



 ATTACHMENT 'B': APPLICATION REFERRALS

AGENCY

COMMENTS

School Authority

Calgary Catholic
School District
(CCSD)

The Calgary Catholic School District (CCSD) offers the following comments relative to the above-noted plan (PL20190094/PL20190093), located within Cochrane Lake:

- The Cochrane Lake development appears to approach the elementary school threshold averaging 4,000 +/- residents.
- Such a threshold for the CCSD would meet the requirement for a school site. This is also further supported by the development's location within the broader North Cochrane ASP (May. 2018), which could house an additional 9,000 to 10,000 new residents. A school in this development's location north of Cochrane could very likely serve and support CCSD students from outlying proximate communities in Rocky View County as well.
- As this area's development moves forward the Calgary Catholic School District will have an interest in the provision of adequate school services to the residents within the Cochrane Lake area.
- Further, a review of PL20190093 documentation and proposed amendments to the Cochrane Lake Conceptual Scheme (Aug. 1995) to bring it in line with the Cochrane Lake Village Neighbourhood Plan (Feb. 2019) showing that MR has been significantly adjusted from the Cochrane Lake Hamlet Plan (May. 2011) <https://www.rockyview.ca/Portals/0/Files/BuildingPlanning/Planning/ASP/Cochrane-Lake-Hamlet-Plan.pdf> (pages 17 & 24 specifically) which included a possible additional school site in the northwest sector of the Hamlet Plan. Without the additional school site, the possibility of providing adequate school services to CCSD students has been severely impacted.
- CCSD has concerns regarding the MR dedication as shown and requires further clarification on the actual MR and MSR calculations. This is required for making a complete review of these plans.
- The plans seem to indicate PUL and ER all as MR dedication. CCSD requests that a review of the appropriateness of the use of MR dedication surrounding a PUL and ER land use be reviewed to ensure that it complies with the purposeful use of MR lands.

The CCSD is therefore unable to support this plan as circulated, as based on the development proposed the CCSD will require a school site. This may therefore involve planning for a second school site. The CCSD also looks forward to further discussions with the municipality on how best to support the educational and recreational needs of these residents, as well as public institutional space planning, for Cochrane Lake.

Province of Alberta

Alberta
Transportation

In reviewing the application, the proposed development does not fall within the control distance of a provincial highway as outlined in the Highways



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	<p>Development and Protection Act / Regulation, and will not require a roadside development permit from Alberta Transportation.</p> <p>The department does expect that the municipality will mitigate the impacts of traffic generated by developments approved on the local road connection to the highway system, pursuant to <i>Policy 7</i> of the <i>Provincial Land Use Policies</i> and <i>Section 648(2)(c.2)</i> of the <i>Municipal Government Act</i>.</p> <p>The department has the following additional comments on the referral:</p> <p>1. A traffic impact assessment should be prepared by a qualified transportation professional to determine the impacts of the planned subdivision and development in the area, particularly at the intersection of Highway 22 and Cochrane Lakes Road. Rocky View County should ensure that the appropriate intersection improvements are constructed as required to accommodate this additional traffic.</p> <p>On review of the TIA I offer the following comments for the 2036 Post Development horizon:</p> <ul style="list-style-type: none"> • The intersections of Highway 22 and Cochrane Lake Road and Highway 22 and Weedon Trail will require improvements to accommodate traffic from the proposed subdivision in the 20 year horizon. • The Traffic Impact Assessment recommends a traffic signal at Highway 22 and Cochrane Lake Road; however a <u>roundabout must be contemplated</u> when traffic control greater than a two-way stop condition is required. Additional analysis will be required to assess traffic operations of a roundabout at this location as well as a benefit-cost analysis of a roundabout vs. traffic signals, using Alberta Transportation's <u>methodology</u>. • Highway 22 will need to be constructed to a four lane cross-section through the intersection of Highway 22 and Cochrane Lake Road, and Highway 22 and Weedon Trail in advance of highway twinning, to support development traffic. • A single lane roundabout will need to be constructed at the Highway 22 / Weedon Trail intersection, to support development traffic. <p>There would be benefit to ensuring other area developers participate in the improvements noted above. Prior to subdivision approval, it would be beneficial to agree to an overall strategy for implementing these improvements concurrent with staging of Cochrane Lake (and other) area development.</p>



