# COUNTY OF ROCKLAND

# Department of General Services **Purchasing Division**

# **Contract Award Notification**

Title: Sludge Collection Equipment-Replacement Parts

Contract Period: October 10, 2023, through October 9, 2024, w/ (4) 1-year options

Extended through October 9, 2025, w/(3) 1-year options

Original Date of Issue: July 5, 2024

Date of Revision: 07/08/24

BID No: RFB-RC-2023-078

Catalog: Wastewater Treatment

Authorized Users: Authorized Departments, All Political Subdivisions

Address Inquiries To:

Name: Michele Phillips Title: Purchaser I Phone: 845-364-2984 Fax: 845-364-3809

E-mail: phillipm@co.rockland.ny.us

# Description

This contract is for sludge collection equipment replacement parts

| Contract #   | Vendor Number | Contractor & Address                  | Telephone No.            |
|--------------|---------------|---------------------------------------|--------------------------|
| BID 23 078   | 0000012818    | Applied Industrial Technologies, Inc. | <del>518 427 5800</del>  |
| NOT          |               | 6 Enterprise Drive                    |                          |
| RENEWED      |               | Albany, NY 12204                      |                          |
|              |               | Contact: Mark Spink                   |                          |
|              |               | 2341@applied.com                      | FAX: 518-427-6314        |
| BID 23-078-A | 0000023044    | GP JAGER INC                          | 973-750-1180             |
|              |               | 328 W. Main Street                    |                          |
|              |               | Boonton, NJ 07005                     |                          |
|              |               | Contact: Janelle Sanz                 |                          |
|              |               | jsanz@jagerinc.com                    |                          |
| BID 23-078-B | 0000022858    | Eastern Industrial Automation         | 201-376-8824/            |
|              |               | 14 Sebago Street                      | 201-794-3838             |
|              |               | Clifton, NJ 07013                     | C: 201-396-2241          |
|              |               | Contact: Thomas Donch                 |                          |
|              |               | tomdonch@easternia.com                |                          |
|              |               |                                       | <b>FAX:</b> 201-794-3237 |
| BID 23-078-C | 0000028322    | Brandt Manufacturing                  | 517-851-7000             |
|              |               | 4974 Bird Drive                       |                          |
|              |               | Stockbridge, MI 49285                 |                          |
|              |               | Contact: Andreas Brandt               |                          |
|              |               | <u>abrandt@brandt-mfg.com</u>         |                          |

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POMONA, NY 10970 TELEPHONE NO.: 845-364-3820

FAX NO.: 845-364-3809

| LINE  | DESCRIPTION   | ITEM NUMBER | EST. | UNIT  | UNI | T PRICE  | MANUFACTURER      | PRODUCT (MANDATORY | VENDOR        |
|-------|---|-------------|------|-------|-----|----------|-------------------|--------------------|---------------|
| NO.   | Sprockets are to be deep chilled with a Birnell   |             | QTY. |       |     |          | (MANDATORY FIELD) | FIELD)             |               |
|       | hardness of 360 min. and 3/16" minimum depth chill  |             |      |       |     |          |                   |                    |               |
|       | (A SIDE) Y16A bearing support and bearing for 2 7/16" dia.  | 89065000003 | 4    | Each  |     |          |                   |                    |               |
| #0-1  | Shaft, Fairfield/FMC, Siemens Industry JK5111-16A, Brewton  |             |      |       |     |          | Fairfield         | N/A                | GP Jager Inc. |
|       | W3789 or approved equal   |             |      |       | \$  | 506.88   |                   | - "                | 01 11811      |
|       | (A SIDE) 117Y, 46-3 spiral jaw clutch, RH, WT-42,   | 89065000004 | 4    | Each  | -   |          |                   |                    |               |
| #0-2  | Brewton W4812-2, 95811 Fairfield or approved equal  |             |      |       | \$  | 690.34   | Fairfield         | N/A                | GP Jager Inc. |
|       | (A SIDE) 117Y, 46-4 spiral jaw clutch, LH, WT-43,   | 89065000005 | 4    | Each  | Ψ   | 070.54   |                   |                    |               |
| #0-3  | Brewton W4812-2, 95811 Fairfield or approved equal  | 07003000003 | -    | Duch  | Φ.  | 600.24   | Fairfield         | N/A                | GP Jager Inc. |
|       | (A SIDE) 358Y, 102-3 hand wheel, RH, WT-44,   | 89065000006 | 4    | Each  | \$  | 690.34   |                   |                    |               |
| #0-4  | Brewton W4812-1, 95811Fairfield or approved equal   | 8906300000  | 4    | Eacii |     |          | Fairfield         | N/A                | GP Jager Inc. |
|       |   | 222472222   |      |       | \$  | 658.60   |                   |                    |               |
| #0-5  | (A SIDE) 358Y, 102-4 hand wheel, LH, WT-45,   | 89065000007 | 4    | Each  | Φ.  | 650.60   | Fairfield         | N/A                | GP Jager Inc. |
|       | Brewton W4812-2 Fairfield or approved equal   | 0006500000  | 20   | Г. 1  | \$  | 658.60   |                   |                    |               |
| #0-6  | (A SIDE) 496W95-A safety collars 2 7/16" dia. WT-51, Cut<br>Sheet Brewton 95881 Fairfield or approved equal | 89065000009 | 20   | Each  |     |          | Fairfield         | N/A                | GP Jager Inc. |
|       | **  |             | _    |       | \$  | 90.00    |                   |                    |               |
|       | (A SIDE) 158X11E tightener and sprocket for H78 chain   | 89065000011 | 8    | Each  |     |          |                   | 27/1               | an            |
| #0-7  | WT-71, Brewton 2916-1, 95881 Fairfield or approved equal  |             |      |       | Φ.  | 969.22   | Fairfield         | N/A                | GP Jager Inc. |
|       | (A SIDE) 158X11F tightener and sprocket for H78 chain   | 89065000012 | 8    | Each  | \$  | 868.32   |                   |                    |               |
| #0-8  | WT-72, Brewton 2917-1, 95881 Fairfield or approved equal  | 89063000012 | 0    | Eacii |     |          | Fairfield         | N/A                | GP Jager Inc. |
| #00   | w 1-72, blewton 2517-1, 536611 anneld of approved equal   |             |      |       | \$  | 868.32   | Tanneid           | 14/11              | or sager me.  |
|       | (A SIDE) Y20-A driver sprocket, #H78, FR. 11T, 9.26" P.D.   | 89065000013 | 10   | Each  |     |          |                   |                    |               |
|       | with shear pin hub, bronze bushed with sleeve and trip device   |             |      |       |     |          |                   |                    |               |
| #0-9  | for limit switch, bore for 1 7/8" shaft keys ½" x ¼", stainless   |             |      |       |     |          | Fairfield         | N/A                | GP Jager Inc. |
|       | steel sleeve, Brewton W-4829 Fairfield or approved equal  |             |      |       |     |          |                   |                    |               |
|       |   |             |      |       | \$  | 1,701.89 |                   |                    |               |
|       | (A SIDE) Cross collector sprocket (driven) Wt. 92, split  | 89065000015 | 8    | Each  |     |          |                   |                    |               |
|       | sprocket, #H78, 12T, 10.08" P.D. HBS-L2-215, 5 1/4" x 3 5/8"  |             |      |       |     |          |                   |                    |               |
| #0-10 | TWC, bore 2.940 + .003, KS. SS. PATT.P P-42831, Brewton   |             |      |       |     |          | Fairfield         | N/A                | GP Jager Inc. |
|       | W4813, 95811 Fairfield or approved equal  |             |      |       |     |          |                   |                    |               |
|       |   |             |      |       | \$  | 510.00   |                   |                    |               |

