

TO: Mayor Savage and Members of Halifax Regional Council

SUBMITTED BY: Original Signed by 
Jacques Dubé, Chief Administrative Officer

DATE: August 10, 2021

SUBJECT: Increase to Contract – Tender No. 20-217 and RFP 18-302 – Bayers Road,
Transit Priority Corridor

ORIGIN

This report originates from a need to increase the contract for approved 2020/21 Capital Budget project CT200002 – Major Strategic Multi-Modal Corridor: Bayers Road – beyond 20% or \$20,000 of its original value.

LEGISLATIVE AUTHORITY

Halifax Regional Municipality Charter

Municipal expenditures

79A (1) Subject to subsections (2) to (4), the Municipality may only spend money for municipal purposes if (a) the expenditure is included in the Municipality's operating budget or capital budget or is otherwise authorized by the Municipality; (b) the expenditure is in respect of an emergency under the Emergency Management Act; or (c) the expenditure is legally required to be paid.

...
(4) The Municipality may authorize capital expenditures that are not provided for in its capital budget if the total of such expenditures does not exceed the greater of (a) the amount authorized to be transferred from the operating budget to the capital budget under subsection (3); (b) the borrowing limits established for the Municipality under Section 109; or (c) the amount withdrawn from a capital reserve fund under subsection 120(4).

HRM Procurement Administrative Order (2020-004-ADM)

32. (1) All contract amendments are subject to the identification and availability of sufficient funds in the Council approved business planning and budget process.

32(7) The approval and signing authority limits for cumulative contract amendments are as follows:

- ...
- CAO - (a) \$20,000 or (b) a 20% increase to the originally approved contract amount, whichever is greater.
 - Council – any amount.

RECOMMENDATION

It is recommended that Halifax Regional Council:

1. Suspend the rules of procedure under Schedule 2, the Audit and Finance Standing Committee Terms of Reference, of Administrative Order One, the Procedures of the *Council Administrative Order*, requiring the Standing Committee to review and make recommendations on proposals coming to the Council outside of the annual budget or tender process; and
2. In accordance with the *Covid-19 Administrative Order*, approve a withdrawal from Q526 Capital Reserve in the amount of **\$692,875.11** (net HST included) without the Audit and Finance Standing Committee reviewing and making a recommendation on the impact to the Reserve.
3. Waive the requirement for the Audit & Finance Committee to approve a budget increase of **\$692,875.11** (net HST included) to Project Account No. CT200002 – ‘Major Strategic Multi-Modal Corridor: Bayers Road’ with funding from Q526 Capital Reserve as outlined in the Financial Implications section of this report.
4. Approve an increase to the contract with Dexter Construction Company Limited for Tender 20-217 (P.O. No. 2070843085) in the amount of **\$520,705.02** (net HST included) with funding from Project Account No. CT200002 – Major Strategic Multi-Modal Corridor, as outlined in the Financial Implications section of this report.
5. Approve an increase to the Construction Services component of RFP No. 18-302 Consulting Services to WSP Canada Inc. (P.O. No. 2070796457) in the amount of is **\$20,127.20** (net HST included) with funding from Project Account No. CT200002 – Major Strategic Multi-Modal Corridor, as outlined in the Financial Implications section of this report.
6. Approve an increase to the Design Services component of RFP No. 18-302 Consulting Services - to WSP Canada Inc. (P.O. No. 2070796457) in the amount of **\$52,042.89** (net HST included) with funding from Project Account No. CT200002 – Major Strategic Multi-Modal Corridor, as outlined in the Financial Implications section of this report.
7. Approve the construction budget for Bayers Road Interim Transit Priority Measures between Windsor Street and Connaught Avenue in the amount of **\$100,000.00** based on the Engineer’s Estimate with funding from Project Account No. CT200002 – Major Strategic Multi-Modal Corridor, as outlined in the Financial Implications section of this report.

BACKGROUND

The Halifax Transit Moving Forward Together Plan, approved by Regional Council in April 2016, identified Bayers Road as a critical bottleneck for transit service into and out of downtown Halifax. At the December 5, 2017, meeting of Regional Council, the Integrated Mobility Plan was approved, and staff were directed to include an implementation plan in the upcoming staff report for the Bayers Road Transit Priority corridor functional design to allow Council to consider construction in fiscal 2019/20.

