



APPLICATION - PERMIT ON-SITE WASTEWATER SYSTEM



(Please Type or Print Legibly)

OWNER'S NAME: Freedom to Surf LLC ,c/o Jack Harris PHONE: (410) 251-0464

ADDRESS: 33139 Dupont Blvd Frankford, DE 19945

PROJECT LOCATION: 33139 Dupont Blvd Frankford, DE 19945

Permit Number:
283331

TAX/MAP #: 433-6.14-4.00

APPLICATION

PREPARER: Jeremy Kalmbacher

DNREC

LICENSE #: 6093

PREPARER'S ADDRESS: 20180 Gum Island Rd Georgetown, DE 19947

PHONE: (302) 740-4442

I hereby affirm that the information provided on this document is accurate and complete.

Preparer's Signature: [Signature] Date: 7.27.26

By signing this permit application, the preparer further certifies they were physically present at the site.

-SEPTIC DESIGN CRITERIA-

(Please check all boxes that apply)

System Type: (CF = Cap & Fill / FD = Full Depth)

- | | |
|---|--|
| ☐ Gravity (FD) | ☐ Permanent Holding Tank |
| ☐ Gravity (CF) | ☐ Elevated Sand Mound |
| ☐ Pressure Dose (FD) | ☐ Wisconsin At-Grade |
| ☐ Pressure Dose (CF) | ☐ Subsurface Micro Irrigation |
| ☐ Low Pressure Pipe (FD) | ☒ Peat Bio- Filter |
| ☐ Low Pressure Pipe (CF) | ☐ Other _____ |
| ☐ Temporary Holding Tank | |

☒ Bed or ☐ Trench

☐ Gravelless Chamber ☒ Stone/Gravel ☐ Tire Chips
 Sand-lined ☒ Yes ☐ No

Existing System Malfunctioning ☒ Yes ☐ No ☐ N/A

Pre-Treatment Units

- ☒ Septic Tank
☐ Other _____

Central Water Available ☐ Yes ☒ No

(If yes, please state Utility Name: _____)

Type of Construction:

- ☒ Replacement
☐ New Construction
☐ Component Replacement
 Component: _____
☐ Repair to Existing System
 Reason: _____

☐ Authorization to Use Existing System

Permit #: _____

Present Condition: _____

Structure to be connected: _____

of Bedrooms: 30 employees

Avg. Percolation Rate: 25

Gallons Per Day Flow: 600

Minimum Sq. Ft. Req'd: 840

Sq. Ft. Proposed: 900

- SITE PLAN & CROSS SECTION -
(INDICATE DIRECTIONS OF NORTH & SCALE OF SITE PLAN)

Draw a general location map of
project location and give distance
to nearest road junction.

See attached location map

See attached layout

Freedom to Surf, LLC
c/o Jack Harris

OWNER'S/AUTHORIZED AGENT SIGNATURE: *Freedom to Surf, LLC*

DATE: 7/30/26

- A copy of this page must be submitted with both septic system and well construction report(s)

PLANNING & ZONING
Jamie Whitehouse, AICP, MRTPI
Director

(302) 855-7878 T
(302) 854-5079 F



Sussex County
DELAWARE
sussexcountyde.gov

Sussex County Zoning Verification

This form is to provide the current zoning for the following parcel of land located within Sussex County. This form does not grant approval for any current or future use of the property.

Tax Parcel Number: 433-6.14-4.00

Location: 33139 Dupont Blvd Frankford, DE 19945

Current Zoning: C-1

Owner: (from assessment records):

Freedom to Surf LLC

Owner Mailing Address (from assessment records):

33139 Dupont Blvd

Frankford, DE 19945

The zoning for this property has been confirmed from the Official Sussex County Zoning Map by:

Amy Hallen
Sussex County Planning & Zoning Staff Member

7-27-2026
Date

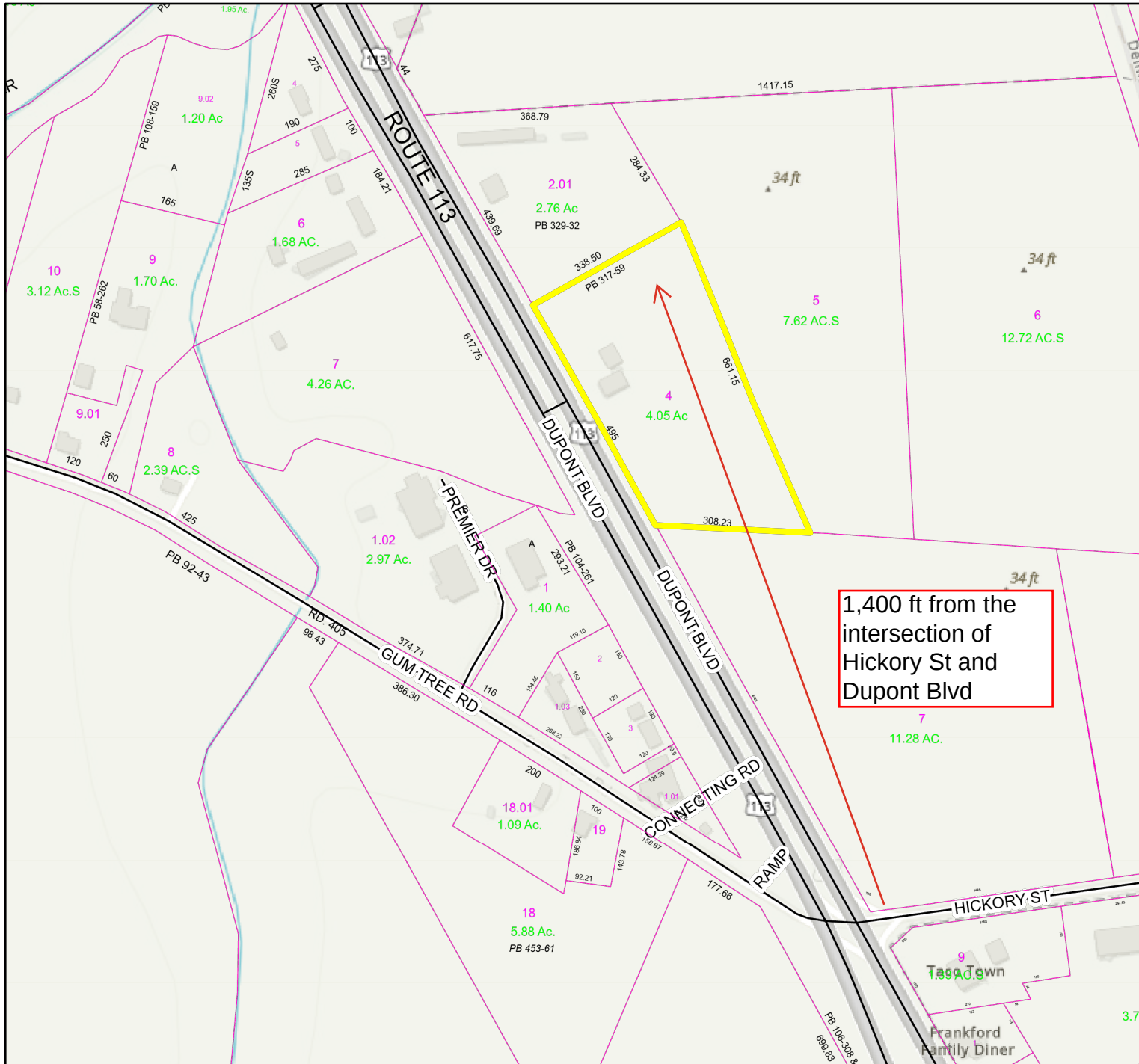


COUNTY ADMINISTRATIVE OFFICES
2 THE CIRCLE | PO BOX 417
GEORGETOWN, DELAWARE 19947

Last Updated 3-12-20

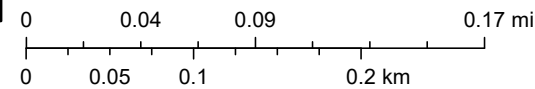


Letter Landscape Parcel Details



PIN:	433-6.14-4.00
Owner Name	FREEDOM TO SURF LLC
Book	6313
Mailing Address	33139 DUPONT BLVD
City	FRANKFORD
State	DE
Description	
Description 2	
Description 3	
Land Code	

- Tax Parcels
- TaxParcel
- Encumbrance
- Condo
- Streets
- County Boundaries
- GIOLandRecords.PARCELFABRIC.Condo
- Citations



Pepper Creek Tax Ditch Court Order Change No. 19 (Sussex County)

Change in construction/major and minor maintenance rights-of-way on Sub 2 of Prong 10 ("S2 P10") and Sub 1 of Sub 2 of Prong 10 ("S1 S2 P10") as shown on the map and chart on this page.