POMONA, NY 10970

| LINE           | DESCRIPTION   | ITEM NUMBER  | EST. | UNIT  | UN        | IT PRICE | MANUFACTURER      | PRODUCT (MANDATORY | VENDOR        |
|----------------|---|--------------|------|-------|-----------|----------|-------------------|--------------------|---------------|
| NO.            | Sprockets are to be deep chilled with a Birnell                   |              | QTY. |       |           |          | (MANDATORY FIELD) | FIELD)             |               |
|                | hardness of 360 min. and 3/16" minimum depth chill                |              |      |       |           |          |                   |                    |               |
|                | (A SIDE) 492Z115-A split, peak cap brgs babb.                     | 89065000016  | 1    | Each  |           |          |                   |                    |               |
| #0-11          | 2 15/16", WT-11, Brewton W3695, 95881 Fairfield or approved       | 0,000,00010  | •    | 20011 |           |          | Fairfield         | N/A                | GP Jager Inc. |
| "   "          | equal   |              |      |       | \$        | 544.80   | Tunnela           | 11/11              | or suger me.  |
|                | (A SIDE) 1571Z39-A split M.I. SAF. Collar                         | 89065001017  | 1    | Each  | Ψ         | 311.00   |                   |                    |               |
| #∩ <b>-</b> 12 | 2 15/16", WT-12, Brewton 95881 Cut Sheets or approved equal       | 0,000,001017 | •    | Lacii |           |          | Fairfield         | N/A                | GP Jager Inc. |
| #0 12          | 2 13/10 , W1 12, Browton 93/001 Cut Sheets of approved equal      |              |      |       | \$        | 100.80   | Tannelu           | IV/A               | of Jager Inc. |
|                | (A & B SIDES) 1101Y51-D split sprocket #H78, 40-T.                | 89065000018  | 1    | Each  | Ψ         | 100.00   |                   |                    |               |
|                | 33.24"P.D. dished arms. Bore for 2 15/16" shaft, KS.S.S. for      | 07003000010  | 1    | Lacii |           |          |                   |                    |               |
| #0-13          |   |              |      |       |           |          | Fairfield         | N/A                | GP Jager Inc. |
|                | approved equal  |              |      |       |           |          |                   |                    |               |
|                |   |              |      |       | \$        | 2,538.00 |                   |                    |               |
| #0-14          | (A & B SIDES) Collars 2 15/16", WT-12, Brewton 95881 Cut          | 89065001019  | 1    | Each  |           |          | Fairfield         | N/A                | CD Is see Iss |
| #0-14          | Sheets or approved equal  |              |      |       | \$        | 100.80   | rairneid          | IN/A               | GP Jager Inc. |
|                | (A SIDE) 492Z131-K split sprockets #720-SC.F.R. 17-T,             | 89065000020  | 1    | Each  |           |          |                   |                    |               |
|                | 8 1/2P. 16.61P.D. Bore for 2 15/16" SFT., S.S. for plastic chain, |              |      |       |           |          |                   |                    |               |
| #0-15          | (4 3/4" TWC), WT-21, Brewton W4808, 95881, Farfield or            |              |      |       |           |          | Fairfield         | N/A                | GP Jager Inc. |
|                | approved equal  |              |      |       | \$        | 771.00   |                   |                    |               |
|                | (A SIDE) JK3587-13-C take-up units with split peak cap brgs.      | 89065000021  | 1    | Each  | Ψ         | 771.00   |                   |                    |               |
| <b>"0 40</b>   | babb. 2 15/16", WT-31, Brewton W3608, 95881 or approved           | 07003000021  | 1    | Lacii |           |          | F . C 11          | 27/4               | CD I I        |
| #0-16          | equal   |              |      |       |           |          | Fairfield         | N/A                | GP Jager Inc. |
|                |   |              |      |       | \$        | 1,237.50 |                   |                    |               |
|                | (A SIDE) JK3587-13-D take up units with split peak cap brgs.      | 89065000022  | 1    | Each  |           |          |                   |                    |               |
| #0-17          | babb. 2 15/16", WT-32, Brewton 3608, 95881 or approved            |              |      |       |           |          | Fairfield         | N/A                | GP Jager Inc. |
|                | equal   |              |      |       | \$        | 1,237.50 |                   |                    |               |
|                | (A SIDE) 1352Y28-K split sprockets #720-SC. 19-T,                 | 89065000023  | 1    | Each  | Ė         | ,        |                   |                    |               |
|                | 9 1/2P., 18.48 P.D. Bore for 2 15/16" SFT.KS.IN line as pairs,    |              |      |       |           |          |                   |                    |               |
| #0-18          | S.S. for plastic chain (5/6 TWC), WT-14, Brewton W4412,           |              |      |       |           |          | Fairfield         | N/A                | GP Jager Inc. |
|                | 95881 Fairfield or approved equal                                 |              |      |       | <b>d</b>  | 055.00   |                   |                    |               |
|                |   |              |      |       | <b>\$</b> | 855.00   |                   |                    |               |

POMONA, NY 10970

| LINE<br>NO. | DESCRIPTION  Sprockets are to be deep chilled with a Birnell hardness of 360 min. and 3/16" minimum depth chill   | ITEM NUMBER | EST.<br>QTY. | UNIT | UN | IT PRICE | MANUFACTURER<br>(MANDATORY FIELD) | PRODUCT (MANDATORY<br>FIELD) | VENDOR                                   |
|-------------|---|-------------|--------------|------|----|----------|-----------------------------------|------------------------------|--|
| #0-19       | (A SIDE) 492Z131-L split sprockets, #720-SC F.R., 17.T., 8 1/2P, 16.61 P.D. Bore for 2 15/16" SFT. Plain (NoS.S.) for plastic chain (4 ¾" TWC), WT-22, Brewton W4808, 95881, Fairfield or approved equal  | 89065000024 | 1            | Each | \$ | 771.00   | Fairfield                         | N/A                          | GP Jager Inc.                            |
| #0-20       | (A SIDE) Peak cap brgs. 2 15/16", WT-11, Brewton W3695, 95881 or approved equal   | 89065000025 | 1            | Each | \$ | 544.80   | Fairfield                         | N/A                          | GP Jager Inc.                            |
| #0-21       | (A SIDE) Collars 2 15/16", WT-12, Brewton 95881 or approved equal   | 89065001026 | 1            | Each | \$ | 100.80   | Fairfield                         | N/A                          | GP Jager Inc.                            |
| #0-22       | (A SIDE) Split sprockets 17-T, #720.SC S.S, WT-21, Brewton W4808, 95881 or approved equal   | 89065000027 | 1            | Each | \$ | 771.60   | Fairfield                         | N/A                          | GP Jager Inc.                            |
| #0-23       | (A SIDE) Split sprockets 17-T, #720.SC plain, WT-22, Brewton W4809, 95881 or approved equal   | 89065000028 | 1            | Each | \$ | 750.00   | Fairfield                         | N/A                          | GP Jager Inc.                            |
| #0-24       | (A SIDE) Link Belt, Steady Rest Bearing – Part#2-1239Z, 2-7/16, Link Belt 2-1239Z, Brewton/Fairfield, or approved equal   | 89065000037 | 4            | Each | \$ | 625.00   | LINK BELT                         | 2-1239Z                      | Eastern Industrial Automation            |
| #0-25       | (A & B SIDES) Right Hand Screw, 18" Diameter, 18" Pitch 3/8" Thick, Sectional flight welded on 5½" SCH80 Pipe, Bushed and 2-Bolt drilled for 2-15/16" Shafts.  Over All Length 9'8". James Eagen Sons, Charter Machine Company Charter Machine Company Part #: 18SQ624-R, Martin Sprocket or approved equal | NOT RENEWED | 1            | Each | \$ | 2,283.00 | Orthman                           | 18SQ624-R                    | Applied Industrial<br>Technologies, Inc. |
| #0-26       | (A & B SIDES) Left Hand Screw, 18" Diameter, 18" Pitch, 3/8" Thick, Sectional flight welded on 5 ½ " SCH80 Pipe, Bushed and 2-Bolt drilled for 2-15/16" Shafts. Over All Length 9'8". James Eagen Sons, Charter Machine Company, Fairfield, or Martin Sprocket & Gear Part #: 18SQ624-L or approved equal   |             | 1            | Each | \$ | 2,283.00 | Orthman                           | 18SQ624-L                    | Applied Industrial<br>Technologies, Inc. |
| #0-27       | (A & B SIDES ) 2-15/16" Hardened Coupling Shafts, James Eagen Sons, Charter Machine Company, Martin Sprocket & Gear or Fairfield Part #: CC6-H or approved equal  |             | 1            | Each | \$ | 200.00   | Martin Sprocket                   | СС6-Н                        | Applied Industrial Technologies, Inc.    |