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ATCO Gas	ATCO Gas would like the developer to contact our Engineering department in order to discuss possible options and recourse for our regulating facility and pipelines within the Subdivision Conceptual Scheme.
ATCO Pipelines	Please see attached conditional letter 19-2553. There is an ATCO Pipelines' facility within LSD 10-28-26-W4.
Telus Communications	TELUS Communications Inc. has no objections to the above mentioned circulations.
FortisAlberta	FortisAlberta has no concerns, please contact 310-WIRE for any electrical services.
Internal Departments	
Recreation, Parks and Community Support	<p>PL20190094: Redesignation The Parks office of the Recreation, Parks and Community Support department has no concerns with this land use redesignation application. Comments pertaining to reserve dedication to support development of parks, open spaces, or an active transportation network will be provided upon review of an associated subdivision application.</p> <p>PL20190093: Amended Conceptual Scheme With regards to the "Cochrane Lake Village: Neighbourhood Plan":</p> <p><u>Section 5.2 Open Space and Community Amenities</u> <u>Open Space & Cochrane Lake Policies</u> <i>Policy 5.2.1 A Landscaping Plan shall be required prior to the endorsement of a plan of subdivision or the issuance of a Development Permit.</i></p> <ul style="list-style-type: none"> • Acknowledgement - This is a requirement as per the Servicing Standards. <p><i>Policy 5.2.2 A minimum 8 meter MR strip shall be established surrounding the Lake to provide for a multi-use regional pathway, including interpretive signage and benches.</i></p> <ul style="list-style-type: none"> • Final design and inclusion of either a pathway (asphalt) or trail (engineered aggregate) as indicated would be subject to future review and consideration. <p><i>Policy 5.2.3 Open space amenities throughout the plan shall be aimed at serving a range of ages and providing activities throughout the year.</i></p> <ul style="list-style-type: none"> • Consideration for amending the policy to include the term "parks" with "open space" as parks are typically programmed/developed open spaces subject to a higher level of amenity. • Consideration for amending the policy inclusive of "...all ages and abilities" is recommended in order to promote accessibility throughout the parks and open space areas.



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	<p><i>Policy 5.2.4 Design of open spaces shall seek to enhance human comfort by maximizing solar exposure and providing protection from prevailing wind.</i></p> <ul style="list-style-type: none"> • Acknowledgement - This is a standard design principle and is deemed to be a proven approach to enhancing site conditions. <p><i>Policy 5.2.5 An Open Space Management Plan shall be required prior to the endorsement of a plan of subdivision or the issuance of a Development Permit.</i></p> <ul style="list-style-type: none"> • Regarding an Open Space Management Plan; clarification is required to ascertain who/what party -- an HOA or the County -- will be responsible for maintenance and operation of MR property and all improvements located there within. <p><u>Village Centre Policies</u></p> <p><i>Policy 5.3.1 The Village Core shall be pedestrian-friendly and linked with the local trails network.</i></p> <ul style="list-style-type: none"> • Consider referencing and/or using the term “active transportation” as this is inclusive of pathways, trails, on road facilities and sidewalk infrastructure. <p><i>Policy 5.3.2: The Village Core shall be collectively owned and operated through the Homeowners Association.</i></p> <ul style="list-style-type: none"> • Acknowledgement that the HOA will retain titled land holdings. <p><i>5.2.3: Management of programming in the Village Core shall be by the Homeowners Association.</i></p> <ul style="list-style-type: none"> • Clarification on whether general public accessibility to Village Core programming is required. <p>Section 5.4 Dark Sky</p> <ul style="list-style-type: none"> • Incorporation of appropriate illumination of programmed areas (seating area, pathway intersections, trail heads, etc..) in Municipal Reserves is encouraged <p><u>Section 6.0 Land Use Statistics</u></p> <p><u>Policy 6.0.2 (MR dedication)</u></p> <ul style="list-style-type: none"> • As illustrated; north/south MR alignment which is located within the pipeline right of way is problematic as these public lands are exclusively encumbered and essentially sterilized by pre-existing utility infrastructure. • As per <u>Section 665(3) “Designation of municipal land”</u> within the Municipal Government Act: “<i>The certificate of title for a municipal reserve, school reserve, municipal and school reserve, environmental reserve, conservation reserve or public utility lot under this section must be free of all encumbrances, as defined in the Land Titles Act.</i>” Therefore, all MR lands that are shown to occupy the same space as buried pipelines will not be considered for reserve dedication. These lands, if deemed essential to form



