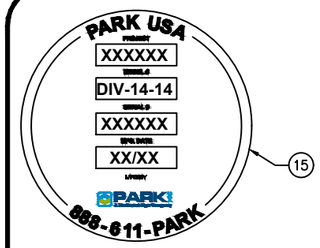
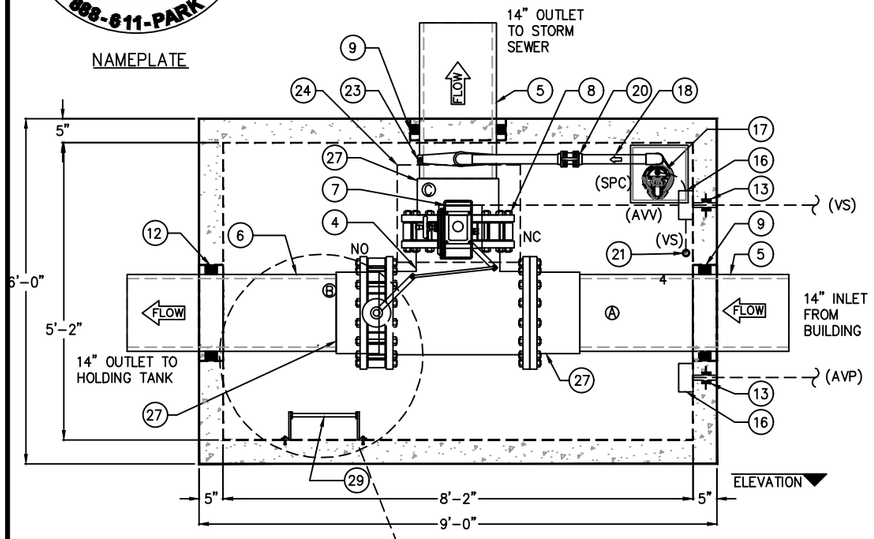
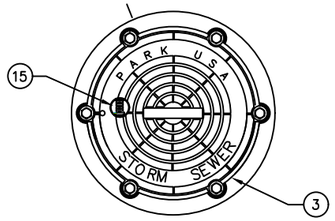
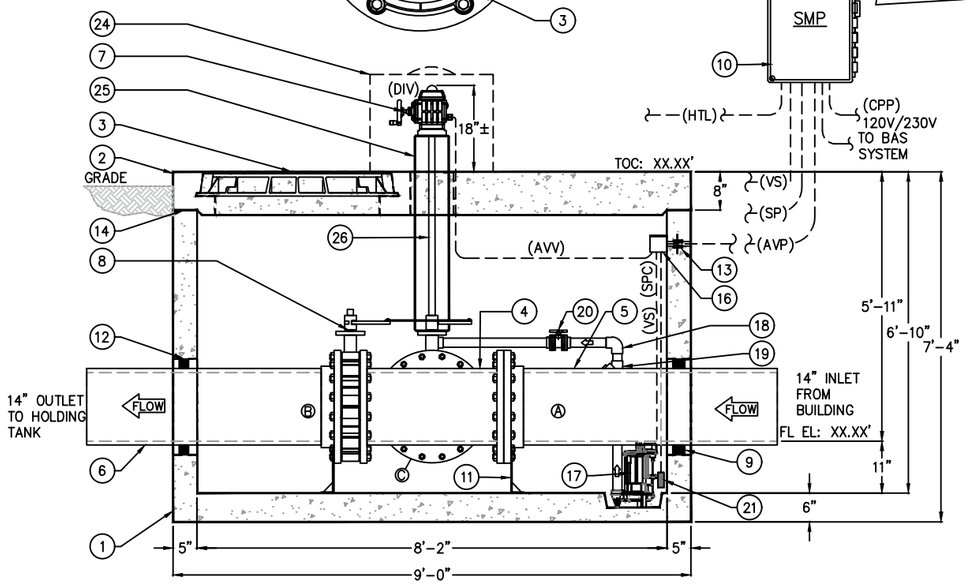


NAMEPLATE



PLAN VIEW





ELEVATION

SPECIFICATIONS

CONCRETE: CLASS I/II CEMENT WITH DESIGN STRENGTH OF 5000 PSI AT 28 DAYS. UNIT IS OF MONOLITHIC CONSTRUCTION AT FLOOR AND FIRST STAGE OF WALL WITH SECTIONAL RISER TO REQUIRED DEPTH.

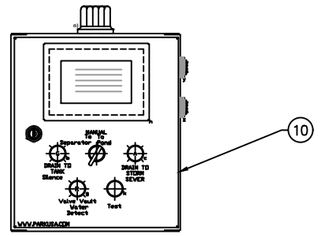
REINFORCEMENT: GRADE 60 REINFORCED WITH STEEL REBAR CONFORMING TO ASTM A615 AND ASTM-C478 ON REQUIRED CENTERS OR EQUAL.