Stations	Construction/Major Maintenance ROW (looking upstream)		Minor Maintenance ROW (looking upstream)	
	Left	Right	Left	Right
S2 P10 9+20 to 14+52	50 ft TOB	‡	50 ft TOB	‡
S1 S2 P10 0+00 to 6+80	50 ft TOB	50 ft TOB	50 ft TOB	50 ft TOB
6+80 to 9+00	‡	50 ft TOB	‡	50 ft TOB

‡ All rights-of-way extents for tax ditches not modified by this Court Order Change are to remain as previously recorded.

Tax Ditch ROW includes the cross-section of the ditch and are measured from the CL or TOB as noted in the table above.

Abbreviations	
Center from ditch/pipe	CL
Court Order Change	COC
Feet	ft
Maintenance Turnaround	MT
Rights-of-Way	ROW
Station	Sta.
Special Access ROW	SAR
Stormwater Pond	SWP
Terminus	Term
Top of Bank	TOB

LEGEND

Approximate Property Line

Connected Areas

Property Code

Channel Name

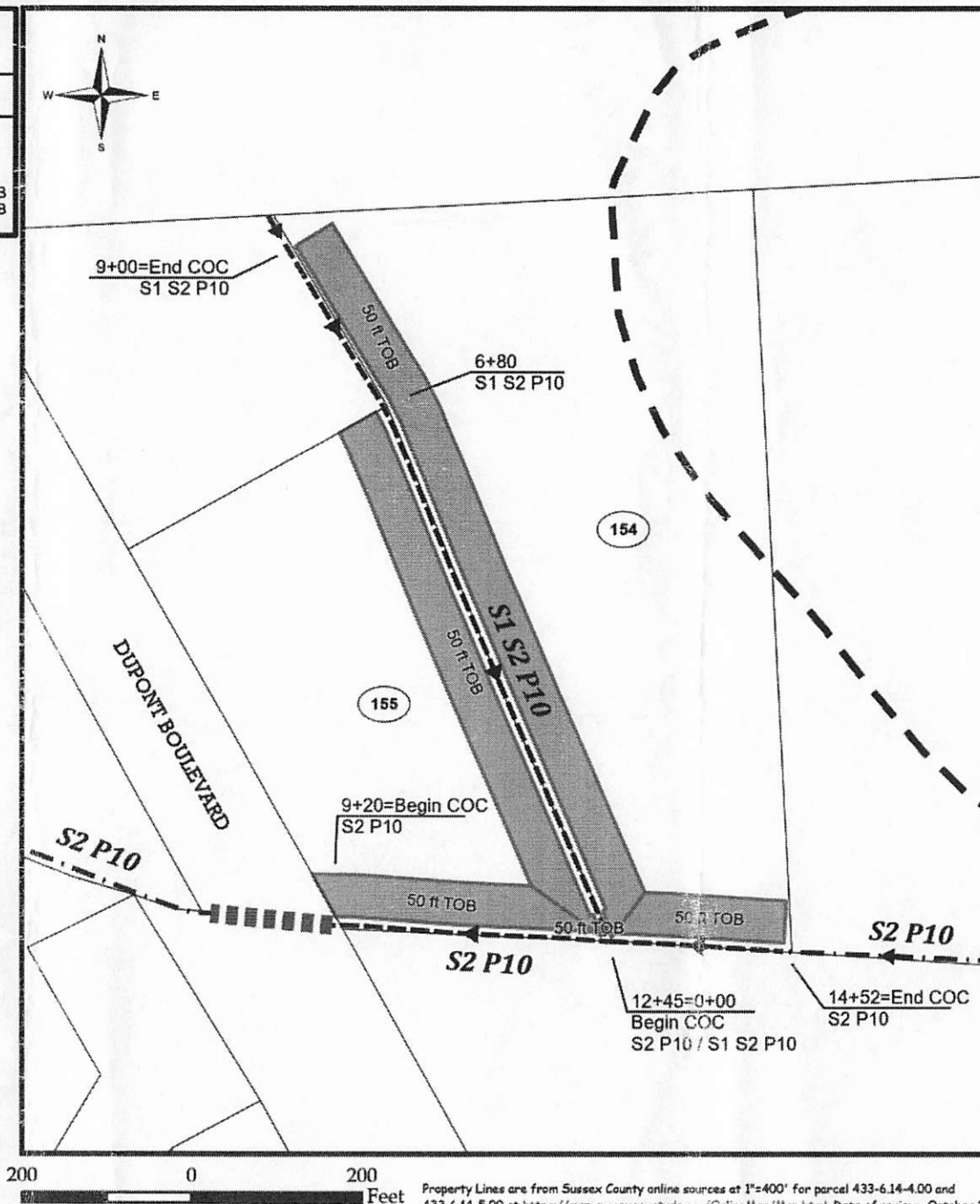
Tax Ditch Existing

Tax Ditch Change

DelDOT Crossing

Tax Ditch ROW Change

Watershed Existing



The Pepper Creek Tax Ditch Managers Joel T. Antonioli Sr., Crimson J. Shortridge, and William Dailey were consulted by the Delaware Department of Natural Resources and Environmental Control, Division of Watershed Stewardship, Conservation Programs Section, Drainage Program and verbally approved of this document as written on 11/7/2025, as such their signatures are not required under 7 Del. C. § 4189(2).

APPROVED: DIVISION OF
WATERSHED STEWARDSHIP

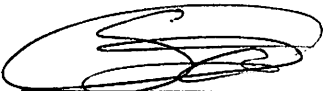
12-4-25
Date


Tyler Brown, Administrator
Conservation Programs Section
Division of Watershed Stewardship,
Delaware Department of Natural Resources
and Environmental Control

3) **GENERAL PROVISIONS:**

- a. The Landowners of Property No. 154 agree to be responsible for assuring that this Court Order Change is filed with the Recorder of Deeds for Sussex County. The Landowners of Property No. 154 shall file this Court Order Change with the Recorder of Deeds for Sussex County within 21 days of receipt of the final Court Order Change from DNREC.
- b. This Court Order Change is not intended to otherwise modify the Rights and Obligations of the Pepper Creek Tax Ditch Organization under *Chapter 41 of Title 7* of the Delaware Code.
- c. The Tax Ditch organization is not responsible for any damages to structures located within the Tax Ditch ROW, including but not limited to roadways, curbing, sidewalks, buildings, sheds, decks, pools, play structures and landscaping that may occur during tax ditch maintenance activities.
- d. To the extent necessary, DNREC reserves the right to enforce the terms of this Court Order Change, including, but not limited to issuing a Cease and Desist Order under 7 Del. C. § 6018 or obtaining an Order from the Court of Chancery prohibiting any conduct contrary to the terms of this Court Order Change.
- e. Effective Date: Pursuant to 7 Del. C. § 4189(2)(a), this Court Order Change shall be effective upon approval by DNREC, Division of Watershed Stewardship.

IN WITNESS THEREOF, the Landowners or their authorized representatives of Property Nos. 154 and 155 of the Pepper Creek Tax Ditch, with the approval of DNREC, Division of Watershed Stewardship have caused this Court Order Change to be duly executed.



Witness Signature
Printed Name: Sergio Covarrubias

12/2/25

Date



Signature
Printed Name: John Stamm Harris, Jr.
(prop. 154) 433-6.14-5.00



Witness Signature
Printed Name: Sergio Covarrubias

12/2/25

Date



Signature
Printed Name: John Stamm Harris, Jr.
Registered Agent, Freedom to Surf, LLC
(prop. 155) 433-6.14-4.00

NOW, THEREFORE, we the undersigned, the Landowners or the Landowners' authorized representatives, of Property Nos. 154 and 155, hereby agree as follows:

1) **ALTERATIONS TO PEPPER CREEK TAX DITCH:**

a. **Alteration to Construction, Major and Minor Maintenance Rights-of-Way ("ROW"):**

It is acknowledged that the tax ditch rights-of-way include the cross section of the ditch. The widths of the construction/major and minor maintenance ROW on Property Nos. 154 and 155 along Sub 2 of Prong 10 ("S2 of P10") and Sub 1 of Sub 2 of Prong 10 ("S1 of S2 of P10") are modified as follows:

Stations	Construction/Major Maintenance ROW (looking upstream)		Minor Maintenance ROW (looking upstream)	
	Left	Right	Left	Right
<u>S2 of P10</u> 9+20 to 14+52	50 ft Top of Bank ("TOB")	‡	50 ft TOB	‡
<u>S1 of S2 of P10</u> 0+00 to 6+80	50 ft TOB	50 ft TOB	50 ft TOB	50 ft TOB
6+80 to 9+00	‡	50 ft TOB	‡	50 ft TOB

‡All rights-of-way extents for tax ditches not modified by this Court Order Change are to remain as previously recorded.

