

**TOWN OF CANMORE**  
**AGENDA**  
Special Meeting of Council  
Council Chambers at the Civic Centre, 902 – 7 Avenue  
**Tuesday, May 16, 2023 at 10:00 a.m.**

Times are estimates only.

- 10:00 – 10:05
- A. CALL TO ORDER AND APPROVAL OF AGENDA**
1. **Land Acknowledgement**
  2. **Agenda for the May 16, 2023 Special Meeting of Council**
- B. PUBLIC HEARINGS – None**
- C. DELEGATIONS – None**
- D. APPROVAL OF MINUTES – None**
- E. BUSINESS ARISING FROM THE MINUTES – None**
- F. UNFINISHED BUSINESS – None**
- G. BYLAW APPROVAL – None**
- 10:05 – 10:35
- H. NEW BUSINESS**
1. **Capital Budget and Plan Amendments**  
Purpose: To provide context for upcoming recommendations for amendments to capital scope, schedule, and budget of projects in the 2023-2028 Capital Budget and Plan.
- 10:35 – 11:20
2. **Capital Project Budget and Staging Amendments**  
Recommendation : That Council approve adjustments to the following capital project budgets and staging:
    - Increase the budget for CAP 7235 Bow River West Pathway – Phase 1 from \$2,200,000 to \$3,600,000 funded by:
      - \$171,000 Investing in Canada Infrastructure Program (ICIP) federal grant
      - \$424,000 Canada Community Building Fund (CCBF) federal grant
      - \$805,000 Municipal Sustainability Initiative (MSI) provincial grant
    - Increase the budget for CAP 7297 Bow Valley Trail and Teepee Town Street and Drainage Improvements from \$2,700,000 to \$3,900,000 funded by:
      - \$290,000 Offsite Levy Reserve
      - \$575,000 MSI provincial grant
      - \$335,000 CCBF federal grant

- Increase the budget for CAP 7324 Bow Valley Trail Water Upgrade – Phase 2 from \$1,750,000 to \$2,250,000 funded by:
  - \$500,000 Water Utility Reserve
- Reduce the scope of capital project 7323 Bow Valley Trail Wastewater Upgrade -Phase 2 to coincide with the extents of CAP 7297.
- Cancel 2024 approved capital projects: CAP 7355 Teepee Town 2<sup>nd</sup> Avenue Rehabilitation Construction and CAP 7369 BVT Wastewater Upgrade – Phase 3 and bring the projects back into the future capital plan.
- Direct administration to update the 2024-2028 capital plan to account for future project budget and staging approvals as part of the 2024 budget amendment process.

**I. REPORTS FROM ADMINISTRATION – None**

**J. NOTICES OF MOTION – None**

**K. IN CAMERA – None**

11:20

**L. ADJOURNMENT**



# Briefing

**DATE OF MEETING:** May 16, 2023 **Agenda #:** H-1

**To:** Council

**SUBJECT:** Capital Budget and Plan Amendments

**SUBMITTED BY:** Andy Esarte, Manager of Engineering

**PURPOSE:** To provide context for upcoming recommendations for amendments to capital scope, schedule, and budget of projects in the 2023-2028 Capital Budget and Plan.

## EXECUTIVE SUMMARY

Several factors are contributing to the need for adjustments to the scope, schedule, and budget of many capital projects. The recommendations for adjustments to previously approved capital budgets and projects are being made with consideration for Council priorities, asset management needs related to growth and lifecycle maintenance, and municipal funding and resourcing capacity. This briefing provides an overview of current market conditions that will inform upcoming briefings and requests for decision to assist in contextualizing the recommendations.

## BACKGROUND/HISTORY

Administration is working to deliver the capital program in support of Council priorities, to manage growth, and maintain Town's assets. The projects outlined in this report have been approved by Council as part of the 2023-2028 capital budget or are carried forward from previously approved capital budgets.

## DISCUSSION

Capital budgets are prepared with the best information available at the time. Typically, budgets are set early in the design process, and estimates are based on previous tender pricing with some adjustment for inflation. As designs progress, scope can change for a variety of reasons, including input from stakeholders, information on the condition of the asset, and lessons learned from prior projects among them. Key considerations impacting the current capital portfolio are listed below:

### *Construction Market Challenges*

Given the lead time on preparing capital budgets, the current environment of considerable fluctuations in the availability of labour and in construction costs create significant challenges in completing the approved capital projects. While inflation is generally considered, the last roadway projects were in 2020, and inflation has been significantly higher than anticipated, with significant competition for resources. Canmore has unique local market challenges, and where we can usually draw resources from the broader Alberta market, there is currently a province wide construction labour shortage. Housing and affordability challenges in the Bow Valley exacerbate these issues.

*Changing Regulatory and Asset Management Requirements*

The Utility Master Plan (UMP) update has recently been completed and will be presented to Council at the May Committee of the Whole (COW) meeting. There are new recommendations in the UMP for utility replacements and other upgrades to the water and wastewater systems due to regulatory requirements that were not anticipated based on the previous plan. It is typical for scope to develop as a project progresses, and early phases of design carry higher contingencies to accommodate unknowns. However, fundamental changes to scope that were unaccounted for at the time of project approval require consideration within the context of the larger budget and additional project approvals.

*Grant Opportunities*

Administration regularly applies for merit-based grants to advance projects that are already identified in the capital plan. The timing of receiving merit-based grants is unknown, and therefore cannot be accounted for in budget planning until approved. When new grant funding sources are approved, that is an opportunity to review project scopes and budgets, and use of the funding requires Council approval.

*Third Party Obligations*

The Town is responsible for maintenance costs associated with CP Rail crossings, based on historic agreements that are typical for municipalities to enter. While CP endeavors to provide advance notice, rapid deterioration of crossings in recent years has resulted in unexpected project expenditures. As repair related to CP Rail crossings is led by CP, even though these projects must be funded by the Town, it is challenging to anticipate timing of the work with enough certainty that it can be included in capital budgets.

