ADDENDUM NO. 3

TO

PARK AVENUE PUMP REPLACEMENT
TOWN OF TRUMBULL, CONNECTICUT

BIDDING AND CONTRACT REQUIREMENTS AND SPECIFICATIONS

FOR

PARK AVENUE PUMP REPLACEMENT

February 9, 2018

PREPARED BY:

WRIGHT-PIERCE ENGINEERS
169 Main Street, 700 Plaza Middlesex
Middletown, Connecticut 06457
ADDENDUM NO. 3
TOWN OF TRUMBULL, CONNECTICUT
PARK AVENUE PUMP REPLACEMENT

As a point of clarification, it should be understood that the Contract Documents govern all aspects of the project. Informal discussions held during the Pre-Bid Conference, or over the telephone are informational only. All official changes to the Contract Documents are made only by addenda. The following changes and additional information are hereby made a part of the Contract Documents:

CLARIFICATIONS
1. Additional information is now available from the original station manufacturer, Dakota Pumps, and is included in this addendum for reference only. The manufacturer recommends building the new pump supports and extension off of the existing base to accommodate the pump location, welding to that base while minimizing the amount of welding to the existing floor.

2. The existing motor actuate plug valve (TYP 2) installed on the force main discharge piping are wired to an existing NEMA 4X box in the drywell. There is then a 9-pin connector cable from that box to the existing PLC. This NEMA 4X box, wiring and cabling shall be maintained and refed to the new PLC. All programming associated with the motor actuated valves will be conducted by Flygt under their scope of work.

3. Disregard the deletion of the check valve position switches stated in Addendum No. 2. Provide two (2) new check valve position indicator switches as part of the base bid and wire back to the new Control Panel (termination location will be provided during submittals). All programming associated with the switches will be conducted by Flygt under their scope of work. Position switches shall meet the following specification:

Position Switch: (ZS)

a. The check valve limit switch shall be a hermetically sealed single contact limit switch.
b. The switch shall utilize a side mounted adjustable lever with a spring return that can be adjusted to sense the closed position of the check valve swing arm.
c. The switch contacts shall be rated NEMA B600 for AC.
d. Provide a fabricated stainless steel bracket that mounts to one of the valve's flange bolts. The bracket will support the limit switch so that the switch will be activated by the check valve's swing arm when the valve is in the closed position.
e. Hazardous Area Classification: NEMA 4X
f. Equivalent to:
   1) Allen Bradley 802R Series Sealed Contact Switches
   2) Or Equal
DAKOTA PUMP

Water & Sewerage Handling Equipment

SUBMITTAL DATA
FOR

Contract #11 Sanitary Sewer System
Job: Phase II - Trumbull, Conn. Date: 7/31/80
Location: Trumbull, Connecticut
Engineer: Flaherty-Giavara Associates
Contractor: Mark IV Construction Co., Inc.

File No. 7980-33-6

APPROVED
MARK IV CONSTRUCTION CO. INC.
AUG 11 1980

DAKOTA PUMP INC.
Riverside Rd. Interchange I-90
P.O. Box 951 Mitchell, S. D. 57301
Phone 605, 996-6636
# Description and Schedule

<table>
<thead>
<tr>
<th>Job: Contract #11</th>
<th>Date: July 28, 1980</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name: Mark IV Construction Co.</td>
<td>Location: Trumbull, Conn.</td>
</tr>
<tr>
<td>Conditions: 490 gpm to 335 gpm ft. to</td>
<td>Footing Elev. 108.33'</td>
</tr>
<tr>
<td>Finished Grade Elev. 144.25'</td>
<td>Influent Elev. Invert 110.00'</td>
</tr>
<tr>
<td>Discharge Elev. Through top of chamber</td>
<td>Overall Vertical Dim. 37.92'</td>
</tr>
<tr>
<td>Elev. Top of Access Tube 146.25'</td>
<td></td>
</tr>
</tbody>
</table>

## ITEM 100

| Equipment Chamber 1/4" SAFETY MAT REQ'D |
|-------------------------|-----------------|-----------------|----------------|
| Skids I-Beam Type | 8" | Size | 18.4#/ft. |
| Floor Plate Type | 3/8" | Size | 15.3#/sq.ft. |
| Sump Length | 8" | Depth | 14" |
| Shell Dia. | 9'-8" | Height | 1/2" |
| Head Plate Type | 3/8" | Size | 15.3#/sq.ft. |
| Drip Ring NR | Lifting Hooks |
| Pump Hooks 1/2"x8" Size | four (4) | Thus Pump Beads as needed |
| Tube Flange 2" x 2" x 1/2" |

## Exterior Surface Preparation

- A. Coaltar epoxy-polyamide B69B35 1000 mils Dry
- B. Coal tar applied asphalt mastic 300 inches wet
- C. Proprietary Epoxy specifications base coat B69N70 1.5 mils Dry
  - intermediate and top coat 169GA70 4.5 mils Dry