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	<p>part of the open space network are eligible to be held as HOA titled park space.</p> <p><u>Policy 6.0.3 (MR occupancy)</u></p> <ul style="list-style-type: none"> • Acknowledgement - HOA to operate and maintain Municipal Reserve lands via a license agreement with the County. • Recommend specifying “All” rather than “The” with regards to Municipal Reserve lands. <p><u>Section 7.0 Mobility Network</u></p> <ul style="list-style-type: none"> • Provision for inclusion of an active transportation network to be incorporated into the transportation network is recommended. • Integration of bike lanes, separated pathways and other facilities into the traditional road network are recommended to encourage active living and accommodate multi modal forms of transportation. <p><u>Section 8.0: Cochrane Lake Management and Function</u></p> <ul style="list-style-type: none"> • Paragraph #3 indicates the following: “<i>The proposed alteration to the lake edge is intended to function both as a device to manage variations in water levels, while also providing an opportunity to introduce a lakefront pathway to be jointly funded by the County and the Developer.</i>” Clarification on this sentence is required as it is committing the County to a pathway build within the Neighbourhood Plan area. This notion is incorrect as the County has no interest in this development which is privately owned. Recommend revision or removal of statement. • Numerous references are made throughout the document which indicate an intention to use the lake for recreational purposes. • Due to location and the apparent high concentration of water fowl present, overall water quality is a concern. • Recommend inclusion of a firm commitment to ensure ongoing water testing is undertaken to ascertain water quality is of a condition which is within acceptable human health tolerances. <p><u>Section 11.0 Homeowners Association</u></p> <ul style="list-style-type: none"> • Acknowledgement - As per Policy 11.0.1 (b): HOA to operate and maintain Municipal Reserve lands. Please note: Maintenance and operation of Municipal Reserves and all improvements located there within conducted by the HOA will be subject to the terms of a formal occupancy agreement - commonly referred to as a “License of Occupation for Maintenance and Operation of County Lands” as provided by the County. • Recommend use of “Municipal Reserve” in place of “publicly owned”. Recommend revision of policy reflective of this vernacular.

***Comments addressed through revisions to the proposal.*



AGENCY	COMMENTS
GIS Services	Please have the applicant complete a road naming application for the proposed subdivision. I've attached all relevant documentation related to the process.
Development Compliance	Recommend that any public use, multi-unit residential, or commercial use areas be designed to incorporate Crime Prevention Through Environmental Design principles;
Fire Services & Emergency Management	<p>Recommend that a biophysical impact assessment be required, in order to identify and/or mitigate any potential harmful effects on wildlife in the area. Having reviewed the circulation, the Fire Service has the following comments:</p> <ol style="list-style-type: none"> 1. Please ensure that water supplies and hydrants are sufficient for firefighting purposes. Please contact the Fire Service to propose a design for a private hydrant systems if it is required. 2. Dependent on the occupancies, the Fire Service recommends that the buildings be sprinklered, if applicable, as per the National Building Code. 3. Please ensure that access routes are compliant to the designs specified in the National Building Code and the Rocky View County Servicing Standards. 4. Please ensure that there is adequate access throughout all phases of development and that the access complies with the requirements of the National Building Code & NFPA 1141. There will need to be a secondary & tertiary access road which links to Range Road 44 & to Monterra Drive.
Solid Waste	<p>There are no further comments at this time.</p> <p>Is there any mention of Solid Waste Management in this conceptual scheme? I couldn't find any. Seeing that it is for an +/- 800 home development I think it would be a good idea to include reference to solid waste servicing. We could borrow language from other Conceptual Schemes that are more recent. Could you find a couple of examples that might work?</p>
Planning and Development Services - Engineering	<p><u>General</u></p> <ul style="list-style-type: none"> • The review of this file is based upon the application submitted. These conditions/recommendations may be subject to change to ensure best practices and procedures. • As a condition of future subdivision, the applicant will be required to provide a detailed landscaping plan for all open space and recreational areas associated to each proposed phase of development to the satisfaction of the County's Municipal Lands department. • As a condition of future subdivision, the applicant shall be responsible to dedicate all necessary easements and ROWs for utility line assignments and provide for the installation of all underground shallow utilities and street lighting with all necessary utility providers to the satisfaction of the County



