

PROPOSAL

To: **Jill Grimaldi, BCES**
Company: **Kimley Horn**

Date: January 30, 2021

Project: **Indian River County SWDD
Centrate GST Conversion
Vaughan Rotamix Installation**

Dear Jill:

We are pleased to offer the following equipment & installation for the above referenced project:

- (1) Furnish & Install a Vaughan Rotamix System in the existing ground storage tank.
Consisting of the following:
 - (1) Vaughan Model HE8K10CS-110 Chopper Pump
 - Rated at 1700 GPM at 31' TDH
 - 8" ANSI Discharge Flange
 - 10" ANSI Suction Flange
 - 20 HP Electric Motor, 1170 RPM, 3/460 Volts, Premium Efficiency, TEFC
 - Flushless mechanical seal
 - Air Release Valve
 - Tnemec 431 Epoxy finish
 - SS Fasteners & Anchor Bolts
 - (2) Vaughan Rotamix Extra Low Profile Mixing Nozzle Assemblies
 - Each assembly has (2) nozzles for a total of (4).
 - Nozzles are polyurethane construction
 - Nozzle barrels are SS construction
 - Exterior is Fusion Bonded Epoxy Coating
 - SS Anchor bolts
 - (3) Suction Piping is 14" HDPE, DIPS, SDR 11
 - (1) Suction Isolation Valve, 14"
 - (1) Discharge Piping is 12" HDPE, DIPS, SDR 11
 - (1) Discharge Isolation Valve, 12"
 - (1) Discharge Check Valve, 12"
 - (2) Branch Piping to Vaughan Rotamix nozzles is 8" HDPE, DIPS, SDR 11
 - (3) Pipe clamps, 316SS, 14"
 - (3) Pipe clamps, 316SS, 12"
 - (2) Pipe clamps, 316SS, 8"
 - (1) Pipe Supports, SS are required

TYPICAL INSTALLATION



INSTALLED PRICE: \$210,966.00

Clarifications:

