



Plattsburgh, New York

Kristofer Gushlaw
Chief Plant Operator

Water Resource Recovery Facility
53 Green Street
Plattsburgh, NY 12901
518-563-7172
gushlawk@cityofplattsburgh-ny.gov

NOTICE TO BIDDERS

The Common Council of the City of Plattsburgh, New York, will receive sealed bids up until **11:00 AM, Tuesday, August 1, 2023** at the City Clerk's Office, City Hall, Plattsburgh, New York, for the furnishing of **Contract# WRRF2023-04: Instrumentation Services for the Water Filtration Plant and Water Resource Recovery Facility**. The bids will be publicly opened and read aloud in the Common Council Chambers of the City Hall Building at 11:00 AM on this same date.

Specifications may be obtained at the Office of the City Clerk, City Hall, Plattsburgh, New York, 12901, or on www.cityofplattsburgh.com.

Bids to be accompanied with a Non-Collusive Bidding Certificate.

Envelope containing bid shall be plainly marked: "**Contract# WRRF2023-04: Instrumentation Services for WFP and WRRF.**"

The Common Council of the City of Plattsburgh reserves the right to reject any and/or all bids and to waive any and/or all informalities that do not affect the validity of the bid.

Kristofer Gushlaw
Chief Plant Operator

SPECIFICATIONS

CONTRACT# WRRF2023-04

INSTRUMENTATION SERVICES FOR THE
WATER FILTRATION PLANT &
WATER RESOURCE RECOVERY FACILITY

KRISTOFER GUSHLAW
CHIEF PLANT OPERATOR (WRRF)

CITY OF PLATTSBURGH

53 GREEN STREET

PLATTSBURGH, NEW YORK 12901

JUNE 2023

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WATER FILTRATION PLANT AND
WATER RESOURCE RECOVERY FACILITY**

ENVIRONMENTAL SERVICES DEPARTMENT

CITY HALL

**PLATTSBURGH, NEW YORK 12901
(518-563-7731)**

**JONATHAN P. RUFF
ENVIRONMENTAL MANAGER**

JUNE 2023

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BIDDING REQUIREMENTS
INFORMATION FOR BIDDERS

1.1 OPENING OF BIDS

- A. Bids will be opened at the time and place set forth in the Notice to Bidders. Every bid received before that time, or authorized postponement thereof, will be opened and publicly read aloud. Bidders and other persons properly interested may be present in person or by representative.
- B. The Owner may consider informal any bid not prepared and submitted in accordance with the provisions hereof or may waive any informalities in or reject any or all bids. Any bid may be withdrawn prior to the advertised time for the opening of bids or authorized postponement thereof. Any bid received after the time and date specified shall not be considered. No bidder may withdraw a bid within 30 days after the actual opening thereof.
- C. Conditional bids will not be accepted.

1.2. PREPARATION OF PROPOSAL

- A. Proposals must be submitted on prescribed forms or facsimiles thereof. All blank spaces must be filled in, in ink or typewritten, in both words and figures where so indicated.
- B. Each proposal must be submitted in a sealed envelope and shall have clearly designated on the outside the name and address of the bidder, the name of the project and the contract for which proposal is submitted. Each proposal must be submitted to the City Clerk, City of Plattsburgh, 41 City Hall Place, Plattsburgh, NY 12901. Bids are to be submitted in an envelope and plainly marked:
“Contract# WRRF2023-04: Instrumentation Services for WFP and WRRF.”

1.3 COPIES OF CONTRACT DOCUMENTS

- A. Copies of the contract documents may be obtained from the City Clerk, City of Plattsburgh, 41 City Hall Place, Plattsburgh, NY 12901. (phone # 518-563-7702, fax # 518-562-5844), or may be downloaded from the City website.

1.4 NON-COLLUSIVE BIDDING CERTIFICATE

- A. Each prime Bidder submitting a bid for any portion of the work contemplated by the bidding documents shall execute a non-collusive certificate as required by applicable New York State law, in the form herein provided, to the effect that he has not colluded with any other person, firm or corporation in regard to any bid submitted. Such certificate shall be attached to the bid. Failure of any bidder to abide by this provision shall be cause for rejection of his bid.

BIDDING REQUIREMENTS - INFORMATION FOR BIDDERS, CONTINUED...

