

INVITATION TO BID #2018-65 Hoodland Water Resource Recovery Facility (WRRF) Modernization Project ("BID") RESPONSE TO CLARIFYING QUESTIONS August 2, 2018

Note that these are questions submitted by interested firms to the above referenced solicitation. The below answers are for clarification purposes only and in no way alter or amend the BID as published.

- 1. <u>I/O Drawings</u>: It looks like in the plans, Sheets ICA-16 and ICA-17 are mismatched to the Index. The sheets say input and the index says output.
 - **<u>RESPONSE:</u>** Sheets ICA-16 and ICA-17 are intended to be digital input modules. The sheet index text has been changed to reflect this.
- 2. <u>Combustible Gas Detectors:</u> In section 40 91 10 6, M., 1, 2, and 3, shows AIT-1030, AIT-1031, and AIT-1032. I don't see AIT-1032 on the P&ID's and is not listed in the Appendix 1 Instrumentation list. Please advise.
 - **RESPONSE:** The P&ID's and Appendix 1 have been updated to exclude AIT-1032 for pump room combustible gas detection. It is not needed.
- 3. <u>Conductor Run Between Plant (Generator) and Pump Station:</u> The electrical feed going to the pump station is what I'm, seeing to be roughly 1,300-ft away, plans call for a single set of 350 kcmil. With that distance, your voltage drop would put you at roughly 120 Amps at the pump station. Looks like you are trying to get 200 Amps. Is there a spare conduit going the same route to be able to use parallel sets?
 - **RESPONSE:** Our calculations indicate that at a full 200 Amp loading, the approx. 1,500-ft run of one set of 350 kcmil copper conductor will have a voltage drop of approx. 5.3%. We find this to be acceptable.
- 4. Generator: I do not see any reference to a subbase fuel tank for the generator. Do you need a subbase tank? If so, what size (run-time)? Is there an existing fuel tank?
 RESPONSE: Yes, there is an existing generator fuel tank located in the adjacent room. The existing tank is mounted at a higher elevation than the generator.
- Generator: Please verify that the new generator is an open unit (inside) and requires a special hockey puck, super critical silencer for clearance requirements.
 RESPONSE: Yes, the new generator is an "open" (non-enclosed), skid-mounted unit. A low-profile type silencer ("hockey-puck" or "disk" style) of the "super-critical" kind is required per the contract specifications (26 32 13 Standby Power System, 2.3 Diesel Engine Generator Set, E., 6.).
- 6. <u>ATS (Arrah Wanna PS):</u> Does the 4-pole ATS (located at the Arrah Wanna Pump Station) require a NEMA 3R enclosure?
 - **RESPONSE:** No. The service-entrance rated, 4P ATS at the Arrah Wanna pump station is located inside the electrical room and is not subject to falling water.

- 7. Hoodland Sewage Treatment Plant As-Built Plans: Sheet 1, Sheet 2, E1, E2 & M2 are duplicated at the end of the pdf & Sheets A2, C1, C4 & C5 are missing according to the Index.

 RESPONSE: The As-Built plans provided are the best and most complete set available. Please disregard the duplicate sheets.
- 8. Section 001113 (Invitation to Bid) on the Index is actually 001116 on the pages.

 RESPONSE: Invitation to bid should be section 00 11 16. See addendum #1, issued August 2, 2018, for the changes to the index.
- 9. The called out duty point for the Hoodland Sewer Bypass is 1200 GPM at 75 TDH. Does this include the suction lift? How much of the 75 TDH is static on the discharge and how much is friction loss?

RESPONSE: Yes, this includes suction lift of approximately 16 feet; Static = approximately 27 feet, friction loss = 32 feet.

End of Clarifying Questions #1