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SERVICES AND SOLUTIONS FOR A LIVABLE REGION

METRO VANCOUVER REGIONAL DISTRICT
REGIONAL PARKS COMMITTEE

REGULAR MEETING

Wednesday, June 8, 2022
9:15 AM
Meeting conducted electronically pursuant to the Procedure Bylaw
28th Floor Boardroom, 4515 Central Boulevard, Burnaby, British Columbia
Webstream available at http://www.metrovancouver.org

A G E N D A[1]

1. ADOPTION OF THE AGENDA

1.1 June 8, 2022 Regular Meeting Agenda

That the Regional Parks Committee adopt the agenda for its regular meeting scheduled for June 8, 2022 as circulated.

2. ADOPTION OF THE MINUTES

2.1 May 18, 2022 Regular Meeting Minutes

pg. 5

That the Regional Parks Committee adopt the minutes of its regular meeting held May 18, 2022 as circulated.

3. DELEGATIONS

4. INVITED PRESENTATIONS

5. REPORTS FROM COMMITTEE OR STAFF

5.1 Ecological Restoration Projects in Regional Parks

Verbal Update

Designated Speaker: Markus Merkens, Natural Resource Management Specialist, Regional Parks

[1] *Note: Recommendation is shown under each item, where applicable.*

5.2 MVRD Dedication of Land as Regional Park Bylaw No. 1349, 2022 *pg. 9*

That the MVRD Board:

a) give first, second and third reading to *Metro Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1349, 2022*; and

b) pass and finally adopt *Metro Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1349, 2022*.

5.3 MVRD Dedication of Land as Regional Park Amendment Bylaw No. 1345, 2022 – Amends Bylaw 1061, 2007 *pg. 15*

That the MVRD Board:

a) give first, second and third reading to *Metro Vancouver Regional District Dedication of Land as Regional Park Amendment Bylaw No. 1345, 2022*; and

b) pass and finally adopt *Metro Vancouver Regional District Dedication of Land as Regional Park Amendment Bylaw No. 1345, 2022.*

5.4 MVRD Dedication of Land as Regional Park Amendment Bylaw No. 1346, 2022 – Amends Bylaw 1076, 2008 *pg. 26*

That the MVRD Board:

a) give first, second and third reading to *Metro Vancouver Regional District Dedication of Land as Regional Park Amendment Bylaw No. 1346, 2022*; and

b) pass and finally adopt *Metro Vancouver Regional District Dedication of Land as Regional Park Amendment Bylaw No. 1346, 2022.*

5.5 MVRD Dedication of Land as Regional Park Amendment Bylaw No. 1347, 2022 – Amends Bylaw 1111, 2009 *pg. 30*

That the MVRD Board:

a) give first, second and third reading to *Metro Vancouver Regional District Dedication of Land as Regional Park Amendment Bylaw No. 1347, 2022*; and

b) pass and finally adopt *Metro Vancouver Regional District Dedication of Land as Regional Park Amendment Bylaw No. 1347, 2022.*

5.6 MVRD Dedication of Land as Regional Park Amendment Bylaw No. 1348, 2022 – Amends Bylaw 1300, 2020 *pg. 36*

That the MVRD Board:

a) give first, second and third reading to *Metro Vancouver Regional District Dedication of Land as Regional Park Amendment Bylaw No. 1348, 2022*; and

b) pass and finally adopt *Metro Vancouver Regional District Dedication of Land as Regional Park Amendment Bylaw No. 1348, 2022.*

5.7 MVRD Dedication of Land as Regional Park Amendment Bylaw No. 1344, 2022 – Amends Bylaw 1319, 2021 *pg. 41*

That the MVRD Board:

a) give first, second and third reading to *Metro Vancouver Regional District Dedication of Land as Regional Park Amendment Bylaw No. 1344, 2022*; and
b) pass and finally adopt *Metro Vancouver Regional District Dedication of Land as Regional Park Amendment Bylaw No. 1344, 2022.*

5.8 Alternative Transportation Study Part II: Access to Regional Parks Report *pg. 47*

That the MVRD Board:

a) receive for information the report dated May 10, 2022, titled "Alternative Transportation Study Part II: Access to Regional Parks"; and
b) direct staff to share the report with TransLink and member jurisdictions.

5.9 təmtəmíxʷtən/Belcarra Regional Park – Joint City of Port Moody and MVRD Bedwell Bay Rd Traffic Study results *pg. 79*

That the Regional Parks Committee receive for information the report dated May 11, 2022, titled "təmtəmíxʷtən/Belcarra Regional Park – Joint City of Port Moody and MVRD Bedwell Bay Rd Traffic Study results."

5.10 Manager's Report – Regional Parks *pg. 147*

That the Regional Parks Committee receive for information report dated May 18, 2022 titled "Manager's Report – Regional Parks."

6. INFORMATION ITEMS

6.1 Regional Parks Upcoming Events – June 2022 *pg. 152*

7. OTHER BUSINESS

8. BUSINESS ARISING FROM DELEGATIONS

9. RESOLUTION TO CLOSE MEETING

Note: The Committee must state by resolution the basis under section 90 of the Community Charter on which the meeting is being closed. If a member wishes to add an item, the basis must be included below.

That the Regional Parks Committee close its regular meeting scheduled for June 8, 2022 pursuant to the *Community Charter* provisions, Section 90 (1) (g) as follows:

"90 (1) A part of the meeting may be closed to the public if the subject matter being considered relates to or is one or more of the following:

(g) litigation or potential litigation affecting the regional district."

10. ADJOURNMENT/CONCLUSION

That the Regional Parks Committee adjourn/conclude its regular meeting of June 8, 2022.

Membership:

McEwen, John (C) – Anmore
Wiebe, Michael (VC) – Vancouver
Calendino, Pietro – Burnaby
Dilworth, Diana – Port Moody
Guerra, Laurie – Surrey
Harvie, George – Delta
Hodge, Craig – Coquitlam
Miyashita, Tracy – Pitt Meadows
Muri, Lisa – North Vancouver District
Nicholson, Maureen – Bowen Island
Penner, Darrell – Port Coquitlam
Richter, Kim – Langley Township
Ross, Jamie – Belcarra
Soprovich, Bill – West Vancouver
Trentadue, Mary – New Westminster

METRO VANCOUVER REGIONAL DISTRICT
REGIONAL PARKS COMMITTEE

Minutes of the Regular Meeting of the Metro Vancouver Regional District (MVRD) Regional Parks Committee held at 9:17 a.m. on Wednesday, May 18, 2022 in the 28th Floor Boardroom, 4515 Central Boulevard, Burnaby, British Columbia.

MEMBERS PRESENT:
Chair, Mayor John McEwen, Anmore
Vice Chair, Councillor Michael Wiebe*, Vancouver
Councillor Pietro Calendino*, Burnaby
Councillor Diana Dilworth*, Port Moody
Councillor Laurie Guerra*, Surrey
Councillor Craig Hodge*, Coquitlam (departed at 10:02 a.m.)
Councillor Tracy Miyashita*, Pitt Meadows
Councillor Lisa Muri*, North Vancouver District
Councillor Maureen Nicholson*, Bowen Island
Councillor Darrell Penner*, Port Coquitlam
Councillor Kim Richter*, Langley Township
Mayor Jamie Ross*, Belcarra
Councillor Bill Soprovich, West Vancouver
Councillor Mary Trentadue*, New Westminster

MEMBERS ABSENT:
Mayor George Harvie, Delta

STAFF PRESENT:
Mike Redpath, Director, Regional Parks, Parks and Environment
Morgan Mackenzie, Legislative Services Coordinator, Board and Information Services

*denotes electronic meeting participation as authorized by Section 3.6.2 of the *Procedure Bylaw*

1. ADOPTION OF THE AGENDA

1.1 May 18, 2022 Regular Meeting Agenda

It was MOVED and SECONDED
That the Regional Parks Committee adopt the agenda for its regular meeting scheduled for May 18, 2022 as circulated.

CARRIED

2. ADOPTION OF THE MINUTES

2.1 April 13, 2022 Regular Meeting Minutes

It was MOVED and SECONDED
That the Regional Parks Committee adopt the minutes of its regular meeting held April 13, 2022 as circulated.

CARRIED

3. DELEGATIONS

No items presented.

4. INVITED PRESENTATIONS

No items presented.

5. REPORTS FROM COMMITTEE OR STAFF

5.1 Regional Parks 2021 Annual Report

Report dated April 22, 2022, from Jamie Vala, Division Manager, Planning and Resource Management, Regional Parks, providing the Regional Parks Committee with the *Regional Parks 2021 Annual Report.*

Members were provided a presentation on the *Regional Parks 2021 Annual Report,* highlighting the Regional Parks services role and values, how Metro Vancouver is protecting important natural areas and how people are connecting with the land.

Discussion ensued regarding restoration projects of physical structures, methods of capturing the park visitation numbers and conflicts regarding the increasing shared used of the trails.

Presentation material titled "Regional Parks 2021 Annual Report" is retained with the May 18, 2022 Regional Parks Committee agenda.

It was MOVED and SECONDED
That the MVRD Board receive for information report dated April 22, 2022, titled "Regional Parks 2021 Annual Report".

CARRIED

5.2 Manager's Report – Regional Parks

Report dated April 25, 2022, from Mike Redpath, Director, Regional Parks, providing the Regional Parks Committee with an update on the Geocaching Operating Policy, the mosquito control program, the filming in Metro Vancouver parks, and the various Parks events.

It was MOVED and SECONDED

That the Regional Parks Committee receive for information report dated April 25, 2022 titled "Manager's Report – Regional Parks".

CARRIED

6. INFORMATION ITEMS

6.1 Draft Climate 2050 Nature and Ecosystems Roadmap

Members were provided with a presentation from Josephine Clark, Natural Resource Management Planner, Planning and Resource Management, Regional Parks and Edward Nichol, Regional Planner I, Regional Planning and Housing Services, on the Draft *Climate 2050 Nature and Ecosystems Roadmap*, highlighting the strategic framework, the potential issue areas, the key concepts, the goals and targets and the engagement plans.

Discussion ensued regarding carbon sequestration and protecting the region's tree canopy coverage.

Presentation material titled "Draft Climate 2050 Nature and Ecosystems Roadmap" is retained with the May 18, 2022 Regional Parks Committee agenda.

10:02 a.m. Councillor Hodge departed the meeting.

6.2 Regional Parks Upcoming Events – May and June 2022

7. OTHER BUSINESS

No items presented.

8. BUSINESS ARISING FROM DELEGATIONS

No items presented.

9. RESOLUTION TO CLOSE MEETING

It was MOVED and SECONDED
That the Regional Parks Committee close its regular meeting scheduled for May 18, 2022 pursuant to the *Community Charter* provisions, Section 90 (1) (g) as follows:

"90 (1) A part of the meeting may be closed to the public if the subject matter being considered relates to or is one or more of the following:

(g) litigation or potential litigation affecting the regional district."

CARRIED

10. ADJOURNMENT/CONCLUSION

It was MOVED and SECONDED
That the Regional Parks Committee adjourn its regular meeting of May 18, 2022.

CARRIED
(Time: 10:10 a.m.)

_____ _____

Morgan Mackenzie, John McEwen, Chair
Legislative Services Coordinator

52911005 FINAL

To: Regional Parks Committee

From: Jamie Vala, Division Manager, Planning and Resource Management, Regional Parks

Date: May 4, 2022 Meeting Date: June 8, 2022

Subject: **MVRD Dedication of Land as Regional Park Bylaw No. 1349, 2022**

RECOMMENDATION

That the MVRD Board:

a) give first, second and third reading to *Metro Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1349, 2022*; and

b) pass and finally adopt *Metro Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1349, 2022*.

EXECUTIVE SUMMARY

Metro Vancouver undertakes an annual process to dedicate regional park land acquired in the previous year. Work is also underway to review regional park land that is not currently dedicated for inclusion in future bylaws. Included in the proposed bylaw, Metro Vancouver Regional District Dedication of Land as Regional Park Bylaw, No. 1349, 2022 is the regional park land acquired in 2021 and previously undedicated lands in Derby Reach Regional Park.

PURPOSE

To obtain MVRD Board approval of *Metro Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1349, 2022* for the dedication of land acquired for use as regional park.

BACKGROUND

Section 30 of the *Community Charter* (British Columbia), applicable to regional districts pursuant to section 278 of the *Local Government Act*, authorizes a regional district to dedicate land as a park by way of a bylaw. Lands dedicated and held as a regional park or trail cannot be utilized for non-park or trail uses, thereby providing additional protection for the intended use of the lands.

PARK LAND DEDICATION

The *Local Government Act* authorizes a regional district to dedicate land as regional park by way of a bylaw. Once dedicated the land cannot be put to non-park uses. Dedication of land as a regional park can only be revoked by a bylaw adopted with the approval of the electors.

The lands included in Schedule A to the attached bylaw have been acquired by the MVRD for park purposes.

FUTURE DEDICATION AND PLANNING

Metro Vancouver will be undertaking a project to review all regional park land that is not currently dedicated through bylaw and will bring a bylaw forward in the future to dedicate other regional parks interests.

ALTERNATIVES

1. That the MVRD Board:
   a) give first, second and third reading to *Metro Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1349, 2022*; and
   b) pass and finally adopt *Metro Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1349, 2022*.

2. That the MVRD Board receive for information the report dated May 4, 2022, titled "Metro Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1349, 2022" and provide alternate direction to staff.

FINANCIAL IMPLICATIONS

There are no financial implications as the result of this bylaw.

CONCLUSION

Metro Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1349, 2022 will dedicate land acquired by MVRD for regional park use. The lands identified in Schedule A of the attached bylaw have been acquired specifically for use as a regional park.

Staff recommend that the MVRD Board choose Alternative 1, that the MVRD adopt Bylaw No. 1349, 2022.

Attachment

Metro Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1349, 2022.

49179090

METRO VANCOUVER REGIONAL DISTRICT
BYLAW NO. 1349, 2022
A Bylaw to Dedicate Land as Regional Park

WHEREAS:

A. Section 30 of the *Community Charter*, applicable to regional districts pursuant to section 278 of the *Local Government Act*, authorizes a regional district to dedicate land as a park by way of a bylaw.

B. the Metro Vancouver Regional District has acquired land legally described in the attached Schedule "A" (the "**Land**") for regional park purposes.

NOW, THEREFORE, the Board of the Metro Vancouver Regional District enacts as follows:

Citation

1. The official citation of this bylaw is "Metro Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1349, 2022".

Dedication

2. The Land is dedicated as regional park.

Schedules

3. The following Schedule is attached to and forms part of this bylaw:

    a. Schedule "A", Lands acquired for Regional Park Purposes.

Read a first, second and third time this __ day of _____, ____.

Passed and finally adopted by a 2/3 vote of all members of the Board this __ day of _____, ____.

Sav Dhaliwal, Chair

Chris Plagnol, Corporate Officer

Schedule “A”

Lands Acquired for Regional Park Purposes

Schedule "A"

Dedication of Land as Regional Park

PARK	MUNCIPALITY	TENURE	LEGAL DESCRIPTION	PID	DATE OF ACQUISITION
Codd Wetland Ecological Conservancy Area					
Codd Wetland Ecological Conservancy Area	Pitt Meadows	Fee Simple	THE NORTH EAST QUARTER OF SECTION 1 TOWNSHIP 40 EXCEPT: THAT PORTION COVERED BY THE WATERS OF STURGEON SLOUGH NEW WESTMINSTER DISTRICT	011-390-506	July, 2021
Codd Wetland Ecological Conservancy Area	Pitt Meadows	Fee Simple	PART SOUTH WEST QUARTER SECTION 1 TOWNSHIP 40 LYING NORTH OF A CHANNEL OF LILLOOET RIVER NEW WESTMINSTER DISTRICT	013-529-242	January, 2021
Derby Reach Regional Park					
Derby Reach Regional Park	Township of Langley	Fee Simple	PART LOT "C" (EXPLANATORY PLAN 2735) LANGLEY TOWNSITE TOWNSHIP 11 LYING NORTH EAST OF THE OLD WAGON ROAD EXCEPT: PARCEL "ONE" (EXPLANATORY PLAN 8101), NEW WESTMINSTER DISTRICT	013-256-459	January, 1976
Derby Reach Regional Park	Township of Langley	Fee Simple	PARCEL "2" (109476E) OF LOT "C" (REFERENCE PLAN 2735) OF THE LANGLEY TOWNSITE TOWNSHIP 11 EXCEPT THE WESTERLY 33 FEET EXTENDING FROM THE NORTHERLY BOUNDARY TO THE SOUTHERLY BOUNDARY AND ADJOINING THE WESTERLY BOUNDARY NEW WESTMINSTER DISTRICT	013-257-099	April, 1974
Derby Reach Regional Park	Township of Langley	Fee Simple	PARCEL "3" (N95461E) SHOWN AS 10 ACRES OF LOT "D" (REFERENCE PLAN 2735) LANGLEY TOWNSITE TOWNSHIPS 11 AND 12 EXCEPT: FIRSTLY: PARCEL "4" (EXPLANATORY PLAN 10499) SECONDLY: PART SUBDIVIDED BY PLAN 38718 NEW WESTMINSTER DISTRICT	013-257-269	March, 1989
Derby Reach Regional Park	Township of Langley	Fee Simple	PARCEL "ONE" (EXPLANATORY PLAN 14949) OF LOT "D" (EXPLANATORY PLAN 2735) LANGLEY TOWNSITE TOWNSHIPS 11 AND 12 NEW WESTMINSTER DISTRICT	013-257-153	February, 1992

Derby Reach Regional Park	Township of Langley	Fee Simple	PARCEL "2" (N95461E) SHOWN AS 139 ACRES OF LOT "D" (REFERENCE PLAN 2735) OF LANGLEY TOWNSITE TOWNSHIPS 11 AND 12 EXCEPT: FIRSTLY: PARCEL "ONE" (EXPLANATORY PLAN 14949) SECONDLY: PART SUBDIVIDED BY PLAN 38718, NEW WESTMINSTER DISTRICT	015-964-710	March, 1989
Derby Reach Regional Park	Township of Langley	Fee Simple	LOT 10 TOWNSHIP 12 LANGLEY TOWNSITE NEW WESTMINSTER DISTRICT PLAN 38718	008-546-193	June, 1977
Derby Reach Regional Park	Township of Langley	Fee Simple	LOT "E" (EXPLANATORY PLAN 2735) TOWNSHIPS 11 AND 12 LANGLEY TOWNSITE EXCEPT: PART SUBDIVIDED BY PLAN 31465, NEW WESTMINSTER DISTRICT	013-257-307	January, 1973
Derby Reach Regional Park	Township of Langley	Fee Simple	PARCEL A (EXPLANATORY PLAN 43067) LOT 7 TOWNSHIPS 11 AND 12 LANGLEY TOWNSITE NEW WESTMINSTER DISTRICT PLAN 31465	006-594-603	January, 1973
Derby Reach Regional Park	Township of Langley	Fee Simple	LOT 2, EXCEPT PORTIONS IN PLAN LMP23858, TOWNSHIP 11 AND 12 LANGLEY TOWNSITE NEW WESTMINSTER DISTRICT PLAN 81741	014-124-190	May, 1995
Derby Reach Regional Park	Township of Langley	Fee Simple	PARCEL A (J10625E) LOT 3 DISTRICT LOT 415 GROUP 2 NEW WESTMINSTER DISTRICT PLAN 37255	008-406-286	January, 1973
Derby Reach Regional Park	Township of Langley	Fee Simple	LOT 3 EXCEPT FIRSTLY; PART SUBDIVIDED AS ROAD ON PLAN 30224; SECONDLY; PART SUBDIVIDED BY PLAN 79982; DISTRICT LOT 53 GROUP 2 NEW WESTMINSTER DISTRICT PLAN 875	012-146-170	April, 1995
Derby Reach Regional Park	Township of Langley	Fee Simple	LOT 4 EXCEPT FIRSTLY: PART SUBDIVIDED AS ROAD ON PLAN 30224; SECONDLY: PART SUBDIVIDED BY PLAN 79982; DISTRICT LOT 53 GROUP 2 NEW WESTMINSTER DISTRICT PLAN 875	012-146-196	April, 1995
Derby Reach Regional Park	Township of Langley	Fee Simple	LOT 1 DISTRICT LOT 386A GROUP 2 NEW WESTMINSTER DISTRICT PLAN EPP64920	029-976-014	October, 2016
Derby Reach Regional Park	Township of Langley	Fee Simple	PART LOT 5 DISTRICT LOTS 53 AND 126 GROUP 2 LYING NORTH WEST OF ROAD ON PLAN 30224 NEW WESTMINSTER DISTRICT PLAN 875	011-927-470	April, 1993

Derby Reach Regional Park	Township of Langley	Fee Simple	LOT 2 EXCEPT: PARCEL B (T39133E) DISTRICT LOT 415 GROUP 2 NEW WESTMINSTER DISTRICT PLAN 37255	008-406-235	January, 1973
Derby Reach Regional Park	Township of Langley	Fee Simple	LOT 1 EXCEPT: PART SUBDIVIDED BY PLAN 58892; DISTRICT LOT 414 AND 415 GROUP 2 AND SECTION 7 TOWNSHIP 12 NEW WESTMINSTER DISTRICT PLAN 23864	009-321-071	May, 1995
Kanaka Creek Regional Park					
Kanaka Creek Regional Park	Maple Ridge	Fee Simple	LOT 4 EXCEPT: STATUTORY RIGHT OF WAY PLAN 74139; SECTION 17 TOWNSHIP 15 NEW WESTMINSTER DISTRICT PLAN 13720	006-940-790	May, 2021

To: Regional Parks Committee

From: Jamie Vala, Division Manager Planning and Resource Management, Regional Parks

Date: May 11, 2022 Meeting Date: June 8, 2022

Subject: **MVRD Dedication of Land as Regional Park Amendment Bylaw No. 1345, 2022 – Amends Bylaw 1061, 2007**

RECOMMENDATION

That the MVRD Board:

a) give first, second and third reading to *Metro Vancouver Regional District Dedication of Land as Regional Park Amendment Bylaw No. 1345, 2022*; and
b) pass and finally adopt *Metro Vancouver Regional District Dedication of Land as Regional Park Amendment Bylaw No. 1345, 2022.*

EXECUTIVE SUMMARY

During a detailed review of previously dedicated parkland, it was discovered that there are a number of administrative amendments required in the *Greater Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1061, 2007.* The amendments can be found in the attached bylaw (Attachment).

PURPOSE

To obtain MVRD Board approval of a number of administrative amendments to *Greater Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1061, 2007*.

BACKGROUND

Section 30 of the *Community Charter* (British Columbia), applicable to regional districts pursuant to section 278 of the *Local Government Act* (British Columbia), authorizes a regional district to dedicate land as a park by way of a bylaw. Upon detailed review of *Greater Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1061, 2007*, it was identified that the bylaw required a number of administrative updates.

ALTERNATIVES

1. That the MVRD Board:
   a) give first, second and third reading to *Metro Vancouver Regional District Dedication of Land as Regional Park Amendment Bylaw No. 1345, 2022*; and
   b) pass and finally adopt *Metro Vancouver Regional District Dedication of Land as Regional Park Amendment Bylaw No. 1345, 2022.*

2. That the MVRD Board receive for information the report dated May 11, 2022, titled "*MVRD Dedication of Land as Regional Park Amendment Bylaw No. 1345, 2022 – Amends Bylaw 1061, 2007"* and provide alternate direction to staff.

FINANCIAL IMPLICATIONS

There are no financial implications as a result of this amending bylaw.