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	<ul style="list-style-type: none"> • As per the Conceptual Scheme document, there are several utility pipelines present on the NW-28-26-04-W05M and SW-28-26-04-W05M by various utility owners. At the time of subdivision of the applicable phase that would impact these existing facilities, the applicant will be required to provide the County with confirmation from utility owners that all necessary setbacks have been maintained. • As a condition of future subdivision, the applicant is required to submit a Construction Management Plan with each proposed phase of the development addressing noise mitigation measures, traffic accommodation, sedimentation and dust control, management of stormwater during construction, erosion and weed control, construction practices, waste management, firefighting procedures, evacuation plan, hazardous material containment and all other relevant construction management details <p><u>Geotechnical</u> - Section 300.0 requirements:</p> <ul style="list-style-type: none"> • Applicant provided a Shallow Subsoil & Groundwater Site Investigation, prepared by Almor Testing Services Ltd., dated December, 2017. The geotechnical investigation evaluated subsurface soil and groundwater conditions within the project boundaries. As per the Shallow & Groundwater Site Investigation, the subsurface conditions are considered to be suitable for the proposed development. The geotechnical investigation provided a recommendation pertaining to site grading, utility trench and excavation stability, foundation requirements, frost protection, concrete type, pavement designs, seismic considerations and erosion considerations. • A policy should be added in the Conceptual Scheme that the Cochrane Lake Village development will align with the recommendations of Shallow Subsoil & Groundwater Site Investigation, prepared by Almor Testing Services Ltd., dated December, 2017. <p><u>Transportation</u> - Section 400.0 requirements:</p> <ul style="list-style-type: none"> • The applicant provided a Traffic Impact Assessment (TIA) for the proposed development prepared by Bunt & Associates dated January 19, 2017. The development is proposed to consist of twenty (20) phases developing from southeast to northeast along Cochrane Lake over 20-year period. The development is proposed to gain access from three access points, (1) access from Cochrane Lake Road on the south side, (2) access from Range Road 44 on the west side and (3) access from Range Road 43 on the east side. The main access will be from Cochrane Lake Road via a new road which will connect to the existing intersection of Cochrane Lake and Lake Estate Road. • The TIA considered offsite impacts to the road network and key intersections based on the growth of background traffic as well as with the addition of the proposed development. The TIA also makes various recommendations for upgrades to offsite roads and key intersections for proposed development.