1.5 QUALIFICATION OF BIDDERS

- A. The Owner may make such investigation as he deems necessary to determine the ability of the bidder to perform the work and the bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request.
- B. The Owner reserves the right to reject any bid if the evidence submitted by or investigation of such bidder fails to satisfy the Owner that such bidder is properly qualified to carry out the obligations of the contract and to complete the work contemplated herein.
- C. The Owner requires the Bidder and/or the person he assigns or designates to do the work described in this contract to have a minimum of three (3) years industrial instrumentation maintenance experience and with electrical equipment of a similar nature described herein. The bidder shall have demonstrated abilities to troubleshoot, calibrate, make recommendations and repairs, use diagnostic equipment and have knowledge of current industrial practices.
- D. The Bidder shall have a current phone number which the Bidder can be reached 24 hours a day, 7 days per week in case of emergencies. This phone number is to be provided on the bid schedule form for proper submittal with the bid proposal.

1.6. SUBCONTRACTOR

- A. The Bidder may designate a Subcontractor to do the work described herein and the Owner shall have the right to review and approve or disapprove the Subcontractor subject to the same conditions set forth in 1.5, Qualification of Bidders. Any such Subcontractor shall comply with all conditions set forth in this contract.

1.7 CONDITIONS OF WORK

- A. Each Bidder must inform himself fully of the conditions relating to the construction and labor under which work is now being or will be performed. Failure to do so will not relieve a successful bidder of his obligations to furnish all labor necessary to carry out the provisions of the contract documents and to complete the contemplated work for the consideration set forth in his bid. The Contractor, in the carrying out of his work, must employ such methods or means as will not cause any interruption or interference with the work of any other contractor, or the operations of the Owner unless authorized in advance by the Owner.

BIDDING REQUIREMENTS - INFORMATION FOR BIDDERS, CONTINUED...

1.8 OBLIGATION OF BIDDERS

- A. At the time of the opening of bids, each bidder will be presumed to have inspected the sites, to have familiarized himself with local conditions, and to have read and to be thoroughly familiar with the bidding documents, including all Addenda. The failure or omission of any bidder to receive or examine any form, instrument or document shall in no way relieve any bidder from any obligation in respect to his bid.

1.9 ADDENDA AND INTERPRETATIONS

- A. No interpretations of the meaning of the Specifications or other contract documents will be made to any bidder orally. Every request for such interpretation shall be in writing to the City Environmental Manager, and to be given consideration, must be received at least 5 days prior to the date fixed for the opening of the bids. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications. Addenda will be mailed to all prospective bidders at the respective address furnished prior to the date as fixed for opening of bids. Failure of any bidder to receive any such addendum or interpretation shall not relieve any bidder from any obligations under his bid as submitted. All addenda so issued shall become part of the contract documents.

1.10 BASIS FOR AWARD

- A. Award will be made to the lowest responsible bidder as determined from the Bid Proposal. Unit prices shall govern in the event of a math error. On contracts with estimated quantities, the award will be made on the unit prices quoted.
- B. The Common Council of the City of Plattsburgh reserves the right to reject any or all bids.
- C. Discrepancies between words and figures will be resolved in words. Discrepancies between the indicated sum of any column or figures and the correct sum thereof, will be resolved in favor of the correct sum.

GENERAL CONDITIONS

2.1 CONTRACT AND CONTRACT DOCUMENTS

- A. The specifications and Addenda shall form part of Contract and the provisions thereof shall be as binding upon the parties hereto as if they were herein fully set forth. The Table of Contents, titles, headings, contained herein and in said documents are solely to facilitate reference to various provisions of the Contract documents and in no way affect, limit or cast light upon the interpretation of the provisions to which they refer.

2.2 DEFINITIONS

- A. "Contract" means the contract executed by the City of Plattsburgh and the Contractor.
- B. "Contractor" means the person, firm or corporation executing the agreement or the duly recognized assignee thereof, who will perform the work described in the drawings and specifications of the contract documents.
- C. "Sub-Contractor" means a person, firm or corporation supplying labor and materials or only labor for work at the site of the project, for and under separate contract or agreement with the Contractor.
- D. "Engineer" means the Chief Plant Operator at the Water Filtration Plant or Chief Plant Operator at the Water Pollution Control Plant, a duly authorized person representing the City of Plattsburgh.
- E. "Owner" shall mean the City of Plattsburgh. All contracts and agreements connected with the Owner shall be executed by the Mayor.

