

Refinement of Operating and Capital Impacts for All Business Cases

On 2018 June 28, the Priorities and Finance Committee directed Administration to continue to refine the operating and capital budget impacts for all business cases, including to continue to work with proponents to address the list of unresolved issues that was displayed at the meeting.

Included is a summary of issues that have been brought to the attention of Administration, either during the 2018 June 28 meeting, or subsequently through meetings and correspondence conducted between July 3 and July 23. Meetings were offered to all proponents, and in some cases multiple meetings occurred. Also, in some cases, Administration has revised costs based on new information.

For most issues, proponents and Administration have either reached an understanding, or agreed to continue to seek understanding through the associated outline plan and land use review processes. For some issues, proponents and Administration have agreed to disagree.

Below is a summary table of the financial impacts associated with identified issues. Only issues that have, in Administration's opinion, resulted in a cost change have been included in the table.

Area Structure Plan and Reference	Ref	Infrastructure	PFC2018-0678 Cost Estimate	Proponent Cost Estimate	PFC2018-0678 Indicated Budget Cycle	Proponent Indicated Budget Cycle	Net Difference	Notes
Keystone Hills	1(a)	Cost Estimate: 11 St NE / Stoney Trail Interchange	\$35M; revised to \$48M. \$5M (Phase 1); +\$21M (Phase 2); +22M (Phase 3)	\$25M (Phases 1,2)	2023+	2019-2022 (Phase 1,2) 2023+ (Phase 3)	\$35M is increased to \$48M and reallocated as follows: \$5M in 2019- 2022 for Actively Developing Communities; \$21M in 2019- 2022; \$22M in 2023+.	Staging plan proposed by Administration: Phase 1 allocated to Actively Developing Community; Phase 2 required to support business case in 2019-2022; Phase 3 required for full build out

Area Structure Plan and Reference	Ref	Infrastructure	PFC2018-0678 Cost Estimate	Proponent Cost Estimate	PFC2018-0678 Indicated Budget Cycle	Proponent Indicated Budget Cycle	Net Difference	Notes
								of business case in 2023+
Nose Creek	2(b)	Cost Estimate: Highway 566 upgrade & Hwy 566/Hwy QEII Interchange upgrade	\$70M; revised to \$95M		2019-2022		Cost Increase: \$25M for 2019-2022* *Unfunded Provincial Highway infrastructure	Reflects updated cost estimate from Alberta Transportation
Nose Creek	2(c)	Cost Estimate: 160 AV/ CrossIron Drive / Highway QEII Interchange	\$83M; revised to \$62.5M	\$62.5M	2019-2022	2019-2022	Cost Reduction: \$20.5M for 2019-2022	Updated cost estimate
East Stoney	3(a)	64 Av NE/ Stoney Trail overpass: Necessity of Inclusion and Feasibility Potential of the 80 Av NE overpass	\$30M for 64 Ave NE overpass; Revised to \$7M for 80 Ave NE	Not required for Business Case	2019-2022	2023+	Cost Reduction: \$23M for 2019-2022	Pursue single-lane 80 Ave NE/ Stoney Trail overpass to support emergency services in 2019-2022
Belvedere	4(b)	Memorial Dr E overpass	\$30M; revised to \$50M				Cost Increase: \$20M for 2023+	Updated cost estimate – includes rail crossing and roadway tie-in to existing Memorial Drive.

Area Structure Plan and Reference	Ref	Infrastructure	PFC2018-0678 Cost Estimate	Proponent Cost Estimate	PFC2018-0678 Indicated Budget Cycle	Proponent Indicated Budget Cycle	Net Difference	Notes	
Belvedere	5(a)	Proponent Water Servicing Proposal	\$23M	\$0	2019-2022	Not applicable	Cost Reallocation: \$23M reallocated to \$16M in 2019-2022 and \$7M in 2023+	Agreed to phase water servicing over the 2019-2022 and 2023+ time frames	
Belvedere	5(c)	Proponent Storm Servicing Proposal	\$23M	\$0	2019-2022	Not applicable	Cost Reallocation: If the on-site storm proposals are acceptable, \$23M reallocated to in 2023+	If the storm proposal is acceptable, \$23M reallocated to 2023+. 2019-2022 costs stated as TBD.	
Belvedere	5(d)	Proponent Transportation Servicing Proposal	Memorial Dr E overpass triggered if both Belvedere business cases move forward	A smaller 75 hectare proposal to minimize trips to allow for development to proceed ahead of the overpass.	2023+	If both Belvedere business cases move forward, 2010-2022	2023+	No change	Further discussion is required on the 75 hectare proposal
South Shepard	6(b)	Necessity for Inclusion in 2023+: Transportation Infrastructure	\$156M	\$0	2023+	Not applicable	Cost Reduction: \$156M, to be allocated to future growth	Agreed to remove the allocation to South Shepard and reallocate,	

