

- GENERAL NOTES**
- THE DRAWINGS DEPICTED HEREIN REPRESENT PRELIMINARY LAYOUTS OF A WASTEWATER TREATMENT SYSTEM CAPABLE OF TREATING THE DOMESTIC WASTE CONSTITUENTS NOTED IN TABLE 1. COMMERCIAL OR NON-DOMESTIC WASTEWATER STREAMS ARE NOT INCLUDED IN THIS SCOPE AND MAY REQUIRE SEPARATE EVALUATION. CONTACT IWT FOR COMMERCIAL WASTEWATER TREATMENT REVIEW AND DESIGN REQUIREMENTS.
 - ECOPOD REACTOR BOX SHALL BE CONSTRUCTED OF AISI 304/304L STAINLESS STEEL.
 - TANK MATERIAL SHALL BE SINGLE WALL FIBERGLASS REINFORCED PLASTIC (FRP) PER ASTM D4097.
 - BLOWERS, WEIRS, CONTROL PANELS, AND VARIOUS SMALL PARTS WILL BE SHIPPED UNASSEMBLED AND SECURELY PACKAGED, TO BE INSTALLED BY CONTRACTOR.
 - SEE INSTALLATION GUIDE FOR INSTALLATION DETAILS.
 - CONTACT AN IWT REPRESENTATIVE REGARDING DEVIATIONS FROM THESE STANDARDS.

**TABLE 1
PROCESS PARAMETERS
IWT E450D BOD ONLY**

PARAMETER	MINIMUM	MAXIMUM
AVERAGE DAILY FLOW	-	4,500 GPD
PEAK DAILY FLOW	-	7,000 GPD
INFLUENT BOD ₅	-	11.3 LB/DAY
AIR TEMPERATURE	-	68 °F
WATER TEMPERATURE	68 °F	68 °F
RELATIVE HUMIDITY	10%	90%
SITE ELEVATION	0 FT AMSL	3,000 FT AMSL

