Roxanne Johnston

From: Steve Williams <Seawatch_18@yahoo.com>
Sent: Tuesday, March 16, 2021 10:02 AM
To: planningdepartment
Subject: RE: Resolution PC 20 07 PUD 01 - PC 20 08 SUB 01 - Rhododendron Drive

RE: Resolution PC 20 07 PUD 01 - PC 20 08 SUB 01 - Rhododendron Drive
Information relative to stormwater design for development.

From: Steve Williams, 18 Sea Watch Place, Florence Oregon
Bc: Sea Watch Hearing Group, Bruce (Idylwood)

Dear City of Florence Planning Department:

I read the editorial by Dana Rodet in the Siuslaw News (3/13) where he stated a concern about the importance of City planning for drainage issues (second to last paragraph) “get it right”.

Residents at Sea Watch Estates have related to me that when the storm drain system was installed nearby (that the 35th street project could have potentially used), it was pointed out to the City that it was not correctly sized for future growth. This could cause future groundwater/spring erosion issues for Sea Watch Estates in the future since it there would be no capacity for future development.

Mr. Miller has verified this capacity issue. Hindsight is valuable, but only if you learn from it.

I want to be sure that both the City and the developer are aware of the following information and will share with the hydrologist and stormwater design people (Items from **Resolution dated 09/08/2020 Chapter 34 item 26 and Title 11 Chapter 3 item 30).**

Relative information:

1. Emails and notes I’ve sent to the planning commission concerning 1998 issues from Sandpine infiltration, City meeting note (attached), and references to Geological reports the City accepted from Sea Watch Estates.
2. History of the issues that resulted from concentrated spring outflow and focused infiltration from the east side of Rhododendron and 35th Street (Records are in the City system including additional Geo reports).
3. My letter to the City dated May 2018 noting our concerns about the infiltration system with Fairway Estates development. The City should already be aware of and review the damage that resulted to the adjacent Coast Guard Station which resulted in an extensive horizontal drainage system installation to correct the situation. Repairs were paid by Federal Tax dollars. T**hey did find a solution after the fact - I think this would be key to designing cheaper and proactive solution design.**
4. My written testimony presented to the City council during the Appeal Process. I explained further the “Hot Spot” issues and how the City may have to reconsider piping water to a safe, non vulnerable infiltration area, eg. like the Coast Guard repair.
5. USGS report 1539-K was done in 1963 that references the spring runoffs from the dunes unique to this area of the City, as well as evapotranspiration factors of groundwater recharge. This should be a part of the review, as it independently confirms the other reports and information given. This is available online.

Evapotranspiration (or lack of) will be the increase of surface water that will be added to the flows of the surface springs from the loss of natural evaporation areas and to what the vegetation would normally absorb. I estimate that this would be about 0.5 -0.8 million cubic feet of additional focused spring drainage from the

development's 9 acres that would discharge at Sea Watch Estates annually. This will probably be focused into 2-3 spring outlets (hot spots) that would create erosion. Without corrective action or directing this additional water to a non sensitive area (like the Coast Guard did) would almost certainly result in home and property loss.

I can understand Dana Rodet's concern as stated in the second to last paragraph. Idylwood and Seawatch Estates have similar situations subject to groundwater issues from a limited aquifer. Idylwood has surface spring flooding (instead of our slope spring erosion). Thinking that additional water introduced to a shallow aquifer would "stay on the property" is unreasonable. The water doesn't necessarily respect property lines, as it will flow and surface on lower adjacent lands. The City may want to consider this when approving excavations, drainage reconfigurations, evapotranspiration issues from any reduction of seasonal lakes that allow for onsite evaporation, and vegetation removal for homes and roadways.

In our situation at Sea Watch Estates (a City planned community), the City has a right to use imminent domain to drain waters through our slope vs. investing in other methods that would not be destructive to our community. We feel it important that the developer, hydrologist, and the people planning and approving the storm water plan have this information brought to their attention. Not doing so could be viewed as limiting the scope of evaluation opening issues of liability.

