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Ivins City Council Public Hearing Sept. 1, 2022

PLEASE ADD TO THE PUBLIC RECORD

SITLA120 ISSUES

SITLA120 and the St George Regional airport both sit on top of the Chinle Geological Formation. In this formation are deposits of expansive clays we know as"Blue Clay."

.Blue clay can expand over 8% in volume,and exert an upward force of15,000 lbs per sq.ft., just by getting wet.

SGU's new airport is a great example. In 2007, a 366 page Geotechnical Report from one of our Nation's best Engineering companies, cleared the runway for construction in 2010. As I'm sure you may remember, even with this exhaustive review, they got it wrong. The clays were in deep layers below the excavated runway base specified. Over a period of years water reached the clay. The runway had to be removed and replaced in 2019 by a new runway with a 17' deep buffer of clean fill at a cost of over $22M. SITLA120 could easily face the similar problem and this poses risks to Ivins. I have submitted a GRAMA request to SITLA for any of their SITLA120 geotechnical reports and I am waiting to hear back.

SITLA120 RISKS TO IVINS

Construction delays and overruns due to high incidence of expansive clay mitigation costs could lead to investor or developer bankruptcy.

>> Should we require completion bond for reclamation funds?

Clay expansion is a timeless risk. Water activation can and does occur with changing surface conditions, and changes in ground water flows.

>> What litigation exposure does Ivins incur with long term liability by permitting construction on this project knowing the risks of expansive clays?

Within the past 4 years properties directly adjacent to SITLA 120 on Mesa Vista required over excavation of up to 27' deep, and then refilled with clay free soils. This can easily negate low cost building.)

>> Is there a contingency plan with soil removal and fill routes approved that does not travel on residential roads?

In summary, where expansive clays are present or expected, Ivins needs very clear soil testing requirements, expansive clays mitigation standards, and a soil removal / replacement plan completed and approved prior to a permit being issued. This risk is too great to be born by our city.

SOURCES:

https://archives.stgeorgeutah.com/news/archive/2019/05/29/jcw-as-4-month-airport-closure-takes-effect-a-complicated-tale-of-blue-clay-and-bureaucracy-comes-to-light/#.Ywvf6C-B3Mo

https://suindependent.com/geological-wonderland-blue-clay-chinle-formation