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								when appropriate, to future development
Rangeview	7(b)	Phasing Potential for Utilities Infrastructure in One Calgary 2019-2022	\$111M	\$111M with potential for phasing	2019-2022	2019-2022 and 2023+	Cost Reallocation: \$111M reallocated to \$53M in 2019-2022 and \$58M in 2023+	Agreed to likelihood of progress by end 2022, allocated costs accordingly
Rangeview	7(c)	Cost Estimate: 88 ST SE extension	\$17M; revised to \$23.5M		2019-2022		Cost Increase: \$6.5M for 2019-2022	Updated cost estimate to include land requirements
Providence	8(b)	Levy Charges Payable	\$75M	\$96M	Not applicable	Not applicable	Payables increase of \$21M	Calculation correction
Glacier Ridge	10(b)	144 Av NW / West Nose Creek Bridge	\$25M	\$25M	2019-2022	2019-2022	None	In discussions between June 28 and July 30 the possibility of delaying the bridge to 2023+ was discussed, but ultimately Administration's review concludes it is required in 2019-2022.

Area Structure Plan and Reference	Ref	Infrastructure	PFC2018-0678 Cost Estimate	Proponent Cost Estimate	PFC2018-0678 Indicated Budget Cycle	Proponent Indicated Budget Cycle	Net Difference	Notes
Glacier Ridge	10(c)	Northridge Feedermain Phase 2	\$17M	\$17M	2019-2022	2023+	Cost Reallocation: \$17M, \$20.8M, \$15.2M reallocated from 2019-2022 to 2023+	
		Northridge West Leg Feedermain	\$20.8M	\$20.8M				
		Northridge Reservoir	\$15.2M	\$15.2M				
Glacier Ridge	10(d)	Timing of Infrastructure: Shaganappi Trail Widening	\$10M		2019-2022		Cost Reallocation: \$10M reallocated to 2023+	Updated timing of investment
Glacier Ridge	12(b)	Levy Charges Payable	\$15M	\$27M	Not applicable	Not applicable	Payables increase of \$13M	Calculation correction

CASE BY CASE ANALYSIS

1	Area Structure Plan: Keystone Hills	Proponents: Melcor / Genstar / Pacific	Communities: 2
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Ref	Issue	Cost in PFC2018-0678	Developer Position	Administration Review and Conclusion	PFC2018-0678 Change Recommendation
1(a)	Cost Estimate: 11 St NE / Stoney Trail Interchange	PFC2018-0678 estimated a cost of \$35M in the 2023+ period. This was based on two bridge decks, and assumed the ramps to/from the north were constructed in 2019-2022	Proponent requested a phased implementation, and estimated a cost of \$25M for the ramps to/from the north and a single bridge deck. The proponent requests that both the ramps and the single bridge deck should be included in the 2019-2022 period. Proponent suggests second bridge deck is not required to support full build out of the business case and should not be allocated as such.	Discussions with the proponents have resulted in Administration revising its cost estimate, and allocation. Administration is supportive of a phased implementation with the single bridge deck to be constructed in 2019-2022. Based on the review of the transportation studies, Administration recommends keeping the second bridge deck in 2023+ to support full build out of the business case and future development in Keystone Hills and Nose Creek.	Cost change: \$35M in 2023+ is reallocated to \$5M in 2019-2022 (related to Actively Developing Communities); \$21M in 2019-2022 and \$22M in 2023+.
1(b)	Cost Allocation and Funding Status: Storm Extension	The estimated cost for this storm extension is \$10.4 million. This extension and outfall is a regional solution and will benefit the east catchment of the	Proponent suggests the extension should be attached to the actively developing communities of Livingston and Carrington. Proponent also suggests that the costs can be financed through the Construction Finance Agreement (CFA) / Borrowing Bylaw that enabled East Keystone.	The 144 Ave NE storm extension allows for the ultimate drainage solution for the east catchment of the Keystone ASP, and also provides benefit for this business case. This infrastructure was included in the original East Keystone CFA (2014 Dec). Later, under further analysis, the solution for the east catchment of the	No cost change recommended at this time. The extension benefits the entire east catchment of the Keystone ASP. However, the costs continue to be attributed to this business case to facilitate consideration in

Ref	Issue	Cost in PFC2018-0678	Developer Position	Administration Review and Conclusion	PFC2018-0678 Change Recommendation
		Keystone ASP, as well as the business case.		<p>Keystone ASP was determined to be a developer-funded overland drainage solution (2015 April). Concurrently in 2015, the 2016 Offsite Levy was being determined. Due to the timing of the developer-funded solution, the Off-site Levy Bylaw included the extension as a project, but there were no associated costs identified. A revised Keystone Master Drainage Plan was submitted (October 2017) and it has been determined that the wetland, to be used for the Keystone ASP storm facility, needed to be lowered so a storm trunk and outfall has been shown to once again be required.</p> <p>This extension is eligible to be funded through Off-site Levies. Financing (through a Construction Finance Agreement or other means) can be discussed once a decision is made on the status of the business case.</p>	<p>the Off-site Levy Bylaw update in 2018 Q4.</p> <p>If this business case is approved by Council, Administration will include these utility project costs for consideration as part of the Off-Site Levy Bylaw update in 2018 Q4.</p>

