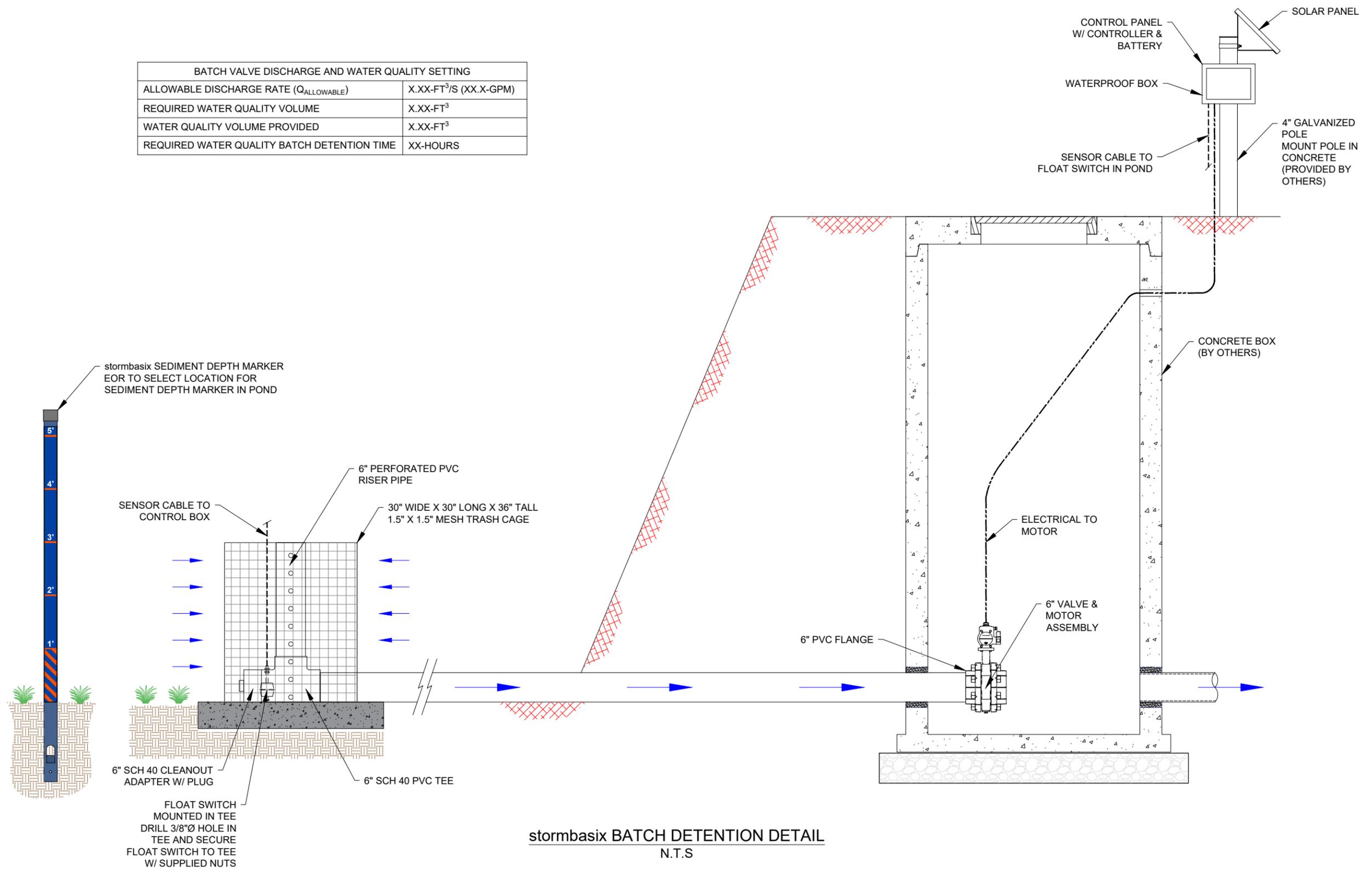
