Part 1 General

1.1 REFERENCES

.1 American Gear Manufacturers Association (AGMA)

.2 American National Standards Institute (ANSI)

.1 ANSI MH 27.1 Specifications for Underhung Crane and Monorail Systems

.3 American Society of Mechanical Engineers (ASME)

.1 ASME B30.16 Overhead Hoists (Underhung)

.2 ASME HST-4M Performance Standard for Overhead Electric Wire Rope Hoists

.4 Crane Manufacturer's Association of America (CMA)

.5 National Electrical Manufacturers Association (NEMA)

.6 Canadian Standards Association (CSA)

.1 CSA B167-96, Safety Standard for Maintenance and Inspection of Overhead Cranes, Gantry Cranes, Monorails, Hoists, and Trolleys

1.2 ACTION AND INFORMATIONAL SUBMITTALS

.1 Shop Drawings and Product Data:

.1 Submit shop drawings indicating electrical requirements, weights, loads, dimensions and clearances.

1.3 CLOSEOUT SUBMITTALS

.1 Provide maintenance data for incorporation into manual specified in Section 01 78 00 - Closeout Submittals.

.2 Include Owner’s Manual including Operation and Maintenance instructions.

Part 2 Products

2.1 GENERAL

.1 Supply and install two (2) push trolley electric wire rope hoists for hoisting equipment in the motor room level and the pump room level of the pumping station.

.1 Identification: HO-L20, HO-L21

2.2 EQUIPMENT HOIST

.1 Operating environment – indoor, unclassified area.

.2 Rated capacity: 1000 kg.

.1 Clearly mark capacity on permanent nameplate.

.3 Equipment hoist to be in compliance with all standards referenced.

.4 High torque, heavy duty hoist motor for smooth hoisting action.

.5 D.C. disc motor brake.

.6 Load brake capable of holding the load independent of the hoist motor brake.

.7 1.74m (5.7 ft) minimum lift

.8 Single speed lifting – 4.5 to 5 m/min (13 to 16.4 fpm)

.9 Deep grooved, large diameter rope drum to help prevent rope overwrap.

.10 Manual single monorail trolley, rigid mount. Hoist to be compatible with existing S200 x 27 beam x 2.75 m length in the motor room and S200 x 27 beam x 5.25 m length in the pump room. Low headroom design.

.11 Hook assembly: 360 deg rotation with safety spring-loaded latch.

.12 Shrouded lower block.

.13 Noise level: max. 85dBa at 1m

.14 Power supply requirements:

.1 575V, 3 Phase, 60 Hz power.

.15 Control Power

.1 Internally derived.

.2 Maximum voltage at pendent control to be 120V.

.16 Upper travel limit switch

.17 Unit complete with controller, magnetic contactors for hoist motor control, and pendant control.

.18 Push-button pendant control suspended from the hoist.

.1 Cable complete with external strain relief.

.2 Cable length: Motor Room – 1.5 m, Pump Room – 1.8 m

.19 CSA approved.

.20 High quality epoxy paint finish.

.21 Unit completely assembled in the shop, and test run prior to shipping.

.22 Acceptable products:

.1 Yale/ Shaw-Box Series 800

.2 Kone Cranes

.3 Or approved equal in accordance with B7.

Part 3 Execution

3.1 INSTALLATION

.1 Install in accordance with the manufacturer's installation instructions and in conformance with local codes.

3.2 FIELD TESTING

.1 Provide a documented functional test to verify the proper operation of the hoists. Utilize to lift one of the new pumps.

END OF SECTION