



January 27, 2021

City File: RV20-02
County File: PL20170009

Department of Planning and Development
Rocky View County
262075 Rocky View Point
Rocky View County, AB, T4A 0X2

SUBJECT: PL20170009/10 (Div. 2) Riverside Estates Conceptual Scheme

Dear Andrea Bryden,

The City of Calgary has reviewed the above noted application in reference to the *Rocky View County/City of Calgary Intermunicipal Development Plan (IDP)* and other applicable policies. Due to significant risk to source water quality The City did not support the February 25, 2020 application, or the intensification of land uses located immediately adjacent and upstream of the Bearpaw Reservoir without careful planning and mitigation efforts to eliminate the negative water quality impacts on the reservoir—the drinking water source for 1.2 million people. The City's response highlighted concerns related to the lack of information on potential detriment to source water quality in the Bearspaw Reservoir, including but not limited to, stormwater management, wastewater/septic effluent, and the cumulative environmental impacts of developments on the source watershed.

The application was re-circulated in late December 2020 to The City for further consideration with supporting technical documents. The updated application did not include a summary of changes, making it difficult to determine how the applicant and/or The County had addressed previous comments. It is also unclear whether the applicant is moving forward with Conceptual Scheme approval, Springbank ASP amendment and redesignation concurrently as these details were not provided. The City would suggest that with The County proposing an updated Springbank ASP later this year, the application may be premature given an anticipated new policy structure outlined in an updated plan.

The City continues to **not support** the application and has the following generalized concerns with more specific comments outlined below:

- 1) The Conceptual Scheme lacks source water protection consideration and is silent on policy / commitment to protecting the water quality in the Bearspaw Reservoir.
- 2) Proposed servicing including the lack of centralized pipe solution, use of a decentralized wastewater solution near the Bearspaw Reservoir.
- 3) Stormwater management.

The City provides the following comments on the proposed Conceptual Scheme:

Servicing and Stormwater:

Servicing:

- It is unclear what the connectivity between the septic field drainage and the river itself. This style of septic has been proposed in many The County developments without data to demonstrate what is being discharged into the septic drainage fields.
- Clarification of septic discharge location is required.
- The relief of the land is such that the proposed septic field is situated on a central elevated plateau that slopes downward east towards the river. Having just the low-pressure system (pumped) sewage where all pumps must work together in unison for the sewage to move properly is cause for concern particularly in this instance where the system relies of a septic field near as opposed to discharging into a centralized system, particularly given the proximity to Bearspaw Reservoir. It is not clear how the system if approved will be maintained, monitored and updated in perpetuity, particularly if the system remains private.
- Ephemeral flows should not be disrupted nor have septic or urban stormwater contributions.
- Clarification is required as to whether the developer has applied for a water license or EPEA approval.

Stormwater:

- With the development located this close to the reservoir and known water quality challenges with stormwater, zero stormwater discharge either through an outfall or an ephemeral stream should occur.
 - It is unclear where the ephemeral flow occurs. Additional details are required to ensure proposed lot configuration does not interrupt or pollute natural ephemeral flow.
- The City has concerns as to whether the proposed development will follow runoff volume control targets of 45mm (5.3.1) as the statement following the policy includes: *the immediate downstream water body is the Bow River Reservoir (Bearspaw Dam) and not an erodible channel*. The City requires clarification as to whether there is a commitment to the volume control or whether The County is accepting less stringent targets. It is suggested that The County uphold the 45mm volume control target.
- The Conceptual Scheme refers to Alberta Environment and Parks guidelines which would be the 85% TSS removal for particles ≥ 75 microns which has little to do with what we would call source water protection.
 - Sensitivity analysis on system failure/potential GW contamination/non-point source nutrients (and contaminant) input to the Bow River should be done prior to the Conceptual Scheme being considered by The County.
- There are several low impact development references without details on the monitoring/maintenance commitment and assumed The County responsibility.

Source Water:

- As previously indicated the lands in question are identified by The City's Source Water Vulnerability Rating system as both *High* and *Very High* vulnerabilities. The rating holds the following implications:
 - **High:** Contaminants likely to be mobilized and transported downstream during most runoff-producing precipitation or snowmelt events. The time for runoff to reach the Bow River or Elbow River is short, requiring prompt action to be effective. Spills and other accidental release would likely enter watercourses or connected aquifers if not contained within a few hours.
 - **Very High:** Contaminants likely to be mobilized and transported downstream during most runoff-producing precipitation or snowmelt events. The time for runoff to reach the rivers is potentially very short, making response to an event difficult. Spills and other accidental releases would likely enter watercourses or connected aquifers if not contained immediately.

- The application does not provide enough details to fully understand implications to the source water supply as it relates to the water system, sanitary systems and stormwater conveyance. Reference is made to the conceptual scheme adhering to recommendations of the Springbank Context Study and updating the Master Drainage Plan and Alberta Environment and Parks requirements, it is unclear how these commitments will translate to a practical and technical perspective. Given the proximity to the Bow River and the lack of technical information provided at this stage it is difficult to offer support to the application.

- The Bearspaw Task Force Trilateral Consensus Report, approved by Rocky View County Council as an action of the Glenbow Ranch ASP mediation agreement, outlines that stormwater runoff from developed land uses contain a wide range of contaminants that can pose threats to drinking water quality. As upstream growth continues, stormwater runoff from developed lands poses increasing risks to source water quality in the Bearspaw Reservoir and Bow River. The report states that while balancing and accommodating land use change, municipalities should be evaluating and implementing enhanced stormwater design requirements in source water areas to reduce the risk of polluting drinking water supplies.
 - There continues to be no discussion on the Bearspaw Tri-Lateral Consensus report and The County Council's commitment to protecting water quality in the Bearspaw Reservoir. There has been no baseline water quality information in any of the supporting documents provided to The City. This remains a major omission must be addressed by The County and the applicant.
 - The well drilling reports should be mapped spatially using the basemap that Calgary and The County developed during the Bearspaw Task Force discussions to get a better spatial understanding. Again, contaminant travel time to the reservoir and baseline water quality is absent from the application.

- The Conceptual Scheme remains silent on source water protection which is unacceptable to The City. The applicant must provide firm policy statements and demonstrate a commitment to source water protection in the Conceptual Scheme.

General Comments:

- The Interim Growth Plan identifies as Principle 2, to protect water quality and promote water conservation. More specifically, policy 3.2.3 a. states that all statutory plans **shall** “protect source water quality and quantity in accordance with federal and provincial legislation and regulation, promote water conservation, and incorporate effective stormwater management”. The proposed application is in direct conflict with this policy as the proposed development will likely be mobilized downstream to the Bearspaw Reservoir and Treatment Plant.
- Clarification is still required as to whether swimming pools are still going to be allowed. The recirculated information did not include details as to whether the applicant was still concurrently trying to rezone the land and if so, whether amendments had been made to the zoning. The City of Calgary would continue to have significant concerns about managing and disposing of swimming pool water and how it will be managed over the long term if rezoning remains a consideration of the application.

In summary, The City of Calgary **does not support** the proposed application as the application is premature and may have detrimental impact on services and resources for The City of Calgary.

If you have any further questions, do not hesitate to contact myself.
Yours truly,



Matthew Atkinson

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