Idylwood lies within Lane County boundaries, so they have little say with the City. I would just like to say that, as a city resident, I feel they do have very valid concerns and worries.

We have reached out to the City after the Fairway Estates project several times since 2018 to try to work with them in avoiding a repeat of their infiltration effects to neighboring properties and also avoid a repeat of the Sandpines 1998 infiltration damages to Sea Watch. We still would like to work with the City with this effort.

Knowledge and historical information are key. I hope the City will consider this and be willing to work with us to a productive end.

PS. We monitor the agendas, but is it possible to get notified when the Hydrologist report and storm water system plans are submitted ?

Sincerely, Steve Williams - Sea Watch Estates.

From: Steve Williams
To: planningdepartment
Subject: Written Testimony - Non agenda item for 3/23/2021 Planning Meeting
Date: Wednesday, March 17, 2021 12:51:19 PM

Written Testimony - Non agenda item for 3/23/2021 Planning Meeting

Subject - City Storm Water Considerations For Shallow Aquifers

From: Steve Williams, 18 Sea Watch Place, Florence Oregon

Dear City of Florence Planning Department:

The City has a practice of infiltrating all stormwater onsite - not to leave the property. This would work in many areas of Florence with deep aquifers (100+ ft of sand).

In some areas the sand overlying the impervious clay or mudstone is quite shallow, infiltration on one property will move laterally to a lower adjacent property and can surface as springs, causing flooding, or erosion. It can also result in damage and/or property loss for the adjacent property of an infiltration site.

To compound this issue, when a development is done, there are two other issues that increase infiltration issues:

1. **Evapotranspiration**
   (definition - the process by which water is transferred from the land to the atmosphere by evaporation from the soil and other surfaces and by transpiration from plants.)
   When a property is cleared and covered with a hard surface, Evapotranspiration is eliminated. Bottom line is now you could increase the amount of infiltrated water 20-30%, compounding issues with adjacent properties
2. **Hot Spots - Focused pressure**
   When a property infiltrates, it focuses water to a limited set of points to be absorbed. Instead of an even distribution of rainfall, these points focus flows, that in turn reamerge at specific springs with tremendous flows and water pressure. This can cause erosion and/are flooding in specific areas of adjacent properties.

Title 9 Chapter 5-3-2-D of Florence City code covers evaluating this spring/surface water issue within a ¼ mile from infiltration.

As Florence grows by leap and bounds, this problem will be coming up more and more. I'm not a hydrologist. But I have a degree in geology and have been researching City public documents, several geologic reports and government publications (like the USGS report 1539-K was done in 1963). The USGS report references the specific areas of Florence that end up as spring runoffs instead of being absorbed. It also references evapotranspiration factors of groundwater recharge.

When Fairway Estates went in, Sea Watch had concerns about the infiltration issues. We were told by Coast Guard personnel that this created major issues for them and they had to do major construction (horizontal collection and rerouting of the additional groundwater to a non sensitive infiltration area) to save their site.

Records show 16 Sea Watch Ct. had a major issue with localized infiltration at Sandpines developing a hot spot at the home site (proven by a dye test). This could have been easily corrected if the problem was recognized and addressed early on.

We still are looking to work with the City on this issue, and to allow developers to develop - but not at the loss to our homes.

Groundwater isn’t an exact science, many can have opinions. However, having plans to monitor changes, plans to quickly address unexpected outcomes, and foremost, letting people know this is being done is important. These shouldn't be controversial.

The effects of Fairway Estates missed us, but we do have concerns about other nearby developments being considered.

There are solutions for this issue, and ways to determine which areas it applies to. I hope the above information can be considered and are helpful.

I will again offer (as in Email dated May 2018), we truly want to work with the City on this issue.

Sincerely, Steve Williams - Sea Watch Estates