2	Area Structure Plan: Nose Creek	Proponents: QuadReal	Communities: 2
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Ref	Issue	Cost in PFC2018-0678	Developer Position	Administration Review and Conclusion	PFC2018-0678 Change Recommendation
2(a)	Cost Estimate and Alignment: Sanitary Extension	PFC2018-0678 estimated a cost of \$10.4M (recovered through the Off-site Levies)	<p>Proponent asked about:</p> <p>The \$10.4M cost estimate</p> <p>Whether capital-sized infrastructure could be funded by the developer.</p>	<p>Administration met with the proponent and provided additional detail on:</p> <p>The cost estimate of \$10.4M for the sanitary extension.</p> <p>Confirmation that this sanitary extension is City sized/ levy eligible infrastructure as it would provide a benefit to the business case and lands beyond the business case. Furthermore, the benefitting catchment may also service Airdrie in the future.</p> <p>Discussion that the alignment for the sanitary extension should align with the approved Nose Creek ASP.</p>	<p>No cost change. Maintain the cost estimate of \$10.4M.</p> <p>Assume the extension is City sized/levy eligible, but to continue discussions should the proponent want further consideration of this as a developer-funded infrastructure.</p> <p>Continue sanitary alignment discussions during the Outline Plan review.</p> <p>If this business case is approved by Council, Administration will include these utility project costs for consideration as part of the Off-Site Levy Bylaw update in 2018 Q4.</p>
2(b)	Funding Status: Hwy 566 / QEII Provincial Interchange	Administration is seeking documentation to confirm the timing of the	Proponent is in communication with Alberta Transportation. Proponent is seeking a letter from the Province to	No confirmation has been received to show a provincial commitment to fund and construct within 2019-2022. In addition, Alberta	Cost Change: \$70M is revised to \$95M; funding responsibility remains with Alberta Transportation.

Ref	Issue	Cost in PFC2018-0678	Developer Position	Administration Review and Conclusion	PFC2018-0678 Change Recommendation
	Inclusion in Provincial Capital Planning	Hwy 566/ QEII interchange and, specifically whether it will be funded in the 2018-21 Provincial Fiscal Plan	outline a commitment to fund and construct the interchange in their current budget cycle.	Transportation has provided an updated cost estimate of \$95M from the 2009 Interchange Planning Study Review.	
2(c)	Cost Estimate: 160 AV/ CrossIron Drive/ Highway QEII Interchange upgrade	PFC2018-0678 indicated a cost estimate of \$83M.	Proponent has estimated the cost of the CrossIron Mills interchange (including rail and creek crossing) at \$62.5M.	Administration has reviewed the recent cost estimates and has accepted the proponent's cost estimate.	Cost Change: \$83M is revised to \$62.5M in 2019-2022.
2(d)	Feasibility Potential: Fire/ Emergency Response from Rocky View County	PFC2018-0678 indicated the area is currently outside of the citywide Fire/ Emergency Response standard. A temporary fire station that is planned within Livingston would provide partial coverage.	Proponent suggests that an agreement be struck with Rocky View County to provide Fire/ emergency response coverage from the Balzac station until such a time as The City delivers coverage. Developer suggests the area is within 7-10 minutes of the Balzac fire hall.	The City has an agreement for regional servicing with Rocky View; however, that agreement is chiefly for supporting coverage on major incidents near boundaries. Administration has several concerns with the proposal: Service level differentiation Rocky View County uses a different response standard, and are also a composite service, which may impact service and response time. Ability To the shortest point, Balzac Fire Station is 6km	No cost change recommended at this time. Proponent and Administration acknowledge the difference of opinion on the feasibility of regional servicing at this time, and commit to continuing discussion on regional service provision and other considerations for fire and emergency response coverage.