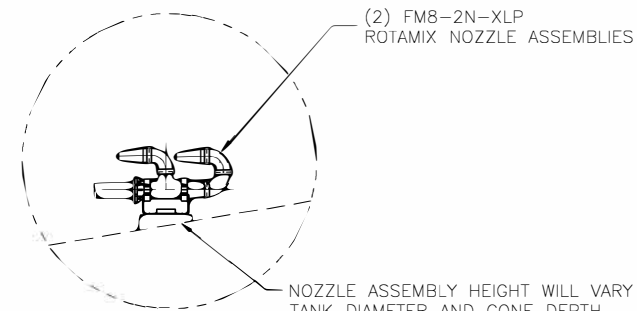
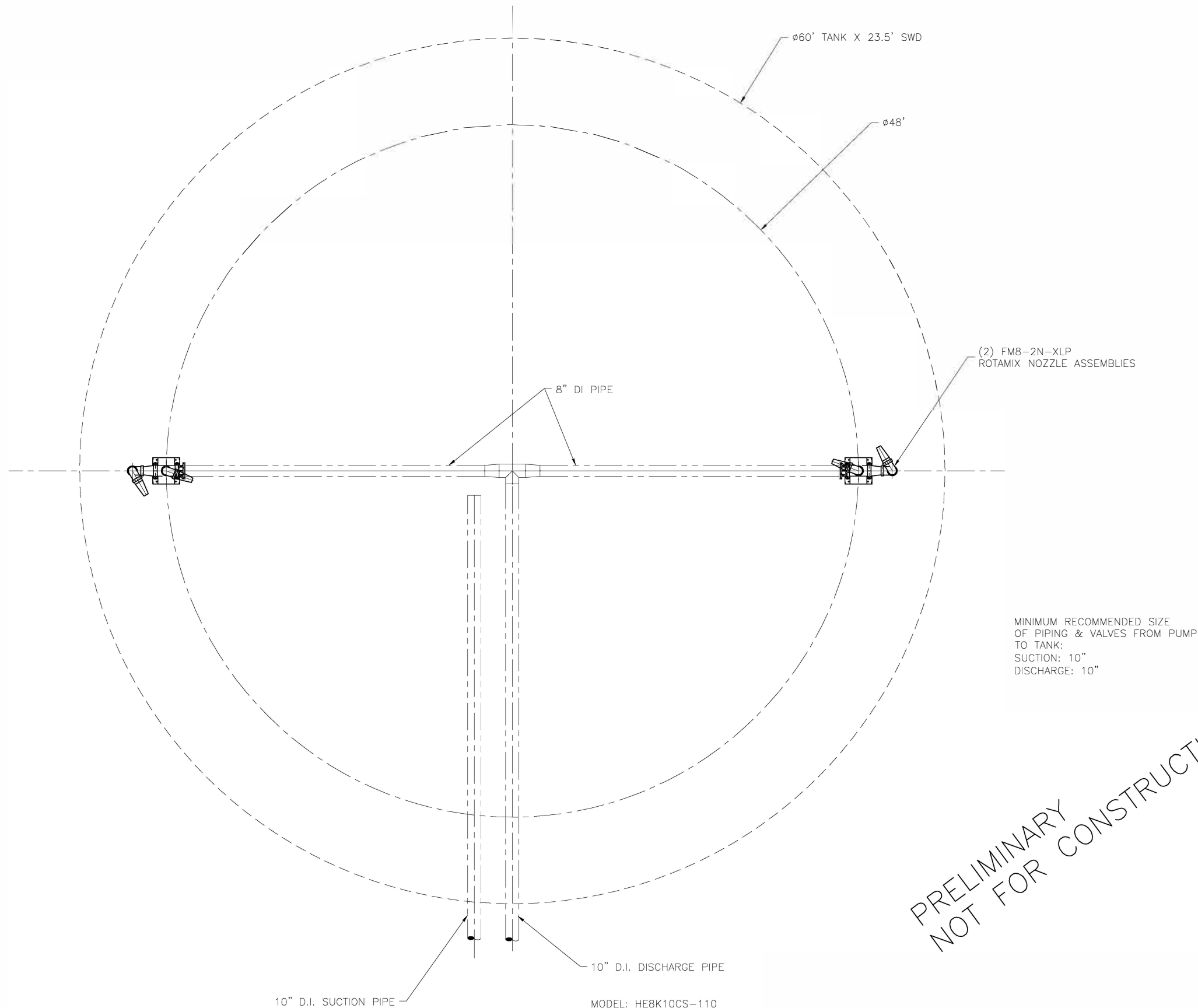
1. Wall penetrations are by Crom Corporation
2. Pipe support pedestals inside of tank are by Crom Corporation
3. Electrical is by others
4. All piping is HDPE, SDR 11.

Note: Price does **not** include any item not specifically listed in this proposal.
Terms: Net 30 days, Proposal is valid for 30 days.
Freight: Freight allowed to jobsite.
Delivery: Submittals – Approximately 4-6 weeks after receipt of purchase order.
Equipment - Approximately 16-18 weeks after receipt of approved submittals.

Thank you for the opportunity to quote on this project. Please contact us with any questions.

Sincerely,
Fred Nugent

Offices located throughout Florida



(2) FM8-2N-XLP
ROTAMIX NOZZLE ASSEMBLIES

NOZZLE ASSEMBLY HEIGHT WILL VARY WITH TANK DIAMETER AND CONE DEPTH. THEY GENERALLY SHOULD BE LOCATED AS CLOSE TO FLOOR OF TANK/CONE AS POSSIBLE.