2.3 SAFETY AND HEALTH REGULATIONS

- A. In order to protect the lives and health of his/her employees under the Contract, the Contractor shall comply with all pertinent provisions of the Contract Work Hours & Safety Standards Act, as amended, commonly known as the Construction Safety Act, as pertains to health and safety standards; and shall maintain an accurate record of all cases of death, occupational disease, and injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment on work under the Contract. Any City safety rules will also be abided by pertaining to any activity that the Contractor does while working on City equipment or at any City location.

2.4 WAGES

- A. The Contractor shall comply with all labor and wage requirements of the New York State Department of Labor.

GENERAL CONDITIONS CONTINUED...

2.5 TIME OF CONTRACT

- A. The Contract period shall be for one (1) year, commencing on August 14, 2023, and expiring on August 13, 2024, or on the date as noted in the letter giving a formal notice to proceed. Contract period may be extended for up to two (2) additional one-year contracts by mutual agreement of the Owner and Contractor. Notice of extension must be in writing 60 days prior to Contract expiration.

2.6 TERMINATION OF CONTRACT

- A. The owner shall have the right to terminate the Contract after ten (10) days written notice in the event:
1. The Contractor fails to perform under the terms of this Contract.
 2. The Contractor fails to proceed in a diligent and workmanlike manner as determined by the Environmental Manager or Chief Plant Operator.

2.7 PAYMENT

- A. A purchase order for the contracted amount will be written. Payments will be made on a quarterly basis after each scheduled maintenance period is completed. The contractor will bill the City after each quarterly maintenance is performed. Any overtime or emergency service will be included in the quarterly billings.
- B. **Rate of Pay Adjustments:**
Contractor may change pay rates hereunder annually, on the anniversary date of this contract, at a rate equal to the most recent annual percentage increase in the Consumer Price Index (CPI-U), published by the United States Department of Labor for the Northeast Urban, provided that such rate of pay change shall not exceed three percent (3%).

Method of Adjustment:

Within sixty (60) days of the end of the contract, the Contractor shall provide the City with written notice of their intent to extend the contract, including any such rate of pay adjustments, and the effective date of the Contract's anniversary, together with reasonable justification therefore. If the City does not reject such rate of pay adjustment in writing within fourteen (14) days after Contractor first gives notice of such rate of pay adjustment to the City, will be deemed to have approved such rate of pay adjustment. If the City rejects such rate of pay adjustment, the contract will go back out to bid. The City may extend the contract at the increase rate for up to twelve (12) months after Contractor's notice of the increased rate of pay on the contract anniversary date, provided that the City desires to so extend the contract. Upon official confirmation by the Common Council of the City, the Contractor will get a formal response as a resolution stating the acceptance of the contract for the period of the extension.

- C. The estimated bid quantities for each component of the bid are for bid evaluation only. The City reserves the right to utilize more or less hours of work than what is listed in the bid quantities as determined by actual usage for instrumentation work as maintenance, repairs or installations.

2.8 INSURANCE

The bidder agrees to indemnify the City against any liability, claim, or expenses for injury, death, or damage to property directly caused by the bidder's negligence in performing their obligations under this contract as indicated in the description of service.

CONTRACTORS

Construction, supply and service contractors who perform work, services, or supplies to the City on a regular basis are required to provide evidence of insurance as follows:

(A) GENERAL LIABILITY

Premises-Operational-Contractual	BI/PD \$ 1,000,000 C.S.L./\$ 2,000,000 AGGREGATE
Completed Operations/Products	BI/PD \$ 1,000,000 C.S.L./\$ 2,000,000 AGGREGATE

All policies must be on the COMPREHENSIVE FORM and the City of Plattsburgh is to be named as Additional Insured.

The X, C and U exclusions are to be eliminated if the contract involves certain types of work. If blasting is involved, the X exclusion is to be eliminated. If grading, excavating or pile driving work is involved, the C and U exclusions are to be eliminated.

(B) AUTOMOBILE LIABILITY -

Including owned, non-owned and hired vehicles -

Bodily Injury/Property Damage = \$1,000,000. C.S.L.