POMONA, NY 10970

| LINE   |  | ITEM NUMBER                | EST. | UNIT | UNI | Γ PRICE  | MANUFACTURER<br>(MANDATORY FIELD) | PRODUCT (MANDATORY<br>FIELD) | VENDOR                                |
|--------|--|----------------------------|------|------|-----|----------|-----------------------------------|------------------------------|---------------------------------------|
| NO.    | Sprockets are to be deep chilled with a Birnell hardness of 360 min. and 3/16" minimum depth chill         |                            | QTY. |      |     |          | (MINDITORT TEED)                  | FIELD)                       |                                       |
|        | •  | 2227722222                 |      | Б.1  |     |          |                                   |                              |                                       |
|        | (A & B SIDES) 18" x 2-15/16" 220 Hanger<br>James Eagen Sons, Charter Machine Company, Martin Sprocket      | 89077000004<br>NOT RENEWED | 1    | Each |     |          |                                   |                              |                                       |
|        | & Gear or Fairfield  | TOT REIVED                 |      |      |     |          | Orthman                           | 18CH2206                     | Applied Industrial Technologies, Inc. |
|        | Part #: 18CH2206 or approved equal   |                            |      |      | \$  | 201.00   |                                   |                              | reciniologies, me.                    |
|        | (A & B SIDES) 2" Hard Iron Bearing   | 89077000005                | 1    | Each | 7   |          |                                   |                              |                                       |
| #0-29  | James Eagen Sons, Charter Machine Company or Martin  | NOT RENEWED                |      |      |     |          | Martin Sprocket                   | CHB2204MHI                   | Applied Industrial                    |
|        | Sprocket & Gear Part #: CHB2204MHI or approved equal   |                            |      |      | \$  | 42.50    |                                   |                              | Technologies, Inc.                    |
|        | (A & B SIDES)-2-15/16" x 16 5/8" Drive Shaft   | 89077000006                | 1    | Each |     |          |                                   |                              |                                       |
| #0 20  | James Eagen Sons, Charter Machine Company or Martin Sprocket & Gear  | NOT RENEWED                |      |      |     |          | Orthman                           | 1CD6BB                       | Applied Industrial                    |
|        | Part #: 1CD6BB or approved equal   |                            |      |      | \$  | 155.50   |                                   |                              | Technologies, Inc.                    |
|        | (A & B SIDES) 2-15/16" x 12 3/8" End Shaft   | 89077000007                | 1    | Each | Ψ   | 155.50   |                                   |                              |                                       |
| #()-31 | James Eagen Sons, Charter Machine Company, Martin Sprocket   | NOT RENEWED                |      |      |     |          | Orthmann                          | CE6BB-W                      | Applied Industrial                    |
|        | and Gear Part #: CE6BB-W or approved equal   |                            |      |      | \$  | 109.50   |                                   |                              | Technologies, Inc.                    |
|        | (A SIDE) Y-17A, 2 7/16" dia. X 3'3" long Drive Extension Shaft   | 89077000008                | 1    | Each | 7   |          |                                   |                              |                                       |
| #0-32  | cut for keyways 5/8" x5/8" Brewton, or approved equal  | NOT RENEWED                |      |      |     |          | Brewton                           | 2 7/16DIA. X 3'3"            | Applied Industrial Technologies, Inc. |
|        |  |                            |      |      | \$  | 350.00   |                                   |                              | reemiologies, me.                     |
|        | (A SIDE)145Y118-N Couping WT-53, bore 1 7/8"ks, 2 7/16"ks, Browning, or approved equal                     | 89077000009                | 1    | Each |     |          |                                   |                              | Eastern Industrial                    |
| #0-33  | 2 1/10 kg, Browning, or approved equal   |                            |      |      |     |          | BROWNING                          | WT53                         | Automation                            |
|        | YY 7 7 7 1 6 7 1 6 7 1 7 1 7 1 7 1 7 1 7 1   | 222552222                  | 4    |      | \$  | 450.00   |                                   |                              |                                       |
|        | H78-D Hub, 18 Teeth Cast Iron Rim Split Sprocket 15.02" PD x 15/16 Face, Max Offset 3", Max Bore 2-15/16", | 89077000010                | 1    | Each |     |          |                                   |                              |                                       |
| #0-34  | Fairfield, BREWTON H78-D Hub 18T CI Split or   |                            |      |      |     |          | Fairfield                         | N/A                          | GP Jager Inc.                         |
|        | approved equal   |                            |      |      | \$  | 1,068.00 |                                   |                              |                                       |

POMONA, NY 10970

| LINE  | DESCRIPTION   | ITEM NUMBER | EST. | UNIT        | UNIT PRICE | MANUFACTURER<br>(MANDATORY FIELD) | PRODUCT (MANDATORY<br>FIELD) | VENDOR               |
|-------|---|-------------|------|-------------|------------|-----------------------------------|------------------------------|----------------------|
| NO.   | Sprockets are to be deep chilled with a Birnell hardness of 360 min. and 3/16" minimum depth chill  |             | QTY. |             |            | (MINDITORI I IIII)                | FIELD)                       |                      |
| #0-35 | Non-Metallic Collector Chain 10' section NCS720s chain with F26 (6'') attachment link attached As per the attached specifications Envirex, Allied Locke, Polychem, Siemens, Fairfield FFCBN720NA6TAA or approved equal                                | 89065100001 | 300  | 10' section | \$ 169.10  | Brandt MFG                        | NCS720-F226-20P              | Brandt Manufacturing |
| #0-36 | Non-Metallic Attachment Link F26 (6") attachment link only for NCS720s chain As per the attached specifications Envirex, Allied Locke, Polychem, Siemens, Fairfield FFCBN720NA6T0A0, Brandt MFG NCS720-F226-POM or approved equal                     | 89065100012 | 300  | Each        | \$ 17.85   | Brandt MFG                        | NCS720-F226                  | Brandt Manufacturing |
| #0-37 | Non-Metallic Collector Chain 10' section NCS720s chain with F28 (8") attachment link attached As per the attached specifications Envirex, Allied Locke, Polychem, Siemens, Fairfield FFCBN720NA8TAAA, Brandt MFG NCS720-F228-10-POM or approved equal | 89065100011 | 300  | 10' section | \$ 169.10  | Brandt MFG                        | NCS720-F228-20P              | Brandt Manufacturing |
| #0-38 | Non-Metallic Attachment Link F28 (8") attachment link only for NCS720s chain, As per the attached specifications. Envirex, Allied Locke, Polychem, Siemens, Fairfield FFCBN70NA8T0A0, or approved equal   | 89065100013 | 300  | Each        | \$ 17.85   | Brandt MFG                        | NCS720-F228                  | Brandt Manufacturing |