Following a design process that included extensive stakeholder and public engagement, staff presented the preferred functional design option to the Transportation Standing Committee (TSC) in February 2018. Regional Council subsequently approved the preferred option in February 2018 and directed staff to proceed with the detailed design of dedicated bus lanes in both directions on the Bayers Road corridor, including reconfiguration of the Halifax Shopping Centre intersection. The preferred options were based on the functional planning and engagement completed by project consultant WSP Canada Inc. and HRM staff.

To complete the detailed design of the Bayers Road Transit Priority Corridor, a Request for Proposals (RFP) 18-302, was publicly advertised on the Province of Nova Scotia's Procurement website on March 27th, 2018 and closed on April 24th, 2018. Based on the highest scoring proponent, the project was awarded to WSP Canada Inc. in the amount of \$114,324 (net HST included) in July 2018.

Due to the size and complexity of the project, the final detailed design was divided into two phases for implementation and tendering:

- Phase 1: Romans Avenue to Connaught Avenue
- Phase 2: Connaught Avenue to Windsor Street

Design of Phase 1 (Romans Avenue to Connaught Avenue) was completed in March 2019 and construction Tender 20-217 was awarded to Dexter Construction Company Limited in summer 2020. Design and land acquisition of Phase 2 (Connaught Avenue to Windsor Street) is ongoing.

Halifax Regional Council awarded Phase 1 (Romans Avenue to Connaught Avenue) construction Tender 20-217 on June 23, 2020 to Dexter Construction Company Limited for a total Tender Price of \$7,438,643.21 (net HST included). During the award process it was known, and outlined in the award report, that additional funds would be required to complete Phase 2.

For construction projects, general industry practice considers a 10% contingency in the budget. However, due to budget constraints, a contingency was not set aside for Phase 1 -Tender 20-217.

DISCUSSION

Phase 1 construction started in July 2020 with an understanding that construction would need to be completed over two construction seasons due to the complicated nature of the work at the intersections. Phase 1a (Romans Avenue to Coleman Court) was planned for 2020/21, and Phase 1b (Coleman Court to Connaught Avenue) was planned for 2021/22 and is currently underway as of July 2021.

Once Phase 1 construction began, unforeseen challenges arose which led to several changes and an increase to Dexter's contract. To date, a total of 17 construction change orders have been processed, which contributed to additional project cost. Some change orders are related to Halifax Water (HW) work and will be recovered through the cost sharing agreement. Some major changes include:

- Redesign and adjustments to the active transportation multi-use pathway that impacted retaining walls.
- Additional driveway reinstatement for civic 6814 and the removal of a concrete bus slab.
- Changes to storm sewer as a result of conflicts with existing sanitary sewer and watermain.
- Addition of concrete storm pipe including reinstatement.

More change orders are expected to complete Phase 1 construction and have been taken into consideration in the projected costs as outlined in summary of changes.

As a result of the above additional scope, the cumulative increase to Dexter's contract is projected to be \$520,705.02 (net HST included). A summary of the changes to the original contract are as follows:

Summary of the changes	(Net HST included)
Original Tender 20-217 contract amount ¹	\$7,438,643.21
Current Request for Increased budget	\$520,705.02
Cumulative Increase to Date	\$520,705.02
New Contract Value (Net HST included)	\$7,959,348.23
<i>Note 1. Approved by Regional Council June 23, 2020</i>	

The total amount of changes (approved and pending) is \$520,705.02, which represents a cumulative increase of 7% to Dexter's original contract value of \$7,438,643.21. This cumulative increase is within the 10% contingency range that is typical for construction projects with similar size and scope.

Construction duration of Phase 1 exceeded the original 35-week (175 working days) period estimated in May 2020. WSP completed 24 weeks of construction inspection during the 2020 construction season. Based on review of the contractor's schedule, approximately 16 to 18 weeks of construction are needed to complete Phase 1 in 2021. WSP provided a change order for additional construction inspection and contract administration services for the 2021 construction season. As a result of this additional scope, an increase of \$20,127.20 (net HST included) to WSP's Services contract component is requested (as identified in the table below).

During design of phase 1 and phase 2, additional consulting work beyond the original project scope was identified to support design changes. This additional work was approved by the project management team and Regional Council (*December 10, 2019*) as outlined in the summary of changes table below.