(2) FM8-2N-XLP
ROTAMIX NOZZLE ASSEMBLIES

MINIMUM RECOMMENDED SIZE
OF PIPING & VALVES FROM PUMP
TO TANK:
SUCTION: 10"
DISCHARGE: 10"

PRELIMINARY
NOT FOR CONSTRUCTION

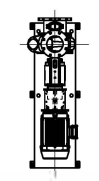
NOTE:

1. NOZZLE ANGLES TO BE POSITIONED IN FIELD BY VAUGHAN ENGINEER.
2. VAUGHAN CO. TO SUPPLY PUMP(S) AND NOZZLE ASSEMBLIES. ALL PIPING TO BE SUPPLIED & INSTALLED BY OTHERS. PIPING LAYOUT & FITTINGS FOR ILLUSTRATION PURPOSES ONLY.
3. CHOOSING LARGE PIPING SIZE RESULTS IN BETTER MIXING. CHOOSE PIPING SIZE TO OBTAIN 4-7 FT/SEC VELOCITY BASED ON THE ROTAMIX SYSTEM FLOW. THIS IS PARTICULARLY CRITICAL FOR PUMP SUCTION-SIDE PIPING TO AVOID PUMP CAVITATION AND GAS BINDING. DISCHARGE PIPING CAN RANGE UP TO 8 FT/SEC WITH OUT NEGATIVE IMPACT. SYSTEM TOTAL HEAD WILL GENERALLY BE AROUND 33-40 FT.
4. CHOOSING PIPE & VALVE SIZES WHICH ARE SMALLER THAN SHOWN WILL REDUCE MIXING SYSTEM PERFORMANCE.
5. AIR RELEASE VALVE MUST BE INSTALLED AT HIGH POINT IN PIPING AFTER PUMP DISCHARGE FLANGE & BEFORE FIRST CHECK VALVE.

10" D.I. SUCTION PIPE

10" D.I. DISCHARGE PIPE

MODEL: HEBK10CS-110
MOTOR: 20 HP, 1170 RPM
ESTIMATED PERFORMANCE: 1700 GPM



ROTAMIX SYSTEM OPERATING INSTRUCTIONS (ONE PUMP)

1. THIS MIXING SYSTEM IS TO ONLY BE OPERATED WITH ONE PUMP AT A TIME.
2. MIXING SYSTEM IS DESIGNED TO BE OPERATED CONTINUOUSLY.
3. PUMP CHOPPING CLEARANCES MUST BE MAINTAINED TO INSURE PROPER OPERATION OF MIXING SYSTEM.

		VAUGHAN CO., INC. 364 MONTE-ELVA ROAD MONTESANO, WA 98863 PHONE: (360) 728-4022 FAX: (360) 728-6155		TITLE ROTAMIX MIXING SYSTEM NOZZLE ASSEMBLY LAYOUT LEACHATE STORAGE TANK	
THIS DRAWING IS THE PROPERTY OF VAUGHAN COMPANY INC. IT IS FORWARDED FOR YOUR CONFIDENTIAL INFORMATION PURPOSES ONLY, AND IS NOT TO BE DISCLOSED TO ANYONE ELSE OR REPRODUCED OR USED FOR MANUFACTURING PURPOSES WITHOUT THE EXPRESS WRITTEN CONSENT OF VAUGHAN COMPANY INC.		VAUGHAN SALES ENGINEER JF		CUSTOMER INDIAN RIVER COUNTY	
THIS DRAWING IS A PROPOSAL. DRAWING AS SUCH IS A PRELIMINARY DRAWING AND IT SHOULD NOT BE USED FOR CONSTRUCTION PURPOSES.		JOB ORDER NUMBER JF		DATE 10/28/21	
				VAUGHAN QUOTATION NUMBER: RQ7008	