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	<ul style="list-style-type: none"> ○ The road upgrades includes : <ul style="list-style-type: none"> ▪ Widening Highway 22 to a four-lane highway south of Weedon Trail. ▪ Upgrading Weedon Trail to a Regional Collector standard. ▪ Improving Range Road 44 south of Weedon Trail from Regional Low Volume gravel roads to Regional Moderate Volume gravel roads. ▪ Upgrade Range Road 43 south of Weedon Trail from Regional Low Volume classification to a Regional Transitional Paved classification. ▪ Upgrading the Cochrane Lake Road from Highway 22 to future site access to a Regional Arterial. ▪ Improving Cochrane Lake Road east of Highway 22 from a Regional Transitional Paved classification to a Regional Collector. ▪ Improving Range Road 43 south of Cochrane Lake Road from a Regional Transitional Paved classification to a Regional Collector classification. ○ The illumination upgrades includes following: <ul style="list-style-type: none"> ▪ The intersections of Highway 22 with Weedon Trail and Cochrane Lake Road will require full illumination lighting once the signalized intersection and roundabout are installed. ▪ Delineation lighting will be warranted at the intersections of Cochrane Lake Road with primary site access and Sheriff Road at a future horizon. ▪ Delineation lighting will be warranted at the intersection of Cochrane Lake Road and Range Road 43 at a future horizon. ● As the TIA impacts/proposes improvements to provincial highway network (Highway 567 and Highway 22), the TIA was circulated to AT for their review and comment. ● As per AT, the intersections of Highway 22 and Cochrane Lake Road and Highway 22 and Weedon Trail will require improvements to accommodate traffic from the proposed subdivision in the 20 year horizon. Additional analysis is required to assess traffic operations of upgrade at Highway 22 and Cochrane Lake Road including a benefit-cost analysis of a roundabout vs. traffic signals, using Alberta Transportation's methodology. As a condition of future subdivision, the applicant will be required to obtain a Roadside DP from AT for the implementation of any improvements to the provincial highway network. ● At time of future subdivision for the next applicable phase, the applicant will be required to submit an updated TIA taking into consideration existing background traffic, traffic to be generated from the new phase and any other traffic from other approved developments within the Cochrane Lake Hamlet. The TIA is to



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	<p>provide recommendations for off-site improvements that are required to be implemented with the applicable phase of the development. If offsite improvements are required to be implemented to support the applicable phase, the applicant will be required to enter into a Development Agreement with the County for the implementation of the necessary upgrades and be eligible to receive cost recoveries for any oversizing allowed in the infrastructure</p> <ul style="list-style-type: none"> • It is the County's expectation that the first developer to apply for subdivision approval who triggers an offsite upgrade will be required to implement a suitable improvement that will service their development (possibly numerous phases) as well as provide an adequate level of service for the other developments. As a condition of future subdivision, the applicant may be required to pay cost recoveries for the upgrades to offsite infrastructure implemented by other that provide direct benefit to the proposed development. • As a condition of future subdivision, the applicant will be required to enter into a Development Agreement with the County for the construction of the internal road network including all related infrastructure (sidewalks, curb & gutters, etc.) and all other offsite improvements identified in the TIA in accordance with the requirements of the County's Servicing Standards. As the applicant has proposed a multi-phased development, the onsite and offsite infrastructure requirements shall be determined at the subdivision stage in relation to the phase proposed at that time. • As a condition of future subdivision, the applicant is required to provide payment of the Transportation Off-Site Levy, in accordance with the applicable levy at time of subdivision approval, for the total gross acreage of the lands proposed to be subdivided and developed. • It is to be noted that the applicant shall be responsible for any offsite ROW acquisitions (if required) to support the proposed development <p><u>Sanitary/Waste Water</u> - Section 500.0 requirements:</p> <ul style="list-style-type: none"> • The applicant submitted a Utility Servicing Memo for Cochrane Lake Village, dated May 27th, 2019, which provides estimates of wastewater generation and recommends servicing strategies. • As per Utility Servicing memo, peak flow rates generated from 800 home in Cochrane Lake Village will be approximately 16.7 L/sec. • The servicing memo identifies sewage disposal services will be provided from the utility infrastructure owned by Horse Creek Sewer Services (HCSW) to service Cochrane Lake Village. A new lift Station with sufficient storage capacity will be provided to collect and deliver sewer from Cochrane Lake Village to HCSW pipeline at a point approximately 280 m west of the Cochrane Lake Road and Range Road 43 intersection. • The limitation on HCSW discharge system is 48 L/s. Currently, Monterra lift station flow rate to HCSW pipeline is limited to 30 L/s, which is adequate for present and future needs. The future needs incorporates 276 currently subdivided lots, 55 lots on Colvin Family



