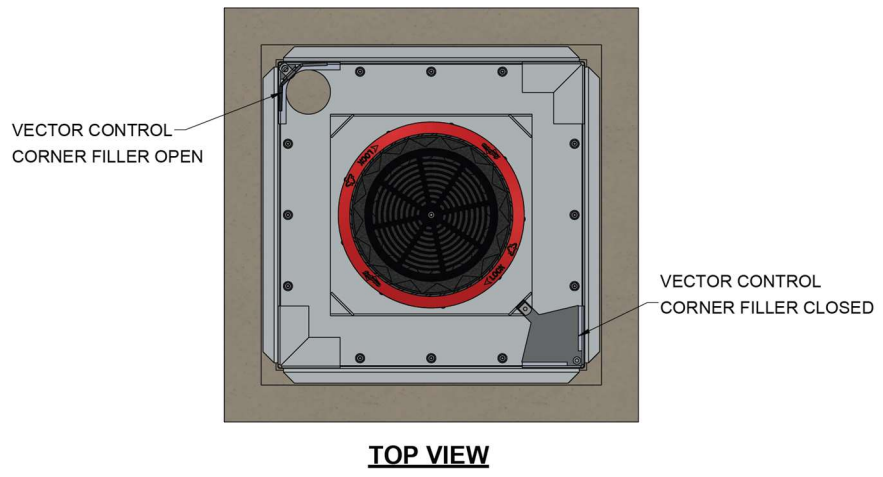
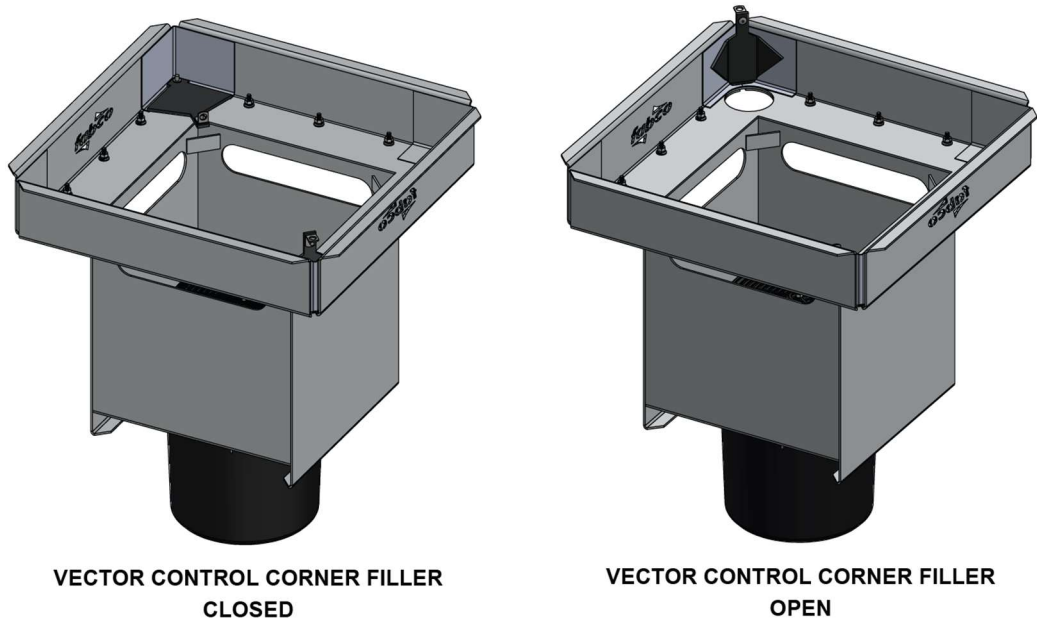
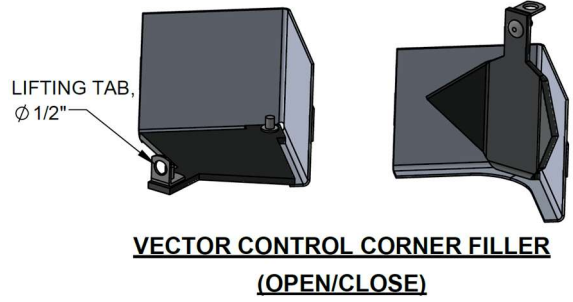
6. Vector Control Accessibility

6.A. Date of Application Submittal to Mosquito Vector Control Association

Application to the Mosquito and Vector Control Association of California (MVCAC) for the Fabco StormBasin was submitted on August 31, 2022, and a letter of verification was received on September 30, 2022. See Appendix B for the MVCAC verification letter.