## Interior and Exposed Exterior Surface

- A. Proprietary Epoxy specifications base coat B69N70 1.5 mils Dry
  - intermediate and top coats B69GA70 4.5 mils Dry
# Description and Schedule

**Job:** Contract #11  
**Date:** July 28, 1980  
**Name:** Mark IV Construction Co.

<table>
<thead>
<tr>
<th>ITEM 101 ACCESS TUBE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tube 48“ Dia. 1/4“ Wall 27’ 4“ Total Length</td>
</tr>
<tr>
<td>Lower Flange 2 1/2 x 2 1/2 x 3 53“ O.D. Dia.</td>
</tr>
<tr>
<td>12 x 16 x 37’-7“ * Ladder 1“ square Rungs 1/2x1 1/2“ channel Rails</td>
</tr>
<tr>
<td>Vent Tube 4“ diameter x 27’-0“</td>
</tr>
<tr>
<td>Sump Discharge 1 1/2“ Galv. Type Blkhd Fitting Welded nipple through sump</td>
</tr>
<tr>
<td>Hatch 50“ steel, epoxy coated, spring assisted, w/drip lip</td>
</tr>
<tr>
<td>Rim Gasket Continuous Silicone Rubber Type Lock T-handle w/5 disc. tumbler Type</td>
</tr>
<tr>
<td>Cover Switch Hatch-activated &amp; Manual Type Conduit 1/2“ EMT</td>
</tr>
</tbody>
</table>

*A safety landing will be supplied halfway down from the top (epoxy coated steel)*

<table>
<thead>
<tr>
<th>ITEM 102 PIPING AND VALVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influent Pipe 6“ Dia. Class 50 Ductile Type Plain End Fitting</td>
</tr>
<tr>
<td>Influent Valves 6“ DeZurik Make Eccentric Plug Type</td>
</tr>
<tr>
<td>Check Valves 4“ x 6“ M&amp;H Make Lever &amp; Spring Type</td>
</tr>
<tr>
<td>Discharge Valves 6“ Clow Make List 14 Gate Type</td>
</tr>
<tr>
<td>Discharge Manifold 6“ x 6“ x 6“ SOE Type</td>
</tr>
<tr>
<td>Discharge Pipe 6“ Dia. Class 50 Ductile Type Plain End Fitting</td>
</tr>
<tr>
<td>Pipe Support Floor chairs Gaskets Rubber/asbestos ring type</td>
</tr>
<tr>
<td>Bulkhead Fittings 1“ steel sleeves with concrete/embecco grout</td>
</tr>
</tbody>
</table>

**Recirculation Scheme**

- **Recirculation Regulator** NR
- **Gate Valves** Pipe Fittings Type

**Sump Pump Piping**

- **Flexible Connection** NR
- **Check Valves (2) 1 1/2“ Gate Valves (1) 1 1/2“ All Bronze
- **Piping 1 1/2“ Schedule 40 steel (GALV.)**

**Exterior Piping**

(Furnished on request only)

**Sump Discharge Piping**

- **T-Y Fitting, 90° Bends**

1/4“ Poly Tube (ample supply furnished to reach from control to W.W.)

**Remarks**
Description and Schedule

Job: Contract #11
Date: July 28, 1980

Name: Mark J.V. Construction Co.

ITEM 103
Pumps

<table>
<thead>
<tr>
<th>Pumps</th>
<th>Four (4)</th>
<th>Thus</th>
<th>4</th>
<th>&quot;Suction&quot; 14 x 0</th>
<th>Max. Impeller 4</th>
<th>&quot;Discharge&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Non-Clog</td>
<td>Make</td>
<td>Allis-Chalmers</td>
<td>Model 400, 4x4x14</td>
<td>Seal</td>
<td></td>
</tr>
<tr>
<td>CI Impeller</td>
<td>&quot;Dia.&quot;</td>
<td>1750</td>
<td>RPM</td>
<td>Mechanical</td>
<td>50m filtered water</td>
<td>Lub. Scheme</td>
</tr>
</tbody>
</table>

Motors and Drives

<table>
<thead>
<tr>
<th>Four (4)</th>
<th>Thus</th>
<th>40 H.P.</th>
<th>FR</th>
<th>1750 RPM</th>
<th>3φ</th>
<th>60 Hz</th>
<th>480 Volts</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive</td>
<td>Flex-coupled</td>
<td>Driver Dia.</td>
<td>Driven Dia.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ITEM 104
CATHODIC PROTECTION

Sac. Anode Type Four (4) Thus 17# Packaged Magnesium

ITEM 105
POWER AND CONTROL CENTER

Panel Locking Switch Amps Pole
Main Breaker By others on pole Amps Pole
Motor Breaker Four (4) Thus .90 amp, 3-pole NEMA I Enclosures

Four (4) Furnas size '3' starters of the auto-transformer type.

