GENERAL NOTES

1. THE DRAWINGS DEPICTED HEREIN REPRESENT PRELIMINARY LAYOUTS OF A WASTEWATER TREATMENT SYSTEM CAPABLE OF TREATING THE DOMESTIC WASTE CONSTITUENTS NOTED IN TABLE 1.
2. ECOPOD REACTOR BOX SHALL BE CONSTRUCTED OF HIGH DENSITY POLYETHEYLENE (HDPE) OR AISI 304/304L STAINLESS STEEL.
3. TANK MATERIAL OPTIONS:
   - 3.1. CARBON STEEL PER ASTM A36 w/COATING PER IWT STANDARDS,
   - 3.2. FIBERGLASS REINFORCED PLASTIC (FRP) (NOT ALL MODELS),
   - 3.3. PRECAST CONCRETE PER ENGINEER OF RECORD REQUIREMENTS, BY OTHERS,
   - 3.4. CAST-IN-PLACE CONCRETE PER ENGINEER OF RECORD REQUIREMENTS, BY OTHERS.
4. BLOWERS, WEIRS, CONTROL PANELS, AND VARIOUS SMALL PARTS WILL BE SHIPPED UNASSEMBLED AND SECURELY PACKAGED, TO BE INSTALLED BY CONTRACTOR.
5. SEE INSTALLATION GUIDE FOR INSTALLATION DETAILS.
6. CONTACT AN IWT REPRESENTATIVE REGARDING DEVIATIONS FROM THESE STANDARDS.

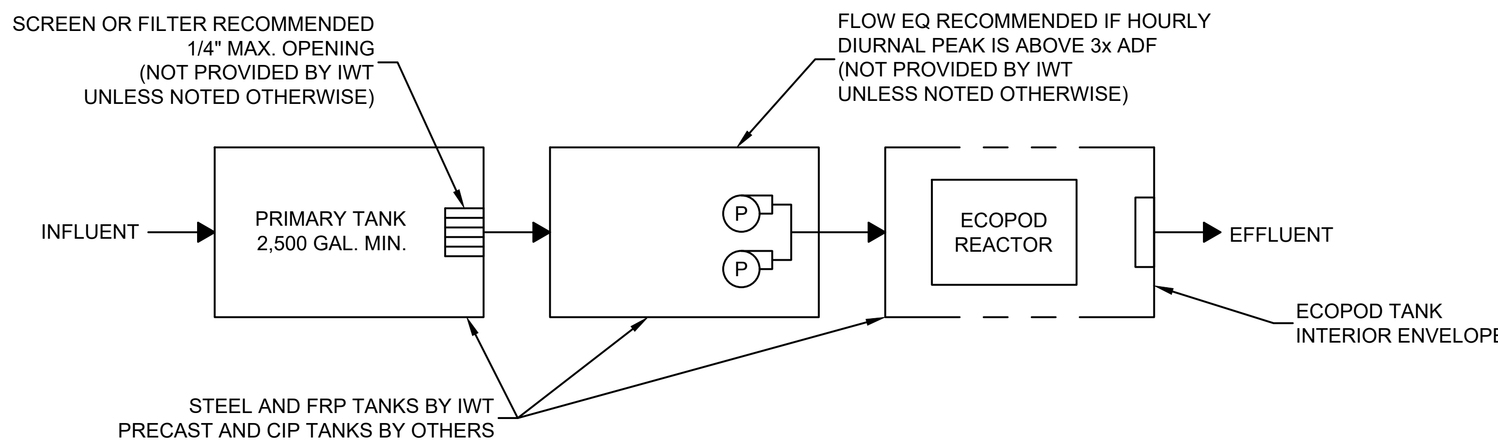
TABLE 1
PROCESS PARAMETERS
IWT E500S BOD ONLY

PARAMETER	MINIMUM	MAXIMUM
AVERAGE DAILY FLOW	-	5,000 GPD
PEAK DAILY FLOW	-	7,500 GPD
INFLUENT BOD_5	-	12.5 LB/DAY
AIR TEMPERATURE	-	115 °F
WATER TEMPERATURE	68 °F	68 °F
RELATIVE HUMIDITY	10%	90%
SITE ELEVATION	0 FT AMSL	3,000 FT AMSL

