CITY OF YUBA CITY STAFF REPORT

Date: March 1, 2022

To: Honorable Mayor & Members of the City Council

From: Public Works Department

Presentation By: Ben Moody, Public Works & Development Services Director

Summary

Subject: Wastewater Treatment Facility Return Activated Sludge/Waste Activated Sludge

Pumps Purchase

Recommendation: Adopt a Resolution awarding the purchase of three (3) RAS pumps and two (2) WAS

pumps to G3 Engineering, Inc. of Granite Bay, CA in the amount of \$140,000, with

the finding that it is in the best interest of the City

Fiscal Impact: \$140,000 – Account No. 981103-65501 (Recurring Plant Projects)

Purpose:

Construct priority improvements for continuous and reliable operation of the Wastewater Treatment Facility.

Council's Strategic Goal:

This project addresses the City Council's Strategic Goal of improving the City's wastewater Infrastructure by continuously updating equipment and processes and proactively addressing future needs.

Background:

The City of Yuba City Wastewater Treatment Facility (WWTF) was originally constructed in 1972, and so the aging equipment and treatment processes needed rehabilitation to extend their useful life or replacement with newer technology. It also became challenging for the City to meet current and future NPDES permit requirements. Subsequently, the Public Works Department developed the WWTF Improvements Project to address the priority upgrades, with a design produced by Woodard & Curran.

At the time of WWTF Improvements Project development, the Return Activated Sludge/Waste Activated Sludge (RAS/WAS) pump system, consisting of four (4) RAS and two (2) WAS pumps, was determined to be of lesser priority and was expected to continue to operate sufficiently for the near future, and was therefore not included in the project design.

Analysis:

Recently, one of the RAS pumps failed completely; replacement parts are no longer manufactured due

to the age of the pumps and the WWTF maintenance team is unable to bring the pump back into operation. With one RAS pump out of service, the WWTF has had to take some equipment offline and therefore reduced the effectiveness of this portion of the treatment process. The loss of an additional pump would severely jeopardize the treatment process. In order to safeguard against this concern as quickly as possible, the Public Works Department purchased one (1) RAS pump from G3 Engineering, Inc. in the amount of \$44,945.46 in November 2021 with the City Manager's authorization, as the specialty equipment has an approximate manufacturing and shipping lead time of 18-20 weeks.

Staff has determined that the most expedient and beneficial means by which to facilitate the RAS/WAS pump-system upgrade is to purchase the appropriate pumps directly and to contract with the WWTF Improvements Project design firm Woodard & Curran of Walnut Creek, CA for design and bid specifications.

Public Works is requesting purchase of an additional three (3) RAS pumps and two (2) WAS pumps from G3 Engineering, Inc. in order to remove and replace the entirety of the obsolete system at the same time and integrate the pump system replacement into the newly completed WWTF Improvements Project infrastructure. G3 Engineering, Inc. is the sole source for the KSB Sewalbloc-brand pumps needed for the system.

Woodard & Curran will be able to provide the necessary design and project management services, as they have a unique understanding of the facility and the recent improvements. Staff has prepared a Professional Services Agreement with Woodard & Curran to develop the design and bid specifications for the pump-system project utilizing Council's authorization on the Fiscal Year 21/22 Citywide purchasing item in June 2021.

Once design is complete, Public Works staff will return to Council for approval of the plans and specifications and then issue a Public Contract Code formal bid for the installation of the new RAS/WAS pump system. Staff estimates recommending award to Council and beginning construction in Fall 2022.

Fiscal Impact:

The total estimated pre-construction costs of the RAS/WAS pump project are as follows:

1 RAS Pump Purchase (November 2021)G3 Engineering, Inc. \$44,945.46 3 RAS/2 WAS Pump Purchase G3 Engineering, Inc. \$140,000.00 Design Professional Services Agreement Woodard & Curran \$121,757.00

Pre-Construction Total: \$306,702.46

The quotation from G3 Engineering, Inc. attached to the Resolution as Exhibit 1A is for the total of four (4) RAS pumps and two (2) WAS pumps and does not include sales tax or freight. G3 Engineering has estimated the air freight as an additional \$20,000, which will reduce the lead time from 22-24 weeks by an estimated four weeks. There are sufficient funds in Account No. 981103-65501 (Recurring Plant Projects) for these encumbrances.

