



City of Port Moody

Report/Recommendation to Council

Date: June 9, 2022
Submitted by: Engineering and Operations Department – Infrastructure Engineering Services Division
Subject: Bedwell Bay Road Transportation Study

Purpose

To summarize the Bedwell Bay Road Transportation Study and recommend allocating funds in subsequent capital budgets to proceed with detailed design of the study recommendations.

Recommended Resolution(s)

THAT \$300,000 be allocated for consideration in the 2023 Capital Budget process to complete detailed design of the proposed multi-use path along First Avenue and Bedwell Bay Road, between Ioco Road and Tum Tumay Whueton Drive, and associated recommendations from the Bedwell Bay Road Transportation Study as recommended in the report dated June 9, 2022 from the Engineering and Operations Department – Infrastructure Engineering Services Division regarding the Bedwell Bay Road Transportation Study;

AND THAT staff explore funding opportunities to help pay for the detailed design and construction of the project.

Background

The City maintains jurisdiction over about 2.6 kilometres of Bedwell Bay Road, from Sunnyside Road to the Port Moody – Village of Belcarra boundary. About 200 metres of the road lies within the Village of Anmore, including the intersection with Crystal Creek Drive / Forestview Lane. Within the same corridor, First Avenue runs for about 700 metres between the Ioco Road intersection and the start of Bedwell Bay Road. The Port Moody section of the corridor includes various landmarks of interest, including the old Ioco Town site, the White Pine Beach Road intersection to the Sasamat Lake area, and the Tum Tumay Whueton Drive intersection into tæmtæxʷtæn / Belcarra Regional Park. The road is part of the regional Major Road Network.

Bedwell Bay Road has been the subject of numerous previous reports to Council, most notably about managing on-street parking along the road. While parking was generally permitted along the road for much of its history, Council resolved to restrict parking in 2018 to address concerns over vehicles protruding into the travelled portions of the roadway because of the narrow shoulders, restricting sightlines and forcing pedestrians to also walk in the travelled portion of

the roadway. High numbers of patrons visiting the parks, particularly in the summer months and significantly increased during the COVID-19 pandemic, has led to significant challenges enforcing the no-parking restrictions, and the City expanded the parking restrictions for most of the road within Port Moody and added further physical measures, such as plastic delineator posts and temporary concrete barriers, to the road.

On June 24, 2021, the Transportation Committee received a delegation from the HUB Cycling Tri-Cities Local Committee on a Sasamat Greenway Safe and Active Transportation Corridor. The general concept for the corridor would be to provide a safe walking and cycling connection between Ioco Road and Tum Tumay Whueton Drive, as detailed in a May 12, 2021 letter from HUB Cycling (**Attachment 1**). The Transportation Committee passed the following resolution:

TC21/014

THAT a review of the costs and feasibility for the design and construction of a Sasamat Greenway be undertaken as recommended in the letter dated May 12, 2021 from HUB Cycling regarding Sasamat Greenway – Safe Active Transportation Corridor.

Council subsequently passed the following resolution on July 27, 2021:

RC21/375

THAT the report dated July 5, 2021 from the Transportation Committee regarding Sasamat Greenway – Safe and Active Transportation Corridor be referred to staff for action.

Separately, the City had also entered into a contribution agreement with Metro Vancouver Regional District (Metro Vancouver) to collaborate on a Bedwell Bay Road Transportation Study. The City retained Associated Engineering to review transportation conditions in the corridor, park access, parking operations, transportation demand management measures, and conduct stakeholder consultation. Associated Engineering prepared a final report (**Attachment 2**) which forms the basis of this report. The project was funded with the assistance of Metro Vancouver.

Discussion

The purpose of the project was to create a functional plan for Bedwell Bay Road, which would enable a design process to be completed later. Project objectives were described as follows:

- Improve the safety of the corridor for all users.
- Develop a permanent solution to the on-street parking issues.
- Address the need for inclusion of active transportation within the corridor.

City and Metro Vancouver staff met the consulting team onsite to learn about issues and discuss opportunities for the corridor. The existing conditions were summarized as follows:

Intersections

- The intersection of Bedwell Bay Road and Crystal Creek Drive / Forestview Lane in the Village of Anmore is located on a horizontal curve and may have poor sightlines.
- The intersection of Bedwell Bay Road and White Pine Beach Road is a complex, skewed T-intersection with turning lanes, bus stops, and turnaround areas within the intersection.
- The intersection of Bedwell Bay Road and Tum Tumay Whueton Drive is a skewed T-intersection with potential sightline issues. The intersection operates as a 3-way stop.

