

**SOUTHWEST SUBURBAN SEWER DISTRICT
KING COUNTY, WASHINGTON**

RESOLUTION NO. 2020-03-01

**A RESOLUTION OF THE SOUTHWEST SUBURBAN
SEWER DISTRICT, KING COUNTY, WASHINGTON,
WAIVING COMPETITIVE BIDDING REQUIREMENTS
FOR THE PURCHASE OF A USED FKC SKID MOUNTED
ROTARY SCREEN THICKENER DEMONSTRATION
UNIT DUE TO SPECIAL FACILITIES OR MARKET
CONDITIONS AND/OR A SINGLE SOURCE OF SUPPLY.**

WHEREAS, Southwest Suburban Sewer District (“District”) provides sewer service to properties within and outside the District's corporate boundaries; and

WHEREAS, the District has a need to purchase and acquire a rotating screen thickener for use at its Miller Creek Wastewater Treatment Plant in order to provide for more effective and efficient processing of sludge at the Miller Creek WWTP; and

WHEREAS, in 2018 the District previously used a skid mounted rotary screen thickener manufactured by FKC Co., Ltd. at the Miller Creek WWTP on a temporary basis as a demonstration of the capabilities of this equipment which performed well and helped resolve some of the processing issues being experienced by the District; and

WHEREAS, the District has budgeted \$120,000 for the acquisition of this type of equipment in its 2020 budget; and

WHEREAS, the District determined that it can buy the same skid mounted rotary screen thickener that it had previously used as a demonstration unit from FKC Co., Ltd. which will result in substantial savings to the District in the amount of approximately \$100,000; and

WHEREAS, because the District has previously used this same skid mounted rotary screen thickener at the Miller Creek WWTP with success, the District has determined that it is in its best interest to acquire this used equipment at substantial savings to the District; and

WHEREAS, RCW 39.04.280(1)(b) authorizes the District to waive the competitive bidding process to purchase equipment involving special facilities or market conditions; and the skid mounted rotary screen thickener is a special facility available only from FKC Co., Ltd; and

WHEREAS, RCW 39.04.280(1)(a) authorizes the District to waive the competitive bidding process to purchase equipment limited to a single source of supply; and the used skid mounted rotary screen thickener is not available from another source of supply; now therefore

BE IT RESOLVED by the Board of Commissioners of Southwest Suburban Sewer District, King County, Washington, as follows:

1. The recitals set forth above are incorporated herein in full by this reference.
2. The competitive bidding requirements as set forth in RCW 57.08.050 are hereby waived and the General Manager or designee, pursuant to RCW 39.04.280(1)(a) and (b) is hereby authorized and directed to proceed with the purchase of the equipment identified in **Attachment A**.

ADOPTED by the Board of Commissioners of Southwest Suburban Sewer District, King County, Washington, at the special meeting thereof held this 17th day of March, 2020.

SOUTHWEST SUBURBAN SEWER
DISTRICT
KING COUNTY, WASHINGTON

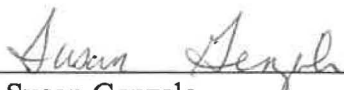
Individual Commissioner's
Vote on Resolution

In Favor Of:
Opposed:
Abstained:



Scott Hilsen
President and Commissioner

In Favor Of:
Opposed:
Abstained:



Susan Genzale
Vice President and Commissioner

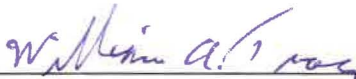
In Favor Of:
Opposed:
Abstained:



William A. Tracy
Secretary and Commissioner

CERTIFICATE

I, William A. Tracy, Secretary of the Board of Commissioners of Southwest Suburban Sewer District, King County, Washington, do hereby certify that the foregoing resolution is a true and correct copy of Resolution No. 2020-03-01 of such Board, duly adopted at a regular meeting thereof held on the 17th day of March, 2020, signed by the members of such Board in attendance at such meeting and attested by myself in authentication of such adoption.



William A. Tracy, Secretary
Board of Commissioners
Southwest Suburban Sewer District
King County, Washington

ATTACHMENT A

**INFORMATION RELATING TO PURCHASE OF USED
FKC SKID MOUNTED ROTARY SCREEN THICKENER**



Southwest Suburban Sewer District

17840 Des Moines Memorial Drive So. Burien, WA 98148
Phone 206-244-9575 Fax 206-433-8546

Dedicated to preserve the purity of your environment.