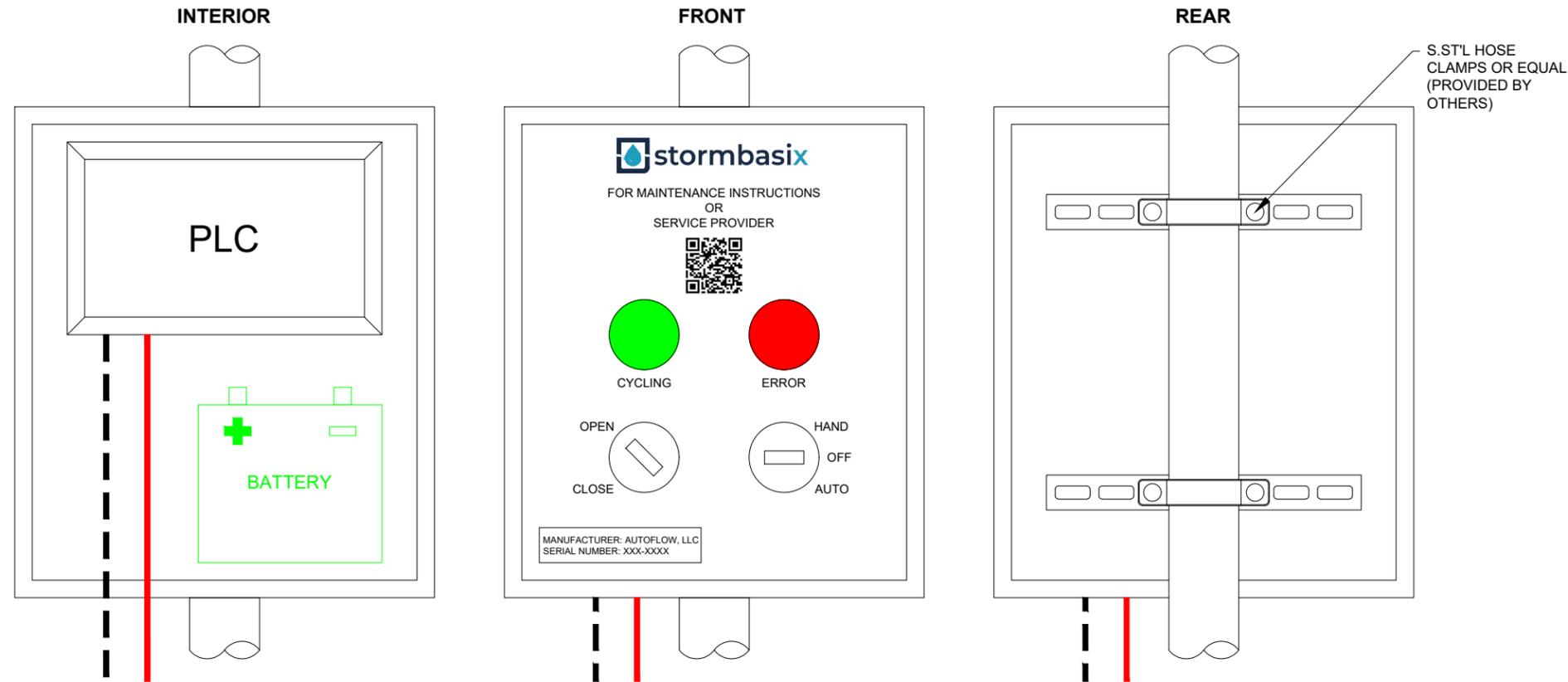