While the Department and Woodard & Curran do not have an accurate Engineer's Estimate for the construction costs of the project at this time, staff will propose anticipated funding adjustments to Account No. 981103-65501 during the annual CIP budget process and will provide an estimate as part of the approval of plans and specifications item.

Environmental:

Staff has determined that this project falls within the Class 1 Categorical Exemption per CEQA Guidelines Section 15301, as the replacement of the existing RAS/WAS pumps with like equipment involves negligible expansion of the existing WWTF.

Alternatives:

Do not approve the award and direct staff to include the pump purchase as part of the bid specifications for the RAS/WAS Pump Upgrade construction contract. This will result in significant time delays due to the lengthy equipment production timeline and projected equipment cost increase, as well as markup from the contractor.

Recommendation:

Adopt a Resolution awarding the purchase of three (3) RAS pumps and two (2) WAS pumps to G3 Engineering, Inc. of Granite Bay, CA in the amount of \$140,000, with the finding that it is in the best interest of the City.

Attachments:

- 1. Resolution WWTF RAS-WAS Pumps Purchase
- 2. Exhibit A WWTF RAS-WAS Pumps Purchase

<u>Prepared By:</u> Scarlett O. Harris Administrative Analyst I Submitted By:
Diana Langley
City Manager

ATTACHMENT 1

RESOL	UTION NO	

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF YUBA CITY AWARDING THE PURCHASE OF THREE (3) RAS PUMPS AND TWO (2) WAS PUMPS TO G3 ENGINEERING, INC. OF GRANITE BAY, CA IN THE AMOUNT OF \$140,000

WHEREAS, the City of Yuba City recognizes the need for ongoing maintenance and improvements to maintain continuous and reliable operation of the Wastewater Treatment Facility (WWTF) for the health and wellbeing of our customers and the environment; and

WHEREAS, the City Public Works Department developed the WWTF Improvements Project (Project) to address priority upgrades to the aging facility in accordance with this need and to ensure continued compliance with the City's NPDES permit; and

WHEREAS, the WWTF's existing four (4) RAS and two (2) WAS pump system, though not originally identified as a priority improvement in the Project design, have begun to fail and their imminent replacement has now become a necessity; and

WHEREAS, the City has determined that the most expedient and beneficial means by which to facilitate the RAS/WAS pump-system upgrade is to purchase the appropriate pumps directly and to contract with Project design firm Woodard & Curran of Walnut Creek, CA for design and bid specifications; and

WHEREAS, the City has purchased one (1) RAS/WAS pump from G3 Engineering, Inc. and desires to purchase the remaining three (3) RAS pumps and two (2) WAS pumps from G3 Engineering, Inc. of Granite Bay, CA in accordance with the City's Purchasing Policies and Procedures, as the pumps are proprietary equipment uniquely suited for the WWTF's treatment process infrastructure solely available from said vendor; and

WHEREAS, G3 Engineering, Inc., is the sole supplier in the region of KSB Sewabloc pumps; and

WHEREAS, the City has met the requirements to sole source the equipment pursuant to Public Contract Code section 3400(c) and City Purchasing Policies section 8-8.4.2; and

WHEREAS, the negotiated prices for G3 Engineering, Inc.'s equipment are reasonable and on par with previous projects of a similar size undertaken by other public agencies; and

WHEREAS, the City Council now desires to authorize the sole source purchase of RAS and WAS KSB Sewabloc pumps from G3 Engineering, Inc.; and

NOW, THEREFORE, be it resolved by the City Council of Yuba City as follows:

- 1. The City Council finds that all of the facts set forth in the recitals above are true and correct and incorporated herein.
- The City Council finds and determines that this project falls within the Class 1
 Categorical Exemption set forth in CEQA Guidelines Section 15301 as this contract is to
 allow for the repair and operation of an existing public wastewater treatment facility,
 which will involve negligible or no expansion of the existing facility. Further, none of the

exceptions to Categorical Exemptions set forth in CEQA Guidelines Section 15300.2 apply to this project.

