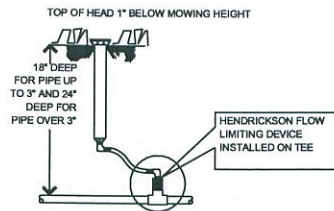
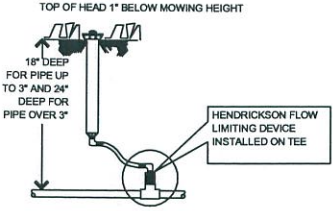


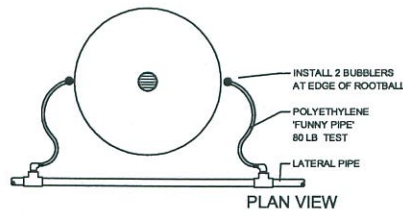
A



SPRAY HEAD
N.T.S.



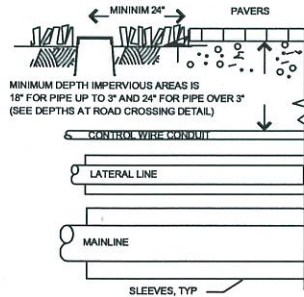
ROTARY NOZZLE HEAD
N.T.S.



TREE BUBBLER
N.T.S.

B

- 1 INSTALL SLEEVES CROSSING UNDER SIDEWALKS AND PAVERS
- 2 SLEEVE PIPE SHALL BE HDPE DR 17 OR PVC SCHEDULE 40
- 3 CROSSINGS SHALL BE DIRECTIONAL BORE, UNLESS WRITTEN PERMISSION IS GRANTED FOR CUTTING.
- 4 INSTALL A 6" PLASTIC BOX TO IDENTIFY THE LOCATION OF SLEEVE CROSSINGS



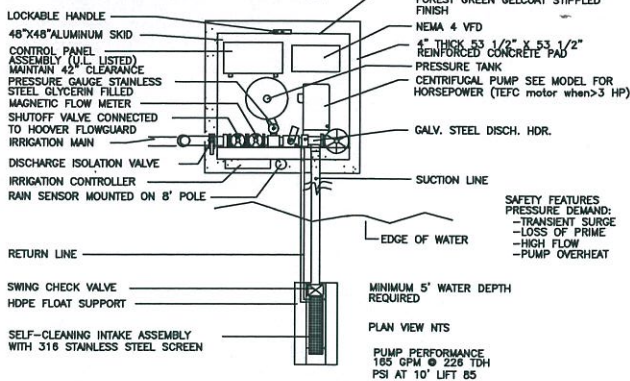
SLEEVES
N.T.S.

C

NOTE: SUCTION PIPES AND FITTINGS SHALL BE HDPE HEAT FUSED. CHECK VALVE 3" AND LARGER SHALL BE SWING TYPE, 2" AND SMALLER SHALL BE POPPET STYLE. ALL EXPOSED SUCTION & DISCHARGE PIPE ADJACENT TO THE PUMP SYSTEM SHALL BE GALVANIZED STEEL. BUTTERFLY OR BALLVALVE PROVIDED AT EACH PUMP. PROVIDE MINIMUM OF 4" CLEARANCE ON ALL SIDES OF PUMP SYSTEM.

COMMUNICATION VIA CELLULAR MODEM OR 10/100 BASE T DIRECT ETHERNET CONNECTION. USER DEFINED INTERNET BASED CONTROL PARAMETERS USING STANDARD WEB BROWSER WITH EVENT LOGGING AND EMAIL ALERTS FOR WARNINGS AND ALARMS AS FOLLOWS:

- X MAXIMUM GALLON PER MINUTE USAGE WITH ADJUSTABLE TIME DELAY AND NUMBER OF RESTART ATTEMPTS
- X MINIMUM TOTAL DAILY WATER USAGE
- X DAILY, MONTHLY AND ANNUAL WATER USAGE BUDGETS
- X GRAPHING OF REAL TIME AND HISTORICAL FLOW AND PRESSURE (INCOMING SUPPLY & DISCHARGE) AND SYSTEM EVENTS WITH TIME AND DATE SHOWN
- X RAIN SENSOR STATUS
- X HISTORIC WATER USAGE BY DAY AND MONTH
- X LOSS OF PRIME
- X VFD FAULT
- X PUMP HIGH TEMPERATURE
- X PUMP RAPID CYCLE
- X SHUT OFF VALVE STATUS
- X SHUTOFF VALVE BYPASS WITH ADJUSTABLE TIMER