POMONA, NY 10970 TELEPHONE NO.: 845-364-3820

FAX NO.: 845-364-3809

| LINE         | DESCRIPTION   | ITEM NUMBER | EST. | UNIT  | UNIT | PRICE  | MANUFACTURER      | PRODUCT (MANDATORY                  | VENDOR               |
|--------------|---|-------------|------|-------|------|--------|-------------------|-------------------------------------|----------------------|
| NO.          | Sprockets are to be deep chilled with a Birnell             |             | QTY. |       |      |        | (MANDATORY FIELD) | FIELD)                              |                      |
|              | hardness of 360 min. and 3/16" minimum depth chill          |             |      |       |      |        |                   |                                     |                      |
|              | Flights with Filler Blocks                                  | 89065100004 | 120  | Each  |      |        |                   |                                     |                      |
|              | 3" x 8" x 19' 4"  |             |      |       |      |        |                   |                                     |                      |
|              | As per the attached specifications                          |             |      |       |      |        |                   | Fairfield                           |                      |
| #0-39        | Envirex Sigma, FMC 492X191, Hitachi Maxco, US Filter        |             |      |       |      |        | Fairfield         | FF382D2W2R1232,                     | GP Jager Inc.        |
|              | Envirex Products V06-1842-1-1, Polychem, Fairfield          |             |      |       |      |        |                   | FSC1FBPO386H4537                    |                      |
|              | FF382D2W2R1232  |             |      |       |      |        |                   |                                     |                      |
|              | w/ (2) FSC1FBPO386H4537 or approved equal                   |             |      |       | \$   | 177.96 |                   |                                     |                      |
|              | Flights with Filler Blocks                                  | 89065100005 | 150  | Each  |      |        |                   |                                     |                      |
|              | 3" x 8" x 14'   |             |      |       |      |        |                   |                                     |                      |
|              | As per the attached specifications                          |             |      |       |      |        |                   | Fairfield                           |                      |
| #0-40        | Envirex Sigma, FMC 492X191, US Filter Envirex               |             |      |       |      |        | Fairfield         | FF382D2W2R1168,                     | GP Jager Inc.        |
|              | Products V06-1842-2-1, Polychem, Fairfield                  |             |      |       |      |        |                   | FSC1FBPO386H4537                    |                      |
|              | FF382D2W2R1168  |             |      |       |      |        |                   |                                     |                      |
|              | w/ (2) FSC1FBPO386H4537 or approved equal                   |             |      |       | \$   | 132.60 |                   |                                     |                      |
|              | Flight Sigma with Filler Block                              | 89065100010 | 150  | Each  |      |        |                   |                                     |                      |
|              | 3" x 6" x 117"  |             |      |       |      |        |                   |                                     |                      |
| <b>"0 44</b> | As per the attached specifications                          |             |      |       |      |        | D : C 11          | Fairfield                           | CD I I               |
| #0-41        | Envirex Sigma, US Filter Envirex Products H426625-1-        |             |      |       |      |        | Fairfield         | FF382D2W2R0117,<br>FSC1FBPO386H4537 | GP Jager Inc.        |
|              | 100, Polychem, Allied-Locke, Fairfield                      |             |      |       |      |        |                   | F3C1FDFU360H433/                    |                      |
|              | FF362D2W2R0117  |             |      |       | \$   | 96.90  |                   |                                     |                      |
|              | w/(2) FSC1FBPO364H4537 or approved equal                    | 89065100003 | 600  | Each  | Ф    | 90.90  |                   |                                     |                      |
|              | Wear Shoes – Carry Shoes As per the attached specifications | 89003100003 | 000  | Eacii |      |        |                   |                                     |                      |
| #0-42        | Envirex, FMC 806X66-1, Allied Locke, Polychem,              |             |      |       |      |        | Brandt MFG        | CWS55                               | Brandt Manufacturing |
| #0 42        | Guardian, Fairfield FSCICWSUH53550A or approved             |             |      |       |      |        | Dianat Wir G      | CW355                               | Dianat Manufacturing |
|              | equal   |             |      |       | \$   | 4.85   |                   |                                     |                      |
|              | Wear Shoes – Return Shoes                                   | 89065100008 | 600  | Each  | Ψ    | 1.05   |                   |                                     |                      |
|              | As per the attached specifications                          | 3,000,10000 | 550  |       |      |        |                   |                                     |                      |
| #0-43        | Envirex, FMC 806X66-1, Allied Locke, Polychem,              |             |      |       |      |        | Brandt MFG        | RWS50                               | Brandt Manufacturing |
|              | Fairfield FSCIRWUSUH453550B or approved equal               |             |      |       | \$   | 5.10   |                   |                                     |                      |

POMONA, NY 10970

| LINE               | DESCRIPTION   | ITEM NUMBER | EST. | UNIT | UNIT PRICE  | MANUFACTURER      | PRODUCT (MANDATORY | VENDOR        |
|--------------------|---|-------------|------|------|-------------|-------------------|--------------------|---------------|
| NO.                | Sprockets are to be deep chilled with a Birnell             |             | QTY. |      |             | (MANDATORY FIELD) | FIELD)             |               |
|                    | hardness of 360 min. and 3/16" minimum depth chill          |             |      |      |             |                   |                    |               |
|                    | Turn Shaft Sprockets  | 89065100006 | 12   | Each |             |                   |                    |               |
|                    | As per the attached specifications. Sprocket shall be       |             |      |      |             |                   |                    |               |
|                    | affixed by set screens machined through the hub of the      |             |      |      |             |                   | Fairfield          |               |
| #0-44              | sprocket.   |             |      |      |             | Fairfield         | FB13SUU290000SC60  | GP Jager Inc. |
|                    | Envirex, Brewton Iron Works, Hitachi Maxco, Allied          |             |      |      |             |                   | 13135002700005000  |               |
|                    | Locke, Connexus, Fairfield FB13SUU290000SC60,               |             |      |      |             |                   |                    |               |
|                    | Brewton W4651CS or approved equal                           |             |      |      | \$ 636.00   | 1                 |                    |               |
|                    | Turn Shaft Sprockets  | 89065100009 | 12   | Each |             |                   |                    |               |
|                    | As per the attached specifications. Sprocket shall be free  |             |      |      |             |                   |                    |               |
|                    | wheeling & restricted from lateral movement by use of       |             |      |      |             |                   | Fairfield          |               |
| #0-45              | Contains  |             |      |      |             | Fairfield         | FB13SUU290000SC60  | GP Jager Inc. |
|                    | Envirex, Brewton Iron Works, Hitachi Maxco, Allied          |             |      |      |             |                   |                    |               |
|                    | Locke, Fairfield FB13SUU290000SC60, Brewton                 |             |      |      |             |                   |                    |               |
|                    | W4651CS or approved equal                                   |             |      |      | \$ 636.00   |                   |                    |               |
|                    | Head Shaft Sprockets  | 89065100007 | 8    | Each |             |                   |                    |               |
| #0-46              | As per the attached specifications                          |             |      |      |             | Fairfield         | Fairfield          | GP Jager Inc. |
|                    | Envirex, Brewton Iron Works, Allied Locke, Guardian,        |             |      |      | ф 010.00    |                   | FB19SCU29K00SC60   |               |
|                    | Fairfield FB19SCU29K00SC60 or approved equal                | 2225        | 2200 | -    | \$ 810.00   |                   |                    |               |
|                    | Chain   | 89065110001 | 2200 | Feet |             |                   |                    |               |
| ,,, 4 <del>7</del> | Stainless steel with attachment link every 10 feet Hitachi- |             |      |      |             | E . C. 11         | Fairfield          | CD I I        |
| #0-47              | Maxco, FMC, Connexus, Fairfield FFCBF7153A83JAAA            |             |      |      |             | Fairfield         | FFCBF7153A83JAAA   | GP Jager Inc. |
|                    | or approved equal as per attached specifications            |             |      |      | \$ 34.20    |                   |                    |               |
|                    | TT 1 CL . 6   | 00065110002 | 4    | Г. 1 | \$ 34.20    |                   |                    |               |
|                    | Head Shaft  | 89065110002 | 4    | Each |             |                   |                    |               |
| #0.49              | Length: 19'6", Size: 3 15/16" diameter, Hitachi-Maxco,      |             |      |      |             | Fairfield         | Fairfield          | CD Issau Inc  |
| #0-48              | FMC, Shafting CF 1018 Oil Spray and Paper, ALI,             |             |      |      |             | rairiieid         | FSC1HSSLS1023439   | GP Jager Inc. |
|                    | Connexus, Fairfield FSC1HSSLS1023439, SES or                |             |      |      | \$ 2 122 00 |                   |                    |               |
|                    | approved equal as per attached specifications               |             |      |      | \$ 3,132.00 |                   |                    |               |