The design period of Phase 2 has been extended and additional scope changes are required to support design and land acquisitions. WSP has requested an additional of **\$26,232.10 (Change Order #8)** for Phase 2 design fees to provide:

- additional legal survey services required to revise property sketches, modify legal survey boundaries;
- additional temporary construction easements including property descriptions for properties that may require expropriation;
- additional meetings and coordination due to extended project duration.

Additional Design Scope - Bayers Road Interim Transit Priority Measure

Phase 2 (Connaught Avenue to Windsor Street) construction was planned to be tendered in fall/winter 2021 with construction in 2022. However, due to the current status of the land acquisition schedule, it is expected that the Phase 2 construction will be tendered in fall/winter 2022 and construction would take place in 2023.

As Phase 1 construction is being completed this year, and Phase 2 construction is now anticipated to be delayed until 2023 at the earliest, staff are exploring options to provide an interim outbound bus only lane on Bayers Road between Windsor Street and Connaught Avenue that can be completed in fall 2021. This interim measure will enable buses that currently detour off Bayers Road onto Roslyn Road (to avoid delays during congested periods) to return to their regular routing on Bayers Road.

Staff expect that an interim outbound bus lane can be accommodated within the existing curb limits. The result would be one lane of traffic in each direction on Bayers Road between Windsor Street and Connaught Avenue and an outbound transit lane, with on-street parking accommodated as appropriate (potentially during off-peak periods). Staff will consider the resulting traffic impacts associated with the interim outbound bus lane as part of the design process.

To complete the interim design for Phase 2 of Bayers Road WSP has requested an additional **\$25,810.79 (Change Order #9)** for additional work to provide:

- Interim Detailed Design
- Pre-Tender Package for HRM review
- Tender Package including drawing set, specifications and construction cost

As a result of the above additional scope, a total increase to WSP's construction services and design fees (Change Order# 1, # 8 & Change Order #9) of **\$72,170.09** (net HST included) is requested. A summary of the changes to the original contract award is as follows:

Summary of Changes to WSP Contract	(Net HST included)
Original contract amount	\$114,324.00
Change Order #1 increase approved to date	\$866.00
Change Order #2 revised scope cost neutral	\$ -
Change Order #3 increase approved to date	\$15,737.00
Change Order #4 increase approved to date ¹	\$119,878.00
Change Order #5 revised scope cost neutral	\$ -
Change Order #6 revised scope cost neutral	\$ -
Change Order #7 revised scope cost neutral	\$ -
Increase to construction services component	\$114,503.94
Current Funding Request for Increase Change Order #1 (construction services)	\$20,127.20
Current Funding Request for Increase Change Order #8	\$26,232.10
Current Funding Request for Increase Change Order #9	\$25,810.79
Current Cumulative Funding Request for Increase (Change order #1, #8 & 9)	\$72,170.09
Cumulative Contract Increase to Date	\$323,155.03
New Contract Value (Net HST included)	\$437,479.03
<i>Note 1. Increased approved by Regional Council December 10, 2019</i>	

The total cumulative amount of these changes is \$323,155.03, which represents a cumulative increase of 283% to the original contract value of \$114,324.00.

Construction of Bayers Road Interim Transit Priority Measures between Windsor Street and Connaught Avenue

Based on the Engineer's Estimate, **\$100,000** is required to complete construction of interim Transit Priority Measures between Windsor Street and Connaught Avenue. It is anticipated that work can be completed in fall 2021.

Project Cost Summary

A summary of project costs for account CT200002 – Major Strategic Multi-Modal Corridor: Bayers Road is tabled below. Please note that property acquisition costs are covered in a separate account.

Table 1: Cost Summary

Phase 1 (Romans Avenue to Connaught Avenue) design and construction costs				
Items	Approved Budget (2020/21)	Award Value to Date (A)	Budget Forecast to Completion (B)	Additional required C= (A-B)
Approved Budget	\$3,800,000			
Design Fees (Incl. change orders) ³		\$250,805.00 ²	\$302,847.89	\$(52,042.89)
Construction Cost (Dexter)		\$7,438,643.21 ¹	\$7,959,348.23	\$(520,705.02)
Contract Administration		\$114,503.94 ¹	\$134,631.14	\$(20,127.20)
Halifax Water Cost Sharing	\$1,463,433 ¹			
Traffic Signal Equipment		\$ 95,609.62	\$ 95,609.62	-
Construction of Bayers Road Interim Transit Priority Measures between Windsor Street and Connaught Avenue ⁴			\$100,000.00	\$(100,000.00)
Sub Total Phase 1	\$5,263,433.0	\$7,899,561.77	\$8,592,436.88	\$(692,875.11)

Note 1. Award approved by Regional Council June 23, 2020

Note 2. Change Award approved by Regional Council December 10, 2019

Note 3. For Phase 2 (Connaught Avenue to Windsor Street) design fees covered as part of Phase 1,

Note 4. For Phase 2 Interim Transit Priority Measures between Windsor Street and Connaught Avenue.