2) **ONGOING MAINTENANCE RESPONSIBILITIES:**

- a. The future construction, major and minor maintenance costs will not be materially affected. Any stipulations in previous Court Order Changes ("COC") regarding a parcel's maintenance responsibility remain in effect.
- b. The Landowners of Property Nos. 154 and 155 are responsible for ensuring all private drainage infrastructure within the tax ditch rights-of-way provides a minimum of 25' of traversable clearance.

Prepared by: DNREC
Division of Watershed Stewardship
Return to: 21309 Berlin Road, Unit 6
Georgetown, DE 19947

Document # 2026000000176 BK: 28 PG: 167
On 1/5/2026 at 9:42:25 AM
RECORDER OF DEEDS Alexandra Reed Baker
Sussex County
Consideration: \$0.00
Doc Surcharge Paid

Page 1 of 5

PEPPER CREEK TAX DITCH C.A. #06M-11-082

COURT ORDER CHANGE NO. 79
(SUSSEX COUNTY)

Pursuant to 7 *Del. C.* § 4189(2), all affected Landowners hereby seek to alter the Pepper Creek Tax Ditch, C.A. #06M-11-082, on the terms and conditions set forth herein:

RECITALS

WHEREAS, the present Landowners of Property Nos. 154 and 155 desire a change to the Pepper Creek Tax Ditch; and

WHEREAS, as a result of the desired change, the Landowners of Property Nos. 154 and 155 seek alterations to the Pepper Creek Tax Ditch that affect Property Nos. 154 and 155 of the Pepper Creek Tax Ditch; and

WHEREAS, the Landowners of Property Nos. 154 and 155 acknowledge that their parcels are subject to 7 *Del. Laws, C.* 41 § 4186, Obstruction of or damage to tax ditch; civil and criminal liability; and

WHEREAS, the Delaware Department of Natural Resources and Environmental Control ("DNREC"), Division of Watershed Stewardship, has advised the Managers of the Pepper Creek Tax Ditch of these alterations and confirmed that no other properties or landowners within the Pepper Creek Tax Ditch are affected by these alterations to the Pepper Creek Tax Ditch; and

WHEREAS, DNREC, Division of Watershed Stewardship, has reviewed the request to alter the Pepper Creek Tax Ditch as set forth herein and, pursuant to 7 *Del. C.* § 4189(2), has approved this Court Order Change on the date listed below; and

FILED PROTHONOTARY
SUSSEX COUNTY
2025 DEC 15 P 12:28



PERMITTING	
DATE	
REVISIONS	
NO.	

Three Chord CEM, LLC
CIVIL ENVIRONMENTAL MARINE

P.O. BOX 203
GEORGETOWN, DE 19607
(302) 740-4442

RIO MOTORS

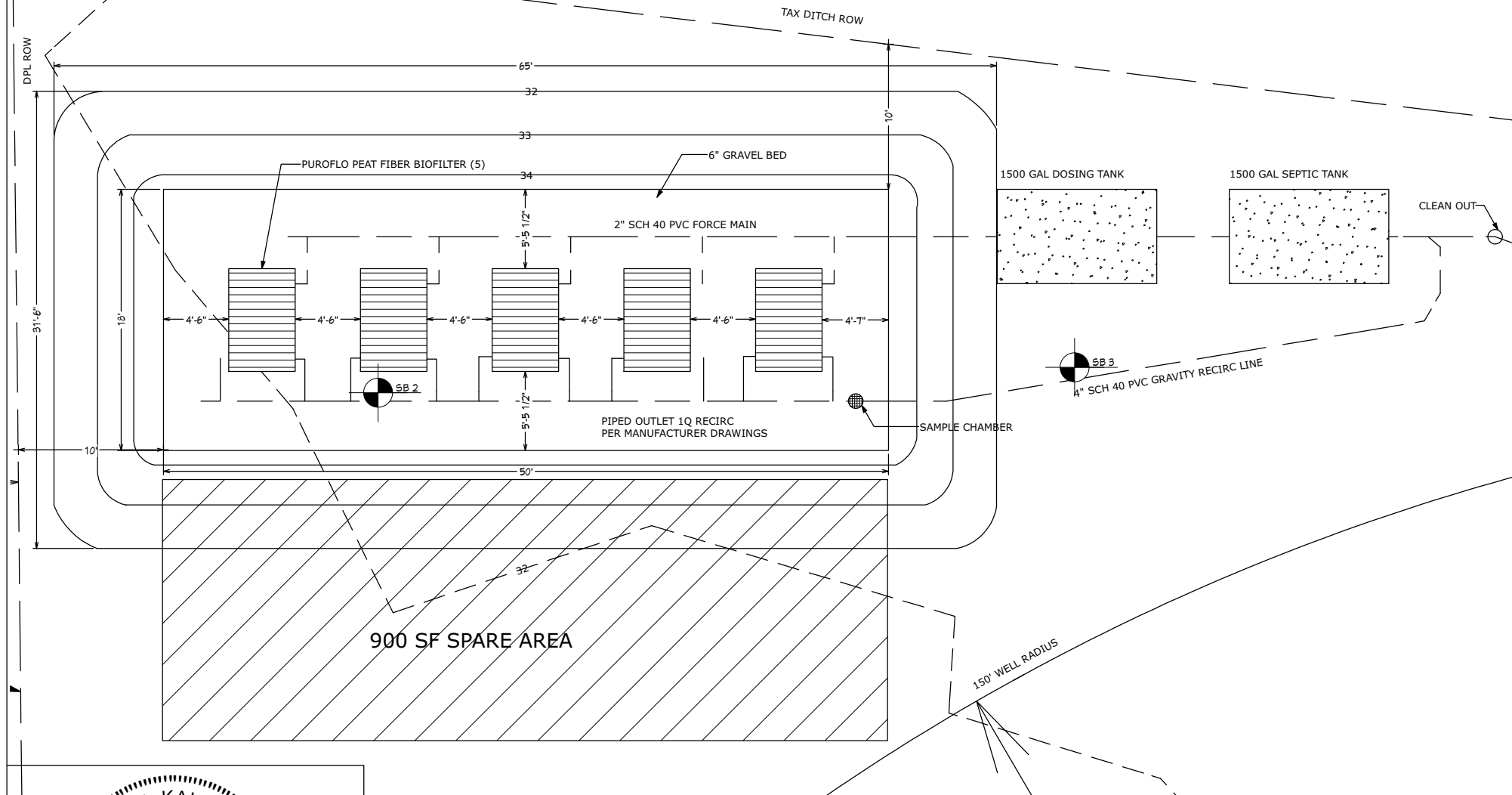
33139 DUPONT BLVD
FRANKFORD, DE 19945
TP: 433-6.14-4.00

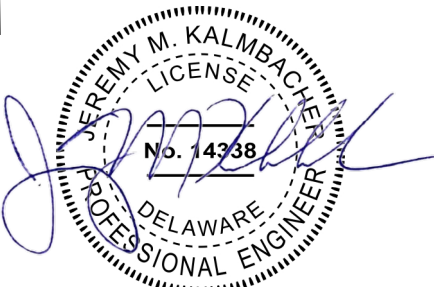
JEREMY KALMBACHER
DE PE LICENSE #14338

SEPTIC LOCATION PLAN

SCALE : 1" = 30'	SHEET C-1
DESIGN BY : JMK	
DRAWN BY : JMK	
DATE : JUL 2026	

SEPTIC PLAN VIEW

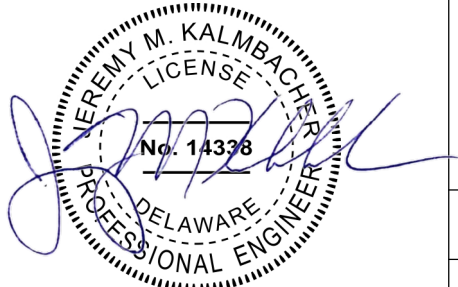
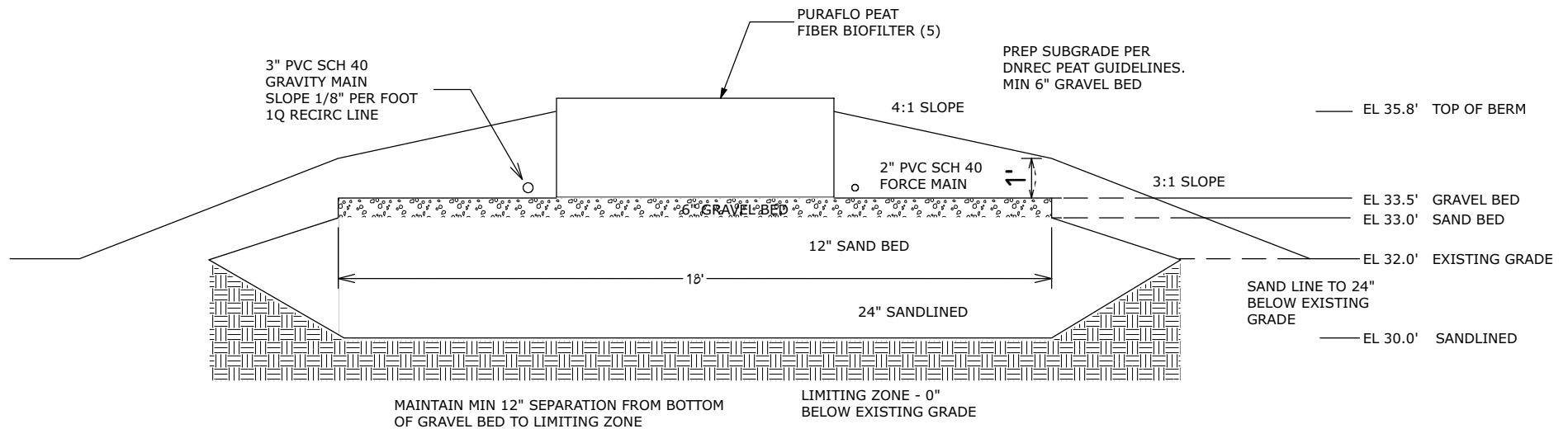




