

UNRESTRICTED TT2017-0379 ATTACHMENT 1

1. OVERVIEW		I		
Recommended Capital		Baines Bridge Rehabilitation and Up	grading	
Project Description Executive summary Provide a brief description of the project and what it is expected to deliver. Capture only the essential elements of the business case, including most pertinent facts, in a clear, concise and strategic manner. Expected Key Deliverables		Baines bridge is located at Zoo Rd. and Memorial Dr. The bridge requires lifecycle maintenance rehabilitation. As part of the scope of work the sidewalk will be widened on one side to provide a multi-use pathway that will be integrated with the pathway system in the vicinity and will complement the recent improvements by the City and CMLC on St. Patrick's Island. The railings will be upgraded to meet current safety standards for all users (pedestrians, cyclists and wheelchair). In order to minimize traffic disruptions this work needs to be completed in 2017 while Zoo Rd. is currently closed for the 12 St. bridge replacement and zoo flood mitigation work which will be completed in the fall of 2017. Extended life cycle of bridge by a minimum of 10 years and add additional functional and aesthetic upgrades to pedestrian connectivity in the area.		
Benefits	Economic	Gross Output: 3,393,036		
Describe		Gross Domestic Product (GDP): 2,117	',856	
and/or quantify		Income: 1,025,808		
value and		Employment: 15		
outcomes of project	Social	Community outcomes (e.g. safety, he inclusion and diversity): Improved safe connections that promote active lifes current road closure so that the road this work.	fety due to higher railings tyles such as walking and	and improved cycling. Leveraging
Environmental Improvements to infrastructure for walking and cyclin GHG emissions.		alking and cycling contrib	outes to reduced	
including ex	ort and long ment returns pected financial,	The timing of the proposed work would align with and take advantage of the current Zoo Road closure and therefore avoid impacts to vehicle and pathway users from occurring over a longer duration. The west sidewalk of the bridge will be widened and tie into the new regional		
social and environmental considerations, avoided costs etc. Include quantifiable and qualitative returns.		pathway along Zoo Road which will improve safety, mobility and experience of the pathway users. The sidewalk modification will improve the walkable environment and pathway connectivity in the region, and is supported by several goals and objectives in the Calgary Transportation Plan and Municipal Development Plan.		
		The work includes functional upgrades to extend the service life and significantly reduce maintenance costs in the short term. Aesthetic upgrades will be made to the visible areas of the structure with some design elements carried over from the 12 th St bridge project.		
_	Address, Ward/	Ward 9	Project type (MUGS)	M - Maintenance
	Catchment	Transportation Infrastructure		
Business Unit (BU) Strategic Alignment		Council Priorities	A city that moves, A we	Il run city
IC has this information and		Council Frontics	A Sity that moves, A wel	ii raii city
will complete this section				



Capital Investment Plan	Transportation and Transit
Calgary Economic Development (CED) 10 year Economic Strategy:	Community
Focus	
CED 10 year Economic Strategy: Strategy	2
CED 10 year Economic Strategy: Action	1

2. RESILIENCE

Project / Program	Proposed investment will align with current closure of bridge
Assumptions	
Constraints	Schedule of 12 Street bridge replacement
Dependencies:	12 Street bridge replacement, Zoo Road flood mitigation project
Risk(s):	Funding is required by June 1, 2017 in order to coordinate with existing projects
Describe any known risks	schedules.

3. PUBLIC CONSULTATION PLANS

Provide a brief description of public consultation completed and the dates of consultation.	Zoo Road is currently closed to the public and this project will utilize the existing closure.
Provide a brief description of public consultation outstanding and the dates of the planned consultation.	Information session tentatively planned for April/May alongside Zoo Flood Mitigation project and 12 th St Bridge.

Estimate Class	3
External Funding (Anticipated / Received)	None anticipated or received
List funding source and their contribution to the total cost estimate	
Operating Impact Describe operating impact of investment if any (i.e. whether new or able to be absorbed within existing operating budget). Where possible provide a precise financial and operating response identifying operating benefits of the investment. Operational efficiencies may also be identified.	The work would provide a direct positive impact to operating costs with minimal/no bridge repairs or maintenance expected in the next 10 years.