A reduction in construction scope for Phase 1 has been reviewed and no cost savings can be found. As construction is underway, we may need to issue a stop work order until the funds are secured. TPW's Project Manager and the Construction Inspector are watching the budget closely to mitigate potential risk.

Projected Phase 2 Cost

Construction budget for Phase 2 (Connaught Avenue to Windsor Street) was initially estimated at \$2,520,000. As a result of Phase 1 Tender # 20-217 and current market projections, Phase 2 funding will need to increase by approximately \$2,180,000 with total estimated projection of \$4,700,000. The budget projection and cash flow for Phase 2 will be addressed during future capital budget process.

FINANCIAL IMPLICATIONS

Staff has recommended an increase to:

- Dexter's contract - P.O. No. 2070843085 in the amount of \$520,705.02 (net HST included)
- RFP No. 18-302 - P.O. No. 2070796457- WSP's Construction Services (Change Order # 1) in the amount of \$20,127.20 (net HST included)
- RFP No. 18-302 - P.O. No. 2070796457- WSP's design fees (Change Order # 8+Change Order #9) in the amount of \$52,042.89 (net HST included), and
- An interim Transit Priority Measures construction cost of \$100,000.00

With this report, staff is seeking an additional of **\$692,875.11** (net HST included) to complete Phase 1 including construction of Bayers Road Interim Transit Priority Measures between Windsor Street and Connaught Avenue. Without these additional funds, construction of Phase 1 and Interim Transit Priority Measures cannot be completed.

The budget availability has been confirmed by Finance. A summary of the changes are as follows:

Budget Summary: Capital Account No. CT200002 – Major Strategic Multi-Modal Corridor: Bayers Road

Cumulative Uncommitted Budget	\$ 2,502,911
Plus: Increase from Q526 Capital Reserve	\$ 692,875
Less: Increase to Tender 20-17-Dexter's contract	\$520,705
Less: RFP 18-302-WSP's Construction Services	\$20,127
Less: RFP 18-302-WSP's Design Services	\$52,042
Less: Interim Transit Priority Measures construction cost	\$100,000
Projected balance	\$ 2,502,912*

Budget Summary: Capital Reserve Q526

Q526 Capital Reserve Balance:	\$ 29,376,500
Unbudgeted Withdrawal, CT200002:	\$ 692,875
Net Available Balance, Q526	\$ 28,683,625

The project was estimated in the proposed 2020/21 Capital Budget at \$3,800,000 as a multi-year project, with \$3,625,000 projected in the 2021/22 Capital Project Budget, totalling \$7,425,000 for the Major Strategic Multi-Modal Corridor: Bayers Road. As a result of cost sharing from Halifax Water, the overall net cost for Phase 1 to Project Account No. CT200002 was estimated at \$6,089,714.15 during award of Tender 20-217. Please note, actual cost sharing amount for this project will be based on final quantities determined during construction in 2021.

*Note the projected remaining balance is the multi-year budget allocated for use in fiscal 22/23 and is available to commit but not to spend in the 21/22 fiscal year.

RISK CONSIDERATION

There are risks associated with the recommendation in this report. To reach this conclusion, consideration was given to financial and service delivery risks.

- Phase 1 (Romans Avenue to Connaught Avenue) construction is expected to be completed by the middle to end of August 2021. Temporary disruptions to the major right of way corridor are required as part of Phase 1 construction work. The project is also being coordinated with utility stakeholder works and adjacent construction projects in the area. Construction mitigation measures, coordination meetings and public notifications are provided. However, unforeseen conditions of underground materials and/or infrastructure may be encountered, which may be risks to the project completion schedule.
- Unforeseen conditions may lead to more change orders for phase 1 construction but based on experience with this project a forecast of expected changes have been estimated and considered in the budget forecast request in this report.
- Phase 2 (Connaught Avenue to Windsor Street) construction was planned to be tendered in fall/winter 2021 with construction in 2022. However, due to the current status of the land acquisition schedule, it is expected that the Phase 2 (Connaught Avenue to Windsor Street) construction will be tendered in fall/winter 2022 and construction would take place in 2023. This will require budget allocation in 2021/22 in order to tender in 2022 with spending in 2023/24.

