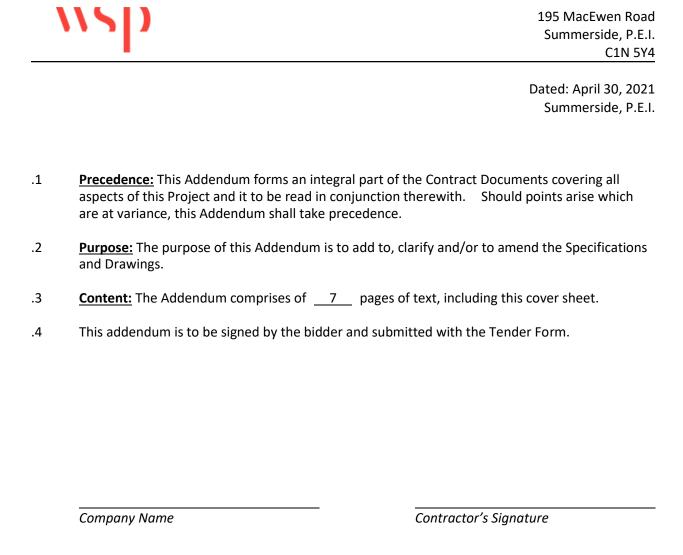
### **ADDENDUM NO. 1**

# To the Specifications and Drawings for Cornwall Wastewater System Upgrades Phase 2 (North River Treatment Facility Aeration Upgrades)



### Addendum No. 1

## Cornwall Wastewater System Upgrades Phase 2 (North River Treatment Facility Aeration Upgrades)



### April 30, 2021

- 1. Correction: Please be advised that the address for the Cornwall Town Office is 15 Mercedes Drive.
- 2. Add Section 01 33 00 Shop Drawings, Product Data and Samples to the specifications. A copy of this section is included with this addendum.

APS represents NEXOM in Atlantic Canada who are named as the "Basis of Design" for the fine bubble aeration system specified in Section 44 41 13. APS issued the following comments / questions and WSP has responded with answers:

3. Page 5/15, Item 12 states, "New blower parameters are to be configured in the existing PLC at the blower building. All costs associated with this work are to be included in the lump sum cost for the new pad-mounted blower."

Page 111/115, Section 44 41 13, Item 2.4 states, "The blower shall be controlled by the Aeration Blower Control Panel (by others) as specified in Division 26."

**Question:** Please confirm that all controls / integration required for the new blower is outside of the equipment supplier's Scope of Supply and would be the responsibility of others (i.e. local electrician / programmer).

**Response:** The operation of the three blowers (2 existing, 1 new) will be manually controlled by the operator with an expected rotation of once/month. Any controls or integration outside of the Supplier's scope of supply of the equipment will be the responsibility of the general contractor and/or electrician.

4. Page 104/115, Section 44 41 13, Item 1.12.1.4 states, "Total Ammonia-N - 88 kg/day".

**Comment**: Based on our pre-design work with WSP, we believe this should be 40kg/d. We believe there must have been a typo between kg/lb that got carried through. Can you please revise?

Response: In Section 44 41 13, Item 1.12.1.4, revise the total ammonia loading to 40 kg/d.

5. Page 110/115, Section 44 41 13, Item 2.3.2.8 states, "Motor power requirements: 50 hp, 575 v, 3-phase, 60hz (VFD compatible)..."

Question: Drawing E01 shows existing control panel power supply as 120/208V / 3-phase /

60Hz. Can you please confirm if blower should be 208/3-ph/60Hz or

575V/3-ph/60Hz?

Response: Existing Panel CDP as per drawing is shown as 120/208vac, 3-phase, which is

incorrect. It is 600vac, 3-phase. The blower power requirements are to be 50 hp,

575 v, 3-phase, 60hz and fed from existing CDP panel, 600vac, 3-phase.

- 6. **Comment**: Following are the wiring requirements for the specified Aerzen blower which are not currently described or shown in the specifications / drawings but should be taken into consideration to avoid extra costs after closing from contractors. Also note, we don't know what the existing plant PLC programming currently allows for in way of alarms. A typical blower control panel would have trip relays for the two sets of blower alarms. The existing plant PLC may have this allowed for already for the other (existing) blowers. But this is what is needed for the new Aerzen blower.
  - Blower enclosure space heater since outdoor installation (180W, 120V, single phase, separate feed required)
  - Blower high discharge temp switch (control wiring, 2 pair wire from, from blower back to panel)
  - Blower motor PTC thermistor trip relays (control wiring, 2 pair wire, from blower motor back to panel)

**Response:** Power for space heater shall be provided from panel, 120/208vac. Provide 15amp, 1p breaker in spare space and associated wiring. PLC panel has spare I/O for alarms.

- 7. Comment / Question: Section 44 41 13 specifies the following trips / days onsite.
  - Item 3.4.2, pre-commissioning trip, 1 trip / 1 day
  - Item 3.4.3, during-construction trips, 2 trips / 2 days total
  - Item 3.4.4, post-construction trip, 1 trip / 1 day
  - Item 3.5, start-up/commissioning/training, 1 trip / 2 days
  - TOTAL = 5 trips / 6 days onsite

This is much more than what is typically provided, or required for a project this size, and would add significant cost to our Scope of Supply, especially given the ongoing COVID-19 pandemic and travel restrictions in place. Coordinating travel nowadays is very time consuming and sometimes very expensive when extra days in a hotel are required while waiting for negative COVID testing results. NEXOM would instead suggest a virtual pre-commissioning/installation meeting to go over installation procedure and requirements with the contractor. NEXOM would also offer a second virtual meeting during construction to discuss any questions or concerns the contractor may have while doing the installation. Finally, we'd include 1 trip / 2 days on-site for system start-up/commissioning/training as specified in item 3.5. So to summarize, we'd instead propose (2) virtual sessions, one pre-commissioning and one during commissioning, and 1 trip / 2 days onsite instead of the site services that are specified. Is this acceptable?

