

WDS ON-DEMAND
BEACH, DECK, POOL SHOWER WATER TRANSFER SYSTEM
MODEL WDS- BDPSWTS

Specifications for WDS Shower Water Transfer System. For use with Roof Top Showers, Beach Showers, Pool Showers, Resort Deck Showers, Hospital Chemical Showers & all sites where shower water must be kept out of the storm water system and rainwater out of treatment system.

PART 1 GENERAL

1.1 DESCRIPTION

A. The system shall be complete to include a stainless-steel pit, a pit mounted Transfer Valve, one each of hot and cold-water ON-Demand Valves, a stainless-steel Silt and Solids Basket and an ADA compliant brass or Poly carbonate shower drain grate. Shower heads and plumbing by others.

B. The ON-Demand Transfer System shall be manufactured by Wastewater Diversion Systems, Inc. Mechanicsville, VA in the USA, or an Engineer approved equal system that does not require electricity for operation.

C. It is the intent of these specifications to have one supplier provide equipment within this section for the sole system responsibility. The basis of selection will be made to the responsible and qualified bidder. Bidders are advised that all specifications must be strictly adhered to. Suppliers that are named in specifications have been identified as being qualified to provide the equipment specified. The bidder is responsible for determining conformance of a supplier's equipment to meet the specifications. Alternate proposals, if offered, will not be considered as the basis of selection. Proposals deviating from or taking exception to the specification requirement will be deemed unresponsive.

D. Operation: The On-Demand Valve will receive a hydraulic signal from either hot or cold water when the shower is in use. The ON-Demand Valve will automatically send water down the drive line to open the pit mounted hydraulically operated Transfer Valve. With Transfer Valve open, all shower wash water will exit through the Transfer Valve into the sewer. When shower is not in use, the Transfer Valve will remain closed sealing the sewer from rainwater. Rainwater will fill the pit and overflow into the stormwater outlet.

E. WDS ON-Demand Transfer Shower System shall be Made in the USA

F. Approved supplier: WASTEWATER DIVERSION SYSTEMS, INC. 8417 Erle Road, Mechanicsville, Virginia USA 23116 804-873-1798 foxwwdsusa@aol.com or Engineer approved equal.

1.2 SUBMITTALS

SD-01 Shop Drawings.

WDS ON-Demand Transfer Shower System

SD-02 Product Data.

WDS ON-Demand Transfer Shower System

Submit Manufacturer's standard drawings or catalogue cuts.

SD-03 Manufacturer's Instructions.

Manufacturer's Instructions Manual

SD-04 Operation and Maintenance Date.

Operation and Maintenance Manual

1.3 SPARE PARTS

The Manufacturer of the ON-Demand Transfer Shower System shall provide a list of spare parts required for 1 year of service for each system provided at this site. All spare parts shall be boxed and labeled for ease of storage at the purchaser's warehouse.

2.1 MATERIALS

All components of the ON-DEMAND Transfer Shower system herein described shall be fabricated and manufactured from new, unused materials, free from defects, and of the highest quality possible. The valve body, stem assembly and wet components of the ON-Demand Valve and the pit mounted transfer Valve shall be made of corrosion resistant lead-free materials with all metal parts complying with the following features.

(a) Brass alloys shall be C89833 LEAD FREE

(b) Stainless Steel alloys shall be 304 SS.

(c) Austenitic Stainless-Steel alloys shall contain up to 20% chromium and up to 10.5% Nickel.

2.2 ON DEMAND VALVE

The WDS 1" ON-Demand Valve shall be by Wastewater Diversion Systems, Inc. or equal. The ON-Demand Valve shall be Lead free C89833 Brass and 304 stainless-steel construction and shall be totally automatic, hydraulically operated and inline serviceable and perform the following functions:

(a) Hydraulically detect shower usage and supply the driveline with the appropriate pressure to open the pit mounted transfer valve and have the following features:

(b) a minimum sensitivity of up to 2 liters per minute activation flow.

(c) a sensitivity adjustment to washdown flow.