COMMUNITY ENGAGEMENT

Community consultation was included as part of the project, specifically during the following components:

- Prior to the selection of the functional design option on February 1, 2018, community engagement was part of the Bayers Road transit priority corridor options and also as part of developing HRM's overall priorities related to the *Integrated Mobility Plan* and the *Moving Forward Together Plan*.
- December 12, 2019: HRM Staff held a community meeting with residents of the Westmount subdivision and of Micmac Street to discuss the proposed changes and solicit feedback from residents on how they would be impacted; and
- January 29, 2020: HRM Staff held a public meeting for the general public that allowed residents to view the detailed design drawings and learn about key features of the project.

In addition, there has been extensive correspondence between HRM & stakeholders and project updates will be communicated to the public on an ongoing basis.

ENVIRONMENTAL IMPLICATIONS

The IMP provides a framework for accomplishing the Regional Plan's Goals of achieving a more sustainable transportation system with at least 30% of all trips by transit or active transportation (AT). This project helps achieve this goal.

Halifax Water's integrated sewer separation works helps improve storm sewer quality and separates it from the sanitary sewer treatment.

ALTERNATIVES

Regional Council could choose not to approve the recommendation

ATTACHMENTS

A1 - WSP Canada Inc. Cost Proposal for Additional Scope

A copy of this report can be obtained online at halifax.ca or by contacting the Office of the Municipal Clerk at 902.490.4210.

Report Prepared by: Abdullah Mofarrah, Design Engineer Team Lead, Project Planning & Design, 902-490-5019



April 23, 2021

Abdullah Mofarrah, P.Eng.
Design Engineering Team Lead – Transportation & Public
Halifax Regional Municipality

[via email: mofarra@halifax.ca]

**RE: Bayers Road Transit Priority Corridor
Cost Quote Request for Phase 1 Construction Services for 2021 – Change Order C1**

Dear Mr. Mofarrah:

This letter outlines the additional scope of work and cost for the construction services for the Bayers Road Transit Priority Corridor project. These services are described in our *Proposal for Bayers Road Transit Priority Corridor – Detailed Design Phase 1 Construction Services & Phase 1 As-Built Package – Cost Quote Request*, May 21, 2020.

INTRODUCTION

WSP completed the detailed design of the Bayers Road Transit Priority Corridor Project and was contracted to complete the construction services. Phase 1 of the construction for the Bayers Road Transit Priority Corridor project is expected to exceed the original 35-week construction period estimate outlined in the May 2020 requests. WSP has completed 24 weeks of construction inspection during the construction season of 2020 however, it is anticipated that there are approximately 16 weeks of construction remaining on Phase 1 to be completed during the 2021 season. Therefore, WSP has prepared this change order to account for the additional construction inspection services for the construction 2021 season.

SCOPE OF WORK

The scope of work for Phase 1B construction is expected to be consistent with the services performed during Phase 1A in 2020 and as described in our May 21, 2020 scope of work.

COST OF SERVICES

The May 21, 2020 budget included an estimate of 35-weeks remaining of construction inspection work for Phase 1 Construction on the Bayers Road Transit Priority Corridor project. WSP has completed 24-weeks of construction work in 2020 and there is approximately \$30,000 remaining from the original estimated budget of \$105,015. To complete Phase 1 Construction services in 2021, based on review of contractor schedule we estimate approximately 16 weeks of activity remaining which will require an additional budget of 19,300. The budget estimates and summary are included in the table below:



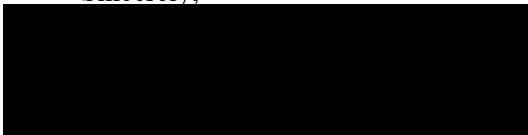
Table 1: Budget Estimate

Bayers Road Phase 1 Construction Services Summary		
Initial Budget Estimate Phase 1	As Built Package	\$ 4,783
Construction Services and As-Built	Construction Services	\$ 105,015
		May 2020 Total PO \$ 109,798
May 2020 Construction Services Budget		\$ 105,015.00
less Construction Services Expenditures up to February 27, 2021		\$ 74,679.17
May 21, 2020 Construction Services Budget Remaining		\$ 30,335.83
Estimated Phase 1 Remaining work (Approx. 16 weeks @ \$3100/week)		\$ 49,600.00
less May 2020 Construction Services Budget Remaining		\$ 30,335.83
		\$ 19,264.17
Additional Expected Phase 1 Construction Services Budget Required for		
	2021	\$ 19,300.00
With Additional Construction Services Budget, total remaining includes:		
	As Built Package	\$ 4,783.00
	Construction Services	\$ 49,635.83

We estimate that **an additional budget of \$19,300 plus HST** will be required to complete the construction services for Phase 1B activity during 2021.