JEREMY M. KALMBACHER
 DE PE LICENSE #14338

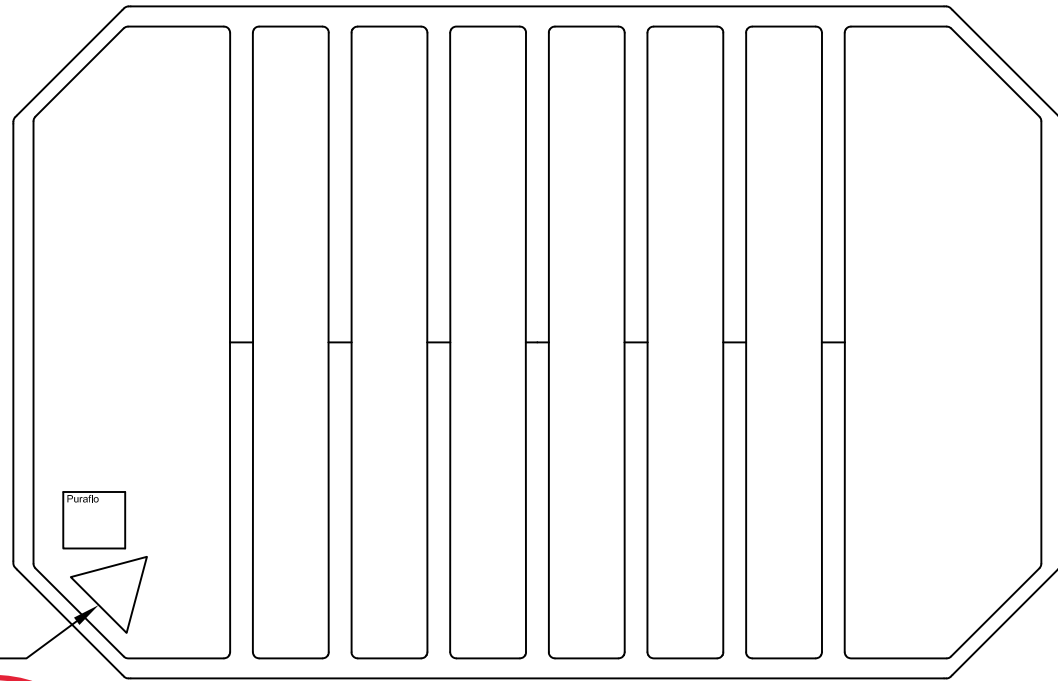
DATE: 7/23/2026	PROJECT NAME	THREE CHORD C.E.M., LLC P.O. BOX 203 GEORGETOWN, DE 19947	SHEET
SCALE: 1" = 10'	SEPTIC PLAN VIEW		
DRAWN BY: JK			1

PEAT BIOFILTER CROSS SECTION



JEREMY M. KALMBACHER
DE PE LICENSE #14338

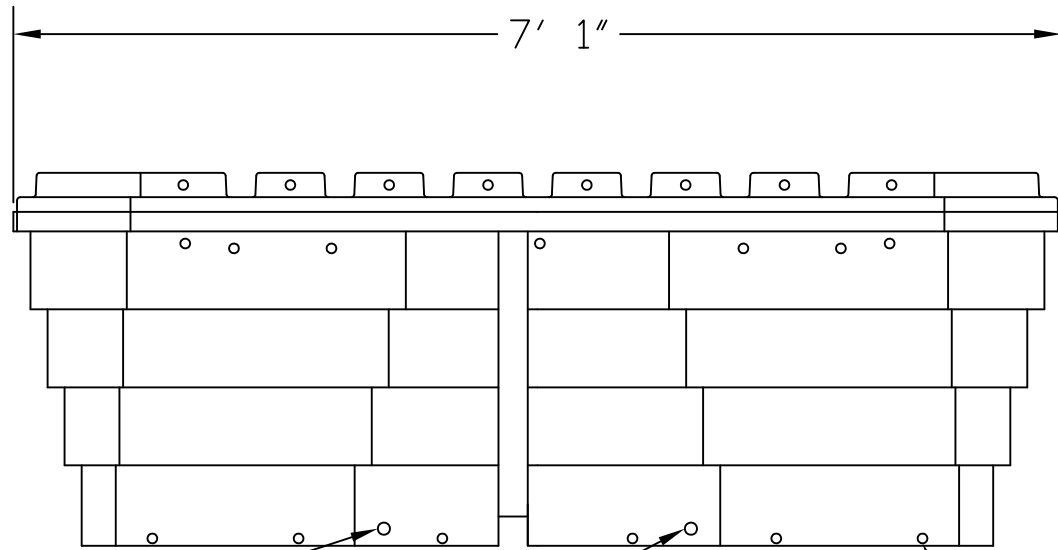
DATE: 7/23/2026	PROJECT NAME	THREE CHORD C.E.M., LLC P.O. BOX 203 GEORGETOWN, DE 19947	SHEET
SCALE: NTS	PEAT BIOFILTER CROSS SECTION		1
DRAWN BY: JK			



Triangle
(Blue, Green
or White)