CONCLUSION

The proposed amendment bylaw, subject to MVRD Board approval, will address the administrative updates needed in *Greater Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1061, 2007*.

Staff recommend the MVRD Board adopt Alternative 1.

Attachment

MVRD Dedication of Land as Regional Park Amendment Bylaw No. 1345, 2022

52686354

METRO VANCOUVER REGIONAL DISTRICT
BYLAW NO. 1345, 2022
A Bylaw to amend Metro Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1061, 2007

WHEREAS:

A. The Metro Vancouver Regional District Board (the "**Board**") adopted the "Greater Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1061, 2007" (the "**Bylaw**"), a bylaw to dedicate land as regional park; and

B. The Board wishes to amend the Bylaw.

NOW, THEREFORE, the Board of the Metro Vancouver Regional District enacts as follows:

1. The Bylaw is hereby amended as follows:

   (a) Schedule 1 of the Bylaw is hereby deleted and replaced with Schedule 1 that is attached to and forms part of this bylaw.

Citation

2. The official citation for this bylaw is "Metro Vancouver Regional District Dedication of Land as Regional Park Amending Bylaw No. 1345, 2022".

Schedules

3. The following Schedule is attached to and forms part of this bylaw:

   (a) Schedule "1", Lands acquired for Regional Park Purposes.

Read a first, second and third time this __ day of _____, 2022.

Passed and finally adopted by a 2/3 vote of all members of the Board this __ day of _____, 2022.

_____
Sav Dhaliwal, Chair

_____
Chris Plagnol, Corporate Officer

Schedule "1"

Lands Acquired for Regional Park Purposes

Dedication of land as Regional Park

PARK	MUNCIPALITY	TENURE	LEGAL DESCRIPTION	PID	DATE OF ACQUISITION
Blaney Bog Regional Park					
Blaney Bog Regional Park	Maple Ridge	Fee Simple	LOT 26 SECTION 32 TOWNSHIP 12 NEW WESTMINSTER DISTRICT PLAN 23511	009-224-050	January, 2005
Boundary Bay Regional Park					
Boundary Bay Regional Park	Delta	Statutory Right-of-Way #BX529248	THAT PART OF PARCEL "F" DISTRICT LOT 171 GROUP 2 NEW WESTMINSTER DISTRICT REFERENCE PLAN 51889 SHOWN BOLD ON PLAN 56691	004-966-627	May, 2005
Boundary Bay Regional Park	Delta	Statutory Right-of-Way #BX529248	THAT PART OF PARCEL "B" DISTRICT LOT 171 GROUP 2 NEW WESTMINSTER DISTRICT REFERENCE PLAN 51888 SHOWN BOLD ON PLAN 56691	004-949-960	May, 2005
Boundary Bay Regional Park	Delta	Statutory Right-of-Way #BX529248	THAT PART OF PARCEL "A" (REFERENCE PLAN 50162) OF LOT 5 SECTION 23 TOWNSHIP 5 NEW WESTMINSTER DISTRICT PLAN 857 SHOWN BOLD ON PLAN 56691	013-872-346	May, 2005
Boundary Bay Regional Park	Delta	Statutory Right-of-Way #BX529248	THAT PART OF PARCEL "B" (REFERENCE PLAN 50161) OF LOT 11 SECTION 23 TOWNSHIP 5 NEW WESTMINSTER DISTRICT PLAN 23090 SHOWN BOLD ON PLAN 56691	009-337-334	May, 2005
Boundary Bay Regional Park	Delta	Statutory Right-of-Way #BX529248	THAT PART OF PARCEL "C" (REFERENCE PLAN 50160) OF LOT 12 SECTION 24 TOWNSHIP 5 NEW WESTMINSTER DISTRICT PLAN 23090 SHOWN BOLD ON PLAN 56691	009-337-784	May, 2005
Boundary Bay Regional Park	Delta	Statutory Right-of-Way #BX529248	THAT PART OF PARCEL "ONE" (REFERENCE PLAN 50159) OF PARCEL "A" (REFERENCE PLAN 7719) SECTION 24 TOWNSHIP 5 NEW WESTMINSTER DISTRICT SHOWN BOLD ON PLAN 56691	015-369-251	May, 2005
Boundary Bay Regional Park	Delta	Statutory Right-of-Way #BX529248	THAT PART OF LOT 10 SECTION 24 TOWNSHIP 5 NEW WESTMINSTER DISTRICT PLAN 1715 SHOWN BOLD ON PLAN 56667	009-181-971	May, 2005
Boundary Bay Regional Park	Delta	Statutory Right-of-Way #BX529248	THAT PART OF PARCEL "A" (REFERENCE PLAN 51342) LOT 14 FRACTIONAL SECTION 24 TOWNSHIP 5 NEW WESTMINSTER DISTRICT PLAN 30110 SHOWN BOLD ON 56685	006-478-352	May, 2005
Boundary Bay Regional Park	Delta	Statutory Right-of-Way #BX529248	THAT PART OF PARCEL "A" (EXPLANATORY PLAN 30794) LOT 13 EXCEPT: PARCEL "ONE" (REFERENCE PLAN 38003); SECTION 24 TOWNSHIP 5 NEW WESTMINSTER DISTRICT PLAN 25196 SHOWN BOLD ON PLAN 56667	008-728-950	May, 2005
Boundary Bay Regional Park	Delta	BC Licence of Occupation #239858; for 30 years starting January 1, 2006	PARCEL "A" (EXPLANATORY PLAN 30794) LOT 13 EXCEPT: PARCEL "ONE" (REFERENCE PLAN 38003); SECTION 24 TOWNSHIP 5 NEW WESTMINSTER DISTRICT PLAN 25196, CONTAINING 8.093 HECTARES, MORE OR LESS	008-728-950	January, 2006
Boundary Bay Regional Park	Delta	Statutory Right-of-Way #BX529248	THAT PART OF PARCEL "A" (REFERENCE PLAN 49402) LOT 6 SECTIONS 19 AND 30 TOWNSHIP 3 PLAN 10379 SHOWN BOLD ON PLAN 56685	009-312-960	May, 2005
Boundary Bay Regional Park	Delta	Statutory Right-of-Way #BX529248	THAT PART OF PARCEL "B" (REFERENCE PLAN 49251) LOT 5 SECTION 30 TOWNSHIP 3 NEW WESTMINSTER DISTRICT PLAN 10379 SHOWN BOLD ON PLAN 56685	009-313-028	May, 2005
Boundary Bay Regional Park	Delta	Statutory Right-of-Way #BX529248	THAT PART OF PARCEL "A" (REFERENCE PLAN 48650) OF THE SOUTH EAST QUARTER SECTION 29 TOWNSHIP 3 NEW WESTMINSTER DISTRICT SHOWN BOLD ON PLAN 56686	014-294-290	May, 2005

Boundary Bay Regional Park	Delta	Statutory Right-of-Way #BX529248	RIGHT OF WAY THE OVER BED OF BOUNDARY BAY, GROUP 2, NEW WESTMINSTER DISTRICT, SHOWN BOLD OUTLINED ON PLAN 56686 ON FILE IN THE LAND TITLE OFFICE AT NEW WESTMINSTER	No PID	May, 2005

Schedule "1"

PARK	MUNCIPALITY	TENURE	LEGAL DESCRIPTION	PID	DATE OF ACQUISITION
Boundary Bay Regional Park	Delta	Statutory Right-of-Way #BX529248	THAT PART OF PARCEL "A" (REFERENCE PLAN 48651) OF THE SOUTH HALF OF THE NORTH EAST QUARTER SECTION 29 TOWNSHIP 3 NEW WESTMINSTER DISTRICT SHOWN BOLD ON PLAN 56686	014-294-303	May, 2005
Boundary Bay Regional Park	Delta	Statutory Right-of-Way #BX529248	THAT PART OF PARCEL "2" (REFERENCE PLAN 48317) OF PARCEL "B" (REFERENCE PLAN 1130) OF THE NORTH WEST QUARTER SECTION 28 TOWNSHIP 3 NEW WESTMINSTER DISTRICT SHOWN BOLD ON PLAN 56686	014-294-401	May, 2005
Boundary Bay Regional Park	Delta	Statutory Right-of-Way #BX529248	THAT PART OF PARCEL "3" (REFERENCE PLAN 48372) OF PARCEL "C" (REFERENCE PLAN 43617) OF THE NORTH WEST QUARTER SECTION 28 TOWNSHIP 3 NEW WESTMINSTER DISTRICT SHOWN BOLD ON PLAN 56686	014-294-541	May, 2005
Boundary Bay Regional Park	Delta	Statutory Right-of-Way #BX529248	THAT PART OF PARCEL 3 (REFERENCE PLAN 50184) OF THE NORTH EAST QUARTER SECTION 28 TOWNSHIP 3 NEW WESTMINSTER DISTRICT SHOWN BOLD ON PLAN 56686	015-375-251	May, 2005
Boundary Bay Regional Park	Delta	Statutory Right-of-Way #BX529248	THAT PART OF PARCEL "A" (REFERENCE PLAN 47312) OF THE NORTH WEST QUARTER SECTION 27 TOWNSHIP 3 NEW WESTMINSTER DISTRICT SHOWN BOLD ON PLAN 56689	014-295-270	May, 2005
Boundary Bay Regional Park	Delta	Statutory Right-of-Way #BX529248	RIGHT OF WAY OVER THE BED OF BOUNDARY BAY, GROUP 2, NEW WESTMINSTER DISTRICT, SHOWN OUTLINED ON PLAN 56689, ON FILE IN THE LAND TITLE OFFICE AT NEW WESTMINSTER	No PID	May, 2005
Boundary Bay Regional Park	Delta	Statutory Right-of-Way #BX529248	THAT PART OF PARCEL "A" (REFERENCE PLAN 47187) OF THE FRACTIONAL NORTH EAST QUARTER SECTION 27 TOWNSHIP 3 NEW WESTMINSTER DISTRICT SHOWN BOLD ON PLAN 56689	014-295-237	May, 2005
Boundary Bay Regional Park	Delta	Statutory Right-of-Way #BX529248	THAT PART OF PARCEL "B" (REFERENCE PLAN 47187) OF THE FRACTIONAL SOUTH EAST QUARTER SECTION 34 TOWNSHIP 3 NEW WESTMINSTER DISTRICT SHOWN BOLD ON PLAN 56689	014-295-253	May, 2005
Boundary Bay Regional Park	Delta	Statutory Right-of-Way #BX529248	THAT PART OF PARCEL "A" (REFERENCE PLAN 47313) OF THE SOUTH HALF OF SECTION 35 TOWNSHIP 3 NEW WESTMINSTER DISTRICT SHOWN BOLD ON PLAN 56689	014-295-181	May, 2005
Boundary Bay Regional Park	Delta	Statutory Right-of-Way #BX529248	THAT PART OF PARCEL "ONE" (REFERENCE PLAN 49171) OF PARCEL "B" (REFERENCE PLAN 49170) OF THE NORTH EAST QUARTER SECTION 35 TOWNSHIP 3 NEW WESTMINSTER DISTRICT SHOWN BOLD ON PLAN 56689	014-294-907	May, 2005
Boundary Bay Regional Park	Delta	Statutory Right-of-Way #BX529248	ALL THAT PART DISTRICT LOT 841 GROUP 2 NEW WESTMINSTER DISTRICT CONTAINING .7122 HA SHOWN ON STATUTORY RIGHT OF WAY PLAN 56689	023-370-751	May, 2005
Boundary Bay Regional Park	Delta	Statutory Right-of-Way #BX529248	THAT PART OF PARCEL "2" (REFERENCE PLAN 49171) OF PARCEL "B" (REFERENCE PLAN 49170) OF THE NORTH EAST QUARTER SECTION 35 TOWNSHIP 3 NEW WESTMINSTER DISTRICT SHOWN BOLD ON PLAN 56689	014-294-915	May, 2005
Boundary Bay Regional Park	Delta	Statutory Right-of-Way #BX529248	THAT PART OF LOT 14 SECTION 36 TOWNSHIP 3 NEW WESTMINSTER DISTRICT PLAN 47311 SHOWN BOLD ON PLAN 56689	006-180-205	May, 2005
Boundary Bay Regional Park	Delta	Statutory Right-of-Way #BX529248	THAT PART OF PARCEL "A" (REFERENCE PLAN 47175) OF LOT 3 SECTION 36 TOWNSHIP 3 NEW WESTMINSTER DISTRICT PLAN 8563 SHOWN BOLD ON PLAN 56689	014-071-126	May, 2005
Boundary Bay Regional Park	Delta	Statutory Right-of-Way #BX529248	THAT PART OF PARCEL 1 (REFERENCE PLAN LMP24097) OF LOT 12 SECTION 1 TOWNSHIP 4 AND SECTION 36 TOWNSHIP 3 NEW WESTMINSTER DISTRICT PLAN 25376 SHOWN BOLD ON PLAN LMP32005	023-135-166	May, 2005

Schedule "1"

PARK	MUNCIPALITY	TENURE	LEGAL DESCRIPTION	PID	DATE OF ACQUISITION
Brunette Fraser Regional Park					
Brunette Fraser Regional Park	New Westminster	Lease #BX328593; 99 years plus 99 year renewal, starting April 25, 2005	THAT PART OF PARCEL "32" SUBURBAN BLOCK 8 REFERENCE PLAN 61967 SHOWN BOLD ON BCP17438	002-988-861	May, 2005
Brunette Fraser Regional Park	New Westminster	Easement #BX328594	THAT PART OF PARCEL "32" SUBURBAN BLOCK 8 REFERENCE PLAN 61967 SHOWN HATCHED ON BCP17438	002-988-861	May, 2005
Brunette Fraser Regional Park	New Westminster	Lease #BX328593; 99 years plus 99 year renewal, starting April 25, 2005	PARCEL "2" (PLAN WITH FEE DEPOSITED 37433E) OF THE B.C. PENITENTIARY RESERVE AND OF THE GOVERNMENT RESERVE ADJACENT TO THE B.C. PENITENTIARY RESERVE PLAN 2620 EXCEPT: FIRSTLY: PART ON REFERENCE PLAN 4903 SECONDLY: PART ON REFERENCE PLAN 4904 THIRDLY: PART ON REFERENCE PLAN 5061 FOURTHLY: PART ON REFERENCE PLAN 5248 FIFTHLY: PART ON REFERENCE PLAN 11153	012-963-429	May, 2005
Brunette Fraser Regional Park	New Westminster	Lease #BX328593; 99 years plus 99 year renewal, starting April 25, 2005	DISTRICT LOT 3977 GROUP 1 NEW WESTMINSTER DISTRICT	024-596-094	May, 2005
Brunette Fraser Regional Park	New Westminster	Lease #BX328593; 99 years plus 99 year renewal, starting April 25, 2005	PARCEL A PENITENTIARY RESERVE REFERENCE PLAN 82403	014-636-549	May, 2005
Brunette Fraser Regional Park	New Westminster	Lease #BX328593; 99 years plus 99 year renewal, starting April 25, 2005	THAT PART OF DISTRICT LOT 3978 GROUP 1 NEW WESTMINSTER DISTRICT SHOWN BOLD ON BCP17438	012-986-615	May, 2005
Brunette Fraser Regional Park	New Westminster	Easement #BX328595	THAT PART OF DISTRICT LOT 3978 GROUP 1 NEW WESTMINSTER DISTRICT SHOWN HATCHED ON BCP17438	012-986-615	May, 2005
Brunette Fraser Regional Park	New Westminster	Statutory Right-of-Way #BX328597	THAT PART OF DISTRICT LOT 3978 GROUP 1 NEW WESTMINSTER DISTRICT SHOWN BOLD ON BCP17439	012-986-615	May, 2005
Brunette Fraser Regional Park	New Westminster	Lease #BX328593; 99 years plus 99 year renewal, starting April 25. 2005	THAT PART OF PARCEL "ONE" (PLAN WITH FEE DEPOSITED 37433E) OF THE B.C. PENITENTIARY RESERVE AND OF THE GOVERNMENT RESERVE ADJACENT TO B.C. PENITENTIARY RESERVE PLAN 2620 SHOWN BOLD ON BCP17438	012-963-259	April, 2005
Brunette Fraser Regional Park	New Westminster	Lease #BX328593; 99 years plus 99 year renewal, starting April 25. 2005	WATER LOT 100 PLAN 2620	024-731-048	April, 2005
Brunette Fraser Regional Park	New Westminster	Lease #BX328593; 99 years plus 99 year renewal, starting April 25. 2005	WATER LOT 99 PLAN 2620	024-731-030	April, 2005
Burns Bog Regional Park					
Burns Bog Regional Park	Delta	an undivided 28469/44000 Interest in Fee Simple	THE WEST 100 ACRES OF THE SOUTH EAST QUARTER OF SECTION 23 TOWNSHIP 4 EXCEPT: FIRSTLY: THE RIGHT OF WAY OF THE VANCOUVER VICTORIA AND EASTERN RAILWAY AND NAVIGATION COMPANY AS SHOWN ON PLAN WITH FEE DEPOSITED 8825F SECONDLY: PARCEL "A" (REFERENCE PLAN 15997) THIRDLY: PART ON HIGHWAY PLAN 73154; NEW WESTMINSTER DISTRICT	000-915-106	March, 2004
Burns Bog Regional Park	Delta	an undivided 28469/44000 Interest in Fee Simple	PARCEL ONE (REFERENCE PLAN 25703) OF THE NORTH EAST QUARTER OF SECTION 14 TOWNSHIP 4 EXCEPT: FIRSTLY: PART SUBDIVIDED BY PLAN 26104 SECONDLY: PART SUBDIVIDED BY PLAN 40037 THIRDLY: PART DEDICATED AS ROAD ON PLAN 50544 FOURTHLY: PART ON HIGHWAY PLAN 73154 FIFTHLY: PART SUBDIVIDED BY PLAN BCP10128 NEW WESTMINSTER DISTRICT	000-915-084	March, 2004

Burns Bog Regional Park	Delta	Fee Simple	PARCEL "D" (EXPLANATORY PLAN 2515) DISTRICT LOT 437 GROUP 2 EXCEPT: FIRSTLY: PARCEL ONE (REFERENCE PLAN 8648) SECONDLY: PORTIONS IN PLANS 64775 AND LMP7813 THIRDLY: PORTIONS IN STATUTORY RIGHT OF WAY PLANS 73154,73156 AND LMP45327 FOURTHLY: PART IN PLAN BCP10127 FIFTHLY: PARTS IN PLAN BCP10128 SIXTHLY: PARTS IN PLAN BCP11267, NEW WESTMINSTER DISTRICT	000-914-991	June, 2004
Burns Bog Regional Park	Delta	Fee Simple	PARCEL 1 (REFERENCE PLAN 8648) DISTRICT LOT 437 GROUP 2 NEW WESTMINSTER DISTRICT, EXCEPT PART SUBDIVIDED BY PLAN BCP11267	000-915-114	June, 2004

Schedule "1"

PARK	MUNCIPALITY	TENURE	LEGAL DESCRIPTION	PID	DATE OF ACQUISITION
Capilano River Regional Park					
Capilano River Regional Park	District of North Vancouver	Encroachment Agreement dated April 7, 2005 between Capilano Suspension Bridge Holdings Ltd. and GVRD; 5 years plus 2 renewals of 5 years starting April 1,2005	LOT N, EXCEPT PART IN PLAN 14817, BLOCK 25 DISTRICT LOTS 601 AND 607 PLAN 13563	007-019-823	April, 2005
Codd Wetland Regional Park					
Codd Wetland Regional Park	Pitt Meadows	Lease #BW548451; 25 years plus 25 year renewal, starting Decembers, 2004	LOT A SECTION 31 TOWNSHIP 12 AND SECTION 6 TOWNSHIP 42 NEW WESTMINSTER DISTRICT PLAN BCP10255	025-912-861	December, 2004
Codd Wetland Regional Park	Pitt Meadows	Lease #BW532994; 25 years plus 25 year renewal, starting July 22, 2004	LOT B SECTION 36 TOWNSHIP 9, SECTION 1 TOWNSHIP 40 AND SECTION 6 TOWNSHIP 42 NEW WESTMINSTER DISTRICT PLAN BCP10255	025-912-879	November, 2004
Codd Wetland Regional Park	Pitt Meadows	Easement #BW130787	THAT PART OF THE NORTH WEST QUARTER SECTION 6 TOWNSHIP 42 NEW WESTMINSTER DISTRICT EXCEPT PLAN BCP10255 SHOWN AS AREA 6 ON BCP10256	001-535-595	March, 2004
Codd Wetland Regional Park	Pitt Meadows	Easement #BW130788	THAT PART OF THE SOUTH WEST QUARTER SECTION 6 TOWNSHIP 42 NEW WESTMINSTER DISTRICT EXCEPT PLAN BCP10255 SHOWN AS AREA 5 ON BCP10256	001-535-455	March, 2004
Codd Wetland Regional Park	Pitt Meadows	Easements #BW130791 & #BW130792	THOSE PARTS OF THE SOUTH WEST QUARTER SECTION 6 TOWNSHIP 42 NEW WESTMINSTER DISTRICT EXCEPT PLAN BCP10255 SHOWN AS AREAS 1 AND 2 ON BCP10256	001-535-455	March, 2004
Codd Wetland Regional Park	Pitt Meadows	Easements #BW130779 & #BW130780	ALL ROADS AND DYKES ON THE NORTH HALF OF THE NORTH EAST QUARTER OF SECTION 31 TOWNSHIP 12 EXCEPT PLAN BCP10255	000-774-880	March, 2004
Codd Wetland Regional Park	Pitt Meadows	Easements #BW130779 & #BW130780	ALL ROADS AND DYKES ON THE NORTH HALF OF THE NORTH WEST QUARTER OF SECTION 31 TOWNSHIP 12 EXCEPT PLAN BCP10255	000-774-804	March, 2004
Codd Wetland Regional Park	Pitt Meadows	Easements #BW130779 & #BW130780	ALL ROADS AND DYKES ON ALL THAT PORTION OF THE NORTH EAST QUARTER OF SECTION 36 TOWNSHIP 9 WHICH LIES TO THE NORTH OF THE RIGHT BANK OF THE NORTH FORK OF THE LILLOOET RIVER EXCEPT PLAN BCP10255	000-774-766	March, 2004
Crippen Regional Park					
Crippen Regional Park	Bowen Island	Statutory Right-of-Way #BX294592	THAT PART OF LOT A DISTRICT LOT 777 GROUP 1 NEW WESTMINSTER DISTRICT PLAN BCP20430 SHOWN BOLD ON BCP21172	026-470-667	December, 2005
Crippen Regional Park	Bowen Island	Lease dated December 21 , 2005 between Bowen Island Municipality and GVRD; 10 years starting December 21, 2005	LOT A DISTRICT LOT 777 GROUP 1 NEW WESTMINSTER DISTRICT PLAN BCP20430	026-470-667	December, 2005
Crippen Regional Park	Bowen Island	Statutory Right-of-Way #BX294592	THAT PART OF LOT B DISTRICT LOT 777 GROUP 1 NEW WESTMINSTER DISTRICT PLAN BCP20430 SHOWN BOLD ON BCP21172	026-470-675	December, 2005

Schedule "1"

