Official Notice No. 153-2011
Howard Pumping Station
HS-26: MEDIUM VOLTAGE SOLID STATE
MOTOR CONTROLLER INSTALLATION
FOR PUMPS 5, 6, 7, AND 8
September 21, 2011

ADDENDUM NO. 1

This Addendum consists of the following **CHANGES TO THE BID DOCUMENTS FOR OFFICIAL NOTICE 153-2011**:

1. **PLEASE SEE THE RESPONSES BELOW TO THE REQUEST FOR INFORMATION SUBMITTED:**

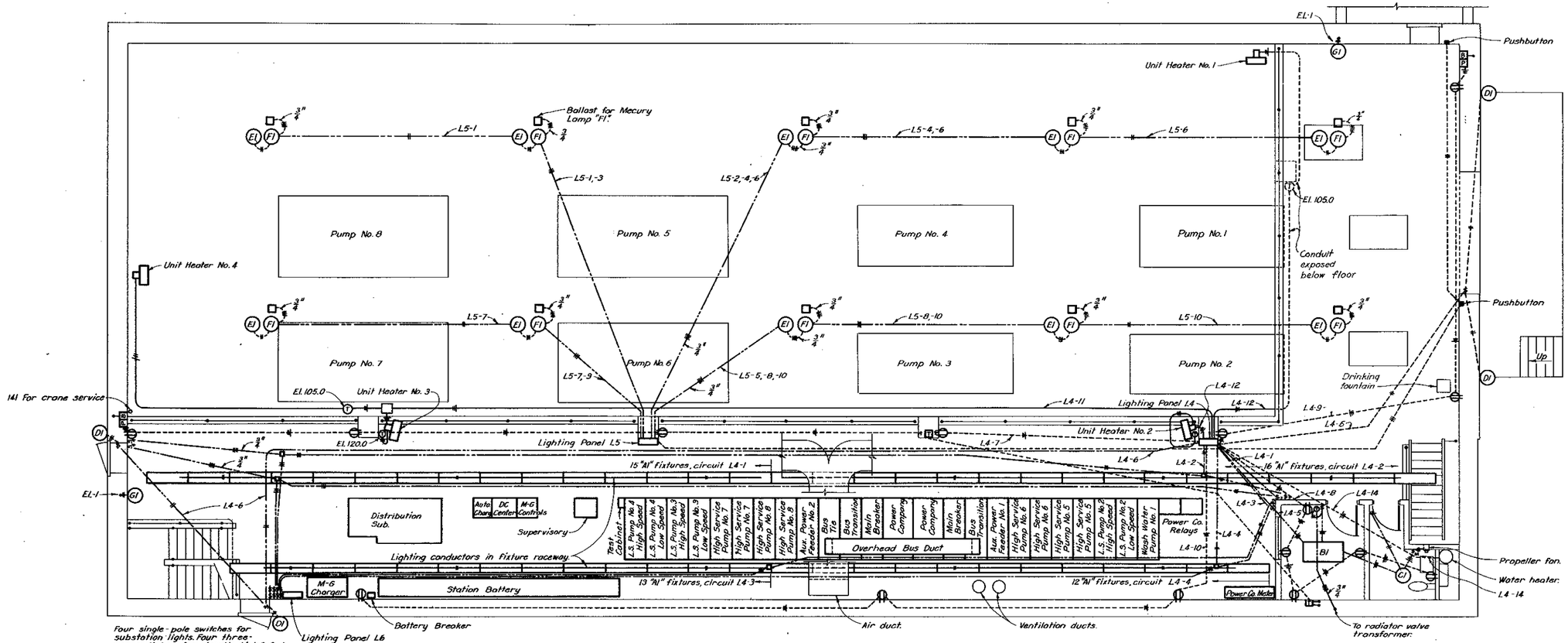
HS-26 RFI RESPONSES
(O.N. 153-2011)