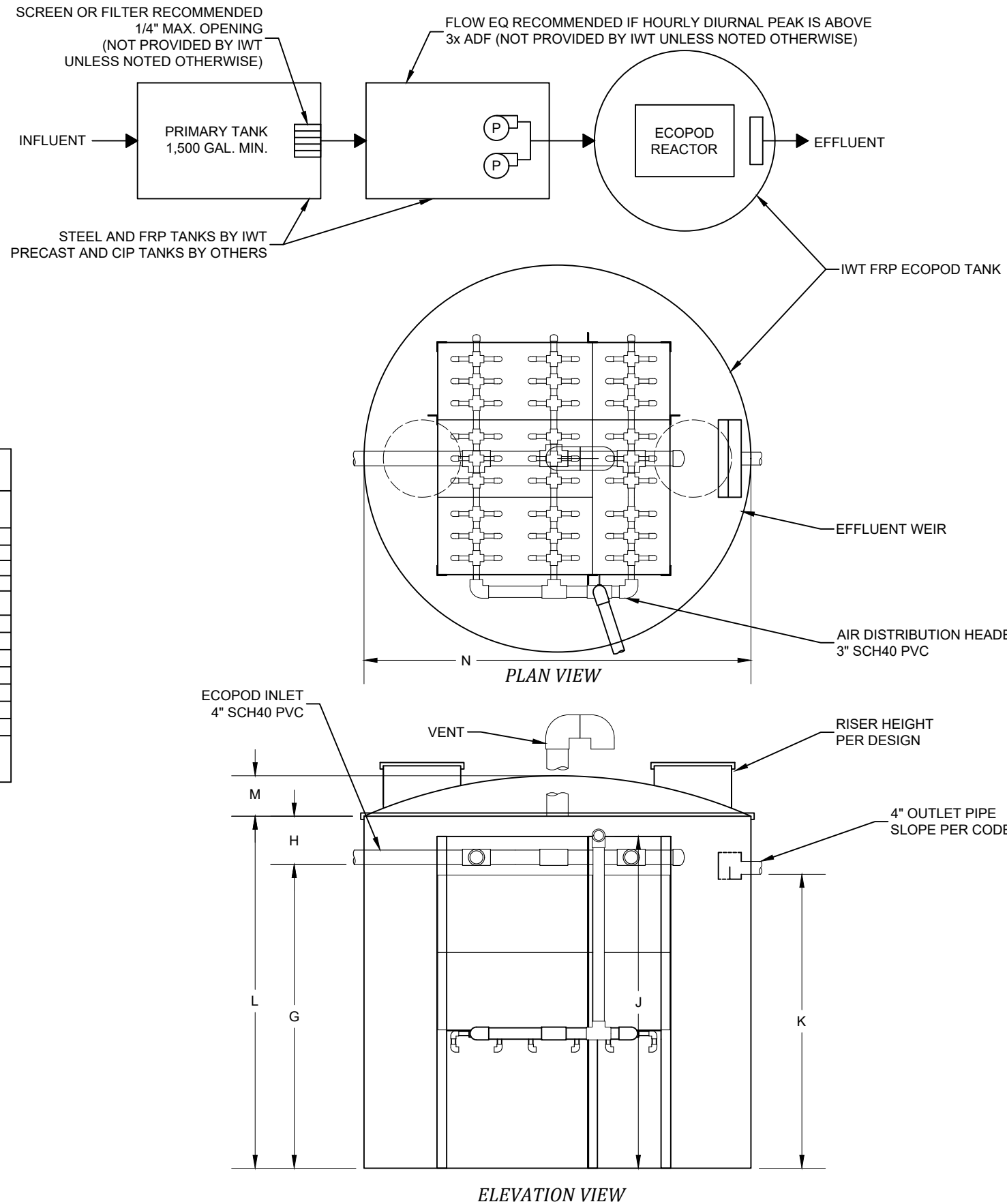
**TABLE 2
AIR DEMAND**

PARAMETER	UP TO 1,000 FT AMSL	1,000 TO 3,000 FT AMSL
STANDARD AIRFLOW	55 SCFM	64 SCFM
SITE AIR REQUIREMENT	61 ICFM	76 ICFM
BLOWER INLET AIR	67 ICFM	116 ICFM
AIR HEADER SIZE	3 IN	3 IN
MIN. TANK VENT X-SECT. AREA	27.6 IN ² 1 EA 6"	47.8 IN ² 2 EA 6" OR 1 EA 8"
BLOWER SELECTION	FPZ SCL K04-MS	FPZ SCL K05-MS ³
NOISE LEVEL	65.0 dB(A)	70.8 dB(A)
AIR TEMPERATURE RISE ¹	41 F (22.8 C)	33 F (18.3 C)
BLOWER INLET DIAMETER	1.5 IN NPT	2 IN NPT
BLOWER OUTLET DIAMETER	1.5 IN NPT	2 IN NPT
MOTOR POWER RATING ²	2 HP	3 HP
OPERATING POWER	1.1 KW	1.7 KW

1. REVIEW BLOWER DISCHARGE AIR TEMPERATURE WHEN SPECIFYING AIR MAIN PIPING MATERIAL.
2. REVIEW BLOWER MANUFACTURER CUTSHEETS FOR ADDITIONAL ELECTRICAL INFORMATION.
3. USE ALTERNATIVE BLOWER GARDNER DENVER 2L ON HIGH ELEVATION RANGE IF REQUIRED. SEE CALCULATIONS FOR DETAILS.

**TABLE 3
STANDARD EQUIPMENT LIST**

DESCRIPTION	QTY	MAKE	MODEL
ECOPOD REACTOR	1	IWT	E450D
BLOWER	1	FPZ	PER TABLE 2
CONTROL PANEL	1	IWT	PER DESIGN
24" S.S. EFFLUENT WEIR	1	IWT	TROUGH-3.0



**TABLE 4 (NOT APPLICABLE)
MINIMUM ECOPOD REACTOR DIMENSIONS**

SITE ELEVATION		LAYOUT ID	A OVERALL LENGTH		B OVERALL WIDTH		B1 AIR HEADER CL DIM	
FT	M		IN	CM	IN	CM	IN	CM
INTENTIONALLY LEFT BLANK.								

**TABLE 5 (NOT APPLICABLE)
RECOMMENDED ECOPOD TANK
INTERIOR ENVELOPE DIMENSIONS**

DIMENSION	IN	CM
C VESSEL FRONT SPACE		
D VESSEL REAR SPACE		
E AIR HEADER SIDE INSIDE SPACE		
F NO HEADER SIDE INSIDE SPACE		
INTENTIONALLY LEFT BLANK.		

**TABLE 6
REQUIRED ECOPOD TANK
INTERIOR ENVELOPE MINIMUM
DIMENSIONS**

DIMENSION	IN	CM
G INLET INVERT	92	234
H PLENUM SPACE ABOVE INLET INVERT	10	25
J MEDIA REACTOR HEIGHT	101	257
K OUTLET INVERT	89	226
1. ONE (1 EA.) INLET AND ONE (1 EA.) OUTLET ACCESS RISER REQUIRED, 24" DIA MINIMUM.		

**TABLE 7
VC ECOPOD TANK
EXTERIOR DIMENSIONS**

DIMENSION	IN	CM
L = G + H TANK WALL HEIGHT	102	259
M TANK DOME HEIGHT	12	30
N TANK DIAMETER ¹	120	305
1. PIPE PENETRATIONS EXTEND 3 IN. FROM TANK WALL		

NO.	DATE	INITIALS	DESCRIPTION

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

COPYRIGHT (C) 2024 INFILTRATOR WATER TECHNOLOGIES, LLC (IWT). INFORMATION CONTAINED HEREIN IS CONFIDENTIAL AND IS THE PROPERTY OF IWT. NO PART OF THIS DRAWING SHALL BE REPRODUCED, DISTRIBUTED, DISCLOSED, OR USED BY ANY PERSON OR ORGANIZATION, IN WHOLE OR IN PART, WITHOUT THE PRIOR WRITTEN PERMISSION OF IWT. THIS INFORMATION IS BASED ON SPECIFIC INPUT PARAMETERS AND IS FOR BUDGETARY OR PRELIMINARY USE ONLY. USE AND INTERPRETATION OF THIS INFORMATION AND DETERMINING THE APPLICABILITY TO A SPECIFIC PROJECT IS AT THE SOLE DISCRETION OF THE USER AND/OR THE ENGINEER OF RECORD.

**ECOPOD E450D-VC
STANDARD DESIGN FOR BOD REDUCTION**

GENERAL ARRANGEMENT

HORIZ. SCALE	PROJECT NO.
N/A	N/A
VERT. SCALE	DATE
N/A	07/20/2021
DRAWN BY	DESIGNED BY
CGK	AOB
DRAWING NO.	SHEET NO.
C1.0	01 of 01