PARK	MUNCIPALITY	TENURE	LEGAL DESCRIPTION	PID	DATE OF ACQUISITION
Delta- South Surrey Regional Park					
Delta- South Surrey Regional Park	Delta	Statutory Right-of-Way #BW410120	THAT PART OF LOT 2 SECTION 1 TOWNSHIP 4 NEW WESTMINSTER DISTRICT PLAN 6087 SHOWN AS ZONE 1 ON BCP13137	000-822-124	September, 2004
Delta- South Surrey Regional Park	Surrey	Statutory Right-of-Way #BW533255	THAT PART ON LOT 1 SECTION 6 TOWNSHIP 2 NEW WESTMINSTER DISTRICT PLAN 4789 SHOWN BOLD ON BCP14572	014-041-774	November, 2004
Delta- South Surrey Regional Park	Surrey	Statutory Right-of-Way #BW384401	THAT PART OF LOT 1 NORTH WEST QUARTER SECTION 6 TOWNSHIP 2 NEW WESTMINSTER DISTRICT PLAN BCP12927 SHOWN AS ZONE 1 ON BCP12928	026-037-173	August, 2004
Delta- South Surrey Regional Park	Surrey	Statutory Right-of-Way #BW335434	THAT PART OF PARCEL "D" (REFERENCE PLAN 6959) DISTRICT LOT 51A GROUP 2 EXCEPT: FIRSTLY: PART SUBDIVIDED BY PLAN 11417 SECONDLY: PARCEL "ONE" (REFERENCE PLAN 35431), NEW WESTMINSTER DISTRICT SHOWN AS ZONE 1 ON BCP12403	012-975-991	July, 2004
Delta- South Surrey Regional Park	Surrey	Statutory Right-of-Way #BW533258	THAT PART OF LOT 2 DISTRICT LOT 51"A" GROUP 2 NEW WESTMINSTER DISTRICT PLAN 11417 SHOWN BOLD ON BCP14573	009-522-701	November, 2004
Iona Beach Regional Park					
Iona Beach Regional Park	N/A	Fee Simple	DISTRICT LOT 8061 GROUP 1 NEW WESTMINSTER DISTRICT	026-635-593	March, 2006
Iona Beach Regional Park	N/A	Fee Simple	DISTRICT LOT 8060 GROUP 1 NEW WESTMINSTER DISTRICT	026-635-569	March, 2006
Kanaka Creek Regional Park					
Kanaka Creek Regional Park	Maple Ridge	Fee Simple	LOT 1 DISTRICT LOT 404 GROUP 1 NEW WESTMINSTER DISTRICT PLAN BCP25876	026-800-837	September, 2006
Kanaka Creek Regional Park	Maple Ridge	Fee Simple	LOT B SECTION 18 TOWNSHIP 15 NEW WESTMINSTER DISTRICT PLAN BCP26268	026-930-439	September, 2006
Matsqui Trail Regional Park					
Matsqui Trail Regional Park	Abbotsford	Statutory Right-of-Way #BX459015	THAT PART OF LOT 12 DISTRICT LOTS 198 AND 412 GROUP 2 NEW WESTMINSTER DISTRICT PLAN 64659 SHOWN BOLD ON BCP18291	003-471-985	June, 2005

Schedule "1"

PARK	MUNCIPALITY	TENURE	LEGAL DESCRIPTION	PID	DATE OF ACQUISITION
Pitt River Regional Park					
Pitt River Regional Park	Pitt Meadows	BC License of Occupation #239803; 10 years starting June 6, 2006	THAT PARCEL OR TRACT OF LAND IN THE VICINITY OF PITT RIVER, GROUP 1, NEW WESTMINSTER DISTRICT, AS SHOWN ON PLANS 2895, 1167, 6859 AND SKETCH PLAN 14746F, CONTAINING 1.377 HECTARES, MORE OR LESS	024-726-184	June, 2006
Pitt River Regional Park	Pitt Meadows	BC License of Occupation #239803; 10 years starting June 6, 2006	THAT PARCEL OR TRACT OF LAND IN THE VICINITY OF PITT RIVER, GROUP 1, NEW WESTMINSTER DISTRICT, AS SHOWN ON PLANS 2895, 1167, 6859 AND SKETCH PLAN 14746F, CONTAINING 1.377 HECTARES, MORE OR LESS	024-726-192	June, 2006
Pitt River Regional Park	Pitt Meadows	BC License of Occupation #239803; 10 years starting June 6, 2006	THAT PARCEL OR TRACT OF LAND IN THE VICINITY OF PITT RIVER, GROUP 1, NEW WESTMINSTER DISTRICT, AS SHOWN ON PLANS 2895, 1167, 6859 AND SKETCH PLAN 14746F, CONTAINING 1.377 HECTARES, MORE OR LESS	024-726-206	June, 2006
Pitt River Regional Park	Pitt Meadows	BC License of Occupation #239803; 10 years starting June 6, 2006	THAT PARCEL OR TRACT OF LAND IN THE VICINITY OF PITT RIVER, GROUP 1, NEW WESTMINSTER DISTRICT, AS SHOWN ON PLANS 2895, 1167, 6859 AND SKETCH PLAN 14746F, CONTAINING 1.377 HECTARES, MORE OR LESS	024-733-091	June, 2006
Pitt River Regional Park	Pitt Meadows	BC License of Occupation #239803; 10 years starting June 6, 2006	THAT PARCEL OR TRACT OF LAND IN THE VICINITY OF PITT RIVER, GROUP 1, NEW WESTMINSTER DISTRICT, AS SHOWN ON PLANS 2895, 1167, 6859 AND SKETCH PLAN 14746F, CONTAINING 1.377 HECTARES, MORE OR LESS	007-586-345	November, 2005
Pitt River Regional Park	Pitt Meadows	BC License of Occupation #239803; 10 years starting June 6, 2006	THAT PARCEL OR TRACT OF LAND IN THE VICINITY OF PITT RIVER, GROUP 1, NEW WESTMINSTER DISTRICT, AS SHOWN ON PLANS 2895, 1167, 6859 AND SKETCH PLAN 14746F, CONTAINING 1.377 HECTARES, MORE OR LESS	024-756-679	June, 2006
Pitt River Regional Park	Pitt Meadows	BC License of Occupation #239803; 10 years starting June 6, 2006	THAT PARCEL OR TRACT OF LAND IN THE VICINITY OF PITT RIVER, GROUP 1, NEW WESTMINSTER DISTRICT, AS SHOWN ON PLANS 2895, 1167, 6859 AND SKETCH PLAN 14746F, CONTAINING 1.377 HECTARES, MORE OR LESS	024-732-435	June, 2006
Pitt River Regional Park	Pitt Meadows	Fee Simple	PARCEL "A" (REFERENCE PLAN 3141) SECTION 16 BLOCK 6 NORTH RANGE 1 EAST EXCEPT: FIRSTLY: PART ON REFERENCE PLAN 2357 SECONDLY: PARCEL "ONE" (REFERENCE PLAN 17385) THIRDLY: PORTIONS SHOWN ON HIGHWAY PLAN 28515, FOURTHLY: PART SHOWN ON HIGHWAY PLAN 57033 NEW WESTMINSTER DISTRICT	008-473-731	April, 2005
Pitt River Regional Park	Pitt Meadows	Fee Simple	PARCEL "ONE" (REFERENCE PLAN 5553) SECTIONS 2 AND 3 BLOCK 6 NORTH RANGE 1 EAST NEW WESTMINSTER DISTRICT	006-505-767	July, 2006
Pitt River Regional Park	Pitt Meadows	Fee Simple	PARCEL "A" (REFERENCE PLAN WITH FEE DEPOSITED 84720E) FRACTIONAL SECTION 4 TOWNSHIP 40 NEW WESTMINSTER DISTRICT	006-505-686	July, 2006
Thwaytes Landing Regional Park					
Thwaytes Landing Regional Park	District of North Vancouver	Vancouver Port Authority Lease #V-4453(01); 10 years starting December 1, 2004	THAT CERTAIN WATERLOT AREA OF SOME 2,014 SQUARE METRES, MORE OR LESS, FRONTING LOTS 12 AND 13, DISTRICT LOT 871, PLAN 2860, GROUP 1, NEW WESTMINSTER DISTRICT, DISTICT OF NORTH VANCOUVER, BRITISH COLUMBIA SHOWN ON LEASE PLAN NO. 2004-123 DATED OCTOBER 14, 2004, AS ATTACHED TO LEASE	No PID	December, 2004

To: Regional Parks Committee

From: Jamie Vala, Division Manager Planning and Resource Management, Regional Parks

Date: May 11, 2022 Meeting Date: June 8, 2022

Subject: **MVRD Dedication of Land as Regional Park Amendment Bylaw No. 1346, 2022 – Amends Bylaw 1076, 2008**

RECOMMENDATION

That the MVRD Board:

a) give first, second and third reading to *Metro Vancouver Regional District Dedication of Land as Regional Park Amendment Bylaw No. 1346, 2022*; and
b) pass and finally adopt *Metro Vancouver Regional District Dedication of Land as Regional Park Amendment Bylaw No. 1346, 2022.*

EXECUTIVE SUMMARY

During a detailed review of previously dedicated parkland, it was discovered that there are a number of administrative amendments required in the *Greater Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1076, 2008.* The amendments can be found in the attached bylaw (Attachment).

PURPOSE

To obtain MVRD Board approval of a number of administrative amendments to *Greater Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1076, 2008*.

BACKGROUND

Section 30 of the *Community Charter* (British Columbia), applicable to regional districts pursuant to section 278 of the *Local Government Act* (British Columbia), authorizes a regional district to dedicate land as a park by way of a bylaw. Upon detailed review of *Greater Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1076, 2008*, it was identified that the bylaw required a number of administrative updates.

ALTERNATIVES

1. That the MVRD Board:
   a) give first, second and third reading to *Metro Vancouver Regional District Dedication of Land as Regional Park Amendment Bylaw No. 1346, 2022*; and
   b) pass and finally adopt *Metro Vancouver Regional District Dedication of Land as Regional Park Amendment Bylaw No. 1346, 2022.*

2. That the MVRD Board receive for information the report dated May 11, 2022, titled "*MVRD Dedication of Land as Regional Park Amendment Bylaw No. 1346, 2022 – Amends Bylaw 1076, 2008"* and provide alternate direction to staff.

FINANCIAL IMPLICATIONS

There are no financial implications as a result of this amending bylaw.

CONCLUSION

The proposed amendment bylaw, subject to MVRD Board approval, will address the administrative updates needed in *Greater Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1076, 2008*.

Staff recommend the MVRD Board adopt Alternative 1.

Attachment

MVRD Dedication of Land as Regional Park Amendment Bylaw No. 1346, 2022

52746893

METRO VANCOUVER REGIONAL DISTRICT
BYLAW NO. 1346, 2022
A Bylaw to amend Metro Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1076, 2008

WHEREAS:

A. The Metro Vancouver Regional District Board (the "**Board**") adopted the "Greater Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1076, 2008" (the "**Bylaw**"), a bylaw to dedicate land as regional park; and

B. The Board wishes to amend the Bylaw.

NOW, THEREFORE, the Board of the Metro Vancouver Regional District enacts as follows:

1. The Bylaw is hereby amended as follows:

   (a) Schedule 1 of the Bylaw is hereby deleted and replaced with Schedule 1 that is attached to and forms part of this bylaw.

Citation

2. The official citation for this bylaw is "Metro Vancouver Regional District Dedication of Land as Regional Park Amendment Bylaw No. 1346, 2022".

Schedules

3. The following Schedule is attached to and forms part of this bylaw:

   (a) Schedule "1", Lands acquired for Regional Park Purposes.

Read a first, second and third time this __ day of _____, 2022.

Passed and finally adopted by a 2/3 vote of all members of the Board this __ day of _____, 2022.

Sav Dhaliwal, Chair

Chris Plagnol, Corporate Officer

Schedule "1"

Lands Acquired for Regional Park Purposes *(Effective June 24, 2022)*

Dedication of Land as Regional Park

PARK	MUNCIPALITY	TENURE	LEGAL DESCRIPTION	PID	DATE OF ACQUISITION
North Alouette Regional Park					
North Alouette Regional Park	Maple Ridge	an undivided 1/2 Interest in Fee Simple	LOT 1 SECTION 31 TOWNSHIP 12 NEW WESTMINSTER DISTRICT PLAN BCP29366	027-025-934	April, 2007
North Alouette Regional Park	Maple Ridge	Lease #BB841389 of an undivided 1/2 Interest in Fee Simple	LOT 1 SECTION 31 TOWNSHIP 12 NEW WESTMINSTER DISTRICT PLAN BCP29366	027-025-934	March, 2008
North Alouette Regional Park	Maple Ridge	an undivided 1/2 Interest in Fee Simple	LOT A SECTION 30 TOWNSHIP 12 NEW WESTMINSTER DISTRICT PLAN BCP29365	027-025-713	April, 2007
North Alouette Regional Park	Maple Ridge	Lease #BB841389 of an undivided 1/2 Interest in Fee Simple	LOT A SECTION 30 TOWNSHIP 12 NEW WESTMINSTER DISTRICT PLAN BCP29365	027-025-713	March, 2008
Glen Valley Regional Park					
Glen Valley Regional Park	Langley Township	an undivided 2/3 Interest in Fee Simple	WEST HALF OF THE NORTH EAST QUARTER SECTION 13 TOWNSHIP 11 NEW WESTMINSTER DISTRICT	013-279-688	December, 2006
Glen Valley Regional Park	Langley Township	Lease #BB825824 of an undivided 1/3 Interest in Fee Simple	WEST HALF OF THE NORTH EAST QUARTER SECTION 13 TOWNSHIP 11 NEW WESTMINSTER DISTRICT	013-279-688	January, 2008
Glen Valley Regional Park	Langley Township	an undivided 2/3 Interest in Fee Simple	NORTH HALF OF THE NORTH WEST QUARTER SECTION 13 TOWNSHIP 11 NEW WESTMINSTER DISTRICT	013-279-726	December, 2006
Glen Valley Regional Park	Langley Township	Lease #BB825824 of an undivided 1/3 Interest in Fee Simple	NORTH HALF OF THE NORTH WEST QUARTER SECTION 13 TOWNSHIP 11 NEW WESTMINSTER DISTRICT	013-279-726	January, 2008
Widgeon Marsh Regional Park					
Widgeon Marsh Regional Park	Coquitlam	Easement #BB135022	THAT PART OF NORTH 5 CHAINS LEGAL SUBDIVISION 8 SECTION 27 TOWNSHIP 40 NEW WESTMINSTER DISTRICT SHOWN BOLD ON PLAN BCP33440	007-786-905	November, 2007
Widgeon Marsh Regional Park	Coquitlam	Fee Simple	FRACTIONAL LEGAL SUBDIVISON 9 SECTION 27 TOWNSHIP 40 EXCEPT: WEST 10 CHAINS, NEW WESTMINSTER DISTRICT	007-603-886	November, 2007

To: Regional Parks Committee

From: Jamie Vala, Division Manager Planning and Resource Management, Regional Parks

Date: May 11, 2022 Meeting Date: June 8, 2022

Subject: **MVRD Dedication of Land as Regional Park Amendment Bylaw No. 1347, 2022 – Amends Bylaw 1111, 2009**

RECOMMENDATION

That the MVRD Board:

a) give first, second and third reading to *Metro Vancouver Regional District Dedication of Land as Regional Park Amendment Bylaw No. 1347, 2022*; and
b) pass and finally adopt *Metro Vancouver Regional District Dedication of Land as Regional Park Amendment Bylaw No. 1347, 2022.*

EXECUTIVE SUMMARY

During a detailed review of previously dedicated parkland, it was discovered that there are a number of administrative amendments required in the *Greater Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1111, 2009.* The amendments can be found in the attached bylaw (Attachment).

PURPOSE

To obtain MVRD Board approval of a number of administrative amendments to *Greater Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1111, 2009*.

BACKGROUND

Section 30 of the *Community Charter* (British Columbia), applicable to regional districts pursuant to section 278 of the *Local Government Act* (British Columbia), authorizes a regional district to dedicate land as a park by way of a bylaw. Upon detailed review of *Greater Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1111, 2009*, it was identified that the bylaw required a number of administrative updates.

ALTERNATIVES

1. That the MVRD Board:
   a) give first, second and third reading to *Metro Vancouver Regional District Dedication of Land as Regional Park Amendment Bylaw No. 1347, 2022*; and
   b) pass and finally adopt *Metro Vancouver Regional District Dedication of Land as Regional Park Amendment Bylaw No. 1347, 2022.*

2. That the MVRD Board receive for information the report dated May 11, 2022, titled "*MVRD Dedication of Land as Regional Park Amendment Bylaw No. 1347, 2022 – Amends Bylaw 1111, 2009"* and provide alternate direction to staff.

FINANCIAL IMPLICATIONS

There are no financial implications as a result of this amending bylaw.

CONCLUSION

The proposed amendment bylaw, subject to MVRD Board approval, will address the administrative updates needed in *Greater Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1111, 2009*.

Staff recommend the MVRD Board adopt Alternative 1.

Attachment

MVRD Dedication of Land as Regional Park Amendment Bylaw No. 1347, 2022

52746906

METRO VANCOUVER REGIONAL DISTRICT
BYLAW NO. 1347, 2022
A Bylaw to amend Metro Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1111, 2009

WHEREAS:

A. The Metro Vancouver Regional District Board (the "**Board**") adopted the "Greater Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1111, 2009" (the "**Bylaw**"), a bylaw to dedicate land as regional park; and

B. The Board wishes to amend the Bylaw.

NOW, THEREFORE, the Board of the Metro Vancouver Regional District enacts as follows:

1. The Bylaw is hereby amended as follows:

   (a) Schedule 1 of the Bylaw is hereby deleted and replaced with Schedule 1 that is attached to and forms part of this bylaw.

Citation

2. The official citation for this bylaw is "Metro Vancouver Regional District Dedication of Land as Regional Park Amendment Bylaw No. 1347, 2022".

Schedules

3. The following Schedule is attached to and forms part of this bylaw:

   (a) Schedule "1", Lands acquired for Regional Park Purposes.

Read a first, second and third time this __ day of _____, 2022.

Passed and finally adopted by a 2/3 vote of all members of the Board this __ day of _____, 2022.

Sav Dhaliwal, Chair

Chris Plagnol, Corporate Officer

Schedule "1"

Lands acquired for Regional Park Purposes

Dedication of Land as Regional Park

PARK	MUNCIPALITY	TENURE	LEGAL DESCRIPTION	PID	DATE OF ACQUISITION
Barnston Island Regional Park					
Barnston Island Regional Park	GVRD Electoral Area A	Fee Simple	PARCEL "A" (REFERENCE PLAN 4763) SOUTH HALF SECTION 10 TOWNSHIP 9 NEW WESTMINSTER DISTRICT	007-568-134	April, 2009
Barnston Island Regional Park	GVRD Electoral Area A	Fee Simple	LOT 9 SECTION 3 TOWNSHIP 9 NEW WESTMINSTER DISTRICT PLAN 3204	010-890-939	April, 2009
Blaney Bog Regional Park Reserve					
Blaney Bog Regional Park Reserve	Maple Ridge	Fee Simple	NORTH QUARTER OF THE NORTH HALF OF THE NORTH EAST QUARTER SECTION 32 TOWNSHIP 12 NEW WESTMINSTER DISTRICT	013-302-027	December, 2008
Blaney Bog Regional Park Reserve	Maple Ridge	Fee Simple	WEST HALF FRACTIONAL LEGAL SUBDIVISION 13 SECTION 35 TOWNSHIP 3 RANGE 5 WEST OF THE SEVENTH MERIDIAN NEW WESTMINSTER DISTRICT	013-180-037	December, 2008
Blaney Bog Regional Park Reserve	Maple Ridge	Fee Simple	EAST HALF FRACTIONAL LEGAL SUBDIVISION 16 SECTION 34 TOWNSHIP 3 RANGE 5 WEST OF THE SEVENTH MERIDIAN NEW WESTMINSTER DISTRICT	013-180-029	December, 2008
Blaney Bog Regional Park Reserve	Maple Ridge	Fee Simple	SOUTH EAST QUARTER LEGAL SUBDIVISION 1 SECTION 3 TOWNSHIP 4 RANGE 5 WEST OF THE SEVENTH MERIDIAN NEW WESTMINSTER DISTRICT	013-180-088	December, 2008
Burns Bog Regional Park					
Burns Bog Regional Park	Delta	Permit starting November 28, 2008 between the Province and GVRD; for a term of 29 years 11 months, plus a renewal of 50 years	SECTION 16 TOWNSHIP 4 NEW WESTMINSTER DISTRICT	000-915-122	November, 2008
Burns Bog Regional Park	Delta	Permit starting November 28, 2008 between the Province and GVRD; for a term of 29 years 11 months, plus a renewal of 50 years	LOT E DISTRICT LOT 437 GROUP 2 NEW WESTMINSTER DISTRICT PLAN BCP10127	025-891-090	November, 2008
Burns Bog Regional Park	Delta	Permit starting November 28, 2008 between the Province and GVRD; for a term of 29 years 11 months, plus a renewal of 50 years	LOT A DISTRICT LOT 437 GROUP 2 NEW WESTMINSTER DISTRICT PLAN BCP11267	025-945-688	November, 2008

Burns Bog Regional Park	Delta	an undivided 1/2 Interest in Fee Simple	PARCEL 2 (REFERENCE PLAN BCP6339) OF THAT PART OF PARCEL D (EXPLANATORY PLAN 2515) DISTRICT LOT 437 GROUP 2 AS SHOWN ON PLAN 64775 NEW WESTMINSTER DISTRICT	025-727-303	June, 2009
Capilano Regional Park					
Capilano Regional Park	District of North Vancouver	Fee Simple	LOT 1 (EXPLANATORY PLAN 10758), EXCEPT PART IN PLAN 19183 BLOCK 13 DISTRICT LOTS 601 AND 607 PLAN 4740	011-351-225	July, 2008

Schedule "1"

Dedication of Land as Regional Park

PARK	MUNCIPALITY	TENURE	LEGAL DESCRIPTION	PID	DATE OF ACQUISITION
Derby Reach Regional Park					
Derby Reach Regional Park	Langley Township	Lease #BB985092	LOT A DISTRICT LOT 414 GROUP 2 AND SECTION 7 TOWNSHIP 12 NEW WESTMINSTER DISTRICT PLAN BCP30090	027-082-156	July, 2008
Kanaka Creek Regional Park					
Kanaka Creek Regional Park	Maple Ridge	Fee Simple	PARCEL 31 SECTION 14 TOWNSHIP 12 NEW WESTMINSTER DISTRICT REFERENCE PLAN 68686	000-888-621	July, 2009
Kanaka Creek Regional Park	Maple Ridge	Easment #BB1095290	THAT PART OF LOT 9 EXCEPT: FIRSTLY: PART SHOWN ON REFERENCE PLAN 5722 SECONDLY: PARCEL "A" (REFERENCE PLAN 4784) SECTION 14 TOWNSHIP 12 NEW WESTMINSTER DISTRICT PLAN 2701 SHOWN BOLD ON PLAN BCP41746	000-643-891	July, 2009
Matsqui Trail Regional Park					
Matsqui Trail Regional Park	Abbotsford	Fee Simple	PARCEL "B" (REFERENCE PLAN 3008) DISTRICT LOT 67 GROUP 2 NEW WESTMINSTER DISTRICT	012-976-351	April, 2009

To: Regional Parks Committee

From: Jamie Vala, Division Manager Planning and Resource Management, Regional Parks

Date: May 11, 2022 Meeting Date: June 8, 2022

Subject: **MVRD Dedication of Land as Regional Park Amendment Bylaw No. 1348, 2022 – Amends Bylaw 1300, 2020**

RECOMMENDATION

That the MVRD Board:

a) give first, second and third reading to *Metro Vancouver Regional District Dedication of Land as Regional Park Amendment Bylaw No. 1348, 2022*; and
b) pass and finally adopt *Metro Vancouver Regional District Dedication of Land as Regional Park Amendment Bylaw No. 1348, 2022.*

EXECUTIVE SUMMARY

During a detailed review of previously dedicated parkland, it was discovered that there are a number of administrative amendments required in the *Greater Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1300, 2020.* The amendments can be found in the attached bylaw (Attachment).