1. OVERV				
Recommended Capital		14 Street and 90 Avenue Southwest Pedestrian Bridge		
Project Description				
Executive summary Provide a brief description of the project and what it is expected to deliver. Capture only the essential elements of the business case, including most pertinent facts, in a clear, concise and strategic manner.		The project is for the construction of a pedestrian bridge across 14 St. at 90 Ave SW. This project was approved by Council in January 2017 under report TT2017-0012. The pedestrian bridge will be constructed at the same time as the Southwest BRT project. The bridge will connect the communities of Pump Hill, Bayview and Palliser and the Glenmore Landing Shopping Centre with the community of Haysboro.		
Expected Ke	ey Deliverables	Improved safety for pedestrian and cyclist crossing of 14 St.		
Expected Rey Deliverables		 Improved safety for pedestrial and cyclist crossing of 14 st. Improved connectivity to new BRT station to be constructed at Glenmore Landing Shopping Centre. Improved connectivity to regional pathway system. 		
Benefits	Economic	Gross Output: 11,875,627		
Describe		Gross Domestic Product (GDP): 7,412	2,496	
and/or quantify		Income: 3,590,329		
value and		Employment: 51		
outcomes of project		Community outcomes (e.g. safety, health, attractive and well-designed city, inclusion and diversity): Improved safety, promotion of healthy lifestyle for walking/cycling and transit use		
	Environmental	Use of transit, walking and cycling all contribute to reduced GHG emissions.		
Return on Investment Describe short and long term investment returns including expected financial, social and environmental considerations, avoided costs etc. Include quantifiable and qualitative returns.		The new pedestrian overpass aligns of 2018. Specifically, the overpass will address. 1. A city that moves – responding efficient transportation choice. 2. A healthy and green city – resulting lifestyles for all Calgarians and pathway system. The pedestrian overpass also support Calgary Transportation Plan (CTP) and the 2020 Sustainability Direction (2021) improving walking in Calgary (2016).	s: ng to the need for a varie ces. esponding to the need to nd connecting communition ts: the goals and objectiv d Municipal Developmen 10); and Step Forward – a	ety of affordable and encourage healthy es to the regional es outlined in the t Plan (MDP) (2009);
-	Address, Ward/ Catchment	City-wide, Ward 11	Project type (MUGS)	G - Growth
Business Ur	nit (BU)	Transportation Infrastructure	T.	
Strategic Alignment IC has this information and will complete this section		Council Priorities	A city of inspiring neigh that moves, A healthy a	



Capital Investment Plan	Transportation and Transit, Growth
Calgary Economic Development (CED) 10 year Economic Strategy:	Community
CED 10 year Economic Strategy: Strategy	2
CED 10 year Economic Strategy: Action	1

2. RESILIENCE

Project / Program	Construction of pedestrian bridge will be undertaken at the same time as the SW	
Assumptions	BRT project, limiting the impact to Calgarians.	
Constraints	Location of the ramps for the pedestrian bridge is contingent on road right of way, access to BRT station and connection to communities. The locations of the ramps is part of the public engagement currently underway.	
Dependencies:	Delivery of project at the same time as the SW BRT schedule, utility relocation and upgrading.	
Risk(s): Describe any known risks	Community concerns regarding SW BRT project	

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Provide a brief description of public consultation completed and the dates of consultation.	Online engagement as part of the Southwest BRT Facilitated Citizen Involvement was undertaken from February 22 to March 8, 2017. In person meetings with the Community Associations for Haysboro and Pumphill, Bayview, and Palliser were held March 7 and March 16 respectively. A facilitated workshop with members of the community associations and key stakeholders was held on March 18, 2017.			
	A What We Heard report will be available online by the end of April 2017.			
Provide a brief description of public consultation outstanding and the dates of the planned consultation.	Further discussions will be held with the two adjacent community associations as well as Glenmore Landing Shopping Centre owner and the Jewish Community Centre as the detailed design progresses.			