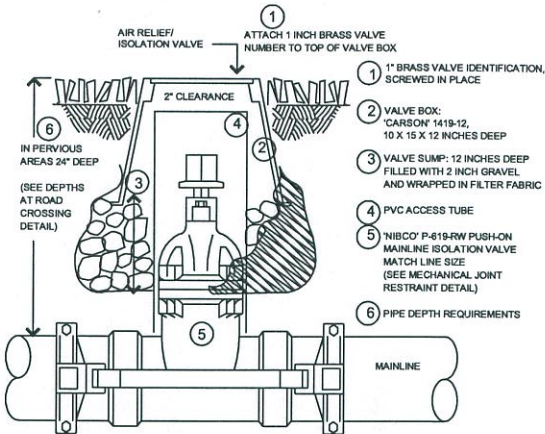


HOOVER PUMPING MODEL: HCF-20PDV-230/3-E-24,L,M,R2,S,Z FILE PH#10792.DWG 06/09
Pompano Beach, Florida, Tel: 954-971-7350

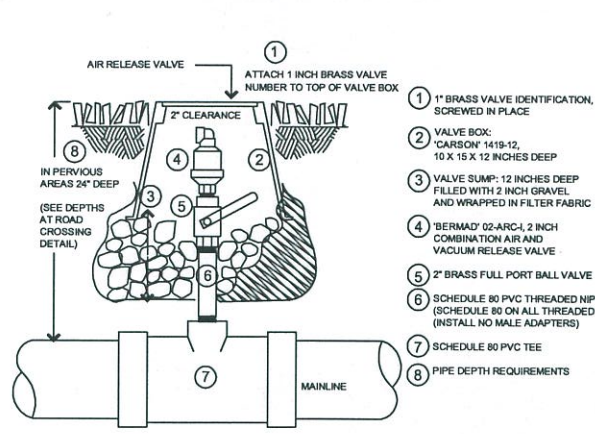
CENTRIFUGAL PUMP SYSTEM DETAIL
N.T.S.

FIBERGLASS ENCLOSED SINGLE LAKE SUCTION @
PRESSURE DEMAND, VARIABLE FREQUENCY DRIVE(VFD)
SELF-CLEANING INTAKE SCREEN, HOOVER FLOWGUARD

D



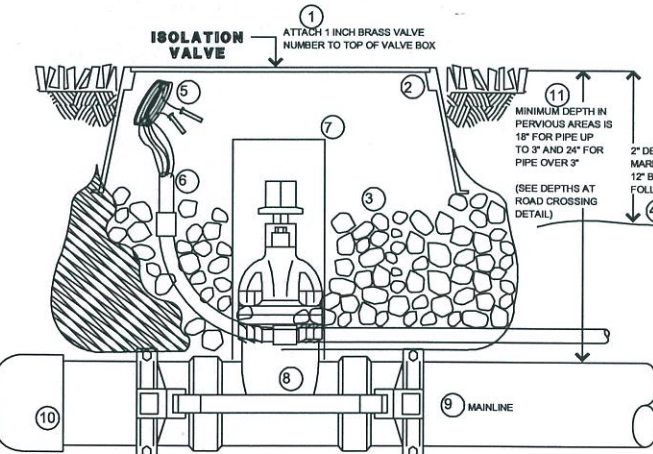
MAINLINE ISOLATION VALVE
N.T.S.



MAINLINE AIR RELEASE VALVE
N.T.S.

