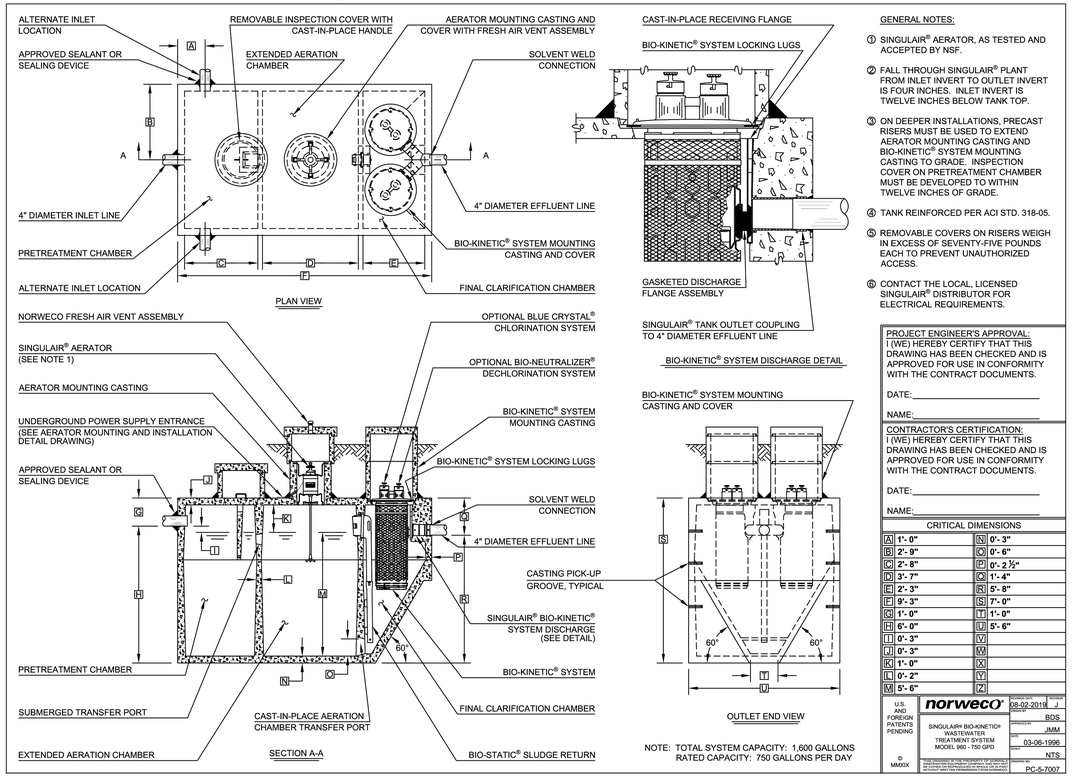
SEPTIC TANK TREATMENT UNIT SPECIFICATION (PBTS SYSTEM)
NUMBER: 13-160-NW2-C3



NOTE: TOTAL SYSTEM CAPACITY: 1,600 GALLONS
RATED CAPACITY: 750 GALLONS PER DAY

GENERAL NOTES:

1. SINGULAIR® AERATOR, AS TESTED AND ACCEPTED BY NSF.
2. FALL THROUGH SINGULAIR® PLANT FROM INLET INVERT TO OUTLET INVERT IS FOUR INCHES. INLET INVERT IS TWELVE INCHES BELOW TANK TOP.
3. ON DEEPER INSTALLATIONS, PRECAST RISERS MUST BE USED TO EXTEND AERATOR MOUNTING CASTING AND BIO-KINETIC® SYSTEM MOUNTING CASTING TO GRADE. INSPECTION COVER ON PRETREATMENT CHAMBER MUST BE DEVELOPED TO WITHIN TWELVE INCHES OF GRADE.
4. TANK REINFORCED PER ACI STD. 318-05.
5. REMOVABLE COVERS ON RISERS WEIGH IN EXCESS OF SEVENTY-FIVE POUNDS EACH TO PREVENT UNAUTHORIZED ACCESS.
6. CONTACT THE LOCAL, LICENSED SINGULAIR® DISTRIBUTOR FOR ELECTRICAL REQUIREMENTS.

PROJECT ENGINEER'S APPROVAL:
I (WE) HEREBY CERTIFY THAT THIS DRAWING HAS BEEN CHECKED AND IS APPROVED FOR USE IN CONFORMITY WITH THE CONTRACT DOCUMENTS.