Shoulder Widths

Existing shoulder widths were reviewed to determine if they were “Not Walkable” (i.e. less than 1.2 metres wide), “Walkable” (i.e. between 1.2 metres and 2.4 metres wide), or “Parkable” (i.e. more than 2.4 metres wide), based on guidance from the Transportation Association of Canada for parking areas. The review determined that, based on this criterion, most of the road does not currently have shoulders wide enough to safely park.

Collisions and Safety

Based on a review of collisions reported to police, Bedwell Bay Road does not seem to have many collisions occurring. The project therefore focused more on addressing the issue of comfort caused by the narrow shoulders and people currently being forced to walk in the vehicle travel lanes around parked cars. Port Moody Police did report a concern about vehicle rollover collisions occurring at the Tum Tumay Whueton Drive intersection.

Traffic Volume and Speed

Traffic data was provided by Port Moody vehicle counters and by permanent count stations maintained by Metro Vancouver, with the following observations:

- Total traffic along Bedwell Bay Road is well within the capacity of a two-lane road.
- Total traffic varies significantly throughout the week and year, from a low of less than 2,000 vehicles per day in January, to a high approaching 12,000 vehicles per day on summer weekends in August.
- Traffic along White Pine Beach Road is about 5-10% of total traffic along Bedwell Bay Road.
- Traffic on White Pine Beach Road, which is related to visitors to Sasamat Lake, increased significantly during the pandemic, with annual totals of about 150,000 vehicles per year before 2020, but more than 200,000 per year in 2020 and 2021.
- Speeds along Bedwell Bay Road were much higher than the posted speed limit of 50 km/h, including 85th percentile speeds west of White Pine Beach Road of 75 km/h or more.
- Despite the lack of facilities, the road is used by cyclists, with more than 50 cyclists per day counted on separate occasions in October and November 2021.

Parking

There are about 412 parking spots at White Pine Beach. Parking demand on peak days exceeds supply, and recent efforts to restrict parking on Bedwell Bay Road, coupled with higher demand, has exacerbated issues experienced.

Transit

There are two community shuttles, Routes 181 and 182, that operate along Bedwell Bay Road. Coast Mountain Bus uses a “flag stop” system except at White Pine Beach. Route 150 is a busy summer season shuttle from Coquitlam Centre SkyTrain Station running frequent articulated buses to White Pine Beach. Most bus stops lack passenger amenities such as shelters and benches.

In addition to the above, the following issues have been experienced at specific locations:

White Pine Beach Road

During busy times, Metro Vancouver Park staff oversee the intersection of White Pine Beach Road at Bedwell Bay Road, and have noted:

- Cars illegally parking on the shoulder and in the turn lane of the intersection
- Belligerent behaviour by some drivers towards park operators and traffic control staff
- Through traffic on Bedwell Bay Road impeded by vehicles stopping to access the park
- Bylaws staff and Port Moody Police witness significant non-compliance with parking bylaws, even with high amounts of ticketing and towing
- Route 182 bus passengers needing to wait in the travelled portion of the roadway because of the location of the bus stop.

Tum Tumay Whueton Drive

The skew of the intersection and curve may make it difficult for drivers to identify which road is Bedwell Bay Road and which is Tum Tumay Whueton Drive, particularly at night because the intersection is not illuminated. Directional signage at the intersection could also be improved.

Floatwalk Access

The floatwalk access north of the Tum Tumay Whueton Drive intersection serves as a secondary access to White Pine Beach. Port Moody Police are frequently deployed to patrol this area of the park, but there is no emergency vehicle parking in this area.

Bedwell Bay Turnaround Area

An informal turnaround area near the Village of Belcarra boundary is not well defined and there are frequently park goers walking in this area along the narrow shoulders.

Recommendations

After reviewing the corridor and identifying the various issues for addressing, the Project Team divided the study area into five improvement areas:

1. Pedestrian / Cyclist Facilities along Bedwell Bay Road
2. White Pine Beach Road Intersection
3. Floatwalk Access
4. Tum Tumay Whueton Drive Intersection
5. White Pine Beach Visitation and Circulation

Attachment 2 provides detailed descriptions of the options that were developed and how they were evaluated. The Project Team's recommendations for each improvement area are summarized below.

- Construction of a curb-separated multi-use path along one side of Bedwell Bay Road and First Avenue between Ioco Road and Tum Tumay Whueton Drive. This would provide better traffic operations and mobility, road safety, parking compliance, and walking facilities, for a similar cost and set of implementation challenges as the other option that was explored. While the report describes the multi-use path option as being on the north side, the path may also be constructable on the south side. The implications of constructing it on different sides of the road would be explored during detailed design.
- Convert the White Pine Beach intersection to a mini-roundabout, which would provide better traffic operations and mobility, and road safety, because it would mitigate the poor sightlines. A mini-roundabout would provide a traffic calming effect on Bedwell Bay

Road, and would better accommodate driveway turnaround traffic when the park gate is closed. Marked crosswalks and better bus stops would also be added.