PURPOSE

To obtain MVRD Board approval of a number of administrative amendments to *Metro Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1300, 2020*.

BACKGROUND

Section 30 of the *Community Charter* (British Columbia), applicable to regional districts pursuant to section 278 of the *Local Government Act* (British Columbia), authorizes a regional district to dedicate land as a park by way of a bylaw. Upon detailed review of *Metro Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1300, 2020*, it was identified that the bylaw required a number of administrative updates.

ALTERNATIVES

1. That the MVRD Board:
   a) give first, second and third reading to *Metro Vancouver Regional District Dedication of Land as Regional Park Amendment Bylaw No. 1348, 2022*; and
   b) pass and finally adopt *Metro Vancouver Regional District Dedication of Land as Regional Park Amendment Bylaw No. 1348, 2022.*

2. That the MVRD Board receive for information the report dated May 11, 2022, titled "*MVRD Dedication of Land as Regional Park Amendment Bylaw No. 1348, 2022 – Amends Bylaw 1300, 2020"* and provide alternate direction to staff.

FINANCIAL IMPLICATIONS
There are no financial implications as a result of this amending bylaw.

CONCLUSION
The proposed amendment bylaw, subject to MVRD Board approval, will address the administrative updates needed in *Metro Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1300, 2020*.

Staff recommend the MVRD Board adopt Alternative 1.

Attachment
MVRD Dedication of Land as Regional Park Amendment Bylaw No. 1348, 2022

52747723

METRO VANCOUVER REGIONAL DISTRICT
BYLAW NO. 1348, 2022
A Bylaw to amend Metro Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1300, 2020

WHEREAS:

A. The Metro Vancouver Regional District Board (the "**Board**") adopted the "Metro Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1300, 2020" (the "**Bylaw**"), a bylaw to dedicate land as regional park; and

B. The Board wishes to amend the Bylaw.

NOW, THEREFORE the Board of the Metro Vancouver Regional District enacts as follows:

1. The Bylaw is hereby amended as follows:

   (a) Recital B is hereby deleted and replaced with the following:

   "The Metro Vancouver Regional District has acquired land legally described in the attached Schedule "A" (the "Land") for regional park purposes."

   (b) Recitals C, D and E are hereby deleted, each in their entirety;

   (c) Schedule "A" of the Bylaw is hereby deleted and replaced with Schedule "A" that is attached to and forms part of this bylaw.

   (d) Schedule "B" is hereby deleted in its entirety;

   (e) Section 3 is hereby deleted and replaced with the following:

   "The following Schedule is attached to and forms part of this bylaw:

   a. Schedule "A", Lands acquired for Regional Park Purposes".

Citation

2. The official citation for this bylaw is "Metro Vancouver Regional District Dedication of Land as Regional Park Amending Bylaw No.1348, 2022".

Schedules

3. The following Schedule is attached to and forms part of this bylaw:

   (a) Schedule "A", Lands acquired for Regional Park Purposes.

Read a first, second and third time this __ day of _____, ____.

Passed and finally adopted by a 2/3 vote of all members of the Board this __ day of _____, ____.

Sav Dhaliwal, Chair

Chris Plagnol, Corporate Officer

Schedule "A"

Lands acquired for Regional Park Purposes

Dedication of Land as Regional Park

PARK	MUNCIPALITY	TENURE	LEGAL DESCRIPTION	PID	DATE OF ACQUISITION
Codd Wetland Ecological Conservncy Area					
Codd Wetland Ecological Conservncy Area	Pitt Meadows	Fee Simple	EAST HALF LEGAL SUBDIVISION 5 SECTION 7 TOWNSHIP 42 NEW WESTMINSTER DISTRICT	013-557-220	December, 2019
Codd Wetland Ecological Conservncy Area	Pitt Meadows	Fee Simple	LEGAL SUBDIVISION 3 SECTION 7 TOWNSHIP 42 NEW WESTMINSTER DISTRICT	013-557-009	December, 2019
Codd Wetland Ecological Conservncy Area	Pitt Meadows	Fee Simple	LEGAL SUBDIVISION 4 SECTION 7 TOWNSHIP 42 NEW WESTMINSTER DISTRICT	013-557-084	December, 2019
Codd Wetland Ecological Conservncy Area	Pitt Meadows	Fee Simple	LEGAL SUBDIVISION 6 SECTION 7 TOWNSHIP 42 NEW WESTMINSTER DISTRICT	013-557-157	December, 2019
Kanaka Creek Regional Park					
Kanaka Creek Regional Park	Maple Ridge	Fee Simple	THAT PART OF LOT 3 EXCEPT: SOUTH 110 FEET; SECTION 14 TOWNSHIP 12 NEW WESTMINSTER DISTRICT PLAN 2701 SHOWN ON PLAN EPP92979	030-828-171	June, 2019
Minnekhada Regional Park					
Minnekhada Regional Park	Coquitlam	Fee Simple	LEGAL SUBDIVISION 1 SECTION 21 TOWNSHIP 40 NEW WESTMINSTER DISTRICT	007-568-444	December, 2019
North Alouette Regional Greenway					
North Alouette Regional Greenway	Maple Ridge	Fee Simple	THOSE PARTS OF THE SOUTH HALF OF THE SOUTH EAST QUARTER SECTION 31 TOWNSHIP 12 NEW WESTMINSTER DISTRICT AND THE NORTH HALF OF THE SOUTH EAST QUARTER SECTION 31 TOWNSHIP 12 NEW WESTMINSTER DISTRICT WITH A TOTAL AREA OF 7.69 HA SHOWN ON PLAN EPP87735	030-704-243	February, 2019

To: Regional Parks Committee

From: Jamie Vala, Division Manager Planning and Resource Management, Regional Parks

Date: May 11, 2022 Meeting Date: June 8, 2022

Subject: **MVRD Dedication of Land as Regional Park Amendment Bylaw No. 1344, 2022 – Amends Bylaw 1319, 2021**

RECOMMENDATION

That the MVRD Board:

a) give first, second and third reading to *Metro Vancouver Regional District Dedication of Land as Regional Park Amendment Bylaw No. 1344, 2022*; and
b) pass and finally adopt *Metro Vancouver Regional District Dedication of Land as Regional Park Amendment Bylaw No. 1344, 2022.*

EXECUTIVE SUMMARY

During a detailed review of previously dedicated parkland, it was discovered that there are a number of administrative amendments required in the *Greater Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1319, 2021.* The amendments can be found in the attached bylaw (Attachment).

PURPOSE

To obtain MVRD Board approval of a number of administrative amendments to *Metro Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1319, 2021*.

BACKGROUND

Section 30 of the *Community Charter* (British Columbia), applicable to regional districts pursuant to section 278 of the *Local Government Act* (British Columbia), authorizes a regional district to dedicate land as a park by way of a bylaw. Upon detailed review of *Metro Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1319, 2021*, it was identified that the bylaw required a number of administrative updates.

ALTERNATIVES

1. That the MVRD Board:
   a) give first, second and third reading to *Metro Vancouver Regional District Dedication of Land as Regional Park Amendment Bylaw No. 1344, 2022*; and
   b) pass and finally adopt *Metro Vancouver Regional District Dedication of Land as Regional Park Amendment Bylaw No. 1344, 2022.*

2. That the MVRD Board receive for information the report dated May 11, 2022, titled *"MVRD Dedication of Land as Regional Park Amendment Bylaw No. 1344, 2022 – Amends Bylaw 1319, 2021"* and provide alternate direction to staff.

FINANCIAL IMPLICATIONS

There are no financial implications as a result of this amending bylaw.

CONCLUSION

The proposed amendment bylaw, subject to MVRD Board approval, will address the administrative updates needed in *Metro Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1319, 2021*.

Staff recommend the MVRD Board adopt Alternative 1.

Attachment

MVRD Dedication of Land as Regional Park Amendment Bylaw No. 1344, 2022

52754220

METRO VANCOUVER REGIONAL DISTRICT
BYLAW NO. 1344, 2022
A Bylaw to amend "Metro Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1319, 2021"

WHEREAS:

A. The Metro Vancouver Regional District Board (the "**Board**") adopted the "Metro Vancouver Regional District Dedication of Land as Regional Park Bylaw No. 1319, 2021" (the "**Bylaw**"), a bylaw to dedicate land as regional park; and

B. The Board wishes to amend the Bylaw.

NOW, THEREFORE, the Board of the Metro Vancouver Regional District enacts as follows:

1. The Bylaw is hereby amended as follows:

   (a) Recital B is hereby deleted and replaced with the following:

   "The Metro Vancouver Regional District has acquired land legally described in the attached Schedule "A" (the "Land") for regional park purposes."

   (b) Recitals C, D and E are hereby deleted, each in their entirety;

   (c) Schedule "A" of the Bylaw is hereby deleted and replaced with Schedule "A" that is attached to and forms part of this bylaw;

   (d) Schedule "B" is hereby deleted in its entirety; and

   (e) Section 3 is hereby deleted and replaced with the following:

   "The following Schedule is attached to and forms part of this bylaw:

      a. Schedule "A", Lands acquired for Regional Park Purposes".

Citation

2. The official citation for this bylaw is "Metro Vancouver Regional District Dedication of Land as Regional Park Amending Bylaw No. 1344, 2022".

Schedules

3. The following Schedule is attached to and forms part of this bylaw:

   (a) Schedule "A", Lands acquired for Regional Park Purposes.

Read a first, second and third time this __ day of _____, 2022.

Passed and finally adopted by a 2/3 vote of all members of the Board this __ day of _____, 2022.

Sav Dhaliwal, Chair

Chris Plagnol, Corporate Officer

Lands acquired for Regional Park Purposes

Schedule "A"

Dedication of Land as Regional Park

PARK	MUNCIPALITY	TENURE	LEGAL DESCRIPTION	PID	DATE OF ACQUISITION
Aldergrove Regional Park					
Aldergrove Regional Park	Abbotsford	Fee Simple	Lot "A" Section 5 Township 13 NWD Plan 17233	010-288-511	February, 2020
Aldergrove Regional Park	Abbotsford	Fee Simple	West Half of the North East Quarter Section 5 Township 13 Except: Firstly: part Subdivided by Plan 17233, Secondly: part Subdivided by Plan 19412, Thirdly: Parcel "C" (Bylaw Plan 62651), NWD	013-330-802	February, 2020
Aldergrove Regional Park	Abbotsford	Fee Simple	Lot "B" Section 5 Township 13 New Westminster District Plan 19412	010-486-411	February, 2020
Aldergrove Regional Park	Abbotsford	Fee Simple	Parcel "A" (Explanatory Plan 12755) of the North 50 Acres of the East Half of the North East Quarter Section 5 Township 13 New Westminster District	013-330-837	February, 2020
Aldergrove Regional Park	Abbotsford	Fee Simple	Lot 1 Section 5 Township 13 New Westminster District Plan 31567	006-609-601	February, 2020
Aldergrove Regional Park	Abbotsford	Fee Simple	East Half of the North East Quarter Section 5 Township 13 Except: the North 50 Acres New Westminster District	013-330-756	February, 2020
Aldergrove Regional Park	Abbotsford	Fee Simple	Lot 1 Section 5 Township 13 New Westminster District Plan 35703	007-181-205	February, 2020
Aldergrove Regional Park	Abbotsford	Fee Simple	Lot 2 Section 5 Township 13 New Westminster District Plan 35703	007-181-221	February, 2020
Burns Bog Ecological Conservancy Area					
Burns Bog Ecological Conservancy Area	Delta	an undivided 1/2 Interest In Fee Simple	Lot B Section 12 Township 6 New Westminster District Plan EPP44870	029-928-494	August, 2020
Burns Bog Ecological Conservancy Area	Delta	an undivided 1/2 Interest In Fee Simple	Lot 1 District Lots 130 and 437 Group 2 New Westminster District Plan EPP41430	029-529-298	August, 2020

Burns Bog Ecological Conservancy Area	Delta	an undivided 1/2 Interest In Fee Simple	Lot A District Lot 437 Group 2 New Westminster District Plan EPP39194 Except Plan EPP67855	029-602-483	August, 2020
Burns Bog Ecological Conservancy Area	Delta	an undivided 28469/44000 Interest In Fee Simple	Lot 1 District Lot 14 Township 4 New Westminster District Plan EPP42759	031-162-088	August, 2020
Crippen Regional Park					
Crippen Regional Park	Bowen Island	Fee Simple	Lot 6 District Lot 1910 Plan 13749	008-497-460	April, 2020
Kanaka Creek Regional Park					
Kanaka Creek Regional Park	Maple Ridge	Fee Simple	That part of Lot 32 Section 13 Township 12 New Westminster District Plan NWP67649 as shown on Plan EPP98554	031-072-020	April, 2020

To: Regional Parks Committee

From: Jamie Vala, Division Manager, Planning and Resource Management, Regional Parks

Date: May 10, 2022 Meeting Date: June 8, 2022

Subject: **Alternative Transportation Study Part II: Access to Regional Parks Report**

RECOMMENDATION

That the MVRD Board:

a) receive for information the report dated May 10, 2022, titled "Alternative Transportation Study Part II: Access to Regional Parks"; and
b) direct staff to share the report with TransLink and member jurisdictions.

EXECUTIVE SUMMARY

The original 1966 regional park system plan - "A Regional Parks Plan for the Lower Mainland Region" - anticipated that most visitors would travel by private automobile. Today around 25% of regional park visitors come via sustainable transportation options. In 2020, Metro Vancouver initiated an alternative transportation study to better understand how to promote the use of bicycling and public transit.

Part I of the study, completed in 2020, rated the relative connectivity of regional parks by bicycling and public transit infrastructure. Part II (Attachment 1) reviewed other jurisdictions' practices, compared the Part I ratings to regional park visitor reported travel modes, highlighted key insights, and identified 11 possible actions to promote more alternative transportation use by regional park visitors.

The study will be of value to member jurisdictions and other regional partners. Implementation of 11 short to medium term actions will require partnerships with member jurisdictions and other agencies.

PURPOSE

To provide the Regional Parks Committee with the results of the Alternative Transportation Study Part II and provide a series of actions that Metro Vancouver can pursue to encourage more park visitors to travel to regional parks by bicycle or public transit.

BACKGROUND

The Metro Vancouver Board Strategic Plan 2019 to 2022 directs Regional Parks service to investigate opportunities to increase access to regional parks through public transit and active transportation (bicycling). This work is also identified on the 2022 Regional Parks Committee Work Plan.

Part I of the study (2020) inventoried and rated the relative access of each regional park and greenway by bicycling and transit. Part II of the study (2022) reviewed existing data on park visitor travel patterns, investigated approaches being used in other jurisdictions, compared park visitor travel data to the Part I relative transportation connectivity ratings, and identified possible actions Metro

Vancouver and its partners can implement to make it easier to get to regional parks by public transit and bicycling. During the Part II study the scope was broadened to consider the role of passenger ferries and how alternative transportation options can support social equity goals.

TRANSPORTATION AND ACCESS TO REGIONAL PARKS

The present distribution and development of regional parks reflects the original 1960's system plan ("A Regional Parks Plan for the Lower Mainland Region") when travel to large natural parks was predominantly by motor vehicle. The 1966 system plan located parks within an hour's drive of regional town centers and provided private automobile parking capacity for a regional population of approximately one million residents. Today the region's population is projected to grow from 2.7 million to 3.8 million by 2050, and visits to regional parks typically increase at double the population growth rate.

Over the 56 years following adoption of the 1966 system plan regional growth and transportation planning efforts have significantly improved alternate transportation options across the region; however, not all regional parks are currently connected by public transit or bicycling infrastructure.

PART I STUDY RESULTS

Metro Vancouver staff mapped and evaluated transit and cycling access for 22 of the 23 regional parks and all 5 regional greenways. Thwaytes Landing Regional Park is water access only so was not included in this work. Based on the data and assumptions used in the Part I study, many regional parks are connected to the community by bicycling infrastructure and transit to some degree. The relative quality of connection ranges from none to excellent. Regional parks tend to be better connected by bicycling infrastructure than transit.

The Regional Parks Alternative Transportation Study - Part I can be found on Metro Vancouver's website/digital library catalogue (Reference).

PART II STUDY RESULTS

The study identified key insights from the background research and the data analysis. These insights can help guide future actions to improve alternative transportation options to regional parks. The following is a brief summary of these insights.

Every park is unique

Every regional park is unique in its character, context and needs. Effectively promoting increased alternative transportation systemically will require transportation plans tailored to the unique circumstances of each regional park and the community they are located within.

Data

Only a limited amount of direct data is available to Metro Vancouver on how its regional park visitors travel to parks. This was gathered through two regional parks visitor surveys in 2013 and 2019. A shortcoming of the visitor survey data is there is notable variation in the results at individual parks between samples, and with only two data points it is not possible to identify trends.

Public opinion survey
The survey of both park visitors and non-park visitors identified two key findings concerning transportation to regional parks. Firstly, it found strong public support for improving access to parks by bicycling and transit. Secondly it found that the lack of vehicle ownership was an important barrier to regional parks access. Improving access by transit and bicycling will promote equitable access to the health benefits of regional parks.

Bicycling and Transit
The comparison of the part I relative transportation infrastructure connectivity ratings to the travel mode reported in the 2013 and 2019 regional park visitor surveys highlighted a weak and inconsistent relationship between infrastructure connectivity and travel behavior. This deviation between infrastructure availability and travel choice suggests that some factor(s) other than the quality of a regional park's transportation infrastructure connectivity influences a regional park visitors' travel choice. Better understanding what park characteristics or behavioral attributes correlate to higher travel mode shares will help prioritize future planning, program development and infrastructure development activities.

Passenger Ferries
Passenger ferry service feasibility is tied to the combination of the right blend of regional geography, urban settlement and traffic congestion. This means a geography with protected marine waterways and navigable rivers combined with frequent pockets of dense commercial and residential development within close proximity of the waterfront. Congestion on other land based travel modes is also an important factor. The region has the right geography, but not the intensity and frequency of urban development along regional waterways nor the traffic congestion.

Leading Practices
Los Angeles County is a leading example of a region developing a strategic approach to increasing the use of transit by park visitors. Many things can be learned from their process and plan. Collaboration between the regional parks agency and transit authority is required, and ranking parks according to their key facilities of interest is an important approach for prioritizing service improvements.

Implementation
The Part II study identified actions that could help Metro Vancouver promote alternative transportation travel to regional parks to help reduce regional greenhouse gas emissions, manage park capacity and improve access to the important nature benefits offered by regional parks.

Eleven short to medium term implementation actions were identified. They are:

1. Advance the incomplete portions of approved regional greenway corridors (i.e., Pitt River, Brunette-Fraser and Seymour River greenways);
2. Support completion of Sea Island Greenway to the Iona Beach Regional Park;
3. Complete the design and construction of the Burnaby Lake South Greenway;
4. Advance management planning for the Delta Nature Reserve and Delta South Surrey Regional Greenway;

5. Collaborate with Port Moody to complete the transportation study from Port Moody to Belcarra Regional Park and work together to advance recommendations from that study;
6. Complete a passenger ferry service business case study for eastern Burrard Inlet (e.g., Port Moody - Belcarra Regional Park - Deep Cove);
7. Develop a plan for a shuttle bus from Templeton Station (SkyTrain) to Iona Beach Regional Park;
8. Implement the Coquitlam Town Center to Widgeon Marsh Regional Park shuttle in conjunction with the opening of Widgeon Marsh Regional Park;
9. Continue to work with TransLink to expand bus and SkyTrain service to regional parks;
10. Continue to explore the factors that motivate people to use alternative transportation modes to travel to regional parks and how improvements to alternative transportation modes can help reduce barriers of access, particularly for equity deserving populations; and
11. Explore partnerships to promote use of alternative transportation modes to travel to regional parks.

ALTERNATIVES

1. That the MVRD Board:

a) receive for information the report dated May 10, 2022, titled "Alternative Transportation Study Part II: Access to Regional Parks"; and
b) direct staff to share the report with TransLink and member jurisdictions.

2. That the MVRD Board receive for information the report dated May 2, 2022, titled "Alternative Transportation Study Part II: Access to Regional Parks" and provide alternate direction to staff.

FINANCIAL IMPLICATIONS

There are no financial implications presented. Actions will be incorporated into annual work plans and costed at that time. Review will be during the annual budgeting process.

CONCLUSION

Metro Vancouver started the alternative transportation study in 2020 to better understand how to promote the use of bicycling and public transit for park visitor travel. Part I of the study rated the relative connectivity of regional parks by bicycling and public transit infrastructure while part II reviewed other jurisdictions' practices, compared the part I ratings to regional park visitor reported travel mode, highlighted key insights gathered during research, and identified 11 possible actions to promote more alternative transportation use by regional park visitors. This study is of value to TransLink and member jurisdictions. Implementation of all 11 actions will require partnerships with member jurisdictions and other agencies.

Staff recommends the MVRD Board adopt Alternative 1.

Attachment

"Regional Parks Alternative Transportation Study – Part 2"

Reference

Regional Parks Alternative Transportation Study – Part 1

49179932

Alternative Transportation Study

Part II: Access to Regional Parks

May 2022

1. Summary

Metro Vancouver initiated the *Regional Parks Alternative Transportation Study* in 2020 to inform improvements to regional parks access by bicycling and public transit, better manage park carrying capacity, and reduce the environmental impact of park visitor travel.

Completed in 2020, part 1 of this study rated regional parks according to the quality of their alternative transportation infrastructure. Part 2 of the study included a review of other jurisdictions' efforts to promote alternative transportation to their parks and examined the relationship between regional park visitor transportation mode share and the part 1 infrastructure ratings. This report describes the identified strategies and practices that can be employed to increase alternative transportation options to regional parks and provides a list of recommended near term actions that Metro Vancouver can implement to improve alternative transportation access to regional parks.

2. Introduction

This report describes the findings of part 2 of the Regional Parks Alternative Transportation Study. Initiated in 2020, the study originally aimed to determine how to:

1. Improve access to regional parks (including regional greenways) by bicycling, and public transit;
2. Better manage carrying capacity at our busiest parks; and
3. Reduce environmental impact (GHG emissions, reduce land used for parking, etc.) of people getting to regional parks.

After completing part 1 of the project two additional goals were identified:

1. Improve access for all people, particularly those without vehicles; and
2. Improve access to regional parks using passenger ferries.

This study does not explicitly look at the walkability of regional parks, but this may be something to look at more closely in future work particularly as the region densifies and the number of residences developed within walking distance of regional parks increases.

Part 1 of this study rated how well served regional parks were by transit and bicycling infrastructure (relative transportation connectivity ratings). Part 2 of the study reviewed existing data on park visitor travel patterns, investigated approaches being used in other jurisdictions, compared park visitor travel data to the part 1 relative transportation connectivity ratings with the object of identifying ways to make it easier to get to regional parks on public transit and active transportation. The report identifies implementation actions for Metro Vancouver and its partners to pursue to achieve this goal.

This report is one tool that Metro Vancouver will use to inform its actions to improve access to regional parks by alternative transportation modes. It may also be a tool that members of the regional federation can use

to support their efforts to implement the Regional Greenways Network described in Regional Greenways 2050 and Metro 2050.