NOTE: ALL COMPONENTS SHALL BE PURPLE COLORED TO INDICATE RE-USE WATER

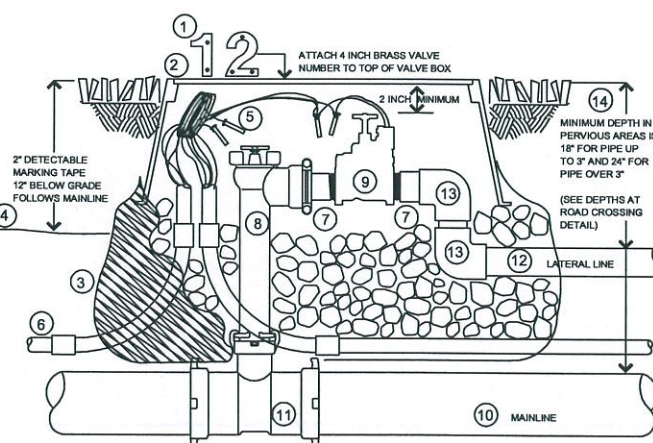
- 1 VALVE IDENTIFICATION LABEL, BRASS
- 2 VALVE BOX: "CARSON" 1324-12, 16 X 25 X 12 INCHES DEEP
- 3 VALVE SUMP: 12 INCHES DEEP FILLED WITH 2 INCH GRAVEL AND WRAPPED IN FILTER FABRIC
- 4 DETECTABLE MARKING TAPE: 2 INCH WIDE TAPE ABOVE MAINLINE AND 12" BELOW GRADE
- 5 CONTROL WIRE: 12 AWG COPPER, TYPE UF-83 THINWALL WITH A 24" SERVICE COIL AND DRY-6 WATERPROOF WIRE CONNECTORS. ALL CONTROL WIRES ACCESSIBLE AT EVERY VALVE BOX. INSTALL A DIFFERENT COLOR FOR EACH VALVE (DO NOT USE GREEN). INSTALL WHITE COLOR AS THE COMMON. INSTALL EXTRA BLUE COLORED WIRES WHERE NOTED ON PLANS
- 6 CONTROL WIRE CONDUIT: 2 INCH GREY PVC ELECTRIC CONDUIT USING LONG RADI SWEEPS COMING INTO EACH VALVE BOX
- 7 PVC ACCESS TUBE
- 8 "NIBCO" P-619-RW PUSH-ON MAINLINE ISOLATION VALVE MATCH LINE SIZE (SEE MECHANICAL JOINT RESTRAINT DETAIL)
- 9 MAINLINE PIPE: PVC CLASS 200, GASKETTED, INSTALL LABELS FACING UP
- 10 PVC CAP
- 11 PIPE DEPTH REQUIREMENTS



END OF MAINLINE INSTALLATION
N.T.S.

NOTE: ALL COMPONENTS SHALL BE PURPLE COLORED TO INDICATE RE-USE WATER

- 1 VALVE IDENTIFICATION LABEL, BRASS
- 2 VALVE BOX: "CARSON" 1324-12, 16 X 25 X 12 INCHES DEEP
- 3 VALVE SUMP: 12 INCHES DEEP FILLED WITH 2 INCH GRAVEL AND WRAPPED IN FILTER FABRIC
- 4 DETECTABLE MARKING TAPE: 2 INCH WIDE TAPE ABOVE MAINLINE AND 12" BELOW GRADE
- 5 CONTROL WIRE: 12 AWG COPPER, TYPE UF-83 THINWALL WITH A 24" SERVICE COIL AND DRY-6 WATERPROOF WIRE CONNECTORS. ALL CONTROL WIRES ACCESSIBLE AT EVERY VALVE BOX. INSTALL A DIFFERENT COLOR FOR EACH VALVE (DO NOT USE GREEN). INSTALL WHITE COLOR AS THE COMMON. INSTALL EXTRA BLUE COLORED WIRES WHERE NOTED ON PLANS
- 6 CONTROL WIRE CONDUIT: 2 INCH GREY PVC ELECTRIC CONDUIT USING LONG RADI SWEEPS COMING INTO EACH VALVE BOX
- 7 SCHEDULE 80 PVC THREADED NIPPLE. ALL THREADED PVC FITTINGS SHALL BE SCHEDULE 80. NO MALE ADAPTERS SHALL BE INSTALLED
- 8 MANUAL GATE VALVE: "LEEMCO" LV 218 RIGHT ANGLE VALVE
- 9 ELECTRIC CONTROL VALVE: "RAINBIRD" PEBB-R SIZED PER PLANS
- 10 MAINLINE PIPE: PVC CLASS 200, GASKETTED, INSTALL LABELS FACING UP
- 11 MAINLINE FITTINGS: "LEEMCO" DUCTION IRON WITH JOINT RESTRAINTS AT DIRECTION CHANGES
- 12 LATERAL LINE PIPE: PVC SCHEDULE 40, INSTALL LABELS FACING UP
- 13 LATERAL LINE FITTINGS: PVC SCHEDULE 40
- 14 PIPE DEPTH REQUIREMENTS



VALVE INSTALLATION
N.T.S.

Date	Description
2-14-11	ADDED NOTE CHG. DETAIL

A

B

C

D

Michael Singer Inc.
South Shores - Denville Beach, FL
561-287-0244
msig@msinger.com

KEITH AND SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
8001 W. WINDY HILL BLVD. SUITE 100
FORT LAUDERDALE, FL 33309

State of Florida
License No. 0000354
C. MICHAEL OLIVER, R.L.A.

PHASE I TRANSPORTATION CENTER
SEMINOLE COCONUT CREEK CASINO
SEMINOLE TRIBE OF FLORIDA
5600 NW 40TH STREET
COCONUT CREEK, FLORIDA 33073

DRAWN BY
KEITH AND SCHNARS, PA. MO
CHECKED BY
CMO
ISSUE DATE
AUGUST 16, 2010
JOB NUMBER
17796.42
SHEET NAME
IRRIGATION
DETAILS

IR-6