Auxiliary Circuit Breakers

<table>
<thead>
<tr>
<th>Lights &amp; fan</th>
<th>15</th>
<th>Amps</th>
<th>1</th>
<th>Pole</th>
<th>Controls</th>
<th>15</th>
<th>Amps</th>
<th>1</th>
<th>Pole</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressors</td>
<td>15</td>
<td>Amps</td>
<td>1</td>
<td>Pole</td>
<td>Conv. Outlet</td>
<td>15</td>
<td>Amps</td>
<td>1</td>
<td>Pole</td>
</tr>
<tr>
<td>Dehumidifier</td>
<td>15</td>
<td>Amps</td>
<td>1</td>
<td>Pole</td>
<td>Heater</td>
<td>20</td>
<td>Amps</td>
<td>2</td>
<td>Pole</td>
</tr>
<tr>
<td>Sump Pump</td>
<td>15</td>
<td>Amps</td>
<td>1</td>
<td>Pole</td>
<td></td>
<td>Amps</td>
<td>Pole</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Alternator Diversified No. ARA-120-ADA Type Elapsed Time Meter (2) Engler six-digit
Interval Timer Dayton 2E209 Type Bubbler Flo Meter Dwyer Model 500 Type
Depth Indicator 0-160" No. 2½" dial, Marshalltown Fig. 83B Type
Air Pumps Two (2) No. ITT Type Oilless, both mounted on (1) 2 gal. tank
Alarm Gear Contacts only for: LWL, HWL, Low Air Pressure, High Drywell

Power failure, Pump failure (Seal water failure, incorporated with Pump Failure)

One (1) VE-302 pressure switch for pump control (Lead, Lag, Shut-off).

B. Motor Wiring #6 AWG
Conduit 1" EMT to 1" Sealtite

C. Lights Two (2) 100 watt incandescent with glass globes & cast guards.
ALARM EQUIPMENT

One (1) UE J54S Pressure Switch for Low wetwell level.

One (1) UE J54S Pressure Switch for High wetwell level.

One (1) Furnas 69WA4 Pressure Switch mounted on air receiver for low air pressure.

One (1) Switch Systems NC float for high drywell.

One (1) Time Mark A25BB power monitor for power failure

One (1) Furnas limit switch and one (1) Dayton time delay on each check valve level to signal pump failure.
ITEM 106  ENVIRONMENTAL CONTROL

1500 Watts Heater Fan-forced 5120 BTU

Dehumidifier 15 PT/D 200 cfm Fan 265 cfm 0.0" S.

Fan Motor 1610 RPM 1.86 AMPS 115 Volts Shaded pole TYF

Sump Pump 1000 GPH 17' TDH Submersible Type SV25A Mod.

Pump Motor 8.5 at Amps 115 Volts Shaded Pole TYF

Two (2) 4½" dial, 0-15 in. Hg, 0-15 psi gauges for pump suction.

Two (2) 4½" dial, 0-200 psi gauges for pump discharge.

Each gauge will have a protective diaphragm with gauge cock.

ITEM 107  POWER FEED CONDUIT

2 " EMT Type Wire to terminals in panel by others. Also, one (1) 3/4" EMT conduit for load center power and

one (1) 3/4" EMT conduit for alarm wiring.

ITEM 108  TEST STAND OPERATION

One (1) Hr. at 490 gpm at 335' TDI

a. Hr. at gpm at TDI

b. Hr. at gpm at TDI

c. Hr. at gpm at TDI

ITEM 109  SHIPPING DETAILS

Shipped by truck to jobsite or nearest passable road.

Shipping Weight and Date Estimate 14-18 weeks after formal

approval received in shop. Subject to & contingent upon
availability & procurement of materials.

Est. 26,000 lbs.
Description and Schedule

Job: Contract #11 ........................................ Date: July 28, 1980 ........................................

Name: Mark IV Construction Co. ........................................

ITEM 110  SPARE PARTS AND ACCESSORIES

Seal Two (2)  Thus Mechanical

Gaskets Two (2)  Thus Volute

Touch Up Kit One (1)  Thus Containing epoxy

Daily Report NR  Thus

Instructions Six (6)  Thus One (1) in station, Five (5) sent direct.

Ash Tray NR  Waste Paper Basket NR

Wet Well Trash Basket NR  " x"  " x" " Type

Rails Length Bracket

Wench Type  Cable Chair

Additional Spare Parts:

Two (2) sets of bearings for pump  Two (2) pump shafts

Two (2) untrimmed impellers  Two (2) bearing housings

Two (2) shaft sleeves

[Underlined] Supply "No Smoking" Sign in Station

One (1) ventilating blower to be used as spare for installed blower.

INSTALL 2 UNITS, WITH ALTERNATING SWITCH

Respectfully Submitted,

[Signature]  Veiler Lowrie

for Dakota Pump Inc.