# SECTION 43 21 13.23

# HORIZONTAL END SUCTION CENTRIFUGAL PUMPS

### PART 1 GENERAL

### 1.1 GENERAL REQUIREMENTS

A. Install horizontal end suction centrifugal pumps shown on the drawings and listed in Section 01 64 00 City-Furnished Products, within the WTRPO Facility.

#### PART 2 PRODUCTS (Not Used)

## PART 3 EXECUTION

## 3.1 INSTALLATION

- A. Install in accordance with manufacturer's printed instructions.
- B. Level base by means of steel wedges (steel plates and steel shims). Wedge taper not greater than 6 mm per 0.3 m. Use double wedges to provide a level bearing surface for the pump and driver base. Accomplish wedging so that there is no change of level or springing of the baseplate when the anchor bolts are tightened.
- C. Adjust pump assemblies such that the driving units are properly aligned, plumb, and level with the driven units and all interconnecting shafts and couplings. Do not compensate for misalignment by use of flexible couplings.
- D. After the pump and driver have been set in position, aligned, and shimmed to the proper elevation, grout the space between the bottom of the baseplate and the concrete foundation with a poured, nonshrinking grout of the proper category, as specified in Section 03 60 00, Grouting.
- E. Remove wedges after grout is set and pack void with grout.
- F. Connect suction and discharge piping without imposing strain to pump flanges.
- G. Anchor Bolts: Accurately place using equipment templates. All mounting brackets, bases, beams, hardware and stabilizes shall be type 316 stainless steel and shall be supplied by the Manufacturer.

## 3.2 FIELD QUALITY CONTROL

A. Functional Tests: Conduct on each pump.

- 1. Alignment: Test complete assemblies for correct rotation, proper alignment and connection, and quiet operation.
- 2. Flow Output: Measured by plant instrumentation and storage volumes.
- B. Performance Test: In accordance with Hydraulic Institute Standards.

END OF SECTION