1. What is the weight of the pump motor? ORIGINAL SHOP DRAWINGS GIVE ESTIMATED TOTAL WEIGHT OF ROTOR, STATOR, AND BEARING HOUSINGS AS 25,100#.
2. Are there existing detail installation drawings of the pumps that would show what is under the enclosure? NO.
3. What is the extent of process piping that will need to be removed and replaced for the water cooling systems, oil systems, etc.? FURNISH AND INSTALL ALL PROCESS PIPING REQUIRED TO RECONNECT THE MOTOR.
4. Do the bearings need new oil installed after the completion of the project? If so, how much and of what kind? YES. A GOOD GRADE INDUSTRIAL OIL HAVING A VISCOSITY OF 350 TO 450 S.S.U. AT 100 DEGREES FAHRENHEIT WITH A VISCOSITY INDEX OF 100.
5. How is the exciter installed on the motor? THE EXICITER IS SHAFT MOUNTED.
6. Is the floor of the mezzanine near the exterior loading dock door rated to hold the pump motors? YES.
7. Will we be able to utilize the existing facility bridge crane to remove and replace the pump motors? YES.
8. Should a new conduit be installed from the LV motor control enclosure to the SCADA panel? In speaking with the plant electrician, he stated that the existing wireway is filled to capacity and that old wiring may not be able to be removed from the existing conduits. AT THIS POINT THE CONTRACTOR SHOULD NOT PLAN ON INSTALLING A NEW CONDUIT FROM THE MOTOR LV CABINET TO THE SCADA PANEL.

9. Could more detail be provided about the existing SCADA system panel and what work needs to be done at that panel? THE CONTRACTOR IS RESPONSIBLE FOR TERMINATING ALL WIRING IN THE SCADA CABINET. DETAILS ON THE TERMINATION POINTS WILL BE PROVIDED ONCE THE PROJECT IS AWARDED.
10. Does any new I/O need to be added at the SCADA panel? THE CITY WILL PROVIDE ALL REQUIRED I/O HARDWARE AT THE CABINET.
11. Do any of the motor couplings get replaced as a part of this project or is the assumption that the existing couplings are fine and don't need to be replaced? NO; REPLACEMENT OF THE MOTOR COUPLINGS IS NOT INCLUDED IN THE SCOPE OF THIS PROJECT.
12. If the couplings are to be replaced, would we be responsible for that or would the City handle that?
    IN THE EVENT THAT THE MOTOR COUPLINGS NEED TO BE REPLACED, THE CITY WOULD REQUEST THE PRIME CONTRACTOR TO SUPPLY A QUOTE TO PERFORM THE WORK UNDER CHANGE ORDER.
13. The existing motor bases are both bolted and dowelled to prevent lateral movement. Do we:
    a) Assume that the lateral alignment is correct and will not require any modification after the pump is removed and replaced?
    b) Survey the existing conditions with a laser alignment tool to document the existing conditions?
    c) If the alignment is not maintained after the pump (motor) is replaced, are we responsible to drill and dowel the two feet that aren't currently doweled to properly align the bases/motor/ pump/shafts?

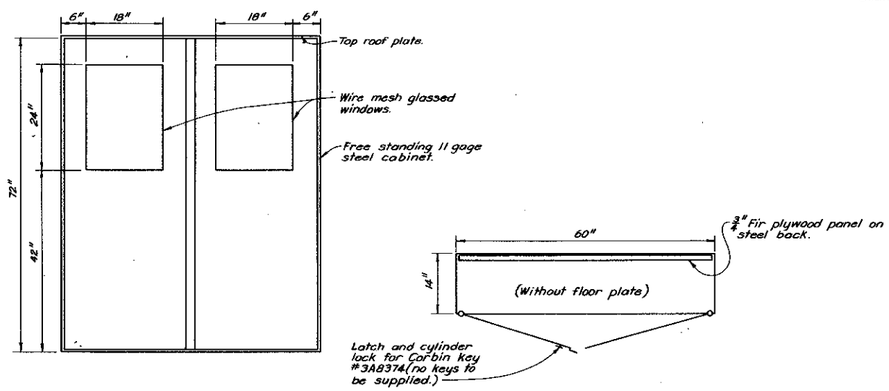
    THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REALIGNMENT OF ALL EQUIPMENT AFTER THE MOTOR HAS BEEN REINSTALLED AND SHALL TAKE SUCH MEASURES AS NEEDED TO COMPLETE THE WORK.
14. Does the existing lightning arrestor stay or is it removed when the new starter is installed? REMOVED.
15. Does the existing surge capacitor stay or is it removed after the new starter is installed? REMOVED.
16. Should new motor leads be installed during the motor rebuild? There is not much length there to terminate onto? YES.
17. What is the specified manner to terminate the new starter conductors onto the motor leads? STRESS KIT IS REQUIRED. BOLT-ON CONECTION VIA STAND-OFFS.