*Stacking Impacts*

As administration has worked to deliver the capital plan, the factors above have all played a role in the need to consider adjustments to some projects that have already been approved in capital budgets. A summary for each project is outlined below to provide an overview of the briefings and requests-for-decision that will be before Council in the coming months. The overview provides context to illustrate that each of the individual projects and impacts has been considered within the whole of the capital plan, and that the individual changes that arise from individual approvals of Council will be reflected in a larger update to the 2024-2028 plan as part of the budget process this fall.

***Bow River West Pathway - Phase 1 (7235)***

*Request for Decision for Budget and Staging Amendments – May 16, 2023*

A budget placeholder was established several years ago ahead of design. Project budget has been adjusted as scope has developed and estimates were refined. Construction costs are significantly higher than budget. Administration will be recommending adjustments to the budget to fund this priority work, funded by Investing in Canada Infrastructure Program (ICIP) grant, and adjusting phasing of future projects with similar funding sources.

***Bow Valley Trail and Teepee Town Street and Drainage Rehabilitation, Water and Wastewater Upgrades (CAP 7297, 7323, 7355, 7369)***

*Request for Decision for Budget and Staging Amendments – May 16, 2023*

Construction costs for the first portion of this work – from William Street to Hospital Place are higher than expected, and contractor availability affects the schedule. Administration will be recommending deferring the planned 2024 2<sup>nd</sup> Avenue portion this work to fund completion of the current scope and balance workload for internal resourcing. The deferred project work will be completed within five years to accommodate growth requirements of the utilities.

***Railway Avenue Street Improvement and Utilities - Design and Construction (7239, 7359, 7112, 7371)***

*What we heard briefing – May 16, 2023*

*Request for Decision – Concept Design Approval and Staging – Summer 2023*

The design for Railway Avenue has progressed based on intersection modelling and signal timing design, and through stakeholder engagement. A briefing outlining the updated concept design will be presented at the May COW meeting. The scope of work includes adjustments to include additional turn bays, and the UMP updates recommends replacement of the water line along Railway Avenue – scope not contemplated previously.

Based on the above, budgets and construction staging plans are under review. With revised scope and available resourcing, completing the full central portion of Railway Avenue in 2024 is not feasible. A split scope and revised phasing of the Railway corridor will be proposed to allow for completion of priority work in 2024 and will be outlined in the briefing and request for decision.

***2023 Bus Stop Improvements (7301)***

*Request for Decision – Budget Amendment – May 23, 2023*

An application for ICIP grant funding was approved in late fall, 2022 in the amount of \$853,600. The grant funding must be spent by March 31, 2025. The application included bus stop improvements in the current priority list for accessibility, connectivity, and amenity. It will be recommended that the budget for the 2023 Bus Stop Improvement project be increased by that amount. This grant represents 80% of the total grant approval and requires a 20% matching share, which will be funded by the currently approved funding sources of the project. The increased scope of this project reduces the scope of future year bus stop projects funded in the approved capital plan, and still leaves some transit-related priorities unfunded.

***CPR Crossing Improvements***

*Request for Decision – New Capital Project – May 23, 2023*

The Town's agreements with CP Rail require the Town to fund crossing maintenance and replacement costs, this is standard practice for the majority of at grade crossings in the country. The Town has been working with the Rail Authority to schedule and complete repair and maintenance activities related to the crossing at Railway Avenue south since late 2021. Several temporary repairs were undertaken in late 2022 and early 2023 at the authority's expense to defer the full replacement. In February of 2023 the Rail Authority notified the Town that the temporary repairs were not adequate, and a full replacement would be required in 2023. The

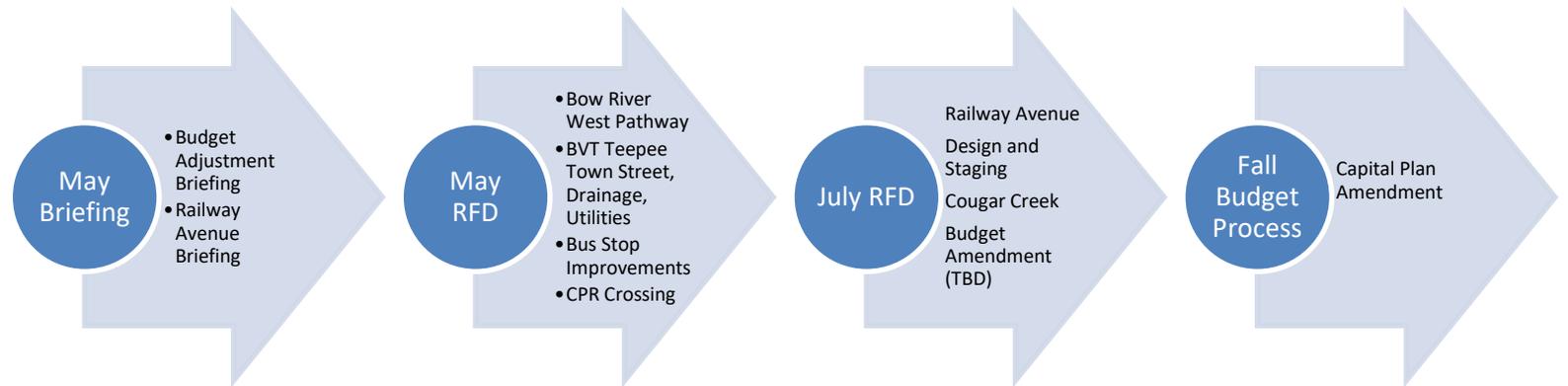
Rail Authority identified lifecycle deterioration of the rail ties as the cause of degradation of the crossing. It will be recommended that the project be approved and funded from Asset Rehabilitation/Replacement Reserve.