PLAN VIEW

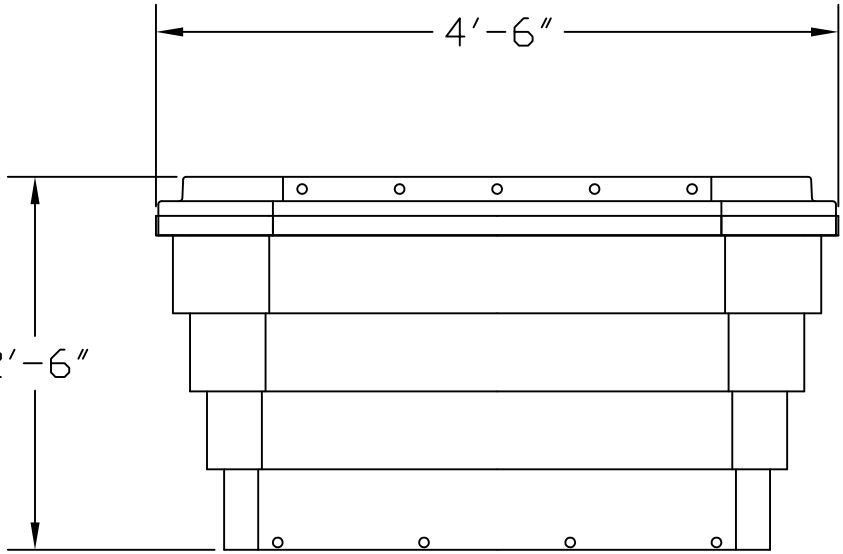
50%
WEEPHOLES
FOR RECIRC TO
SEPTIC TANK



4 - 1"
Threaded
Inserts

ELEVATION VIEW

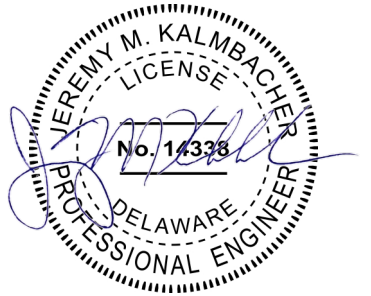
Sealed Modules
are without
Weep-holes



END VIEW

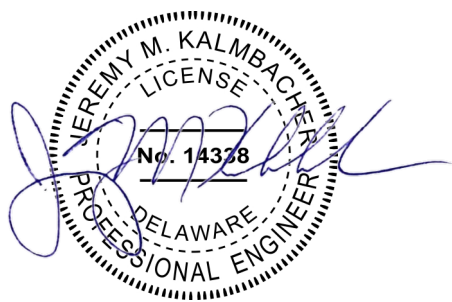
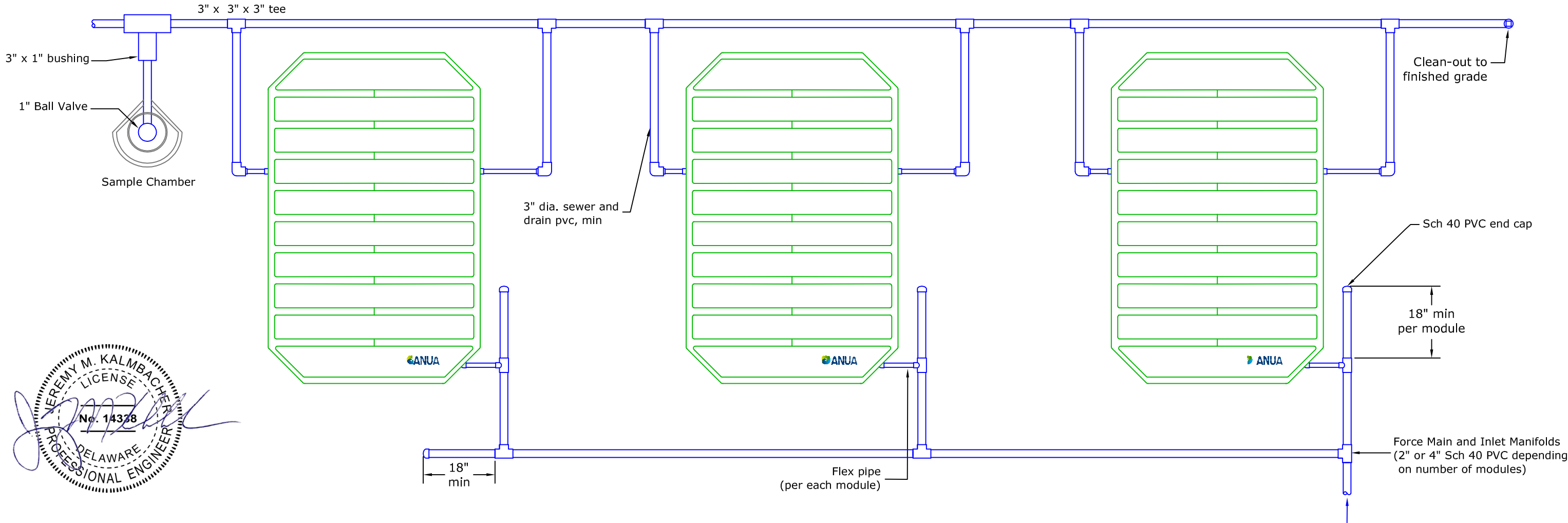
Notes:

Legend:



A	FIRST RELEASE	6/1/12
Rev.	DESCRIPTION	DATE
 4106 Bernau Avenue - Greensboro, NC 27407 Phone 336-547-9338 Fax 336-547-8559 www.bnm-us.com		
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Project PURAFLO PEAT FIBER BIOFILTER		
Client CLIENT		
Drawing Title ASSEMBLED MODULE DETAIL		
Date 6/1/12	Scale (A3) N/S	Drawn by AJW
Status PLANNING ☒ TENDER ☐	FOR APPROVAL ☐ FOR CONSTRUCTION ☐ AS BUILT ☐	Checked by PJ Approved by PJ
		Dwg. No. PURAFLO-01

- Notes:
- 1) GEOTEXTILE FABRIC OVER STONE. (DO NOT PLACE GEOTEXTILE UNDER MODULE OR UNDER WEEP HOLES)
 - 2) STONE TO COVER ALL WEEP HOLES AROUND THE PERIMETER OF MODULE(S)
 - 3) FOR TYPE A - PAD INSTALLATION: BLUE CODED MODULES WITH WEEP HOLES AND ONE GREEN CODED MODULE WITH SAMPLING CHAMBER, DRAIN INTO A STONE PAD FOR FINAL TREATED EFFLUENT DISPOSAL
 - 4) FOR TYPE A - PAD INSTALLATION: PAD DIMENSIONS CAN BE SELECTED TO MATCH SITE CONDITIONS AND MODULES CAN BE INSTALLED SIDE-BY-SIDE AS WELL AS END-TO-END
 - 5) FOR TYPE B - PIPED OUTLET INSTALLATION: SEALED WHITE CODED MODULES (NO WEEP-HOLES) PLACED ON A 6" SUPPORT GRAVEL BED
 - 6) FOR TYPE B - PIPED OUTLET INSTALLATION: MODULES CONNECTED VIA OUTLET MANIFOLDS TO A GRAVITY DRAIN LINE. DRAIN LINE SLOPED PER LOCAL CODE.
 - 7) LOGO COLOR ON LID WILL MATCH MODULE COLOR CODE.



4106 Bernau Avenue -
Greensboro,
NC 27407
Phone: 336-547-9338
Fax:
Website: www.anuainternational.com

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DRAWING TITLE: PURAFLO DN SIDE TO SIDE ALT TYPE B - PIPED OUTLET INSTALLATION

PROJECT: PFLO-DN-A

CLIENT: CLIENT

DWG No: PURAFLO- DN

DATE: 5/4/21

SCALE: N.T.S.

DRAWN BY: MEF

CHECKED: SM & SC

APPROVED: CB

- DWG STATUS -

PLANNING ☒

TENDER ☐

FOR APPROVAL ☐

FOR CONSTRUCTION ☐

AS BUILT ☐

ISSUE

FIRST ISSUE OF DRAWING

SHT 1 OF 1

PAGE SIZE

B

Do not scale directly from drawing Dimensions are in inches unless stated otherwise If in doubt, ask!

Puraflo Dn & Dispersal Field Design Guide

Design Parameters	Design flow	600	gpd
	Occupancy		people
	Soil application rate	0.714	gpd/ft ²
	Slope %	0.0%	
	Depth to limiting layer	0	in
	Req'd separation to limiting layer	12	in
	Hydraulic loading per linear foot	12.0	gpd/ft, per model
Dispersal option, req'd		Mounded	

Septic Tank Sizing	Min (per 3rd party testing)	1,500	gallons
	State or Other req'd min	1,500	
	Septic tank size, req'd	1,500 gallons	

Pump Tank Sizing	Min (per 3rd party testing)	1,500	gallons
	State or Other req'd min	1,000	gallons
	Pump tank size, req'd	1,500 gallons	

Puraflo Module Sizing	Influent BOD ₅ to module	Recirc	
	Module in polishing mode?	No	
	Puraflo modules, req'd	5	

In-Ground Pad Design	# Pads	1	
	Pad, W	16.8	ft
	Pad, L	50.0	ft
	Pad area	840	ft ²
	Puraflo module spacing	2.9	ft, end-to-end

Gravel Trench Design	Use bottom or sidewall area?	Bottom	
	Trench, W and H, in	24	12
	# Trenches	9	
	Trench, L	50.0	ft, per trench
	Bottom area	840	ft ²

Chamber Design	Use bottom or sidewall area?	Bottom	
	Chamber, W and H, in	36	12
	Chamber, L (per chamber)	55	in
	# Trenches	6	
	Trench, L	50.0	ft, per trench
	Bottom area	840	ft ²
	Chambers, req'd	65	
Chamber model			



DIRECTIONS: Fill-in cells highlighted **GREEN**, if applicable.

v.100515

Mounded Pad Design	Slope ratio	3 : 1
	Sand media loading rate	0.714 gpd/ft ²
	Absorption area width, A	16.8 ft
	Absorption area length, B	50.0 ft
	Basal width, A+I or A+I+J	16.8 ft
	Mound fill depth, D	12 in
	Mound fill depth, E	12 in
	Mound depth, F	6 in
	Mound depth, G	6 in
	Mound depth, H	6 in
	Downslope width, I	6.0 ft
	Upslope width, J	6.0 ft
	Endslope length, K	6.0 ft
	Total width, W	28.8 ft
	Total length, L	62.0 ft
	Puraflo module spacing, M	2.9 ft, end-to-end
	Total mounded pad area	1,786.0 ft ²