POMONA, NY 10970

| LINE          | DESCRIPTION   | ITEM NUMBER | EST. | UNIT | UN | IT PRICE | MANUFACTURER<br>(MANDATORY FIELD) | PRODUCT (MANDATORY  | VENDOR         |
|---------------|---|-------------|------|------|----|----------|-----------------------------------|---------------------|----------------|
| NO.           | Sprockets are to be deep chilled with a Birnell       |             | QTY. |      |    |          | (MANDATORY FIELD)                 | FIELD)              |                |
|               | hardness of 360 min. and 3/16" minimum depth chill    |             |      |      |    |          |                                   |                     |                |
|               | Turn Shaft  | 89065110003 | 12   | Each |    |          |                                   |                     |                |
|               | Length: 19', Size: 3 7/16" diameter, Hitachi-Maxco,   |             |      |      |    |          |                                   | Fairfield           |                |
| <i>‡</i> 0-49 | FMC, Shafting CF 1018 Oil Spray and Paper, ALI,       |             |      |      |    |          | Fairfield                         | FSC18SSL1022834     | GP Jager Inc.  |
|               | Connexus, Fairfield FSC18SSL1022834, SES or approved  |             |      |      |    |          |                                   | 13C1033L1022034     |                |
|               | equal as per attached specifications                  |             |      |      | \$ | 3,072.00 |                                   |                     |                |
|               | Wear Strips For Floor Rails & Return Tracks           | 89065110004 | 2200 | Feet |    |          |                                   |                     |                |
| 0-50          | Size: 3" x 1/2", Hitachi-Maxco, FMC, ALI, Connexus,   |             |      |      |    |          | Fairfield                         | Fairfield           | CD Issan Inc   |
| 0-30          | Fairfield FSCIFWUH5030H120 or approved equal as per   |             |      |      |    |          | raimeid                           | FSCIFWUH5030H120    | GP Jager Inc.  |
|               | attached specifications                               |             |      |      | \$ | 5.15     |                                   |                     |                |
|               | Turn Shaft Sprockets                                  | 89065110005 | 24   | Each |    |          |                                   |                     |                |
| 0-51          | 17 teeth min. Hitachi-Maxco, FMC, SAV715 17T,         |             |      |      |    |          | Fairfield                         | Fairfield           | GP Jager Inc.  |
| 0-51          | Brewton, Fairfield FB17SUU34000SC60 or approved       |             |      |      |    |          | raimeid                           | FB17SUU34000SC60    | Gr Jager IIIc. |
|               | equal as per attached specifications                  |             |      |      | \$ | 612.00   |                                   |                     |                |
|               | Head Shaft Sprockets                                  | 89065110006 | 8    | Each |    |          |                                   |                     |                |
| 0-52          | 19 teeth min., Hitachi-Maxco, FMC, Guardian, Brewton, |             |      |      |    |          | Fairfield                         | Fairfield           | GP Jager Inc.  |
| 0-32          | Fairfield FB19CU39K00SC60 or approved equal as per    |             |      |      |    |          | ranneiu                           | FB19CU39K00SC60     | Or Jager Ilic. |
|               | attached specifications                               |             |      |      | \$ | 564.00   |                                   |                     |                |
|               | Drive Sprockets                                       | 89065110007 | 4    | Each |    |          |                                   |                     |                |
| 0-53          | 40 teeth min., Hitachi-Maxco, FMC, Brewton, Martin,   |             |      |      |    |          | Fairfield                         | Fairfield           | GP Jager Inc.  |
| 0-33          | Fairfield FA40SCU00K0BS060 or approved equal as per   |             |      |      |    |          | ranneiu                           | FA40SCU00K0BS060    | OF Jager Inc.  |
|               | attached specifications                               |             |      |      | \$ | 1,932.00 |                                   |                     |                |
|               | Submerged Bearings -                                  | 89065110008 | 8    | Each |    |          |                                   |                     |                |
|               | Head Shaft Bearings                                   |             |      |      |    |          |                                   | Fairfield           |                |
| 0-54          | Hitachi-Maxco, FMC, Brewton W3698, Connexus,          |             |      |      |    |          | Fairfield                         | FSC1WBIBBSMD000     | GP Jager Inc.  |
|               | Fairfield FSC1WBIBBSMD000 or approved equal as per    |             |      |      |    |          |                                   | 13C1WDIDDSMID000    |                |
|               | attached specifications                               |             |      |      | \$ | 829.20   |                                   |                     |                |
|               | Submerged Bearings -                                  | 89065110009 | 24   | Each |    |          |                                   |                     |                |
|               | Turn Shaft Bearings                                   |             |      |      |    |          |                                   | Fairfield           |                |
| 0-55          | Hitachi-Maxco, FMC, Brewton W3694, Connexus,          |             |      |      |    |          | Fairfield                         | FSC1WBIBBSMD000     | GP Jager Inc.  |
|               | Guardian 3-1622-4, Fairfield FSC1WBIBBSMD000 or       |             |      |      |    |          |                                   | 1.9CI M DIDDSMID000 |                |
|               | approved equal as per attached specifications         |             |      |      | \$ | 591.60   |                                   |                     |                |

POMONA, NY 10970

| LINE          | DESCRIPTION   | ITEM NUMBER | EST. | UNIT | UN       | IT PRICE | MANUFACTURER      | PRODUCT (MANDATORY    | VENDOR             |
|---------------|---|-------------|------|------|----------|----------|-------------------|-----------------------|--------------------|
| NO.           | Sprockets are to be deep chilled with a Birnell           |             | QTY. |      |          |          | (MANDATORY FIELD) | FIELD)                |                    |
|               | hardness of 360 min. and 3/16" minimum depth chill        |             |      |      |          |          |                   |                       |                    |
|               | Non-Metallic Collars                                      | 89065110010 | 52   | Each |          |          |                   |                       |                    |
|               | Hitachi-Maxco, FMC, ALI UHMW,                             |             |      |      |          |          |                   |                       |                    |
| #0-56         | 2-1821-4 UHMW, Guardian, Connexus, Tri-State              |             |      |      |          |          | Fairfield         | NOT APPLICABLE        | GP Jager Inc.      |
|               | Bearings, Fairfield or approved equal as per attached     |             |      |      |          |          |                   |                       |                    |
|               | specifications  |             |      |      | \$       | 76.80    |                   |                       |                    |
|               | Take-Up Bearing Assembly                                  | 89065110011 | 8    | Each |          |          |                   |                       |                    |
|               | Hitachi-Maxco, FMC, Brewton W3611,                        |             |      |      |          |          |                   | Fairfield             |                    |
| #0-57         | 3-1652-4, Guardian, Connexus, Fairfield                   |             |      |      |          |          | Fairfield         | FSCITBFSBB000000      | GP Jager Inc.      |
|               | FSCITBFSBB000000 or approved equal as per attached        |             |      |      |          |          |                   | 1 SCITBI SBB 000000   |                    |
|               | specifications  |             |      |      | \$       | 1,274.40 |                   |                       |                    |
|               | 2 3/16 Dia x 2' 2" Lg. Jack Shaft,                        | 89065100014 | 6    | Each |          |          |                   |                       |                    |
| #0-58         | Material - #C-1045 as specified,                          | NOT         |      |      |          |          | SES               | Shaft 2 3/16" x 2' 2" | Applied Industrial |
|               | Viking, ALI, Connexus, Tri-State Bearings, Fairfield,     | RENEWED     |      |      |          | 4 40 00  | ~_~               |                       | Technologies, Inc. |
|               | Martin, SES or approved equal                             |             |      |      | \$       | 160.00   |                   |                       |                    |
|               | 2 3/16 Dia x 4' 3" Lg. Jack Shaft,                        | 89065100015 | 6    | Each |          |          |                   |                       |                    |
| #0-59         | Material - #C-1045 as specified,                          | NOT         |      |      |          |          | SES               | Shaft 2 3/16" x 4' 3" | Applied Industrial |
|               | Viking, ALI, Connexus, Tri-State Bearings, Martin         | RENEWED     |      |      | Ф        | 225.00   |                   |                       | Technologies, Inc. |
|               | Sprocket, SES or approved equal                           | 00057100015 | -    | Б. 1 | \$       | 325.00   |                   |                       |                    |
|               | <b>Ductile Iron Style 2 Sliding Base Chain Tighteners</b> | 89065100016 | 6    | Each |          |          |                   |                       |                    |
| <b>"</b> 0 00 | Complete with 7T Cast Iron Chilled Rim Sprocket as        |             |      |      |          |          | F . C 11          | Fairfield             | CD I I             |
| #0-60         | specified,  |             |      |      |          |          | Fairfield         | FSCICHTN787TCICI      | GP Jager Inc.      |
|               | Viking, Brewton, Connexus, Fairfield                      |             |      |      | φ.       | 206.00   |                   |                       |                    |
|               | FSCICHTN787TCICI or approved equal                        | 00065100017 |      | E 1  | \$       | 396.00   |                   |                       |                    |
|               | 11T78 Jaw Clutch/Handwheel Sprocket Style-2, RH 2         | 89065100017 | 6    | Each |          |          |                   | D : C 11              |                    |
| #0-61         | 3/16 Bore Cast Iron Chilled Rim as specified, Viking,     |             |      |      |          |          | Fairfield         | Fairfield             | GP Jager Inc.      |
|               | Brewton, Connexus, Fairfield FA11SCC21000000 or           |             |      |      | 8        | 1.188.00 |                   | FA11SCC21000000       | •                  |
|               | approved equal  | 00065100020 |      | Г. 1 | <b>3</b> | 1,188.00 |                   |                       |                    |
|               | 13T78 Jaw Clutch/Handwheel Sprocket Style-2, LH 2         | 89065100020 | 6    | Each |          |          |                   | E : C 11              |                    |
| #0-62         | 3/16 Bore Cast Iron Chilled Rim as specified, Viking,     |             |      |      |          |          | Fairfield         | Fairfield             | GP Jager Inc.      |
|               | Brewton, Connexus, Fairfield FA13SCC21000000 or           |             |      |      | •        | 1 100 00 |                   | FA13SCC21000000       | -                  |
|               | approved equal  |             |      |      | 2        | 1,188.00 |                   |                       |                    |