TABLE 2
AIR DEMAND

PARAMETER	UP TO 1,000 FT AMSL	1,000 TO 3,000 FT AMSL
STANDARD AIRFLOW	110 SCFM	128 SCFM
SITE AIR REQUIREMENT	124 ICFM	154 ICFM
BLOWER INLET AIR	141 ICFM	187 ICFM
AIR HEADER SIZE	3 IN	4 IN
MIN. TANK VENT X-SECT. AREA	58.0 IN^2 2 EA 8" OR 1 EA 8"	76.9 IN^2 2 EA 8" OR 1 EA 10"
BLOWER SELECTION	FPZ SCL K05-TD	FPZ SCL K06-MS
NOISE LEVEL	73.0 dB(A)	73.0 dB(A)
AIR TEMPERATURE RISE[1]	24 F (13.3 C)	21 F (11.7 C)
BLOWER INLET DIAMETER	2 IN NPT	2 IN NPT
BLOWER OUTLET DIAMETER	2 IN NPT	2 IN NPT
MOTOR POWER RATING[2]	3 HP	3 HP
OPERATING POWER	1.3 KW	1.9 KW

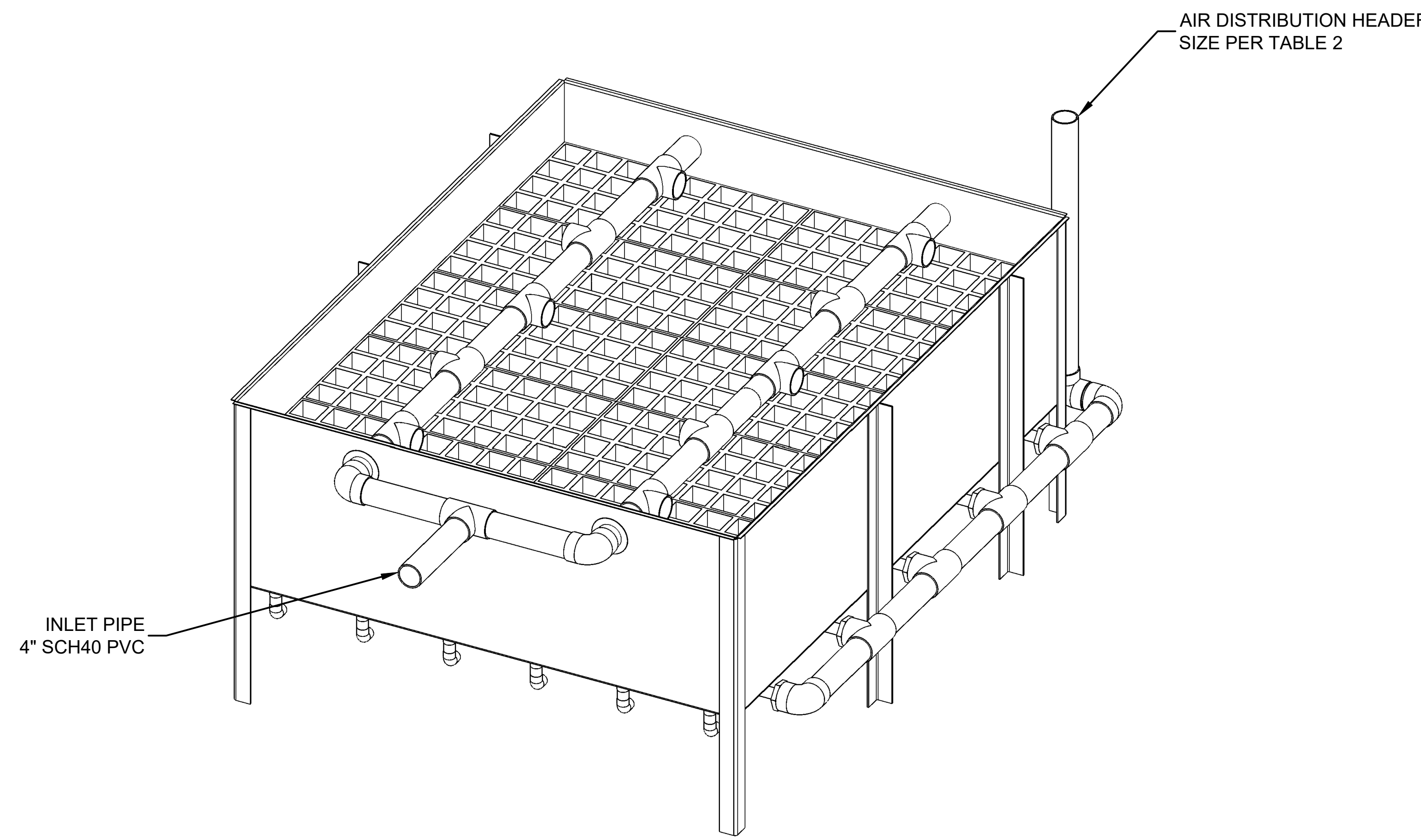
1. REVIEW BLOWER DISCHARGE AIR TEMPERATURE WHEN SPECIFYING AIR MAIN PIPING MATERIAL.
2. REVIEW BLOWER MANUFACTURER CUTSHEETS FOR ADDITIONAL ELECTRICAL INFORMATION.