Notes

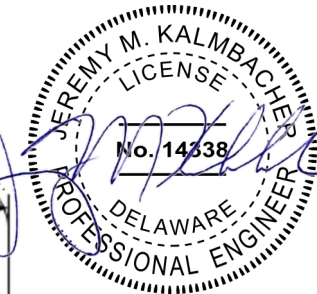
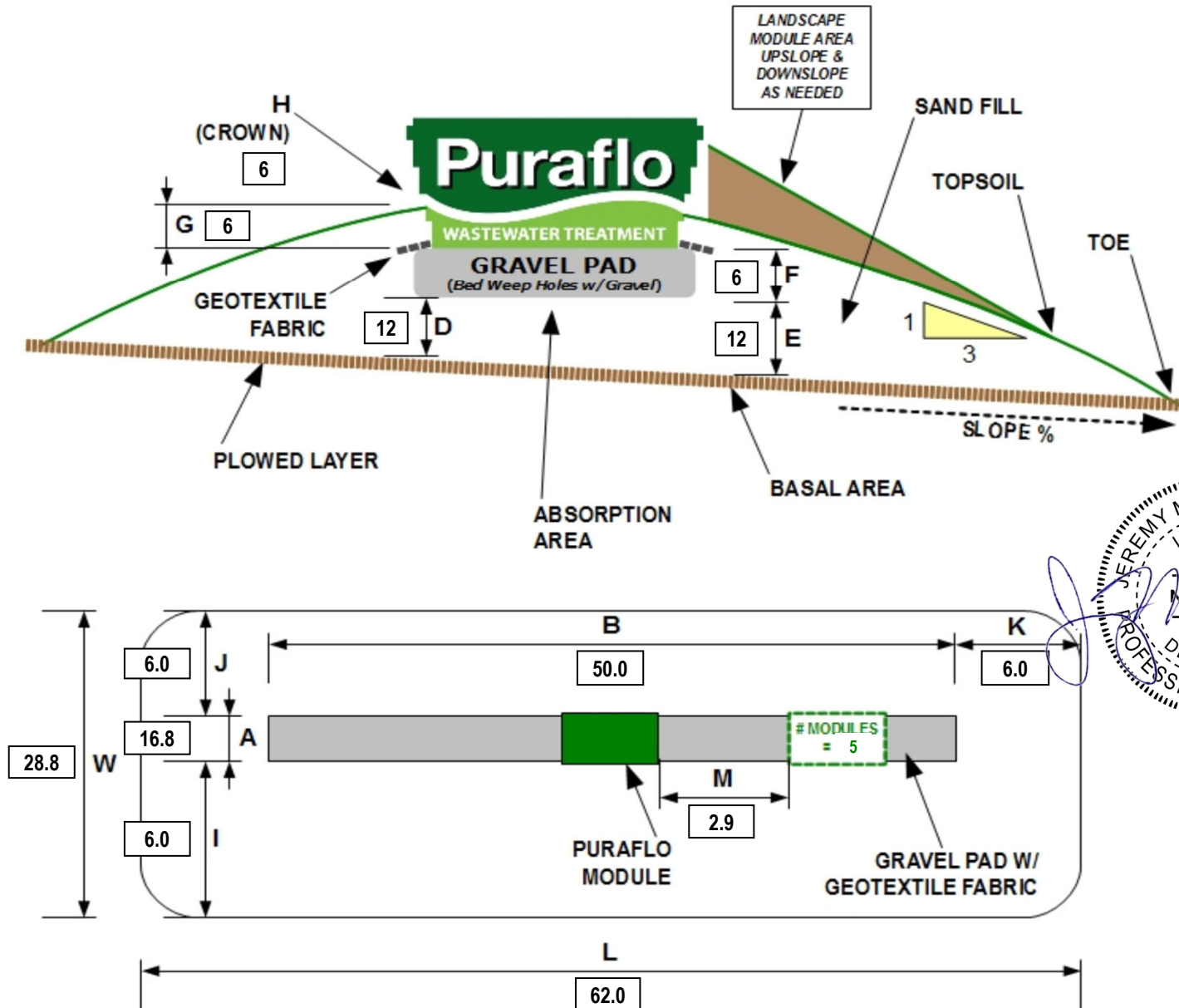
Mounded Pad Diagram

NOTES:

1. NOT TO SCALE

2. MODULE DIMENSIONS: 7.08' L x 4.58' W x 2.5' H

3. DIMENSIONS: SIDE VIEW = INCHES, TOP VIEW = FEET



TDH Calculations for Selecting System Pump

Assumes $f = 0.022$ for 2 inch pipe typical operating range

Static Head in Feet = Measured/Estimated

Friction Head in Feet = $(fLv^2)/(2gD) = (2.1355 \times 10^{-5})LQ^2$ (Q in gpm, L in feet)

Pressure Head in Feet = $0.10524(Q/\text{No. Mod.})^2$ (Q in gpm) from Orifice Equations

BOX 1.

Q (gpm)	# Modules	L (feet)	h_{stat} (feet)	h_f (feet)	h_p (feet)	TDH
0.0	5	168.00	8.00	0.00	0.00	8.00
10.0				0.36	0.42	8.78
20.0				1.44	1.68	11.12
30.0				3.23	3.79	15.02
40.0				5.74	6.74	20.48
50.0				8.97	10.52	27.49
60.0				12.92	15.15	36.07
70.0				17.58	20.63	46.21
80.0				22.96	26.94	57.90
90.0				29.06	34.10	71.16
100.0				35.88	42.10	85.97

BOX 2.

EQUIVALENT LENGTH ESTIMATE			
Element	2" Ftg. Eq. Length	Number	Eq. Length
Length	50.00	1.00	50.00
Reg. 90 deg	9.00	5.00	45.00
Reg. 45 deg	4.00	0.00	0.00
T (Diversion)	11.00	0.00	0.00
Coupling (Disconnect)	2.00	1.00	2.00
Check Valve	17.00	1.00	17.00
Ball Valve (fully open)	54.00	1.00	54.00
TOTAL EQ. LENGTH			168.00

BOX 3 - Programmable Timer Settings

Anticipated pump rate	30 gpm
Treatment design flow + recirc volume	1200 gpd
Drainback volume per dose	0 gal.
Dosing Interval (pump rest time)	1.50 hrs.
Number of doses	16 d ⁻¹
Drainback volume per day	0 gpd
Pump design flow	1200 gpd
Approx. volume per dose	75 gal.
Dose volume per module	15.00 gal.
Pump run time per dose	2.50 min.
Pump run time per dose	150.00 sec.
Tank volume (gal. per inch) ESTIMATE	24 gal. in. ⁻¹
Draw down per dose*	3.2 in.

From system versus pump curve for selected pump

From design flow + recirc volume

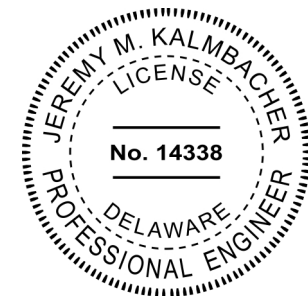
For cold weather climates, the transport line drains to protect from freezing

Minimum 1 hour

Treatment plus Drainback

From pump tank dimensions or manufacturer's data

*Prior to drainback



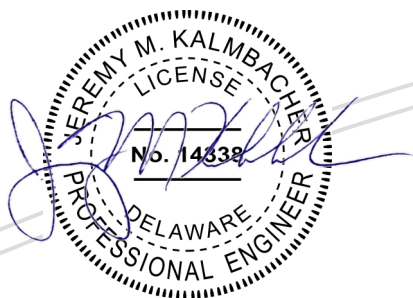
Loss through drainback hole while pump is active is assumed to be negligible



WS_B Series

Model 3886

SUBMERSIBLE SEWAGE PUMP



FEATURES

Impeller: Cast iron, semi-open, dynamically balanced, non-clog with pump out vanes for mechanical seal protection. Optional Silicon bronze impeller available.

Casing: Cast iron volute type for maximum efficiency. Designed for easy installation on A10-20 guide rail or base elbow rail systems.

Mechanical Seal: SILICON CARBIDE VS. SILICON CARBIDE sealing faces for superior abrasive resistance, stainless steel metal parts, BUNA-N elastomers.

Shaft: Corrosion-resistant stainless steel. Threaded design. Locknut on all models to guard against component damage on accidental reverse rotation.

Fasteners: 300 series stainless steel.

Capable of running dry without damage to components.

Designed for continuous operation when fully submerged.

EXTENDED WARRANTY AVAILABLE FOR RESIDENTIAL APPLICATIONS.

AGENCY LISTINGS



Tested to UL 778 and CSA 22.2 108 Standards
By Canadian Standards Association
File #LR38549

APPLICATIONS

Specifically designed for the following uses:

- Homes
- Sewage systems
- Dewatering/Effluent
- Water transfer

SPECIFICATIONS

Pump

- Solids handling capabilities: 2" maximum
- Discharge size: 2" NPT
- Capacities: up to 185 GPM
- Total heads: up to 38 feet TDH
- Temperature: 104°F (40°C) continuous, 140°F (60°C) intermittent

MOTORS

- Fully submerged in high grade turbine oil for lubrication and efficient heat transfer. All ratings are within the working limits of the motor.
- Class B insulation

Single phase (60 Hz):

- All single phase models feature capacitor start motors for maximum starting torque.
- Built-in overload with automatic reset.
- SJTOW or STOW severe duty oil and water resistant power cords.
- 1/3 - 1 HP models have NEMA three prong ground-ing plugs.