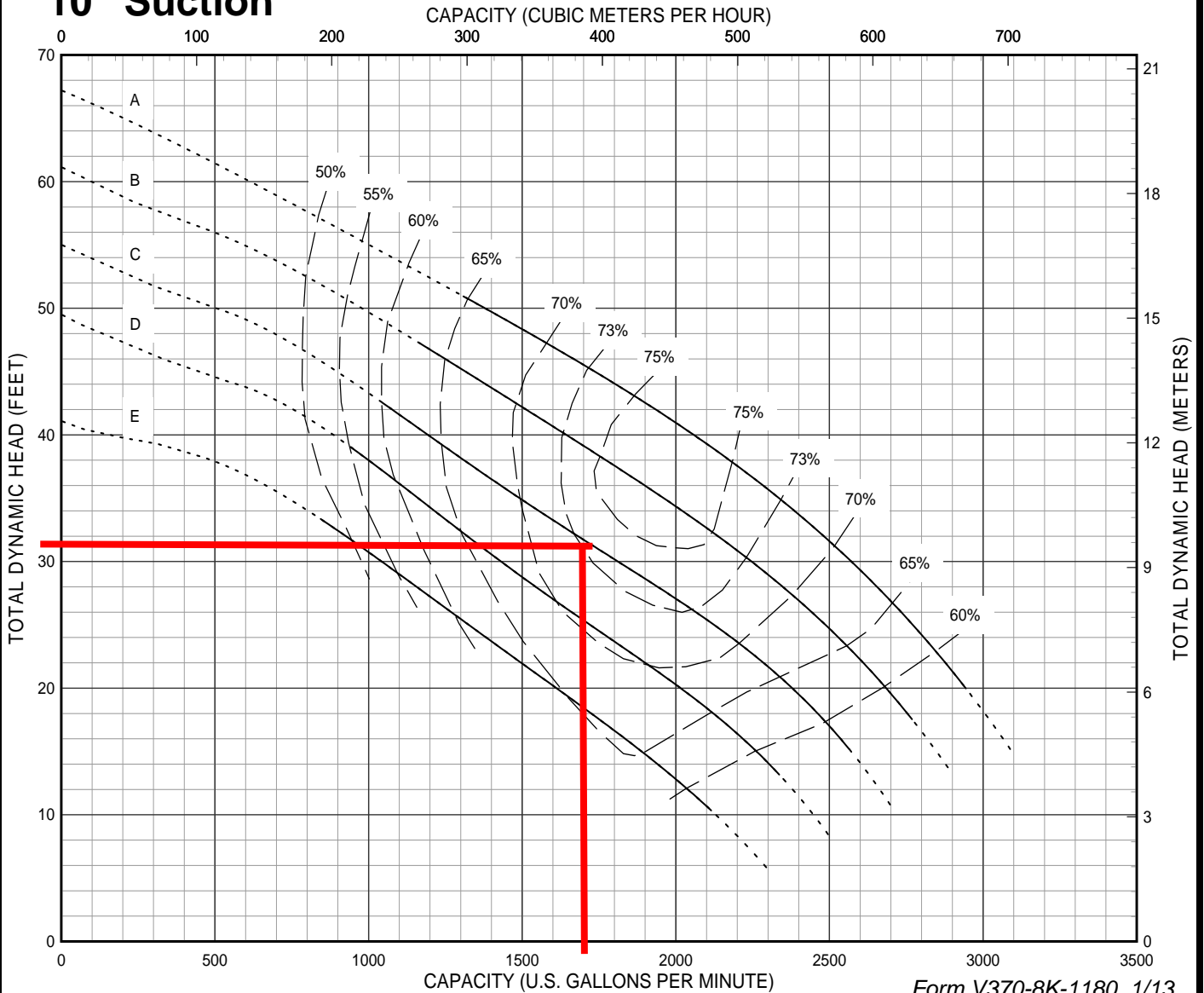
Vaughan E Series Chopper Pump PERFORMANCE CURVE