D.I. CASTINGS: MANHOLE FRAMES, COVERS OR GRATES ARE MANUFACTURED OF DUCTILE IRON CONFORMING TO ASTM A536, AASHTO M306, & AASHTO M105 STANDARDS. MANHOLE SHALL BE NOMINAL 24" DIAMETER AND BE HS-20 TRAFFIC DUTY.

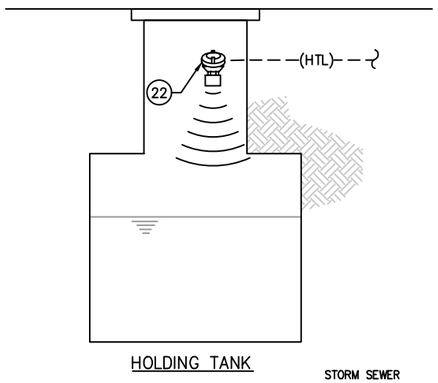
ENGINEERING DATA

FIELD EXCAVATION AND PREPARATION SHALL BE COMPLETED PRIOR TO DELIVERY OF INTERCEPTOR. USE DIMENSIONAL DATA AS SHOWN. UNIT SHALL BE STRUCTURALLY AND HYDRAULICALLY ENGINEERED CONFORMING TO UPC AND ACI BUILDING CODES. MANUFACTURER SHALL ENSURE VAULT ASSEMBLY DESIGN ACCOUNTS FOR PREVENTION OF BUOYANCY EFFECT, IF WATER TABLE DEPTH IS PROVIDED.

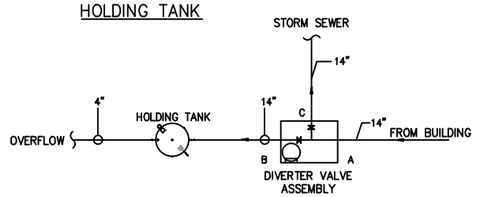
NOTES:
1. JOINTS TO BE SEALED w/ PLASTIC RAM-NEK GASKET
2. ALL DIMENSIONS ARE TO CENTER OF BLOCK-OUTS
3. LIFTING INSERTS AS REQUIRED
4. STRUCTURE TO BE PLACED ON MIN 6" STABALIZED BASE
5. RISER SECTIONS FURNISHED AS REQUIRED



CONTROL PANEL



HOLDING TANK



KEY PLAN

CONDUIT/WIRE LEGEND				
MARK	DESCRIPTION	ELECT	WIRE SIZE	CONDUIT SIZE
AVP	ACTUATOR VALVE	120/230 VAC	(6) 14GA	1"
VS	VAULT WATER SENSOR	120/230 VAC	(2) 14GA	1"
AVV	ACTUATOR	120/230 VAC	(6) 14GA	SO CORD
SP	SUMP PUMP	120/230 VAC	(3) 12GA	1"
SPC	SUMP PUMP (INTERIOR)	120/230 VAC	(3) 12GA	SO CORD
HTL	HOLDING TANK (LEVEL SENSOR)	120/230 VAC	(3) 12GA	1"
OPP	CONTROL PANEL POWER	120/230 VAC	(3) 12GA	1"

NOTE: ALL WIRING/ CONDUIT SIZES ARE SUBJECT TO NEC AND ALL OTHER CODES

SPECIFICATIONS
STORMWATER DIVERTER SYSTEM

A. General Conditions:

A diverter valve shall be provided to direct flow from the building rainwater collection system, to either the holding tank or storm sewer system the sanitary sewer. The contractor shall furnish a diverter system including labor, materials and equipment which includes but is not limited to the containment tank, drain well, drainage, hatches, vent, supports, floats, valves, piping, shut off and check valves, protective coating, control panel and electric systems, access ladders, liquid level controls, internal wiring and all other required appurtenances for a completely operational stormwater diverter system.

B. Diverter Valve Assembly

The diverter valve shall be a 3-way butterfly valve that shall consist of ductile iron body with epoxy coating, EPDM o-ring seats and socket, and threaded end connections. The 3-way valve shall be fitted with an electric actuator that provides for a quarter-turn at a minimum torque of 300 in-lbs. The actuator shall include a housing that is designed to meet NEMA 4X environmental demands. A clutch-free manual override system to provide full-time override capabilities during powered or unpowered events shall be included. The diverter valve assembly shall be housed in a precast concrete vault suitable for direct burial. The vault shall include a manway access 30" in diameter. The access cover shall be ductile iron, bolted, and be watertight (pressure tested to 15 PSI). Provide water detection sensor and submersible sump pump with an integral float switch. The actuator shall have a stainless-steel extended valve stem/housing in order to extend the actuator 18" above grade to protect against moisture. Provide a weatherproof and removable aluminum or stainless-steel protective enclosure secured with security bolts. The enclosure shall have a glass window to allow a visual inspection of diverter valve position.