**Cougar Creek Mitigation**

*Request for Decision - Budget Amendment - TBD*

Project completion requires additional funding. The project completion phase is currently tendered with pricing expected by end of May. Administration has been working with funding agencies for the past several months. The earliest that a confirmation of funding is expected to be received is June. Should funding not be confirmed at that time, then it recommended to complete the current phase of work and continue liaising with funding agencies and bring a recommendation to amend the budget as part of the 2024 budget process to allow for a continuation of construction in 2024.

**Council Engagement Outline**



**FINANCIAL IMPACTS**

Financial impacts of the above have been considered in the context of the current approved council plan and reserves and funding sources.

**Fall and Future Budgeting Effort**

Administration will update the 2024-2028 capital plan to account for all Council approved amendments to the projects above as part of the 2024 budget amendment process. Though updates would not typically occur in the midpoint of the two-year budget cycle, a change in project staging for 2024 projects and beyond is required to keep current approvals within our available funding envelope, for the reasons stated in this briefing. Updates will be made to cost estimates, and renewed consideration will be given to how to account for placeholders and budgets developed ahead of design. The update will also consider whether different approaches can be used to account for inflation and market factors more accurately in future budget planning. Additionally, funding the capital program in the face of escalating costs, and increasing burden of growth and asset rehabilitation, will require a close review of reserve policy and contributions, and the offsite levy model projects and costs assumptions.

**STAKEHOLDER ENGAGEMENT**

Internal stakeholders have participated in developing staging and budgeting plans, including Finance, Public Works, Engineering, and the Corporate Strategic Team (CST).

**ATTACHMENTS**

None.

**AUTHORIZATION**

Submitted by:	Andy Esarte Manager of Engineering	Date:	<u>May 4, 2023</u>
Approved by:	Palki Biswas Manager of Finance	Date:	<u>May 5, 2023</u>
Approved by:	Therese Rogers General Manager, Corporate Services	Date:	<u>May 5, 2023</u>
Approved by:	Whitney Smithers General Manager, Municipal Infrastructure	Date:	<u>May 5, 2023</u>
Approved by:	Sally Caudill Chief Administrative Officer	Date:	<u>May 8, 2023</u>



# Request for Decision

**DATE OF MEETING:** May 16, 2023 **Agenda #:** H-2

**TO:** Council

**SUBJECT:** Capital Project Budget and Staging Amendments

**SUBMITTED BY:** Andy Esarte, Manager of Engineering

**RECOMMENDATION:** That Council approve adjustments to the following capital project budgets and staging:

- Increase the budget for CAP 7235 Bow River West Pathway – Phase 1 from \$2,200,000 to \$3,600,000 funded by:
  - \$171,000 Investing in Canada Infrastructure Program (ICIP) federal grant
  - \$424,000 Canada Community Building Fund (CCBF) federal grant
  - \$805,000 Municipal Sustainability Initiative (MSI) provincial grant
- Increase the budget for CAP 7297 Bow Valley Trail and Teepee Town Street and Drainage Improvements from \$2,700,000 to \$3,900,000 funded by:
  - \$290,000 Offsite Levy Reserve
  - \$575,000 MSI provincial grant
  - \$335,000 CCBF federal grant
- Increase the budget for CAP 7324 Bow Valley Trail Water Upgrade – Phase 2 from \$1,750,000 to \$2,250,000 funded by:
  - \$500,000 Water Utility Reserve
- Reduce the scope of capital project 7323 Bow Valley Trail Wastewater Upgrade -Phase 2 to coincide with the extents of CAP 7297.
- Cancel 2024 approved capital projects: CAP 7355 Teepee Town 2<sup>nd</sup> Avenue Rehabilitation Construction and CAP 7369 BVT Wastewater Upgrade – Phase 3 and bring the projects back into the future capital plan.
- Direct administration to update the 2024-2028 capital plan to account for future project budget and staging approvals as part of the 2024 budget amendment process.

**EXECUTIVE SUMMARY**

Administration is recommending adjustments to the staging and budget of the above projects based on contractor availability, and market pricing.

**RELEVANT COUNCIL DIRECTION, POLICY, OR BYLAWS**

The capital budgets have been established through approvals in 2022 and 2023.

**DISCUSSION***Strategic Planning Alignment*

The approved capital budget and plan consists of priority projects to address growth and asset lifecycle maintenance and replacement. Several factors have contributed to higher costs and the need to adjust budgets to award contracts and move forward with the work. Administration is bringing forward recommendations for funding and staging that are consistent with Council strategic priorities, and that consider the larger capital plan. The primary means of addressing cost increases and contractor availability is to utilize new funding sources, and reallocating funding from projects that will be deferred to future years. The implications of adjusting those project timelines are outlined below.

The Bow River West Pathway project is tendered and awarded to Bremner Engineering and Construction Limited conditional on budget approvals. The scheduled mobilization date to site is early June with a fall completion planned. Landscaping work will continue into 2024. This timing is consistent with plan. Originally approved in 2022 for \$1,500,000 funded from grants, as per the Budget Amendments Policy (FIN-001), the Chief Administrative Officer approved an internal transfer of \$700,000 of additional grant funding, bringing the approved 2022 budget to \$2,200,000.

The Bow Valley Trail and Teepee Town street and drainage improvements and water and wastewater upgrades are tendered and awarded to PCL Construction conditional on budget approvals. The scheduled mobilization is for fall of 2023, with project completion planned in 2024. Landscaping work will continue into 2025. This timing is one year later than planned and is based on contractor availability. Sewer main will be completed up to the pedestrian crossing north of Hospital Place to coincide with the extent of surface works improvements.