2. The City Council finds that a sole source award is appropriate on grounds including that G3 Engineering, Inc., is the sole authorized distributor of the desired type of pumps in the region, that only these pump types would be financially and practically feasible to given the current operating system, facilities, and performance needs, and that the proposed negotiated prices for G3 Engineering, Inc.'s equipment are reasonable and on par with previous projects of a similar size undertaken by other public agencies. Given this, the City Council finds that it is in the best interest of the City to make a sole source award to G3 Engineering, Inc. for three (3) RAS pumps and two (2) WAS pumps. As such, the City Council of the City of Yuba City awards the purchase of three (3) RAS pumps and two (2) WAS pumps to G3 Engineering, Inc., of Granite Bay, CA in the amount of \$140,000.

The foregoing Resolution was duly and regularly introduced, passed, and adopted by the City Council of the City of Yuba City at a regular meeting thereof held on the 1st day of March, 2022.

AYES:	
NOES:	
ABSENT:	
	Dave Shaw, Mayor
ATTEST:	
Ciara Wakefield, Deputy City Clerk	
	APPROVED AS TO FORM COUNSEL FOR YUBA CITY:
	Shannon Chaffin, City Attorney Aleshire & Wynder, LLP

Exhibit:

A. Quotation for RAS/WAS Pumps from G3 Engineering, Inc. and G3 Engineering Sole Source Letter 1/5/2022

EXHIBIT A

G3 Engineering, Inc.

PO Box 2148, Granite Bay, CA 95746 Phone 408 483 1899 FAX 916 797 1881 e-mail: mike@g3engineering.com

QUOTATION

To: Shell	y Masuda	Date: 9/24/2021
Company:_	Woodard Curran/Yuba City	WWTP
Phone:	925 627 3226	
Email:	smasuda@woodwardcurran	.com
From:	Mike Burns	
Company:_	G3 Engineering, Inc.	

SUBJECT: G3 Engineering Proposal #6326 – Yuba City RAS and WAS Pumps

Qty	Description	Unit Price	Total Price
4 ea	RAS PUMPS	\$24,450/ea	\$97,800
	 KSB Sewabloc (K200-316G VF) Complete KSB Vertical Solids Handling Pump with similar curve to existing Chicago Pumps (2400 GPM at 30') Standard pump construction (G Materials) with tandem mechanical seals. Includes pump, 8" x 8" suction elbow with mounting foot. Standard coatings New 30 HP Premium Efficiency TEFC WEG motor. Includes Non-Witnessed Performance Test (HI level 1U). (Will require modifications to pedestals and piping) 		
	Lead time 22-24 weeks		
4 ea	Adder for Internal Grounding Ring on Motor	\$985/ea	\$3940
4 ea	Adder to Provide US Motor in lieu of WEG Motor	\$2350/ea	\$9400

2 ea	WAS PUMPS	\$14,580/ea	\$29,160
	 KSB Sewabloc (E80-253G VF) Complete KSB Vertical Solids Handling Pump sized for (494GPM at 47') Standard pump construction (G Materials) with tandem mechanical seals. Includes pump, 4" x 4" suction elbow with mounting foot. Standard coatings New 15 HP Premium Efficiency TEFC WEG motor. Includes Non-Witnessed Performance Test (HI level 1U). (Will require modifications to pedestals and piping) 		
2 ea	Adder for Internal Grounding Ring on Motor	\$950/ea	\$1900
2 ea	Adder to Provide US Motor in lieu of WEG Motor	\$1250/ea	\$2500
	TOTAL PRICE (Plus tax and freight)		\$144,700

Prices are FOB Factory (Richmond, VA)
Freight is Pre-pay and add
Taxes are not included
Pricing is valid for 30 days
Proposal Subject to G3 Engineering's Standard Terms and Conditions

Data sheet



Customer item no.:

