

Part 1 General

1.1 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit manufacturer's instructions, printed product literature and data sheets to include:
 - .1 Weight, materials of construction, surface finish, dimensions for crane and all accessories and fittings including all connection details.
 - .2 Physical dimensions and rated capacities for all possible configurations of hook height, hook reach, etc.
 - .3 Identifying factory and field assembled components and recommended installation.
 - .4 Installation and operation manuals.

1.2 CLOSEOUT SUBMITTALS

- .1 Operation and Maintenance Data: submit operation and maintenance data.
 - .1 Manufacturer's name, type, model year, capacity and serial number.
 - .2 General equipment specifications and data sheets.
 - .3 Details on operation, servicing and maintenance.
 - .4 Operation and maintenance instructions.
 - .5 Factory-recommended maintenance schedule.

1.3 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with manufacturer's written instructions.

Part 2 Products

2.1 PUMP LIFTING DAVIT (H-1)

- .1 General:
 - .1 The lifting davit shall be installed on the Leachate Storage Tank (TK-1) access platform to permit removal of the Leachate Loadout Pump (P-1) from roof manway M2. Davit shall include suitable hook reach and height to permit removal and installation of P-1 through the roof manway on TK-1.
- .2 Technical Requirements:
 - .1 Lift Capacity: 550 to 1200 lb (250 to 500 kg)
 - .2 Hook Reach: 22 to 66 inches (558 to 1676 mm)
 - .3 Hook Height: 85 inches maximum (2159 mm)
- .3 Lift Capacity: davit crane shall have a variable lift capacity based on boom length, to vary between 1200 pounds (544 kg) lift capacity with the boom in the shortest length when positioned at 45 degrees from vertical and 550 pounds (249 kg) with the boom fully extended and in the horizontal position.
- .4 Hook Reach: boom shall telescope up to 4 different lengths with a minimum hook reach of 22 inches (558 mm) in the shortest position and a maximum hook reach of at least 66

- inches (1676 mm) with the boom fully extended, measured from mast center to hook center.
- .5 Hook Height: hook height shall be adjustable by moving the boom up or down between horizontal and 45 degrees from vertical, with a minimum of 43 inches (1092 mm) between the lowest position and the highest position with the boom fully extended.
 - .6 Boom Angle: boom angle shall be adjustable with a hand operated screw jack acting to raise or lower the boom between horizontal and 45 degrees from vertical.
 - .7 Boom Sheave: wire rope shall pass over a sheave at the end of the boom. Sheave shall have a bronze bearing, and shall be supported by a machined clevis pin which shall be keyed to the boom to keep the pin from rotating.
 - .8 Rotation: mast and boom shall rotate 360 degrees in the base on a pin bearing in the bottom of the base, with a rotational handle attached to mast to facilitate rotation. Crane shall include a Nylatron bearing sleeve to support the mast at the top of the base.
 - .9 Fastening Pins: crane components shall be fastened together using stainless steel clevis style pins, secured with lynch pins with lanyards fastening the lynch pins to primary structural components.
 - .10 Portability: davit crane shall break down into portable components with no single component weighing more than 50 pounds (23 kg). Carrying handles shall be welded to mast and boom.
 - .11 Winch Location: lifting winches shall be located such that the center point of the drive shaft is behind the centerline of the mast.
 - .12 Winch Mounting Bracket: crane shall be equipped with a winch mounting bracket that connects to the boom with a quick connect pin allowing the winch to be attached or removed without tools.
 - .13 Nametag: davit crane shall be labeled with a non-corrosive metal identification plate labeled or imprinted with the manufacturer's name, model number and serial number.
 - .14 Winch: zinc plated spur gear hand winch with a Quick Disconnect cable anchor, and a positive load holding mechanical brake able to stop and hold the load automatically when operation is halted.
 - .15 Base: Wall Mount Base
 - .16 Material and Finish for Crane and Base: steel meeting ASTM standards. Finish hot-dipped galvanized.
 - .17 Wire Rope: wire rope with swivel hook and swaged ball fitting. Wire rope construction shall be 7 x 19 type 316 stainless steel cable. Length shall accommodate the following:
 - .1 Removal of Leachate Loadout Pump (P-1) from Leachate Storage Tank (TK-1).
 - .2 Additional length required to allow wire rope to remain connected to Leachate Loadout Pump (P-1) during normal system operation and stored under the Leachate Storage Tank (TK-1) roof manway using wire rope keeper.
 - .18 Wire Rope Keeper: Wire rope keeper used with Quick Disconnect Feature. The swaged ball fitting on the wire rope can be inserted into the slot on the wire rope keeper to allow the wire rope to remain attached to the load either when the crane is moved to another base location.
 - .19 Acceptable Product: Thern Commander 1000, 5PT10 Series Portable Davit Crane or approved equivalent in accordance with B7.

Part 3 Execution

3.1 INSTALLATION

- .1 All equipment shall be installed in accordance with manufacturer's written instructions and the contract documents.

3.2 INSPECTION, TESTING AND COMMISSIONING

- .1 Inspect, test and commission new equipment in accordance with manufacturer's recommendations including demonstration and training of operation and maintenance of the equipment with The City.
- .2 Verify acceptable operation of all davit operations including, but not limited to, removal and installation of P-1 from TK-1.

END OF SECTION