#### COUNTY OF ROCKLAND - DGS-PURCHASING

BLDG. A., 6TH FLOOR, 50 SANATORIUM RD, POMONA, NY 10970 TELEPHONE: 845-364-3820 / TELEFAX: 845-364-3809

**Sludge Collection Equipment-Replacement Parts** 

RFB #: RFB-RC-2023-078

# **SPECIFICATIONS**

#### 1. SCOPE

1.1. Provide pricing for the purchase of specified replacement parts for the Rockland County Sewer District #1 primary and secondary settling tanks (A and B Sides) at the Rockland County Sewer District #1 treatment plant. Note: This bid is for pricing only quantities shown are estimates. Items purchased will depend on the requirements of the Rockland County Sewer District #1.

### 2. PRICE ADJUSTMENT

- 2.1. The County recognizes this product or service has a price component that may have a commodity with changing costs. The Contractor/Supplier may request a Price Adjustment no more frequently than once per 6-month period.
- 2.2. A Price Adjustment request must be made in writing and include the reason for the request, documentation supporting the request (ie, commodity increases), the current pricing, and the requested revised pricing.
- 2.3. The County will review the Price Adjustment request. If the Price Adjustment is deemed reasonable the Price Adjustment request will be accepted by written acknowledgement. If the request is not accepted the County may entirely reject the request or may counter with revised pricing. In either case the County will provide a written explanation in support of the decision.
- 2.4. The Director of Purchasing may use available indexes (e.g. CPI or PPI) to determine if the requested Price Adjustment is reasonable. Typically, a Price Adjustment that exceeds 5% will not be approved unless very unusual and significant changes have occurred in the industry.
- 2.5. In the event industry costs decline, the County shall have the right to receive, from the Contractor, a reasonable reduction in prices/pricing that reflect such cost changes in the industry. The County will make a written request to the Contractor for a Price Adjustment in writing with supporting documentation.

# 3. SITE VISIT

- 3.1 A pre-bid meeting is scheduled on **August 24, 2023, 9:00AM** at the RCSD#1, Administration Office located at 4 Route 340, Orangeburg, NY 10962.
  - 3.1.1 Each bidder must inform himself fully of the conditions relating to the contract and is encouraged to visit the site. The site visit will be conducted following the scheduled pre-bid meeting.

### 4. REQUIREMENTS

4.1. Items bid shall be Mfg. by FMC, Brewton, Charter Machine Company, James Eagen Sons Co., as specified on the proposal pages or approved equal.

# 5. INTERCONNECTABILITY

### COUNTY OF ROCKLAND - DGS-PURCHASING

BLDG. A., 6TH FLOOR, 50 SANATORIUM RD, POMONA, NY 10970 TELEPHONE: 845-364-3820 / TELEFAX: 845-364-3809

**Sludge Collection Equipment-Replacement Parts** 

RFB #: RFB-RC-2023-078

5.1. This equipment must have the ability to interconnect with the existing equipment. Bidder must guarantee interconnectability in writing with the bid. In addition, vendor must provide any required data within five business days of request from the Rockland County Sewer District # 1 authorized representative.

### 6. **COMPATIBILITY**

6.1. Equipment offered shall be compatible with the existing equipment/environment in the plant settling tanks without the use of adapters.

# 7. APPROVED EQUAL OR EQUIVALENT PRODUCTS

- 7.1. Bidders shall submit an item by item listing and explanation of any differences between their product specifications and performance and the listed bid specifications. Product and service warranties must be included with bid.
- 7.2. If bidders submit or bid for equivalent or approved equal products, they must submit manufacturer's product description and specifications. Bidder shall also include a side by side comparison of the offered product to the specified product.
- 7.3. Items requiring adapters will not be acceptable. Bidder must provide a list of 5 installations where items bid are being used with the same type of equipment that is being utilized by the Rockland County Sewer District # 1. The equipment shall have been in use for a minimum of three years. References need to include location, contact email and telephone number of each installation. See Certification of Experience Form.
- 7.4. Bidder must be able to demonstrate within one week after notice and guarantee in writing that the item bid is interconnectable with existing equipment.

# 8. BRAND NAME

8.1. The use of a brand name is for the purpose of describing a standard of quality, performance and characteristics desired and is not intended to limit or restrict competition.

### 9. **DELIVERIES**

9.1. All parts must be delivered Monday – Friday, excluding holidays, between the hours of 8 AM - 2 PM.

# 10. DETAILED SPECIFICATIONS

### 10.1. SPROCKETS

10.1.1. Sprockets are to be deep chilled with a Birnell hardness of 360 min. and 3/16" minimum depth chill.

# 10.2. SPECIFICATIONS FOR NON-METALLIC COLLECTOR CHAIN AND ATTACHMENT LINKS ITEMS 35-38

- 10.2.1. All collector flight chain furnished by the Contractor must meet the following specifications:
  - 10.2.1.1. Chains shall be 6" pitch type 720, curved side bar with an average weight of 1.3 to 1.4 lbs. per foot. Side bars shall be curved to a 10" radius. The chain shall have a catalog working load of not less than 2,600 lbs. based upon both strength and wear considerations.

### COUNTY OF ROCKLAND - DGS-PURCHASING

BLDG. A., 6TH FLOOR, 50 SANATORIUM RD, POMONA, NY 10970 TELEPHONE: 845-364-3820 / TELEFAX: 845-364-3809

**Sludge Collection Equipment-Replacement Parts** 

RFB #: RFB-RC-2023-078

- 10.2.1.2. Lengths and attachments shall be manufactured of reinforced polyester alloy with barrel and side bars integrally molded to insure squareness of the links. Connecting pins of glass reinforced polyester alloy or fiberglass fortified acetal shall have a T-head feature to prevent pin rotation, and shall be held in place without the need for spring clips, cotters or similar devices. The pins shall be pressed into the link side bars to exclude abrasives. Rigid attachments shall extend the full depth of the flight and shall be designed to push the flight to minimize the loading on the flight attachment bolts. Attachments are to be spaced at 10 foot centers.
- 10.2.1.3. The chain barrel shall have a diameter along its full working length, which allows proper engagement, with a 1" maximum face width of a 720 sprocket.
- 10.2.1.4. Each link must have a 6" pitch with .941" diameter pins.
- 10.2.1.5. Chain lengths shall be proof tested at a load of 5,000 lbs. Proof loads must not cause damage or distortion to the chain.
- 10.2.1.6. Copies of chain tests performed on identical chain must be submitted to document compliance with the specifications.

