

THE MOST EXTREME SITE PLANS REQUIRED MASSIVE OPEN PITS MINE TYPE BLASTING - IN THE MIDDLE OF A CITY

The Burlington Hill development plans required extensive bedrock excavation and blasting to accomplish the development proposal. Even the least aggressive plans required extensive blasting quantities of high explosives, which easily reached over 10,000 pounds. There is no evidence that this activity was done in "lifts" as suggested. There is evidence for reasons unknown, that specific blasting methods were not implemented that would have prevented a significant compromise to the extensive bedrock excavation from potential problematic bedrock failures. Evidence suggests this more than likely happened, especially considering that the City of Burlington's Planner Margaret Fleek had no training or experience in estimating blasting quantities and deep excavations that potentially and dramatically compromised and destabilized the remaining Green Schist and fractured rock on Burlington Hill.

For the utility trenches – (an activity that do to road failures and then the ultimate attempt to repair, in the years of 2006 thru 2008), became a significant compromise to accomplish; and had taken many years longer than the verbal promises of completion. The proposed blasting itself has many potential public safety, noise, air quality and other problems that aren't identified in the year of 1999's EIS draft or final, or the required EIS for the road rebuild in the years of 2006, 2007, and 2008.

Proposed for the top of knob will add dramatically to the weight the knob is expected to carry, after it's structural capabilities have been significantly compromised by being undercut and by blasting. The shock wave from blasting not only effects the rock that is being removed, at least half of the energy will go into the surrounding bedrock that is being left to support the roads and large buildings. That powerful shock wave will destabilize the remaining Green Schist or fractured rock.

Burlington Hill's greatest risk are:

1. They have steep slopes - sometimes vertical - exposed faces directly above existing houses - and these steep faces already have observable landslides.
2. The steep faces indicate that the existing rock is hard and coherent, therefore is likely to require the most blasting. As the EIS did not point out, that part of the proposed development critical areas can't be removed by any other method. It is not possible to accommodate any of the development alternatives without considerable blasting.

The shock wave had negatively affect the remaining rock and slope in five ways:

1. It created micro-fractures throughout the remaining bedrock and therefore accelerate water percolation & weathering, potentially dramatically accelerate it. All rock were affected this way, however fractured schist is extremely vulnerable to it. When trying to use fractured schist rock that has been blasted for rockeries, it is common to find that the rock crumbles to sand the first or second winter through melt freeze.

2. The shock wave had cross and reverberate off of bedding planes in the fractured schist, which caused large sections of the rock to lose their cohesion to other large sections of rock. In time, this allowed water to percolate through many more fissures in the rock which in turn produce the lubrication that created soil and bedrock failures. In all of the site plans, there was a high likelihood of failure underneath the large proposed buildings and roads. Rock stabilization measures such as bolting are extremely expensive, may not be effective and may not be available in some areas since the affected area would include other private land. Again, all of the fractured schist rock had some negative effect from blasting this way. It is difficult to create a clean break point across rock seams and leave the existing material intact. With fractured schist that already has a tendency to have weak bonds between bedding planes, the energy wave will react differently between different planes dislodging them from one another. Differing density and cohesion are both a factor.

3. The shock wave reaching steep exposed faces reverberate back into the rock since only a fraction of the energy was absorbed by less dense materials like air. This produces turbulence much like water waves bouncing off a rocky point and substantially increases fracturing. As an example of this is blasting a boulder that is buried in the earth will have a dramatically different effect than blasting the same boulder that is fully exposed to the air. The one that is buried will require a larger amount of explosive to just split it into two or three pieces, whereas the exposed boulder will crumble easily into many large and small particles. The steep exposed faces on the northwest and southeast sides are very susceptible to this effect, even if the blast is some distance away. This will result in short term issues of how to mat the exposed faces so no fly rock occurs and long-term issues of bedrock and slope stability.

4. Trenching for utilities was very problematic since higher quantities of explosives were needed to make the material move out of the trench. The surrounding bedrock absorbs much of the shock wave, further compromising its integrity. This type of trenching was necessary for many of the roads and buildings on the ridges.

5. The thin layer of soil and vegetation covering the ridges, particularly on the northwest and southeast edges of the site where known slide areas exist were compromised by the blasting. The shock wave negatively affected the contact between the soil and roots from the rock. Potentially, it locally liquefy any saturated soil causing it to fail. Also, the City of Burlington's 1997-98 Annexation application and 1999 EIS/SEPA process, makes no reference on the applications that soils are laced with an Actinolite Mineral Non-Metallic Rock a (form of a Naturally Occurring Asbestos throughout the site. In recent years there has been a rising concerns over potential public exposure to naturally occurring asbestos (NOA). Consequently, geologists are increasingly called upon to evaluate the NOA potential of property prior to land-use decisions, land acquisition, or property development. All these points are very relevant to the development plans for large-scale excavation on many parts of the site, but it's particularly problematic for both the near and long term safety.