(d) be marked, Made in the USA

(e) be installed after an ASSE 1013 compliant RPZ with line strainer and to avoid all "failure to install excuses" the RPZ shall be supplied by WASTEWATER DIVERSION SYSTEMS, INC. WITHIN THE ON-DEMAND TRANSFER SHOWER SYSTEMS PACKAGE.

2.3 ON-DEMAND PIT MOUNTED TRANSFER VALVE

The Pit Mounted On-Demand Transfer Valve shall be Wastewater Diversion Systems, Inc. WDS 6 inch or equal. The Transfer Valve shall be Lead Free C89833 Brass and 304 Stainless-Steel construction and not need lubrication of any type. The Transfer Valve shall be operated hydraulically. Electric or manual valves will not be acceptable in this application. The Transfer Valve shall open to sewer or other treatment and shall have the following features.

(a) shall have a positive closure seal

(b) shall have a minimum discharge of 75 GPM @ 2'/th

(c) shall be WDS 6-inch transfer valve and marked as such

(d) shall have only 3 holding points for easy removal

(e) shall operate during a power failure for washdown

(f) be marked, Made in the USA

2.4 TRANSFER PIT

The WDS 2 x 2 Transfer Pit shall be type 304 stainless steel. The transfer pit shall have a minimum inlet grate dimension of 13-1/2-inch diameter and be 9 inches deep. The transfer pit shall have a 2-inch bottom outlet to sewer and a 2-inch side outlet to storm water. The pit shall be equipped with the following:

- (a) a stainless-steel silt and solids basket
- (b) bolt down ADA style grate
- (c) be installed in accordance with manufacturer's written instructions and the contract documents.
- (d) Couplings for sewer and Stormwater outlet connections shall be Fernco 1056-22 or approved equal and shall be supplied by Wastewater Diversion Systems, Inc. within the Shower Water Transfer System.
- (e) Baffled stormwater outlet to keep floating pollutants from rain an event in the pit to be transferred to sewer at next shower activation.

3.1 INSTALLATION

A. DELIVERY and STORAGE:

(A) Upon delivery of the equipment to the jobsite, the contractor shall take inventory of the shipment and immediately report to the equipment manufacturer any discrepancies between the equipment manufacturer's packing list and shipping documents.

(B) The contractor shall be responsible for off-loading and protection of all equipment against damage and during on-site storage and installation. Damaged equipment and materials will be replaced by the contractor at the contractor's expense.

3.2 SYSTEM START UP AND TRAINING

(A) Supplier of all equipment within this section shall provide one (1) day of start - up service to inspect system installation, train maintenance personnel on the operation of the system and review operation and maintenance manual.

(B) The contractor shall verify in writing that the project is ready for the manufacturer's field services. Copies of written verification shall be sent to WASTEWATER DIVERSION SYSTEMS, INC. PO Box 389 MECHANICSVILLE, VIRGINIA 23111, 804-873-1798 FOXWWSUSA@AOL.COM IN ORDER TO SCHEDULE START UP AND TRAINING.

(C) At a minimum the start - up shall consist of the following.

(1) Inspect the final installation to ensure it complies with the manufacturer's recommended installation procedures.

(2) Start-up of the equipment in the presence of the contractor and owner's operating personnel to ensure opening and closing of the transfer valve.

(3) Filling out and returning commissioning report to WDS, Inc.

3.3 WARRANTY

The equipment/system warranty, unless otherwise stated, shall be warranted to be free of defects in materials and workmanship for a period of 12 months from the date of startup or not more than 18 months after shipping date. The warranty will be voided if the equipment is not installed per the manufacturer's instructions and failing to fill out and return the commissioning report to Wastewater Diversion Systems, Inc

The equipment warranty will be voided if start up is performed by other than Wastewater Diversion Systems, Inc. 8417 Erle Road, Mechanicsville, Virginia 23116, 804-730-1280, foxwwdsusa@aol.com or a designated service company approved & authorized in writing by Wastewater Diversion Systems, Inc.