3. Context

3.1 Metro Vancouver Context

Metro Vancouver is a federation of 21 municipalities, one Electoral Area and one Treaty First Nation, working collaboratively in planning and providing vital utility and local government services to 2.8 million people. Core services include drinking water, sewage treatment, and solid waste management, along with regional services like regional parks, affordable housing, regional land-use planning and air quality and climate action that help keep the region one of the most livable in the world.

In 2021, Regional Parks protected 13,824 Hectares in 23 Regional Parks, 5 Regional Greenways, 2 Regional Park Reserves and 2 Ecological Conservancy Areas. Regional parks continue to be popular places to connect with nature. Typically, regional park visitation grows by 3.9% each year which is about twice what would be expected just by the annual increase in population. In 2021 16.3 million people visited regional parks, a 37% increase from 2019. While this is undoubtedly related to the COVID19 pandemic's impact on the ability of regional residents to travel and gather together, it highlights that connecting people to nature is an essential service.

3.2 Climate

Climate Change is both a global and a local challenge, and it is already affecting our planet and region in profound ways, making summers hotter and drier, winters warmer and wetter, and increasing the occurrence of extreme weather events. Without strong action to reduce greenhouse gas emissions, both locally and globally, these trends will accelerate over the coming decades and it will become increasingly difficult and expensive to maintain the high quality of life we experience in our region

Based on climate modelling the Metro Vancouver region can expect changes to local climate in the coming years (Climate Projections for Metro Vancouver Report). At a broad level, this will mean:

- warmer temperatures;
- a decrease in snowpack;
- longer dry spells in summer months;
- more precipitation in fall, winter, and spring; and
- more intense extreme events.

Metro Vancouver adopted its Climate 2050 Strategic Framework in 2019 to guide the regional response to the global climate emergency. The strategic framework sets the 30-year vision for Metro Vancouver's climate policies and actions, lays out guiding principles, and describes a dynamic and adaptive approach. Climate 2050 includes summaries for each of 10 key issue areas that will become the Climate 2050 Roadmaps. The Issue Area Roadmaps will describe the trajectory toward a resilient, low carbon region for each issue area.

Cars and trucks are one of the largest emitters of greenhouse gases regionally accounting for over 30% of the regional total. The Climate 2050 Transportation Roadmap will support the shift of passenger trips to non-vehicular modes and transit, both of which have lower emissions. This transition will require infrastructure investments so that walking, biking and transit becomes the most convenient way of getting around for most personal trips (Climate 2050) in the region.

The Climate 2050 Transportation Roadmap lays out 48 actions for reducing emissions and increasing resiliency under 6 strategic areas. The most relevant one to this project is Strategic Area 2 - Reduce Driving through Active Transportation and Public Transit.

Any actions Metro Vancouver takes to promote visitor travel to regional parks by bicycle and public transit will support implementation of Climate 2050.

3.3 Equity

Social factors including income level, gender and ethnicity can have a significant influence on how healthy a person is and can contribute to a wide variety of other challenges. These social and health inequities are the result of systemic barriers that cause or aggravate disparities experienced by different groups of people, based on socioeconomic status, race, ethnicity, gender, age, disability and many other factors. Creating more equitable access to nature is a pathway to improving health outcomes and enhancing well-being.

Metro Vancouver recognizes that it can advance social equity and human health in the region by identifying and reducing barriers that may exist in travelling to regional parks. Improving opportunities to use transit, passenger ferries and bicycling to travel to regional parks are three ways to advance this.

As part of its development of an updated regional growth strategy Metro Vancouver initiated a social equity study which culminated in a report titled *Social Equity & Regional Growth Study: Considerations for integrating social equity into regional planning and Metro 2050*. The purpose of this study was to identify how social equity considerations can better inform regional growth planning. The report found that with respect to transit and mobility:

- Transit-reliant populations face isolation, delays, and fewer opportunities in parts of the region with lower transit connectivity between job centers;
- A lack of transit frequency and reliability impacts economic and social opportunities;
- Some sub-regions are experiencing rapid growth due to immigration and lower housing costs, but don't have sufficient transit service to address resulting congestion;
- Pedestrian health and safety is concerning in areas with rising vehicle traffic; and
- Sustaining relationships/community is difficult when solely transit-reliant.

Metro Vancouver conducted public opinion research in order to better understand the public's perspectives on transportation and regional parks. The survey found widespread support for Metro Vancouver to make efforts to:

- Make it easier to get to regional parks on public transit (86%); and
- Make it easier to get to regional parks by active transportation (84%).

It also revealed that certain subgroups more consistently face barriers to accessing regional parks than others. Those groups facing the greatest barriers include:

- Younger people;
- Lower income earners;
- Ethnic minorities; and
- Those without a vehicle.

The researchers conducted a regression analysis which revealed that not owning a vehicle is the biggest barrier to visiting regional parks. Based on this analysis it was concluded that making it easier for those who do not have a vehicle to access regional parks will indirectly help other marginalized groups as well.

3.4 Capacity & Transportation

Carrying capacity - also known as visitor capacity, recreation capacity, or user capacity - is "the maximum amounts and types of visitor use that an area can accommodate while achieving and maintaining desired resource conditions and visitor experiences that are consistent with the purposes for which the area was established" (IVUMC, 2016). There are three aspects of park capacity – physical (space, amenities, parking), environmental (is the park being managed within the acceptable limits of change), and experiential (how people feel about visitor density). While examining these three factors in a comprehensive way is a future project, we know that some regional parks experience parking capacity issues that need to be managed various times of year.

There are two major elements contributing to issues of parking capacity in regional parks. The first is that the 1966 *A Regional Parks Plan for the Lower Mainland Region* proposed a system of nature parks accessed by private automobile. Consequently, regional parks are often located on the outskirts of the region away from major transit routes, bicycling paths or dense urban populations. The second is that visitation to regional parks has grown at roughly twice the rate of regional population growth since visitation tracking started in 1989. Visitation growth has been dramatically amplified during the COVID-19 pandemic.

While park visitation does not approach capacity at most parks, some parking lots and popular park features like beaches or trails can reach capacity during peak times. Parking lots that regularly reach capacity on weekends are at Iona Beach, Pacific Spirit, Lynn Headwaters, Belcarra, Boundary Bay, Derby Reach, Minnekhada, Brae Island, Kanaka Creek and Colony Farm regional parks. Approaches for managing parking lot usage is taking place in parallel to this work. Improving access to parks by transit and bicycle allows visitors

to leave their personal vehicles at home, reducing traffic impacts to neighboring communities and the need for more parking lots.

Micromobility devices, which include bicycles, can support visitors travelling to regional parks in a low carbon way, reduce travel barriers to equity deserving groups and can help manage regional park parking facility congestion. Local and regional governments are considering how best to manage micromobility vehicles and use them to transform how people travel in North American communities. While electric bicycles are generally suited to existing bicycle infrastructure, the Province and communities (including Metro Vancouver) are still working out how to manage other classes of light electric vehicles such as electric kick scooters, electric skateboards, electric unicycles, and onewheels.

4. Literature Review

As part of this study Metro Vancouver collected literature from academic sources, non-profits and other government jurisdictions from around the globe. The literature review focused on understanding what approaches other jurisdictions use to promote bicycle and transit travel to parks. The following section summarizes the results of the literature review focusing on strategies and practices. They are arranged by transportation mode and the following sub-topics: Research; Planning and Policy; Design, Development and Procurement; Marketing; and Operations and Programs.

4.1 Identified Strategies and Practices

4.1.1 Bicycling and other micromobility

Improving bicycling connectivity and safety is one important strategy to reduce greenhouse gas emissions from urban areas and to promote a more just transportation system.

The vast majority of available micromobility research focuses on promoting the use of standard bicycles for general commuting and other utility travel. No examples focusing specifically on promoting increased use of bicycles to access large natural parks were found. The research tended to fit into the following classes: behavioral change, infrastructure characteristics, and network characteristics.

Identified Practices	Description	Examples
Research	For bicycling promotion this type of work often includes literature reviews, spatial data collection, traffic counter programs, mapping and analysis, public opinion gathering via focus groups and market surveys, as well as stakeholder meetings. This work can be conducted by public agencies, academics and non-profits.	Local examples of research include HUB Cycling's State of Cycling report, Dr. Winters' (SFU) team's work on built environment & route selection and the work of UBC's Cycling in Cities Research Program and its Health and Community Design Lab study of the Comox-Helmcken Greenway.

		Big data based transportation data platforms like StreetLight Data and Strava Metro are new tools that may improve an agency's ability to understand resident bicycling patterns.
Planning & Policy	The most advanced examples of bicycling plans are from communities where bicycling is well embedded in the culture. Successful cycle planning is iterative and benefits increase over time with each new plan. Successful implementation of plans builds supports for future proposals. Because Metro Vancouver is decades behind top bicycling cities, a more practical approach is to emulate jurisdictions at slightly more advanced stages of infrastructure development. Bicycling network plans and policies are found in municipal transportation plans, park plans or occasionally both. At times higher orders of government will adopt bicycling plans and policies. In the best examples the bicycling plans and policies of all levels of government work together to promote bicycling as a transportation option.	Notable examples of regional and municipal level bicycling strategies are found in Amsterdam (Netherlands), Copenhagen (Denmark) and Portland (USA). In Metro Vancouver regional scale policies are contained in Regional Greenways 2050 & TransLink's Regional Bicycling Strategy. Examples of best practices for national bicycling promotion policies include the European Cyclists' Federation (2014) or the European Conference of Ministers of Transport's National Policies to Promote Cycling (2004).
Design and Development	Bicycling design guides based on local context are commonly available globally. Many studies evaluating new bicycle infrastructure effectiveness are also available for European and North American jurisdictions. Danish and Dutch approaches are global best practices; however, they reflect evolving programs that started in the 70's.	Best practice in Metro Vancouver should follow national and provincial guides. In Canada and British Columbia best practices include the TAC Geometric Design Guide for Canadian Roads (including the BC supplement) and the BC Active Transportation Design Guide. From the US jurisdiction, the National Parks Active Transportation Guide Book is a good reference.
Marketing	Marketing programs that encourage behavior change may include advertising in mainstream and social media, and trail network branding	Travel, Play & Go by the Bruno Kessler Foundation is one example of gamification used to promote bicycling

	programs. Improvements to way finding through signage, route maps and downloadable smartphone apps may also help market bicycling as a transportation option. Some jurisdictions have tried to use gamification as an innovative strategy to promote bicycling for transportation.	and other sustainable travel modes for transportation.
Operation and Programs	Trail building and maintenance guides support the maintenance of rustic non-paved recreational bicycling routes and pavement capital management plans support paved trail maintenance. These may have relevance to regional parks for its greenways trails. It's important to keep bicycle trails in a good state of repair. Maintenance activities like bike lane cleaning are poorly documented. Small electric street sweepers can be integrated into bicycling infrastructure maintenance programs to keep trails free of debris for safety and comfort. Programs are another way to promote bicycling to parks and other locations. Bike train or Bicycle bus programs (bicycle based walking school bus) promote bicycling for school aged children. A group of students, accompanied by parents or volunteers, ride together along a prescribed route, picking up riders en route to school. These may be adapted to promote bicycling to regional parks.	Operations: An example of a guide book for the maintenance of rustic non-paved recreational bicycling routes is the USDA's Trail Building and Maintenance Guide. An example of a paved bike trail maintenance program is the Nantucket Department of Public Works Pavement Preservation Capital Improvement Plan. An example of small sweepers that can access bike trails to keep them clean of the dirt and debris that impact on cyclist safety and comfort are sold by Bortek. Programs: An example of a bike train program is BiketrainPDX in Portland Oregon which supports bicycle travel to a number of schools in the Portland area. A source of information on bike trains is the Saferoutes Partnership.

4.1.2 Transit

Transit includes public transportation modes like buses, light rail, and shuttles. The literature search did not find broad information on comprehensive regional programs promoting the use of transit to travel to parks, although important research and planning work on this subject was found for three US cities and a number of examples of shuttle pilot projects or programs were also identified.

Identified Practices	Description	Examples
Research	Research is the foundation of a transit to parks strategic plan. Produced by public agencies and NGO's this work typically incorporates literature reviews, spatial data collection, mapping and analysis, focus groups, stakeholder meetings and market surveys.	Good research examples include the *Los Angeles Countywide Comprehensive Parks & Recreation Needs Assessment*, The Wilderness Society's *Connecting People to Parks in King County - A Transit-to-Parks GIS Analysis* & *Next Stop: Equitable Access - A Transit to Parks Analysis* for Albuquerque.
Planning & Policy	One example of a well-developed regional program promoting transit to parks was identified for Los Angeles. This strategic plan identified a range of approaches to improve transit access to parks including schedule enhancement, development of new routes, establishing park specific shuttle buses, marketing, and subsidies such as low cost bus passes. One highlight from this plan was the use of a park ranking system to identify key facilities of interest in the parks system to prioritize service improvements. Criteria used included park size, park amenities and their condition, park pressure, presence of trails, presence of cooling amenities, beach access, and presence of cultural institutions.	LA Metro, the regional transit authority for Los Angeles County adopted *Next Stop: More Access to Open Spaces – Transit to Parks Strategic Plan* (2019). This plan describes a vision for coordinating access goals and strategies at the local and County levels to promote better access to parks. Important to note this plan was based on the Los Angeles Countywide Comprehensive Parks & Recreation Needs Assessment discussed above.
Design, Development & Procurement	These activities include capital investment in facilities such as bus stops and signage, acquisition of moving stock like buses as well as developing operational schedules and hiring and training operators. Research found little specific documentation on these best practices, however, it was apparent that the development of business cases and the use of pilot projects to test feasibility are important aspects of these processes	N/A

	particularly when it comes to park specific shuttle bus programs.	
Marketing	Single local media story on programs was found. Responsible jurisdictions may provide information on their websites or use social media.	TransLink has used its Buzzer blog to promote travel by public transit to some specific parks within the region. Bloggers / influencers have used their platforms to share information on traveling to parks by transit for hiking. Taryn Eyton is one local example.
Operation and Programs	Shuttle programs like ParkBus tend to be oriented towards day use and overnight trips to large natural parks. Washington's Trail Head Direct program targets a limited number of trail heads for day hikes. More frequent shuttle programs like the Mt Seymour shuttle bus for winter sports users may be more relevant to Metro Vancouver's needs. Nature interpretation or activity programs can be an important part of promoting the use of transit by park visitors. Examples of partnerships between transit to natural parks shuttle programs and interpretive or activity programs included ParkBus' ActiveDays Program which pairs transportation to a park with supportive information on being outdoors and an interpretive leader / guide. A similar example is Pacific Parklands Foundation bus grant paired with a Metro Vancouver Regional Parks interpretive program.	Operations: The following shuttle programs provide a good sampling of the types of shuttles offered by public agencies and non-profits to help people access nature. • Trailhead Direct Program pilot project (Washington State) • ParkConneCT pilot program (Connecticut) • The Pacific Parklands Foundation's bus grant program (Metro Vancouver) • ParkBus (Toronto, Vancouver and Ottawa) • Mount Seymour Shuttle (North Vancouver) Programs: Two examples of NGO offered shuttle bus services linked to recreational / interpretive programs were identified. • ParkBus' ActiveDays Program • Pacific Parklands Foundation bus grant with a Metro Vancouver Regional Parks interpretive program.

4.1.3 Passenger Ferries

Many visitors use vehicle ferries to travel to Metro Vancouver's regional parks located on Barnston and Bowen islands. When circumstances are favorable, passenger ferries can make an important contribution to regional transportation. Research found that in most instances passenger ferries are offered as a single point-

to-point service. The passenger ferries operated in the New York, USA region are a good example of this. Sydney Australia's passenger ferry system is a notable exception to this finding. In Sydney a network of passenger ferry routes covering the Sydney Harbor and Paramatta River are operated in a coordinated manner by a single agency.

Regional Greenways Water Crossing Feasibility Study – Phase 2 (2001)

Metro Vancouver commissioned a multi-phase study in 2005 to investigate the feasibility of using a small passenger ferry service to enhance greenway connectivity for pedestrians and cyclists at strategic waterfront locations within Metro Vancouver. The study included the following:

- Research into small passenger ferry systems in other jurisdictions
- Detailed review and analysis of potential water crossing routes
- Evaluation of both recreation and commuter potential
- Preliminary estimate of capital and operating costs
- Detailed business planning and cost estimated for a pilot project

It provides a systematic review of demand and opportunities for recreational and transportation ferry service along the MVRD portion of the Fraser River and Burrard Inlet. The limiting factors identified for water based transportation during the study in 2005 remain relevant 15 years later.

Key observation was that Vancouver had the potential to achieve what the San Francisco Bay Area, Sydney, Hong Kong and New York have in the long term future. The factors Vancouver needs to achieve to match these other cities include:

- High population
- An urban geography cut by waterways
- High ferry traffic volumes
- Numerous vessels and routes and
- Population concentrations located where ferry services are competitive with a conventional land transportation options.

The key high volume ferry service requirements Metro Vancouver lacks are:

- High populations in Metro Vancouver communities that are isolated by waterways and not well served by land transport
- Sufficiently high traffic congestion and driving costs forcing a major switch to high volume ferry services.

Aside from previous work done by Metro Vancouver on testing the feasibility of using passenger ferries to extend the greenway network, examples of studies, plans or programs for the use of passenger ferries specifically to travel to parks was not readily available.

Identified Practices	Description	Examples
Research	Identified research focused on the feasibility of establishing new ferry services or expanding existing passenger ferry networks. Major focus is ridership assumptions and financial analysis.	Jacob Mittleman's 2018 paper *Keeping Passenger Ferry Systems Afloat: What can Boston learn from other water transportation systems around the country?* (Tufts University). Vilain et al *Public Policy Objectives and Urban Transit Case of Passenger Ferries in the New York City Region*. Journal of the Transportation Research Board, No. 2274
Planning & Policy	Identified examples focused on transportation (not recreation) and typically the feasibility of a single route. System focused examples included a literature review, market analysis, ridership demand modeling, peer systems evaluation, evaluation of future routes, and landside integration. Identification of pilot projects were added focus of Metro Vancouver's greenway crossing study.	Metro Vancouver's regional greenway water crossings is a unique network scale analysis of opportunities to improve regional recreational connectivity by passenger ferry. While the study's financial estimates are out of date, the remainder is still relevant. The *Puget Sound Passenger Only Ferry Study (*2008*) is a* comprehensive example of a network level transportation analysis of passenger only ferries. It was intended to guide transportation investments in the Puget Sound region.
Design, Development & Procurement	This practice implements feasible passenger ferry services. Main focus is buying vessels suited to the intended service, designing and building the ferry terminals, recruiting and training staff and establishing ticketing systems.	See the Puget Sound Passenger Only Ferry Study (2008) above
Marketing	This practice is how a service promotes its use to prospective passengers. No documents found. See web example	The Yankee Freedom ferry to Dry Tortugas National Park website (Florida Keys) is a passenger ferry marketing approach example
Operation and Programs	This practice supports delivery of the service to passengers on a scheduled basis. No academic documents found. Note examples are split between services to parks with popular daytime or overnight recreational activities like	These examples include both privately and publicly offered passenger ferry services. The first set provide access to natural parks offering overnight camping and significant

	camping and services in densely developed urban areas with a blend of tourist and commuting demand. See web examples.	natural experiences or urban parks with many attractions. • Yankee Freedom Ferry • Toronto Island Park • Newcastle Island Ferry • Sidney Spit Ferry This second set are urban focused passenger ferries. Operated by private companies and public agencies, these support travel to tourist attractions, parks and commuting. The last two examples operate on a heavily populated water way with high demand and a number of popular destinations (e.g., Granville Island, Science World). • QtoQ Ferry (New Westminster) • Aquabus (Vancouver) • False Creek Ferries (Vancouver)

4.2 Potential Implementation Interventions

Through the research phase, a number of potential interventions to promote bicycle and transit travel to regional parks were identified. They have been broken down into two main classes – internal and external to regional parks – to reflect the different levels of influence Metro Vancouver has in realizing the intervention. Some interventions, such as shuttle bus programs, may be both external and internal. This section functions like a menu that Metro Vancouver can choose from to develop implementation actions suited to the regional context to improve alternative transportation options to regional parks.

1. External Interventions			
External interventions take place outside of the boundaries of regional parks and greenways giving Regional Parks less direct influence on their implementation. These interventions require the leadership or support of other agencies such as local government, TransLink, the Province, etc.			
Type	**Purpose**	**Intervention**	**Details**
Public Transit and Shuttles	Improve regional park connection to where people live by public transit (primarily bus)	Locate bus stops close to regional park entrances & common visitor origins	N/A
		Increase transit service on current routes	N/A
		Run dedicated shuttle bus with luggage space for gear (e.g., coolers, umbrellas, bbq's) during seasonal and weekly high demand periods.	Types of shuttles. 1. Circulator: Picks up at multiple destinations and then brings people to one or more parks; 2. Community Park Express: One central pickup location and brings people to one park; 3. On Demand Solution: Can be hailed or reserved by the rider to get to a park. Some shuttles permit dogs.
		Offer free / subsidized transit fares for lower income people / families	N/A
		Build safe and well-marked walking / bicycling routes between transit stops and parks / greenways	Improve the quality and continuity of sidewalk & bicycle ways into key park facilities
		Install bus shelters at all regional park oriented transit stops.	Shelter will ensure park visitors don't have to stand in the rain to wait for their bus
		Promote travel to parks by transit or shuttles via marketing campaign	N/A
Bicycle Infrastructure	Connect regional parks to visitors homes and work locations with safe and comfortable bicycling routes	Build one "comfortable for most" bicycle route between every regional park main entrance and the center of the adjacent community	These routes are the regional scale "spine" of the cycling network See Regional Cycling Network for potential routes
		Build municipal bicycling routes that are comfortable	These routes are the local collectors of the cycling network

		for most between all residential and commercial areas in adjacent communities and the regional bicycling network	They will ensure safe community scale bicycle connection to local Regional Cycling Network (i.e., addresses first & last mile issue)
		Provide wayfinding to help bicyclists easily navigate municipal and regional bicycling network to reach regional parks.	Information should be clear, available through multiple media (e.g., signs, pavement markings, mobile apps, paper maps, etc.) and at sufficient frequency
Passenger Ferries	Connect regional parks to where people live with passenger ferry service	Build passenger ferry docks within communities located a short cycle or walk of a regional park.	Passenger ferries are more financially viable if they support commuting and tourism
		Link passenger ferry docks with the main entrances of parks by bicycle and walking routes that are comfortable for most	This ensures safe passage on foot or bicycle from the ferry dock to the park
2. Internal Interventions			
Internal interventions take place within the boundaries of regional parks and greenways giving Regional Parks greater control on their implementation.			
Type	**Purpose**	**Intervention**	**Details**
Park Infrastructure	Improve regional park facilities that promote the increased use of public transit or bicycling as a transportation mode.	Build public transit stops within regional parks as appropriate.	Example is establishment of a TransLink bus stop at White Pine Beach in Belcarra Regional Park to manage limited parking supply.
		Build shuttle bus stops in or near appropriate regional parks	This will support shuttle programs.
		Build bus shelters at park bus stops	Will protect visitors from inclement weather while they wait for transit.
		Build new infrastructure to support park services and programs as necessary	See services and programs section for activities that may require facilities
		Build new end of trip facilities	Examples include change rooms, secure storage, bicycle racks, bicycle repair stands, and motorized bicycle charging facilities.