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	<p>Trust lands and 425 lots planned by Schickedanz in the Schickedanz Cochrane North Development. The peak flow rates from 800 home in Cochrane Lake Village will be approximately 16.7 L/sec. The pumps at Cochrane Lake Lift Station will be sized to deal with maximum daily flow rate of 12 l/s facilitated by storage at lift station. Therefore, in the event that Monterra and the Cochrane Village Lift Stations are to operate simultaneously, the maximum flow received to HCSW discharge would be 42 l/s. This will not cause the HCSW pipeline to exceed the delivery limit of 48 l/s. In the event, other development connect to the HCSW pipeline, flowrates in the pipeline could be managed by communication systems between lift stations.</p> <ul style="list-style-type: none"> • As a condition of future subdivision, the applicant will be required to provide engineering drawings, prepared by a qualified professional, and enter into a Development Agreement with the County for the construction of the proposed wastewater collection, lift station and forcemain connection systems. The applicant will be required to provide a detailed Wastewater Servicing Study to determine all technical requirements and considerations (pressure at tie-in location, minimum flows, impacts to the overall system, etc.) when tying into the HCSW system. It is to be noted that the proposed lift station is required to be constructed on a PUL. • As a condition of future subdivision, the applicant will be required to provide a proof to payment of the connection fee to HCSW. • As a condition of future subdivision, the applicant will be required to submit a Cost Feasibility and Sustainability Analysis estimating the life-cycle costs for the operation, maintenance, repair and replacement of the proposed sanitary lift station to the satisfaction of the County. The analysis shall also address the proposed location of the lift station and its impact on the surrounding properties (odor, noise, access, etc.). • As a condition of future subdivision, the applicant is required to provide payment of the Wastewater Off-Site Levy, in accordance with Bylaw C-8009-2020- Regional Water and Wastewater Off-site Levy Bylaw, based on projected usage. • It is to be noted that the applicant shall be responsible for any ROW acquisitions and easements required to service the proposed development. As a condition of future subdivision, the applicant will be required to secure all necessary easements and ROWs for all proposed wastewater infrastructure. • At this time, applicant should add policies to their Conceptual Scheme with regards to <ul style="list-style-type: none"> ○ The Cochrane Lake Village wastewater servicing shall be in accordance with approved Utility Servicing Strategies, the current version of the Rocky View County Servicing Standards, and all applicable provincial guidelines to the satisfaction of the County; <p><u>Water Supply And Waterworks</u> - Section 600.0 & 800.0 requirements:</p>



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	<ul style="list-style-type: none"> • As per the Conceptual Scheme, the applicant is proposing to use the existing Horse Creek Water Utilities (HCWU) to supply water to Cochrane Lake Village. • Currently, water is extracted from Bow River and pumped to Monterra Raw Storage Reservoir. The Water Treatment Plan (WTP) at Monterra treats the raw water and distributes in the community. As per the servicing memo, the production of WTP is 2,488 m³/day using both trains, which can provide water for only 770 homes in the Cochrane Lake Hamlet. The existing capacity can be increased by expanding filter capacity of the two existing treatment trains, which could produce 3400 m³/day for both trains. This increased capacity would be enough for about 2,000 homes, which would accommodate existing monterra lots, lots on Colvin Family Trust lands, Schickendanz Cochrane North Development and Cochrane Lake Village Development. • Cochrane Lake Village will be supplied from two directions; one from south by installing a 250 feeder main from the south end of monterra drive and second from north by connecting to the existing 250 mm diameter watermain at the north end of monterra drive. This will form a looped system, which will provide fire protection to both the Monterra community and the Cochrane Lake Village development. • At the time of future subdivision, the applicant shall submit a detailed water servicing strategy, including further assessment of the servicing, water demands for each phase of the development and engineered design drawings. The applicant will need to enter into a Development Agreement with the County for the construction of the water distribution system, fire suppression infrastructures and all other water infrastructure required to service the development. The applicant will also need to enter into a Development Service Agreement with HCWU to purchase the necessary water capacity for the proposed phase and for the construction of all water-related infrastructure within WTP. • Fire suppression infrastructure shall be a charged hydrant system required to meet the requirements of the County Servicing Standards and the Fire Hydrant Water Suppression Bylaw. • It is to be noted that the applicant shall be responsible for any ROW acquisitions and easements required to service the proposed development. As a condition of future subdivision, the applicant will be required to secure all necessary easements and ROWs for all proposed potable water infrastructure • All Alberta Environment approvals shall be the sole responsibility of the applicant. • At this time, applicant should add policies to their Conceptual Scheme with regards to <ul style="list-style-type: none"> ○ The Cochrane Lake Village water servicing shall be in accordance with approved Utility Servicing Strategies, the current version of the Rocky View County Servicing Standards, and all applicable provincial guidelines to the satisfaction of the County;