*Current Procurements and Market Conditions*

As outlined in a May 16 briefing to Council, inflationary pressures and a competitive market for construction materials, equipment and labour have been pronounced in pricing for recent tenders. A request for proposal (RFP) package was issued this past winter for Bow Valley Trail and Teepee Town Street and Drainage Improvements and associated utility works, attracted two proposals; one of which was compliant. The compliant submission proposed a later start date and a 2024 completion for the work.

A request for proposals for the Bow River West Pathway project was issued in March 2023. Three proposals were received and two were deemed compliant and evaluated in April.

These were the first two larger bid packages for surface works and utilities since the 2020/21 season. The following notable price increases have been observed over the years:

- Engineered Fill: 47% increase
- Asphalt: 72% increase
- Concrete walk and path: 90% increase

Prior procurements have generally relied on bonded bids, with lowest compliant bid awarded project work. While this method includes stipulations as to how work is to be conducted, low bid processes tend to favour bidders that intend to minimize costs associated with project planning, oversight, safety, and the environment, and punish bidders that intend to appropriately fund those aspects of the work. This can result in poor performance of all aspects of the work. While not always the case, and many low bidders have performed to expectations, the pandemic impacts are felt to be exacerbating the problems with this procurement approach.

This season’s procurements have relied on evaluation of technical submissions. Bids not meeting minimum requirements for project planning, experience, and expertise have been rejected. Accepted bids tend to include higher costs for mobilization/demobilization, traffic accommodation, environment, and other overheads, due to more stringent project requirements and evaluation criteria that consider quality of plans.

The top ranked proponents for both the West Bow River Pathway and Bow Valley Trail projects have proposed well thought out plans for construction, have strong teams, and a proven track record of success in Canmore. While pricing is higher than anticipated, it is consistent across all evaluated submissions and is felt to represent market conditions.

The following table summarizes the revised budget requirements for the associated capital projects:

<b>Revised 2022/2023 Capital Project Budget/Scope</b>	<b>Project Number</b>	<b>Approved Budget</b>	<b>Revised Budget</b>	<b>Budget Variance</b>
Bow River West Pathway – Phase 1	CAP 7235	\$2,200,000	\$3,600,000	<b>\$1,400,000</b>
Bow Valley Trail and Teepee Town Street and Drainage Improvements	CAP 7297	\$2,700,000	\$3,900,000	<b>\$1,200,000</b>
Bow Valley Trail Water Upgrade – Phase 2	CAP 7324	\$1,750,000	\$2,250,000	<b>\$500,000</b>
Bow Valley Trail Wastewater Upgrade ( <i>Scope Change</i> )	CAP 7323	\$3,100,000	\$3,100,000	\$0
<b>2024 Capital Project Cancellations</b>				
Teepee Town 2 <sup>nd</sup> Avenue Rehabilitation Construction	CAP 7355	\$2,950,000	\$0	(\$2,950,000)
Bow Valley Trail Wastewater Upgrade – Phase 3	CAP 7369	\$600,000	\$0	(\$600,000)

*Implications for Capital Planning*

To accommodate higher costs for both current and future street and drainage projects, consideration has been given to the currently approved 2023-2028 capital budget and plan.

The street, drainage and utility projects in the capital plan are all deemed to be priority projects associated with asset rehabilitation and replacement, growth, and safety, and it is planned to maintain the current project list. Associated transportation projects are considered a priority in supporting growth by improving safety and facilitating all travel modes. It is recommended that the staging and pace of complete street projects is

adjusted in the short term to accommodate. Deferring of projects requires careful consideration of implications in terms of asset condition, utility capacity, transportation management, and safety. 2023 approved capital projects are recommended to proceed. These are priority projects and significant investments have been made in design, engagement, and procurement. Sanitary sewer upsizing is required within five years for growth, and waterline upgrades are needed today to provide fire flows. Stormwater improvements will address water ponding in the lowest points within Teepee Town. New bus stops are required for the new transit route starting in 2024. Pathway upgrades will accommodate the growing share of trips taken by those modes on Bow Valley Trail each year. Lighting and crossing improvements will address roadway safety in support of the Town's mode-shift goals. The West Bow River Pathway project has been deferred for many years and is a major gap in the transportation network for existing neighborhoods. The facility will provide safe and accessible year-round access to a large and growing area of the community. Completing the project is an important element in meeting mode-share targets.

It is recommended that a continuation of the street, drainage and utility work on 2<sup>nd</sup> Avenue is rescheduled later in the 6-year capital plan. While the utility work has the same priority as the remainder of Bow Valley Trail, the work can be deferred up to 5 years. The benefit of deferring is that it provides additional time for redevelopment within Teepee Town on 2<sup>nd</sup> Ave to continue and provides additional time for engagement around parking management prior to finalizing designs.

The 2024-2028 capital plan will be updated in the Fall of 2023 to account for future project budget and staging as part of the 2024 budget amendment process.

#### **ANALYSIS OF ALTERNATIVES**

The following alternatives have been considered and are not recommended by administration.

- *Defer Bow Valley Trail Street and Drainage Improvements or the West Bow River Pathway or both.*  
The pros of completing these projects have been outlined herein. While deferring the work would help with managing budget and cashflow in 2023, the projects are needed in the short-term. Any benefit to budget management is outweighed by the time and resources that have been committed to the design, engagement, and procurement processes.
- *Cancel current tenders and re-tender later aiming for better pricing and more contractor availability.*  
While it is possible that the market shifts in the future year, inflation may also continue. It is important to continue to advance priority projects to prevent an increasing backlog and fall behind on asset maintenance and accommodating growth.