		Upgrade park access roads / bicycle paths for cyclists	Ensure that each park has at least one bicycle friendly route into the park that is comfortable for most.
		Build or upgrade passenger docks to support passenger ferry services to regional parks.	
Park Services & Programs	Offer services or programs in parks that 1. eliminate the need to bring personal equipment, 2. provide experiences (e.g. interpretive programs) that encourage visitors to travel to a park by alternative transportation or 3. make driving less attractive (e.g., fee for parking). Services and programs may require park infrastructure improvements to implement; 4. Support people who want to bicycle but need help.	Provide commercial services in parks to reduce luggage requirements for park visitors.	Examples include concession stands, equipment rentals (e.g., bicycles, canoes/kayaks), or novel park facilities (e.g., electric BBQ's, propane campfire apparatus).
		Implement a Traffic Demand Management program that uses parking fees and other strategies to discourage driving to busy parks with limited parking.	This can be associated with park carrying capacity management approaches.
		Partner with health professionals to promote travelling to parks by bicycle.	Example is PaRx program
		Support development of a bicycling to parks promotion program similar to the "Bicycle Trains" used to encourage bicycling to school by children.	Organizing and promoting a regional bicycle train program could include a bicycle 'guide' education program to train "bicycle train" leaders.

5. Data and Analysis

Several quantitative data sources were compared to the relative transportation connectivity ratings from part 1 of the study in an effort to better understand how actual visitor travel behavior aligned with the availability of alternative transportation infrastructure. The only direct data source on bicycle and transit mode share for travel to regional parks is the regional parks visitor surveys (*Regional Parks 2013 Visitor Survey & Metro Vancouver Regional Parks Visitor Survey 2019*). TransLink also provided a set of isochrone analysis

maps, and has made data on bus stop passenger use publicly accessible. These last two sources provide context to the transit use vs infrastructure availability analysis.

5.1 Data

5.1.1 Part 1 Study – Relative Transportation Connectivity Data

Metro Vancouver rated the relative transportation connectivity of regional parks by bicycling or transit in 2020 during part 1 of this study. See Tables 1 and 2 for a summary of the results.

Figure 1: Map showing ratings of how well each Regional Park and Greenway is served by bikeways

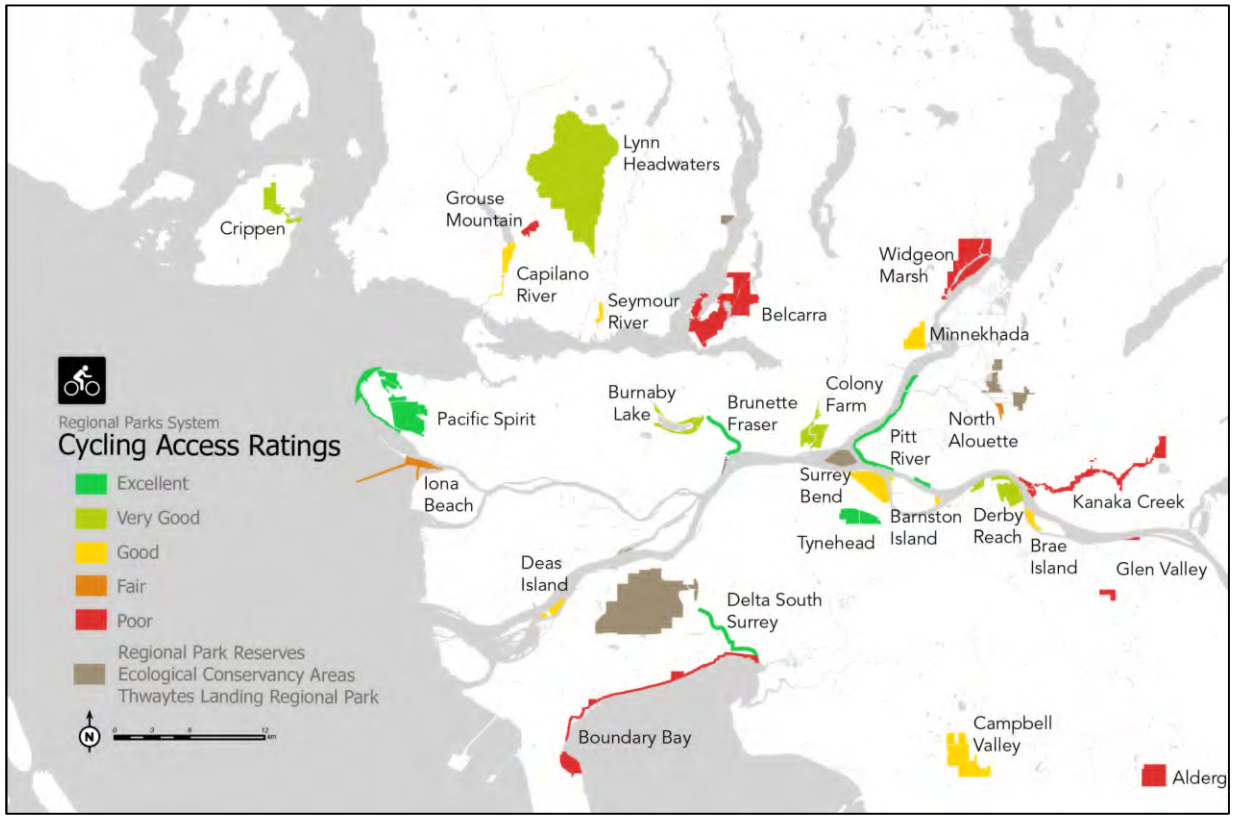
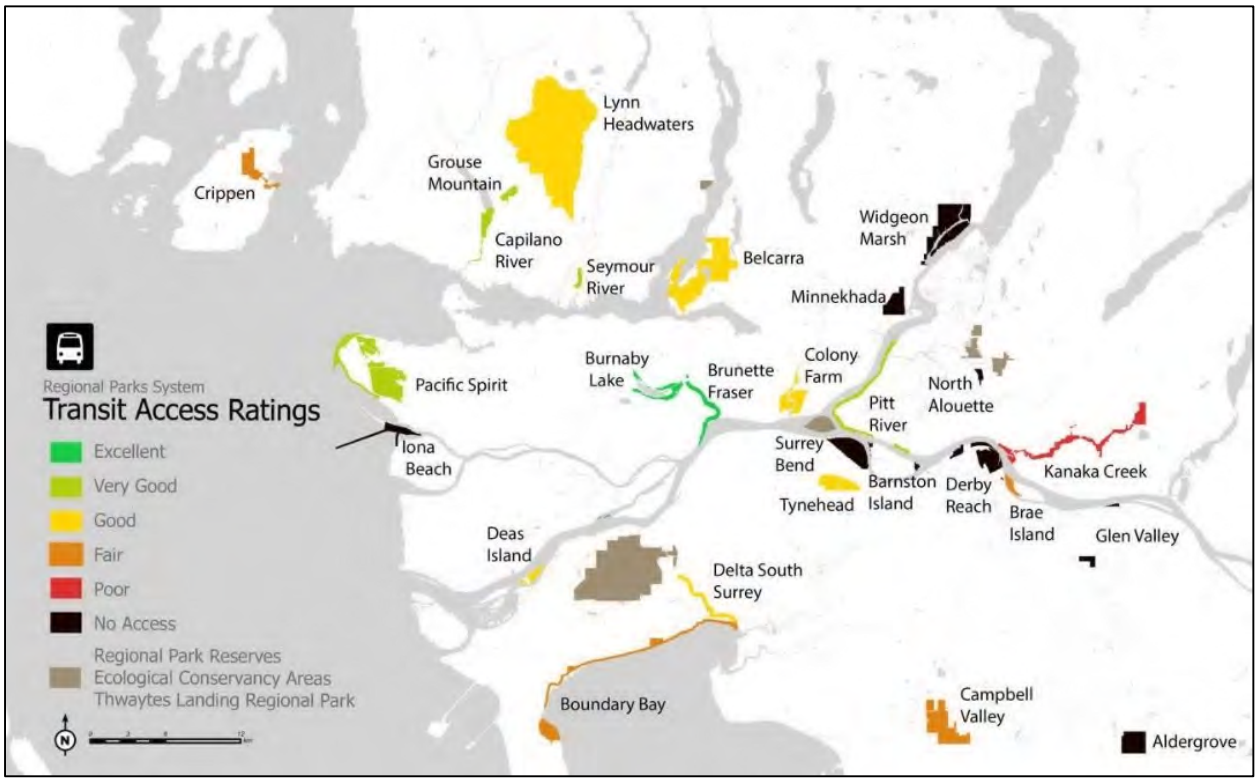


Figure 2: Map showing ratings of how well each Regional Park and Greenway is served by transit



From these maps it's apparent that regional parks tend to be better connected by bicycling infrastructure than transit.

5.1.2 Part 2 Study - Regional Parks Visitor Survey Mode Share Data and TransLink Information

In 2013 and 2019 Metro Vancouver surveyed regional park visitors on a range of topics. These surveys were delivered at regional parks and greenways using the intercept approach to recruit respondents. This is a common practice in parks and recreation planning; however, because survey participation is voluntary and the target population is made up of people in regional parks, the results only reflect the views of park visitors who participated.

During these surveys respondents were asked what travel mode they used to visit the park that day. As shown in Table 3 about three quarters of survey respondents reported using a private vehicle. The next most frequently reported travel mode was walking (14 -16%) followed by bicycling (9-14%) and transit (+/- 3%).

Table 1: Regional Park Visitor Travel Mode by Visitor Survey Year

Travel Mode	2019 (%)	2013 (%)
Private Vehicle	74	73
Walked	14	16
Bicycle	9	14
Transit	3	4
Horse	1	0
Other	0	1

In addition to the visitor survey mode share data two indirect transit information sources were available. The first was the volume of passengers alighting (i.e., people departing) from buses near regional parks. This data was obtained from TransLink's *Transit Service Performance Review (TSPR) 2019 Visualization App*. It was used to understand the number of people using transit in close proximity to each park and see if there was a relationship between reported mode share and adjacent transit traffic.

The second information source was an isochrones analysis based on data provide by TransLink. An iscohrone analysis examines the area and population accessible within a set transit travel time for a specific location. In this case, a 60-minute travel time around each regional park was examined. The output is in both tabular and graphic forms.

These graphic and numeric descriptions for each regional park help Metro Vancouver understand the transit travel market of these regional parks, and may indicate the potential to increase visitor travel by transit for a park.

Park/Greenway	*2013 Survey Mode Share*	*2019 Survey Mode Share*	*Bicycle Access*	*Transit Access*
Aldergrove Regional Park	Vehicle: 96% Bicycle: 6% Walk: 1% Transit: 1% Other: 1%	Vehicle: 100%	Poor	None
Barnston Island Regional Park	Vehicle: 96% Bicycle: 6% Walk: 1% Transit: 1% Other: 1%	Vehicle: 100%	Good	None
Belcarra Regional Park	Vehicle: 92% Bicycle: 6% Walk: 4% Transit: 4% Other: 2%	Vehicle: 95% Bicycle: 3% Transit: 3%	Poor	Good
Boundary Bay Regional Park	Vehicle: 64% Bicycle: 26% Walk: 20%	Vehicle: 62% Bicycle: 26% Walk: 12%	Poor	Fair
Brae Island Regional Park	Vehicle: 70% Bicycle: 16% Walk: 14% Other: 4%	Vehicle: 77% Walk: 20% Bicycle: 4%	Good	Fair
Brunette Fraser Regional Greenway	Walk: 59% Vehicle: 35% Bicycle: 18% Transit: 2%	Vehicle: 51% Bicycle: 25% Walk: 18% Transit: 6%	Excellent	Excellent
Burnaby Lake Regional Park	Vehicle: 68% Walk: 22% Bicycle: 12% Transit: 3% Other 1%	Vehicle: 79% Walk: 16% Bicycle: 5%	Very Good	Excellent
Campbell Valley Regional Park	Vehicle: 91% Walk: 5% Other: 4% Bicycle: 3%	Vehicle: 92% Walk: 6% Horse: 3%	Good	Fair
Capilano River Regional Park	Vehicle: 71% Walk: 28% Bicycle: 7% Transit: 7%	Vehicle: 59% Walk: 31% Bicycle: 8% Transit: 2%	Good	Very good

Colony Farm Regional Park	Vehicle: 61% Bicycle: 31% Walk: 23%	Vehicle: 77% Bicycle: 15% Walk: 5% Transit: 3%	Very Good	Good
Crippen Regional Park	Vehicle: 58% Walk: 30% Bicycle: 8% Transit: 7% Other: 5%	Vehicle: 56% Walk: 22% Transit: 20% Bicycle: 2%	Very Good	Fair
Deas Island Regional Park	Vehicle: 92% Walk: 7% Bicycle: 6% Transit: 1%	Vehicle: 88% Bicycle: 9% Walk: 2%	Good	Good
Delta South Surrey Regional Greenway	Bicycle: 49% Vehicle: 33% Walk: 31%	Bicycle: 52% Vehicle: 36% Walk: 12%	Excellent	Good
Derby Reach Regional Park	Vehicle: 95% Bicycle: 5% Walk: 2%	Vehicle: 81% Walk: 11% Bicycle: 8%	Very Good	None
Glen Valley Regional Park	Vehicle: 92% Bicycle: 7% Walk: 3% Other: 3%	Vehicle: 64% Bicycle: 29% Walk: 7%	Poor	None
Grouse Mountain Regional Park	N/A	Vehicle: 76% Transit: 13% Walk: 5% Bicycle: 5%	Poor	Very good
Iona Beach Regional Park	Vehicle: 82% Bicycle: 22% Other: 2% Walk: 1% Transit: 1%	Vehicle: 95% Bicycle: 5%	Fair	None
Kanaka Creek Regional Park	Vehicle: 90% Walk: 10% Bicycle: 2%	Vehicle: 87% Walk: 6% Bicycle: 6% Transit: 2%	Poor	Poor
Lynn Headwaters Regional Park	Vehicle: 79% Transit: 13% Bicycle: 11% Walk: 10% Other: 1%	Vehicle: 83% Walk: 14% Bicycle: 3% Transit: 1%	Very Good	Good
Minnekhada Valley Regional Park	Vehicle: 96% Bicycle: 5% Walk: 2%	Vehicle: 91% Walk: 6% Transit: 3%	Good	None

NARG	N/A	N/A	Fair	None
Pacific Spirit Regional Park	Vehicle: 53% Walk: 24% Bicycle: 18% Transit: 13% Other: 1%	Vehicle: 73% Walk: 19% Transit: 5% Bicycle: 3%	Excellent	Very good
Pitt River Regional Greenway	Vehicle: 65% Walk: 30% Bicycle: 17%	Vehicle: 57% Walk: 28% Bicycle: 15%	Excellent	Poor
Seymour River Regional Greenway	Vehicle: 48% Walk: 37% Bicycle: 19% Transit: 15% Other: 4%	Walk: 54% Bicycle: 39% Vehicle: 8%	Good	Very Good
Surrey Bend Regional Park	N/A	Vehicle: 76% Bicycle: 14% Walk: 10%	Good	None
Tynehead Regional Park	Vehicle: 82% Walk: 14% Bicycle: 10% Other: 2%	Vehicle: 77% Walk: 16% Bicycle: 7%	Excellent	Good
Widgeon Marsh	N/A	N/A	Poor	None

There is little consistency between current infrastructure ratings and use patterns based on the data available.

The comparison with the TransLink isochrone maps also displayed limited correlation between visitor survey reported park mode share and the 60-minute population estimate from the isochrone analysis. Crippen Regional Park exemplifies this result. It's very small transit market shed in the isochrone analysis and fair infrastructure connectivity rating suggest a relatively small transit mode share. However, visitors reported high transit mode shares in both the 2013 and 2019 visitor surveys for this park.

The comparison of TransLink bus passenger alighting data to visitor survey reported transit mode share also showed little correlation. This is exemplified by the information for Burnaby Lake Regional Park and the Brunette Fraser Regional Greenway. Visitors to these parks reported low transit mode shares while TransLink's Transit Service Performance Review App indicates high levels of passenger traffic at nearby stops some of which are very close to park entrances and trail heads.
These results indicate two issues. The first is that the existing data may not be sufficient to understand the correlation between infrastructure and use. The second is that the reason a park visitor may choose to use alternative transportation to access a regional park is not directly linked to existing infrastructure and other more complicated behavioral factors needs to be explored.

6. Key Insights

This section describes the key insights identified from the background research and the data analysis. These insights can help guide future actions to improve alternative transportation options to regional parks.

Data

Only a limited amount of direct data is available to Metro Vancouver on how its regional park visitors travel to parks. This was gathered through the 2013 and 2019 regional park visitor surveys. A shortcoming of the visitor survey data is that the surveys were only completed twice in the last 10 years and there is notable variation in the results at individual parks between samples.

The public opinion survey, *Regional Parks Research* (Trend Analysis, 2021) interviewed both park visitors and non-park visitors. It identified two key findings concerning transportation to regional parks. Firstly, it found strong public support for improving access to parks by bicycling and transit. Secondly it found that improving access by transit and bicycling will promote equitable access to the health benefits of regional parks. These survey results also indicate that poor pedestrian and bicycling infrastructure may hinder the broader adoption of alternative transportation modes by park visitors.

Bicycling

As noted above, at the start of Part 2 of the study it was assumed that there would be a strong correlation between the visitor survey mode share data for bicycling and the relative transportation connectivity ratings from Part 1 of the study. This was not found to be true.

There could be a number of reasons that the connectivity ratings (in isolation) are not a strong predictor of reported travel mode shares for these parks. Causes could include use of inaccurate data or incorrect assumptions in the relative transportation connectivity ratings process, presence of unknown internal park characteristics influencing bicycling behavior, and presence of unknown external park factors influencing bicycling behavior. Better understanding what park characteristics or behavioral attributes correlate to higher mode shares will help prioritize future bicycle planning, program development and infrastructure development activities.

Transit

As noted above, at the start of Part 2 of the study it was assumed that there would be a strong correlation between the visitor survey mode share data for transit and the relative transportation connectivity ratings from Part 1 of the study. This was not found to be true.

The observed deviation between infrastructure connectivity and travel choice suggests that some factor(s) other than a park's relative transportation connectivity rating for transit, the population density near the park or the volume of transit passenger traffic in its vicinity are influencing regional park visitors' travel choice. Better understanding what park characteristics or behavioral attributes correlate to higher mode shares will help prioritize future transit planning, program development and infrastructure development activities.

Passenger Ferries

In the absence of a functioning passenger ferry system offering travel to regional parks the following conclusions are based on the literature review. The key insight is that ferry service feasibility is tied to the presence of the right blend of regional geography, urban settlement and traffic congestion. Broadly this means a geography with protected marine waterways and navigable rivers combined with frequent pockets of dense commercial and residential development within close proximity of the waterfront and regional parks. Congestion on other land based travel modes is also an important factor. Dense urban development is important because research has found ferry passengers won't travel long distances to use the service and congestion is important because ferry use must provide a measurable benefit over driving or transit. The greater New York City area in the United States is an excellent example of these factors and reports indicate that passenger ferry services there are sufficiently robust to be supported by farebox revenues.

Generally, the Metro Vancouver region has the right geography, but not the intensity and frequency of urban development along regional waterways nor the traffic congestion. The notable exceptions to this rule are the False Creek area and the Burrard Inlet SeaBus route. Establishing passenger ferries in areas of Metro Vancouver where settlement densities are more modest will require public financial and operational support.

Los Angeles County

The Los Angeles County case is the best example found of a region developing a strategic approach to increasing the use of transit by park visitors. Many things can be learned from their process and plan. A few key insights include:

1. Collaboration between the regional parks agency and transit authority is required. In this example a transit needs assessment was completed by the regional park agency for its system. This assessment was then used by the regional transit authority to develop the strategic plan. The partnership used in Los Angeles demonstrates that a close working relationship between Metro Vancouver and TransLink will be important to effectively promote the use of transit for visitor travel to regional parks.

2. Ranking parks according to their key facilities of interest is an important approach for prioritizing service improvements. In Los Angeles, these criteria helped determine which parks were more likely to attract visitors travelling by transit. This approach recognizes that the type of experience / facilities offered in a park influences the likelihood a visitor will use transit to travel there. The Los Angeles ranking system used the following criteria:

    - park size;
    - park amenities and their condition;
    - park pressure;
    - presence of trails;
    - presence of cooling amenities;
    - beach access; and
    - presence of cultural institutions.

A regional park ranking system could help Metro Vancouver and TransLink prioritize further research and the subsequent implementation of transit to parks services and programs. The LA Metro classification was developed for a system of both urban and natural parks. A Metro Vancouver classification system will need to borrow from the natural parks aspects of the LA Metro example and adjust it to local circumstances (e.g., climate, programs and park features) as necessary.

Social Media and Transit to Parks

As part of the literature review a small number of relevant social media and other internet resources were identified. Some of these webpages provided information and advice to people who were interested in travelling to parks using transit. The authors of these webpages commonly identified North Shore parks (e.g., Lynn Headwaters Regional Park) as the natural parks most suited to trips by transit. The reason for this is not clear, but one possible explanation is that these parks are relatively well connected to high density urban areas by transit, and that they offer a ½ to full day backcountry hiking experience that can be completed using equipment and supplies readily worn and carried on a bus or train.

The above characteristics combined with the recreational/scenic aspect of ferry travel may also explain the relatively high use of transit to travel to Crippen Regional Park in spite of its limited transit catchment area and location on Bowen Island away from the main regional population centers.

Park Visitor Travel Behavior

The analysis found that the relationship between relative transportation infrastructure connectivity and alternative transportation mode share was inconsistent with many highly rated parks having much lower mode shares than expected. Understanding the reason for this inconsistency is fundamental to developing an effective approach to increasing travel by alternative transportation to regional parks. Research questions include:

- What motivates regional park visitors to use their bicycle or transit to visit a park in their leisure time?
- What park characteristics, facilities, programs would support increased cycling or transit use?
- How far or how much time are park visitors most likely to travel by bicycle, transit or ferry to visit a regional park or large natural park?
- What is the relationship between utility cycling, recreational cycling and regional parks?

Each Park is Unique

Every regional park is unique in its character, context and needs. Effectively promoting increased alternative transportation systemically will require transportation plans tailored to the unique circumstances of each regional park and the community they are located within. These can be standalone processes or included with other suitable park planning projects such as the development of management plans.

7. Implementation

An important focus of this study is identifying actions that will help Metro Vancouver promote alternative transportation travel to regional parks to help reduce regional greenhouse gas emissions and improve access to the important nature benefits offered by regional parks. The following implementation actions were identified as priorities to support these goals:

- Advance the incomplete portions of approved regional greenway corridors (i.e., Pitt River, Brunette -Fraser and Seymour River Greenways);
- Support completion of Sea Island Greenway to the Iona Beach Regional Park;
- Complete the design and construction of the Burnaby Lake South Greenway;
- Advance management planning for Delta Nature Reserve and Delta South Surrey Regional Greenway;
- Collaborate with the City of Port Moody to complete the transportation study from Port Moody to Belcarra Regional Park. Work together to advance recommendations from that study;
- Complete a passenger ferry service business case study for eastern Burrard Inlet (e.g., Port Moody - Belcarra Regional Park - Deep Cove);
- Develop a plan for a shuttle bus from Templeton Station (SkyTrain) to Iona Beach Regional Park;
- Implement the Coquitlam Town Center to Widgeon Marsh Regional Park electric shuttle in conjunction with the opening of Widgeon Marsh Regional Park;
- Continue to work with TransLink to improve bus and SkyTrain service to regional parks;
- Continue to explore the factors that motivate people to use alternative transportation modes to travel to regional parks and how improvements to alternative transportation modes can help reduce barriers of access, particularly for equity deserving populations; and
- Explore partnerships to promote use of alternative transportation modes to travel to regional parks.