BATCH VALVE DISCHARGE AND WATER QUALITY SETTING	
ALLOWABLE DISCHARGE RATE ($Q_{ALLOWABLE}$)	X.XX-FT ³ /S (XX.X-GPM)
REQUIRED WATER QUALITY VOLUME	X.XX-FT ³
WATER QUALITY VOLUME PROVIDED	X.XX-FT ³
REQUIRED WATER QUALITY BATCH DETENTION TIME	XX-HOURS

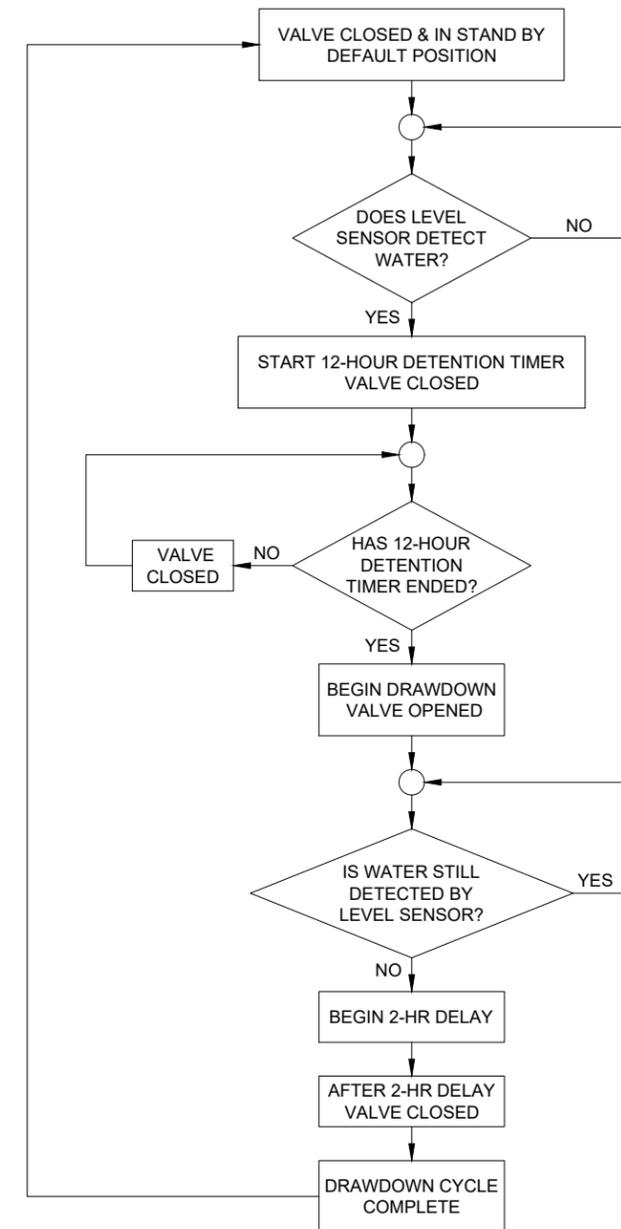


PROJECT: PROJECT NAME CITY, STATE	MODEL:	 	REVISION NO.	0
			DATE	08/09/2025
			SHEET NO.	1
		FOR ADDITIONAL INFORMATION CONTACT: FERGUSON GEOSYNTHETICS & STORMWATER SOLUTIONS www.fergusongss.com		