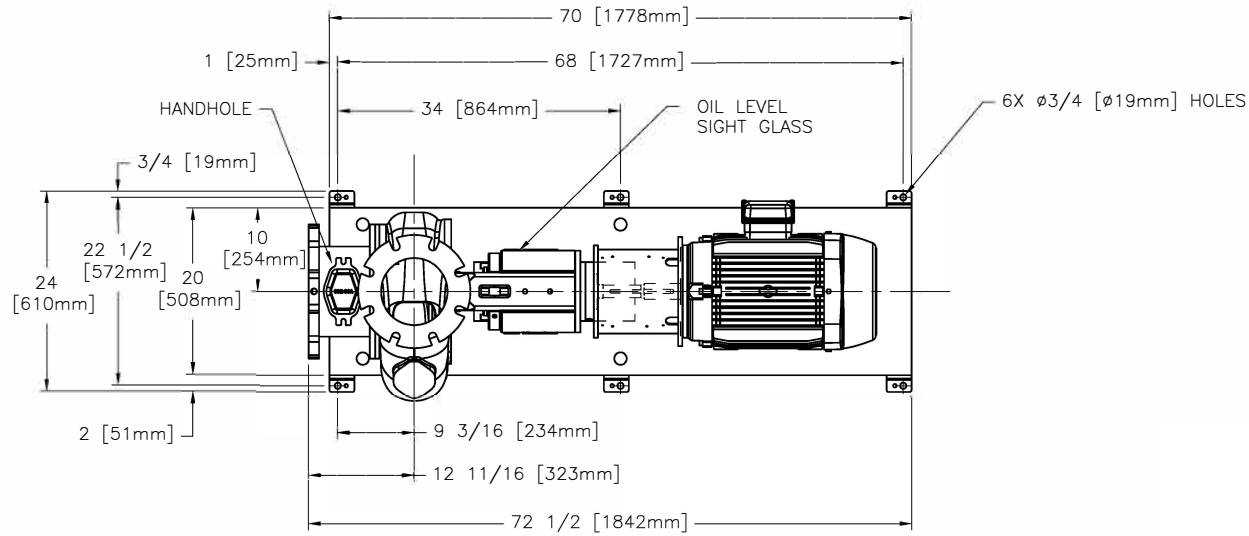
Models:
HE8K10
PE8K10
V8K

CURVE	POWER (HP/KW)	SPEED (RPM)	IMPELLER DIAMETER
A	30 / 22	1180	12.00" (305 mm)
B	25 / 19	1180	11.50" (292 mm)
C	20 / 15	1180	11.00" (279 mm)
D	20 / 15	1180	10.50" (267 mm)
E	15 / 11	1180	10.00" (254 mm)

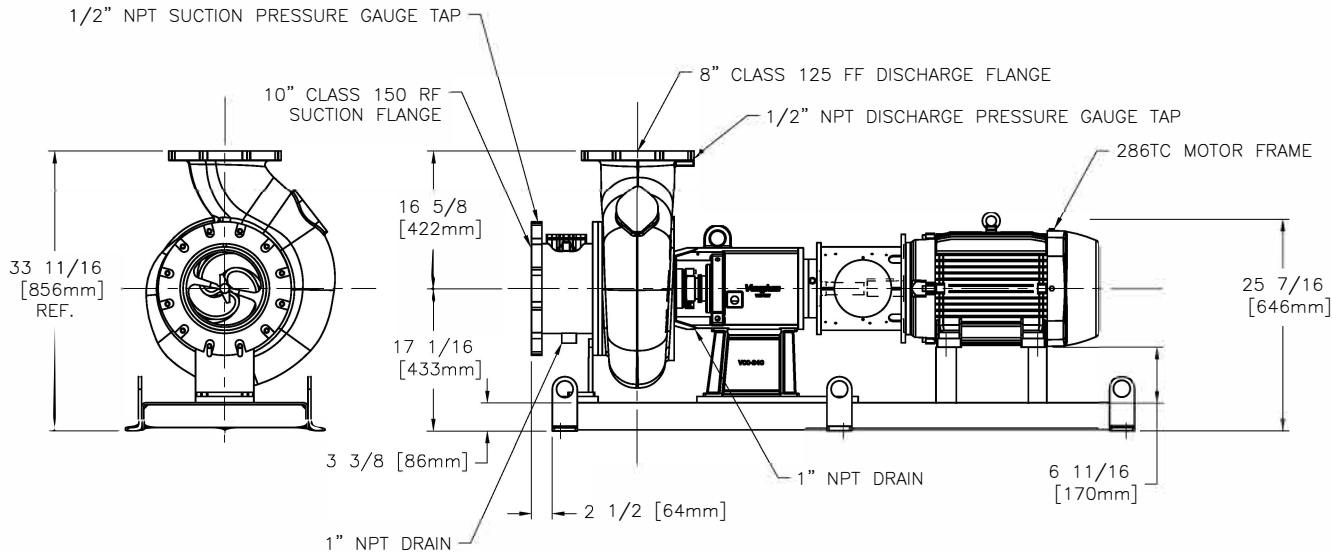
Back-Pull-Out Casing
3-Blade Impeller
8" Discharge
10" Suction