8. Glossary

Bicycle (bike) train: This is an organized group of students and adults who bicycle to and from school together. The biking group makes designated stops to pick up more students on the way to school and home at the end of the day. Bike trains can be organized as a formal or informal event.

Gamification: This is the process of adding games or gamelike elements to something (such as a task) so as to encourage participation. Gamelike elements include competition, lotteries, team experience or awards.

Isochrone analysis: These are a combination of map and table used to communicate the spatial and numeric characteristics of a travel time analysis (walking and transit) for a particular point in the region. The 60-minute population estimates they describe are based on regional population data and spatial travel time analyses for a set of travel periods (up to an hour). The map component shows the two dimensional distribution of the population estimate (transit shed) by travel period while the table component reports regional population by time period.

Micromobility: This refers to small, lightweight vehicles or devices operating at speeds below 32km/h in British Columbia (25 km/h in other jurisdictions). Micromobility vehicles / devices can include standard bicycles, electric powered or power assisted bicycles of various designs, electric scooters, and electric skateboards (Wikipedia). In British Columbia motor assisted cycles, commonly called electric bicycles, are regulated by the Province under the Transportation Act and the Motor Assisted Cycle Regulation (BC Reg. 151/2002)
(https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/151_2002).

To: Regional Parks Committee

From: Steve Schaffrick, Division Manager, Central Area, Regional Parks

Date: May 11, 2022 Meeting Date: June 8, 2022

Subject: **təmtəmíxʷtən/Belcarra Regional Park – Joint City of Port Moody and MVRD Bedwell Bay Road Traffic Study results**

RECOMMENDATION

That the Regional Parks Committee receive for information the report dated May 11, 2022, titled "təmtəmíxʷtən/Belcarra Regional Park – Joint City of Port Moody and MVRD Bedwell Bay Road Traffic Study results."

EXECUTIVE SUMMARY

In 2021, Metro Vancouver partnered with the City of Port Moody to commission a traffic study for the section of Bedwell Bay Road adjacent and leading up to təmtəmíxʷtən/Belcarra Regional Park. Ongoing traffic congestion and safety concerns during peak park visitation days, and the desire for an active transportation connection to the park have established a need for safety improvements along this stretch of road.

The traffic study provides recommendations for development of a multi-use path, reconfiguration of the White Pine Beach Access Road and Tum-tumay Whueton Dr. intersections, and establishment of dedicated parking at the float walk access area, to enhance existing roadside parking restrictions and digital traffic signboard and social media communication strategies.

The traffic study findings have been endorsed by the City of Port Moody Transportation Committee, and will be presented to Port Moody Council for endorsement.

PURPOSE

To provide the Regional Parks Committee with a summary of the high level recommendations arising from the City of Port Moody and MVRD's joint traffic study for Bedwell Bay Road, and to outline next steps in implementation of these recommendations.

BACKGROUND

Traffic congestion on Bedwell Bay Road around the entrance to təmtəmíxʷtən/Belcarra Regional Park's White Pine Beach has been an ongoing pattern during the peak summer season over the past several decades, as park visitors have used the roadside for parking after park parking lots have filled. Vehicles have also caused congestion along the road when waiting for parking spaces to open up, and have performed illegal u-turns along the road upon discovering that no parking is available.

In 2019, in response to concerns about congestion and pedestrian safety as users walk within travel lanes alongside parked vehicles, the City of Port Moody instituted parking restrictions along Bedwell Bay Road; these restrictions have been expanded in subsequent years. Also starting in 2019, MVRD

partnered with the Village of Anmore, City of Port Moody, the Village of Belcarra, and BC Hydro (operators of Buntzen Lake Recreation Area) to establish a series of digital traffic signboards warning would-be park visitors in advance of full parking lots. The signboards function in conjunction with a social media strategy communicating the same information with a suggestion that park visitors explore public transit options for travel to and from the parks.

In 2021, the MVRD Board adopted the *Regional Greenways 2050* strategy which identified a greenway route along Bedwell Bay Road north from Ioco Road This route is supported by Port Moody and is a priority for HUB Cycling, a non-profit cycling advocacy group who have communicated with Port Moody a wish to have safe cycling options in this area.

In light on ongoing safety concerns along Bedwell Bay Road and the desire to enhance active transportation in the area, in July 2021, MVRD and the City of Port Moody signed a contribution agreement to jointly fund hiring of a consultant by Port Moody to conduct a traffic study of Bedwell Bay Road MVRD committed to funding up to $50,000 which was the majority cost of the study.

This consultant study set out to evaluate traffic and safety concerns for the area of Bedwell Bay Road adjacent and leading to təmtəmíxʷtən/Belcarra Regional Park, and provide recommendations to improve safety and congestion, including concept designs and Class D cost estimates, while enhancing active transportation and alternative transportation opportunities.

BEDWELL BAY ROAD TRAFFIC STUDY

The City of Port Moody hired Associated Engineering in Fall 2021 to carry out the traffic study. During fall/winter 2021 the consultants gathered data and interviewed City, MVRD staff, and Coast Mountain Bus staff to explore issues along the road and suggested improvements. Emergency services representatives were also consulted by MVRD staff. Options development and final review took place in spring 2022.

Traffic study results

The traffic study defined the problems to be remedied along Bedwell Bay Road as the following:

- People walking along the middle of the road.
- People riding bikes do not feel safe riding along the corridor due to vehicle speeds and lack of separated bike facilities.
- People parking their vehicles illegally and unsafely.
- People illegally stopping on the side of the road to wait to be allowed into the park and block Bedwell Bay Road and/or the White Pine Beach Road access for emergency vehicles, transit, and other vehicles.

Four main improvement areas were identified, for which the consultants developed concept options:

> **Improvement Area 1: Pedestrian / Cyclist Facilities along Bedwell Bay Road** - The study presents two options for separated cycling/pedestrian facilities along Bedwell Bay Road, between Ioco Road and Tum-tumay Whueton Dr. Option 1b, a bi-directional paved multi-use path alongside the westbound travel lane, is the recommended option.

Improvement Area 2: White Pine Beach Access Road Intersection - The study presents two options for improvements to the White Pine Beach Access Road intersection. Option 2b is the recommended option. This option involves reconfiguring the intersection to include a mini-roundabout—facilitating turn-arounds and reducing vehicles speeds—as well as new pedestrian crossings, and new bus pull-outs with pedestrian waiting areas.

Establishment of a park-and-ride within the Ioco Townsite is recommended to complement the roundabout turn-around, allowing would-be park visitors to park their vehicles at Ioco and use existing transit connections to access the park.

Improvement Area 3: Float Walk Access - The study presents a recommendation for improvements to the float walk access area north of Tum-tumay Whueton Dr., including dedicated parking for around 25 vehicles, and a pedestrian sidewalk.

Improvement Area 4: Tum Tumay Wheuton Drive Intersection - The study presents two options for improvements to the Tum-tumay Whueton Dr. intersection. Option 4a is the recommended option. This option involves minor realignment of the intersection to better resemble a t-intersection, new directional arrow pavement markings, enhanced directional signage, and new street lighting around stop signs.

Municipal review and consultation

The draft study findings were taken by Port Moody staff to the Port Moody Transportation Committee in April 2022, and were endorsed by the committee. The committee provided some detailed comments on improvements to the roadway, including painted bus lanes, and use of high concrete barriers alongside the separated pathway. Staff also noted at the committee meeting that police presence may be required to enforce traffic rules in the area.

The study recommendations will also be presented to staff from the Villages of Anmore and Belcarra at a meeting in late May 2022.

Next steps toward implementation

Staff noted at the Port Moody Transportation Committee presentation that the project, including the recommended improvements at each of the four improvement areas, can begin following Port Moody Council's endorsement and contingent on available funding. The budget for the project is estimated at $8 Million. It is anticipated that funding sources beyond the City of Port Moody will be required, such as senior level government grants.

Detailed design for intersection improvements at the White Pine Beach intersection will be required, and the Bedwell Bay Road multi-use path will require extensive engineering due to challenging and restricting roadside terrain. Should Port Moody Council approve the project, such pre-construction work may be expected to begin in 2023.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

All costs incurred for the consultant study were within approved budgets for 2021 and 2022. MVRD will continue to collaborate with the City of Port Moody to identify potential funding sources. As the greenway is identified in the *Regional Greenways 2050* strategy MVRD may be able to provide a contribution towards capital construction. The improvements to the White Pine intersection almost exclusively benefit Metro Vancouver's ability to manage traffic into the park, and as such it is anticipated we would provide funding for this improvement area.

Any MVRD contribution toward these improvements would be thoroughly reviewed and considered.

CONCLUSION

As a result of ongoing concerns regarding traffic congestion and safety along the stretch of Bedwell Bay Road leading up to and alongside təmtəmíxʷtən/Belcarra Regional Park, the City of Port Moody and MVRD partnered to commission a traffic study to define issues and design high-level solutions.

Recommended solutions include establishment of a separated multi-use path along the road, providing a safe cycling and walking facility; reconfiguration of the White Pine Beach Access Road intersection to include a mini-roundabout, pedestrian crossings, and dedicated bus pull-outs and pedestrian waiting areas, providing safe facilities for transit and providing safe turn-around for vehicles when park parking is full; installation of alignment and signage enhancements at the Tum-tumay Whueton Dr. intersection to improve wayfinding and reduce risk of collision; and establishment of around 25 dedicated parking spaces at the float walk access area.

The total project is estimated at $8 Million, and following Port Moody Council endorsement, detailed design and engineering work could begin in late 2022.

Attachment

City of Port Moody Final Report – Bedwell Bay Road Corridor Improvements Transportation Study - May 2022

Reference

Regional Greenways 2050

52717703

ATTACHMENT

Associated Engineering | 75 YEARS

REPORT

City of Port Moody
Final Report

Bedwell Bay Road
Corridor Improvements
Transportation Study

MAY 2022

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1 Introduction

Associated Engineering (AE) was retained by the **City of Port Moody (PoMo)** in partnership with and by the joint funding of the **Metro Vancouver Regional District (MVRD)** to conduct a transportation corridor study for Bedwell Bay Road and 1st Avenue.

Due to the use of Bedwell Bay Road for access to the təmtəmíx̌ʷtən/Belcarra Regional Park and White Pine Beach, MVRD is a major partner in the project. Specifically, MVRD Parks is interested in improvements to the traffic operations and configuration of the təmtəmíx̌ʷtən/Belcarra Regional Park entrance intersection to White Pine Beach.

MVRD has also identified the Bedwell Bay Road corridor as part of the Regional Greenway Network in the Regional Greenways 2050 strategic plan. At present, during peak summer usage, the parking demand at the park exceeds parking supply. This parking demand backs up on Bedwell Bay Road and causes significant traffic flow and parking issues during the peak visit periods. Overflow vehicles park illegally along the shoulder for multiple kilometers, and causes safety issues for vehicles, pedestrian, and cyclists.

1.1 Project Objectives

The key objectives of this study are to recommend improvements to the intersections and roadways within the study area, specifically:

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

1.2 Study Area

The study area is defined as 1st Avenue between the intersection of Ioco Road and Sunnyside Road, and Bedwell Bay Road from Sunnyside Road to the municipal boundary of the Village of Belcarra. **Figure 1-1** shows the study area. Bedwell Bay Road and 1st Avenue are classified as a Major Road Network (MRN) and are two lane undivided roadways with a rural cross section and a speed limit of 50 km/h. The roadways in the study area are mainly in the jurisdiction of Port Moody and provides access to the Village of Belcarra, təmtəmíx̌ʷtən/Belcarra Regional Park at Sasamat Lake and the Village of Anmore.

The study area includes the access points and parking areas that serve təmtəmíx̌ʷtən/Belcarra Regional Park and Sasamat Lake.

The zoning of the surrounding area is a mixture of M2: General Industrial, A1: Acreage Reserve, and Residential for a short stretch at Crystal Creek Drive. The Bedwell Bay Road study corridor is located in a rural setting in hilly terrain. The corridor is generally heavily forested on both sides with open ditches used for drainage.

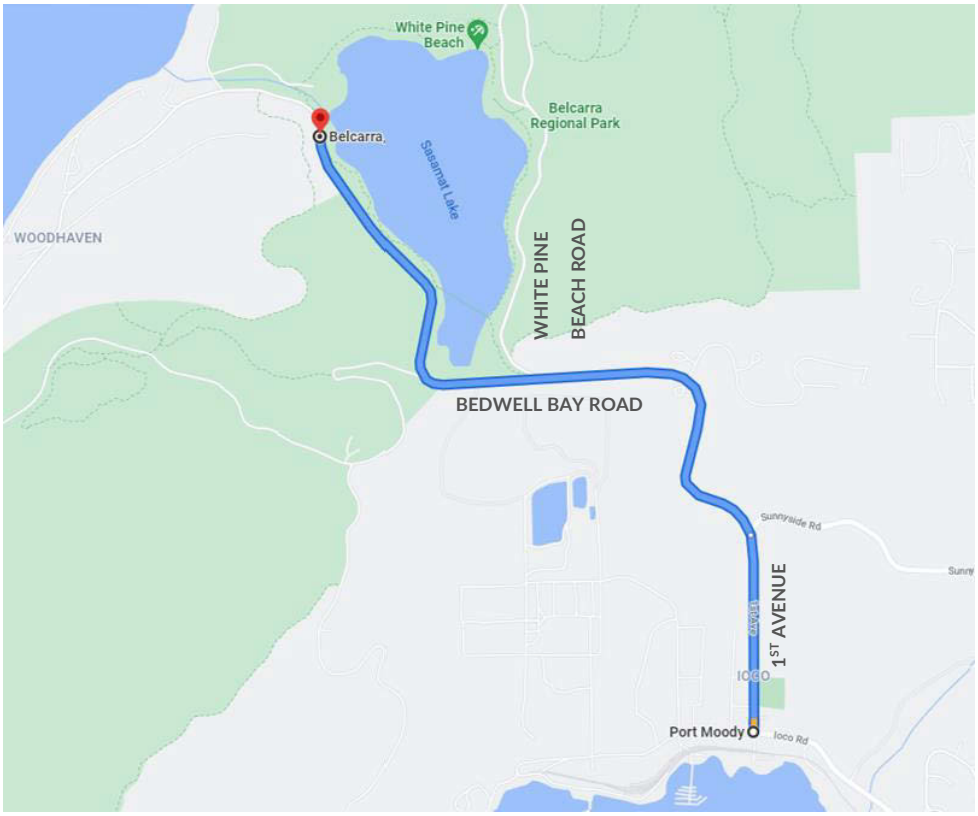


Figure 1-1
Bedwell Bay Road Study Corridor

1.3 Background Information

Several background information documents were reviewed as part of this study. Key information from the background reports are summarized in this section.

Belcarra Electronic Traffic Signboard Standard Operating Procedures, Metro Vancouver, 2021:

- təmtəmíxʷtən/Belcarra Regional Park has total of three electronic boards. Two are shared between Village of Anmore, Village of Belcarra, Port Moody and Metro Vancouver to warn motorists when the parking lots are full.
- The third sign board is located at the Bedwell Bay Road pullout west of the Floatwalk to help minimize traffic and illegal parking in Village of Belcarra.
- Includes recommended messaging for sign boards.

City Council Reports: At its meeting held on June 13, 2019 City Council carried a recommendation that "plastic delineator posts be installed in the recently signed parking restriction areas along Bedwell Bay Road." The report to Council indicated that there was poor compliance of the parking restrictions that were put in place in spring 2019. At its meeting held on September 25, 2018, City Council carried a recommendation that parking restrictions along Bedwell Bay Road be implemented to address a number of specific concerns including:

- Vehicles parked on the shoulder edge that protrude over the white edge line limiting sightlines and available travel portion of the roadway.
- Vehicles parked on the shoulder of Bedwell Bay Road that force pedestrians to walk on the traveled portion of the roadway while carrying various large items for park use.

- Unmarked steep slopes adjacent to the road shoulder that can make access difficult and potentially unsafe. Activity in these areas can also increase erosion of steep slopes adjacent to the roadway.
- Vehicles searching for parking spaces that make frequent U-turns on Bedwell Bay Road.

In a prior Council report, dated May 24, 2011, City Council defeated a recommendation to install no parking zones on Bedwell Bay Road and instead carried a motion that staff consult with Metro Vancouver on potential locations within Metro Vancouver lands to increase off-street parking for White Pine Beach/Sasamat Lake.

In a prior closed Council session, concrete barriers were installed in locations along Bedwell Bay Road in July 2021.

Conceptual Drawings, MVRD, 2021: Discussion sketches show potential drop-off zone and reconfiguration of the parking lots within White Pine Beach to help with traffic flow.

Metro Vancouver Regional Parks Pay Parking Analysis, G. P. Rollo & Associates, 2020: Identified that the parking at the Sasamat Lake parking lot appeared to be oversupplied on average. The study also identified the anticipated revenue generated by implementing paid parking and the costs associated with implementation and operation. It also identified that there were 774,915 visits in 2019 and 721 parking stalls located within the park.

Regional Greenways 2050, Metro Vancouver, 2020: Identified the Bedwell Bay Road Corridor and White Pine Beach Road as part of the Regional Greenway Network in the 30-year vision for recreational trails. It also identified the corridor's Regional Greenway Network Operational Status as "Planned". The corridor is a proposed future route identified in the existing plans of active transportation development. A planned route will require some combination of conceptual planning, land acquisition, detailed design, funding and construction to transform it into a future greenway.

Regional Parks – Traffic Management Plan for təmtəmíx̱ʷtən/Belcarra Regional Park, Metro Vancouver, 2021: Identified the amount of parking supply in as well as outlines the traffic management strategy used during peak park demand periods.

Sasamat Greenway – Safe Active Transportation Corridor, HUB Cycling, 2021: HUB has requested a safe active transportation greenway or route from April Road to White Pine Beach that is all ages and abilities accessible. The Sasamat Greenway concept would align with HUB, PoMo, and MV long-term priorities. The Sasamat Greenway concept is shown in **Figure 1-2**.

Traffic Data: Traffic tube counts and turning movement counts at various locations along the study corridor were obtained by PoMo. MVRD also maintains several magnetic count stations throughout the corridor including two on Bedwell Bay Road, one at

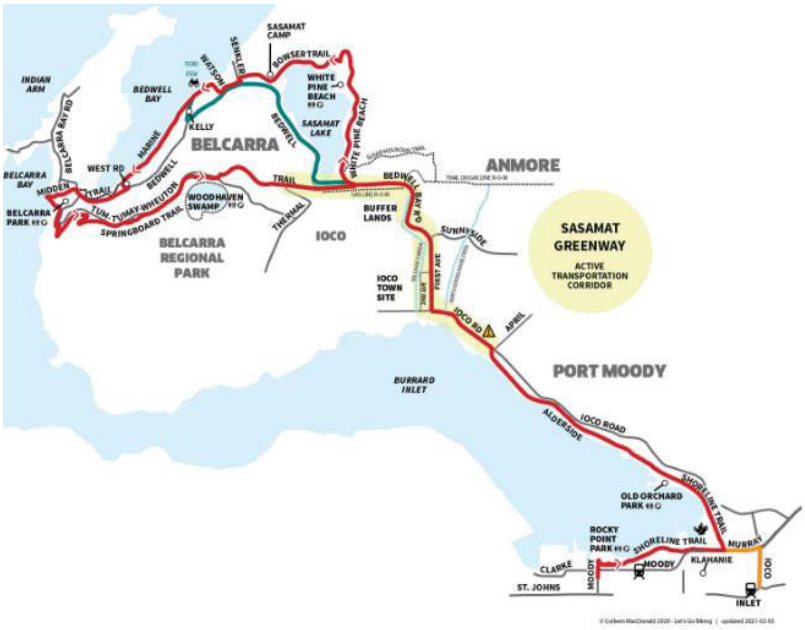


Figure 1-2
Sasamat Greenway Concept

the village entrance, one at Crystal Creek Drive, and one on White Pine Beach Road. The findings are discussed in **Section 2.4**.

Variable Message Sign Implementation, City of Port Moody Email Discussions, 2018:

- VMS signs installed at Heritage Mountain Boulevard – Ioco Road and David Avenue and Forest Park Way W
- Both signs indicate when Buntzen Lake and White Pine Beach are full based on observation and phone communications.
- Cost sharing is between multiple agencies including PoMo, MV, and Buntzen/Hydro.
  Sign only used annually from May long weekend to September long weekend. It appears that the VMS signs are having a low impact on travel behaviours.

White Pine Beach Entrance Improvements Tech Memo, ISL Engineering, 2013: Recommended traffic and safety improvements at the intersection of Bedwell Bay Road – White Pine Beach Road including extending the existing median barrier and relocating object marking sign, installing a gate device at the east end of the median, relocate delineators to the east, paint new pavement markings, add "local and bus traffic only" sign. Most of these recommendations were implemented and reflect the current configuration of the road.

1.4 Site Visit

A site visit was completed along Bedwell Bay Road on November 8, 2021 with representatives from AE, PoMo, and MV. It was noted that there are four key locations where traffic issues occur:

1) Congestion at the entrance to the White Pine Beach park.
2) Boardwalk trailhead adjacent to Bedwell Bay Road has no formal parking.
3) Turn around area towards Belcarra.
4) The turn-off to Anmore.

Discussion and observation onsite included the illegal parking and congestion along Bedwell Bay during peak times, no parking signs, white delineators installed in 2019, barrier installation, existing bus stop locations, and intersection operations and sight lines. Full details of the site visit are included in **Appendix A**.

2 Existing Conditions Review

The existing conditions of the roadway are described in this section.

2.1 Study Area Roads

The project area includes 1st Avenue north of Ioco Road and Bedwell Bay Road from 1st Avenue, west to the Belcarra municipal boundary. There are several private accesses that tie into the road, and the following intersecting roads:

1ST Avenue / Bedwell Bay Road / Sunnyside Road: Bedwell Bay Road and Sunnyside Road branch off 1st Avenue, with Sunnyside Road oriented as the stop-controlled, minor leg of the intersection. At the intersection, Sunnyside Road has narrow shoulders with a pin-on asphalt curb on the eastbound side of the roadway. .

Crystal Creek Drive / Forest View Lane: This Village of Anmore intersection has left-turn lanes from Bedwell Bay Road to both side street. North-eastbound has a channelized right-turn lane to Crystal Creek Drive. Forest View Lane is right-out only. The intersection is located on a horizontal curve and may have poor sightlines.

White Pine Beach Road: White Pine Beach Road intersects with Bedwell Bay Road at a complex T-intersection. Westbound Bedwell Bay Road has a right-turn only lane with approximately 70 m of storage and barrier separating the turn lane from through traffic. Eastbound Bedwell Bay Road has a left-turn lane into the park access and an acceleration lane that tapers for vehicles exiting White Pine Beach Road. White Pine Beach Road has a vehicle/bus turnaround with a bus stop. Due to the skewed angle of the intersection, vehicles leaving White Pine Beach Road either turn right via a channelized yield, or travel through to eastbound Bedwell Bay Road. **Figure 2-1** shows the existing layout of the intersection.

Tum Tumay Whueton Drive: Tum Tumay Whueton Drive intersects with Bedwell Bay Road along a horizontal curve with steep vertical slope on some approaches. The angle of intersection is skewed. These characteristics cause potential sightline issues. The intersection operates as a 3-way stop, with stop signs and bars located at all directions. **Figure 2-2** shows the existing layout of the intersection.