Ref	Issue	Cost in PFC2018-0678	Developer Position	Administration Review and Conclusion	PFC2018-0678 Change Recommendation
				<p>from the business case area. Administration has concerns that Rocky View will not be able to meet the City of Calgary response standard for the proposed community.</p> <p>Infrastructure compatibility Calgary Fire and Rocky View use different equipment/ infrastructure which compromises an emergency response.</p> <p>Communication and safety concerns Lack of compatibility between radio communication could compromise emergency scenes.</p> <p>Liability considerations have not been addressed</p>	

3	Area Structure Plan: East Stoney	Proponents: Pacific	Communities: 1
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Ref	Issue	Cost in PFC2018-0678	Developer Position	Administration Position	Administration Conclusion
3(a)	64 Av NE/Stoney Trail Overpass: Necessity of Inclusion and Feasibility Potential of the 80 Av NE Emergency Response/ Pedestrian/ Transit Only Overpass.	PFC2018-0678 attached the 64 Av NE overpass and \$30M cost to this business case for the 2019-2022 period.	Proponent suggested that the 64 Av NE overpass does not improve fire/ emergency response coverage, and is not required immediately from a transportation perspective.	<p>Administration originally attached the cost to this business case for 2019-2022 under the assumption it materially improved Fire/ emergency response coverage. Subsequent modeling showed the improvement was not material.</p> <p>Discussions began on June 28 into the feasibility of an Emergency Response only overpass as a capital solution for improved coverage. This solution also provided an opportunity for improved transit, pedestrian and cyclist connectivity to Saddletowne LRT.</p> <p>This solution (\$7M) would defer the need for the 64 Av NE overpass in the short term. The 64 Av NE overpass is still part of the ultimate transportation network.</p>	<p>After discussion, Administration agrees with the proponents that the 64 Av NE overpass does not improve fire/emergency response coverage, and is not required immediately from a transportation perspective.</p> <p>Cost change: removal of 64 Av NE overpass (\$30M) in 2019-2022.</p> <p>Further, the 80 Av NE overpass is proposed as a capital solution for both emergency response and improved pedestrian and transit connectivity.</p> <p>Cost change: addition of 80 Av NE overpass (\$7M) in 2019-2022.</p> <p>If this business case is approved by Council, Administration recommends that these</p>

Ref	Issue	Cost in PFC2018-0678	Developer Position	Administration Position	Administration Conclusion
				<p>The 80 Av NE overpass is not currently included in the Off-site Levies, but is otherwise eligible for inclusion. If this business case moves forward, Administration will seek to add it in conjunction with the next review; if it is not added to the off-site levy bylaw, the full cost of the overpass would be required to be funded from property tax.</p>	<p>costs be included for consideration as part of the Off-Site Levy Bylaw update in 2018 Q4. The current model assumes these costs will be added to the Off-Site Levy Bylaw.</p>

4	Area Structure Plan: Belvedere	Proponents: TriStar / Truman / Lansdowne / Minto / Others	Communities: 1
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Ref	Issue	Cost in PFC2018-0678	Developer Position	Administration Review and Conclusion	PFC2018-0678 Change Recommendation
4(a)	Water, Sanitary and Storm Capacity Assessment	PFC2018-0678 identified that sufficient capacity for West Belvedere. Developer-sized (developer funded) extensions are required to develop this business case.	Proponent suggested that there is sufficient capacity for water, sanitary and storm existed in the western Belvedere catchments, enabled through developer-funded servicing investments, and requiring no City capital. There were questions at PFC about to what extent this was accurate.	Following the discussion on 2018 June 28, the proponents contacted Administration and together it was confirmed that West Belvedere requires no City Capital-funding.	No cost change recommended at this time. PFC2018-0678 represents Administration's and the proponents understanding.
4(b)	Cost Estimate: Memorial Drive/Stoney Trail overpass	PFC2018-0678 estimated a cost of \$30M in the 2023+ period. This timing was based on the anticipated build-out rate of West Belvedere.	Proponents would like to investigate phasing options.	The cost estimate was reviewed, and was increased to \$50M with expanded scope to include the extension of Memorial Drive to Stoney Trail, including a grade-separated railway crossing west of Stoney Trail. The infrastructure benefits the entire Belvedere Area Structure Plan and timing considerations would be reviewed should other development in Belvedere also proceed.	Cost change: \$30M in 2023+ is revised to \$50M in 2023+.

5	Area Structure Plan: Belvedere	Proponents: OpenGate	Communities: 1
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Ref	Issue	Cost in PFC2018-0678	Developer Position	Administration Review and Conclusion	PFC2018-0678 Change Recommendation
5(a)	Feasibility Potential: Proponent Water Servicing Proposal	PFC2018-0678 identified a cost of \$23M for water servicing.	<p>Proponents have suggested a developer-sized (developer funded) watermain can be extended from East Hills, at zero capital cost to The City.</p> <p>After June 28, proponents worked with Administration to determine a phased servicing approach. Proponents note the phased approach will benefit an area much larger than this business case.</p>	<p>Following a meeting with the proponent on 2018 July 9, Administration confirmed that \$23M is required to complete the full water feedermain servicing loop for the Belvedere ASP.</p> <p>Administration proposed that this water feedermain can be phased in to service this business case at a cost of \$16M which includes the first two phases of this infrastructure. A developer-sized (developer funded) watermain connection would complete the water servicing loop.</p> <p>This project is not currently included in the Off-site Levies, but is eligible for inclusion.</p>	<p>Cost change: \$23M in 2019-2022 is revised to \$16M in 2019-2022 (Phases 1 and 2), with the \$7M is reallocated to 2023+.</p> <p>If this business case is approved by Council, Administration will include these utility project costs for consideration as part of the Off-Site Levy Bylaw update in 2018 Q4. The current model assumes these costs will be added to the Off-Site Levy Bylaw.</p>
5(b)	Feasibility Potential: Proponent Sanitary Servicing Proposal	PFC2018-0678 identified a cost of \$6M for a sanitary trunk that would additionally	Proponent initially proposed that sanitary servicing can be delivered through a developer-sized (developer funded) lift	At a meeting with the proponent on July 9, the subsequent sanitary servicing solution was introduced by the proponent to construct a deep sanitary extension to	No cost change recommended at this time. A cost estimate has not been completed on the alternate alignment.