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	<p data-bbox="477 260 1235 289"><u>Storm Water Management</u> – Section 700.0 requirements:</p> <ul data-bbox="526 296 1455 1942" style="list-style-type: none"> <li data-bbox="526 296 1455 695">• Applicant provided a Sub-catchment Master Drainage Plan for MCL development, prepared by Stormwater Solutions, dated August 2017. The sub-catchment Master Drainage Plan covers approximately 134 hectares of land west of Cochrane Lake. As per the Sub-catchment Master Drainage Plan, the stormwater will be managed through three wet ponds to attain the required targets for sediment removal, discharge rate and runoff volume. To provide a pre-treatment of runoff, road ditches are proposed as opposed to curb and gutter and drainage from the roofs and all other impervious areas will be directed to grassed areas. Discharge from the wet ponds will be through inlet control device in a control structure to Cochrane Lake. <li data-bbox="526 701 1455 1199">• As per the revised Cochrane Lake Sub-catchment Master Drainage Plan., prepared by Stormwater Solutions Inc, dated September 2017, Cochrane Lake has had issues recently due to artificial raising of water level and lack of flow-through volume. A new outlet has been constructed to allow for a pumped rate of 30 L/s into Horse Creek. As per Cochrane North Sub-Catchment Master Drainage Plan & Preliminary Outlet Design Review, prepared by Sedulous Engineering Inc., dated October 26, 2017, the existing outlet system could see flow increased to deliver 130 L/s from a hydraulic perspective. However, the current regulatory approvals the County has for the outlet system would not permit anything over 30 l/s to service the current state and changes will be required to support any further development in the catchment. The revised Cochrane Lake Sub-catchment Master Drainage Plan proposes a long-term outfall to direct 500 l/s to the Bow River at full build-out. <li data-bbox="526 1205 1455 1335">• Based on the response obtained from the applicant, applicant intends to seek a new approval from appropriate approving authority to allow the discharge of necessary flow rates into the Bow River at the detailed design stage. <li data-bbox="526 1341 1455 1640">• As a condition of future subdivision, the applicant will be required to provide a detailed design for proposed outfall and all related infrastructure to the Bow River in accordance with the requirements of Sub-catchment Master Drainage Plan, the County's servicing Standards, Alberta Environment regulations and best practices. As a condition of future subdivision, the applicant will be required enter into a Development Agreement with the County for the upgrades to outfall and all related infrastrucure with the applicable phase of the development. <li data-bbox="526 1646 1455 1942">• As a conditon of future subdivision, the applicant will be required provide a detailed stormwater management plan (SWMP) and design drawings incorporating outfall requirements for the proposed stormwater management system and all related infrastructure for each phase of development in accordance with the requirements of the Cochrane Lake Master Drainage Plan, the County's Servicing Standards, Alberta Environment regulations and best practices. As a condition of future subdivision, the applicant will be required enter into a Development Agreement with the County for the construction