(C) WORKER'S COMPENSATION -

In addition to the normal New York statutory coverage that is required, an All States or New York endorsement is required from the Contractors domiciled in a state other than New York. Those Contractors that are domiciled in the monopolistic State Fund states of Nevada, North Dakota, Ohio, Washington, West Virginia and Wyoming are to provide a certificate directly from their respective State Fund rather than their agent or broker.

INSURANCE CONTINUED...

If a contract involves any work that requires an employee to enter the confines of the inter-state waters of Lake Champlain, the Worker's Compensation policy is to include a United States Longshoremen's and Harbor Worker's Compensation Act endorsement as part of their policy.

(D) NEW YORK STATE DISABILITY BENEFITS -

Statutory coverage is required from all contractors regardless if they are domiciled in New York or in a state other than New York if they employ any individual who is a legal resident of the State of New York.

(E) GENERAL INFORMATION -

All Certificates of Insurance must be on the ACORD Form 25 or a comparable insurance company certificate and indicate 30 days written notice to the City should any of the described policies be cancelled before the expiration dates. Certificates provided by the State Fund are permissible on their own form but must contain the 30 days written notice of cancellation.

Excess liability on the Umbrella Form noted on the Certificate can be combined with the general liability and automobile liability limits to satisfy the minimum limits that are required. If it is indicated that Excess Liability is on other than an Umbrella Form, the Certificate must indicate that the Excess Liability coverage is on a following-form basis.

During the transition to the "Simplified" General Liability format, the old forms will be permitted and no aggregate is required for other than Product Liability coverage. The aggregate limit for Product Liability on the old forms should equal or exceed the Products per occurrence limit. Any coverage using a claims-made format must be approved by the Insurance Analyst.

TECHNICAL SPECIFICATIONS

3.1 DESCRIPTION OF SERVICE

- A. For the 12 month period beginning with the signing of contract documents, provide the following:
1. Schedule maintenance service inspections by a qualified engineer or technician, on a quarterly basis, including systematic examination, cleaning, alignment, testing, adjustment lubrication, calibration and verification of proper control function for the equipment described in "Schedule A". Each preventive maintenance visit will be for 5 days (40 work hours) each quarter.
 2. Emergency service to keep the equipment listed in "Schedule A" in operation with reasonable promptness. Emergency service will be provided Monday through Friday from 8:00 a.m. to 4:00 p.m., excluding holidays. For bid purposes, 2-3 day emergency service calls (each call being 24 hours in length) are put in the bid. Each service time will include costs for meals, lodging, and travel expenses. Hourly wage will be noted. The actual number of emergency calls per year and the duration of any call, is neither implied or limited to the bid amount. The actual number of calls may be more or less and the duration of any call may be more or less.
 3. When conditions warrant, repair or replace worn parts or complete components for equipment listed in "Schedule A" which have failed due to normal wear and tear and not by reason of the Owner's negligence or misuse of equipment. The City will be responsible for purchasing of items in conjunction with recommendations of the contractor. Installation and set up of new components will be responsibility of the contractor or as agreed to between the Owner and contractor. The actual number of hours for installation work, for the year, is neither implied or limited to the bid amount. The actual amount of installation hours may be more or less as the need dictates to complete the work.
- B. All items listed on "Schedule A" of this specification will be in operating condition at the time of contract agreement. Items so listed on "Schedule A" are reflective of components at the time this bid specification was first put together, and any items recently installed will not be listed.
- C. If any equipment listed on "Schedule A" is found to be, or become obsolete and repair or replacement parts are no longer available, it will be the City's responsibility to obtain necessary parts or replace said equipment with the contractor.
- D. Bid cost will be for a one-year period for items listed under A.1. and A.2. Note that bidder must provide the services listed under A.2 and A.3. These are items which will be paid as needed.

TECHNICAL SPECIFICATIONS CONTINUED...

- E. Contractor will supply the Owner with documentation of preventive maintenance service. Documentation will show condition that equipment was found in, notation of any corrective actions, and the final state of the equipment. Documentation will be given to the Owner for recordkeeping. All items listed on "Schedule A, will be listed separately on documentation information. Documentation will be given to Owner after each preventive maintenance visit. In terms of Emergency Visit documentation, the same requirement will apply for the contractor to supply the Owner with documentation showing what was done. The information given to the Owner will be in the same format used for preventive maintenance documentation.