Ref	Issue	Cost in PFC2018-0678	Developer Position	Administration Review and Conclusion	PFC2018-0678 Change Recommendation
		<p>require a secured Right-of-Way through lands not owned by the proponent.</p>	<p>station and forcemain to the west at zero capital cost to The City.</p> <p>After June 28, proponent subsequently proposed to Administration that an alternate sanitary alignment be considered.</p>	<p>the west, so that West Belvedere sanitary trunk capacity would not be impacted. However, Administration has initial concerns with a deep sanitary trunk, and would require a sanitary servicing study to determine the feasibility of this approach.</p> <p>Administration and the proponent both understand that the initial sanitary servicing proposal put forward by the proponent would require an agreement with landowners in West Belvedere to utilize their sanitary trunk capacity (via Trinity Sanitary Trunk). The proponent is to pursue this option with the West Belvedere landowners to determine the feasibility of this proposal, as this business case was not intended to be serviced through the West Belvedere sanitary catchment.</p> <p>Administration's preferred solution is the original alignment proposed by The</p>	<p>If this business case is approved by Council, Administration will include these utility project costs for consideration as part of the Off-Site Levy Bylaw update in 2018 Q4. The current model assumes these costs will be added to the Off-Site Levy Bylaw.</p>

Ref	Issue	Cost in PFC2018-0678	Developer Position	Administration Review and Conclusion	PFC2018-0678 Change Recommendation
				<p>City and the Belvedere ASP, locating the sanitary trunk through lands where the proponent would need to negotiate a ROW easement with an adjacent landowner to the south.</p> <p>This project is not currently included in the Off-site Levies, but is eligible for inclusion.</p>	
5(c)	Feasibility Potential: Proponent Storm Servicing Proposal	PFC2018-0678 identified a cost of \$23.2M for one of two potential storm servicing options to service these lands: Forest Lawn Creek Storm water Management Facility upgrades or via the regional Cooperative Storm water Management Initiative (CSMI).	Proponent has suggested that storm water can be managed with storm ponds and water re-use for vertical farming, data centre cooling, irrigation of a nearby private cemetery, irrigation of parks, and irrigation of other land owned by OpenGate.	<p>The proponent is proposing an interim storm servicing solution to retain storm onsite with zero release.</p> <p>The storm pond size will have to be larger in comparison to development that discharges at a typical rate in order to allow for this type of storm servicing to be accepted by Administration. Or, the water re-use strategy would have to manage all storm water.</p> <p>The interim servicing solutions proposed by the proponent will have to be in place until the ultimate storm management facility is funded.</p>	<p>Cost change: If the proponent is able to demonstrate that the zero-release of storm water is an achievable strategy, then no capital costs would be borne by The City. Costs can be restated to \$0 in 2019-2022 and TBD for 2023+, as permanent storm servicing for the area with costs has not been determined.</p> <p>If this business case is approved by Council, Administration will address these utility project costs for consideration as part of the Off-Site Levy Bylaw</p>

Ref	Issue	Cost in PFC2018-0678	Developer Position	Administration Review and Conclusion	PFC2018-0678 Change Recommendation
				This project is not currently included in the Off-site Levies, but is eligible for inclusion.	update in 2018 Q4. The current model assumes these costs will be added to the Off-Site Levy Bylaw.
5(d)	Feasibility Potential: Proponent Transportation Servicing Proposal and Size of Business Case Area	PFC2018-0678 indicated the 2000 single unit transportation capacity limit applies to all of Belvedere. Beyond this, the Memorial Dr E overpass (\$30M) would be required.	<p>Proponent had initially suggested that reverse commuting associated with proposed uses may result in a negligible impact on exiting capacity, and that the Memorial Dr E overpass may be required for the West Belvedere business case alone.</p> <p>Following discussions with Administration, a 75 hectare proposal that reduced significant trip generating land uses was proposed by the proponent, in order to mitigate trip generation.</p>	<p>Administration reviewed proponent's Transportation Assessment. Within the 2019-2022 timeframe, reverse flow is not a benefit, as the traffic generated exceeds the capacity of the mobility network and significant transportation infrastructure would be required to be built to support the development.</p> <p>In the long term scenario of the (2048), Administration would agree with the proponent's claims that reverse flow is an advantage, once significant transportation infrastructure is in place to support the development.</p> <p>The proponent has not yet provided information to substantiate that the Memorial Drive overpass is required within 2019-2022.</p>	<p>The infrastructure benefits the entire Belvedere Area Structure Plan and timing considerations would be reviewed should other development in Belvedere also proceed.</p> <p>Cost estimate for Memorial Drive E overpass has been updated as per Ref 4(b).</p> <p>Further discussions are required on the 75 hectare proposal and associated impacts on the transportation network.</p>