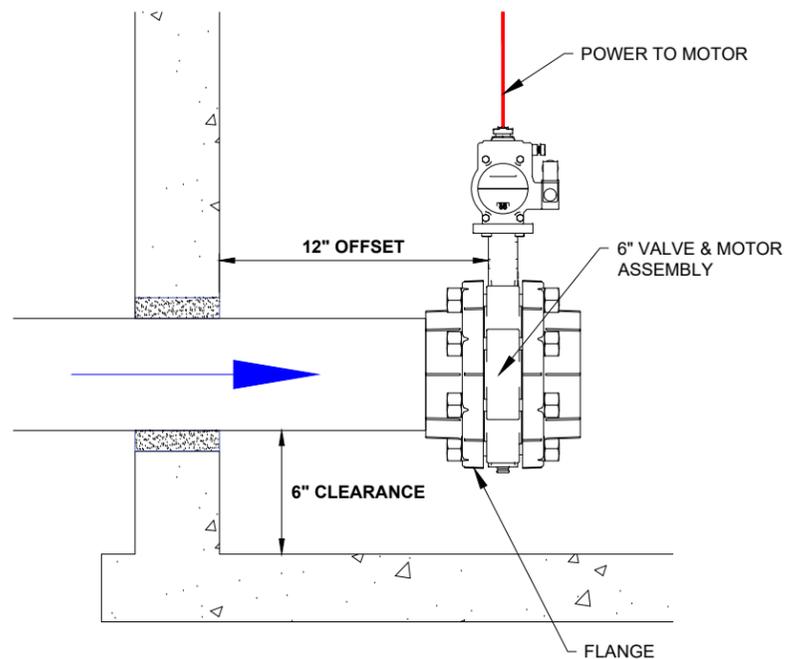
DETAIL 1 - CONTROL BOX DETAIL



DETAIL 2 - PROGRAMMABLE LOGIC FLOW CHART OPERATION FOR DETENTION AND/OR WATER QUALITY



DETAIL 3 - VALVE ASSEMBLY



PROJECT:	MODEL:	 	FOR ADDITIONAL INFORMATION CONTACT: FERGUSON GEOSYNTHETICS & STORMWATER SOLUTIONS www.fergusongss.com	REVISION NO.
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CITY, STATE				DATE
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STORMBASIX SPECIFICATIONS

THE FOLLOWING SPECIFICATIONS DESCRIBE THE COMPONENTS, GENERAL FUNCTIONS, AND APPLICATIONS OF A CONTINUOUSLY MONITORED AUTOMATED STORMWATER SYSTEM (C-MASS), USING THE PROGRAMMED STORMBASIX.

1. CONTINUOUSLY MONITORED AUTOMATED STORMWATER SYSTEM (C-MASS) DEVICE: THE STORMBASIX SHALL PROVIDE FOR ACTIVE MANAGEMENT OF DETAINED STORMWATER VOLUME AND/OR ITS ALLOWABLE DISCHARGE RATE. THE STORMBASIX IS PROGRAMMABLE TO DETAIN A SPECIFIED VOLUME OF STORMWATER FOR A SPECIFIED REQUIRED PERIOD OF TIME.

1.1 THIS STORMBASIX SHALL FUNCTION AS AN ELECTRONICALLY CONTROLLED, SOLAR POWERED STORMWATER MANAGEMENT DEVICE, PROVIDING PRECISION STORMWATER VOLUME MANAGEMENT CAPABILITIES AND REAL-TIME DATA. USING SENSORS, SOLAR POWER, AND AN ELECTRONIC ACTUATOR. THE STORMBASIX CONNECTS TO AN INTAKE RISER SCREEN INSIDE THE STORMWATER IMPOUNDMENT AREA. ASSEMBLY CAN BE CONFIGURED ABOVE GROUND OR BELOW GROUND IN A MANHOLE OR VAULT STRUCTURE.

1.2 PRE-PROGRAMMED OUTFALL VALVE CONTROL: THE STORMBASIX CAN BE PRE-PROGRAMMED TO EXECUTE COMMANDS BASED ON STORM EVENTS, REQUIRED CONTROL VOLUMES AND ALLOWABLE DISCHARGE RATES.

1.3 BATCH DETENTION FUNCTION FOR STORMWATER QUALITY: THE STORMBASIX MAY BE PROGRAMMED TO PROVIDE BATCH DETENTION TO ACHIEVE STORMWATER QUALITY EFFLUENT GOAL OF 80% OR MORE REMOVAL OF TOTAL SUSPENDED SOLIDS (TSS) BY HOLDING THE WATER QUALITY VOLUME (WQV) FOR A REQUIRED PERIOD OF TIME.

1.4 SPILL CONTROL: STORMBASIX WHEN SPECIFIED FOR OIL SPILL CONTROL SHALL BE EQUIPPED WITH POLLUTANT SPECIFIC SENSORS THAT WHEN TRIGGERED AUTOMATICALLY CLOSES THE VALVE UNTIL THE COMMAND IS OVERRIDDEN.