- F. Contractor may be assisted in repair work / emergency service by the WRRF contract electrician. This is contingent on the availability of the electrician at the time. The electrician will be paid by the City for all the regular hours of work when working with instrumentation contractor. Overtime hours for electrician will be paid by the instrumentation contractor for any work requiring the assistance of the electrician. Payment for overtime work will be responsibility of the instrumentation contractor and will not be billed to the City.

- G. Contractor will train WRRF/WFP personnel in the operation of any piece of equipment that requires City personnel to interact with the operation of equipment. New or replaced equipment installed by contractor that is covered under a warranty, will be the responsibility of the contractor to honor the terms of the warranty unless the term of this service agreement expires, then the new contractor will assume the responsibility of any warranty issues. Copies of equipment manuals and other relevant information, shall be retained by the City for information purposes.

BID PROPOSAL FORM
CONTRACT# WRRF2023-04 INSTRUMENTATION SERVICES
FOR THE CITY OF PLATTSBURGH WRRF/WFP

SUBMIT TO: City of Plattsburgh, City Clerk
 41 City Hall Place
 Plattsburgh, NY 12901

BID DATE: 11:00 AM, Friday, August 1, 2023

The undersigned hereby certifies he/she has examined and fully comprehends the requirement and intent of the specifications for the Preventive Maintenance Services- Instrumentation for the Water Resource Recovery Facility/Water Filtration Plant, with the following price:

<u>DESCRIPTION</u>	<u>TOTAL PRICE</u>
1. Provide Regular quarterly - 5 day (40 work hours) in length, Maintenance Service, Labor for one year as specified in contract for WRRF. {Quarterly Service Calls (4) 160 hours total}	\$ _____
2. Two (2) Emergency Service calls - Each 3 days (24 work hours) in length, including wages (hourly), lodging, meals and any travel expenses. {Emergency Service Calls (2) 48 hours total}	\$ _____
Itemize: \$ _____ (Wages per hour)	
\$ _____ (Meals per day)	
\$ _____ (Lodging per day)	
\$ _____ (Travel costs, \$/hour)	
3. Provide installation and startup of new equipment. A total of 10 days total. (80 work hours) Installation Work - 80 hours total	\$ _____
4. Provide – 5 days (40 work hours) of Maintenance Service for the WFP alarm system and associated equipment.	\$ _____
<u>TOTAL PRICE ITEMS 1, 2, 3 & 4 ABOVE</u>	
	\$ _____

TOTAL PRICE \$ _____

(IN WORDS)

SIGNED: _____
NAME (PRINT): _____
NAME OR FIRM: _____
STREET: _____
CITY & STATE: _____
TELEPHONE: _____ **DATE:** _____
FAX # _____
EMERGENCY PHONE NUMBER 24 HR. _____

BID PROPOSAL FORM CONTINUED...

ADDENDUM NO. 1. ACKNOWLEDGEMENT _____
ADDENDUM NO. 2. ACKNOWLEDGEMENT _____

- Required Attachments:**
- 1. **Non-Collusive Bid Certificate**
 - 2. **Insurance Information**
 - a. **Acord Form 25**

"SCHEDULE A"
CITY OF PLATTSBURGH
WATER RESOURCE RECOVERY FACILITY

LOCATION/FUNCTION

MAKE & MODEL NUMBER

RAW WASTE FLOW - 36" PARSHALL FLUME

Flow Meters (2 EA) FT 1110 FT 1210	Drexelbrook U Sonic SR Level Meter
Transducers (2 EA)	Drexelbrook USS-11
MA Converter FI - 1110 FY -1110	Omega Acromag 16OT-20-J-01
UPS BB-1150	APC 1250
Flow Station FT - 1160	Marsh McBirney (4 ch) Flodar

PLANT WET WELL

Battery Back-up BB - 1140	Ferrups Model Fe 500 VA
Controller (used as indicator only) L1230	Foxboro 45
Power Supply PS - 1140	CTG 2600 (24VDC)
Air Pressure Switch PSA – 1110	Foxboro M-610A
Level Trans LT – 1210	Drexelbrook Usonic R
PSI (Power Supply) PS -1120	IDEC PS5R-D24 (24 V DC)
LY-1110 (Alarm module used for power isolation)	ACROMAG 633T
LT (Level Transmitter) LT-1110	Barton FHCF-35VA - ADCYY-AA(DP)
Back-up VFD Control CSI LIC - 1220	Drexelbrook Usonic R
Level Indicator LT 1220T	Precision Digital
Operator Interface OPI 1220	Honeywell 104202

SCHEDULE A. CONTINUED...