Ref	Issue	Cost in PFC2018-0678	Developer Position	Administration Review and Conclusion	PFC2018-0678 Change Recommendation
				<p>Further conversations with the proponent were informative and clarifying.</p> <p>The 75 hectare proposal has not been thoroughly investigated by Administration, and more work is required to determine how it may fit within the 2000 unit transportation capacity limit in Belvedere.</p>	

6	Area Structure Plan: South Shepard	Proponents: Hopewell / Melcor	Communities: 1
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Ref	Issue	Cost in PFC2018-0678	Developer Position	Administration Review and Conclusion	PFC2018-0678 Change Recommendation
6(a)	Necessity for Inclusion in One Calgary 2019-2022: Fire Hall	PFC2018-0678 identified the need for a Fire Hall in 2019-2022, based on existing modeled coverage	The proponents have suggested a Fire Hall may not be necessary due to the proponents' interpretation of Council direction from PUD2018-0173 and the implementation of mitigation measures, but if it is necessary, that it should be introduced later than 2019-2022.	Following discussion with the proponents, the Council direction from PUD2018-0173 and Calgary Fire's internal modeling was reviewed, and Administration's interpretation is that this area is outside of an acceptable risk and that a Fire Hall is required in 2019-2022.	No cost change recommended at this time.
6(b)	Necessity for Inclusion in 2023+: Transportation Infrastructure	PFC2018-0678 identified the need for a number of transportation capital investments in the 2023+ period, while acknowledging that they were not required to build out the business case area.	The proponents suggested that since the 2023+ transportation infrastructure is not required at all to service the business case, it should be removed completely.	Following discussions, Administration has removed the transportation investments from this business case. These costs will be allocated to future growth in the South Shepard ASP and the East Regional Context Study at the appropriate time. At that time, there may be discussion on overall allocation of benefit.	Cost change: reduction of \$156M from the 2023+ period. These costs will be allocated to future growth in the South Shepard ASP and the East Regional Context Study at the appropriate time.

7	Area Structure Plan: Rangeview	Proponents: Brookfield / Genstar / Section23 / Others	Communities: 2
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Ref	Issue	Cost in PFC2018-0678	Developer Position	Administration Review and Conclusion	PFC2018-0678 Change Recommendation
7(a)	Necessity for Inclusion in 2023+: Fire Hall	PFC2018-0678 identified the need for a Fire Hall in 2023+ and acknowledged it would serve a larger area than incremental lands in the business case.	The proponents asked about the timing/ necessity of the Fire Hall indicated in 2023+.	While 2023+ referred to all years following 2019-2022, it was clarified with the proponents that the Fire Hall is estimated to be needed in the 2027-2030 business cycle, depending on pace of development.	No cost change recommended at this time.
7(b)	Phasing Potential for Utilities Infrastructure in One Calgary 2019-2022	PFC2018-0678 identified the total capital cost for the required utilities for 2019-2022 based on the requirements to service the full build-out of the Business Case area (Rangeview ASP). This total amount was estimated at \$110.9M.	The proponents subsequently asked how phasing between 2019-2022 and 2023+ would proceed, given the scope of the investments required.	<p>Given the size of the business case area, Administration and the proponents agreed at the July 10 meeting that completion of Phase 1 is the most realistic goal for 2019-2022.</p> <p>Costs (\$110.9M) have been reallocated across 2019-2022 and 2023+ accordingly:</p> <p><u>Phase 1 (2019-2022):</u> Water: \$8.33M Sanitary: \$37.3M Storm water: \$7M Total: \$52.6M</p> <p><u>Phase 2 (2023+):</u> Total: \$58.3M</p>	Cost change: \$58.3M for Phase 2 is reallocated from 2019-2022 to 2023+.

Ref	Issue	Cost in PFC2018-0678	Developer Position	Administration Review and Conclusion	PFC2018-0678 Change Recommendation
7(c)	Cost Estimate: 88 ST SE extension	PFC2018-0678 estimated a cost of \$17M in the 2019-2022 period.		The cost estimate was reviewed, and was increased to \$23.5M based on updated functional design, and to include property requirements.	Cost change: \$17M in 2019-2022 is revised to \$23.5M in 2019-2022.

