ADDENDUM NUMBER ONE
DORR ELEMENTARY SCHOOL PRIVATE SANITARY PUMP STATION & FORCEMAIN
SPRINGFIELD LOCAL SCHOOLS
SPRINGFIELD TOWNSHIP, LUCAS COUNTY, OHIO
PROJECT NO. 10E08117
September 8, 2016

BID OPENING: Tuesday, September 13, 2016 at 12:00 noon local time at the Springfield Local Schools Administrative Office, 6900 Hall Street, Holland, OH 43528.

PLAN SET

Sheet 5

On the "Typical Access Manhole With Automatic Air Release" detail, the forcemain pipe within the structure may also be 3" PVC Forcemain being ASTM D2241, SDR 21. Fittings for 3" PVC Forcemain within this structure shall meet requirements for 1-1/2" to 2-1/2" PVC forcemain fittings as noted on Sheet 4.

BID DOCUMENTS

Section 00100 – INSTRUCTIONS TO BIDDERS

On page 00100-1 In Section 1.3 the Substantially Complete date for Alternate 1 shall be changed to April 17, 2017.

Section 11921 – SEWAGE AIR RELEASE & VACUUM BREAK VALVES

Add the attached Section 11921 - SEWAGE AIR RELEASE & VACUUM BREAK VALVES to the Bid Documents.

END OF ADDENDUM #1

P:/Projects/10E08117/Project Specs/10E08117 - ADDENDUM NUMBER ONE – 9-8-2016.wpd

FellerFinch
& ASSOCIATES, INC.
Engineers · Surveyors

1683 Woodlands Drive, Maumee, Ohio 43537
Phone: (419) 893-3680
Fax: (419) 893-2982
www.fellerfinch.com

PART 1 – GENERAL

1.01 WORK INCLUDED

A. The CONTRACTOR shall furnish and install Sewage Air Release & Vacuum Break Valves where shown on the Drawings.

1.02 RELATED WORK

A. Section 01300 – Submittals and all other appropriate sections of the project technical specifications and Drawings.

1.03 SUBMITTALS

A. The CONTRACTOR shall furnish shop drawings showing the valve, valve vault, the castings, components parts, and connections. The castings shall be capable of accommodating an H-20 highway loading.

PART 2 – PRODUCTS

2.01 SCHEDULE

A. The location and sizes for the valves shall be as described in PART FOUR.

2.02 CONSTRUCTION & DESIGN

A. The Sewage Air Release & Vacuum Break Valve shall consist of a compact tubular all stainless steel fabricated body, hollow direct acting float and solid large orifice float in H.D.P.E. – stainless steel nozzle and woven dirt inhibitor screen, nitrile rubber seals and natural rubber seat.

B. Each valve shall have an integral "Anti-Surge" orifice mechanism that shall operate automatically to limit surge pressures rise or shock induced by closure to less than 2 times the valve's rated working pressure.

C. The intake orifice area shall be equal to the nominal size of the valve i.e., a (2") valve shall have a (2") intake orifice.

D. Large orifice sealing shall be effected by the flat face of the control float seating against a nitrile rubber "O" ring housed in a dovetail groove circumferentially surrounding the orifice.

E. Discharge of pressurized air shall be controlled by the seating and unseating of a small orifice nozzle on a natural rubber seal affixed into the control float. The nozzle shall have a flat seating land surrounding the orifice so that damage to the rubber seal is prevented.

F. Each valve's construction shall be proportioned with regard to material strength characteristics, so that deformation, leaking or damage of any kind does not occur by submission to twice the designed working pressure.

G. The Air-Release Valve Assembly shall be complete with a 316 Stainless Steel Full-Port isolation valve the same size as the valve, 1" 316 Stainless Steel valves on side ports, and a reducing flange pre-assembled and ready for connection to Tee as shown on drawings.

2.03 VALVE OPERATION

A. Prior to the ingress of liquid into the valve chamber, as when the pipeline is being filled, the valves shall vent through the large orifice when sewage approach velocities are relative to a transient pressure rise, on valve closure, of less than 2 times the valve's rated pressure.

B. At higher sewage/effluent approach velocities, which have a potential to induce transient pressure rises of greater than 2 times the valve's rated pressure on valve closure, the valve shall automatically discharge

air/gas through the "Anti-Shock" orifice and reduce sewage approach velocity, so that on closure a maximum transient pressure rise of less than < 2 times the valve's rated pressure is realized.

C. Valves shall not exhibit leaks or weeping of liquid past the large orifice seal at operating pressures of 7.3 psi to twice rated working pressure.

D. Valves shall respond to the presence of air/gas by discharging it through the small orifice at any pressures within a specified design range, i.e. 7.3 psi to 150 psi and shall remain leak tight in the absence of air.

E. Valves shall react immediately to pipeline drainage or liquid column separation by the full opening of the large orifice so as to allow unobstructed air intake at the lowest possible negative internal pipeline pressure.

PART 3 – EXECUTION

3.01 INSTALLATION

A. The valves shall be installed as shown on the drawings in accordance with the manufacturer's recommendations.

3.02 WARRANTY

A. The CONTRACTOR shall provide the standard manufacture's warranty on the sewage air release and vacuum break valve to the Owner.

PART 4 – SPECIAL PROVISIONS

4.01 VALVE SIZES

A. The Air Release & Vacuum Break Valves shall each be 2 inch valves.

- END OF SECTION -