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	<p>of the proposed stormwater system and all related infrastructure with the applicable phase of the development.</p> <ul style="list-style-type: none"> • As a condition of future subdivision, the applicant will be required to provide verification of AEP approvals and registration (EPEA) for the stormwater system • As a condition of future subdivision, the applicant will be required to prepare an erosion and sediment control (ESC) plan, prepared by a qualified professional, identifying ESC measures to be taken during the construction. The drawings and plans shall be in accordance with the requirements of the County's Servicing Standards and best management practices • It is to be noted that the applicant shall be responsible for any ROW acquisitions and drainage easements required to service the proposed development (ex. overland drainage courses). As a condition of future subdivision, the applicant will be required to secure all necessary easements and ROWs for all proposed stormwater ponds, escape routes and all other related infrastructure. • At this time, applicant should add policies to their Conceptual Scheme with regards to <ul style="list-style-type: none"> ○ All development within the Cochrane Lake Village Neighborhood plan shall conform to the Cochrane Lake Master Drainage Plan and Cochrane Lake Sub-catchment Master Drainage Plan and be completed in accordance with by Alberta Environment Guidelines and to the satisfaction of the County. <p><u>Environmental</u> – Section 900.0 requirements:</p> <ul style="list-style-type: none"> • A Phase 1 Environmental Site Assessment, prepared by GPEC Consulting Ltd., dated June 16, 1995 is present from the approval of Cochrane Lake Conceptual Scheme. The Phase 1 Environmental Site Assessment incorporates the areas proposed to be developed through Cochrane Lake Village Conceptual Scheme. As per the Phase 1 Environmental Site Assessment, no evidence of contamination was found or reported from past or present land use. The level of environmental risk at this site could be considered low. • A vegetation and wildlife reconnaissance, prepared by Chiron Environmental Services Inc., dated June 23, 1995 is present. The study areas incorporates the areas proposed to be developed through Cochrane Lake Village Conceptual Scheme. Based on the report, the area is not considered to have botanical concerns that would preclude the proposed development. The community types are not considered botanically significant and no rare species were observed. The report recommends that a buffer zone of trees and shrubs be maintained around the lakes and slough for maintenance of wildlife habitat and viewing opportunities. The report also suggests that wildlife corridors be maintained throughout the development to allow animal access to the water. • A policy should be added in the Conceptual Scheme that the Cochrane Lake Village development will align with the recommendations of Phase 1 Environmental Site Assessment and A



AGENCY	COMMENTS
	<p>Vegetation and Wild reconnaissance, conducted as a part of the Cochrane Lake Conceptual Scheme.</p> <ul style="list-style-type: none"> • At time of future subdivision, the applicant will be required to provide an update to the Phase 1 Environmental Site Assessment and a vegetation and wildlife reconnaissance to see the findings are still relevant. The update shall also provide information on required permits and approvals for the proposed development with all relevant municipal, provincial and federal legislation, regulations and policies. • As per the Cochrane Lake Conceptual Scheme, an evaluation by staff of the Archaeological Survey of Alberta has identified the potential for the proposed development to adversely impact any archaeological resources and recommends undertaking Historical Resources Impact Assessment prior to development. • As a condition of future subdivision, applicant is required to provide a Historical Resources Impact Assessment including deep testing, prepared by qualified professionals, in accordance with County's servicing standards. Should findings include any archaeological or paleontological sites, the applicant will be required to obtain clearance under the Historical Resources Act prior to commencing any construction.
Capital Project Management	Capital Projects has no concerns.
Utility Services	<ol style="list-style-type: none"> 1. Given the proposed recreational usage surrounding the Cochrane Lake, it is recommended that an updated Lake Management Plan be completed for this development. 2. Confirmation from the current water supplier that there is capacity to supply the proposed development with water to be obtained. 3. A servicing agreement with the water supplier to supply water to the proposed development to be required as a condition of subdivision. 4. Confirmation to be obtained from the current wastewater service provider that the sanitary forcemain connecting Cochrane Lakes to the Town of Cochrane has sufficient capacity to accommodate the proposed development. 5. Confirmation to be obtained that the current agreement between the County and the Town of Cochrane for wastewater services can accommodate the anticipated wastewater flows from the proposed development. 6. Payment of applicable off-site levies for wastewater services to be required as a condition of subdivision.
Agricultural & Environmental Services	<p>Because this parcel falls within the Cochrane Lake Hamlet Plan, Ag Services has no concerns. The application of the Agricultural Boundary Design Guidelines may be beneficial in buffering the residential land use from the surrounding agricultural land. The guidelines would help mitigate</p>



AGENCY	COMMENTS
	areas of concern including: trespass, litter, pets, noise and concern over fertilizers, dust & normal agricultural practices.

Circulation Period: (July 11, 2019 to August 1, 2019)

Agencies that did not respond, expressed no concerns, or were not required for distribution, are not listed.