



City of Cambridge

Purchasing Department

Cynthia H. Griffin
Purchasing Agent

TO: All Bidders
FROM: City of Cambridge
DATE: February 4, 2013
RE: File No. 5998 – Expansion of SCADA/Telemetry System - Addendum No. 3

1) On sheet E-2, DELETE all interface details entitled “LITTLE FRESH POND SIGNALS TO NEW PLC IN RTU CABINET” in the lower right hand corner associated with Little Fresh Pond and REPLACE with the statement: “REFER TO APPENDIX 13300-A OF SPECIFICATION SECTION 13300 FOR ELECTRICAL MODIFICATIONS TO EXISTING GUSTAVO PRESTON IRRIGATION PUMPS CONTROL PANEL (LITTLE FRESH POND)”

2) DELETE paragraph 13300, 3.06,D,2,b in its entirety and replace with:

b. Modifications to existing Gustavo Preston Co. irrigation pump control panel. The Contractor shall modify the existing control panel as indicated by the clouded notations shown in Appendix 13300-A at the end of this section as follows:

- i. Modify the existing Gustavo Preston control panel to receive a dry contact from the RTU that shall energize new 3PDT general purpose relay, CR-2, in response to a remote DPW command to enter pump station diversion mode (CR-2 relay energized in DIVERSION MODE. CR-2 relay de-energized in IRRIGATION MODE.) Add a new 120vac oiltight indicator light with amber lens as indicated on the drawing to illuminate when the panel is in DIVERSION MODE operation. Furnish an engraved nameplate with this designation on the plate to identify the light. Tie in two form-C contact sets from CR-2 into the two pump control circuits as shown on the drawing to run both pumps continuously when DIVERSION MODE is selected and to run under normal control panel function when DIVERSION MODE is not selected (i.e., normal IRRIGATION MODE is selected). Wire the 3rd form-C NO and NC contacts to the existing DIVERSION VALVE control handswitch adjacent to the Gustavo Preston panel to select the REMOTE switch controls to OPEN the valve in DIVERSION MODE and CLOSE the valve in IRRIGATION MODE.
- ii. Furnish and incorporate an OFF DELAY (DELAY ON BREAK) time delay relay and configure it to change state five minutes after the RTU releases the panel from DIVERSION MODE to return to IRRIGATION MODE. Tie an output of this relay into the control circuit of the second pump as shown to prevent the second pump from operating for five minutes after the panel returns to IRRIGATION MODE of operation, to reduce surge pressure potential on the irrigation system.
- iii. Furnish and incorporate two general purpose relays, CR-3 and CR-4, as shown to provide dry contacts for RTU monitoring of the RUN statuses of Pump 1 and Pump 2 respectively. Note: Existing ALARM status CR-1 is already wired across terminals 22 and 24 as shown.)



c. Wire the modified Gustavo Preston panel modifications shown on Appendix 13300-A to the RTU as follows:

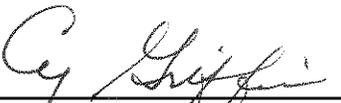
- i. RTU output terminals 21-22 (DO-0) to SCADA DIVERT CMD to control CR-2.
- ii. RTU input terminals 1-2 (DI-0) to N.O. contacts of CR-3 to indicate Pump 1 RUN status.
- iii. RTU input terminals 5-6 (DI-2) to N.O. contacts of CR-4 to indicate Pump 2 RUN status.
- iv. RTU input terminals 3-4 (DI-1) to N.O. contacts of CR-1 to indicate Common Pump Alarm.
- v. RTU input terminals 43-44 (AI-0) to hydrostatic pressure level transmitter to monitor Little Fresh Pond elevation. Note: Furnish 24vdc loop power using RTU 24vdc power terminals 41-42.

3) DELETE paragraph 13000, 1.01, F in its entirety.

