



ADC STREET MAP: MAP 4934 GRID B5 VICINITY MAP

Specifications for RetroFAST 0.375 Wastewater Treatment System

The contractor shall furnish and install (1) RetroFAST 0.375 teatment system as manufactured by Bio-Microbics, Inc. The treatment system shall be complete with all needed equipment as shown on the drawings and specified herein.

The principal Items of equipment shall include FAST System insert, insert lid, blower assembly, and blower holiminity trofAST 0.375 unit shall be situated within tank that exceeds the minimum dimensions and a 16' [41cm] tank opening. Tank(s) must conform to local, state, and all other applicable codes. The contractor shall provide coordination between the FAST system and tank supplier with regard to fabrication of the tank, installation of the FAST unit and delivery to the job site.

2. IPERATING CONDITIONS

The RetrofAST 0.375 treatment system shall be capable of treating the wastewater produced by typical family activities (bath, laundry, kitchen, etc.) ranging from (1) one to (5) five persons and not to exceed 375 US Gallons per day (1420 LPD). For systems installed for rejuvenation of a falled drainfield the flow can exceed the maximum flow rate Consumplity for auditors.

The FAST media shall be manufactured of rigid PVC, polyethylem, or polypropylene and it shall be supported by the polyethylene insert. The media shall be fixed in position and contain no moving or wearing parts and shall not corrode. The media shall be designed and installed to ensure that sloughed solids descend through the media to the bottom of the septic tank.

4. BLIWER 4. BLUWER unit shall come equipped with a regenerative type blower capable of delivering 9-24 CFM [15-41m3/hiRhe blower assembly shall include an inlet filter with metal filter element. The blower shall be mounted outside the tank on a contractor supplied concrete base. Blower piping to the tank shall use non-corrosive material (PVC, Galvanized, or stainless Steel). Do not run galvanized pipe inside the treatment tank. Refer to Installation Manual for further details.

5. REMOTE MOUNTED BLOWER

The blower shall be mounted up to 100 feet [30.5 meters] away from Rethero FAST unit on a contractor supplied concrete base. The blower elevation must be higher than the normal flood level. A two-piece, rectangular housing shall be provided with amper-proof screws. The discharge air line from the blower to the Retro FAST shall be provided and installed by the contractor.

6. ELECTRICAL The electrical source should be within 150 feet [45.7 meters] of the blower consult local codes for longer wiring distances. All wiring must conform to all applicable codes(IEC, NEC, etc.). Wiring distances must prevent significant voltage loss. Input power on 60Hz electrical system is 110/220 VAC, single phase, 2.3/1.0 Amps. Input power on 50Hz electrical systems 127/230 VAC, single phase 0.253 kw/hr. All conduit and wiring shall be supplied by contractor.

All work must be done in accordance with local codes and regulations. Installation of the RetroFAST 0.375 shall be done in accordance with the written instructions provided by the manufacturer. An operation and maintenance manual shall be furished, which will include a description of system installation, operation, and maintenance procedures. The alarm system shall consist of a visual and audible alarm to idicate loss of power to the blower. A manual silence switch is included.

FLOW AND DOSING FAST®systems have been successfully designed, tested and certiled receiving gravity, demand-based influent flow. When influent flow is controlled by pump or other means to help with highly variable flow conditions, then multiple dosing events should be used to maximize performance. The flow rate shall not exceed 5 gpm (19 Lpm).

10. WARRANTY

This warranty conditions, when mutuple abosing events should be used to maximize performance. The flow rate shall not exceed 5 gpm (19 Lph).

Bio-Microbics, Inc. warrants all new RetroFAST@nodels (RetroFAST@150, 0.250, and 0.375) against defects in materials and workmanship for a period of two years after installation or three years from date of shipment, which ever occurs first, subject to the following terms and conditions:

During the warranty period, if any part is defective or falls to serform as specified when operating at design conditions, and if the equipment has been installed and is being operated and maintained in accordance with the written instructions provided by Bio-Microbics, Inc., Bio-Microbics, Bio-Micro

UNLESS NOTED DIMENSIONS ARE IN INCHES [CENTIMETERS] BETTER WATER, BETTER WORLD. TOLERANCES ± 0.02 IN/IN [± 0.05 CM/CM] RetroFAST 0.375 NAME DATE A RetrofAST®0.375 Specification SHEET 3 DF 3 OFFICE OF 10/10/2013 REVISED 10/10/2013 REV.

THE INFORMATION CONTAINED IN THIS DRAVING IS THE SOLE PROPERTY OF BID-HICROBICS INC. MY REPRODUCTION IN PART OR AS A WIGHE VITHOUT THE VRITTEN PERMISSION OF INFORMATION IS PROPERTY OF BID-HICROBICS INC. IS PROPERTY OF BID-HICROBICS OF AND OR MARKAL CHANGE VITHOUT NOTICE.

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PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPAREI OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINER UNDER THE LAWS OF THE STATE OF MARYOSH, LICENSE NO. 20748, EXPIRATIN DATE: 2/22/15.

SITE PLAN BAT INSTALLATION COLUMBIA MEMORIAL PARK

CEMETERY SITE SECTION 1 AREA 1 LOT 1, SECTION 1 AREA 2 LOT 3 PROPOSED OFFICE BUILDING, SHED AND GRAVEL STORAGE AREA PREVIOUS HOWARD COUNTY FILES: FDP-188-A1, F-83-116, 5DP-84-280, ECP-11-033, 5DP-11-039, ECP-12-027

TAX MAP No.: 29 GRID No.: 19 PARCEL No.: 371 HOWARD COUNTY, MARYLAND FIFTH ELECTION DISTRICT SCALE: AS SHOWN DATE: SEPTEMBER 30, 2014 SHEET 1 OF 1