DATE:_____

NAME:_____

CONTRACTOR'S CERTIFICATION:
I (WE) HEREBY CERTIFY THAT THIS DRAWING HAS BEEN CHECKED AND IS APPROVED FOR USE IN CONFORMITY WITH THE CONTRACT DOCUMENTS.

DATE:_____

NAME:_____

CRITICAL DIMENSIONS

A	1'- 0"	N	0'- 3"
B	2'- 9"	O	0'- 6"
C	2'- 8"	P	0'- 2 ½"
D	3'- 7"	Q	1'- 4"
E	2'- 3"	R	5'- 8"
F	9'- 3"	S	7'- 0"
G	1'- 0"	T	1'- 0"
H	6'- 0"	U	5'- 6"
I	0'- 3"	V	
J	0'- 3"	W	
K	1'- 0"	X	
L	0'- 2"	Y	
M	5'- 6"	Z	

U.S. AND FOREIGN PATENTS PENDING

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norweco

SINGULAIR® BIO-KINETIC® WASTEWATER TREATMENT SYSTEM MODEL 960 - 750 GPD

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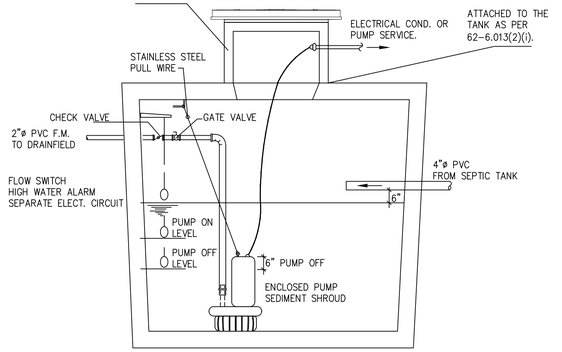
DRAWN DATE	08-02-2019
REVISION	J
DRAWN BY	BDS
CHECKED BY	JMM
DATE	03-06-1996
SCALE	NTS
DRAWING NO.	PC-5-7007

RISER.
WHEN RISERS ARE USED, THE ELECTRICAL LINE AND THE EFFLUENT DOSING PIPE MAY PENETRATE THE RISER WALL PROVIDED THE PENETRATION IS ABOVE THE WET SEASON HIGH WATER TABLE ELEVATION AND THERE IS A WATER-TIGHT SEAL AROUND THE PENETRATIONS. WHEN THE TOP OF THE DOSING TANK IS PLACED MORE THAN 8 INCHES BELOW THE FINISHED GRADE, RISERS SHALL BE USED TO PROVIDE ACCESS WITHIN 8 INCHES OF THE FINISHED GRADE.

(1) RULE 62-6.013(2)(K) REQUIRES THAT IF A RISER IS USED, AND IF THE RISER ACCESS LID OPENS DIRECTLY TO THE RECEPTACLE INTERIOR, JOINTS AROUND THE RISER AND RECEPTACLE SHALL BE SEALED AND MADE WATERTIGHT AS SPECIFIED IN PARAGRAPH 62-6.013(2)(I), F.A.C., TO PROHIBIT INTRUSION OF GROUND WATER INTO THE RECEPTACLE. PLEASE CORRECT THE SPECIFICATION TO MAKE THE SEAL AROUND THE PENETRATION AREA WATER-TIGHT.



TYPICAL SUMP PIT DETAIL

NOTE:
1. PROVIDE WATERPROOF ELEC. INSTALLATION.
2. PROVIDE VISUAL & AUDIBLE ALARM.

SUMP PUMP SPECIFICATIONS.
PROVIDE A 3 LEVER FLOAT SWITCH AS FOLLOW:
0'-2' WATER TABLE PUMP OFF
2'-0" – 3'-6" PUMP ON. COMPLETED DOSING AT 30"
3'-6" – HIGHER PUMPS ON *
* WHEN THIS OCCUR OR PUMP IS BROKEN, THEN AN ALARM BE ACTUATED (LIGHT & BOOZER).

Digitally signed by Ernesto Santana
Date: 2023.12.05 23:48:41 -05'00'

ERNESTO SANTANA, P.E LEED @AP
LIC. #: 60788

Ernesto Santana, P.E., LEED ® AP
CONSULTING ENGINEERS
P.E.# 60788-MECHANICAL
16438 S.W. 85Ln, Miami, Florida 33193
Phone:(786)564-4040

ERNESTO SANTANA LICENSE No. 60788 STATE OF FLORIDA PROFESSIONAL ENGINEER

SEAL:

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DETAILS AND CALCULATIONS

NEW SINGLE FAMILY HOME
11041 SW 77 AVE, PINECREST, FL 33156

REVISION		
No.	DESCRIPTION	DATE:

JOB No. 123-2023

SITE PLAN

DATE: 11/13/2023

SP-1.01

2 OF 5

LE50-SERIES
Sewage Pumps

Liberty Pumps®
A Family and Employee Owned Company

1/2 hp
2" Solids Handling
118 GPM at 10' TDH
25' Maximum Head

Features

- Heavy cast iron construction
- Oil-filled, thermally protected motor
- Permanently lubricated ball bearings
- 2 Vane corrosion resistant *HYTREL® impeller
- All stainless-steel fasteners and rotor shaft
- Quick-connect 10' standard power cord allows replacement of cord in seconds without breaking seals to motor. (25' length optional. 35' and 50' bare lead cords available.)

*HYTREL® is a registered trademark of DuPont Polymers

Vertical float switch models available in 115V

SSPMA CERTIFIED

c SP us

innovate. evolve.

LE50-Series

Impeller
2 Vane semi-open capable of passing a 2" spherical solid

Paint
Powder coat

Max Fluid Temperature
104°F (40°C) Continuous duty
140°F (60°C) Intermittent

Motor
Submersible type, oil-filled, hermetically sealed, thermally protected

Power Cord Type
SJTW, Quick-connect 10' standard length (25' cord option or 35' and 50' bare lead option)

Motor Housing
Class 25 cast iron

Volute
Class 25 cast iron

Dimensional Data
Weight: LE51M: 42 lbs
Height: 14"
Major Width: 11.5" (manual models)

Shaft
Stainless

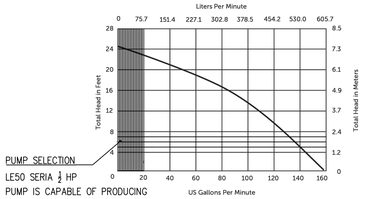
Hardware
Stainless

Mechanical Shaft Seal
Unitized ceramic carbon

Bearings
Upper and lower ball bearings

Float Switch (automatic models)
Wide-angle and vertical float switch available

Performance Curve
60 Hz, 1725 RPM



PUMP SELECTION
LE50 SERIA ½ HP
PUMP IS CAPABLE OF PRODUCING
2.0 GPM @ 6.06' OF HEAD

All Models

MODELS	HP	VOLTS	PHASE	AMPS	DISCHARGE SIZE	AUTOMATIC	IMPELLER
LE51M	1/2	115	1	12	2" FNPT	No	2 Vane Semi-Open
LE51A	1/2	115	1	12	2" FNPT	Wide-Angle Float Switch	2 Vane Semi-Open
LE51AV	1/2	115	1	12	2" FNPT	Vertical Float Switch	2 Vane Semi-Open
LE52M	1/2	208-230	1	6.8	2" FNPT	No	2 Vane Semi-Open
LE52A	1/2	208-230	1	6.8	2" FNPT	Wide-Angle Float Switch	2 Vane Semi-Open

SELECTION

10' cord standard on above models.
For 25' cord options, add a "-2" suffix to model number. Example: LE51A-2
For 35' bare lead cords, add a "-3" suffix to model number. Example: LE51A-3
For 50' bare lead cords, add a "-5" suffix to model number. Example: LE51A-5

Specifications subject to change without notice.
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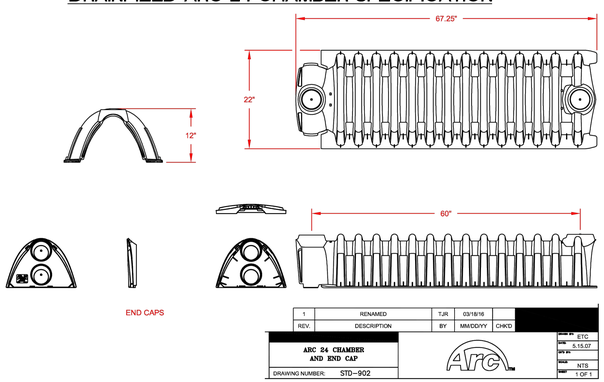
Liberty Pumps - 7000 Apple Tree Avenue - Bergen, New York 14416
Phone 800-543-2550 - Fax 585-494-1839 - LibertyPumps.com

DRAINFIELD ARC 24 CHAMBER SPECIFICATION



REV.	DESCRIPTION	BY	MM/DD/YY	CHK'D
1	RENAMED	TJR	03/18/16	

ARC 24 CHAMBER AND END CAP
DRAWING NUMBER: STD-902
ETC
5.15.07
NTS
1 OF 1