MEMORANDUM

To: Ron Hall, General Manager
From: Tim Berge, District Operations Supervisor
Date: February 26, 2019
Subject: FKC – Rotating Screen Thickener (RST)

Ron, Please see attached proposal for the purchase of a FKC - Rotating Screen Thickener. This capital expense was identified and approved in the 2020 adopted budget. Our budget number was \$120,000.

The attached quote comes in at \$110,000. The proposal is for the district to purchase the demonstration unit we had at Miller Creek in October of 2018. The RST performed well and the design is very operator friendly. We will be saving approximately \$100,000 by purchasing the demonstration unit.

The attached quote includes all warranty details and allows us to not pay for the unit until we are satisfied that it meets our needs, or within six months of delivery.

Presently Miller Creek WWTP mixes our waste sludge from the secondary treatment system with our sludge from the primary clarifiers. This practice is not recommended and leads to poor settling in the thickener, increased odors and pumping less than ideal sludge to the dewatering facility digesters.

We have 15 years of experience running a similar device at Salmon Creek WWTP. In 2005 we purchased and installed a Parkson – Rotating Drum Thickener. The use of the drum thickener has eliminated the problems stated above.

FKC CO., LTD.

2708 West 18th Street
Port Angeles, WA 98363



(360) 452-9472
FAX (360) 452-6880

February 21, 2020

Tim Berge
District Operations Supervisor
Southwest Suburban Sewer District
tim.berge@swssd.com
cell: 206-786-9572

RE: Used FKC Skid Mounted Rotary Screen Thickener (RST) Proposal

Tim,

Attached is FKC's equipment proposal for the used trailer mounted FKC Rotary Screen Thickener Sludge Dewatering System previously demonstrated at the Miler Creek WWTP in September/October of 2018. This system includes an FKC model RST 480 x 2000 Rotary Screen Thickener, flocculation tank, sludge feed pump, polymer makedown and delivery system, thickened sludge pump, and control panel. The skid mounted equipment is mounted on a 20' deckover bumper pull trailer which is included in the proposal.

As agreed, FKC would make the following modifications to the equipment package before delivery of the system:

1. The existing "older" Moyno thickened sludge pump would be removed from the trailer.
2. The existing "newer" Netzsch bypass pump would be relocated and repurposed as the thickened sludge pump\
3. A new 2" flow meter would be installed in the sludge feed piping between the existing sludge feed pump and the flocculation tank. This would be a new Toshiba model LF654GL1BNCAAF2. The flow meter would be powered up so the flow rate can be observed on the local display on the meter, but no analog signal wiring would be pulled into the control panel.
4. A new 2" flow meter would be installed after the thickened sludge pump. This would also be a new Toshiba model LF654GL1BNCAAF2. The flow meter would be powered up so the flow rate can be observed on the local display on the meter, but no analog signal wiring would be pulled into the control panel

Please contact FKC at (360) 452-9472 if you have any questions regarding this equipment proposal.

Sincerely,
FKC Co., Ltd.

A handwritten signature in black ink, appearing to read "Roger Olson", written over a white background.

Roger Olson

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A. Proposed Equipment

1. Rotary Screen Thickener (RST)

<u>Qty.</u>	<u>Description</u>	<u>Delivered Price</u>
1	Rotary Screen Thickener: Model RST-S480x2000L	US\$ 110,000
	Material:	Waste Activated Sludge
	Capacity:	50 GPM
	Inlet consistency:	0.7% or higher
	Outlet consistency:	5% or higher
	Materials of construction:	SS-304 wetted parts, Base SS-304, Other CS
	Drive:	SEW Eurodrive Varimot gearmotor with mechanical speed variator
	Motor:	1.0 HP, 1800 rpm, manufactured by SEW 480 VAC, 3 Ph, 60 Hz included
	Screens:	.045"dia. x 42% open area (stainless steel)
	Drive units:	SEW Eurodrive
	Motor:	1.0 HP, 1800 rpm, by SEW