TYPICAL PROCESS DIAGRAM

TABLE 3
STANDARD EQUIPMENT LIST

DESCRIPTION	QTY	MAKE	MODEL
ECOPOD REACTOR	1	IWT	E500S
BLOWER	1	FPZ	PER TABLE 2
CONTROL PANEL	1	IWT	PER DESIGN
24" S.S. EFFLUENT WEIR	1	IWT	TROUGH-3.0



ECOPOD REACTOR
LAYOUT 2

NO.	DATE	INITIALS	DESCRIPTION
A	10/12/21	AOB	ADDED TRIMETRIC VIEW

Infiltrator Water Technologies
Part of ADS

INFILTRATOR WATER TECHNOLOGIES, LLC
4 BUSINESS PARK RD, OLD SAYBROOK, CT 06475
WWW.INFILTRATORWATER.COM
PHONE: (800) 221-4436 / EMAIL: INFO@INFILTRATORWATER.COM

ECOPOD E500S
STANDARD DESIGN FOR BOD REDUCTION

GENERAL ARRANGEMENT
DESIGN OVERVIEW

HORIZ. SCALE	PROJECT NO.
N/A	N/A
VERT. SCALE	DATE
N/A	02/11/2021
DRAWN BY	DESIGNED BY
CGK	AOB
DRAWING NO.	SHEET NO.
C1.0	01 of 02

GENERAL NOTES

1. ECOPOD REACTOR BOX SHALL BE CONSTRUCTED OF HIGH DENSITY POLYETHEYLENE (HDPE) OR AISI 304/304L STAINLESS STEEL.
2. TANK MATERIAL OPTIONS:
   - 2.1. CARBON STEEL PER ASTM A36 w/COATING PER IWT STANDARDS,
   - 2.2. FIBERGLASS REINFORCED PLASTIC (FRP) (NOT ALL MODELS),
   - 2.3. PRECAST CONCRETE PER ENGINEER OF RECORD REQUIREMENTS, BY OTHERS,
   - 2.4. CAST-IN-PLACE CONCRETE PER ENGINEER OF RECORD REQUIREMENTS, BY OTHERS.
3. SEE INSTALLATION GUIDE FOR INSTALLATION DETAILS.
4. CONTACT AN IWT REPRESENTATIVE REGARDING DEVIATIONS FROM THESE STANDARDS.