#### **FINANCIAL IMPACTS**

Funding for the projects is proposed to come from a combination of grant funding, offsite levy reserves, and utility reserves from the cancelled/deferred projects as shown below. Rather than increasing the draw on grants or reserves, or pulling more debt, the proposed 2023 capital budget amendments are using the same sources of funding from the 2024 cancelled/deferred projects. To complete the work on 2<sup>nd</sup> Avenue within the timeframe needed to accommodate growth, additional adjustments to project timing are planned in the 2024-2028 capital plan.

Revised 2022/2023 Capital Project Budget	Project Number	Revised Budget	Budget Variance	Source of Funding
Bow River West Pathway – Phase 1	7235	\$3,600,000	\$1,400,000	\$1,535,000+805,000 MSI Grant \$600,000+171,000 ICIP Grant \$65,000+424,000 CCBF Grant
Bow Valley Trail and Teepee Town Street and Drainage Improvements	7297	\$3,900,000	\$1,200,000	\$460,000 Asset Rehab Reserve \$500,000+335,000 CCBF Grant \$530,000 ICIP Grant \$210,000+290,000 Offsite Levy Reserve \$1,000,000+575,000 MSI Grant
Bow Valley Trail Water Upgrade – Phase 2	7324	\$2,250,000	\$500,000	\$875,000 Debenture \$875,000+500,000 Water Utility Reserve
Bow Valley Trail Wastewater Upgrade – Phase 2 ( <i>Scope Change</i> )	7323	\$3,100,000	\$0	\$1,550,000 Debenture \$1,550,000 Wastewater Utility Reserve
<b>2024 Capital Project Cancellations</b>				
Teepee Town 2 <sup>nd</sup> Avenue Rehabilitation Construction	7355	\$0	(\$2,950,000)	\$450,000 Asset Rehab Reserve \$1,500,000 CCBF Grant \$1,000,000 MSI Grant
Bow Valley Trail Wastewater Upgrade – Phase 3	7369	\$0	(\$600,000)	\$342,000 Debenture \$258,000 Wastewater Utility Reserve

**STAKEHOLDER ENGAGEMENT**

Internal stakeholders have participated in developing staging and budgeting plans, including Finance, Public Works, Engineering, and the Corporate Strategic Team (CST). The community will be provided with updates for project schedules and directly impacted stakeholders will be informed throughout construction.

**ATTACHMENTS**

1a.&b. CAP 7235 Bow River West Pathway – Phase 1 Original Budget Sheet and Revised Budget Sheet.

2a.&b. CAP 7297 Bow Valley Trail and Teepee Town Street and Drainage Improvements - Current Budget Sheet and Revised Budget Sheet.

3a.&b. CAP 7324 Bow Valley Trail Water Upgrade – Phase 2 Current Budget Sheet and Revised Budget Sheet.

4a.&b. CAP 7323 BVT Wastewater Upgrade – Phase 2 Current Budget Sheet and Revised Budget Sheet.

**AUTHORIZATION**

Submitted by: Andy Esarte  
 Manager of Engineering Date: May 3, 2023

Approved by: Andreas Comeau  
Manager of Public Works Date: May 9, 2023

Approved by: Palki Biswas  
Manager of Finance Date: May 4, 2023

Approved by: Therese Rogers  
General Manager, Corporate Services Date: May 5, 2023

Approved by: Whitney Smithers  
General Manager, Municipal Infrastructure Date: May 5, 2023

Approved by: Sally Caudill  
Chief Administrative Officer Date: May 9, 2023



# Bow River West Pathway - Phase 1

Project Summary

Project Number

7235

<b>Budget Year:</b>	2022
Department:	Engineering
Questica Reference:	ENG-19-37

<b>Budget:</b>	\$1,500,000
Project Type:	Asset Replacement
Priority:	B

## Project Description:

The Bow River West Pathway project includes hard surface improvements between the Bow River Bridge and the existing asphalt pathway in Three Sisters. The upgrades will include both combined mixed use segments, and separate walk and cycle segments depending on the area and transportation requirements, and will upgrade the current shale and clay mix gravel surface pathway that ranges in width from 1.4 to 4.4m.

There are several areas where grades are not accessible, and winter maintenance would not be possible even if paved. In these key areas the scope of work will include establishing accessible and maintainable grades and trail widths through trail realignment, regrading, retaining walls, and replacement of two existing pedestrian bridges at both prospect heights and a storm water crossing to the south of that bridge. Replacement of the Prospect Heights bridge in particular is a major component of the project, requiring regulatory approvals.

Phase 1 budget and schedule may or may not permit the full completion of all of the most challenging areas. This will be determined during the concept and preliminary design, currently underway in fall of 2021. The project is scheduled for completion in 2023, and will not be ready for winter maintenance along the full alignment until then.

There are a number of key connections to the community from the main trail alignment. Those connections require upgrades in order to improve the connectivity to the main path to be accessible and maintainable. That work is expected to be included in a future phase, after the main pathway paving project is completed.

Consideration has been given to the following documents in developing functional requirements for the pathway including:

- 2018 Integrated Transportation Plan
- Historic Transportation Impact Assessments for current and future development areas

END.

## Budget Funding:

	2022	2023	2024	2025	2026	2027	Total
CCBF	\$500,000	0	0	0	0	0	\$500,000
Federal Grants	\$600,000	0	0	0	0	0	\$600,000
MSI Capital	\$400,000	0	0	0	0	0	\$400,000
<b>Total</b>	<b>\$1,500,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>\$1,500,000</b>

## Operating Budget Impact:

Operational impacts include approximately 2km of new hard surface pathway requiring winter maintenance which have been accounted for in the Streets and Roads budget.

Reduced maintenance costs for steel structures vs. existing wooden structures will have a positive impact on Parks budgets in future years.

Solid Waste Services anticipates the addition of several waste bins and has accounted for the additional maintenance in their 2022 budget.

