



Addendum #2 – 2016 Booster Pump Station Project

Booster Pump Station Construction Information and Questions:

1. The Design Engineer checked the following specification "The head loss through the check valve shall not exceed 5 psi at the pump design capacity." The following is the engineers response which includes the attached check valve head loss chart for supporting documentation:

The pumps specified have either 4" or 5" outlets. Therefore check valves on the downstream side of the pump are 4" or 5" depending on which pump is proposed by the contractor. The attached check valve sheet shows the maximum flow through one pump/check valve and maximum head loss. Even for the 4" check valve head loss at 450 gpm is only 7 ft. which is much less than 5 psi.

2. Is Nap-Gard coating an acceptable coating alternative?

Nap-Gard coating is an acceptable alternative due to the products ability to meet the NSF-61 standard. Attached is a the Nap-Gard specification

3. Are lug style butterfly valves an acceptable alternative to the flange style butterfly valves?

Lug style butterfly valves are an acceptable alternative to the flange style butterfly valves if required operation clearance is verified.

4. Does the entire a pump skid as a single unit needs to be NSF-61 certified?

The City is allowing the pump station to be NSF-61 certified either as an individual pump skid unit or by individual components providing supporting documentation.

5. Do the manifold and valve discs need to be constructed out of stainless steel?

Quality coated steel is an acceptable alternative to stainless steel in the construction of the manifold and valves discs.

6. What is the pressure the pumps are to run at?

The pressure requirements for the pumps are located in Part 2.2 Pumps in the Technical Specifications under Section 2 Pump Skid Specifications.

7. What is the flow the pumps are to run at?

The flow requirements for the pumps are located in Part 2.2 Pumps in the Technical Specifications under Section 2 Pump Skid Specifications.

8. What is the power available at the site?

The City of Delta is providing power and will be able to meet necessary power requirements up to and including 480 Volt.

9. How are the pumps to be controlled, Pressure start/Remote start?

Pumps are to be controlled by pressure start with the capability to retrofit to remote start.

10. The drawing shows motor controller integrated with the pumps. Will wall mount controllers be acceptable?

Wall mounted controllers for the pumps are acceptable if the current pump station provides adequate clearance for operation and building requirements and does not require a new building design.

11. Will a pre-fabricated pump station be acceptable? (We can prefab the station)

A pre-fabricated pump station skid is acceptable as long as the design meets the Technical Specifications under Section 2 Pump Skid Specifications.

12. Do clay valves have to be used on this project?

Contractors may submit alternative valve options by the question deadline June 2nd, 2016 at 3:00 pm and the City will determine whether the alternative is an acceptable replacement.

13. Are the pumps going to be provided by the City of Delta and if not do you have any specifications on them so we may be able to locate them for our proposal?

The pumps are to be provided by the Contractor. Pump requirements are outlined in the Technical Specifications located in the Bid Package on the City's RFP webpage <http://cityofdelta.net/rfp.html>

14. What is the dynamic head pressure for the lines coming in to the pump house? (high and low pressures)

The dynamic head pressure is referenced as suction pressure in Part 2.2 Pumps in the Technical Specifications under Section 2 Pump Skid Specifications.

15. What is the flow of the pipes (GPM) on the pipes?

The nominal flow values are referenced in Part 2.2 Pumps in the Technical Specifications under Section 2 Pump Skid Specifications.

Waterline Construction Information and Questions:

16. Do you know how long the trench will be over 6 ft deep?

The 16" waterline being constructed is low pressure and controlled by the level of water in the 3MG tank. This requires the waterline to be constructed either level with the discharge depth or down grade. The contractor will have to use the attached construction drawing of the 3MG Tank and the knowledge that the City stubbed out 5 ft below the second irrigation ditch to determine the amount of trench work. Contractors are encouraged to visit the construction site and survey the area to determine depth and excavation requirements. Trench bedding requirements for waterlines must follow the *City of Delta Standards and Specifications for the Design and Construction of Public Improvements*.

17. Does the pipe need to be laid on a specific grade away from the tank? If so what percent.

The 16" waterline being constructed is low pressure and controlled by the level of water in the 3MG tank. This requires the waterline to be constructed either level with the discharge depth or down grade. As-built requirements will require the line to be surveyed as constructed.

18. Is 15' the depth at the valve or the edge of the tank?

15' was an estimated value. The tank is approximately 24 ft tall and the vault on the attached 3MG tank drawing is approximately 23' from the valve vault lid to the top of the valve. The tie in to the old waterline shall occur between the tank and the vault.

19. Is a step down to the 3MG water line tie in allowed?

No. The pressure in the waterline is controlled by the tank water level or elevation head. This requires the waterline to be constructed either level with the discharge depth or down grade.

20. Do you have support structure for the ditch span? If so Footings requires? Drawing of support structure?

The City does not plan to need a support structure for the ditch span. Ideally the waterline shall be constructed to exit the slope next to the ditch at a reasonable grade and the waterline spanning the ditch shall be required to be encased.

21. Where is the pipe provided going to end and the contractor supplied materials going to start?

The pipe provided by the City is everything not encompassed by the pump station schematic and designs. The Contractor is responsible for providing the components outlined in the technical specifications and pump station designs.

Building Information and Questions:

22. Information regarding the booster station building truss bid and design requirements.

The booster station architectural drawings refer contractors to the structural drawings for truss details. For the bid purposes the roof framing plan on S2 calls for trusses @ 24" o.c. requiring 19 common trusses and two gable trusses. Please contact a truss manufacturer and describe the design and point load of 500 lbs at the center of the bottom chord in order to receive drawings and estimates. A detail will be provided from the architect on how the U-Bolts will carry the load without crushing the wood-fibers on the top of the bottom chord.

23. The booster station construction schedule is set to begin with the construction of the pump station and building. Once the pump station is operational the construction of the waterline shall proceed after irrigation and system requirements are able to be met when the flow is shut off from the 3MG tank.
24. The pump station building shall be required to be constructed around the installed pump station skid.

Project Information

25. Extended contract deadline for the Booster Pump Station project bid submittal shall be at 3:00 pm on June 10th, 2016. Question deadline is extended to 3:00 pm on June 2nd 2016. Apparent low bidder will be notified by June 15th, 2016. Notice of Award will be June 22nd, 2016 pending project award decision at the City Council meeting June 21st, 2016.