Communication dated: 30/01/2018

Doc. no.: Yuba City

Quantity: 1

Sewabloc K 200-316G VF

Number: ES 5643047

Item no.: 100 Date: 07/10/2020

Page: 1/5

Version no.: 2

Operating data

Requested flow rate 2400.00 US GPM Actual flow rate 2400.00 US GPM Requested developed head Actual developed head 30.00 ft 30.00 ft Pumped medium Water Efficiency 79.1 % Clean water Power absorbed 23.06 HP Not containing chemical and Pump speed of rotation 1180 rpm mechanical substances which NPSH required 14.63 ft affect the materials Permissible operating 91.374 psi.g 68.0 °F Max. ambient air temperature pressure Discharge press. 13.015 psi.g

Min. ambient air temperature 68.0 °F 68.0 °F Fluid temperature

Fluid density 62.303144 lb/ft3 Min. allow. mass flow 168.85 lbm/s Fluid viscosity 0.0015 in²/s Shutoff head 57.06 ft Suction pressure max. Max. allow. mass flow 0.000 psi.g 501.93 lbm/s

Mass flow rate 333.58 lbm/s Max. power on curve 23.24 HP

Min. allowable flow rate 1216.47 US GPM

Design Single system 1 x 100 %

Performance test Yes

Design

Pump standard KSB-Aggregate North Shaft seal 2 mech. seals in tandem American execution arrangement with oil reservoir

Close-coupled pump without motor Manufacturer **KSB**

Design Close-coupled MG Type Orientation Material code SIC/SIC/NBR Vertical

Suction nominal dia. **DN 200** Impeller type Multivane radial flow impeller Suction nominal pressure CL 125

Suction position axial Wear ring Casing wear ring Suction flange drilled **ASME B 16.1**

Impeller diameter 11.93 in according to standard Free passage size 3.94 in Discharge nominal dia. **DN 200** Direction of rotation from drive Clockwise

Discharge norminal pressure CL 125 Bearing bracket size Discharge position top (0°/360°) Anti-friction bearings Bearing type

Discharge flange drilled **ASME B 16.1** Lubrication type Grease

according to standard

Ultramarine blue (RAL 5002) Color

KSB-blue

Driver, accessories

Standard-EN-flange drilled acc. to ASME FF

Drive supplied by Baseplate type Without without motor Baseplate size Motor const. type IM3011 Motorside drill No Motor size 326T Frequency 60 Hz Scope of mounting parts: suction elbow with foot.

29.50 HP Rated power P2 Driver type Electric motor Available reserve 26.95 % Drive standard mech. **NEMA**

Number of poles Drive standard elec. **NEMA**

Suction accessory Suction elbow with foot

Data sheet



Customer item no.:

Communication dated: 30/01/2018 Number: ES 5643047

Doc. no.: Yuba City

Quantity: 1

Item no.: 100 Date: 07/10/2020

Page: 2 / 5 Version no.: 2

Sewabloc K 200-316G VF

Materials G

Notes
General criteria for a water analysis: pH-value >= 7; chloride

content (CI) <=250 mg/kg. Chlorine (CI2) <=0.6 mg/kg. Pump casing (101) Cast iron A 48 Class 35

Discharge cover (163) Shaft (210) Cast iron A 48 Class 35 B Cast iron A 48 Class 35 B Chrome steel A 276 Type 420 Impeller (230) O-Ring (412) Casing wear ring (502.1)

Screwed plug (903)
Hexagon socket head cap screw (914)

Cast iron A 48 Class 35 B Nitrile rubber NBR Cast iron A 48 Class 35 B

Steel ST Chrome steel

Packaging

Packaging category B2 With desiccants in PE-

plastic sheeting, heat-sealed

water-proof, in wooden/plywood case, outdoor storage up to 12

months

Packaging for transport Ship IPPC Standard ISPM 15 Yes

Packaging for storage Outdoor

Outdoor storage at -40°C to +50°C, up to 12 months. Packet

must be covered.