18. What is the extent, if any of the control wiring changes that need to take place to this existing equipment (In the LV and HV Motor Compartments)? Is any of this equipment modified or removed? THE CONTRACTOR SHALL BE REQUIRED TO REMOVE THE BEARING RELAYS AND MOTOR WINDING TEMPERATURE METER AND WIRING INADDITION TO THE OLD EXCITER WIRING. EXISTING WIRING DIAGRAMS WILL BE FURNISHED TO THE CONTRACTOR WILL BE PROVIDED ONCE THE PROJECT IS AWARDED.
19. Is there a Valve controller for Pumps #5 &#8 similar as shown for Pumps #6 & #7? YES. THE VALVE CONTROLLERS FOR PUMPS 5 & 8 ARE MOUNTED ON THE NORTH WALL OPPOSITE THE DISCHARGE PIPING FOR EACH PUMP. THE VALVE CONTROLLERS FOR PUMPS 5 & 8 ARE NOT SHOWN ON HS-26-05, BUT ARE SHOWN ON REFERENCE DRAWING HS-38, OPERATING FLOOR WIRING.
20. What wiring is required from the RVSS to the SCADA panel? Does this wiring go through the switchgear on the mezzanine? CONTRACT DRAWING HS-26-05 SHOWS A NEW SCADA CONDUIT TO BE INSTALLED FROM THE RVSS TO THE SCADA CABINET.
21. Is there an existing raceway for the SCADA wiring in the LV section? NO; SCADA WIRING WILL BE ROUTED TO AND FROM THE RVSS.
22. On Sheet HS-26-05, the wire and conduit schedule (F) 4#10's in a ½" conduit. Is this correct or do we need a 1-1/2" conduit? FURNISH AND INSTALL ¾" CONDUIT.
23. Is there a mezzanine drawing for the location of the switchgear and the SCADA panel? YES, SEE ATTACHMENT DRAWING HS-38, HOWARD PUMPING STATION OPERATING FLOOR WIRING.
24. Can we use the overhead crane for moving the motors and the new controllers to the pump level? YES.
25. How do the motor leads attach to the HV section? Do we need a stress kit there? STRESS KIT IS REQUIRED. BOLT-ON CONECTION VIA STAND-OFFS.
26. Are the discharge valves being replaced? NO.
27. Can a Benshaw Soft Start be quoted as an alternate to the G.E. (Rockwell) product? NO.
28. Do you want us to remove the exciter base when we remove the exciter? If so, you will want some sort of cover over the hole that will be there or remove the stairs. EXCITER BASE TO REMAIN.



OPERATING FLOOR PLAN

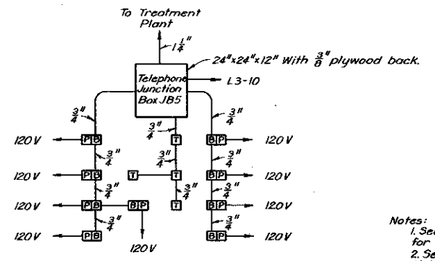
Scale: $\frac{3}{16}$" = 1'-0"



FRONT VIEW — TOP VIEW

POWER COMPANY METER ENCLOSURE

Scale: $\frac{3}{4}$" = 1'-0"



TELEPHONE SYSTEM ONE-LINE

Notes:
1. See Drawings 36 and 39 for legend.
2. See Drawing 37 for fixture schedule.
3. See Drawing 33 for wiring of lighting panels.

WATER ENGINEERING DIVISION
BUREAU OF ENGINEERS
MILWAUKEE WATER WORKS
DEPARTMENT OF PUBLIC WORKS

HOWARD AVENUE PUMPING STATION

OPERATING FLOOR WIRING

APPROVED _____ CONSULTING ENGINEER — APPROVED _____ ENGINEER IN CHARGE
APPROVED _____ SPEC. DEP. COMMISSIONER OF PUBLIC WORKS — APPROVED _____ CITY ENGINEER

BLACK & VEATCH
CONSULTING ENGINEERS, KANSAS CITY, MO.

DESIGNED	REM	DATE	1-14-60
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CHECKED	DCK	FILE	4-41-5

DWG. HS 38