121 Saranac Drive Missoula, MT 59803

November 30, 2018

Territorial Landworks, Inc. PO Box 3851 Missoula. MT 59806

We have received the letter regarding the Hillview Crossing development and have a number of concerns and questions. We are 53 years residents of Missoula and of 121 Saranac Drive. Our phone number is 251-4107. We are also sending these concerns to the Missoula City Council.

We have lived in our home on Saranac Drive since July 1965. Our house is located directly beneath the proposed development. During our time here we have experienced three events in which runoff was a problem. In one such case enough water ran between our house and the neighbors over three days that was deep enough to potentially run a jet boat. These events all happened prior to completion of the drainage project, including the repair and improvement of the ditch above our house. Even though the ditch has been improved it is still a gravel and earthen ditch which is susceptible to washing out and is what happened with the previous smaller ditch.

The situations which caused flooding in the past included an early winter heavy freeze on a bare hillside, enough that moisture could not be absorbed into the ground. What followed was the equivalent of a chinook with warm wind and rain, causing the snow to rapidly melt.

Until the drainage system was built we were in the hundred year flood plain. For us this meant that, when we wanted to build a second garage on to our house, FEMA restrictions would require that the floor of the new garage would end up being 3 feet higher than the existing garage floor. Needless to say, we dropped that plan until the drainage system was complete and we were removed from the hundred year flood plain.

We are aware that much work has gone into the planning for this development. At the community meeting held this summer in Wapikya Park the engineers assured us that they would be able to design the basin project so that runoff would not be a danger to the homes at the bottom of the hill.

We are concerned about water coming off the hill if it is not properly drained. In looking at the drawing it looks like the drainage water could possibly come out the northeast end of the basin project if the streets are running downhill in that direction as it appears. How much water could possibly come down and wash out the ditch below?

The total site area is 1,116,317 square feet. The area covered with buildings, driveways, streets and sidewalks will become impermeable to water absorption, much like the frozen hill which only happened in the winter. Now we will have the equivalent of frozen ground year round in that area. With spring and summer rains the water will come down rapidly from this sloped development. Imagine if we received two inches of rain in 4 hours, which is certainly possible. How many gallons of water would be coming down the storm drain system that is being developed?

Statistics for average rainfall are interesting, but weather patterns can change. A couple of years ago there was a heavy rainfall above the Weaver Ranch east of Bearmouth on Interstate 90 which caused

many small washouts visible yet today on the mountainside. Just this spring our son who lives off Colorado Gulch west of Helena experienced eleven inches of rain in one rainfall. Water rushed down the mountainside and saturated the ground such that there were streams of water both above ground and under ground. The rapidly moving water actually penetrated the electrical panel located on the basement wall.

What has been a hundred year average may be changing to a 50 year pattern due to what seems to be happening with the weather. No matter what the average is one weather event could flood us out. We have homes with basements and some with basement bedrooms. A flooded basement could destroy a house. Would Hillview Crossing development cause FEMA to designate our area once again as being on the 100 year flood plain? Would flood insurance be required for us on the bottom of the hill? Does FEMA have any input into the final project or is the decision only made by local engineers and City Council?

Please consider this: Do not locate any drain pipes above any houses on Saranac Drive. Any drain pipes should drain to the west of Saranac because of the possibility of the ditch being breached. A plan I saw looked as if a drain pipe might come out above the house at the end of Saranac which is owned by Tyler who is wheelchair bound and in no way could hurriedly exit his house in case of sudden flooding.

When we have had a sudden heavy rainfall our street has looked like a river as the French drains cannot contain all of the water. The water from Cohosset flows into Saranac and then overflows into Wapikiya Park where we have seen water 3 to 4 feet deep even without the water from the hill.

Regarding the project design we are disappointed about the height of the buildings as the winter sun right now just clears the hill enough to give us some sunlight in our sunroom. When the development is built we fear the shadow created by the buildings will impact the winter sun for us plus affect melting of snow and ice on Saranac Drive itself, which will then impact all the foot traffic on our street —people jogging, parents walking children, bicyclists of all ages and dog walkers. And consider Tyler who needs to operate his mouth-driven wheelchair on such a street.

Other questions and concerns we have:

- Will any runoff water from Hillview Way join the runoff from Hillview Crossing and thus impact that runoff?
- Has there been any consideration of the seconds it takes for a vehicle exiting from Hillview Crossing to safely enter Hillview Way given the crest of the hill which limits vision? From about November 10 until early January anyone exiting Hillview Crossing in late afternoon will find that in checking for downhill traffic their vision will be dangerously impacted because they will be looking directly into the sun. Likewise, anyone driving up Hillview Way will have a difficult time seeing a pedestrian in the planned crosswalk.
- Is it legal to have only one entrance/exit for such a large development?
- We have always had a concern about arcing wires, firecrackers, lawn mowers, kids with matches and adults throwing cigarettes out car windows. With the sometimes 25-30 mph wind we can get (like the wind the afternoon and evening before the Cat/Griz game) and the grass in the pasture land both east and west of the development the chance of a fast-moving grass fire is a definite possibility. Add to that the closeness of all those units in the development—could we be looking at our version of Paradise, California? We all know how dry our summers can be.

- Could you provide a contour map overlaying the site plan to show where water will run on/off the streets in the development? Using a GPS we discovered that the elevation at the top is 3620 and the elevation to the runoff ditch at the bottom is 3420, a drop of 200 vertical feet.
- Who will maintain the ditch?
- We understand that originally the area along the bottom of the hill was a cattail swamp and was filled in before the houses were built. When we were being sewered we were able to see the black dirt which was at the bottom of the cattail swamp before fill was added. Could Hillview Crossing cause a cattail swamp to be reformed in Wapikiya Park, Honeysuckle Park and Meadow Hill School?
- In the future will there be another development on the other side of Hillview Way to add to the runoff problem?

We wrote this letter in lieu of appearing before the City Council where we could not properly address our concerns and questions in the allotted time. We appreciate your taking time to read this and consider our concerns.

Most of the people in our area have not lived here long enough to experience runoff from the hill, but we do have some history upon which to draw. We love this area and just want it to retain its character as a safe environment for kids, adults and pets.

Thank you for your consideration.

Sincerely,

Donald C. Henrikson

Karen E. Henrikson

Karen & Henrikson