Certifications

Hydraulic performance test

Acceptance standard

Quantity meas. points Q-H

Certificate

ISO 9906 & ANSI HI Class 1U

5

Inspection cert. 3.1 to EN

10204

Test participation Non-witnessed

Quantity, non-witnessed 1 Quantity, witnessed 0

Performance curve



Customer item no.:

Communication dated: 30/01/2018

Doc. no.: Yuba City

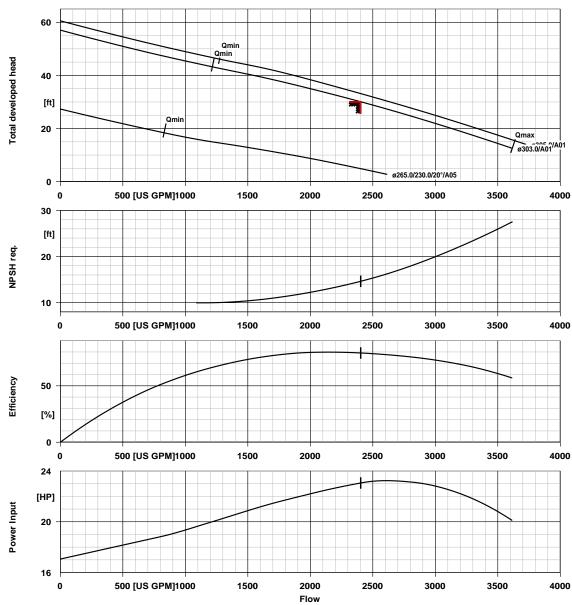
Quantity: 1

Sewabloc K 200-316G VF

Number: ES 5643047

Item no.:100 Date: 07/10/2020

Page: 3 / 5 Version no.: 2



Curve data

Speed of rotation 1180 rpm
Fluid density 62.303144 lb/ft³
Viscosity 0.0015 in²/s
Flow rate 2400.00 US GPM
Requested flow rate 2400.00 US GPM
Total developed head 30.00 ft

Total developed head 30.00 ft Requested developed head 30.00 ft Efficiency 79.1 %
Power absorbed 23.06 HP
NPSH req. 3% 14.63 ft
Curve number K42684/1
Effective impeller diameter 11.93 in

Acceptance standard ISO 9906 & ANSI HI Class

1U

Installation plan



Customer item no.:

Communication dated: 30/01/2018

Doc. no.: Yuba City

Quantity: 1

Sewabloc K 200-316G VF

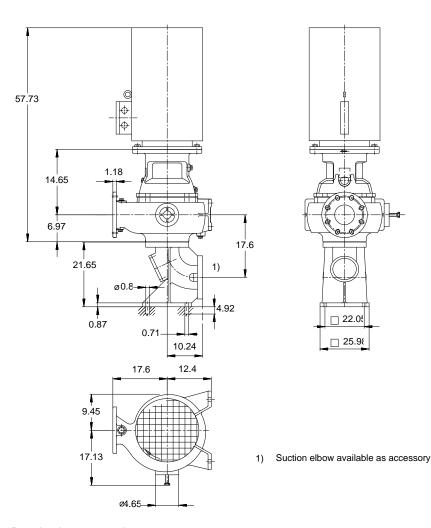


Number: ES 5643047

Item no.:100 Date: 07/10/2020

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Version no.: 2



Drawing is not to scale Dimensions in in

Motor

required but not scope of supply Motor size 326T Motor power 29.50 HP Number of poles Speed of rotation 1180 rpm

Baseplate

Without Design

Size Rp1, Without Leakage drain baseplate

(required but not scope of Foundation bolts

supply)

Connections

Suction nominal size DN1 DN 200 / ASME B 16.1 Discharge nominal size DN2 DN 200 / ASME B 16.1

Nominal pressure suct. CL 125 Rated pressure disch. CL 125 Standard-EN-flange drilled acc. to ASME FF

Weight net

Pump 483 lbm Suction side accessory 154 lbm Total 637 lbm

Installation plan



Customer item no.:

Communication dated: 30/01/2018

Doc. no.: Yuba City

Quantity: 1

Sewabloc K 200-316G VF

Number: ES 5643047

Item no.:100 Date: 07/10/2020

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Version no.: 2

Dimensional tolerances for shaft axis height:

DIN 747

Dimensions without tolerances, middle tolerances to:

Connection dimensions for pumps:

Dimensions without tolerances - welded parts:

DIN 747

ISO 2768-m

EN735

Dimensions without tolerances - welded parts:

ISO 13920-B

Dimensions without tolerances - welded parts: ISO 13920-B Dimensions without tolerances - gray cast iron parts: ISO 8062-CT9

separate drawing.