BACK-UP CONTROLLER FOR PLANT

Battery Backup for PC 1200 BB 1210 BB-1220	Ferrups FE 500 VA Powerware 5115
Recorder/Controller (PC) PC -1200 CS – 1200	Honeywell HC-900 Hybrid Control Sta (Operator Interface)
Power Supply PS - 1210	IDEC Ps5r - D24 (24V DC)
Analog Input Board (8 Channel) (4 EA)	Honeywell HC-900 Hybrid
Analog Output Board (4 Channel)	Honeywell HC-900 Hybrid
Digital Input Board (16 Channel)	Honeywell HC-900 Hybrid
Digital Output Relay Board (8 Channel) (2 EA)	Honeywell HC-900 Hybrid
Power Supply 24VDC PS-1220	Honeywell
Alarm Dialer System AT -1210	Zetron 1550

CONTROL PANEL AT PLANT

Receiver (2 ea) QR-1210 PS (Power Supply) OR-1220 OR-PS-1210	Quindar - 1375HZ - QDTR20 965HZ - QDTR20 Power Supply QP21
Total Raw Waste Flow TT-1110 Alarm / Dialer System AT-1110	Red Lyon Zetron Model 1550 SentiMax 8 Analog 64 Digital
Flow Indicator FI-1110	Omega
1 ea Recorder/Controller PC-1100 CS-1100	Honeywell HC900 Hybrid Control Station Operator Interface
2 ea - Analog Input Board (8 Channel)	Honeywell HC900 Hybrid
1 ea - Analog Output Board (4 Channel)	Honeywell HC900 Hybrid
3 ea - Digital Input Board (16 channel)	Honeywell HC900 Hybrid
1 ea - Digital Output Board (16 channel)	Honeywell HC900 Hybrid
3 ea - Digital Input Board Relay(8 channel)	Honeywell HC900 Hybrid

SCHEDULE A. CONTINUED...

1 ea - PSI (Power Supply) PS-1110	IDEC PS5R-D24 (24 V DC)
1 ea - Battery Back-up (Zetron) BB-1120	Powerware PW 5115
1 ea - Battery Back-up (HC-900) BB-1110	Ferrups Model FE 500 VA
Receiver Panel at Plant	Quindar QDTT
2 EA QR-1110	
QR-1120	
Power Supply OR-PS1110	Quindar QP21

RETURN & WASTE SLUDGE PUMPS

1 ea Mag Flow - #2 Waste Pump FT-1130	Marsh Model 282 2"
1 ea Mag Flow - Return Pumps FT-1140	Marsh Model 282 2"
1 ea Mag Flow (East) FT-1150	Marsh Model 282 2"
1 ea Mag Flow (West) FT-1170	Marsh Model 282 2"

SCHEDULE A. CONTINUED...

U.S. AVENUE PUMP STATION (U.S.A.P.S.)

Recorder	LIC - 4110	Honeywell DR45AT 100
Controller	LIC - 4120	Control Electronics PSM-660
Level Sensor		Control Electronics
Back-up Controller	LC-4210	Drexelbrook
Battery Back-up	BB - 4110	Ferrups FE 500 VA

ADIRONDACK LANE PUMP STATION (ALPS)

Mag Flow Transmitter 10" FT - 3110		McCrometer Model XR
Level Control	LIC - 3110	Honeywell UDC-2000 MINI PRO
Transmitter	LT - 3110	Honeywell ST3000 S900 Model STD 924-A1A-00000-MB,F1D3
Recorder/Controller RC - 3110		Honeywell DR 45AT-1110-40-001-E-000000-0
Transmitter	QT - 3110	Quindar QDTT20
PS 1 (Pressure Switch) PSW-3110		Mercoid
PS 2 (Pressure Switch) PSA-3110		Mercoid
Back-up Controller	LIC-3210	Drexelbrook
Battery Back-up	BB - 3110	Ferrups FE 500 VA
Transmitter QT - 3210		Quindar QDT90
Power Supply PWS 1-3110		IDEC PS5R-024
Power Supply PWS 2 - 3120		ACME DMP1-12025
PY-3110 (ACROMA 31174BB)		ACROMAG 633 T-0500
LY - 3110 (ACROMA 315330C)		ACROMAG 633T -0500
LY-3210 (ACROMA 315331C)		ACROMAG 633T -0500

SCHEDULE A. CONTINUED...

