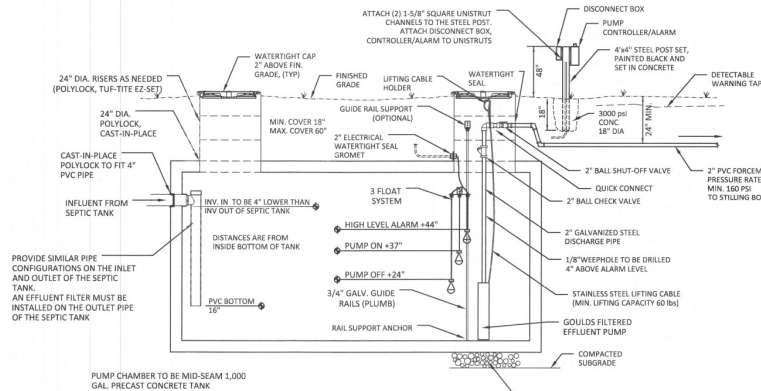


STILLING BOX & DISTRIBUTION BOX DETAILS

- NOTES:
1. COORDINATE SIZE OF STRUCTURES AND THE DRAINFIELD SIZE AND LOCATION WITH THE AOSE PRIOR TO BEGINNING ANY WORK ON THE SEPTIC SYSTEM
  2. THE INVERT IN ELEVATION IS TO BE HIGHER THAN THE INVERT OUT ELEVATION
  3. CAP ALL UNUSED OPENINGS IN THE DISTRIBUTION BOX WITH 4" PVC STUB AND SOLVENT WELDED CAP. STUBS ARE NOT REQUIRED IF UNUSED OPENINGS ARE SEALED FROM THE MANUFACTURER. SEAL ALL UNUSED OPENINGS IN THE STILLING BOX.
  4. CONCRETE STRENGTH IS 4500 PSI W/ STRUCTURAL FIBER REINFORCING
  5. THE 2" FM OPENING SHALL BE GROUTED AROUND THE ENTIRE OPENING, WITH NON-SHRINK GROUT.
  6. THE STILLING BOX IS AN 8 PORT DISTRIBUTION BOX AND THE DISTRIBUTION BOX IS 16-PORT. BOTH BOXES ARE SUPPLIED BY CT JAMISON (540) 483-5944.



PUMP CHAMBER DETAIL

- NOTES:
1. TANK IS BASED ON CT JAMISON DESIGN. CONTACT PATTY AT (540) 483-5944 FOR ADDITIONAL DETAILS
  2. CONCRETE STRENGTH IS 4500 PSI, MINIMUM, AND CONTAINS #4 REBAR ON 1' CENTER
  3. POLYLOCK PIPE SEALS CAST IN TANK ARE REQUIRED
  4. MASTIC SEALANT IN TANK JOINT REQUIRED
  5. ADJUST RISERS AS NECESSARY TO ENSURE THEY ARE 2" ABOVE THE FINISHED GRADE.
  6. GRADE AREA TO PREVENT PONDING AND TO DRAIN RUNOFF AWAY FROM THE ACCESS HOLES.
  7. INVERT IN AT PUMP CHAMBER TO BE SET 4" BELOW INVERT OUT OF SEPTIC TANK.
  8. STUB OUT AND CAP ALL UNUSED PREFABRICATED OPENING IN THE TANKS.

#### PUMP CONTROLLER/ALARM DESIGN & NOTES

THE PUMP & CONTROLLER/ALARM ARE BASED ON THE FOLLOWING CRITERIA:

VOLUME DOSED SYSTEM	94 FT.
STATIC HEAD	13 FT.
FRICTION HEAD	107 FT.
TOTAL DYNAMIC HEAD	120 FT.
FLOW RATE	20 GPM
FORCE MAIN VELOCITY	2.04 FPS
VOLUME / CYCLE	225 GAL = 1/4 DAILY FLOW
PUMP RUN TIME / CYCLE	9.78 MIN.
PUMP DESIGN POINT	23 GPM @ 107 FT. OF HEAD

THIS IS A SIMPLEX SYSTEM - THE PUMP IS A GOULDS - FILTERED EFFLUENT PUMP MODEL 20E10221, 1.0 HP, SINGLE PHASE WITH A FLOW RANGE OF 6-28 GPM. MAX. HEAD AT 20 GPM IS 170 FT. AN EQUAL PUMP MAY BE APPROVED BY THE DESIGN ENGINEER.

A EFFLUENT FILTER MUST BE INSTALLED ON THE OUTLET DRAIN OF THE SEPTIC TANK, PRIOR TO ANY EFFLUENT ENTERING THE PUMP CHAMBER. PROVIDE AN ACCESS PORT ABOVE THE FILTER FOR EASE OF FILTER REMOVAL, CLEANING AND REPLACEMENT.

THE CONTROL PANEL AND SWITCHES SHALL BE A SIE RHOMBUS MODEL NEX1046437, FOR A SIMPLEX VOLUME DOSED SYSTEM. SINGLE PHASE, NEMA 4X ENCLOSURE WITH PADLOCKABLE LATCH, HIGH LEVEL ALARM HORN AND LIGHT, AND ON, OFF AND HIGH LEVEL ALARM FLOAT SWITCHES

#### PLUMBING/INSTALLATION NOTES

THE FORCE MAIN IS TO BE 2" PVC PRESSURE PIPE RATED AT MIN. 160 PSI. WITH A MINIMUM COVER OF 24" BELOW FINISHED GRADE

THE CHECK VALVE IS TO BE A 2" BRASS BALL CHECK VALVE, PRESSURE RATED AT MIN. 150 PSI. TEMPERATURE RATED AT 180° F.

THE SHUT OFF VALVE IS TO BE A FULL PORT BRASS BALL VALVE WITH A HANDLE LEVER. MAX. PRESSURE 600 PSI WOG, TEMPERATURE RATED 0 - 400° F.

ALL GRAVITY LINES TO BE SCHEDULE 40 PVC.

PLUMBING TO BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE (USBC) AND THE VIRGINIA PLUMBING CODE.

#### ELECTRICAL/INSTALLATION NOTES

THE PANEL BOX AND CONTROLLER/ALARM ARE TO BE MOUNTED ON A UNISTRUT CHANNELS & A 4"x4" STEEL POST NEAR THE PUMP CHAMBER OUT OF THE RANGE OF VEHICULAR TRAFFIC.

THE CONTROLLER/ALARM AND THE PUMP REQUIRE SEPARATE AND DEDICATED CIRCUITS. NO SPLICES ALLOWED UNDERGROUND OR IN THE PUMP STATION FOR ELECTRICAL SERVICE OR FLOATS.

FOLLOW MANUFACTURERS INSTRUCTIONS FOR INSTALLATION OF CONTROLLER, ALARM AND FLOAT SWITCHES.

ELECTRICAL WIRING TO BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE (USBC) AND THE VIRGINIA ELECTRICAL CODE.

ELECTRICAL WIRING TO BE A MINIMUM OF 24" BELOW GRADE IN A 2" SCH40 PVC CONDUIT.

DATE:	June 26, 2020
REVISIONS	
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**HUGHES ASSOCIATES**  
ARCHITECTS & ENGINEERS  
656 LEM AVENUE SW | ROANOKE, VIRGINIA 24016  
540.342.4002  
www.hughesassoc.com

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DRAWN BY: *xxx*  
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SEPTIC SYSTEM  
PLAN &  
DETAILS



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19019  
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C-12