#### **SECTION 08000**

## MECHANICAL EQUIPMENT

## PART 1 - GENERAL

## 1.1 Description

## A. Description of the Work

The work to be performed in accordance with this section includes all work associated with the removal of existing pump equipment and the installation of the pump equipment as specified herein.

# B. Related Work Specified Elsewhere

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### PART 2 - MATERIALS

#### 2.1 General

- A. Pumps that have mechanical defects of do not meet the range of head capacity characteristics and efficiency requirements will be rejected after field testing and shall be replaced at the **CONTRACTOR'S** full expense.
- **B.** Mechanical defects include improper tolerances, binding, excessive motor heating, or any other defect which will in time damage the pump or impair the efficiency of the pump.
- C. The **CONTRACTOR** shall furnish to the **ENGINEER**, in triplicate, the following information for each pump specified before the pumps will be approved for installation:
  - Pump data including curves showing total pumping head, capacity, efficiency, and horsepower; impeller diameter, number of stages, materials of construction, etc.
- **D.** The pump manufacturer is to supply the pump head and bowl assembly as well as all component parts including the column pipe, shafting, and bearings, but excluding the driver. A sworn

statement from the manufacturer that the entire pump assembly is from his company will be required.

# 2.2 Requirements and Descriptions

## A. Column Assembly

120 ft. setting , 10" x 22" left hand thread x 1 ", oil lubricated.

# B. Bowl Assembly

Ingersoll-Dresser Pumps Model 15H226, 3 stage design for 2200 gpm at 188 TDH and 3000 gpm at 90 TDH, or equal.

#### C. Electrical

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# D. Discharge Head

An existing 16" X 10" Type AB discharge head shall be removed to facilitate the removal of the existing column and bowls. The discharge shall be reinstalled after the new column and bowls have been installed.

#### E. Cone Strainer

Cone strainer shall be 10" in diameter and connected to the pump bowls.

#### F. Installation

Installation of the equipment shall be on an existing concrete pad. Contractor shall remove all existing equipment from the well, including the bowls, column shaft, discharge head, pump, and electric motor. The discharge head shall be reused. All other equipment shall be new and in accordance with these Specifications.

### G. Water Level Measurement

The existing equipment shall be reused if possible. If existing equipment can not be reused, an airline, with direct reading guage, is to be provided and installed by the contractor.

# H. Pumping Check Valve

The existing 10" pump check valve shall remain in place and be reused. The check valve shall only be removed if the existing pumping equipment can not be removed and the new equipment installed without damaging the valve.

### I. Gear Head

The existing gear head will be removed. A new gear head rated for 125 hp will be provided and installed. The gear head

\*\*END OF SECTION\*\*