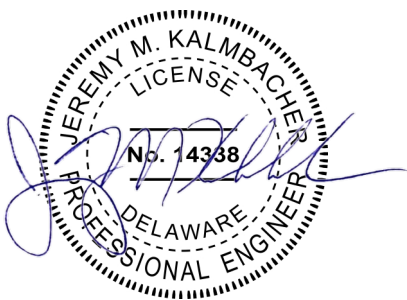
Three phase (60 Hz):

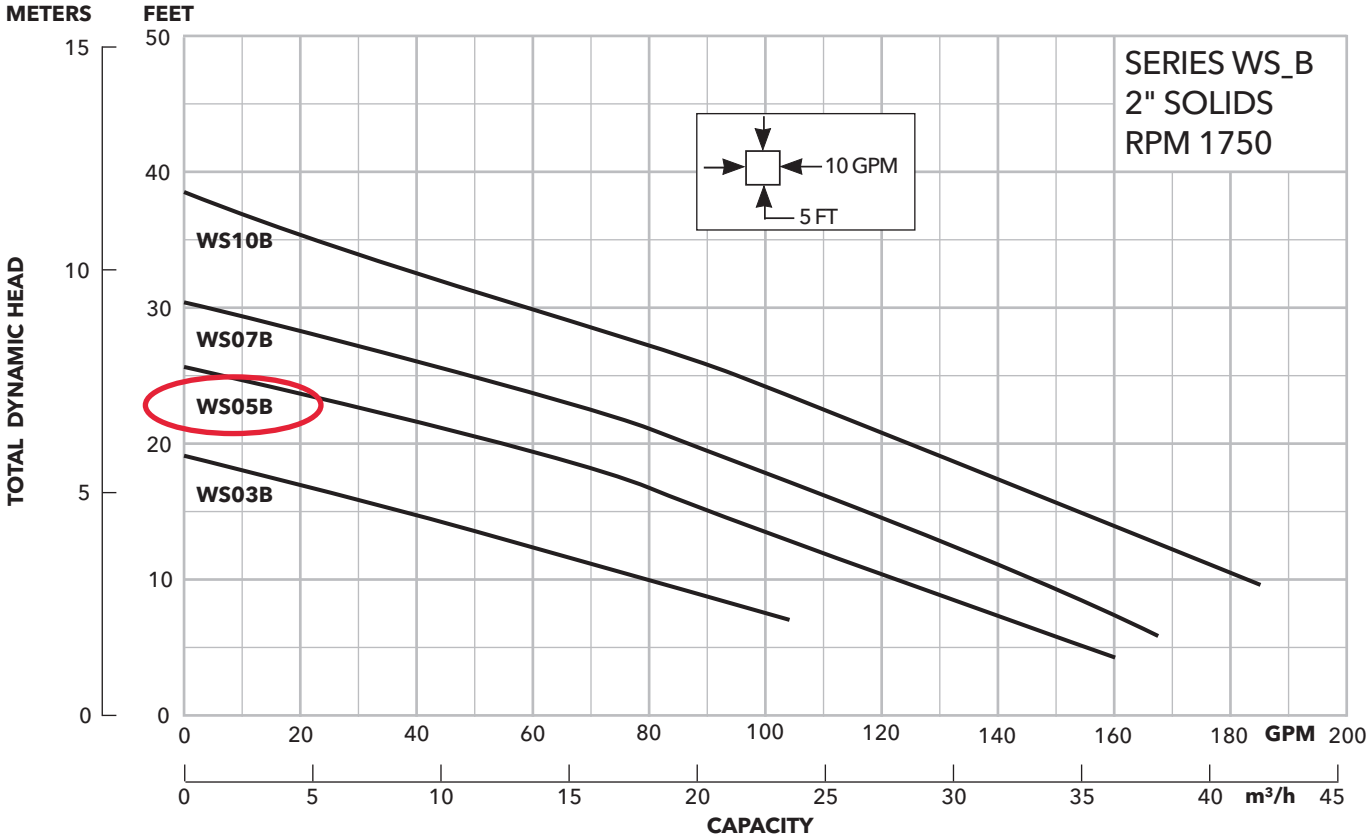
- Class 10 overload protection must be provided in separately ordered starter unit.
- STOW power cords all have bare lead cord ends.
- **Bearings:** Upper and lower heavy duty ball bearing construction.
- **Designed for Continuous Operation:** Pump ratings are within the motor manufacturer's recommended working limits, can be operated continuously without damage when fully submerged.
- **Power Cable:** Severe duty rated, oil and water resistant. Epoxy seal on motor end provides secondary moisture barrier in case of outer jacket damage and to prevent oil wicking. Standard cord is 20'. Optional lengths are available.
- **Motor Cover O-ring:** Assures positive sealing against contaminants and oil leakage.



MODELS

Order Number	HP	Phase	Volts	RPM	Impeller Diameter (in.)	Maximum Amps	Locked Rotor Amps	KVA Code	Full Load Efficiency	Resistance		Weight (lbs.)
										Start	Line-Line	
WS0311B	0.33	1	115	1750	4.69	10.7	30.0	M	54	11.9	1.7	63
WS0318B			208			6.8	19.5	K	51	9.1	4.2	
WS0312B			230			4.9	14.1	L	53	14.5	8.0	
WS0511B	0.5	1	115		5.00	14.5	31.1	J	55	9.3	1.4	65
WS0518B			208			8.0	19.5	K	51	9.1	4.2	
WS0512B			230			7.3	16.5	J	54	11.7	5.6	
WS0538B		3	200			3.8	12.3	K	75	NA	6.7	
WS0532B			230			3.3	9.7	K	75	NA	9.9	
WS0534B			460			1.7	4.9	K	75	NA	39.4	
WS0537B			575			1.4	4.3	K	68	NA	47.8	
WS0718B	0.75	1	208		5.38	11.0	39.0	K	65	2.6	1.4	85
WS0712B			230			9.4	24.8	J	57	4.8	2.3	
WS0738B		3	200			4.1	21.2	H	74	NA	4.3	
WS0732B			230			3.6	17.3	J	76	NA	5.6	
WS0734B			460			1.8	8.9	J	76	NA	22.4	
WS0737B			575			1.5	7.3	J	71	NA	29.2	
WS1018B	1	1	208		5.75	14.0	39.0	K	65	2.6	1.4	
WS1012B			230			12.3	30.5	H	60	4.3	1.8	
WS1038B		3	200			6.0	21.2	H	74	NA	4.3	
WS1032B			230			5.8	17.3	J	76	NA	5.6	
WS1034B			460			2.9	8.9	J	76	NA	22.4	
WS1037B			575			2.4	7.3	J	71	NA	29.2	

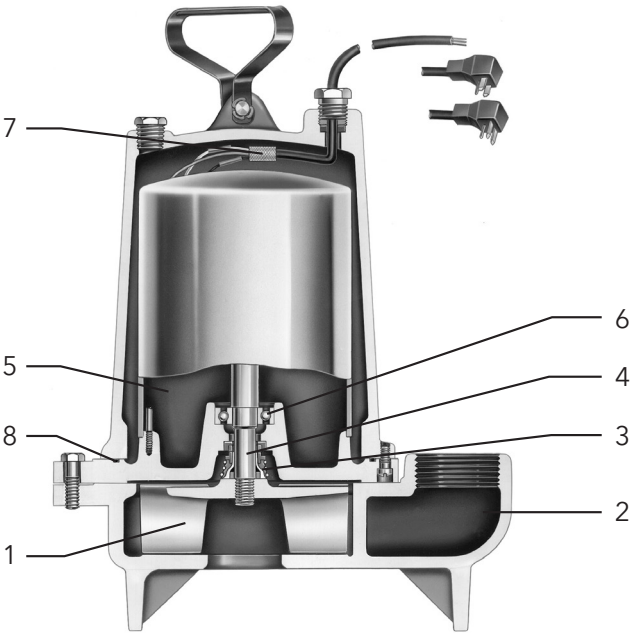




COMPONENTS (for reference only)

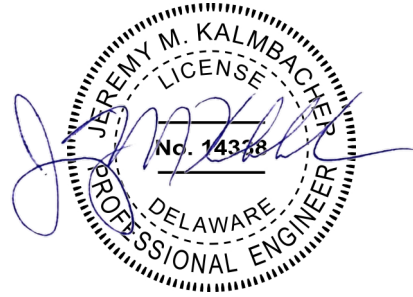
Item No.	Description
1	Impeller
2	Casing
3	Mechanical Seal
4	Motor Shaft
5	Motor
6	Ball Bearings
7	Power Cable
8	Casing O-Ring