2. COMPONENTS: THE STORMBASIX MAY BE IMPLEMENTED EITHER ABOVE OR BELOW GROUND, AND IS COMPRISED OF THE FOLLOWING COMPONENTS:

2.1 HARDWARE AND CONFIGURATION:

THE STANDARD STORMBASIX ASSEMBLY CONSISTS OF A LOWER AND UPPER COMPONENT: THE LOWER COMPONENT IS THE VALVE KIT CONSISTING OF 6"Ø PIPE SPOOL AND 6"Ø ACTUATED OUTFALL VALVE AND FLOAT SWITCH HOUSING LOCATED IN THE POND. THIS LOWER KIT SHALL HAVE FLANGES ON EACH SIDE OF THE ASSEMBLY CONFORMING WITH AN ANSI B16.5 CLASS 150 FLANGE FOR CONNECTION OF THE OUTFALL PIPE FROM THE DETENTION SYSTEM AND TO A DOWNSTREAM DISCHARGE PIPE IF CALLED FOR ON THE PLANS. THE UPPER COMPONENT IS THE LOCKABLE WEATHERPROOF ENCLOSURE BOX WITH A SOLAR PANEL MOUNTED ON ITS TOP. THIS ENCLOSURE BOX HOUSES THE PROGRAMMABLE CONTROLLER INSIDE A NEMA-3R BOX, BATTERY, AND SOLAR CHARGE CONTROLLER.

2.2 FOR ABOVE GROUND APPLICATIONS, THE COMPLETE "OUTLET CONFIGURATION" MAY BE BOLTED INLINE WITH EIGHT (8X) ¾"Ø BOLTS AND NUTS THAT CONFORM TO ANSI B16.5 CLASS 150 FLANGE GRADE SPECIFICATIONS TO THE OUTLET PIPE AND MAY BE SUPPORTED BY THE PIPE ALONE. NO ADDITIONAL SUPPORT IS REQUIRED BUT MAY BE PROVIDED ON REQUEST. THE DISCHARGE PIPE, IF ANY, CONNECTS WITH ONLY FOUR (4X) BOLTS TO PROPERLY FLANGE UP TO THE DISCHARGE SIDE OF THE ACTUATED VALVE.

2.3 OTHER ELECTRONICS SPECIFICATIONS:

- MOTOR - CONTAINS HEX WRENCH FOR MANUAL BYPASS OF ELECTRIC ACTUATOR CONTROLS
- BATTERY - BATTERY THAT PROVIDES POWERS THE SYSTEM
- SOLAR PANEL - PROVIDES 30-WATT CHARGING TO THE 12-VOLT BATTERY
- SOLAR CHARGE CONTROLLER - REGULATES THE VOLTAGE AND CURRENT DELIVERED TO THE BATTERY
- SENSORS: FLOAT SWITCH - A SENSOR SWITCH CAPABLE OF STAYING SUBMERSED IN WATER INDEFINITELY AND IS MOUNTED IN A 6" PVC TEE CONNECTED TO THE RISER PIPE IN THE POND
- OPTIONAL SENSORS: HYDROCARBON SENSOR - THIS OPTIONAL SENSOR MAY BE FITTED TO THE STORMBASIX TO PERFORM SPECIFIC FUNCTIONS BASED ON THE PRESENCE OF HYDROCARBON CONTAMINATION

3. PRETREATMENT - RISER AND TRASH SCREENS:

3.1 A PERFORATED 6"Ø PVC RISER CONNECTED TO THE 6"Ø OUTFALL PIPE WITHIN THE DETENTION AREA.

3.2 THE TRASH CAGE SHALL BE COMPRISED OF ANGLE IRON AND A 1.5" X 1.5" MESH TO PREVENT FLOATABLES AND OTHER CONTAMINANTS FROM ENTERING AND CLOGGING THE PERFORATED RISER.