CUMBERLAND AVENUE PUMP STATION (CAPS)

Mag Flow Transmitter 24"	Foxboro 8300 Series
Mag Flow to Current Converter FT-2110	Foxboro IMT20
Level Control LIC-2110	Honeywell UDC-2000-Mini-Pro
Recorder/Controller LR-2110	Honeywell Truline DR45 AT-1110-40-001-E-000000-0
Transmitter QT-2110	Quindar QDTT20
Industrial Flow Meter FT-2120	Drexelbrook Usonic R
Wet Well Level Transmitter LT-2110	Rosemount 1151 DP
Backup Controller DC LIC-2210	Honeywell DC 230B
Backup Transducer LT-2210	Drexelbrook Usonic R
Backup Bypass Pump Controller LT-2230	Drexelbrook Usonic R
VFD Backup Level Controller LT-2220	Drexelbrook Usonic R
PS 2 (Power Supply) PS 3-2130 PS 2-2120	IDEC PS5R-D24
PS 1 (Power Supply) PS 1-2110	Acromag 251 S
3 ea Alarm Module LA-2110 LA-2120 LA-2130	Acromag 360 A
3 ea 4-20 Isolator Module (VFD) LY-2110 LY-2120 LY- 2130	Acromag 633 T
PS 1 (Pressure Switch) PSW-2110	Mercoid
PS 2 (Pressure Switch) PSA-2110	Mercoid
Battery Back-up BB-2110	Ferrups Model FE 500 VA
Remote –Level Indicator (Bypass Pump Room)	Red Lyon LI – 2110

SCHEDULE A. CONTINUED...

Trans QT-2210

Quindar QDT90

3 ea 4-20 Isolator Module (VFD) LY-2210
LY-2220
LY-2230

Acromag 633 T

1 ea 4-20 Isolator Module (VFD) LY-2240
(BYPASS)

Acromag 633 T

3 EA (Power Supply) PS 1-2210
PS 2-2220
PS 3-2230 (for Quindar)

Honeywell IDEC PS5R-D24

Battery Back-up BB-2210

Ferrups Model FE500 VA

THE KAT

NOTE:

HONEYWELL HC900 + CARDS
HONEYWELL OPERATOR
INTERFACE

INSTALLED BUT NOT FINISHED

NOTE*: Some of these instruments are subject to change, but will be similar in fashion.

SCHEDULE A. CONTINUED...

NEVADA OVAL PUMP STATION (NOPS)

2 ea Motorola (Mobile Units) RT-5110 RR – 5110	SL 11R M1225
2 ea Signal (Modular Units) RTU - 5110 RTR - 5110	Zetron 18/18
1 ea Battery Back-up BB-5110	APC 1100
2 ea Astron Power Supply PWS - 5110 PWS – 5120	M/ 11R

NOTE: One of each of above 3 items, except power supply, is at NOPS, and one at Plant.

Alarm panel functional test

NORTH MARGARET ST. PUMP STATION (N.M.S.P.S)

Level ControlBubbler System LIC – 6110	Drexelbrook Usonic R
Level Control LIC – 6210	Drexelbrook Usonic R
PNI - LI-6110	Dwyer Magnahelic 0" - 100" Pressure Switch 1823
PSL – 6110	Dwyer Magnahelic 0" - 100"
PSH – 6120	Dwyer Magnahelic 0" - 100"
PSL2– 6130	Dwyer Magnahelic 0" -100"
PSH2 – 6140	Dwyer Magnahelic 0" - 100"

MARGARET ST. PUMP STATION (M.S.P.S)

Level ControlBubbler System - Retro Pac	CSI Retro-Pac
Retro-Pac LIC - 7110	