TABLE 4
MINIMUM ECOPOD REACTOR DIMENSIONS

SITE ELEVATION		REACTOR MATERIAL	LAYOUT ID	REACTOR WEIGHT		A OVERALL LENGTH		B OVERALL WIDTH		B1 AIR HEADER CL DIM	
FT	M			LB	KG	IN	CM	IN	CM	IN	CM
0-1,000	0-305	HDPE	1			244	620	60	153	33	84
0-1,000	0-305	SS	1	1,420	293	226	575	59	150	32	82
0-1,000	0-305	SS	2	1,210	549	141	359	107	272	56	143
0-1,000	0-305	SS	3	1,350	613	178	453	83	211	44	112
1,000-3,000	305-914	HDPE	1			246	625	61	155	34	87
1,000-3,000	305-914	SS	1	1,420	293	228	580	60	153	33	84
1,000-3,000	305-914	SS	2	1,210	549	143	364	108	275	57	145
1,000-3,000	305-914	SS	3	1,350	613	180	458	84	214	45	115

1. SOME REACTOR LAYOUTS NOT AVAILABLE IN FIBERGLASS TANKS. CONTACT AN IWT REPRESENTATIVE FOR DETAILS.

TABLE 5
RECOMMENDED ECOPOD TANK INTERIOR ENVELOPE DIMENSIONS

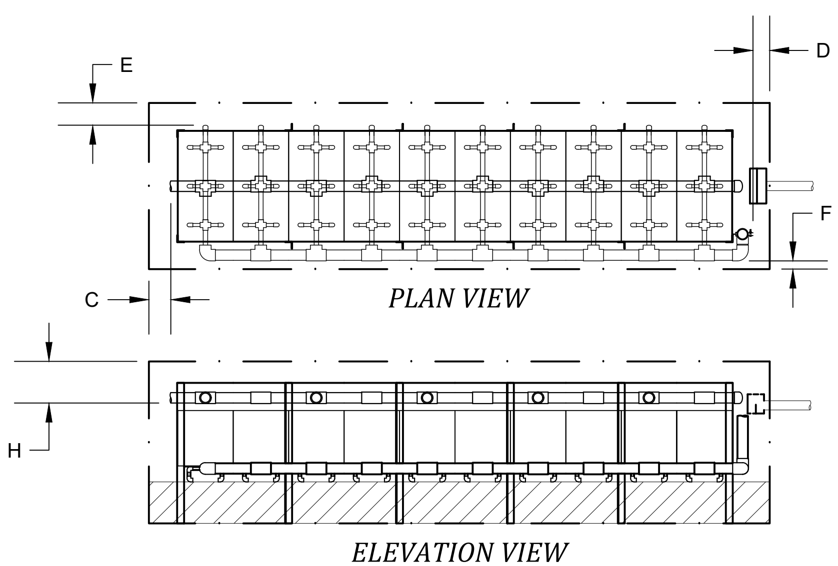
DIMENSION	IN	CM
C VESSEL FRONT SPACE	12	30
D VESSEL REAR SPACE	18	46
E AIR HEADER SIDE INSIDE SPACE	6	15
F NO HEADER SIDE INSIDE SPACE	6	15

1: ADDITIONAL ACCESS HATCHES RECOMMENDED FOR SOLIDS REMOVAL ALONG VESSEL SIDES.