Any signage and benches added will be determined as the project progresses to preliminary design. If desired by Parks, these furnishings will require operational dollars for maintenance beyond the two-year contractor warranty period. Operational costs for any added furnishings will not be significant.

Minimal landscaping is planned, other than natural restoration of disturbed areas. END.

## Project Rationale:

Goals of the project include:

- Creation of an all-ages, all-abilities, year-round pathway connection for walking and cycling to established communities in Canmore west of the Bow River
- Enable a greater proportion of residents and visitors to take a proportion of travel trips by foot and bicycle in support of our Municipal Development Plan, Integrated Transportation Plan, and Integrated Parking Management Plan goals.
- Upgrade facilities in a way that accommodates future growth and requirements in the area.

END.

## Options Considered:

Mixed use and separate facilities will be considered for the various segments of the pathways as is required, along with staging considerations.

Pedestrian bridges will be replaced with steel structures, rather than glue laminated wooden structures, to address operational issues with maintaining wood over waterways.

END.



# Bow River West Pathway - Phase 1 - Revised Budget Sheet

Project Summary

Project Number

7235

<b>Budget Year:</b>	2022	<b>Budget:</b>	\$3,600,000
Department:	Engineering	Project Type:	Asset Replacement
Questica Reference:	ENG-19-37	Priority:	B

## Project Description:

The Bow River West Pathway project includes hard surface improvements between the Bow River Bridge and the existing asphalt pathway in Three Sisters. The upgrades will include both combined mixed use segments, and separate walk and cycle segments depending on the area and transportation requirements, and will upgrade the current shale and clay mix gravel surface pathway that ranges in width from 1.4 to 4.4m.

There are several areas where grades are not accessible, and winter maintenance would not be possible even if paved. In these key areas the scope of work will include establishing accessible and maintainable grades and trail widths through trail realignment, regrading, retaining walls, and replacement of two existing pedestrian bridges at both prospect heights and a storm water crossing to the south of that bridge. Replacement of the Prospect Heights bridge in particular is a major component of the project, requiring regulatory approvals.

Phase 1 budget and schedule has been adjusted based on finalized detailed design and procurement pricing. Total revised budget reflects current market conditions and includes a small construction contingency. The project remains scheduled for 2023 completion and will be ready for year-round maintenance for the upcoming winter season.

There are a number of key connections to the community from the main trail alignment. Those connections require upgrades in order to improve the connectivity to the main path to be accessible and maintainable. That work is expected to be included in a future phase, after the main pathway paving project is completed.

Consideration has been given to the following documents in developing functional requirements for the pathway including:

- 2018 Integrated Transportation Plan
- Historic Transportation Impact Assessments for current and future development areas

END.

## Budget Funding:

	2022	2023	2024	2025	2026	2027	Total
CCBF	\$65,000	\$424,000	0	0	0	0	\$489,000
Federal Grants	\$600,000	\$171,000	0	0	0	0	\$771,000
MSI Capital	\$1,535,000	\$805,000	0	0	0	0	\$2,340,000
<b>Total</b>	<b>\$2,200,000</b>	<b>\$1,400,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>\$3,600,000</b>

## Operating Budget Impact:

Operational impacts include approximately 2km of new hard surface pathway requiring winter maintenance which have been accounted for in the Streets and Roads budget.

Reduced maintenance costs for steel structures vs. existing wooden structures will have a positive impact on Parks budgets in future years.

Solid Waste Services anticipates the addition of several waste bins and has accounted for the additional maintenance in their 2022 budget.

Any signage and benches added will be determined as the project progresses to preliminary design. If desired by Parks, these furnishings will require operational dollars for maintenance beyond the two-year contractor warranty period. Operational costs for any added furnishings will not be significant.

Minimal landscaping is planned, other than natural restoration of disturbed areas. END.

**Project Rationale:**

Goals of the project include:

- Creation of an all-ages, all-abilities, year-round pathway connection for walking and cycling to established communities in Canmore west of the Bow River
- Enable a greater proportion of residents and visitors to take a proportion of travel trips by foot and bicycle in support of our Municipal Development Plan, Integrated Transportation Plan, and Integrated Parking Management Plan goals.
- Upgrade facilities in a way that accommodates future growth and requirements in the area.

END.

**Options Considered:**

Mixed use and separate facilities will be considered for the various segments of the pathways as is required, along with staging considerations.

Pedestrian bridges will be replaced with steel structures, rather than glue laminated wooden structures, to address operational issues with maintaining wood over waterways.

END.



# BVT and Teepee Town Street and Drainage Improvements - Current Budget Sheet

Project Summary

Project Number

7297

<b>Budget Year:</b>	2023
Department:	Engineering
Questica Reference:	ENG-23-04

<b>Budget:</b>	\$2,700,000
Project Type:	Growth
Priority:	B

## Project Description:

This project coincides with deep utility projects along Bow Valley Trail and into Teepee Town. Scope of work includes:

- Stormwater management infrastructure from William Street to Hospital Place, including the area at 2nd Avenue and Hospital Place which has historically experienced significant stormwater management difficulties. At that intersection, grades will be raised and the area will see construction of infiltration facilities in accordance with the Teepee Town Stormwater Management Plan, ISL, 2022.
- Construction of separate walking and bicycle pathways between William Street and the CPR pedestrian crossing just north of Hospital Place. Work includes partial sidewalk connection into Teepee Town along Hospital Place and 2nd Avenue. (See map attached). The bicycle path will be continued north of the CPR crossing if budget permits and extend as far as 17th Street.
- Reconstruction of the intersections of Hospital Place and 2nd Avenue, partial reconstruction of the intersection of Hospital Place and Bow Valley Trail, and partial reconstruction the intersection at Hospital place and 1st Ave.
- Streetlighting and landscaping.

END.

