



ADDENDA

**#2009-139
ADDENDUM NO. 2
August 11, 2009**

**Kitsap County
Central Kitsap Wastewater Treatment Plant
2009 Upgrade Project**

NOTICE TO PROSPECTIVE BIDDERS

The purpose of this addendum is to modify the Contract Documents for the above referenced project to include the attached documents. The above referenced addendum shall become apart of the specification and contract documents. Bidders shall acknowledge receipt of this and all addenda on the Bid Proposal.

ADDENDUM NO. 2

FB 2009-139

**KITSAP COUNTY DEPARTMENT OF PUBLIC WORKS
CENTRAL KITSAP WASTEWATER TREATMENT PLANT 2009 UPGRADE PROJECT**

Date of Addendum No. 2: 1 August 2009

The Specifications and Contract documents for this project shall be modified as follows:

Addendum Item	Page or Drawing	Location and Description of Change
2-001	110	ADD key note 9 which reads, "Provide Modbus communications module and media converter in panel. Patch communications via OP2 and OPHW between PLC-7109 and PLC-1050 to effect load shedding control."
2-002	110	ADD Key Note 9 at PNL-7109 and PLC-1050.
2-003	110	ADD network cable indicating to Provide fiber optic data line from PLC-7109 to OP2.
2-004	17310-1	CHANGE 1.01A.1 to read, "Network reconfiguration in accordance with drawing 110 and Sections 17815 and 17820."
2-005	17310-1	INSERT 1.01A.6, "Provide hardware, software, and configuration to connect existing PLC-7109 to PLC-1050 via Modbus protocol for load shedding implementation. Connection shall be dedicated link, not via SCADA network." after 1.01A.5.
2-006	17310-5	CHANGE 2.02 to read, "PROGRAMMABLE LOGIC CONTROLLER – ALLEN BRADLEY"
2-007	17310-5	ADD 2.02C.3, "Modbus RTU or Equal."

Addendum Item	Page or Drawing	Location and Description of Change
2-008	17310-6	<p data-bbox="544 325 690 357">ADD 2.02I,</p> <p data-bbox="738 357 1429 451">"Specialty Modules: Provide Modbus Master/Slave Communications Module for communication between PLC-1050 and PLC-7109.</p> <ol style="list-style-type: none"> <li data-bbox="738 493 1485 724">1. Module shall be suitable for installation directly in 1746 local chassis, recognized as Input/output module with access to processor memory for data transfer between processor and module using M0/M1 Files. Shall be ladder logic programmable for data transfer with configuration data obtained through user defined ladder. <li data-bbox="738 756 1485 850">2. Module shall have RJ45 communications ports for configuration and Modbus Application communications. <li data-bbox="738 892 1453 987">3. Provide licensed copy of configuration software with all required cables for connection and configuration. <li data-bbox="738 1018 1404 1094">4. SLC 5/05 Interface: Prosoft MVI46-MCM or approved equal."

Addendum Item	Page or Drawing	Location and Description of Change
2-009	17310-9	<p data-bbox="544 325 1323 430">ADD "2.08 PROGRAMMABLE LOGIC CONTROLLER – TEXAS INSTRUMENTS/SIEMENS</p> <p data-bbox="641 451 1485 1291"> <ul style="list-style-type: none"> <li data-bbox="641 451 1144 493">A. Manufacturer: Siemens TI 545 <li data-bbox="641 514 1485 1291"> <ul style="list-style-type: none"> <li data-bbox="641 514 1485 619">B. Specialty Modules: Provide Modbus Master/Slave Communications Module for communication between PLC-1050 and PLC-7109. <ul style="list-style-type: none"> <li data-bbox="738 651 1485 892">1. Module shall be suitable for installation directly in TI local chassis, recognized as Input/output module with access to processor memory for data transfer between processor and module using. Shall be ladder logic programmable for data transfer with configuration data obtained through user defined ladder. <li data-bbox="738 924 1485 1018">2. Module shall have four nine-pin communications ports for configuration and Modbus Application communications. <li data-bbox="738 1050 1485 1144">3. Provide licensed copy of configuration software with all required cables for connection and configuration. <li data-bbox="738 1176 1485 1291">4. Control Technology, Inc, 2573-MOD/TCM2 Serial Interface Adapter with Modbus, or approved equal." </p>
2-010	Section 17911	ADD in it's entirety new Section 17911.
2-011	M138	DELETE the 4"D pipe shown in Section 1 along with its callout. Do not remove it from the on that drawing.
2-012	01014-2	DELETE the word "existing" from the two rows at the bottom of Table 2.

SECTION 17911

CONTROL STRATEGY FOR LOAD SHEDDING

A. PURPOSE:

The Plant's existing Standby Power Generation system is designed to supply power to critical process equipment; however, the capacity of the system is limited. To prevent equipment damage and unexpected results when operating on standby power, a load shedding scheme is employed throughout the Plant.

The existing load shedding scheme is operating as a master program in PLC-7109. The existing program shall continue to function as originally design, whereby a sequence of priority is established, and equipment is stepped on in order until standby system loading reaches a pre-determined setpoint.

Contractor shall use existing programming and new hardware to add all new equipment into the load shedding sequence. Coordinate with owner to establish new priorities and implement programming.

B. REFERENCES:

1. I Drawing: I10
2. Mechanical Plan Drawing: N/A
3. Control Diagram: N/A
4. Instrument Index, N/A
5. Equipment Specifications: 17310

C. SYSTEM DESCRIPTION:

Standby Power Generation provides power to the plant during periods when the Utility is lost. All equipment is automatically cycled OFF during a power failure, and is Load Stepped back ON in accordance with Load Shedding Control Strategy.

D. EQUIPMENT:

Applies to all Rotating Equipment.

E. OPERATOR CONTROLS:

None

F. INSTRUMENTATION:

Existing Load Measurement Instruments.

G. ALARMS:

Alarm if load exceeds user setpoint.

H. OPERATION:

1. Load Shedding Controls:

a. Automatic: Any Equipment operating in AUTO mode shall be turned OFF immediately following a power failure. When Standby Power is available, Equipment shall be automatically stepped ON.

b. Manual: Any Equipment operating in HAND mode shall be turned off provided a run ENABLE bit is connected to the PLC. If and ENABLE bit does not exist, the equipment shall restart immediately follow standby power available. When standby power is available, equipment with ENABLE bits shall be automatically stepped ON in sequence.

There are no other changes to the original specifications other than what is noted above.

****END OF ADDENDUM #2****