Data sheet



Customer item no.:WAS

Communication dated: 30/01/2018

Doc. no.: Yuba City

Quantity: 1

Sewabloc E 80-253G VF

Number: ES 5643047

Item no.: 300 Date: 07/10/2020

Page: 1 / 5

Version no.: 2

Operating data

Requested flow rate 440.00 US GPM Actual flow rate 463.39 US GPM Requested developed head 54.00 ft Actual developed head 59.89 ft Pumped medium Wastewater, municipal Efficiency 70.7 % mechanically treated Power absorbed 9.93 HP Pumped medium details Not containing chemical and Pump speed of rotation 1776 rpm mechanical substances which NPSH required 15.32 ft affect the materials Permissible operating pressure 91.374 psi.g

Max. ambient air temperature 68.0 °F Min. ambient air temperature 68.0 °F

Fluid temperature 68.0 °F Discharge press. 25.966 psi.g

62.428000 lb/ft3 Fluid density Fluid viscosity 0.0015 in²/s 0.000 psi.g Suction pressure max. Mass flow rate 64.45 lbm/s Max. power on curve 13.92 HP Max. allow. mass flow 133.67 lbm/s

Min. allowable flow rate Min. allow. mass flow Design Performance test

Shutoff head

Single system 1 x 100 %

95.20 ft

114.54 US GPM

15.93 lbm/s

Yes

Design

Pump standard KSB-Aggregate North Shaft seal 2 mech. seals in tandem American execution arrangement with oil reservoir

Shaft seal manufacturer Close-coupled pump without motor

Design Close-coupled Orientation Vertical Suction nominal dia. **DN 100** Suction nominal pressure CL 125 Suction position axial **ASME B 16.1**

Suction flange drilled

according to standard

DN 80 Discharge nominal dia. Discharge norminal pressure CL 125 Discharge position top (0°/360°) **ASME B 16.1** Discharge flange drilled

according to standard

Standard-EN-flange drilled acc. to ASME FF

KSB

Type MG

Material code SIC/SIC/NBR

Impeller type Single vane, radial flow (E-

max)

Wear ring Casing wear ring

Impeller diameter 8.86 in Free passage size 2.99 in Direction of rotation from drive Clockwise Bearing bracket size B02

Bearing type Anti-friction bearings

Lubrication type Grease

Ultramarine blue (RAL 5002) Color

KSB-blue

Driver, accessories

Baseplate type Without Drive supplied by without motor Baseplate size Motor const. type IM3011 Motorside drill No Motor size 254T Frequency 60 Hz

Scope of mounting parts: suction elbow with foot. Rated power P2 14.75 HP Driver type Electric motor Available reserve 48.49 % Drive standard mech. **NEMA** Number of poles

Drive standard elec. **NEMA** Suction accessory Suction elbow with foot

Data sheet



Customer item no.:WAS

Sewabloc E 80-253G VF

Communication dated: 30/01/2018

Doc. no.: Yuba City

Quantity: 1

Number: ES 5643047

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Version no.: 2

Materials G

Pump casing (101) Discharge cover (163) Shaft (210)

Impeller (230)

Cast iron A 48 Class 35 B Cast iron A 48 Class 35 B Chrome steel A 276 Type 420

Cast iron A 48 Class 35 B

O-Ring (412) Casing wear ring (502.1) Screwed plug (903) Hexagon socket head cap

screw (914)

Nitrile rubber NBR

Cast iron A 48 Class 35 B Steel ST Chrome steel

Packaging

Packaging category

B1 Wooden or plywood case, cover provided with

polyproylene cellular sheet, outdoor storage up to 3

months Truck

Packaging for storage Indoor

Outdoor storage at -40°C to +50°C for up to 3 months. Packet must be covered. No corrosion protection, only transport

protection.

Packaging for transport IPPC Standard ISPM 15 Yes

Certifications

Hydraulic performance test

Acceptance standard Quantity meas. points Q-H

Certificate

Test participation Quantity, non-witnessed 1

Quantity, witnessed

NPSH test

ANSI HI 2B

Inspection cert. 3.1 to EN

10204

Non-witnessed

0 Yes Quantity meas. points NPSH

Hydrostatic test (room temp.)