Estimate Class	4
External Funding (Anticipated / Received) List funding source and their contribution to the total cost estimate	None anticipated or received
Operating Impact Describe operating impact of investment if any (i.e. whether new or able to be absorbed within existing operating budget). Where possible provide a precise financial and operating response identifying operating benefits of the investment. Operational efficiencies may also be identified.	The proposed pedestrian overpass will not have a significant effect on the existing operating budget. There will be increased costs for life cycle maintenance and inspections and annual costs for cleaning and snow and ice clearing. These additional costs can be accommodated within the existing operating budget. Estimated cost is \$5000-\$7000 per year.



1. OVERVIEW

Recommended Capital		104 Avenue South Slough Crossing and CRR Grade Separation		
Project Description		194 Avenue South Slough Crossing and CPR Grade Separation		
Executive summary		This project is for the extension of 194 Avenue South from Macleod Trail westerly		
Provide a brief description of				
the project and what it is		to Sheriff King Street. The work includes a crossing over the Priddis slough and a		
expected to deliver. Capture		grade separation over the CPR line and future LRT. This project will support		
only the essential elements		current and planned growth of adjacent developments by providing an east-west		
of the busin		connection across Macleod Trail south of Highway 22X.		
-	ost pertinent			
_	lear, concise and	Funding is required to pay for front ending of developer contribution for road		
strategic m	•	construction of 194 Ave. from the CPR line to Sheriff King Street and for		
		additional costs related to challenging geological conditions and construction in		
F	5 P	the wetland.		
Expected Ke	ey Deliverables	The Priddis slough and CPR line to th		
		enhanced east-west connection out		
		communities of West Macleod. Cons		~
		Priddis slough and CPR grade separa		
		service this fast-growing area. This p to support The City's Growth Manag		nt in South Macieou
		to support the City's Growth Manage	ement priorities.	
		This project will provide a peeded second access to West Macland as the surrent		
		This project will provide a needed second access to West Macleod as the current all-turns intersection at 6 St SW will be converted to a half-interchange with the		
		completion of the Southwest Ring Road. This project also aligns with the Calgary		
		Fire Department Servicing Plan for all of South Macleod and is a requirement for		
		Fire to adequately serve this area with its proposed new station.		
Benefits	Economic	Gross Output: 33,930,363		
Describe		Gross Domestic Product (GDP): 21,178,561		
and/or quantify		Income: 10,258,083		
value and		Employment: 145		
outcomes	Social	Community outcomes (e.g. safety, health, attractive and well-designed city,		
of project		inclusion and diversity): Improved tra	affic flow, improved safet	y, supports adjacent
		residential development.		
	Environmental	A wildlife crossing and accommodati	ng the wetland and Pridd	is Slough are part of
		the project.		
Return on I		Construction of 194 Avenue Southeast extension will enable and support		
	ort and long	development in the West Macleod Area. 194 Avenue is essential to provide a		
term investment returns		reliable route for the Calgary Fire Department with the roadway crossing over CP		
including expected financial,		tracks. This road is especially needed in light of the traffic restrictions at 6th		
social and environmental		Street SW during the Calgary Southwest Ring Road construction.		
considerations, avoided				
costs etc. Include				
quantifiable and qualitative				
returns.			D • • • • • • • • • • • • • • • • • • •	
Project	Address, Ward/	Ward 14	Project type (MUGS)	G - Growth
location Catchment				
Business Unit (BU)		Transportation Infrastructure		

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Strategic Alignment IC has this information and will complete this section	Council Priorities	A city that moves, A city of inspiring neighbourhoods
	Capital Investment Plan	Transportation and Transit, Growth
	Calgary Economic Development (CED) 10 year Economic Strategy: Focus	Community
	CED 10 year Economic Strategy: Strategy	2
	CED 10 year Economic Strategy: Action	1

2. RESILIENCE

Project / Program Assumptions	 Provides an additional access to the West MacLeod area which improves resilience. Pre builds future LRT grade separation which reduces the dependency on automobile and will promote future transit access to the community 	
Constraints	Land acquisition – currently underway	
Dependencies:	Underground utility servicing underway by UEP	
Risk(s):	Fill material availability	
Describe any known risks	Regulatory approvals	

Provide a brief description	Communication and engagement was an important component of the Macleod and
of public consultation	194 Avenue Connection planning process. Information sessions for the project were
completed and the dates	held in February 2015 and June 2015. A third Information Session took place on
of consultation.	March 15, 2017, to provide a further update about the project.
Provide a brief description	No further consultations are planned. Regular project updates will be provided on
of public consultation	the project web page.
outstanding and the dates	
of the planned	
consultation.	



