



# INTERNAL REFERRAL

Date: July 10, 2016

<b>To</b>	Shannon Gagnon – Planning and Development Assistant
<b>cc</b>	Craig Walker –Planning Officer Brian Hartman – Manager of Engineering Services
<b>From</b>	Chris Krath – Senior Engineering Officer
<b>Re:</b>	<b>Proposed Amendments to Four Documents in Sturgeon County – St. Albert Rivers Gate Stage 2 Settlement River Lot 57</b>

The following comments are on behalf of Engineering Services, and in response to the above noted application:

1. Current Levy Bylaw 1321/14 was implemented on a per lot basis for cost recovery as determined by current market conditions. The County is expected to fund the design and construction of necessary offsite improvements as required for servicing the proposed development. By increasing the density, it equally increases the servicing requirements (demand) and long term Asset management cost to maintain the additional infrastructure. Initially the developer requested the County to consider this proposal with one cul-de-sac; the outline plan indicates that higher density is being suggested for the remainder of the undeveloped lands in Stage 2. The reduced levy would result in short term infrastructure planning and funding constraints, as well as long term sustainability involving Asset management and increased Level of Service. Prior to supporting this amendment more investigation and consideration is required on what these impacts will have on the County and on its current and future customers / stakeholder.
2. The proposed Right of Way for the cul-de-sac is assumed to be 20m with a 9.0m carriage way. The higher densification would logically result in on-street parking demands for the residents. Transportation services will have to further review and comment on the impacts this proposal will have on snow removal operations, and snow storage capacity. Sturgeon County

operations currently do not have suitable provisions in place to maintain rural developments of this nature.

3. Rivers Gate Stage 1 constructed a 300mm storm main (MH 107A – 107) along Riverview Court W. This storm sewer was sized to accommodate a small catchment area of 0.27 Ha. The Outline Plan proposes to direct the 16 lot Cul-de-sacs 1:5 year storm event into this existing infrastructure. Please provide an updated stormwater Management report and supporting calculations to confirm if the existing minor system has sufficient capacity to accommodate the runoff resulting from the additional basin area using an appropriate coefficient to support the proposed land use. The remaining undeveloped lands of Rivers Gate Stage 2 shall be included.
4. The existing off site water distribution system was constructed to accommodate the ½ acre density, and this proposal is suggesting accommodating twice the density which will result in major flow issues as this subdivision currently has extremely limited capacities. Please provide an update Hydraulic Network Analysis for the County's review.
5. Please be advised that watermain looping shall be required in the cul-de-sac when the line is longer than 120m. The developer is to demonstrate provisions for fire flow can be achieved to support this proposal.
6. The existing wastewater sewer offsite collection system was constructed to accommodate ½ acre density, and this proposal is suggesting accommodating twice the density which will have increased loading on the system. Please provide updated Wastewater collection calculations for the County's review which will include the remaining undeveloped lands in Stage 2.
7. Please be advised that in this phase of construction, the offsite wastewater sewer will be required to tie into the Rivers Gate Lift Station which is currently under construction with an anticipated completion date of October, 2016.
8. Please be advised that separate water distribution and wastewater collection service connections shall be provided for each separately titled lot.
9. In accordance with the overall concept plan, Stage 2 is adding 62 Lots opposed to the previously approved 49 (13 additional lots). Please provide an updated Traffic Impact Assessment to determine what impacts the additional traffic generated ((18) 2-ways trips per lot = 234 trips) will have on the existing road network and intersection treatment at Rivers Gate and Sturgeon Road.
10. Please be advised that provisions for a 6.0m PUL for emergency access

shall be required for cul-de-sacs in excess of 120m from the Centerline of the intersection to the start of the bulb.

Kind Regards,

A handwritten signature in blue ink, appearing to read "Chris Krath".

Chris Krath, C.E.T.  
Senior Engineering Officer