- Provide a small on-street parking area with pedestrian access to the floatwalk including a dedicated emergency vehicle parking area.
- Construct minor safety improvements to the Tum Tumay Whueton Drive Intersection intersection, including the addition of advance warning signage, illumination, minor geometric changes, and better wayfinding signage. These are expected to be inexpensive but effective at improving the intersection.
- For future consideration by Metro Vancouver staff, improvements to circulation within the park, potentially using some of the onsite parking lots as bus turnabout and pick-up / drop-off areas.

Transportation Committee Resolution

The Bedwell Bay Road Transportation Study and its recommendations were presented to the Transportation Committee on April 20, 2022. In discussion, the committee noted the two options developed for active transportation, the multi-use path and the unidirectional facilities on each side, would each have certain advantages and disadvantages, but that ultimately it is important to physically separate people walking and cycling from vehicles on the road. The committee also suggested that paid parking at the floatwalk area may help recover some of the costs of the project over time and encourage visitors to take transit. The committee passed the following resolution:

TC22/011

THAT the findings of the Bedwell Bay Road Transportation Study as presented on April 20, 2022 be endorsed.

Next Steps

The Project Team received an opinion of probable cost of implementing the above recommendations of about \$10 million, which includes 100% contingency factors on all estimates. Most of the cost (i.e. about \$9.7 million) would be for adding the multi-use path to Bedwell Bay Road.

As this cost would represent a significant undertaking, the City should seek to secure grant funding from entities such as Metro Vancouver, the Provincial Government, and the Federal Government. Many of these opportunities require “shovel ready” projects, meaning the City should consider first completing a detailed design before applying for funding. The detailed design would investigate the considerations explored in this project at a much higher level of detail, including environmental impacts and permitting, to identify implementation challenges and resolutions, and to refine cost estimates to within a narrow range.

Other Option(s)

If Council does not wish to proceed further with this project, the following may be considered:

THAT Council receive the report dated June 9, 2022 from the Infrastructure Engineering Services Division regarding the Bedwell Bay Road Transportation Study for information.

The existing conditions within the Bedwell Bay Road corridor would continue.

Financial Implications

Completing a detailed design study of the recommendations of the Bedwell Bay Road Transportation Study is estimated to cost about \$300,000 and would include surveying, environmental investigations, and archaeological permitting. At this time, a high-level construction cost estimate for the recommended improvements is \$10 million.

It is anticipated that this type of project could be eligible for future grant funding programs as they become available.

Communications and Civic Engagement Initiatives

As the relevant sections of Bedwell Bay Road and First Avenue have little to no property frontage that would be affected by the proposed changes, no general public engagement was conducted for this study. The project team met with Coast Mountain Bus Company, HUB Cycling, Village of Anmore and Village of Belcarra during the study to review its findings and solicit feedback.

Council Strategic Plan Objectives

The Bedwell Bay Road Transportation Study aligns with the following Council Strategic Plan Objectives:

- **Exceptional Service:** Form effective relationships with service delivery providers, industries, and stakeholders to improve service delivery – The project was delivered in collaboration with Metro Vancouver.
- **Healthy City:** Encourage lifelong healthy and active living – Adding a multi-use path to First Avenue and Bedwell Bay Road would encourage active transportation along the corridor.
- **Community Evolution:** Provide people with a variety of options to move through and around Port Moody safely and efficiently – Adding a multi-use path to First Avenue and Bedwell Bay Road would improve safety for active transportation users in the corridor.

Attachment(s)

1. Sasamat Greenway Letter from HUB Cycling – 2021-05-12
2. Bedwell Bay Road Transportation Study – Final Report

Report Author

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Report Approval Details

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| Document Title: | Bedwell Bay Road Transportation Study.docx |
| Attachments: | - Attachment 1 - Sasamat Greenway Letter from HUB Cycling - 2021-05-12.pdf - Attachment 2 - Bedwell Bay Road Transportation Study - Final Report.pdf |
| Final Approval Date: | Jul 4, 2022 |

This report and all of its attachments were approved and signed as outlined below:

Stephen Judd, Manager of Infrastructure Engineering Services - Jun 27, 2022 - 11:46 AM

Jeff Moi, General Manager of Engineering and Operations - Jun 28, 2022 - 7:14 PM

Rosemary Lodge, Manager of Communications and Engagement - Jun 30, 2022 - 2:31 PM

Paul Rockwood, General Manager of Finance and Technology - Jun 30, 2022 - 4:41 PM

Tim Savoie, City Manager - Jul 4, 2022 - 10:23 AM