# 10.2.2. Quality Control

- 10.2.2.1. The chain manufacturer must have an approved SPC System in effect and in use from raw material inspection through and including chain test. To insure in process control, the following tests shall be run at the appropriate time in the manufacturing cycle:
  - 10.2.2.1.1. <u>Ultimate strength of single links and pins</u> Two links and pins shall be pull tested for every 125 pieces molded. This shall be continuous throughout the molding operation. The loading shall be averaged to verify that the ultimate strength is not less than 6,300 lbs.
  - 10.2.2.1.2. Qualification ultimate strength testing of assembled chain Six pitch sample strands from each lot of molded links and pins shall be qualified prior to chain assembly. Qualification testing shall consist of ultimate strength test performed by the chain manufacturer. The ultimate strength of the sample strands shall exceed 6,300 lbs. with an elongation not to exceed 3 percent.

### COUNTY OF ROCKLAND - DGS-PURCHASING

BLDG. A., 6TH FLOOR, 50 SANATORIUM RD, POMONA, NY 10970 TELEPHONE: 845-364-3820 / TELEFAX: 845-364-3809

**Sludge Collection Equipment-Replacement Parts** 

RFB #: RFB-RC-2023-078

- 10.2.2.1.3. <u>Proof loading of assembled ten foot (20 pitches) chain strands</u> Every assembled ten foot strand of chain shall be proof loaded to 5,000 lbs. prior to shipping.
- 10.2.2.1.4. Chain strands shall be shipped in 10 foot sections, and shall be checked for matching per ANSIB 29.21M 1981. Chain to be matched within .190".
- 10.2.2.1.5. <u>Length specifications</u> Assembled 20 Link strands of 6" pitch chain under a 130 pound measuring load shall not be less than 120.0 inches and not greater than 120.75 inches.
- 10.2.2.1.6. <u>Camber specifications</u> Chain camber shall comply with requirements of ANSIB 29.21M 1981. Chain to camber a minimum of 1 inch in each direction and to be equal to each other within 1 1/2 inch.
- 10.2.2.1.7. <u>Twist specifications</u> Chain twist shall comply with requirements of ANSIB 29.21M 1981. Assembled 10 foot strands shall twist a minimum of 10<sup>0</sup> in each direction and be equal to each other within 15<sup>0</sup>.
- 10.2.2.1.8. Certified test data on the above shall be submitted to the owner for their review and approval.

# 10.3. SPECIFICATIONS FOR FLIGHTS ITEMS 39 AND 40

- 10.3.1. The fiberglass flights shall be 3" x 8" nominal size, essentially rectangular in cross section, with the front having a transverse concave indentation to provide structural support, and a transverse gap in the back to allow circulation of water through the member to render it non-buoyant. The member shall have a Moment of Inertia of not less than 2.01 about its minor axis. The flight shall be of pultruded isothalic polyester composite construction with an average fiberglass content of 45 percent to ensure total encapsulation of the glass fibers to prevent wicking. The use of extenders in the resin is prohibited.
- 10.3.2. Maximum water absorption shall be no greater than 0.5% in accordance with ASTM D-570. The flight section shall include a scraper lip on the leading edge of the flight to optimize cleaning of the tank floor. Polypropylene filler books shall be furnished to allow the flight to be securely bolted to the chain attachment. The blocks shall provide an interference fit with the flight to maintain proper positioning during assembly. Flight shall be accurately drilled and notched at the factory and banded together for shipment.

# 10.4. SPECIFICATIONS FOR FLIGHTS ITEM 41

- 10.4.1. Flights shall be 3" x 6" nominal size fiberglass construction, essentially rectangular in cross section, with the front having a transverse concave indentation to provide structural support, and a transverse gap in the back to allow circulation of water through the member to render it non-buoyant. The member shall have a Moment of Inertia of not less than \* in.4 about its minor axis. The flight shall be of pultruded isothalic polyester composite construction with a minimum fiberglass content of 50 % but no greater than 60%, to ensure member strength and to insure total encapsulation of the glass fibers to prevent wicking. The use of extenders in the resin is prohibited.
- 10.4.2. Maximum water absorption shall be no greater than 0.6% after immersion for 48 hrs. at 73.4° F (23° C) in accordance with ASTM D-570. The flight section shall include a scraper lip on the leading edge of the flight to optimize cleaning of the tank floor. Polypropylene filler blocks shall

### COUNTY OF ROCKLAND - DGS-PURCHASING

BLDG. A., 6TH FLOOR, 50 SANATORIUM RD, POMONA, NY 10970 TELEPHONE: 845-364-3820 / TELEFAX: 845-364-3809

**Sludge Collection Equipment-Replacement Parts** 

RFB #: RFB-RC-2023-078

be furnished to allow the flight to be securely bolted to the chain attachment. The blocks shall provide an interference fit with the flight to maintain proper positioning during assembly. Flight spacing shall be approximately 10 ft. for longitudinal collectors (and 5 ft. for cross collectors). Flight shall be accurately drilled and notched at the factory and banded together for shipment.

11.4.2.1. a\* Moment of inertia for a 6" sigma flight = 1.6.

### 10.5. SPECIFICATIONS FOR UHMW WEAR SHOES ITEMS 42 AND 43

- 10.5.1. Each flight shall be provided with 1/2" thick UHMW wear shoes designed to run on the return track and floor rails respectively. Material shall be all virgin as defined by ASTM D 4020-81. Wear shoes shall be made from a powder having a molecular weight exceeding four million and intrinsic viscosity greater than 24. Finished wear shoes shall have a relative abrasion resistance of 12. Water absorption after 24 hours immersion per ASTM D570 shall be nil.
- 10.5.2. Maximum water absorption shall be no greater than 0.6% after immersion for 48 hrs. at 73.4° F (23° C) in accordance with ASTM D-570. The flight section shall include a scraper lip on the leading edge of the flight to optimize cleaning of the tank floor. Polypropylene filler blocks shall be furnished to allow the flight to be securely bolted to the chain attachment. The blocks shall provide an interference fit with the flight to maintain proper positioning during assembly. Flight spacing shall be approximately 10 ft. for longitudinal collectors (and 5 ft. for cross collectors). Flight shall be accurately drilled and notched at the factory and banded together for shipment.
  - 11.5.2.1.a \* Moment of inertia for a 6" sigma flight = 1.6.

# 10.6. SPECIFICATIONS FOR SPROCKETS ITEMS 44,45 AND 46

- 10.6.1. <u>Turn Shaft Sprockets</u> Sprockets for the collector chains shall be machined totally of UHMW-PE, virgin material having a hardness of not less than Rockwell R56, having a tensile of no less than 6,400 PSI based on ASTM D638 standards, and a water absorption rate not to exceed 1.3 percent at saturation in accordance with ASTM D570. The sprockets shall be of split construction. The sprockets halves shall be assembled on the shafting with stainless steel bolts through the hub which exert compressive force around the full periphery of the hub. All sprockets shall have a chain saver rim retained into the body for the full 360° of the sprocket. Chain saver rims utilizing bolts, wraps, or fasteners to retain the chain saver flange to the sprocket will not be accepted. One shaft sprocket per turn shaft shall be affixed by set screws machined through the hub of the sprockets. The other sprocket shall be freewheeling, restricted from lateral movement by use of collars.
  - 10.6.1.1. Sprocket size: Min. Pitch Diameter: 12.89", Min. Number of teeth: 13.
  - 10.6.1.2. Bore Size: 2 15/16".
- 10.6.2. <u>Head Shaft Sprockets</u> Sprockets for the head shaft shall utilize a combination design with a cast iron body, split with keyway and set screw. The head shaft sprockets shall have the keyway machined into the hub in such a way as to restrict lateral movement of the key. The teeth shall be replaceable and machined out of UHMW-PE as described in above. The cast iron hubs shall be shop painted by the manufacturer with two coats of an approved corrosion resistant paint.
  - 10.6.2.1. Sprocket size: Min. Pitch Diameter: 18.45", Min. Number of teeth: 19.
  - 10.6.2.2. Bore Size: 2 15/16".

