



Project: Vacuum Sewer Monitoring System

Location: Lake of the Woods, VA

Addendum No. 1 – Q&A

Question No. 1

Under the scope of work for the Valve Pit Monitoring Kits, is a vacuum sensor intended to be installed at every valve pit, or only at a defined percentage of the system? While vacuum measurements can be collected at each pit, we generally do not recommend full saturation, as it can lead to excessive data density (“chart junk”) without providing additional operational value.

Answer

Vacuum sensors should be equipped on 20% of valve pits within the project scope. All equipment in 100% of valve pits should be ready to receive the vacuum sensor signal to accommodate easy relocation by RSA staff.

Question No. 2

Section 3 – Technical Requirements (Valve Operations): The specification references a minimum of five (5) air injections per zone. Please clarify how a “zone” is defined for this project. Is each vacuum station considered a separate zone, or are multiple stations grouped within a single zone? Based on this definition, please confirm the total number of required air injection points.

Additionally, do the air injection controllers need to be easily relocatable between valve pits without requiring physical infrastructure modifications to support system commissioning, ground-truth validation, and fine-tuning of operational parameters?

Answer

Each station serves a “zone.” Upon further review and in consideration of the varying number of lots served per zone, the following table describes the required number of air admittance/air injection points per zone. The total number of points is 43.

The air admittance/injection controllers should ideally be easy to relocate between valve pits with minimal modifications. Understanding that different power or equipment requirements may accompany this functionality, *this process should be detailed in submitted proposals. Staff will evaluate this alongside the various other requirements.*

Zone	Number of Air Injection/Air Admittance Points
A	3
B	5
C	6
D	1
E	6
F	4
G	1
H	2
I	2
J	4
K/L	5
M	1
N	3

Question No. 3

As the project appears to be specified as a turnkey delivery, we assume the successful bidder will be responsible for the supply and installation of all gateway towers and associated equipment. Please confirm this assumption.

Additionally, please advise if there are any preferred tower types, height requirements, or restrictions that must be considered. If existing infrastructure (such as water towers or other elevated structures) is available and acceptable for use in lieu of constructing new towers, please confirm whether this is permitted and identify any known options.

Answer

The successful bidder will be responsible for supply and installation of all gateway towers and associated equipment to achieve full coverage of the Lake of the Woods collection system. This work may be subcontracted and is not required to be performed by the bidding company. Understanding that the exact number of required gateways will be unknown until the winning bidder is granted access to survey and investigate the work area, these expenses can be separated from the lump sum price as additive alternates.

Once ideal gateway locations are identified, RSA will coordinate with the Lake of the Woods Association and Orange County to obtain necessary approvals.

The following RSA-owned elevated water storage tanks are available to be used for communication gateway installation.

Tank Name	Type	Capacity	Ground Elev.	Bottom Elev.	Overflow Elev.	Coordinates
Rte. 601 (Flat Run Rd. LOW)	Elevated, pedosphere Steel	500,000	367	467	503	38.34190727437217, -77.77575976617437
LG Middle School Tank (Flat Run Rd.)	Elevated, pedosphere Steel	500,000	389	467	503	38.312171866012314, -77.78157152863595
Wild. Shores (35249 Wild. Shores)	Elevated, multi-column Steel	250,000	332	467	503	38.36857928334329, -77.75883298034161

Question No. 4

Do you have an estimated project start date?

Answer

RSA is eager to begin work on this important project. The pricing provided by bidders should remain valid for 90 days. At least 5% of scoped valve installations should be complete within 6 months of contract execution. A proposed timeline detailing project phasing should be included in bidder proposals for consideration by RSA.