Complete pump with shaft Range

seal

Test pressure 53.652 psi.g 10.0 min Test time

Certificate Inspection cert. 3.1 to EN

10204

Test participation Non-witnessed

Performance curve



Customer item no.:WAS

Communication dated: 30/01/2018

Doc. no.: Yuba City

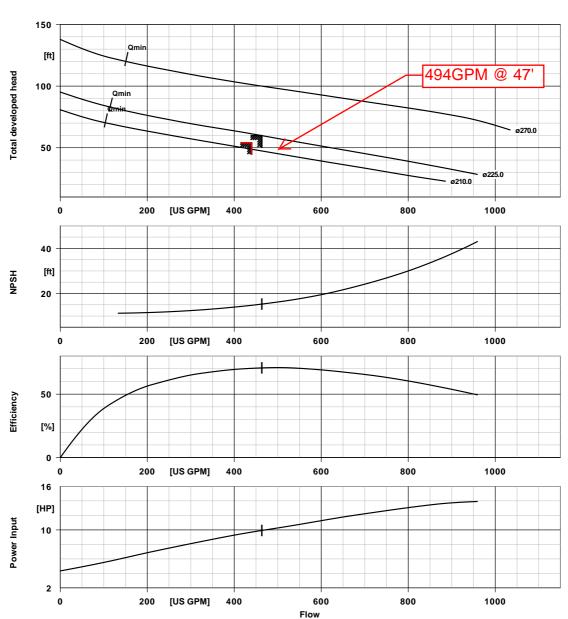
Quantity: 1

Sewabloc E 80-253G VF

Number: ES 5643047

Item no.:300 Date: 07/10/2020

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Curve data

Speed of rotation 1776 rpm
Fluid density 62.428000 lb/ft³
Viscosity 0.0015 in²/s
Flow rate 463.39 US GPM
Requested flow rate 440.00 US GPM
Total developed head 59.89 ft
Requested developed head 54.00 ft

Efficiency 70.7 %
Power absorbed 9.93 HP
NPSH req. 3% 15.32 ft
Curve number K43430/1
Effective impeller diameter Acceptance standard ANSI HI 2B

Installation plan



Customer item no.:WAS

Communication dated: 30/01/2018

Doc. no.: Yuba City

Quantity: 1

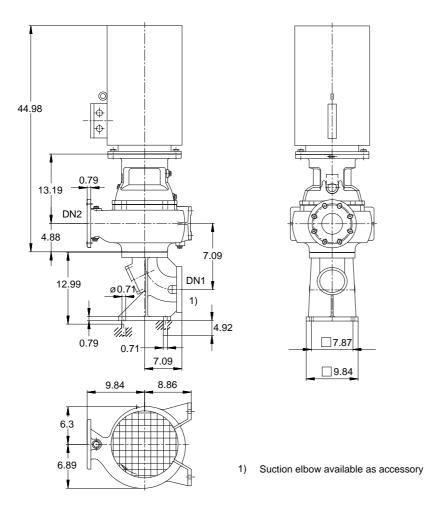
Sewabloc E 80-253G VF

Number: ES 5643047

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Version no.: 2



Drawing is not to scale Dimensions in in

Motor

required but not scope of supply

Motor size 254T

Motor power 14.75 HP

Number of poles 4

Speed of rotation 1778 rpm

Baseplate

Design Without

Size -Leakage drain baseplate Rp1, Without

(8B)

Foundation bolts (required but not scope of

supply)

Connections

Suction nominal size DN1 Discharge nominal size DN2 DN 100 / ASME B 16.1 DN 80 / ASME B 16.1

Nominal pressure suct. CL 125
Rated pressure disch. CL 125
Standard-EN-flange drilled acc. to ASME FF

Weight net

Pump 236 lbm Suction side accessory 88 lbm Total 324 lbm

Installation plan



Customer item no.:WAS

Communication dated: 30/01/2018

Doc. no.: Yuba City

Quantity: 1

Sewabloc E 80-253G VF

Number: ES 5643047

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Connect pipes without stress or strain! Dimensional tolerances for shaft axis height: Dimensions without tolerances, middle tolerances to: Connection dimensions for pumps:

Dimensions without tolerances - welded parts:
Dimensions without tolerances - gray cast iron parts:

For auxiliary connections see **DIN 747** separate drawing. ISO 2768-m

EN735

ISO 13920-B ISO 8062-CT9

G3 Engineering, Inc.

