

Council Initiatives – Groundwater issues in Elbow Valley West

February 21, 2023



Elbow Valley West Development -Timeline

- Project received Council approval in March of 2004 (Conceptual Scheme).
- Land Use granted in April of 2006.
- Subdivision approval in June of 2006.
- Stormwater plan required Alberta Environment approvals.
- Subdivision servicing commenced in 2007 and were completed in 2008.
- County issued Construction Completion Certificates for the infrastructure in July of 2009.
- County issued partial Final Acceptance Certificates EVW infrastructure in 2013.
- Remaining infrastructure turned over to the County 2020/2021.



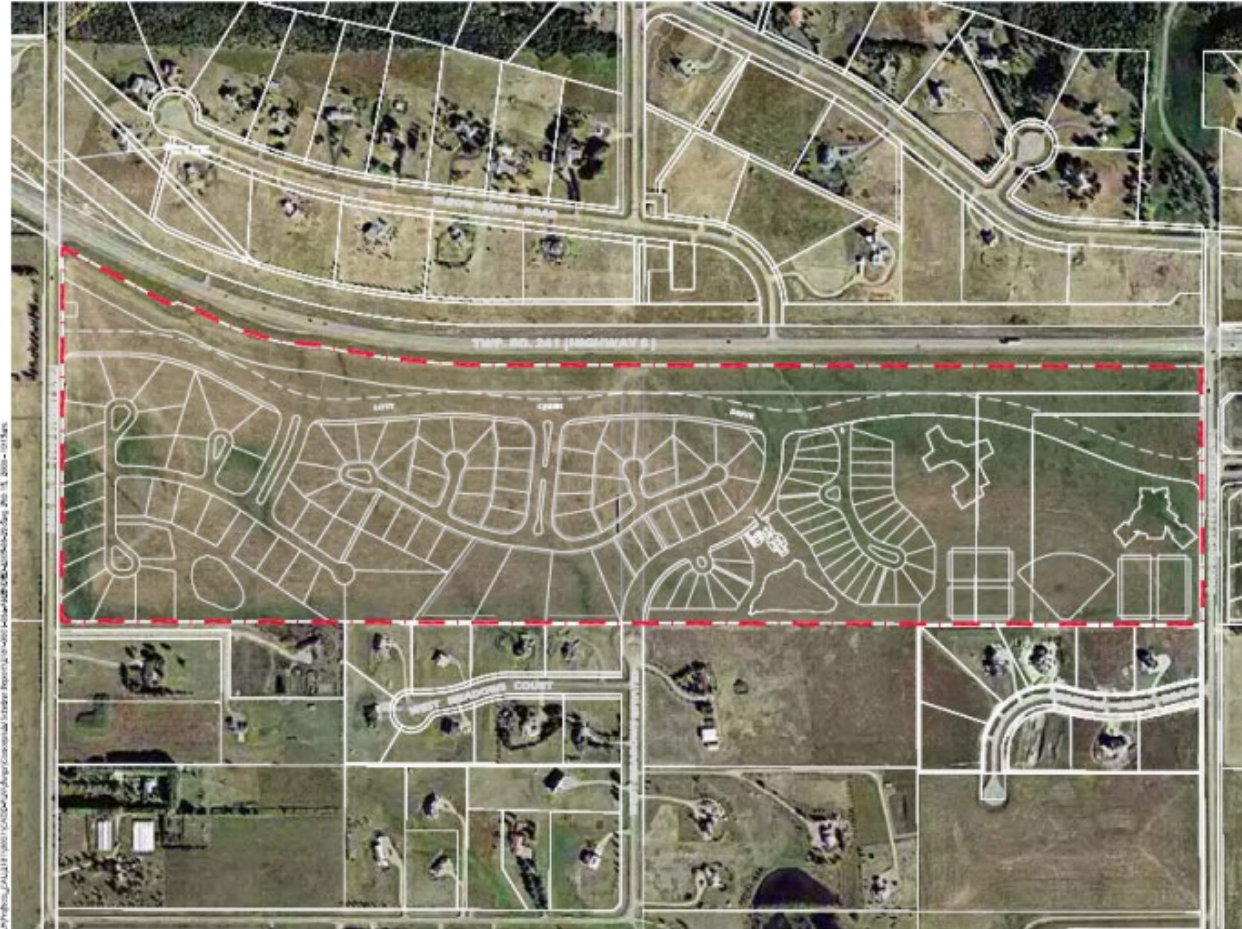
Elbow Valley West Storm System – Timeline

- Design met standards of the day (Alberta Environment Guidelines).
- System collects drainage in two retention facilities, a Stormwater Wet Pond and Dry Pond prior to release offsite.
- At the time of approval, no volume control requirements applied to the design of developments and their stormwater retention systems.
- Original design had a Dry Pond north of West Meadows Estates discharged south.
- Wet Pond that discharge to the east and eventually Range Road 31.

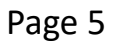


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Millarville Land Company Inc.

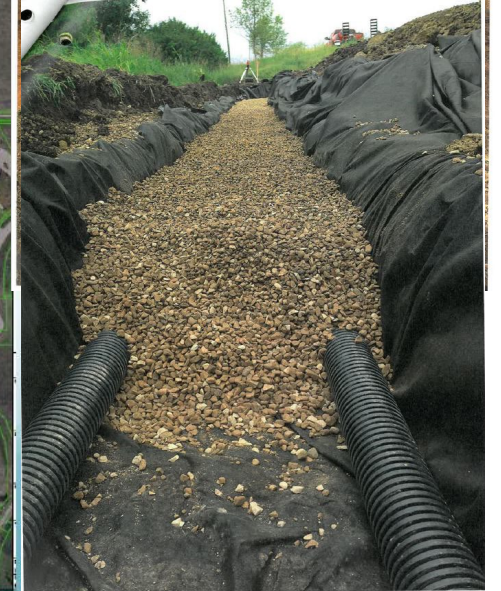


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2012/2013 Dry Pond Construction Program

Catchment Area Draining Into North Section of Dual Ditch



Current Status



Elbow Valley West Storm System – Wet Pond

- System continues to operate utilizing a concrete swale to minimize infiltration into the soils.
- Some concerns still being heard on effectiveness and appearance.



Current Status



Ground Water

- Development approvals do not normally include requirements for ongoing hydro-geological monitoring.
- County Servicing Standards
 - identification surface water tables to set limits for servicing requirements and building foundation types.
- The County does have Bore Holes logs in the area
- Potential evaluation of Groundwater
 - Desktop level study that would evaluate local information and conditions.
 - Field investigation that would gather information through the installation of monitoring wells.
 - Administration estimates a range between \$100k to \$400k for studies of this nature.



Questions?