If you have any questions or comments, please contact me by email at greg.obrien@wsp.com or by telephone at 902-835-9955.

Sincerely,



Greg O'Brien, P.Eng.
 Atlantic Practice Manager - Transportation Engineer
 WSP Canada Inc.

July 19, 2021

Abdullah Mofarrah, P.Eng.
Design Engineer
Halifax Regional Municipality

[via email: mofarra@halifax.ca]

**RE: Change Order #8 – Request for Additional Services - Revised
Proposal for Bayers Road Transit Priority Corridor – Phase 2**

Dear Mr. Mofarrah:

This letter is in response to our recent discussions and relating to the additional design effort, coordination with property owners and the property acquisition team, and monthly project steering committee meetings on Phase 2 of the Bayers Road Transit Priority Project. We have also reviewed effort required to provide additional legal survey services relating to property descriptions and addition of construction easement descriptions on all properties to help facilitate construction.

In the Fall of 2019 the decision was made to break the Bayers Road Transit Priority Project into 2 construction phases. At that time HRM requested a change order from WSP to account for tendering the construction over two phases, these items were summarized in Change Order #4 submitted on November 22, 2019 and approved on December 16, 2019.

In November 2019 it was expected that Phase 1 from Romans Avenue to Connaught Avenue would be tendered for construction in Spring 2020. Phase 2 from Connaught Avenue to Windsor Street would be tendered for construction in Spring 2021. While Phase 1 was tendered on 2020 as expected, HRM decided to delay Phase 2 construction which is now expected to be tendered for construction in Spring of 2021.

Since the Fall of 2019 there have been a number of design changes which were accommodated through Change Orders 5, 6, and 7. These change orders removed budget from some items that were no longer required, and shifted budget to requested areas of scope change. Therefore, it did not change the overall budget established in Change Order 4.

Items remaining to be completed within the established budget include: placement of survey pins to finalize the legal survey plans, attend Phase 2 pre-tender review meeting, prepare Phase 2 Issued for Construction Drawings, and attend Phase 2 Pre-Construction meeting.

Phase 2 construction tender timeframe has been extended and additional scope changes have been requested. Change Order 8 described these tasks and provides an estimate of additional effort required to accommodate the requests.

SCOPE OF WORK FOR CHANGE ORDER 8

The work outlined below relates to four tasks requested that require additional effort beyond what was accounted for in the initial project scope and previous change orders:

TASK 1: EXTENDED PROJECT DURATION:

Since the project duration has been extended beyond what was initial established in November 2019, there is additional effort required including attendance at monthly steering committee meetings, additional project management and administration services. We have summarized our expected effort for this task on the attached budget summary table.

TASK 2: MODIFICATIONS TO LEGAL SURVEY BOUNDARY:

The design completed in 2019 included retaining walls for a number of properties. In the design, the planned ROW had an offset of 0.2m beyond the back of the sidewalk. Modifications to the legal survey were requested in 2020 to keep required retaining walls within HRM ROW. Since this change was requested before the survey pins were placed, there is no additional effort for placement of the property pins at the revised location. However, additional effort is required to coordinate the drawing set and calculate the revised property boundaries for the legal survey. Requestes have also been received to include easements and descriptions for properties where expropriation may be



**Change Order #8 – Request for Additional Services - Revised
Proposal for Bayers Road Transit Priority Corridor – Phase 2**

required. Included in the effort estimated for Task 2 is the addition of construction easements, reissue of the legal survey drawings and preparation of written description for these easements.

TASK 3: SUPPORT FOR PROPERTY ACQUISITION:

Phase 2 of the Bayers Road Transit Priority corridor includes a requirement to expand the ROW which impacts many properties. There have been many requests from HRM for the property sketches to add additional information, modify access configurations, and redesign slopes where retaining walls were planned. These efforts are being spent to support ongoing discussions between the HRM property acquisition group and various vendors along the corridor. In addition to the supporting sketches, additional meetings will need to be held with impacted developers/property owners and the property acquisition group to discuss potential design changes where the widening project blends into private property or the new planned ROW boundary.