2. Flocculation Tank

<u>Qty.</u>	<u>Description</u>	<u>Delivered Price</u>
1	Flocculation Tank, 100 gal with variable speed agitator	Included
	Drive:	SEW Eurodrive Varimot gearmotor with mechanical speed variator
	Motor:	1.0 HP, 1800 rpm, manufactured by SEW 480 VAC, 3 Ph, 60 Hz included
	Materials of construction:	SS-304 wetted parts
	Approx. shipping size/ weight:	100 cubic feet / 750 Lbs

A. Proposed Equipment –

3. Ancillary Equipment

Ancillary Equipment

Control Panel including:

Enclosure, NEMA 4X, 30 AMP, 480 V, 3P
Software, Programming, & Documentation
480 V 3P to 110 V Step Down Transformer
Sludge Feed Pump VFD
Flocculation Tank – Motor Starter
Rotary Screen Thickener – Motor Starter
Polymer System Analog Outputs
Thickened Sludge Pump VFD
Discharge Hopper High Level - Omega Level Switch
Solenoid Valve for Polymer / RST
All System On / Off / Speed on Face of Control Panel
All Alarm Indication on Face of Control Panel
Relay Based Logic

Includes field testing and start-up labor in Seattle

**Delivered Price
Included**

Polymer Make Down System

FKC Custom – L4S-600-2.5 polymer blending system
Peristaltic – Neat Polymer Pump
304 SS Construction

Included

Sludge Feed Pump

NETZSCH Inc.
NEMO Pump model NM053BY01L07V
14 – 80 GPM
5 HP, 480 VAC 3P

Included

Thickened Sludge Pump

NETZSCH Inc.
NEMO Pump model NM038BY01L06B
5 – 30 GPM
2 HP, 480 VAC 3P

Included

Skid Mounting

FKC Co., Ltd.
Factory Assembled and Tested

Included

B. Miscellaneous

1. Delivery

The RST skid will be ready to ship within two (2) months after receipt of written purchase order.

2. Shipping Arrangements

The skid will be delivered by FKC to the plant site.

3. Effective Period

This proposal shall remain valid 60 days from the date of the proposal.

4. Payment Terms

100% with acceptance by owner or within 6 months of delivery if the equipment has yet to start-up due to the schedule of the customer, whichever occurs first.

Net 30 days

5. Installation

The rotary screen thickener skid system is shipped fully assembled and ready for installation.

Installation and erection assistance are not included in the price of the equipment and generally are not required.

6. Operator Training and Start Up

Operator and maintenance training and start up services are included in the price of the equipment. Operator and maintenance training can be accomplished in approximately two hours per group. Ideal training sessions include both classroom and on-site (at the Rotary Screen Thickener) sessions. Generally speaking training, start up and performance testing can be accomplished in one trip.

7. Utility Requirements

- | | |
|----------------------|------------------------------------|
| A. Power | - 30 Amps, 480 V Power Supply |
| B. Water Pressure | - Minimum 35 PSI |
| C. Water Demand | - 13 GPM Max |
| D. RST (S480 x 2000) | - Shower water 15 GPM at 30-40 psi |

8. Warranty

FKC's mechanical warranty covers material and workmanship for a period of twelve (12) months from delivery.

9. Performance Guarantee

The performance figures and conditions denoted in section A of this proposal constitute FKC Co., Ltd.'s performance guarantee and the conditions required to meet the guarantee. All of the consistency figures are based on total solids (TS) not total suspended solids (TSS).

10. Documentation Schedule

A. Operation and Maintenance Manuals - 4 weeks after receipt of order

11. Spare Parts List

No spare parts are required for the first 1-2 year period of operation.
A list of long term spare parts is available upon request.

12. Service Rates

The following are rates and terms for professional and technical services furnished by FKC:

Weekdays

\$1000.00 - Per eight (8) hour day on weekdays plus, lodging, and rental car expenses.

\$187.50 - Per hour for all hours exceeding eight (8) hour workday on weekdays.

\$108.00 - Per hour for office engineering services and telephone consultations.

Saturdays, Sundays and Holidays

\$1,440.00 - Per eight (8) hour day plus lodging and rental car expenses.