6.B. Description of Access for Vector Control Personnel

The Fabco StormBasin features vector control corner fillers which are self-closing view ports allowing for easy access by Vector Control personnel without requiring any confined space entry or lifting of grates. The view ports are self-closing rubber flaps found on the corners of the StormBasin. They can be accessed from above the StormBasin while a catch basin grate is over the unit. The rubber flaps can be pulled open upward with a tool. When open the 3" diameter view port allows visual and physical access to the bottom of the catch basin for inspection or treatment by Mosquito Vector Control personnel.



6.C. Mosquito Vector Control Association of California Letter of Verification

Please refer to Appendix B to find the MVCAC letter of verification for the Fabco StormBasin.

7. Reliability Information

7.A. Estimated Design Life of Device Components before Major Overhaul

The life expectancy of the Fabco StormBasin is estimated by consideration of the materials used to fabricate the Fabco StormBasin. With expected stormwater conditions and regular maintenance, the Fabco StormBasin has an estimated design life of 10 years, and each filter cartridge has a design life of 1 year.

7.B. Warranty Information

Fabco Industries, Inc., warrants that the Fabco StormBasin shall be free from defects in materials and workmanship for a period of 10 years from the date of delivery. The warranty coverage requires that the products must be installed in accordance with all site conditions required by state and local codes, applicable product or industry specifications and guidelines, manufacturer's installation recommendations and other applicable laws. Specifically excluded from the warranty are damages arising from ordinary wear and tear, alteration, or repair by anyone other than Fabco Industries, Inc. or under the direction of Fabco Industries Inc. Furthermore, damage due to accident, misuse, abuse or neglect, or any other event not caused by Fabco Industries Inc, is also not covered by the warranty.

If a warranty claim is made and determined to be valid, Fabco Industries, Inc., will either repair or replace the product, solely at the discretion of Fabco Industries, Inc. All warranty claims must be submitted, evaluated, and approved by Fabco Industries, Inc., for the claim to be determined to be valid. There are no other warranties either expressed or implied other than what is specifically specified herein.

7.C. Customer Support Information

Fabco customer support can provide technical information and help with any questions regarding Fabco Industries' products. You can reach our customer support service at:

Fabco Industries, Inc.
24 Central Drive
Farmingdale, NY 11735
Phone: (631) 393-6024
Email: sales@fabco-industries.com
Website: fabco-industries.com