TASK 4: ACTIVE TRANSPORTATION DESIGN AT NORTHWEST QUADRANT WINDSOR STREET:

A meeting was held to review potential to modify the design of the northwest quadrant of the Windsor Street / Bayers Road intersection to accommodate a bike lane behind the curb on the approach to the stop bar. While detailed design of this intersection has already been completed, we are able to review and modify the design to accommodate improvements to the bike infrastructure on Windsor Street. We will complete design of an asphalt bike lane from approximately the north property boundary on Bayers Road to the planned curb on the north side of Bayers Road to separate bike traffic from motorized traffic at the stop bar for southbound movements on Windsor Street. The design will be included on the drawing set for Bayers Road Transit Priorities Phase 2.

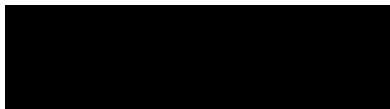
COST OF SERVICES

We estimate that our consulting services, as described above, can be completed for a total budget, excluding HST, of:

- Task 1: Extended Project Duration Monthly Meetings \$ 6,798
- Task 2: Modifications to Legal Survey Boundary \$ 10,380
- Task 3: Support for property Acquisition \$ 7,020
- Total = \$ 24,198 plus HST**

- Provisional - Task 4: AT Design northwest quadrant Windsor Street \$ 956 plus HST

If you have any questions or comments, please contact me by email at greg.obrien@wsp.com or by telephone at 902-444-8347.



Greg O'Brien, P.Eng.
Atlantic Practice Manager - Transportation Engineer
WSP Canada Inc.

July 19, 2021

Abdullah Mofarrah, P.Eng.
Design Engineer - Halifax Regional Municipality

[via email: mofarra@halifax.ca]

**RE: Change Order #9 – Interim Phase 2 Transit Design – Revised
Proposal for Bayers Road Transit Priority Corridor – Phase 2**

Dear Mr. Mofarrah:

Further to your email on July 15th, 2021, WSP has prepared a scope of work to complete an interim design for Phase 2 of the Bayers Road Transit Priority project, as the construction for Phase 2 may be delayed. It is expected that an outbound bus lane can be accommodated within the existing curb limits on Bayers Road resulting in one lane of traffic in each directions between Connaught Avenue and Windsor Street. If there is additional space, on-street parking can be accommodated. The existing pavement markings and signage along Bayers Road would be removed and the proposed pavement markings and signage to be implemented.

SCOPE OF WORK FOR CHANGE ORDER 9

The work outlined below relates to the tasks requested to complete the interim design for Phase 2 of Bayers Road:

TASK 1: INTERIM DETAILED DESIGN:

WSP will complete the interim detailed design of Bayers Road from Connaught Avenue to Windsor Street. The drawing package will include pavement marking and signage requirements for implementation of the interim design that will include an outbound transit lane on Bayers Road within the existing curb to curb width. The drawing package will be stamped by a Professional Engineer.

TASK 2: PRE-TENDER PACKAGE:

After receiving comments on the design package (Task 2), WSP will issue a Pre-Tender Package for HRM review. WSP will meet with HRM to review the Pre-Tender submission of the Interim Detailed Design.

TASK 3: TENDER PACKAGE:

WSP will modify the drawings based comments received and submit the Tender Package of the interim design to HRM which will include the drawing set, specifications and associated construction cost estimate documentation.

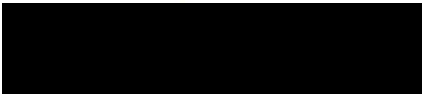
COST OF SERVICES

We estimate that our consulting services, as described above, can be completed for a total budget, excluding HST, of:

• Task 1: Interim Detailed Design	\$ 14,516
• Task 2: Pre-Tender Package	\$ 5,466
• Task 3: Tender Package	<u>\$ 4,768</u>
Total =	\$ 24,750 plus HST

If you have any questions/comments, please contact me by email at greg.obrien@wsp.com or phone at 902-444-8347.

Sincerely,



Greg O'Brien, P.Eng., Atlantic Practice Manager - Transportation Engineer
WSP Canada Inc.