## Budget Funding:

	2023	2024	2025	2026	2027	2028	Total
Asset Rehab - Replacement	\$460,000	0	0	0	0	0	\$460,000
CCBF	\$500,000	0	0	0	0	0	\$500,000
Federal Grants	\$530,000	0	0	0	0	0	\$530,000
MSI Capital	\$1,000,000	0	0	0	0	0	\$1,000,000
Offsite Levy Reserve	\$210,000	0	0	0	0	0	\$210,000
<b>Total</b>	<b>\$2,700,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>\$2,700,000</b>

## Operating Budget Impact:

The project introduces new stormwater management facilities, and additional bicycle path and sidewalk. Additional sidewalk and pathway clearing is accounted for in the operating budget. If changes to parks operating costs are material, they will be incorporated into the 2026 budget to coincide with final acceptance of the infrastructure.

END.

**Project Rationale:**

Combining this work with deep utility work allows for efficiencies in construction in that the surface will already be disturbed to dig utility trenches.

Stormwater management is an important upgrade needed for this section of Bow Valley Trail and low point of Teepee Town. Improvements will help limit (but not eliminate) future ponding. Raising the roadway at Hospital Place and 2nd Avenue will enable access to the hospital to remain dry in the vast majority of storm events.

Sidewalks and bicycle pathways are absent on this side of Bow Valley Trail and in Teepee Town. These areas are in close proximity to the Town Centre and other major trip generators. The planned sidewalk and bicycle paths are identified as recommended improvements in the Integrated Transportation Plan, and are considered priority investments in support of the 2030 mode shift goals.

END.

**Options Considered:**

Options for bicycle paths and sidewalk configurations were considered in the Bow Valley Trail Concept Design: Active Transport Facilities, Crossing, and Intersection Concept Report, Mobycon, 2022, and the Teepee Town Low Traffic Neighbourhood Network Study, Mobycon, 2021.

Options for intersection improvements, bicycle paths and sidewalk configurations are informed by active network connectivity, accessibility, and safety considerations.

Options for stormwater management facilities were considered as part of the Teepee Town Stormwater Management Plan, ISL, 2022.

END



# BVT and Teepee Town Street and Drainage Improvements - Revised Budget Sheet

Project Summary

Project Number

7297

<b>Budget Year:</b>	2023	<b>Budget:</b>	\$3,900,000
Department:	Engineering	Project Type:	Growth
Questica Reference:	ENG-23-04	Priority:	B

## Project Description:

This project coincides with deep utility projects along Bow Valley Trail and into Teepee Town. Scope of work includes:

- Stormwater management infrastructure from William Street to Hospital Place, including the area at 2nd Avenue and Hospital Place which has historically experienced significant stormwater management difficulties. At that intersection, grades will be raised and the area will see construction of infiltration facilities in accordance with the Teepee Town Stormwater Management Plan, ISL, 2022.

- Construction of separate walking and bicycle pathways between William Street and the CPR pedestrian crossing just north of Hospital Place. Work includes partial sidewalk connection into Teepee Town along Hospital Place and 2nd Avenue. (See map attached). The bicycle path will be continued north of the CPR crossing if budget permits and extend as far as 17th Street.

- Reconstruction of the intersections of Hospital Place and 2nd Avenue, partial reconstruction of the intersection of Hospital Place and Bow Valley Trail, and partial reconstruction the intersection at Hospital place and 1st Ave.

- Streetlighting and landscaping.

END.

## Budget Funding:

	2023	2024	2025	2026	2027	2028	Total
Asset Rehab - Replacement	\$460,000	0	0	0	0	0	\$460,000
CCBF	\$835,000	0	0	0	0	0	\$835,000
Federal Grants	\$530,000	0	0	0	0	0	\$530,000
MSI Capital	\$1,575,000	0	0	0	0	0	\$1,575,000
Offsite Levy Reserve	\$500,000	0	0	0	0	0	\$500,000
<b>Total</b>	<b>\$3,900,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>\$3,900,000</b>

## Operating Budget Impact:

The project introduces new stormwater management facilities, and additional bicycle path and sidewalk. Additional sidewalk and pathway clearing is accounted for in the operating budget. If changes to parks operating costs are material, they will be incorporated into the 2026 budget to coincide with final acceptance of the infrastructure.

END.

**Project Rationale:**

Combining this work with deep utility work allows for efficiencies in construction in that the surface will already be disturbed to dig utility trenches.

Stormwater management is an important upgrade needed for this section of Bow Valley Trail and low point of Teepee Town. Improvements will help limit (but not eliminate) future ponding. Raising the roadway at Hospital Place and 2nd Avenue will enable access to the hospital to remain dry in the vast majority of storm events.

Sidewalks and bicycle pathways are absent on this side of Bow Valley Trail and in Teepee Town. These areas are in close proximity to the Town Centre and other major trip generators. The planned sidewalk and bicycle paths are identified as recommended improvements in the Integrated Transportation Plan, and are considered priority investments in support of the 2030 mode shift goals.

END.

**Options Considered:**

Options for bicycle paths and sidewalk configurations were considered in the Bow Valley Trail Concept Design: Active Transport Facilities, Crossing, and Intersection Concept Report, Mobycon, 2022, and the Teepee Town Low Traffic Neighbourhood Network Study, Mobycon, 2021.

Options for intersection improvements, bicycle paths and sidewalk configurations are informed by active network connectivity, accessibility, and safety considerations.

Options for stormwater management facilities were considered as part of the Teepee Town Stormwater Management Plan, ISL, 2022.

END



# BVT Water Upgrade - Phase 2 - Current Budget Sheet

Project Summary

Project Number

7324

<b>Budget Year:</b>	2023
Department:	Utility - Water
Questica Reference:	UTI-23-06

<b>Budget:</b>	\$1,750,000
Project Type:	Growth
Priority:	B

## Project Description:

The project is to completed the remainder of the water upgrade not completed as part of TIP20. The work will be along BVT adjacent to Teepee Town.