8. Field/Lab Testing Information and Analysis

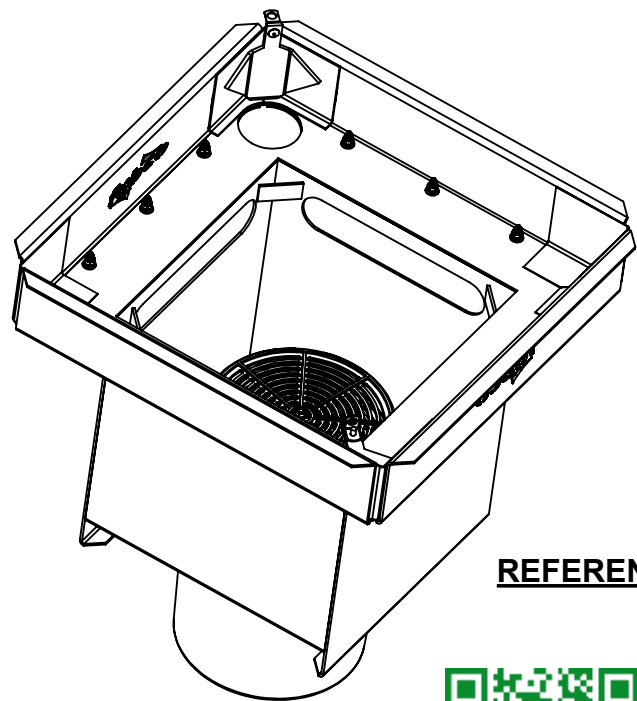
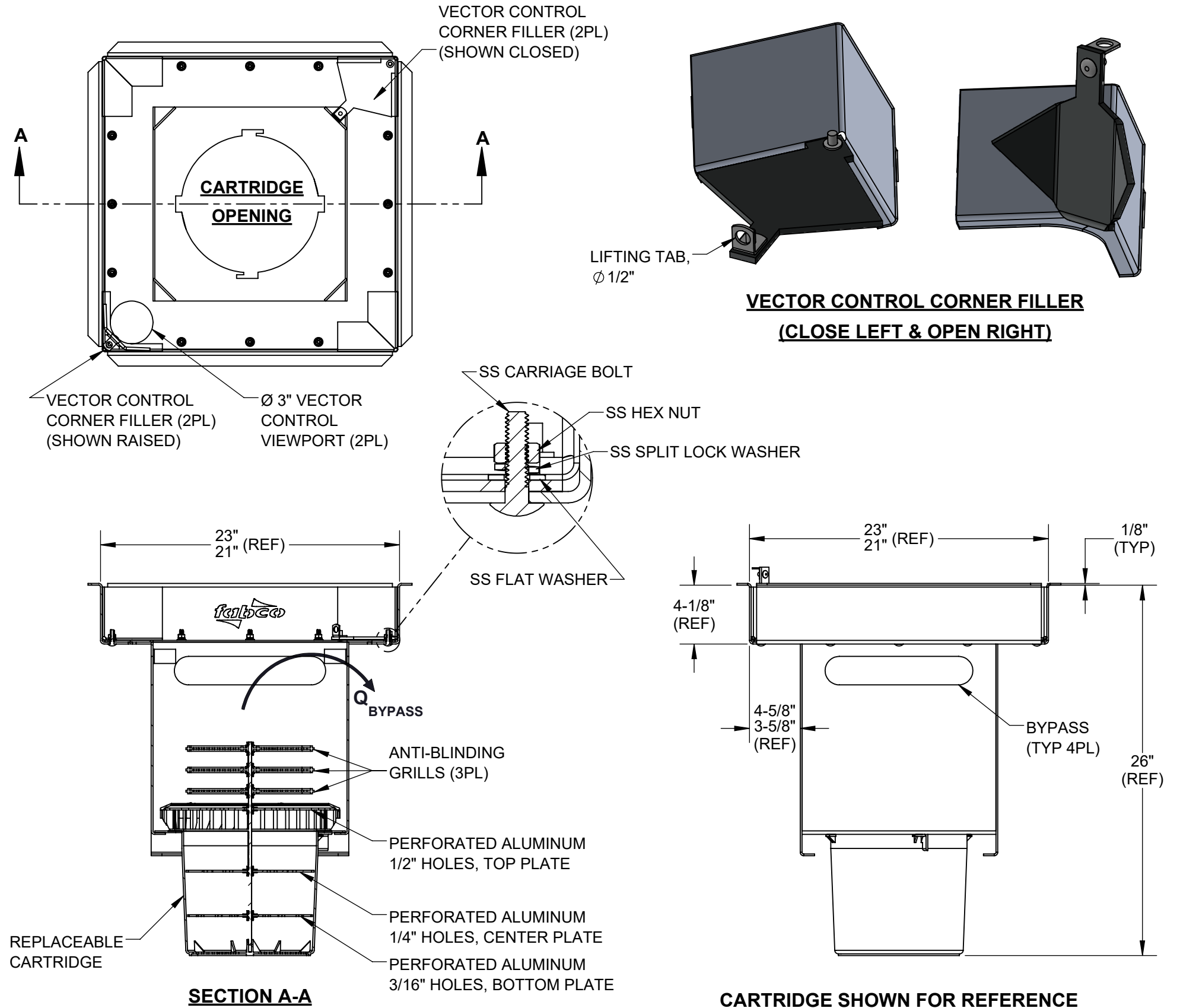
All sizes of the Fabco StormBasin utilize a filter cartridge with perforated aluminum sheet metal screens. The topmost screen has $\varnothing\frac{1}{2}$ " round holes, the middle screen has $\varnothing\frac{1}{4}$ " round holes, and the final bottom screen has $\varnothing\frac{3}{16}$ " (approximately $\varnothing 4.8\text{mm}$) round holes. When installed within a catch basin, the entire surface runoff design flow is directed downwards into the basin of the device and downwards through the cartridge(s). This flow path ensures that all trash 5 mm or greater in diameter is captured from the peak design flow. No lab testing is required as all trash 5 mm and greater in diameter are physically blocked by the screening material from flowing forward. Existing installations of the Fabco StormBasin, including project sites in California, have yielded only positive results.

