

ADDENDUM #2

For Addendum #2 please contact Goldie Associates at
864-882-8194 ext 141 to access the supporting
documents.

To: Ridgeland WRF Expansion Plan Holders

From: Paul Lewis

Re: Addendum #2
Ridgeland WRF Expansion

Thanks to everyone who came out for the pre-bid meeting. We appreciate your interest in the project.

Below are the Addendum #2 items for the project. If you have submitted a question or comment and do not see it addressed here, please resubmit it to us.

Addendum Reference #	Reference	Question / comment
2.1	Revised Plan Sheets from Addendum #1	The following drawings from Addendum #1 are included: Cover, ESC002, ESC003, C001, C011, C012, C013, C014, M601, E001, E002, E011, E012, E013, CS001, CS011, CS012, CS013, CS014
2.2	Pre-bid sign-in sheets	The Pre-bid sign-in sheets are attached.
2.3	Last day for questions	The last day for questions is Monday May 6.
2.4	Low bid	The low bid will be the lowest combination of the base bid and the alternates that the Town elects to exercise.
2.5	Site visit	<ol style="list-style-type: none">1. Subsequent site visits will be available on Thursday April 25 @ 2 pm and Thursday May 2 @ 2 pm. RSVP to Pam Williams, pam@goldieassocates.com if you are coming.2. Ty Shaffer (Town of Ridgeland) will be there to meet you. Any questions need to come to us.
2.6	E002, E011, E013	The circuits for the existing underdrain pumps are added.
2.7	E002, CS014 Section	Sludge dewatering pump P803 should be 5 hp instead of 3 hp.
2.8	CS001	Use fiber optic cable instead of CAT5 for the interconnections between the controls in the field and the operator building.
2.9	Section 00 41 00 Bid form	<ol style="list-style-type: none">1. Attached please find a definitive list of what will be tax exempt and what is not.2. Also attached please find a revised bid form. We have removed the references to tax.

Addendum Reference #	Reference	Question / comment
2.10	Section 02 54 00 Biosolids removal	<ol style="list-style-type: none"> 1. The GC will coordinate the final liquid removal with the biosolids removal contractor as to what each of them will do. 2. There are estimated to be 175 dry tons of sludge to be removed. The sludge does not have to be dried. We are using dry tons as the basis of payment. You will be taking the sludge to a landfill as cake. You will need to estimate the weight of the cake that you will haul. 3. You will empty the west end of Pond #1 first. The aerators can be removed by you if that is helpful to you. Filtrate will go back to the east end of Pond #2. You can discharge filtrate at up to 300 gpm. 4. We do not expect much sludge in the east end of Pond #1. The two large aerators cannot be removed. It would be ok to clean this end out after it is off-line in Phase 3 if desirable. 5. After Pond #1 is cleaned out, then Pond #2 will be cleaned. Filtrate from this cleaning needs to go the west end of Pond #1. It is ok to remove sections of the concrete wall around the top of Pond #2 if that is helpful to you. The filtrate discharge rate will be limited by the LAS pumps. Plan on being able to discharge at 150 gpm, but you may be able to discharge more, depending on the flow of the WWTP. 6. The sludge is Class B sludge.
2.11	Section 40 60 00 – Instrumentation and controls	<ol style="list-style-type: none"> 1. Use the following instruments: 2. LIT701 Flume Level Analyzer (Bubbler) – ISCO Signature Flow meter with bubbler option or approved equal. 3. LIT702 Flume Level Analyzer (Bubbler) – ISCO Signature Flow meter with bubbler option or approved equal. 4. AIT801 Digester DO Analyzer – Hach SC200 xmtr or approved equal. 5. AE801 Digester DO probe - Hach LDO Model 2 or approved equal.
2.12	Section 43 25 01.1 Influent / Effluent PS Control Panels	Section 2.06.1. Only the Modbus RTU is needed. The BACnet MSTP and the Johnson Controls Metasys N2 are not needed.
2.13	Dewatering	There is a functional dewatering system under the lagoons that is available for you to use during construction. It shows on G012 as running lengthways through the center of the lagoons. There is a pump in each of the two manholes at the east end of both lagoons.
2.14	ICEAS Tank	No preloading of the ICEAS tank is required. It will be tested full of water.

Addendum Reference #	Reference	Question / comment
2.15	Section 31 23 00 Excavation and Backfill for Structures	Add Paragraph 3.8.7. The unsuitable soils from under the ICEAS may be hauled off site, or you may use them for fill if you blend them so that they meet compaction requirements.
2.16	Sludge produced during Phase 3 of Construction	<ol style="list-style-type: none"> 1. In Phase 3 the ICEAS will be up and operating, and will begin generating sludge. The ICEAS will not be able to hold sludge without discharging more than about a week. In order to store this sludge, you may rent aerated tanks to put it in, and then decant it back to the ICEAS. Also, you may use Pond #1 to put sludge in. You would need to arrange the existing liner so that you could construct the digester on one end while the other end is filling with sludge. At some point the existing aerators will need to be used to keep the sludge from becoming septic and foul smelling. 2. Sanitaire calculates a sludge generation rate of 19,000 gpd of 0.85% solids at a flow rate of 0.8 mgd and an influent BOD of 250 mg/L. Actual conditions are 0.65 mgd and 175 mg/L BOD which would yield a sludge generation rate of 14,000 gpd. Because the sludge is coming from the ICEAS at 0.85%, much of this water can be decanted and put back in the ICEAS to concentrate the sludge.
2.17	Utilities between the lagoons	Once the Pond #2 aerators are decommissioned, we are not aware of any live power or other utilities that will run between the ponds. The exception to this may be the 110V to feed the underdrain pumps; which may feed off one of the aerator panels. Obviously, you will need to confirm this for yourself.
2.18	Section 02 54 00 – Biosolids removal	In #3.2 Revise contact name and phone #
Questions in process		
	Sludge pump P806	Determining wire size for upgraded 5 hp pump.
	Underdrain pumps	Determining wire size for existing underdrain pumps.
	Generator	We are upgrading the generator to be able to power one existing LAS pump.
	Section 46 76 00 – GeoTube Dewatering Bags	Flint Industries is requesting to be approved as an equal to the GeoTubes. This is under consideration.
	Section 43 25 01 – Non-clog pumps (influent and effluent)	KSB has submitted a request to be considered as an equal for the influent and effluent pumps. This is under consideration.
	Section 02 54 00 – Biosolids removal	We are working with Hickory Hill landfill to get an acceptance letter for the sludge.

If you have any questions, comments, or need further information, please email me at paul@goldieassociates.com.

Sincerely,
Goldie Associates

A handwritten signature in black ink that reads "Paul Lewis". The signature is written in a cursive style with a large initial "P" and "L".

Paul Lewis, PE
Project Engineer