Estimate Class	2
External Funding (Anticipated / Received) List funding source and their contribution to the total cost estimate	None anticipated or received
Operating Impact Describe operating impact of investment if any (i.e. whether new or able to be absorbed within existing operating budget). Where possible provide a precise financial and operating response identifying operating benefits of the investment. Operational efficiencies may also be identified.	Addition of 8.4 lane-km will add sweeping, snow clearing, and boulevard maintenance of approximately \$73,500 per year. Structures maintenance will also increase with the addition of three new structures, with activities such as • Inspections, • Deck and pier washing, Surface course replacement of approximately \$56,000/per year



1. OVERVIE				
Recommended Capital		Crowchild Trail Short Term Improve	ements	
Project Des	-			
Executive summary Provide a brief description of the project and what it is expected to deliver. Capture only the essential elements of the business case, including most pertinent facts, in a clear, concise and strategic manner.		Crowchild Trail is an important skeletal roadway in Calgary's Transportation network, with over 100,000 vehicles per day crossing the Bow River. It plays an important role in the movement of goods and services in a reliable and efficient way to key destinations, and serves as a vital link for the delivery of health and emergency services throughout Calgary and southern Alberta. The Bow River crossing is contributing to several functional and operational challenges, with significant bottlenecks resulting from weaving, added and dropped lanes, and lack of continuous lanes from as far south as Glenmore Tr. SW to 16 Ave. NW. The improvements will extend the life of the existing bridges as well as provide improvements to traffic flow through the area.		
Expected Key Deliverables		The project was identified in the Crowchild Trail Study. See report TT2016-0599. A follow up report will be presented to the April 19, 2017 SPC on Transportation and Transit. Improvements include development of one new core through lane on Crowchild Trail achieved through bridge rehabilitation, widening of the bridge across the Bow River, widening of the bridge across Memorial Dr., ramp reconfiguration and roadway reconfiguration. Modest improvements to the pedestrian and active modes routes connecting to the Bow River pathway system, improvements to transit bus stops along Crowchild Tr., and some upgrades to noise attenuation walls where gaps or openings currently exist, can be achieved through implementation of the short-term plan. The existing Crowchild Trail bridges require major lifecycle rehabilitation, which is required regardless of the additional lane. The additional lane investment leverages this already programmed lifecycle work.		
Benefits	Economic	Gross Output: 118,756,271		
Describe		Gross Domestic Product (GDP): 74,124,962		
and/or		Income: 35,903,289		
quantify value and		Employment: 508		
outcomes of project	Social	Community outcomes (e.g. safety, health, attractive and well-designed city, inclusion and diversity): Improved traffic flow, improved safety		
	Environmental	Improved facilities for transit, walking and cycling all contribute to reduced GHG emissions.		
Return on Investment Describe short and long term investment returns including expected financial, social and environmental considerations, avoided costs etc. Include quantifiable and qualitative returns.		This project leverages Administration extensive engagement with Calgaria improve traffic flow as well as proving with increased access along and acred feedback received from Calgarians (Calgarians immediate benefit and in	ans throughout the study de active mode and trans oss the corridor. This pro over the last two years, a	. The project will sit improvements oject reflects the nd provides
Project	Address, Ward/	City-wide, Ward 7		U - Upgrade
location	Catchment			
Business Ur	nit (BU)	Transportation Infrastructure		



Strategic Alignment IC has this information and will complete this section	Council Priorities	A city that moves, A prosperous city
	Capital Investment Plan	Transportation and Transit, Innovation, Education and Wellness District
	Calgary Economic Development (CED) 10 year Economic Strategy:	Community
	CED 10 year Economic Strategy: Strategy	2
	CED 10 year Economic Strategy: Action	1