APPENDIX A

NOTES:

1. TOTAL WEIGHT, EMPTY: 20 LBS (MAX), NO CARTRIDGE
2. MATERIALS:
 1. FRAME/BASIN: ALUMINUM ALLOY, 5000 SERIES
 2. HARDWARE: STAINLESS STEEL
3. PERFORMANCE CHARACTERISTICS:
 1. DEBRIS CAPACITY: 1.1 CU. FT
 2. FILTERED FLOWRATE (STANDARD CARTRIDGE): 115 GPM (0.26 CFS)
 3. BYPASS FLOWRATE: 875 GPM (1.95 CFS)
4. CLEAR OPENING RANGE:
 1. MINIMUM SIZE: 21" X 21"
 2. MAXIMUM SIZE: 23" X 23"
5. TYPICAL INSTALLATION:

CAREFULLY REMOVE THE STORM GRATE, MEASURE CATCH BASIN FRAME CLEAR OPENING AND ADJUST FLANGES TO REST ON GRATE SUPPORT LEDGE. INSTALL STORMBASIN AND VERIFY EACH FLANGE IS SECURE AND THE UNIT IS SNUG WITH LITTLE MOVEMENT IN THE DRAIN. INSTALL CORNER FILLERS USING PROVIDED DOUBLE-SIDED TAPE. COVER ANY UNWANTED GAPS WITH PROVIDED ALUMINUM TAPE. REINSTALL THE STORM GRATE DIRECTLY ON THE STORMBASIN ADJUSTABLE SUPPORT FLANGES.
6. RECOMMENDED MINIMUM VAULT DEPTH 2" BELOW CARTRIDGE



REFERENCE VIEW



ENGINEER AND CONTRACTOR NOTE: FABCO INDUSTRIES WATER QUALITY INSERTS (WQIS) ARE MANUFACTURED TO PROPERLY FIT INLETS BY USING SPECIFIC INFORMATION COMPILED IN A SURVEY OF THE "AS-BUILT" INLET. IN RETROFIT SITUATIONS THE SURVEY IS DONE TO DOCUMENT THE THREE CRITICAL ASPECTS OF WQI DESIGN (GRATE/FRAME MEASUREMENTS, OPEN/CLEAR SPACE MEASUREMENTS, AND PROTRUSION MEASUREMENTS). IN NEW CONSTRUCTION, FABCO PRODUCT DRAWINGS ARE ESSENTIALLY PLACE HOLDERS BASED ON THE SPECIFIED INLETS. ONCE THE INLETS ARE BUILT, THE PROCESS REVERTS TO THE RETROFIT APPROACH OF SURVEYING THE AS-BUILT INLETS TO CONFIRM FABCO INSERT DESIGN. PLEASE USE THE QR CODE TO ACCESS THE SURVEY FORM AND COMPREHENSIVE GUIDANCE OF THE SURVEY PROCESS. ALTERNATIVELY, NAVIGATE TO www.fabco-industries.com/grate-inlet-survey-guide