WATER AND WASTEWATER EQUIPMENT

5905 Granite Lake Dr., Suite 120, PO Box 2148, Granite Bay, CA 95746 Phone: 916-797-1880 FAX: 916-797-1881 www.g3engineering.com e-mail: jim@g3engineering.com

I. PUMPS and TANKS

TRILLIUM - FLOWAY PUMPS

Vertical Turbine Pumps Submersible Turbine Pumps

CASCADE PUMP COMPANY

Mixed and Axial Flow Lineshaft Pumps

PENN VALLEY PUMPS

Dual Disc Pumps

BLUE WHITE INDUSTRIES

Peristaltic Metering Pumps and Flowmeters

ASSMANN CORPORATION OF AMERICA

Polyethylene Chemical Storage Tanks

GRUNDFOS WASTEWATER YEOMANS, CHICAGO, MORRIS, GRUNDFOS BRANDS

Submersible and Dry Pit Non-Clog Pumps, Grinders Recessed Impeller Grit Pumps

GRUNDFOS WATER AND PACO BRANDS

CR Pumps, BoosterpaQ's and Custom Packaged Pumping Systems
PACO End Suction, Inline and Splitcase Pumps

PRECISION SYSTEMS

Packaged Pumping Stations with backup power and SCADA

KSB PUMPS

Submersible and Dry Pit Non-Clog Pumps Submersible Mixers and Propeller Pumps

UGSI CHEMICALFEED

Wallace & Tiernan Encore 700 Metering Pumps

II. PROCESS EQUIPMENT

FKC SCREWPRESS

Screw Press Dewatering and Rotary Drum Screen Thickening

ENVIRODYNE SYSTEMS, INC.

Clarifiers, Thickeners, Oxidation Ditches, Grit Removal Rotary Distributors, Digester Covers

UGSI CHEMICALFEED

Polyblend and Dynablend Polymer Feed Systems - Liquid and Dry Rotameters, Dry Feed Equipment

SPENCER TURBINE

High Speed Turbo and Multi-Stage Centrifugal Blowers Digester Gas Booster Package Systems

JOHN MEUNIER, INC.

Headworks Screens, Grit Removal, Grit De-Watering Hydrovex Flap Gates and Weirs

SMARTCOVER

Sewer Level Monitoring and Alarm Systems H2S Monitoring Systems

UET MIXERS

Custom Mixer Designs, Inline and Shafted

MEUNIER TECHOLOGIES

DICE Dosing Modules

UGSI/PAX WATER TECHNOLOGIES

Water Storage Tank Mixing, THM Removal, Residual Control

AQSEPTENCE GROUP

Johnson Screens Intake Screens, Triton Underdrains

FONTAINE AOUANOX

Stainless Steel Water Control Gates and Stop Logs

EVOQUA WATER TECHNOLOGIES, LLC

Water Champ - Chemical Induction Mixing System
OSEC - On Site Chlorine Generators
Chlorine Dioxide Systems
Gas Feed Systems
Analyzers, Controllers and Instrumentation

UNITED BLOWERS

Positive Displacement Blowers

INTEGRITY MUNICIPAL SYSTEMS

Fluoride Saturator Systems and Chemical Feed Skids

RPS ENGINEERING

Basin Covers and Domes

STATIFLO

Static Pipe and Open Channel Mixers



Ref: Sole Source Letter

Ref: To whom it may concern,

Jan 5th, 2022

To whom it may concern,

With this letter we would like to inform that G3 Engineering Inc. is our only exclusive representative for Northern California and Northern Nevada for Municipal Wastewater projects.

All inquiries, requests and quotations should be directed to G3 Engineering as no other organization is contractually authorized to sell or distribute KSB equipment in this area.

This is valid for entire 2022.

Ramin Ghasemi

Ramin Ghasemi Western Regional Manager KSB, Inc.

Cell: 949 557 7458

Cc: Rep File