8	Area Structure Plan: Providence	Proponents: Dream / Qualico	Communities: 1
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Ref	Issue	Cost in PFC2018-0678	Developer Position	Administration Review and Conclusion	PFC2018-0678 Change Recommendation
8(a)	Necessity for Inclusion in 2023+: Fire Hall	PFC2018-0678 identified the need for a Fire Hall in 2023+ and an acknowledgement that it would serve a larger area than incremental lands in the business case.	The proponents asked about the timing/ necessity of the Fire Hall indicated in 2023+.	While 2023+ referred to all years following 2019-2022, it was clarified with the proponents that the Fire Hall is estimated to be needed in the 2027-2030 business cycle, depending on pace of development.	No cost change recommended at this time.
8(b)	Levy Charges Payable	PFC2018-0678 identified an expected \$75M in levy charges.	The proponents identified the off-site levies payable were underestimated by \$21M.	Following discussions, Administration and the proponent agreed the off-site levies payable are \$96M.	Off-site levies payable increased to \$96M.

9	Area Structure Plan: Haskayne	Proponents: Brookfield / Marquis	Communities: 1
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Ref	Issue	Cost in PFC2018-0678	Developer Position	Administration Review and Conclusion	PFC2018-0678 Change Recommendation
9(a)	Necessity for Inclusion in 2023+: Fire Hall	PFC2018-0678 identified the need for a Fire Hall in 2023+.	Proponents have suggested a discrepancy exists between Administration’s modeling and the proponents’ modeling.	<p>Following discussion with the proponents, the Council direction from PUD2018-0173 and Calgary Fire’s internal modeling was reviewed, and Administration’s interpretation is that a significant part of this area is outside of an acceptable risk and that a Fire Hall is required very shortly after 2019-2022, in 2023+.</p> <p>Calgary Fire’s modeling is based on projected road networks, modeled road conditions, and actual call response results. The model assumptions are routinely updated.</p> <p>Discussions will continue between Administration and the proponent on existing coverage and modeling assumptions.</p>	No cost change recommended at this time.
9(b)	Feasibility Potential: Proponent	PFC2018-0678 identified the need	Proponents have suggested that solutions may exist to reclassify	Administration is open to consider alternative utility servicing solutions to	No cost change recommended at this time. Final costs to be

Ref	Issue	Cost in PFC2018-0678	Developer Position	Administration Review and Conclusion	PFC2018-0678 Change Recommendation
	Water, Sanitary and Storm Servicing Proposals	for \$17.2M in capital costs.	these utility projects as developer funded utilities.	<p>determine whether the required infrastructure could be developer-sized (smaller) rather than capital sized as identified in the Haskayne ASP.</p> <p>Administration continues to work with the proponent to determine whether these strategies are feasible to service all landowners in the Haskayne ASP. A note, acceptable to the proponents, is included in PFC2018-0678 to acknowledge this.</p> <p>Administration has not yet finalized a position, but will do so through these discussions. If no developer-sized (developer funded) solutions are found to work, this project is eligible for inclusion in the Off-Site Levy Bylaw.</p>	<p>determined through further discussion.</p> <p>If this business case is approved by Council, Administration will include these utility project costs for consideration as part of the Off-Site Levy Bylaw update in 2018 Q4. The current model assumes these costs will be added to the Off-Site Levy Bylaw.</p>

10	Area Structure Plan: Glacier Ridge	Proponents: Ronmor / Wenzel	Communities: 2
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Ref	Issue	Cost in PFC2018-0678	Developer Position	Administration Review and Conclusion	PFC2018-0678 Change Recommendation
10(a)	Feasibility Potential: Proponent Storm Servicing Proposal	PFC2018-0678 identified \$3.8M in storm water costs.	The proponents have put forward a storm servicing proposal that may reduce this cost significantly.	<p>A Staged Master Drainage Plan has been submitted, and is currently under review by Water Resources.</p> <p>Administration will continue to review this proposal through the Outline Plan and Land Use evaluation process.</p> <p>This project is not currently included in the Off-site Levies, but is eligible for inclusion.</p>	<p>No cost change recommended at this time. Final costs to be determined through further discussion.</p> <p>If this business case is approved by Council, Administration will include these utility project costs for consideration as part of the Off-Site Levy Bylaw update in 2018 Q4. The current model assumes these costs will be added to the Off-Site Levy Bylaw.</p>
10(b)	Timing and Necessity for Inclusion in the Ronmor/ Wenzel Business Case: Transportation Infrastructure	PFC2018-0678 identified \$25M for the 144 Av NW / West Nose Creek Bridge with a note indicating that these costs benefit a much larger area than just this business case.	Proponents asked questions about Administration's timing assumptions on the 144 Av NW / West Nose Creek Bridge and the 160 Av NW / West Nose Creek Bridge	To avoid double counting, these costs were allocated to this business case, which is the largest business case in the North sector. It is acknowledged by Administration that they benefit a large area and, should this business case not move forward, the costs would need to be reallocated to other business cases that did move forward.	No cost change recommended at this time. After meeting with the proponents and subsequently reviewing costs and regional impacts, Administration recommends the bridge be maintained in 2019-2022

