

- 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.
 - 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

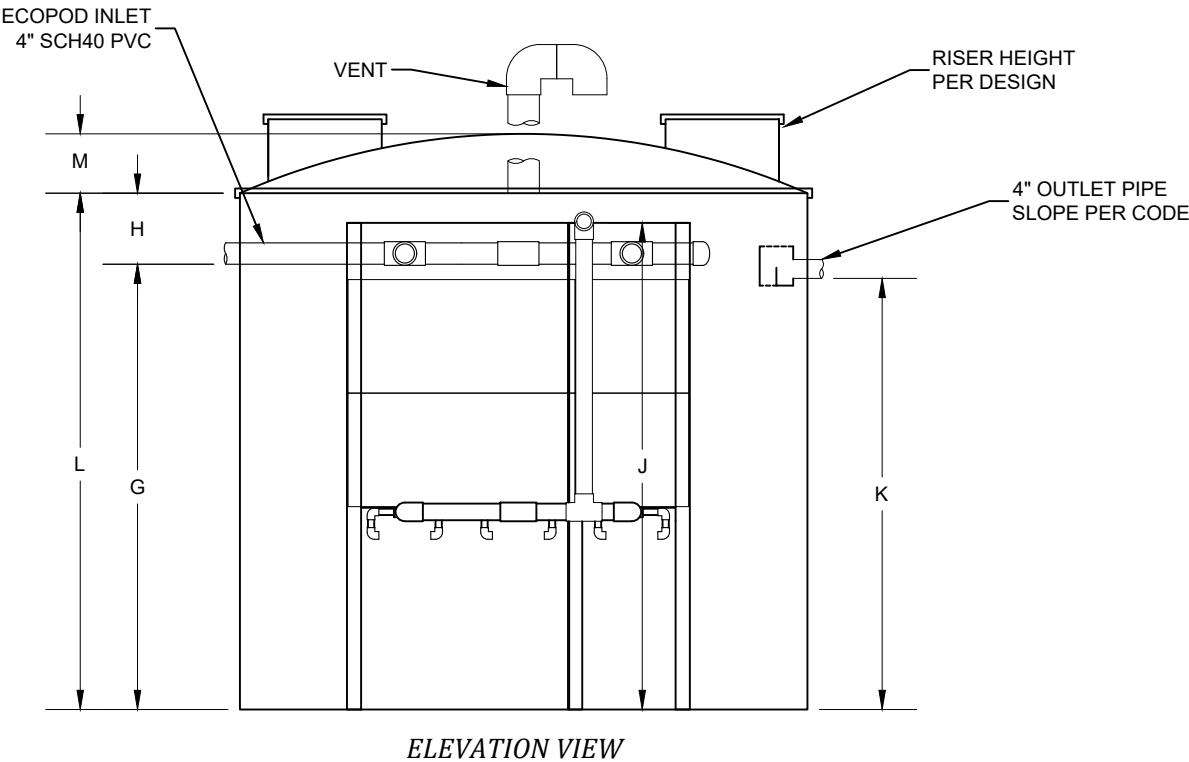
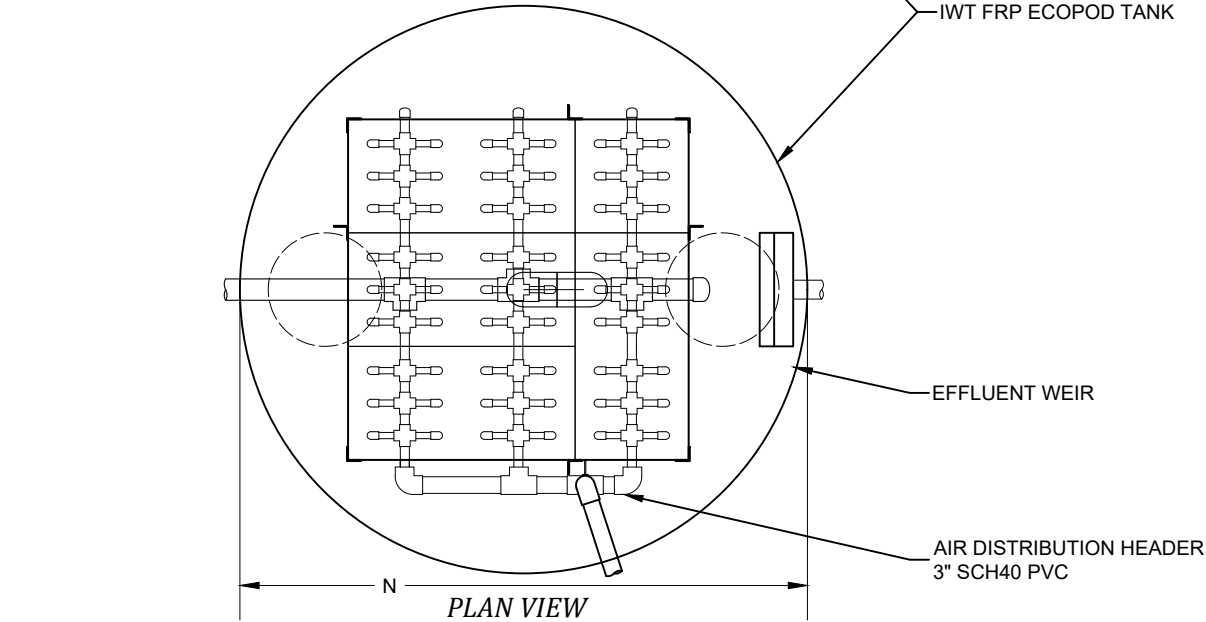
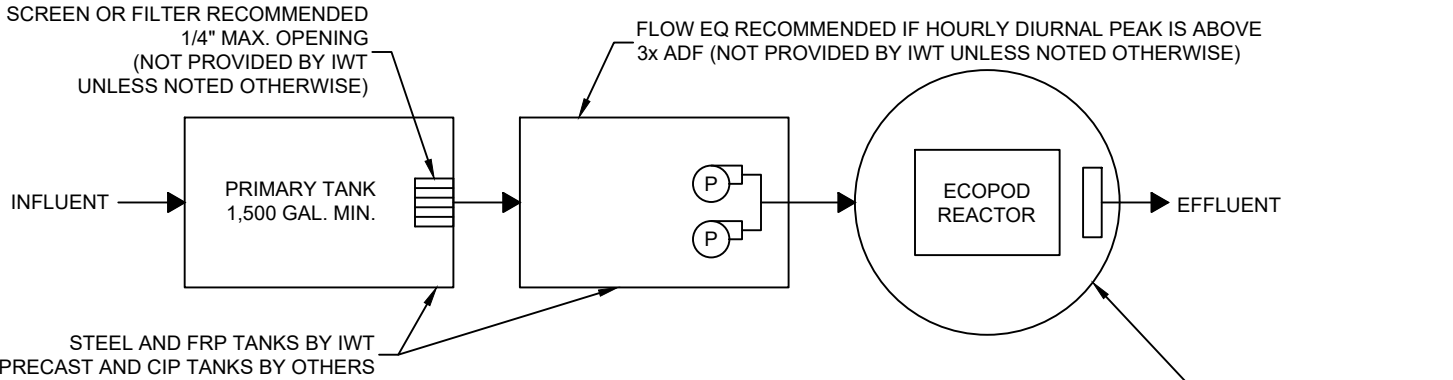


TABLE 4 (NOT APPLICABLE) MINIMUM ECOPOD REACTOR DIMENSIONS							
SITE ELEVATION		LAYOUT ID	A OVERALL LENGTH		B OVERALL WIDTH		B1 AIR HEADER CL DIM
FT	M		IN	CM	IN	CM	IN CM
INTENTIONALLY LEFT BLANK.							

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



Part of **ADS**

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ECOPOD E450D-VC STANDARD DESIGN FOR BOD REDUCTION		HORIZ. SCALE N/A	PROJECT NO. N/A
GENERAL ARRANGEMENT		VERT. SCALE N/A	DATE 07/20/2021
		DRAWN BY CGK	DESIGNED BY AOB
		DRAWING NO. C1.0	SHEET NO. 01 of 01