

SECTION 11199 - HORIZONTAL RECESSED IMPELLER PUMPS

City of San Diego, CWP Guidelines

PART 1 -- GENERAL

1.1 THE REQUIREMENT

- A. The WORK of this Section includes providing horizontal recessed impeller pumps, with horizontal electric motors and all appurtenant work, complete and operable.

1.2 RELATED SECTIONS

- A. The WORK of the following Section applies to the WORK of this Section. Other Sections of the Specifications, not referenced below, shall also apply to the extent required for proper performance of this WORK.
 - 1. Section 11175 Pumps, General

1.3 SERVICES OF MANUFACTURER

- A. **Inspection, Startup, and Field Adjustment:** An authorized representative of the manufacturer shall visit the site for not less than [] day to furnish the indicated services.
- B. **Instruction of OWNER'S Personnel:** The authorized service representative shall also furnish the indicated services for instruction of the OWNER'S personnel in the operation and maintenance of the equipment including step-by-step troubleshooting procedures with necessary test equipment for not less than [one] day.

PART 2 -- PRODUCTS

2.1 PUMP NAME: [] (P-[] through P-[])

- A. **General:** Horizontal recessed impeller pumps shall conform to the following requirements:

- 1. Number of pumping units -[]
- 2. Location -[]
- 3. Service -[]
- 4. Operation (hours per day) -[]
- 5. Drive -[Constant] [variable] speed.

- B. **Operating Conditions:**

- 1. Capacity (gpm)
 - max. -[]
 - at design point -[]
 - min. -[]

- 5. Shaft sleeve -Stainless steel or steel, chrome plated, removable
- 6. Bearings - Radial and thrust, roller or ball bearings, 100,000 hours L-10 life, oil or grease lubricated
- 7. Coupling - Flexible shaft coupling
- 8. Seal -Water flushed stuffing box per Section 11175, except use Teflon lantern ring, bronze, or 316 stainless steel split gland, Buna-N O-ring, outboard packing, and fit the impeller end of the packing with a SpiralTrac, Version P packing protection system as manufactured by EnviroSeal Engineering Products, Ltd, Nova Scotia, Canada.
- 9. Lubrication -[Grease] [oil]
- 10. Pump base -Cast-iron or steel pan with drain

B. **Drive:** [Direct drive] [belt drive] [manual, variable pitch pulley drive] [variable speed drive] with horizontal, heavy-duty, electric motor suitable for []-volt, []-phase, 60-Hz ac power supply, in accordance with Section 16040. The motor shall be supported from the pump base.

2.3 SPARE PARTS

A. The following spare parts shall be provided with each pump:

- 1. 2 sets of all gaskets and O-rings
- 2. 2 sets of all bearings
- 3. 2 sets of [mechanical seals] [packings with lantern rings].
- 4. 2 sets of wear plates

B. Spare parts shall be packaged and boxed as indicated in Section 11000.

2.4 MANUFACTURERS

A. Pumps shall be manufactured by one of the following (or equal):

- 1. Morris-Goulds, model [6100];
- 2. Wemco, model [C].

PART 3 -- EXECUTION

3.1 INSTALLATION

A. Pumping equipment shall be installed in accordance with Shop Drawings and as indicated.

B. General installation requirements shall comply with Section 11175.

** END OF SECTION **