NOTE: For specific parts breakdown, see repair parts



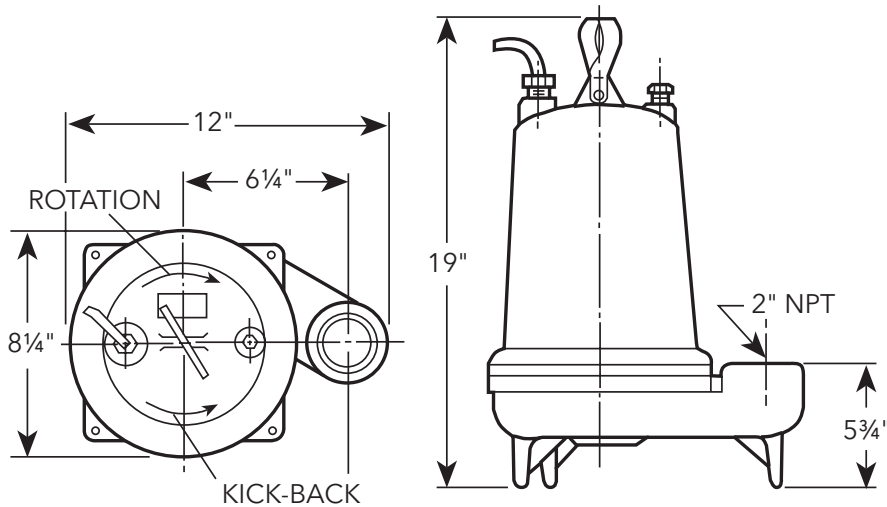
PERFORMANCE RATINGS (gallons per minute)

Order No.		WS03B	WS05B	WS07B	WS10B
Total Head Feet of Water	HP	1/3	1/2	3/4	1
	RPM	1750	1750	1750	1750
	10	80	122	145	183
	15	36	90	116	152
	20	-	50	86	123
	25	-	-	48	95
	30	-	-	-	58
	35	-	-	-	20



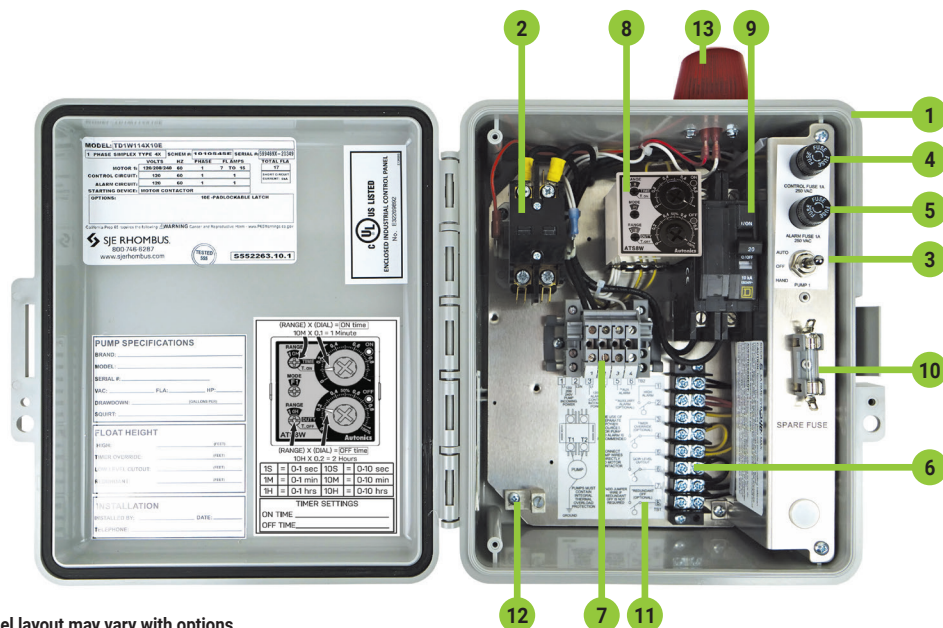
DIMENSIONS

(All dimensions are in inches. Do not use for construction purposes.)



MODEL TD CONTROL PANEL

Single Phase, Simplex Timed Dosing Pump Control



Panel layout may vary with options.

The Model TD control panel provides a reliable means of controlling one single phase pump in onsite septic installations. A programmable timer activates a magnetic motor contactor to turn the pump on and off. A low level cutout float overrides the timer to prevent the pump from running dry. An alarm float activates the audio/visual alarm system indicating a high liquid level. Common applications include sand filter systems, pressure distribution systems, mound systems, or any application requiring a timed dose. This panel is available with optional EZconnex® float connection system.



COMPONENTS

1. Enclosure measures 10 x 8 x 4 inches (25 x 20 x 10 cm) NEMA 4X (ultraviolet stabilized thermoplastic) for indoor or outdoor use
2. Magnetic motor contactor controls pump by switching electrical lines
3. HOA switch for manual pump control
4. Control fuse
5. Alarm fuse
6. Float switch terminal block
7. Incoming power terminal block
8. Programmable timer with separate variable controls allows for setting the on and off times from .1 seconds to 10 hours
9. Circuit breaker provides pump disconnect and branch circuit protection
10. Spare fuse
11. Backplate label includes diagram of float, pump, and power connections
12. Ground lug
13. Red LED beacon provides 360° visual check of alarm condition
14. Alarm horn provides audio warning of alarm condition (83 to 85 decibel rating) (Not shown)
15. Exterior alarm Test/Normal/Silence switch allows horn and light to be tested and horn to be silenced in an alarm condition; alarm automatically resets once alarm condition is cleared (Not shown)
16. Horn silence relay (No shown - mounted under bracket)

Note: Other options available.

Note: Timer Installation Label and Pump/Float Switch Installation Specification Label are located inside the panel on enclosure cover.



MODEL TD - Single phase, simplex timed dosing pump control.

TD CONTROL PANEL	1 ALARM PACKAGE	W ENCLOSURE RATING	1 STARTING DEVICE	1 PUMP FULL LOAD AMPS	4 PUMP DISCONNECTS	H FLOAT SWITCH APPLICATION	8A, 8C, 10E, 17W OPTIONS (LISTED BELOW)
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CONTROL PANEL	✓	TD	Single Phase Simplex Timed Dosing
ALARM PACKAGE		0	Select Options (select Option 1F below)
	X	1	Alarm Package (includes test/normal/silence switch, red light, & horn)
ENCLOSURE RATING	✓	W	Weatherproof, NEMA 4X (engineered thermoplastic)
STARTING DEVICE		1	Magnetic Motor Contactor 120/208/240V
		9	Magnetic Motor Contactor 120V only
PUMP FULL LOAD AMPS		0	0 - 7 FLA
	X	1	7 - 15 FLA
		2	15 - 20 FLA
PUMP DISCONNECTS	✓	4	Circuit Breaker
FLOAT SWITCH APPLICATION		H	Pump Down - 20' Low Level Cutout (select Option 17W below) (all systems will ship with 2 floats by default)
		E	EZconnex® Float Switch System (select Option 33, 35 or 36 below)
		X	No Floats

PRICING WORKSHEET

Model TD Base Price	_____
Alarm Package	_____
Enclosure Rating	_____
Starting Device	_____
Pump Full Load Amps	_____
Float Switch Application	_____
Total Options	_____
TOTAL LIST PRICE	_____

OPTIONS	DESCRIPTION
1F	Door Mounted Alarm Indicator with Horn and Test/Normal/Silence Switch (must select "0" for ALARM PACKAGE)
4B	Red Redundant Off Indicator & Alarm (must also select Option 4D if floats are required)
4D	Redundant Off Float
4E	Redundant Off Float, Alarm Activation (20' SJE SignalMaster® SPDT)
6A	Auxiliary Alarm Contact, Form A
X 8A	Elapsed Time Meter
X 8C	Event (Cycle) Counter
✓ 10E	Lockable Latch - NEMA 4X (included as standard)
10K	Anti-condensation Heater

OPTIONS	DESCRIPTION
16A	10' Cord in Lieu of 20' Cord (per float)
16B	15' Cord in Lieu of 20' Cord (per float)
16C	30' Cord in Lieu of 20' Cord (per float)
16D	40' Cord in Lieu of 20' Cord (per float)
X 17W	SJE MilliAmpMaster™ Wide-Angle / Pipe Clamp
18A	Timer Override Float
19X	Door Mounted Pump Run Indicator
33U	EZconnex® 3-Port, 50', with 10' Floats (3) / Pipe Clamp
35U	EZconnex® 4-Port, 50', with 10' Floats (4) / Pipe Clamp
36U	EZconnex® 3-Port, 50', with 10' Floats (2) / Pipe Clamp, Sealing Plug