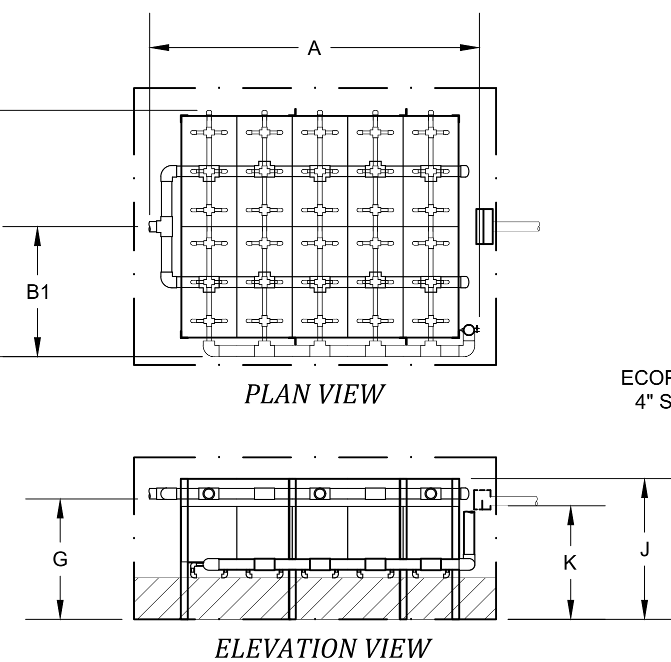
TABLE 6
REQUIRED ECOPOD TANK INTERIOR ENVELOPE MINIMUM DIMENSIONS

DIMENSION	IN	CM
G INLET INVERT	50	127
H PLENUM SPACE ABOVE INLET INVERT	10	25
J MEDIA REACTOR HEIGHT	59	150
K OUTLET INVERT	47	119

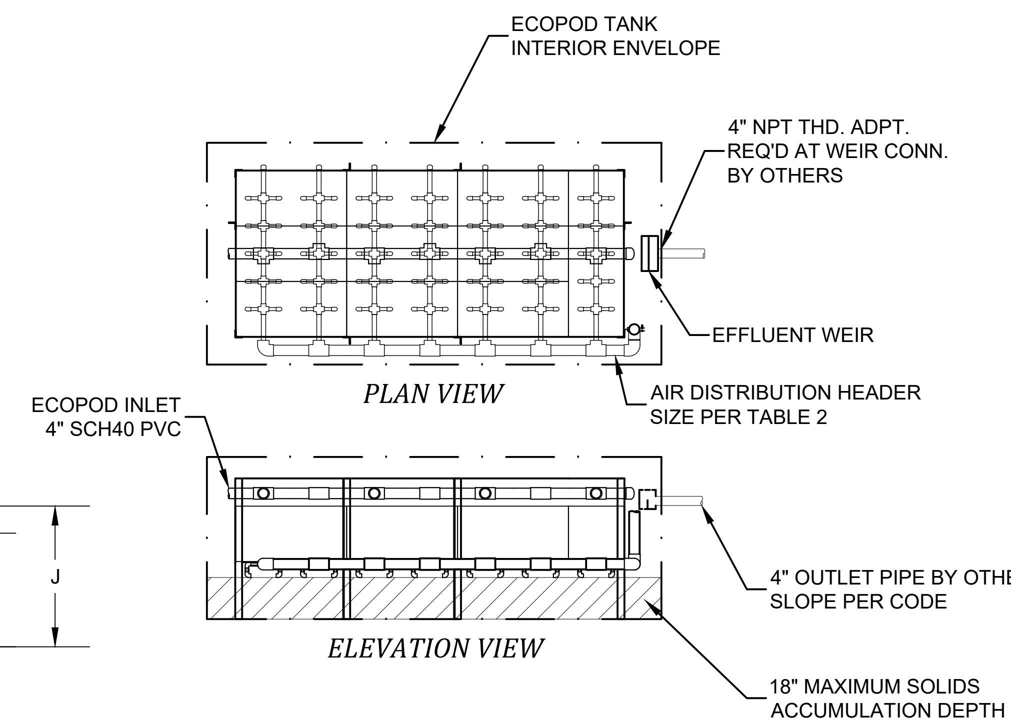
1. ONE (1 EA.) INLET AND ONE (1 EA.) OUTLET ACCESS HATCH REQUIRED, 24" DIA MINIMUM.



LAYOUT 1



LAYOUT 2



LAYOUT 3

NO.	DATE	INITIALS	DESCRIPTION

INFILTRATOR WATER TECHNOLOGIES, LLC
4 BUSINESS PARK RD, OLD SAYBROOK, CT 06475
WWW.INFILTRATORWATER.COM
PHONE: (800) 221-4436 / EMAIL: INFO@INFILTRATORWATER.COM

ECOPOD E500S
STANDARD DESIGN FOR BOD REDUCTION

GENERAL ARRANGEMENT
LAYOUT DIMENSIONS

HORIZ. SCALE	PROJECT NO.
N/A	N/A
VERT. SCALE	DATE
N/A	05/18/2021
DRAWN BY	DESIGNED BY
CGK	AOB
DRAWING NO.	SHEET NO.
C1.1	02 of 02