Ref	Issue	Cost in PFC2018-0678	Developer Position	Administration Review and Conclusion	PFC2018-0678 Change Recommendation
				<p>After meeting with the proponents, Administration reviewed the costs and the regional impacts. Timing of the 144 Av NW / West Nose Creek Bridge was determined to remain in 2019-2022.</p>	
10(c)	<p>Necessity for Inclusion in the Ronmor/Wenzel Business Case: Water Infrastructure</p>	<p>PFC2018-0678 identified \$71.5M in water servicing costs, with a note indicating that these costs benefit a much larger area than just this business case.</p>	<p>Proponents asked questions about Administration's timing assumptions.</p>	<p>In order to avoid double counting, these costs were allocated to this business case, which is the largest business case in the North sector. It is acknowledged by Administration that they benefit a large area and, should this business case not move forward, the costs would need to be reallocated to other business cases that did move forward.</p> <p>Timing of the Northridge Feedermain Phase 2, West Leg Feedermain, and Reservoir were determined to move back to 2023+.</p> <p>This project is not currently included in the Off-site Levies, but is eligible for inclusion.</p>	<p>Cost Change: costs (\$53M) for Northridge Feedermain Phase 2, West Leg Feedermain, and Reservoir moved from 2019-2022 to 2023+.</p> <p>If this business case is approved by Council, Administration will include these utility project costs for consideration as part of the Off-Site Levy Bylaw update in 2018 Q4. The current model assumes these costs will be added to the Off-Site Levy Bylaw.</p>

Ref	Issue	Cost in PFC2018-0678	Developer Position	Administration Review and Conclusion	PFC2018-0678 Change Recommendation
10(d)	Timing of Infrastructure: Shaganappi Trail Widening	PFC2018-0678 estimated a cost of \$10M in the 2019-2022 period.		Based on a further review of the transportation analysis, it is recommended that this investment be pushed out to 2023+.	Cost Change: \$10M reallocated to 2023+

11	Area Structure Plan: Glacier Ridge	Proponents: Capexco – Symons Valley Ranch	Communities: 1 Community Activity Centre
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Ref	Issue	Cost in PFC2018-0678	Developer Position	Administration Review and Conclusion	PFC2018-0678 Change Recommendation
11(a)	Water / Storm Infrastructure: Phase 1 Requirements	PFC2018-0678 indicated developer funded and sized tie-ins would be required to service the full build-out of the proposed Business Case area, through the Northridge Feedermain Phase 1 project (estimated to be completed in Q4 2019).	The proponent put forward a servicing proposal through the extension of developer-funded and sized water mains. This may allow development to start ahead of the Phase 1 Northridge Feedermain.	<p>Administration agrees that the proponent can move forward with only the market development portion of the Business Case prior to the completion of Phase 1 of the Northridge Feedermain.</p> <p>Proponent and Administration will continue working on a water network analysis to inform project phasing and full build out requirements.</p> <p>Proponent will continue working with Administration and with the adjacent land owner (Ronmor) on interim and final servicing solutions for storm pond locations.</p>	No cost change recommended at this time.

12	Area Structure Plan: Glacier Ridge	Proponents: Qualico	Communities: 1
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Ref	Issue	Cost in PFC2018-0678	Developer Position	Administration Review and Conclusion	PFC2018-0678 Change Recommendation
12(a)	Cost Estimate: Sanitary Infrastructure	PFC2018-0678 indicated a cost estimate for \$4M for a sanitary extension.	Proponent estimated sanitary extension at \$2.8M	<p>Administration met with the proponent on July 12, 2018, and there was agreement on the cost of the sanitary trunk of \$4M.</p> <p>It was also agreed that the sanitary trunk will provide capacity to service lands beyond the business case area.</p> <p>The full installation of this sanitary extension may not be required to service this business case, but due to the short length of this pipe extension, the entire trunk would be constructed at one time.</p> <p>This project is not currently included in the Off-site Levies, but is eligible for inclusion.</p>	<p>No cost change recommended at this time.</p> <p>If this business case is approved by Council, Administration will include these utility project costs for consideration as part of the Off-Site Levy Bylaw update in 2018 Q4. The current model assumes these costs will be added to the Off-Site Levy Bylaw.</p>
12(b)	Levy Charges Payable	PFC2018-0678 identified an expected \$15M in levy charges.	The proponents identified the off-site levies payable were underestimated by \$13M.	Following discussions Administration and the proponent agreed that the estimated off-site levies are \$27M.	Off-site levies payable increased to \$27M.