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BLDG. A., 6TH FLOOR, 50 SANATORIUM RD, POMONA, NY 10970 TELEPHONE: 845-364-3820 / TELEFAX: 845-364-3809

**Sludge Collection Equipment-Replacement Parts** 

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## 10.7. SPECIFICATIONS FOR ITEM 47 – CHAIN

- 10.7.1. The collector chain shall be type 715 stainless steel 403 grade as manufactured by Hitachi-Maxco Ltd., FMC, or approved equal.
- 10.7.2. Each link shall have a 6.00 inch pitch with 9/16" diameter pin. The weight of the chain including an F228 attachment in 10 foot long strands shall not be less than 3.9 pounds/foot.
- 10.7.3. The steel sidebars shall be 15/64" thick x 1 57/64" maximum height of type 403 stainless steel. The sidebar shall be annealed and treated for stress relieved stabilized microstructure. The sidebar shall be of the curvature to accepting onto chain saver type sprockets.
- 10.7.4. All barrels shall be made of type 403 stainless steel. The barrels shall have a hardness range of 35-45 Rockwell C, and shall have adequate toughness to withstand normal abuse in handling installation and service. Barrel diameter shall be 1.024 inches.
- 10.7.5. The chain barrel shall have a diameter along its full working length which allows proper engagement with a 1 inch maximum face of sprocket.
- 10.7.6. All chain pins shall be made of type 403 stainless steel. Heat treated to a hardness of 35-45 Rockwell C, all pins shall have Type 304 stainless steel J cotters.
- 10.7.7. The chain shall be furnished in accordance with good chain manufacturing practice, including link squareness and removal of burrs.
- 10.7.8. Chain shall be furnished with a black protective finish. Finish is to protect chain during shipment and storage prior to use.

# 10.8. SPECIFICATIONS FOR ITEMS 48 AND 49 SHAFTS

10.8.1. Shafts shall be cold rolled steel, straight and true, continuous between bearings. Shafts shall be shipped stripped and painted with 3 mills of suitable coating. Set collars for each turn shaft shall be supplied.

10.8.2. SHAFT

DIAMETER, INCHES

ITEM #48 Head Turn

3 15/16"

ITEM #49 Turn Shaft

3 7/16"

- 10.8.3. Item #48 is 19 feet and 6 inches in length and has three keyways.
- 10.8.4. Item #49 is 19 feet in length.
- 10.8.5. Items #48 and #49 shall be painted with 3 mils of suitable coating Houghtons #344 Rust Preventative or approved equal.

# 10.9. SPECIFICATIONS FOR ITEM 50 – WEAR STRIPS FOR FLOOR RAILS AND RETURN TRACKS

10.9.1. UHMW-Polyethylene wear strips, 1/2 inch thick by 3 inches wide, shall be provided and attached to the existing steel floor rails and return tracks. Each strip shall include one anchoring hole and not less than two slotted holes to accommodate the 316 stainless steel weld washers used to secure the wear strips to the steel rails and tracks. Ends of the strips shall be beveled to allow a smooth transition from section to section.

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### 10.10. SPECIFICATIONS FOR ITEM 51 – TURN SHAFT SPROCKETS

10.10.1. Sprockets for the collector chains shall be machined totally of UHMW-PE, virgin material having a hardness of not less than Rockwell R56, having a tensile of no less than 6,400 PSI based on ASTM D638 standards, and a water absorption rate not to exceed 1.3 percent at saturation in accordance with ASTMD570. The sprockets shall be of split construction and shall have a tooth profile compatible with stainless steel chain. The sprocket halves shall be assembled on the shafting with stainless steel bolts through the hub which exert compressive force around the full periphery of the hub. All sprockets shall have a chain saver rim retained into the body for the full 360 degrees of the sprocket. Chain saver rims utilizing bolts, wraps, or fasteners to retain the chain saver flange to the sprocket will not be accepted. One turnshaft sprocket per turn shaft shall be affixed by set screws machined through the hub of the sprockets. The other sprocket shall be freewheeling, restricted from lateral movement by use of collars.

10.10.2. Sprocket Size: Min. Pitch - 16.60, Min. # of Teeth - 17

## 10.11. SPECIFICATIONS FOR ITEM 52 – HEAD SHAFT SPROCKETS

- 10.11.1. Sprockets for the head shaft shall utilize a combination design with a cast iron body, split with keyway and set screw. The head shaft sprockets shall have the keyway machined into the hub in such a way as to restrict lateral movement of the key. The teeth shall be replaceable and machined out of UHMW as described in above. The cast iron hubs shall be shop painted by the manufacturer with two coats of an approved corrosion resistant paint.
- 10.11.2. Sprocket Size: Min. Pitch 18.45, Min. # of Teeth 19

# 10.12. SPECIFICATIONS FOR ITEM 53 – DRIVE SPROCKET

10.12.1. The drive sprocket shall be designed to operate on H78 drive chain. The sprocket shall be of split construction. Hubs shall be made of cast iron, conforming to ASTM A48, and be of the offset design. The drive sprocket shall have not less than 40 teeth. Sprocket teeth shall be manufactured of UHMW. UHMW material shall be made from a powder having a molecular weight exceeding four million and intrinsic viscosity greater than 24 and have a relative abrasion resistance of 12. Water absorption after twenty four (24) hours immersion per ASTM D570 shall be nil. Teeth shall be furnished in replaceable segments and attached to the hubs with type 18-8 stainless steel fasteners.

# 10.13. SPECIFICATIONS FOR ITEMS 54 AND 55 – SUBMERGED BEARINGS

All underwater bearings shall be babbitted and of the water lubricated Peak Cap selfaligning type specially designed to prevent accumulation of settled solids on their surfaces. Bearings shall be two piece to permit easy removal of the shaft without removing the bearing bracket from the wall. These bearings shall be bolted directly to the concrete wall in a manner which will permit their easy adjustment. The bearings shall be equipped with grease fittings for lubrication when the tanks are dewatered.

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### 10.14. SPECIFICATIONS FOR ITEM 56 – NON-METALLIC COLLARS

10.14.1. All collars furnished for sludge collector shafting shall be manufactured of polyurethane. The collars shall be of split construction mounted with 3/8" diameter stainless steel hardware. The collars shall have male-female locators to assure proper alignment.

# 10.15. SPECIFICATIONS FOR ITEM 57 – TAKE-UP BEARING ASSEMBLY

- 10.15.1. Take-up assemblies shall be provided for one shaft of each longitudinal collector; shall provide not less than 12" horizontal travel; shall be of the cantilever fabricated steel design with bronze take-up screws, so designed that no recesses in the concrete are required to maintain clearances.
- 10.16. **Item #58** 2 3/16 Dia x 2' 2" Lg. Jack Shaft, Material #C-1045
- 10.17. **Item #59 -** 2 3/16 Dia x 4' 3" Lg. Jack Shaft, Material #C-1045
- 10.18. **Item #60-** Ductile Iron Style 2 Sliding Base Chain Tighteners Complete with 7T Cast Iron Chilled Rim Sprocket
- 10.19. **Item #61 -** 11T78 Jaw Clutch/Handwheel Sprocket Style-2, RH 2 3/16 Bore Cast Iron Chilled Rim
- 10.20. **Item #62 -** 13T78 Jaw Clutch/Handwheel Sprocket Style-2, LH 2 3/16 Bore Cast Iron Chilled Rim

### 11. **AWARD**

- 11.1. Award shall be made on a line-by-line basis to the lowest responsive responsible bidder (s) meeting the stated requirements.
- 11.2. Quantities listed are estimates. Actual quantities may be more or less than the estimated amounts. Items purchased will depend on the requirements of the Rockland County Sewer District # 1.
- 12.3 In an effort to expedite the award of this contract and to immediately process a Purchase Order, the County is requesting all bidders submit the required Workman's Compensation Certificate, NYS Disability Certificate and Certificate of Liability with their bid submission, however, the apparent low bidder shall have minimum of five days after notification to submit the required documentation.