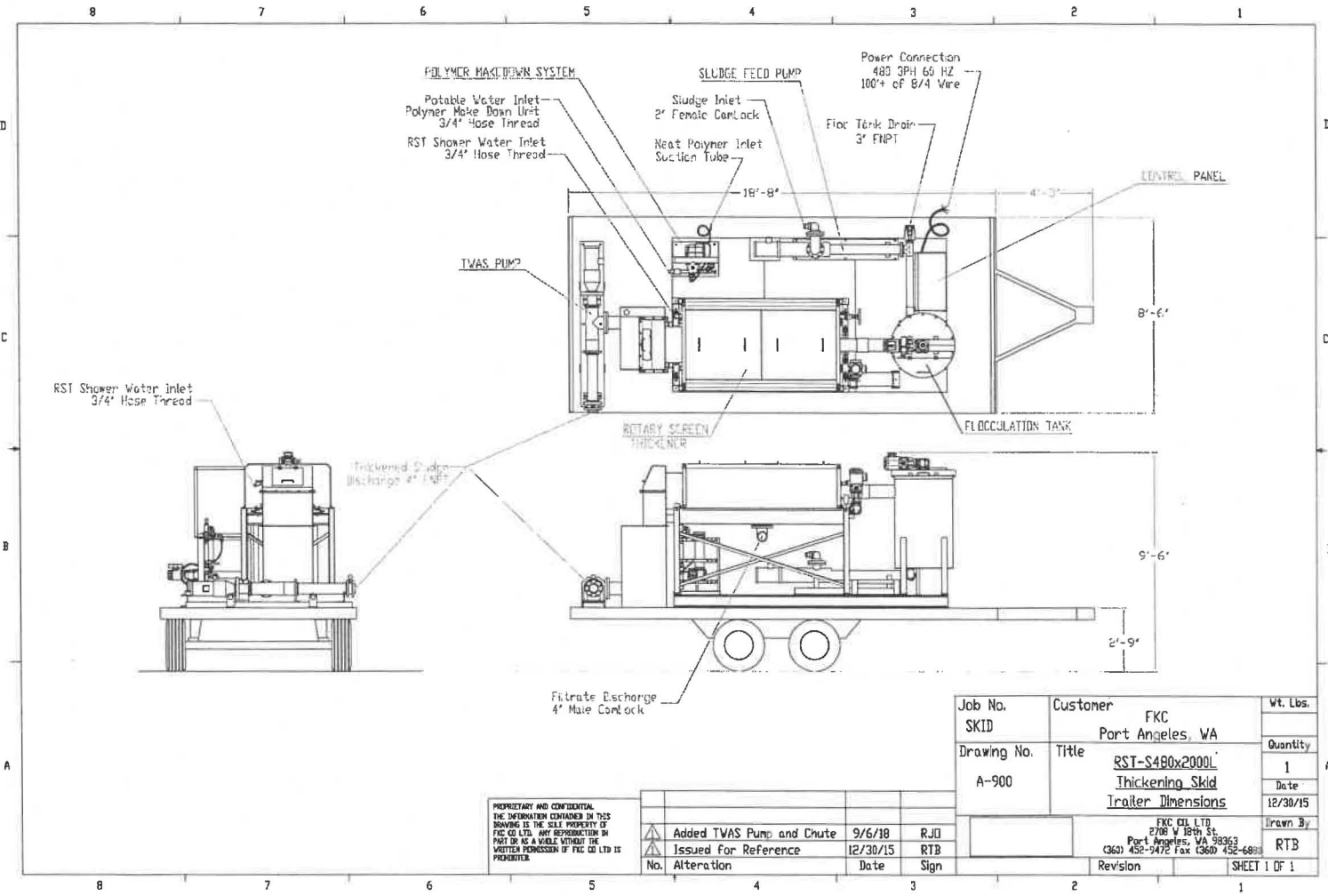
\$270.00 - Per hour for all hours exceeding eight (8) hour workday.

Travel Time - Weekdays

\$80.00 - Per hour travel time. (Not to exceed \$990/day)

Travel Time – Weekends and US Holidays

\$120.00 - Per hour travel time (Not to exceed \$1,440/day)



PROPRIETARY AND CONFIDENTIAL:
 THE INFORMATION CONTAINED IN THIS
 DRAWING IS THE SOLE PROPERTY OF
 FKC CO. LTD. ANY REPRODUCTION OR
 PART OR AS A WHOLE WITHOUT THE
 WRITTEN PERMISSION OF FKC CO. LTD IS
 PROHIBITED.

No.	Alteration	Date	Sign
1	Added TVAS Pump and Chute	9/6/18	RJD
2	Issued for Reference	12/30/15	RTB