C. Diverter Control System:

Contractor shall furnish a diverter control panel that is manufactured by the diverter valve system manufacturer. Provide a ParkUSA RainTrooper Model RTV annunciation panel for the Diverter Valve that shall include audible alarms, visual alarms, holding tank continuous level data, diverter HOA switch, diverter position light indicators, push to test LED indicators, silence button for audible alarm, and dry contacts. Nameplates shall be affixed for pushbuttons, switches, and the indicator lights. Common 120V alarm buzzers with a silencing push button shall be included in the panel and activated for high and low water levels. The alarms can be interfaced and monitored by the Building Automation System (BAS). Provide auxiliary contacts for BAS interface. The panel shall be equipped with a configured HMI touch screen and programmable logic controller (PLC) for easy operator use. The panel shall be completely wired and tested prior to shipment. All components shall be IEC/UL approved. Complete electrical diagrams, dimensional drawings, and functional systems description shall be provided to the engineer for approval.

D. Control System Startup & Training:

A manufacturer's representative shall be available for final adjustment and start-up of the control system after installation is complete and to instruct the operating personnel in the use of the equipment. The manufacturer shall maintain spare parts for immediate availability.

KEYED NOTES		
MARK	QTY	DESCRIPTION
1	1	6'-0" x 9'-0" x 5'-7" DEEP PRECAST CONCRETE VAULT
2	1	8" THK FLAT CONCRETE TOP
3	1	24" DIA DUCTILE IRON WATER-TIGHT RING & COVER
4	1	14" DUCTILE IRON TEE
5	2	14" SCH 80 PVC PIPE
6	1	14" SCH 80 PVC PIPE
7	1	ELECTRIC VALVE ACTUATOR (DIV)
8	2	14" TANDEM ACTUATED BUTTERFLY VALVES
9	2	18" DIA PIPE PENETRATION FOR 14" PVC PIPE w/ LINKSEAL LS475 x 21 PCS
10	1	STORMWATER MANAGEMENT PANEL SMP NEMA 4X (MOUNTED & WIRED BY CONTRACTOR)
11	3	GALVANIZED PIPE SUPPORT
12	1	18" DIA PIPE PENETRATION FOR 14" PVC PIPE w/ LINKSEAL LS575 x 16 PCS
13	2	3" DIA PIPE PENETRATION FOR 1" PVC ELEC CONDUIT w/ LINKSEAL LS300 X 4 PIECES
14	1	ALL JOINTS MADE WATER-TIGHT w/ PLASTIC FLEXIBLE GASKET (RAMNEK)
15	1	NAMEPLATE INDICATING: MFG: ParKUSA 888-611-PARK WWW.PARKUSA.COM MODEL: DIV-14-14 DATE MANUFACTURED
16	2	6"x6"x4" J-BOX
17	1	SUBMERSIBLE SUMP PUMP w/ INTEGRAL FLOAT SWITCH
18	2	1½" PVC PIPING TERMINATING IN STORM SEWER DISCHARGE FROM VAULT
19	1	1½" PVC CHECK VALVE
20	1	1½" PVC TRUE UNION BALL VALVE
21	1	WATER DETECTION SENSOR (E_t)
22	–	HOLDING TANK ULTRASONIC LEVEL TRANSDUCER (UT)
23	1	14"x1½" EPOXY COATED SADDLE
24	1	PROTECTIVE ENCLOSURE w/ DOME
25	1	SS MOUNTING BRACKET FOR ACTUATOR
26	1	EXTENDED VALVE STEM
27	3	14" SCH 80 PVC FLANGE
29	1	GALVANIZED LADDER

RainTrooper
Rainwater Harvest System

ELECTRIC ACTUATOR WARNING
THE HOUSING FOR THE ELECTRIC ACTUATOR IS WEATHERPROOF (NEMA 4X RATED). THE ENCLOSURE IS NOT RATED FOR SUBMERSION. IF SUBMERSION OCCURS THE ELECTRIC ACTUATOR MAY BECOME DAMAGED AND NO LONGER FUNCTION AS INTENDED

PARK USA
A Northwest Pipe Company

STORMWATER DIVERTER SYSTEM
MODEL RTV-14-14

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