DO NOT OPERATE PUMP IN DOTTED PORTION OF CURVES. CURVES ARE SUBJECT TO CHANGE WITHOUT NOTICE. CURVES ARE BASED ON PREM. EFF. TEFC MOTOR SPEEDS. EFFICIENCIES SHOWN ARE NOMINAL BOWL. GUARANTEED MINIMUM EFFICIENCIES PER H.I. LEVEL B.





PRELIMINARY
NOT FOR CONSTRUCTION



NOTES:

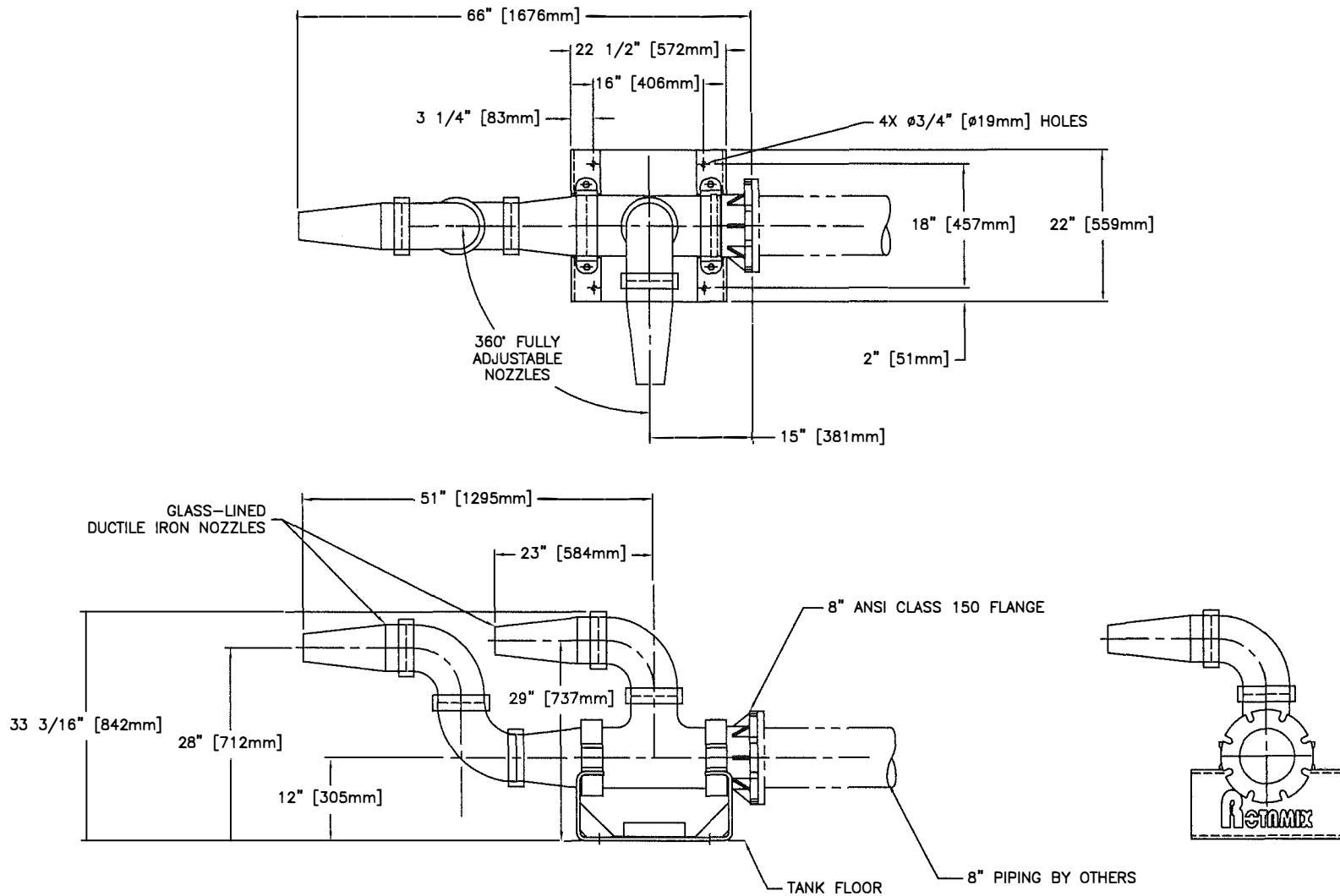
1. PUMP WEIGHT: 880 LBS [399 KGS]
2. BASE PLATE WEIGHT: 230 LBS [104 KGS]
3. MOTOR WEIGHT: 422 LBS [191 KGS]
4. TOTAL WEIGHT: 1532 LBS [695 KGS]
5. PERFORMANCE REQUIRED: GPM @ TDH
6. MOTOR: HP, RPM
POWER: V, PH, HZ
ENCLOSURE:
MANUFACTURED BY:
7. SURFACE PREPARATION:



VAUGHAN CO., INC.
364 MONTE-ELMA ROAD
MONTESANO, WA 98563
PHONE: (360) 248-4042
FAX: (360) 248-8155

TITLE: OUTLINE DIMENSIONS MODEL: HE8K10CS-	
CUSTOMER:	
VAUGHAN SALES ENGR:	LOCATION:
THIS DRAWING IS A PROPOSAL DRAWING AS SUCH IT IS A PRELIMINARY DRAWING AND IT SHOULD NOT BE USED FOR CONSTRUCTION PURPOSES.	DATE:
JOB ORDER NUMBER:	VAUGHAN QUOTATION NUMBER:

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NOTES:

1. FINISH: AS SPECIFIED ON LIST OF EQUIP. IN ENGINEERING SUBMITTAL.
2. ALL FASTENERS TO BE 300 SERIES STAINLESS STEEL.
3. THIS NOZZLE IS DESIGNED TO BE AN INTEGRAL PART OF VAUGHAN'S ROTAMIX™ SYSTEM. THE DISCHARGE NOZZLES ARE DESIGNED TO MIX THE DIGESTER OR STORAGE TANK IN A ROTATIONAL MANNER.
4. ALL COMPONENTS ARE MADE OF GLASS-LINED DUCTILE IRON ASTM A536, EXCEPT FOR THE BASE, WHICH IS 1/2" THICK 1018 HR STEEL.
5. 360° FULLY ADJUSTABLE NOZZLES ARE TO BE POSITIONED IN THE FIELD BY VAUGHAN.
6. PROVIDE 4, 5/8" X 7" LONG 316 S.S. ANCHOR BOLTS.

DATE: 2/14/03

	VAUGHAN CO., INC. 384 MONTE-ELMA ROAD MONTESANO, WA 98563 PHONE: (360) 248-4042 FAX: (360) 248-8155		TITLE: OUTLINE DIMENSIONS MODEL: FM8-2N-XLP ROTAMIX SYSTEM	
	THIS DRAWING IS THE PROPERTY OF VAUGHAN COMPANY INC. IT IS FURNISHED FOR YOUR CONFIDENTIAL INFORMATION PURPOSES ONLY, AND IS NOT TO BE DISCLOSED TO ANYONE ELSE OR REPRODUCED OR USED FOR MANUFACTURING PURPOSES WITHOUT THE EXPRESS WRITTEN CONSENT OF VAUGHAN COMPANY INC.		CUSTOMER:	LOCATION:
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