2. RESILIENCE

/ -			
Project / Program	Coordination with other city projects in the area.		
Assumptions			
Constraints	Regulatory requirements for working over water		
Dependencies:	Final Crowchild Study recommendations to be presented to Council April 2017.		
Risk(s):	Work across Bow River and regulatory approvals		
Describe any known risks	Noise wall relocation adjacent to existing community		
	 Unforeseen Environmental risks such as contaminated soil 		

3. PUBLIC CONSULTATION I	PLANS
Provide a brief description	A six-phase process was developed to deliver a recommended plan for changes and
of public consultation	upgrades to Crowchild Tr. A high level description of each phase is provided below.
completed and the dates	Phase 1: Engagement Process Design (Feb to Mar 2015)
of consultation.	Phase 2: Confirm Project Goals (June to Sept 2015)
	Phase 3: Concept Identification (Oct 2015 to April 2016)
	Phase 4 Concept Evaluation (May to June 2016)
	Phase 5: Concept Selection and Recommendation (Aug to Oct 2016)
	Phase 6: Reporting and Completion (Nov to Dec 2016)
	A foundational element of the Crowchild Trail Study process is that it tied
	engagement to the entire planning and design process, whereby discussion with
	Calgarians drove the course of the study. Phase 1 employed a collaborative
	process, whereby an engagement design team (EDT) worked with the project team
	to develop the engagement process for the corridor study. Phases 2 through 6
	employed an iterative engagement process, whereby stakeholders and the public
	were provided opportunities for both gathering ideas, and then refining those ideas
	into final confirmed output. Additional information is summarized in report
	TT2017-0329.
Provide a brief description	If approved the next stage of engagement would be focused around construction
of public consultation	and minimizing impact to all users and surrounding residents/businesses with dates
outstanding and the dates	to be confirmed.
of the planned	
consultation.	



Estimate Class	Varies from Class 2 to Class 5
External Funding (Anticipated /	None anticipated or received
Received)	
List funding source and their	
contribution to the total cost	
estimate	
Operating Impact Describe operating impact of investment if any (i.e. whether new or able to be absorbed within existing operating budget). Where possible provide a precise financial and operating response identifying operating benefits of the investment. Operational efficiencies may also be identified.	This project will have a minimal operating impact as a significant amount of the infrastructure already exists and the project will extend the service life of various components. This project will have a minimal operating impact as a significant amount of the infrastructure already exists and the project will extend the service life of various components. These costs can be absorbed within the current operating budget



December of the Constant	Clause Trail and Coth Court Coult and Coth Court	
Recommended Capital	Glenmore Trail and 68 th Street Southeast Intersection Enhancement	
Project Description Executive summary Provide a brief description the project and what it is expected to deliver. Caponly the essential elementhe business case, including most pertinent facts, in clear, concise and strate manner.	This project will accelerate intersection enhancements at 68 Street SE and Glenmore Trail. These enhancements would improve circulation within this important industrial growth area in the city's southeast, allow for contiguous industrial development, improving new industrial development opportunities on private and municipal-owned lands, and align with City Council's strategic objective to improve critical goods movement corridors throughout Calgary to keep our economy on the move.	
Expected Key Deliverable	 This project includes interim intersection improvements at the Glenmore Trail and 68 Street SE intersection, including the construction of a jug-handle to more efficiently accommodate movements from southbound Stoney Trail to westbound Glenmore Trail to southbound 68th Street SE, widening of Glenmore Trail and widening of 68 Street north and south of the intersection. The upgrades will provide safer, more efficient traffic movements at the Glenmore intersection. The upgrades would generate City revenue through additional future industrial property taxes sooner than if left unimproved. Strategic investment would open up lands both to the south and to the north of Glenmore Trail to allow for contiguous industrial development. The developer-funded transportation improvements. Will open up areas to south of Glenmore Trail that are currently capped. Expected to facilitate development by opening up 4.0M ft2 of land that is development-permit ready around the intersection by 2019 (1.4M ft 2 Walton Development lands and 2.6M ft2 Real Estate and Development Services land by 2020. 	
Benefits Describe and/or quantify value and outcomes of project	This area is important to both private sector developers and City owned lands as it provides additional supply in an already developing area closely connected to rail and Stoney Trail. The job density in the area is expected to be typical of lighter intensity industrial development, or approximately 20 jobs per hectare on average. If permitted to develop to its full potential, the area could provide capacity for 2,000 long-term jobs. Additional construction jobs would be created to construct logistics warehouses and other light industrial buildings. The intersection upgrades would help generate City revenue through additional future industrial property taxes sooner than if left unimproved. The tax up-tick potential can range from approximately: • Aggressive forecast: \$1,702,879.96/year • Moderate forecast: \$911,876.37/year • Conservative forecast: \$335,248.66/year for 3 years = \$1005,745.99	