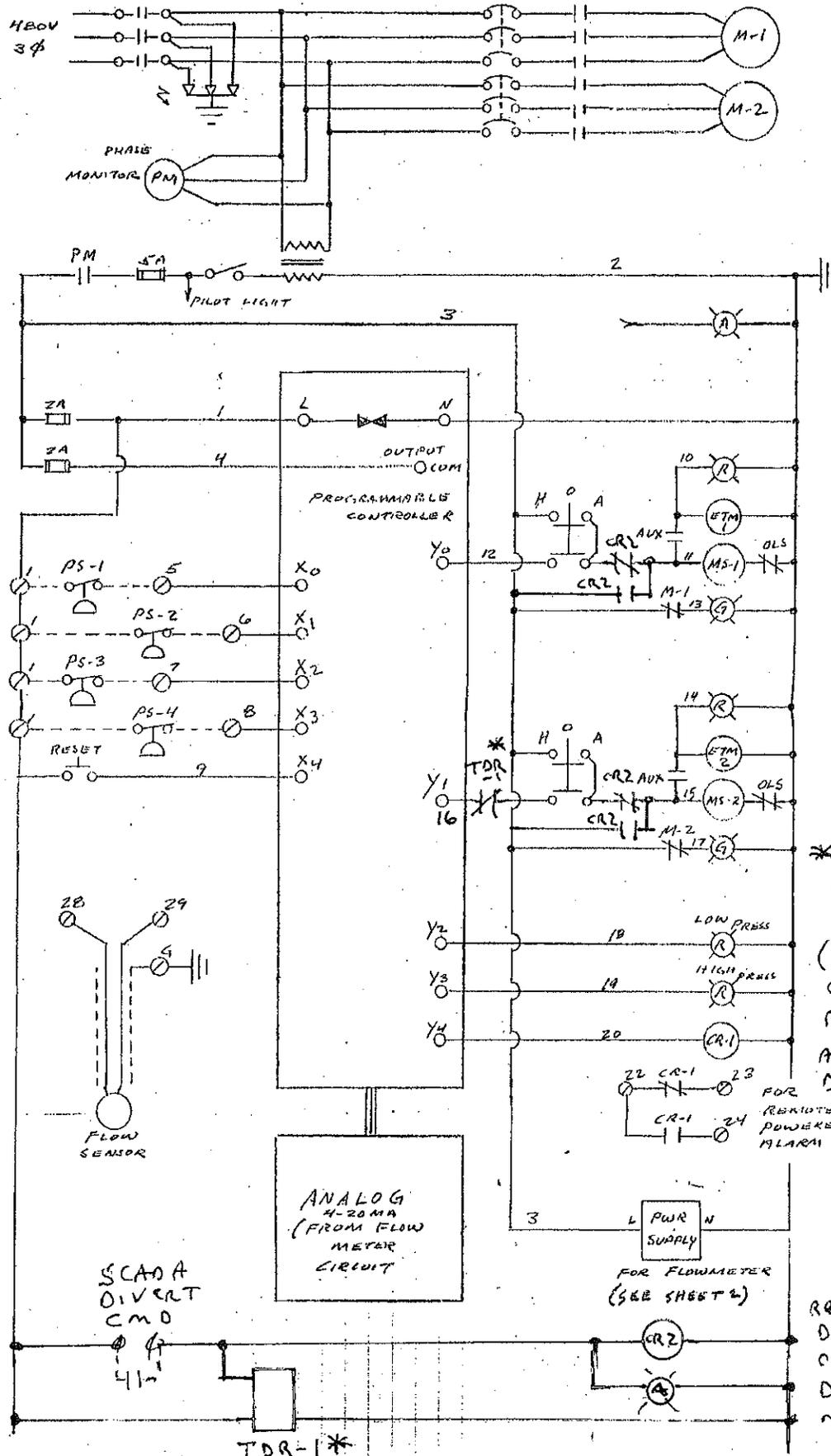
4) DELETE paragraph 01010, 1.02, B,2 in its entirety.

5) ADD attached Appendix 13300-A at the end of section 13300.

All other details remain the same.


CYNTHIA H. GRIFFIN
PURCHASING AGENT

Addendum No. 3



CHD BY: _____ DATE: _____
 SUBJECT: DUAL PUMP CONTROL SCHEMATIC
 JOB NO.: _____ SHEET NO. _____ OF _____
 DWG. 1224 SH 1

* - DELAY ON
 BREAK, 5
 MINUTES
 (2ND PUMP
 CANNOT START
 FOR 5 MINUTES
 AFTER END OF
 DIVERT MODE)

REMOTE
 DIVERSION
 COMMAND.
 DIVERSION
 MODE

SCADA
 DIVERT
 CMD

TDR-1*