These are significant negative impacts of any or all site development plans, and it's physically impossible to mitigate them. Only the no action alternative avoids them. (*This never happen*).

In the EIS, all site plans are consistently analyzed as if the specific road and lot boundaries are the extent of the affected area. As we have concluded, this is fiction. Much of the rest of the site was consumed by cut and fill slopes to accomplish what exists today. Many trees in the wetlands and wetland buffers were removed when the rest of the area was cleared, further compromising the wetlands effectiveness. As for the 1997 request for annexation application filled out by the city planner stating there would be habitat, recreational, aesthetic or carbon sequestration value in the cut and fill slopes, none of that ever happen. The City of Burlington's EIS did not thoroughly examine impacts from the actual footprint of the developed area.

Turns out these aren't just arguments about passion for urban natural areas. The EIS has vastly underestimated the recreational use and value of the Burlington Hill development. It fails to recognize the many harms that its development will cause, and have caused to our quality of life, to our health and the economic well-being of its contribution to the area's economy. It also fails to recognize the many studies that have shown that preserving such places in cities is critical to crating quality urban densities. "Environmentally critical areas cover almost the entire site" yet this seems to have been lost in the conclusions.

Did the construction history of the parties involved study and assess the probability of RCW'S and WAC codes actually being followed?

Even in a perfect world where RCW'S and WAC codes would be followed, how can such a massive development removing such a large volume of trees, and vegetation, and mass quantities of potentially laced Asbestos, operating on such steep slopes, in a known Seismic Zone 3 location, not have significant consequences. The idea is laughable.

Finally a no action alternative would had resulted in a denial of the application, but also as a result of future negotiations the city could have acquire the property for open space. This glosses over what became a HUGE negative change to our visual landscape, not just for Burlington Hill users but for every one of us as we drive, walk, and live in the greater Burlington area. In addition, the shortcomings of the EIS are so substantial that a supplemental EIS should be prepared and issued for further Public Review. The lead agency had missed significant issues/impacts in the draft and final EIS, especially when Burlington Hill description suggests that the property is predominantly a logged off Asbestos gravel pit.

The City Planner Margaret Fleek's Strategic Plan for the handling of its Critical and Hazardous and Sensitive Site Environmental Review process for the Burlington Hill Development, turn out to be nothing more than a "*bogus scheme,*" or "*a scam,*" according to the facts that have been obtained.

The Washington State legislative requirements, for the handling of a Critical, and Hazardous Sensitive Site was for a thorough consultation by the Environmental and Planning Authority.

The SEPA process is meant to regulate the sustainable management of land and its resources and should not replace existing policies for the approval of an illegitimate development.

The City Planner Margaret Fleek's 1999 SEPA Application, simply lists key principles and very broad objectives, which contain very little specific detail in its report to the "facts on the ground," and was not in line with legal requirements set out under the 1990 GMA Act. In no way could Burlington Hill's SEPA Application ever be considered as an adequate or legal document.

The laws governing the SEPA process stipulate that the plan must set out policies on use of land together with a justification for each policy and proposal.

Whether any of the objectives in the 1999 SEPA document could have been achieved, would have depended exclusively on political will.

While falling short of the legal requirements under the 1990 GMA Act, along with numerous RCW and WAC codes that were required for the city to adhere to. The 1999 SEPA approval report "seems to rubber stamp the 82 lot development as well as a proposed multi-family condominium site in an around a Mineral Resource Non-Metallic Rock Quarry, without a single word of onsite identification being required or for clarification to the possibility of additional conditions needed for review; which all leads to speculation, of "*a scam,*" or a "*bogus scheme.*"

What is ultimately disturbing was on January 13, 1999, at the time of the environmental review process, some 5 years after the city and the developer teamed up, Washington State had a number of laws to accommodate incompatible urban developments, which was designed to protect the "people", and not expose them to, or place them in, "*harm's way,*" or create a loss, of one's "*quality of life.*"

Unfortunately, when the City Planner Margaret Fleek presented her facts, in her Washington State Department of Ecology's January 13, 1999 SEPA application, Margaret Fleek, was very clear and concise, in using her own words, and expressions. Then in the year of 2012, at her deposition she was caught changing the original use or meaning to what one could regarded as being erroneous or debased to the actual facts.

One can only conclude that the City Planner Margaret Fleek's January 13, 1999 SEPA application; using her own words and expressions, was *purposeful* in leaving out vital and pertinent information in her environmental analysis being presented to the Department of Ecology. Clearly in reviewing Margaret Fleek's words, they were no doubt misinterpreted, or in other words, "*lost in interpretation.*"