Exhibit Y

From: Mike Miller
To: [redacted]
Cc: Roxanne Johnston
Subject: RE: GSI report and request
Date: Wednesday, November 17, 2021 4:45:41 PM
Attachments: Pumping at Fairway Estates.pdf

Hi Steve,

Sorry for the delay. We have been busy with a number of items and the last few days we have been assisting Mapleton Water District with their emergency.

Here are the answers to you questions (**in blue and bold**) from GSI Water Solutions:

1. If their numbers are correct, and infiltration damage to our slope is a mathematical impossibility, how would it be possible for a previous infiltration system had created a major spring hot spot that nearly destroyed the home at Seawatch lot 16 ? (proven by dye tests and corrected after it was removed)

A dye test is used to trace the pathway of water movement (in this case, to confirm that infiltrated water reaches a spring). However, infiltrated water reaching a spring does not necessarily mean that spring flow (and potential erosion) increases. For spring flow to increase, the groundwater level near the spring must increase (thereby increasing the potential energy of groundwater and the resulting flow rate).

When water is infiltrated, the groundwater level below the infiltration facility rises, forming a mound under the facility. The rise is greatest adjacent to the infiltration facility and becomes rapidly smaller with increasing distance from the infiltration facility (the groundwater surface on the sides of the mound are concave upward). Therefore, the potential for a groundwater level rise to affect a spring depends on the distance between the infiltration facility and the spring. The hydraulic analysis showed that the planned infiltration galleries are located far enough from the spring that infiltration would not affect groundwater levels near the spring and, by extension, increase groundwater flow or erosion rates of the bluff.

2. After the clear cutting of Fairway Estates an their infiltration was system installed, the Coast Guard Station had major groundwater issues. We had sent the City notice of this predictable possibility in 2018. We currently have a request to Home Land Security for the details and engineering notes on how they corrected it. Not sure we will get them as it is a national security base. However, we did talk to them about it. They apparently dug a collection trench to collect the infiltrated water, and then rerouted it to a non sensitive engineered area. Such a system would be of little cost if put in as planned item vs. after the fact. Fortunately they had Federal funds to address, will the City? . We'd like GSI to at least talk to the Coast Guard or their engineer as the new development poses the same issues for Sea Watch Estates.

Is your question regarding whether the groundwater issues the Coast Guard experienced after development of the Fairway Estates can be expected by Sea Watch after development of the 35th and Rhododendron property? If so, we are not familiar with the Coast Guard's groundwater issue and would have to do an information exchange to determine whether the situations are

hydrogeologically similar enough to warrant further investigation. We note that because the hydraulic analysis did not find an increase in spring flow, there is not a reason to divert the 35th and Rhododendron development's stormwater to a different location from the perspective of bluff protection.

Steve, I would like to provide some information regarding your question above. If it is in regards to the 2017 rain events, Fairway Estates was not completed (the streets were still gravel and the stormwater system had nowhere to discharge). During the stormwater events of February-April 2017, the City rented large capacity pumps to pump water from several locations inside Fairway Estates to reduce localized flooding in Mariners Village. Please see attached PDF of the locations and direction of flow of the pumped water. The map was produced at the end of March 2017 and noted conditions at that time. The oval areas is where the groundwater had become surface water and ponding occurred. Again, Fairway Estates road network was still gravel (same basic condition it had been since 2007) and the stormwater system was a closed system with no outlet. It wasn't until later when Fairway Estates installed a 15-inch stormwater line along Rhododendron and connected to the stormwater system just north of 35th that crosses to the west side of Rhododendron Drive into 'Buds Ravine'. The 15-inch stormwater line is connected to a flow control manhole at the entrance to Fairway Estates that meters the stormwater from their system to attenuate flows.

Thank you,

Mike

From: Steve WILLIAMS [redacted]
Sent: Monday, November 8, 2021 4:46 PM
To: Roxanne Johnston <Roxanne.Johnston@ci.florence.or.us>; Mike Miller <mike.miller@ci.florence.or.us>
Subject: GSI report and request

Dear Roxanne and Mr. Miller,

I reviewed the 7/21/21 report from GSI.

We had 2 questions of which we'd like to ask GSI about our concerns at our own expense, but would need the City to approve so they wouldn't be in conflict of interest.

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Please advise - as we all know time is short and unfortunately our requests to have this look at made in 3/21 were not considered in GSI scope of work.

Sincerely, Steve Williams


4-inch trash pump. This pump has a small tank and runs approx. 90 minutes on a tank. Only operate during the day and we are discharging to the unfinished storm system. Pumping activities dewater the area during the day.
Groundwater areas
4-inch diesel pump from RWI. We have also had the 6-inch pump at this location too. Currently pumping into a catch basin which is bubbling up through another catch basin and entering the drainage system in Royal St. George.
3-inch diesel pump. We have been pumping from this location for the last several weeks.
Spyglass Ln
Mariners Ln
Rhododendron Dr
Google