The project is to improve water pressure along Bow Valley Trail to meet fire flow requirements by increasing the size of approx. 200 meters of watermain from 200 mm to 250mm to reach 300 L/s fire flow.  
END

## Budget Funding:

	2023	2024	2025	2026	2027	2028	Total
Debenture	\$875,000	0	0	0	0	0	\$875,000
Water Utility Reserve	\$875,000	0	0	0	0	0	\$875,000
<b>Total</b>	<b>\$1,750,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>\$1,750,000</b>

## Operating Budget Impact:

No operating impact.  
END

## Project Rationale:

The 2016 UMP update completed a hydraulic model analysis and the following observation that the commercial area along Bow Valley Trail near the hospital has an available fire flow of approximately 250 L/s when 300 L/s is required.  
END

## Options Considered:

No options were consider as it was recommended within the Utility Master Plan to meet required fire flows of 300 L/s.  
END



# BVT Water Upgrade - Phase 2 - Revised Budget Sheet

Project Summary

Project Number

7324

<b>Budget Year:</b>	2023	<b>Budget:</b>	\$2,250,000
Department:	Utility - Water	Project Type:	Growth
Questica Reference:	UTI-23-06	Priority:	B

## Project Description:

The project is to completed the remainder of the water upgrade not completed as part of TIP20. The work will be along BVT adjacent to Teepee Town.

The project is to improve water pressure along Bow Valley Trail to meet fire flow requirements by increasing the size of approx. 200 meters of watermain from 200 mm to 250mm to reach 300 L/s fire flow.  
END

## Budget Funding:

	2023	2024	2025	2026	2027	2028	Total
Debenture	\$875,000	0	0	0	0	0	\$875,000
Water Utility Reserve	\$1,375,000	0	0	0	0	0	\$1,375,000
<b>Total</b>	<b>\$2,250,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>\$2,250,000</b>

## Operating Budget Impact:

No operating impact.  
END

## Project Rationale:

The 2016 UMP update completed a hydraulic model analysis and the following observation that the commercial area along Bow Valley Trail near the hospital has an available fire flow of approximately 250 L/s when 300 L/s is required.  
END

## Options Considered:

No options were consider as it was recommended within the Utility Master Plan to meet required fire flows of 300 L/s.  
END



# BVT Wastewater Upgrade - Phase 2 - Current Budget Sheet

Project Summary

Project Number

7323

<b>Budget Year:</b>	2023
Department:	Utility - Waste Water
Questica Reference:	UTI-23-04

<b>Budget:</b>	\$3,100,000
Project Type:	Growth
Priority:	B

## Project Description:

The project is to complete the remainder of the wastewater upgrade not completed as part of TIP20. The project is to upgrade the wastewater mains along Bow Valley Trail and 2nd Avenue, per the 2016 Utility Master Plan update.

Location of work will be along BVT, beginning south of Hospital Place (Sidney Street) and finishing at 13th Street. Peak Wet Weather Flow (PWWF) through this section of pipe is currently calculated at up to 56 L/s operating at between 101% and 141% of its design capacity resulting in approximately 160m of 250mm pipe to cause surcharging.

Project Details: 160m of 250mm to 300mm and 36m of 300mm to 375mm to be upsized.  
END

## Budget Funding:

	2023	2024	2025	2026	2027	2028	Total
Debenture	\$1,550,000	0	0	0	0	0	\$1,550,000
Wastewater Utility Reserve	\$1,550,000	0	0	0	0	0	\$1,550,000
<b>Total</b>	<b>\$3,100,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>\$3,100,000</b>

## Operating Budget Impact:

No operational impacts.  
END



**Project Rationale:**

Capacity: Peak Wet Weather Flow (PWWF) through these sections of pipe is currently well beyond their design capacity that will result in a surcharge.  
END

**Options Considered:**

No options consider as it was recommended within the Utility Master Plan.  
END



# BVT Wastewater Upgrade - Phase 2 - Revised Budget Sheet

Project Summary

Project Number

7323

<b>Budget Year:</b>	2023
Department:	Utility - Waste Water
Questica Reference:	UTI-23-04

<b>Budget:</b>	\$3,100,000
Project Type:	Growth
Priority:	B

## Project Description:

The project is to complete the remainder of the wastewater upgrade not completed as part of TIP20. The project is to upgrade the wastewater mains along Bow Valley Trail and 2nd Avenue, per the 2016 Utility Master Plan update.

Location of work will be along BVT:

- Just south of Mountain Street (Blake) to Hospital place
- Hospital place to 1st ave
- Hospital place to 2nd ending just north of the CP ped crossing

Peak Wet Weather Flow (PWWF) through this section of pipe is currently calculated at up to 56 L/s operating at between 101% and 141% of its design capacity resulting in approximately 160m of 250mm pipe to cause surcharging.

Project Details:

- 249m of 250mm is all upsize from 200m
- 95m of 300mm is upsize from 250
- 35m of 300mm is replace existing 300mm
- 150m of 375mm is upsize from 350mm
- 152m of 375mm is replace existing 375mm

END

## Budget Funding:

	2023	2024	2025	2026	2027	2028	Total
Debenture	\$1,550,000	0	0	0	0	0	\$1,550,000
Wastewater Utility Reserve	\$1,550,000	0	0	0	0	0	\$1,550,000
<b>Total</b>	<b>\$3,100,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>\$3,100,000</b>

## Operating Budget Impact:

No operational impacts.  
END



**Project Rationale:**

Capacity: Peak Wet Weather Flow (PWWF) through these sections of pipe is currently well beyond their design capacity that will result in a surcharge.  
END

**Options Considered:**

No options consider as it was recommended within the Utility Master Plan.  
END