**Response:** Two virtual sessions (one pre-commissioning and one during construction), plus one trip for two days for commissioning and start-up is acceptable if the on-site contractor has proper knowledge and instructions for installation of supplied materials and equipment. In the event that COVID restrictions are lifted and travel within the Atlantic region is permitted, please provide a provisional cost for an in-person (one trip/one day) visit from the local supplier representative.

Contractor's Signature

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- PART 1 GENERAL 1.1 General .1 Submit to the Engineer, for review, Shop Drawings, product data and samples specified. Additional specific requirements for submissions are specified in individual sections of Divisions 02 to 35. .2 Until submission is reviewed, work involving relevant product may not proceed. 1.2 Drawings to be originals prepared by Contractor, **Shop Drawings** .1 Subcontractor, Supplier or Distributor, which illustrate appropriate portion of work; showing fabrication, layout, setting or erection details as specified in appropriate sections. .2 All Equipment Shop Drawings must be complete in all respects and show clear compliance with the Specifications. .3 Identify details by reference to sheet and detail numbers shown on Contract Drawings. Dimension in metric units. Where items or information is not produced in SI Metric .4 units converted values are acceptable. Maximum sheet size 850 x 1050 mm. .5 1.3 Product Data .1 Manufacturer's Standard Schematic Drawings, Catalogue Diagrams, Schedules, Performance Charts, illustrations and other standard descriptive data may be accepted in lieu of Shop Drawings. .2 Above will only be accepted if they conform to the following: .1 Delete information which is not applicable to project. .2 Supplement standard information to provide
  - Show performance characteristics and capacities. .4 .5 Show Wiring Diagrams, when requested, and

additional information applicable to project. Show dimensions and clearances required.

controls.

.3

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1.4	Coordination of Submissions	.1	Check and certify as correct, Shop Drawings, product data
			and samples prior to submission.
		.2	Verify:
			.1 Field measurements
			.2 Field construction criteria
			.3 Catalogue numbers and similar data
			.4 Conformance with Specifications
		.3	Coordinate each submission with requirements of work and Contract Documents. Individual Shop Drawings will not be reviewed until all related Drawings are available.
		.4	Contractor's responsibility for deviations in submission from requirements of Contract Documents is not relieved by Engineer's review of submission, unless the Engineer gives written acceptance of specified deviations.
		.5	Notify the Engineer, in writing at time of submission, of deviations from requirements of Contract Documents.
		.6	After the Engineer's review, distribute copies.
1.5	Submission		
1.0		.1	Coordinate each submission with requirements of work and Contract Documents. Individual submissions will not be reviewed until all related information is available.
		.2	Issue submissions at least 10 working days before dates

- .2 Issue submissions at least 10 working days before dates reviewed submissions will be needed.
- .3 Submit one reproducible transparency of Shop Drawings and six (6) copies of product data for review by the Engineer. Upon review, two reviewed copies of the Shop Drawings will be returned to the general contractor. It is the general contractor's responsibility to transfer these comments to additional copies of the Shop Drawings for use by suppliers and subcontractors.
- .4 Accompany submissions with Transmittal Letter, in duplicate, containing:

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		.1 Date	
		.2 Project title and number	
		.3 Contractor's name and address	
		.4 Number of each Shop Drawing and product data	
		.5 Other pertinent data	
	.5	Submissions shall include:	
		.1 Date and revision dates	
		.2 Project title and number	
		.3 Name of:	
		.1 Contractor	
		.2 Subcontractor	
		.3 Supplier	
		.4 Manufacturer	
		.5 Separate detail when pertinent	
		.4 Identification of product or material.	
		.5 Relation to adjacent structure or materials.	
		.6 Field dimensions, clearly identified as such.	
		.7 Specification section number, where specified.	
		.8 Applicable Standards, such as CSA or CGSB numbers.	
		.9 Contractor's stamp, initialled or signed, certifying approval of submission, certification of field	
		measurements and compliance with Contract	
		Documents.	
4.6 5			
1.6 Engineer's Review	.1	Review of Shop Drawings and product data shall not relieve	
<u>KOVIOW</u>	• 1	Contractor from responsibility for results arising from any	
		error or omission.	
	.2	The Engineer will review the Drawings within a reasonable	
		time and will return them stamped "REVIEWED",	
		"REVIEWED AS NOTED" or "REVISE AND	
		RESUBMIT".	
	.3	Resubmit immediately Drawings noted "REVIEWED AS	
		NOTED" if requested by the Engineer to ensure that	
		corrections have been made.	
	.4	Drawings requiring resubmissions to be either corrected and	
		resubmitted or to be superseded by other submitted	
		Drawings.	
		···	

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- .5 Do not make any changes to Shop Drawings after final review without written permission to the Engineer.
- .6 Make any changes in submissions which Engineer may require consistent with Contract Documents and resubmit as directed by Engineer.
- .7 Notify Engineer, in writing, when resubmitting, of any revisions other than those requested by Engineer.

------ END ------