		CED 10 year Economic Strategy: Strategy	1	
		Calgary Economic Development (CED) 10 year Economic Strategy:	Entrepreneurial	
		Capital Investment Plan	Growth	
will complete this section			Leonomy	
_	information and	Council Filorities	Economy	riospeious
Strategic A		Council Priorities	A City That Moves; A	Prosperous
Business L		Transportation Infrastructure		
Project location	Address, Ward/ Catchment	SE industrial area of the city, Ward	Project type (MUGS)	G - Growth
Describe sinvestmen expected fenvironme consideration	ions, avoided costs de quantifiable and	Income: 2,564,521 Employment: 36 There is opportunity to improve the access capacity and safety at the intersection and open up lands for light to medium industrial development. Safety is important as the site has seen numerous collisions. Without sufficient infrastructure development may migrate to the surrounding municipalities. The City will work with Alberta Environment to mitigate environmental impacts on wetlands in the area. • Will support new industrial developments both to the north and south of the intersection. • Will complete the current infrastructure requirements within this area as other leading infrastructure (fire, sanitary, storm and water) is already in place. • Public investment is expected to trigger private investment for the intersection upgrades. The total construction value is estimated at \$11.4M. The land owners (Walton Developments and Real Estate and Development Services) will be contributing to project costs. Further investment is		
		Investment in this area would provid between existing industrial areas to the developments within the Shepard are Calgary is integral to the continued ridesign, and manufacturing centre. We grown over time and will continue to Canadian Pacific (CP) intermodal rail Gross Output: 8,482,591	the west and new indust ea. Industrial developme ise of Calgary as an impo arehouse and distribution grow throughout the arefacilities.	rial and energy ent in southeast rtant engineering, on activities have



2. RESILIENCE

Project / Program Assumptions	 Private investment in land development and associated road works would immediately follow intersection improvements and the construction of the jug-handle The proposed transporation upgrades have the potential for throw-away costs once a grade-separated interchange is constructed. Most other major infrastructure (water, stormwater, sanitary) is in place to allow these lands to open up. 	
Constraints	Regulatory approvals from Alberta Transportation for work near Stoney Trail and approval from Alberta Environment for work adjacent to wetland. In addition a new legal agreement with developers is required to outline cost sharing responsibility.	
Dependencies:	Review and approval of detailed design by Alberta Transportation.	
Risk(s): Describe any known risks	 Private investment does not move forward within expected timeframe Alberta Transportation and/or Alberta Environment impose other considerations/criteria that may impact project timelines and costs Competing municipalities may offer more attractive options for industrial developers due to potentially lower taxes, cheaper land, and desirable transportation connections. Need for future interchange sooner may cause some throw away costs 	

Provide a brief description of public consultation completed and the dates of consultation.	The business case for investment in this area was developed collaboratively among The City of Calgary's Transportation Department, Director's Integrated Growth Committee (DIGC), land owners, The City's Real Estate and Development Services and Walton Development. Regular meetings were held to discuss how options for intersection upgrades, and new development opportunities aligned.
Provide a brief description of public consultation outstanding and the dates of the planned consultation.	Affected land owners have been consulted/informed as part of the CPAG process. Plan for public engagement still to be developed.



Estimate Class	5
External Funding (Anticipated /	None anticipated or received
Received)	
List funding source and their	
contribution to the total cost	
estimate	
Operating Impact Describe operating impact of investment if any (i.e. whether new or able to be absorbed within existing operating budget). Where possible provide a precise financial and operating response identifying operating benefits of the investment. Operational efficiencies may also be identified.	Additional lane-kms will add sweeping, snow clearing, and boulevard maintenance of approximately \$56,000 per year