PROPRIETARY AND CONFIDENTIAL
 THIS DOCUMENT IS THE PROPERTY OF FABCO INDUSTRIES AND IS CONVEYED WITH THE EXPRESS CONDITION THAT IT AND THE INFORMATION CONTAINED IN IT ARE NOT TO BE USED, DISCLOSED, OR REPRODUCED IN WHOLE OR IN PART, FOR ANY PURPOSE WITHOUT THE EXPRESS WRITTEN CONSENT OF FABCO INDUSTRIES; AND THAT NO RIGHT IS GRANTED TO DISCLOSE OR SO USE ANY INFORMATION CONTAINED IN SAID DOCUMENT.

UNLESS OTHERWISE SPECIFIED REMOVE ALL BURRS BREAK SHARP EDGES .002 - .020 FILLETS .020 MAX DIMENSIONS ARE IN INCHES AND INCLUDE CHEMICALLY APPLIED OR PLATED FINISHES		TOLERANCES: DEC .00 ± .01 DEC .000 ± .005 FRACT ± 1/16 ANGLE ± 2°	
PROJECT	MATERIAL	APPROVAL	DATE
	SEE NOTES	DWN R.W.	7/19/2022
		CHKR	
		ENGR	J.P.
		UPD	7/19/2022
FABCO INDUSTRIES, INC. 24 CENTRAL DRIVE FARMINGDALE, NY 11735 WWW.FABCO-INDUSTRIES.COM		STORMBASIN BMP (1C, VECTOR) NOM. C.S. 22" X 22"	
SCALE: NONE	DWG. NO. B BBM2222-1V-000	REV B	SHEET 1 OF 1



STORMBASIN BMP (1C, VECTOR)
 NOM. C.S. 22" X 22"
 DWG. NO. B
 BBM2222-1V-000
 REV B
 SCALE: NONE
 SHEET 1 OF 1

APPENDIX B



MVCAC
Mosquito and Vector Control Association of California

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Mr. Hime Athar
Fabco Industries, Inc
24 Central Drive
Farmingdale, NY 11735

September 30, 2022

Dear Mr. Athar,

Thank you for the submission of the Fabco StormBasin full trash capture device for review by the Mosquito and Vector Control Association of California pursuant to the SWRCB Trash Treatment Control Device Application Requirements. The Association has reviewed the conceptual drawings for the Fabco StormBasin and verifies that provisions have been included in the design that allow for full visual access to all areas for presence of standing water, and when necessary, allows for treatments of mosquitoes.

While this verification letter confirms that inspection and treatment for the purpose of minimizing mosquito production should be possible with the Fabco StormBasin as presented, it does not affect the local mosquito control agency's rights and remedies under the State Mosquito Abatement and Vector Control District Law. For example, if the installed device or the associated stormwater system infrastructure becomes a mosquito breeding source, it may be determined by a local mosquito control agency to be a public nuisance in accordance with California Health and Safety Code sections 2060-2067.

"Public nuisance" means any of the following:

1. Any property, excluding water, that has been artificially altered from its natural condition so that it now supports the development, attraction, or harborage of vectors. The presence of vectors in their developmental stages on a property is prima facie evidence that the property is a public nuisance.
2. Any water that is a breeding place for vectors. The presence of vectors in their developmental stages in the water is prima facie evidence that the water is a public nuisance.
3. Any activity that supports the development, attraction, or harborage of vectors, or that facilitates the introduction or spread of vectors. (Heal. & Saf. Code § 2002 (j).)

Declaration of a facility or property as a public nuisance may result in penalties as provided under the Health and Safety Code. Municipalities and the vendors they work with are encouraged to discuss the design, installation, and maintenance of stormwater trash capture devices with their local mosquito control agency to reduce the potential for disease transmission and public nuisance associated with mosquito production.

Sincerely,

Bob Achermann,
MVCAC Executive Director