4. ALERTS:

- LOW BATTERY
- LOSS OF FUNCTION

6. MAINTENANCE AND OPERATION SUBMITTAL: AN OPERATION AND MAINTENANCE MANUAL SHALL BE PROVIDED, REVIEWED AND APPROVED DURING THE CONSTRUCTION SUBMITTAL PROCESS AND SHALL INCLUDE AT A MINIMUM: GREASING AND LUBRICATION ITEMS AND CYCLE FOR THE ACTUATOR, MOTOR AND VALVE; INSPECTION AND MAINTENANCE OF THE SOLAR PANEL, GEL BATTERY, TRASH CAGE AND INTAKE RISER.

7. SHIPPING, HANDLING AND STORAGE: THE STORMBASIX IS SHIPPED IN A NEAR-FULLY ASSEMBLED CONFIGURATION AND SHOULD BE STORED LIKEWISE. THE SYSTEMS ARE TRANSPORTED AND STORED ON PALLETS AND MUST REMAIN SECURED VIA STRAPS OR STEEL BANDS TO SAID PALLET PRIOR TO INSTALLATION. THE SOLAR PANEL IS NOT INSTALLED AT TIMES OF TRANSPORT OR STORAGE AND

SHOULD NOT BE INSTALLED UNTIL THE UNIT IS READY TO BEGIN OPERATION. THE BATTERY MAY BE STORED INSIDE THE ELECTRONICS BOX.

8. INSTALLATION: INSTALL THE STORMBASIX SYSTEM PER THE APPROVED PLANS, DETAIL AND DIAGRAM SHEETS. INSTALLATION IS TO BE PERFORMED BY SKILLED WORK PEOPLE WITH A SATISFACTORY RECORD OF PERFORMANCE ON EARTHWORKS, PIPE, WELDING, CHAMBER, OR POND/LANDFILL CONSTRUCTION PROJECTS.

9. SAFETY INFORMATION AND WARNINGS:

- ALWAYS KEEP HANDS CLEAR OF THE VALVE AND MOTOR WHEN THE UNIT IS IN OPERATION
- TURN THE POWER SWITCH OFF WHEN PERFORMING ANY ELECTRICAL WORK
- DO NOT ENTER THE WATER WHEN THE DEVICE IS ACTIVELY DRAINING WATER
- ALWAYS USE PROPER PERSONAL PROTECTION EQUIPMENT (PPE)
- FOLLOW ALL LOCAL, STATE AND FEDERAL REGULATIONS AS IT RELATES WORKPLACE SAFETY (SUCH AS CONFINED SPACE ENTRY)

10. PRODUCTS: THE MANUFACTURER SHALL BE AN ESTABLISHED STORMWATER COMPANY THAT HAS AT LEAST FIVE (5) INSTALLATIONS OF C-MASS DEVICES THAT HAVE BEEN IN USE AND FUNCTIONAL FOR FIVE (5) OR MORE YEARS.

CONTINUOUSLY MONITORED AUTOMATED STORMWATER SYSTEM (C-MASS), SHOWN ON THE PLANS AS THE STORMBASIX SHALL BE AN AUTOMATED VALVE PROVIDED BY:

DISTRIBUTOR:
FERGUSON WATER WORKS
www.ferguson.com

MANUFACTURER:
CONVERGENT WATER TECHNOLOGIES
(800) 711-5428
www.stormbasix.com

11. QUALITY ASSURANCE AND PERFORMANCE SPECIFICATIONS: THE QUALITY OF ALL SYSTEM COMPONENTS AND ALL OTHER APPURTENANCES AND THEIR ASSEMBLY PROCESS SHALL BE SUBJECT TO INSPECTION UPON DELIVERY OF THE SYSTEM TO THE WORK SITE.

PROJECT:

PROJECT NAME
CITY, STATE

MODEL:

 **stormbasix**
BATCH DETENTION VALVE

 **FERGUSON**

FOR ADDITIONAL INFORMATION CONTACT:
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