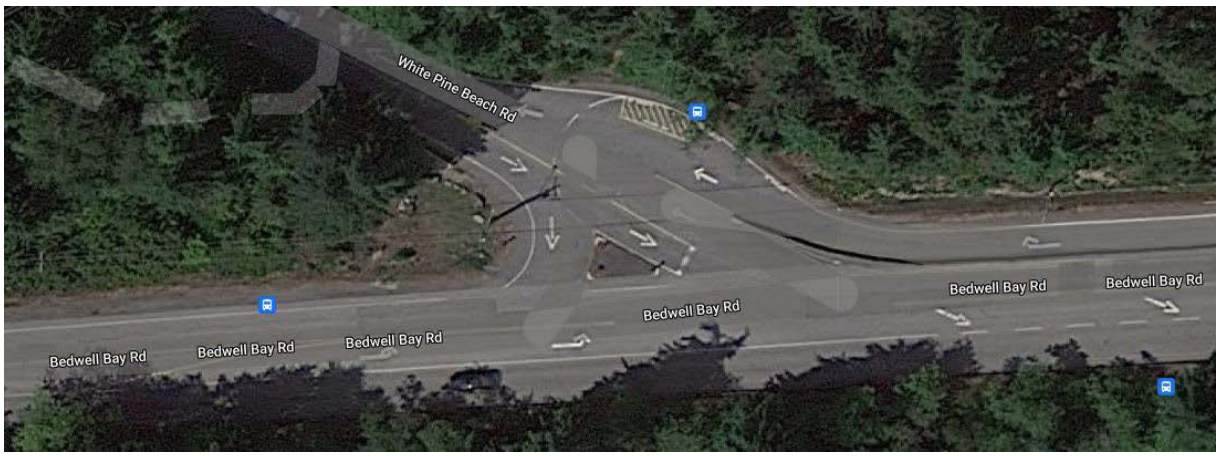


Figure 2-1
Bedwell Bay Road – White Pine Beach Road

Figure 2-2
Bedwell Bay Road - Tum Tumay Whueton Drive Intersection

2.2 Shoulder Widths

Bedwell Bay Road has a rural cross section within the study area. The shoulder widths vary throughout the corridor ranging from no shoulder to some shoulder. Shoulder widths are neither consistent through areas nor equal on both sides. AE developed a map of shoulder width classification throughout the corridor and is shown in **Figure 2-3**. For this project, the paved shoulder widths were estimated from google earth measurements. Walkable shoulders were classified as paved shoulders between 1.2 m to 2.4 m wide and shoulder widths less than 1.2 m were considered not suitable for walking. A “parkable shoulder” width was considered as a paved shoulder width of greater than 2.4 m. This map indicates that only two short sections have shoulder widths are wide enough for vehicles to be safely parked. Likewise, there’s a few sections of roadway that have shoulders not wide enough for them to be used for walking at least in single file along the road.

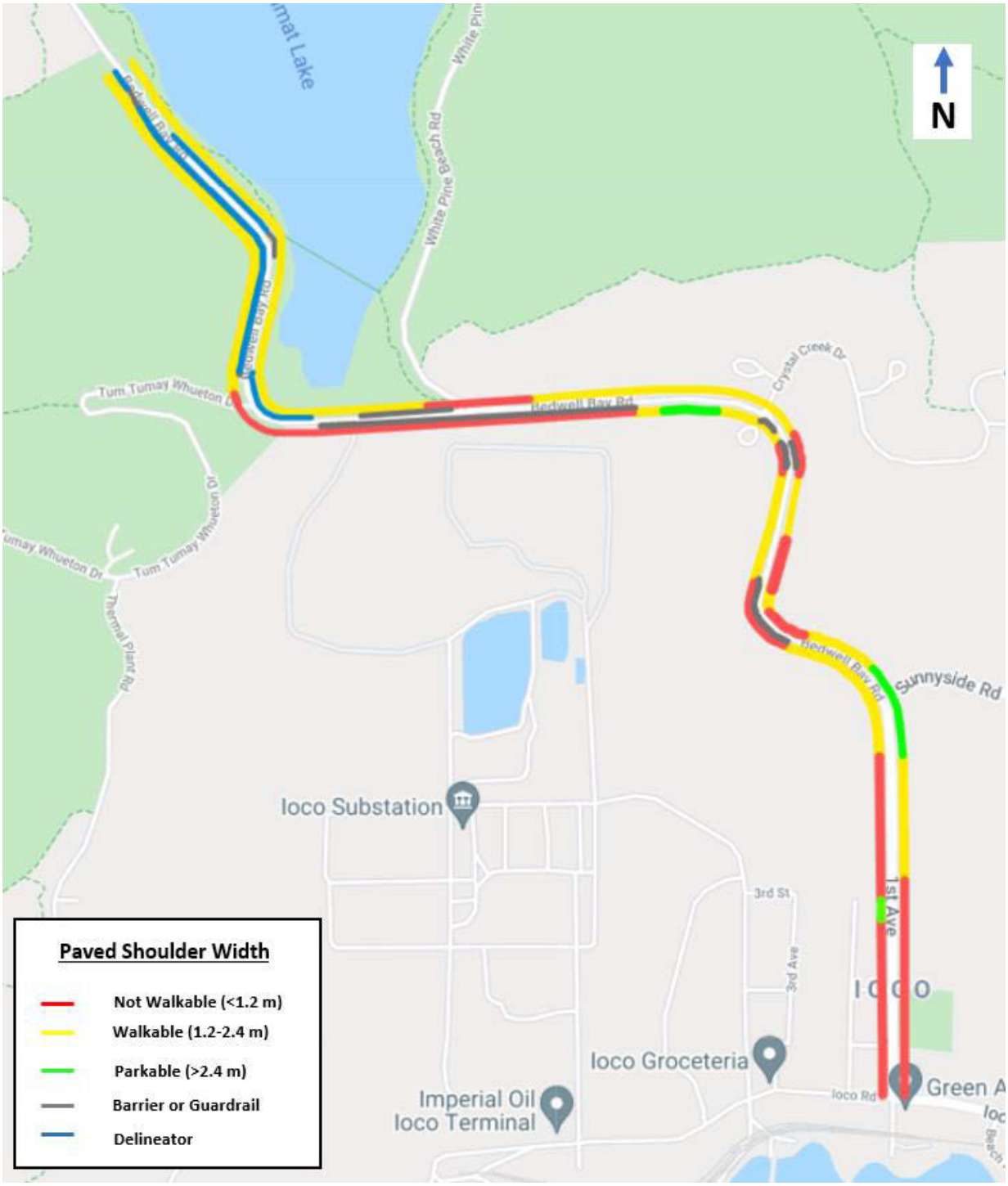


Figure 2-3
Parkable, Walkable, Not-Walkable Shoulder Width Classification

2.3 Safety

The historical collisions taken from the City's Traffic Accident System (TAS) database contains the police-reported collision data. It was summarized for the most recent five years of complete data from 2014 to 2018. The crashes have been mapped in **Figure 2-4**. Nine collisions listed the collision location as 2100 Bedwell Bay Road and there were a further three collisions that were reported on Bedwell Bay Road without a specific location given and not mapped. Collisions at Crystal Creek Drive are in the Village of Anmore jurisdiction and do not appear to be included in the collision data set. No collisions involving pedestrians or cyclists was reported in the data.

Figure 2-4
2014-2018 Police Reported Collisions

2.4 Traffic

Traffic counts were available from a number of sources including permanent count stations operated by Metro Vancouver and Tube Counts arranged by the City.

2.4.1 Traffic by Month and Day of Week

A more complete set of the data provided by MV was available from a permanent count station on Bedwell Bay Road immediately west of Crystal Creek Drive. This data, shown in **Table 2-1** shows the significant difference in the amount of traffic throughout the year, ranging from a low of 1,600 vehicles per day on Sundays in January to a high of nearly 12,000 vehicles per day on Sundays in July. This data is indicative of that pattern that the road serves local traffic going to and from the Village of Belcarra throughout the year and accommodates seasonal variations for traffic destined to all parts of təmtəmíx̱ʷtən/Belcarra Regional Park, not just White Pine Beach at Sasamat Lake.

Table 2-1
Traffic on Bedwell Bay Road Between Crystal Creek Dr. and White Pine Beach Rd, 2020
Two Way Total Volume by Month and Day of Week (vehicles per day)

Month	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Average
Jan	1650	1720	1920	1800	1740	1860	1650	**1770**
Feb	2640	1890	2070	2060	2340	2570	2360	**2290**
Mar	2350	2240	3010	2520	2890	3800	3840	**2940**
Apr	3120	2790	2790	3150	3220	4150	4020	**3300**
May	5340	4150	4150	4480	6040	5330	5910	**5130**
Jun	5160	3240	4020	5380	4690	4950	7800	**4980**
Jul	8340	6300	5700	3920	4160	8050	11700	**6660**
Aug	4890	4490	4490	3540	3970	5080	6680	**4810**
Sep	3850	3230	3450	3760	3710	3190	3830	**3560**
Oct	2800	2560	3090	2770	2710	3500	2770	**2900**
Nov	2200	1980	2370	2180	2380	3270	3280	**2540**
Dec	2590	2460	2390	2520	2380	2990	2440	**2530**
Average	**3740**	**3090**	**3290**	**3170**	**3350**	**4060**	**4690**	**3620**

Table 2-2 shows the daily traffic volumes on White Pine Beach Road for the same time period as **Table 2-1.** This shows how much of the traffic travels to and from White Pine Beach Rd which is significantly less than the traffic on Bedwell Bay Road.

Table 2-2
Traffic on White Pine Beach Rd, 2020
Two Way Total Volume by Month and Day of Week (vehicles per day)

Month	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Average
Jan	90	90	160	110	100	210	180	**130**
Feb	290	110	140	120	250	460	290	**240**
Mar	230	220	340	260	340	620	610	**370**
Apr	430	380	360	440	440	690	690	**490**
May	900	830	860	910	1070	800	930	**900**
Jun	980	490	750	1130	990	1080	1400	**970**
Jul	1610	1230	1160	640	770	1200	1500	**1160**
Aug	930	960	860	680	800	890	910	**860**
Sep	470	570	660	720	650	560	620	**610**
Oct	370	280	410	440	430	590	410	**420**
Nov	180	130	240	170	200	510	540	**280**
Dec	380	300	290	300	290	460	360	**340**
Average	**570**	**470**	**520**	**490**	**530**	**670**	**700**	**560**

2.4.2 Traffic Along Bedwell Bay Road

Table 2-3, Table 2-4, and **Table 2-5** provides a summary of traffic data that was collected using tube counters in October and November 2021. This data has vehicle counts, bike counts and vehicle travel speed.

Table 2-3
Vehicle Volumes Along Bedwell Bay Road
Two Way Total Volume by Day of Week (vehicles per day)

Between	Mon	Tues	Wed	Thurs	Fri	Sat	Sun
1st Ave and Sunnyside Rd (Nov 13 to 19, 2021)	2050	2800	2700	2450	3000	2450	1600
Crystal Creek Dr. and White Pine Beach Rd (Oct. 26 to Nov 1, 2021)	2050	1900	2100	1850	2300	3700	3450
White Pine Beach Rd and Tum Tumay Whueton Dr. (Oct 13 to 19, 2021)	1900	2250	1800	1750	1650	1500	1600
Tum Tumay Whueton Dr. and Belcarra Border (Oct. 26 to Nov 1, 2021)	1500	1500	1600	1500	1600	1700	1500

Table 2-4
Bicycle Volumes Along Bedwell Bay Road
Two Way Total Volume by Day of Week (Bikes per day)

Between	Mon	Tues	Wed	Thurs	Fri	Sat	Sun
1st Ave and Sunnyside Rd (Nov 13 to 19, 2021)*	2	17	6	0	3	2	0
Crystal Creek Dr. and White Pine Beach Rd (Oct. 26 to Nov 1, 2021)	4	0	6	0	11	65	63
White Pine Beach Rd and Tum Tumay Whueton Dr. (Oct 13 to 19, 2021)	17	49	0	1	1	2	4
Tum Tumay Whueton Dr. and Belcarra Border (Oct. 26 to Nov 1, 2021)	2	0	1	0	11	25	20

**Note: Count volumes are lower due to count being conducted in November*

Table 2-5
Vehicle Travel Speeds Along Bedwell Bay Road (85th Percentile Speed)

Bedwell Bay between	NB 85% SPEED	SB 85% SPEED
Belcarra Border and Tum Tumay Wheuton Dr	71.5 km/h	75.8 km/h
Tum Tumay Whueton Dr and White Pine Beach Road	82.8 km/h	74.1 km/h
White Pine Beach Rd and Crystal Creek Dr	67.8 km/h	65.5 km/h
Crystal Creek Dr and Sunnyside Rd	63.3 km/h	66.9 km/h

Speeds were observed to be in excess of the posted 50 km/h speed limit at all tube locations. Higher directional travel speed corresponds to the road grade in the location of the loop. For example, for northbound travel from White Pine Beach to Tum Tumay Whueton, Bedwell Bay Road has a steep downgrade of greater than 10%, which may encourage higher travel speeds. High speeds along Bedwell Bay Road support the need for separation between vehicles and people walking and biking, as well as consideration for options that encourage slower travel speeds.

2.4.3 Historic Vehicle Volumes

Metro Vancouver provided the data in **Table 2-6** which shows monthly park entries of all parks in the area from January 2017 to August 2021 entering White Pine Beach. According to this data, people entering White Pine was highest in 2021, followed by 2020.

Table 2-6
Historic Traffic Volume Trends on White Pine Beach
Vehicle Entries by Year and Month (vehicles per month)[1]

	2017	2018	2019	2020	2021
January	3,900	5,040	4,990	4,090	10,290
February	4,180	5,100	5,140	7,080	9,040
March	4,150	7,760	10,480	11,560*	12,730
April	7,230	7,960	7,890	14,570	19,810
May	15,460	18,110	15,900	28,020	21,590
June	18,560	16,400	19,860	26,720	33,700
July	35,140	31,880	27,570	35,020	39,250
August	29,800	24,230	27,780	26,890	29,260
September	13,400	8,880	10,990	18,240	13,660
October	9,150	6,260	8,210	13,200	10,730
November	3,660	4,740	5,940	8,570	6,910
December	3,820	3,880	5,550	10,340	5,800
TOTAL	**148,500**	**140,240**	**150,300**	**204,300**	**212,800**

**Note: The Covid-19 pandemic took place beginning in March 2020 through 2021, which appears to have contributed to higher park usage in the summer of 2020 and 2021.*

2.5 Parking

The 2018 City Council report identified criteria for allowing vehicles to park along the roadway:

- provide adequate sight distances for vehicles travelling on the roadway at the posted speed limit.
- maximize the amount of on-street parking available for visitors.
- maintain safety for pedestrians and general traffic on the roadway.
- provide minimum 2 m wide paved or gravel shoulder measured from the painted edge line.

At the time, the intention was to only remove the unsafe parking which reduced the parking supply from 380 on-street parking stalls to approximately 260 on-street parking stalls to be available to visitors along Bedwell Bay Road. During the site visit, it was indicated that City Council prohibited parking on all of Bedwell Bay Road and have installed multiple no parking signs including large signs such as that seen in **Figure 2-5**.

[1]Belcarra traffic counts 2017-2021.xls provided by Metro Vancouver. Volumes represent White Pine (inbound) vehicle occupants.

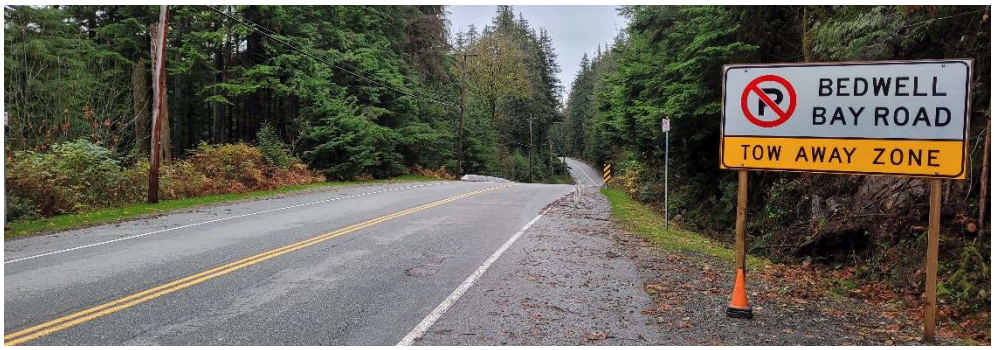


Figure 2-5
No Parking Signage on Bedwell Bay Road

White Pine Beach parking lots have a total of approximately 412 parking stalls. Parking demand on peak days exceeds the available parking and has been a historical ongoing problem for many years. The reduction in parking without a replacement elsewhere has exacerbated the problem and may have contributed to the undesirable driving behaviour and illegal parking as people do not know where to park when the park gates are closed. Park staff and bylaw enforcement had noticed that park demand increased in 2020 and 2021 which was corroborated by the traffic count data. Based on the park usage data, it may be that a combination of increased parking restrictions, newly installed barriers and increased travel to the park contribute to the anecdotal deterioration of driving behaviour.
Associated Engineering did a cursory assessment of which portions of the road are parkable based on whether the paved shoulder width is 2.4 m or greater. This width was selected as the target width for paved parkable shoulder based on the TAC[2] minimum width guidelines. As shown in **Figure 2-3**, there are few areas considered to be parkable. A parkable shoulder should provide enough space to safely park a vehicle completely outside of the travel lane with enough space to enter/exit the vehicle and for pedestrians to walk from their vehicles to their destination without needing to walk in the travel walk. Another consideration is whether pedestrian foot traffic or vehicles will erode the banks of the open ditches found along Bedwell Bay Road.

2.6 Active Transportation

Currently, the Bedwell Bay corridor has no formalized accommodations for people walking or biking other than roadside shoulders, which is common for rural settings. The two modes may share the shoulder space, however this becomes impractical when space is constrained or when vehicles are parked and occupying the space. As shown in **Figure 2-3**, there are several areas along the corridor where the paved shoulder width is below 1.2 m and considered to be too narrow to be walkable.

2.7 Transit

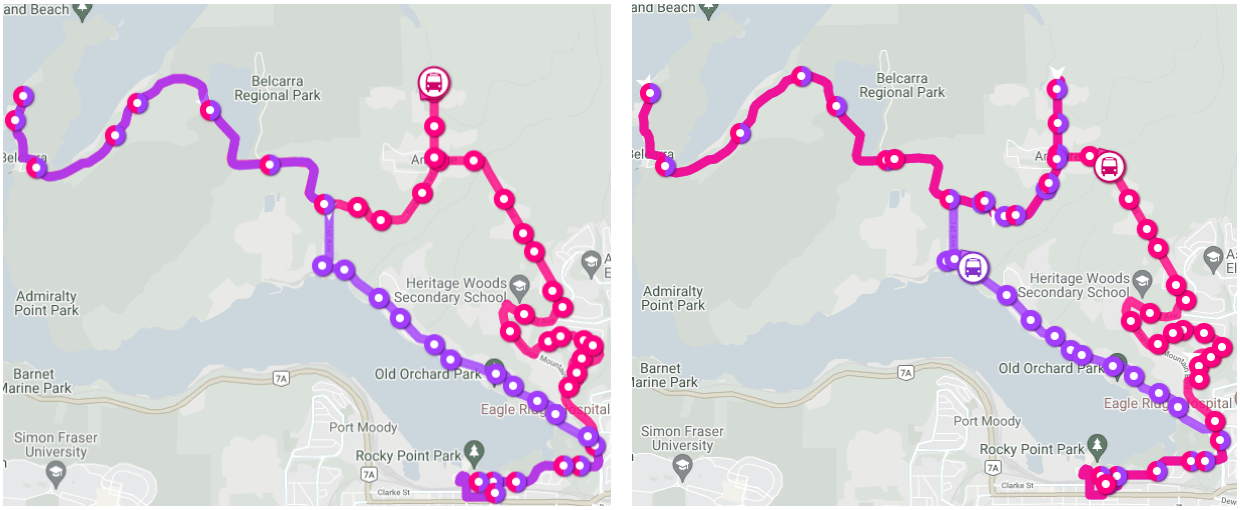
Currently, there are two year-round bus routes and one seasonal bus route that operates along Bedwell Bay Road by TransLink and Coast Mountain Bus Company (CMBC). Route 181 and Route 182 are shown in **Figure 2-6**.

Route 181 is a community shuttle route that connects Port Moody to Belcarra and Anmore via Bedwell Bay Road and Sunnyside Road. The inbound route runs northbound 1st Avenue, right onto northbound Sunnyside Road to Anmore and turns around. It travels southbound on Sunnyside Road. The outbound route travels east on Bedwell Bay Road to southbound on 1st Avenue into Port Moody to Moody Centre Station.

[2] TAC Geometric Design Guide, Section 4.3.2.4, Parking Lanes: Width is generally 2.4 m.

Route 182 is also a community shuttle route that travels from Moody Centre Station to Belcarra. The bus travels inbound northbound to Anmore, and travels southbound along Sunnyside Road to Bedwell Bay Road where it travels to Belcarra. The outbound trip travels east from Belcarra and north along Sunnyside Road to Anmore where it routes into Port Moody.

Coast Mountain Bus uses a "flag stop" system for Route 181/182 along Bedwell Bay Road except at White Pine Beach. In the westbound direction there is a stop located in the intersection turnaround area. In the eastbound direction a temporary stop was constructed opposite to the park entrance, however there is no formal crossing and no waiting area for passengers.



Note: Route 181 shown in purple; Route 182 shown in pink. *Source: https://tripplanning.translink.ca/#/app/nextdepartures*

Figure 2-6
Route 181 & 182 Outbound (Left) and Inbound (Right)

Route 150 is a well-utilized summer shuttle from Coquitlam Centre SkyTrain station to White Pine Beach. The route utilizes an articulating bus and drops / picks up passengers inside the park before heading back into Port Moody. The bus stops along Bedwell Bay Road have minimal infrastructure. Generally, they are identified with only a bus stop sign on the side of the roadway shoulder. The only bus stop with a more robust stop is the White Pine Beach bus stop at the bus turnaround.

CMBC identified their concerns along the corridor during a discussion on December 7, 2021. They identified high ridership on all routes for access to the park during peak times. The main issues they identified are:

- The Route 150 bus stop at the White Pine Beach entrance needs improved facilities for waiting passengers. There is no bus stop pad and a lack of space for waiting passengers.
- There are no formalized bus stops along Bedwell Bay Road for Route 181/182 and instead passengers can flag the bus down at any point in the corridor.
- The temporary eastbound stop constructed in 2021 is not in an ideal location for passenger waiting and loading/unloading. Bedwell Bay Road has roadside barrier in the eastbound direction at White Pine Beach Road and passengers must either climb over them or wait in the travel lane for the bus. No crosswalk is provided and the is bus required to stop in the travel lane which impedes traffic.

- Location of the Route 150 stop inside the park for accessibility.

3 Location Specific Issues

3.1 White Pine Beach Road

The White Pine Beach Road and Bedwell Bay Road intersection was identified as a key area of interest for this study because it is the location that is affected the most by the travel demands and lack of parking supply at White Pine Beach. The problem statement for the intersection is stated below:

> ***White Pine Beach Road Problem Statement: Peak parking demand exceeds capacity for the parking lot, causing cars to illegally park on the shoulder of Bedwell Bay Road. Pedestrians walk from their parked cars to the park in the travel lane which is a safety issue. Vehicles cannot turn around at the intersection when vehicles block the turn lanes. The roadway has observed speeding concerns and the intersection skew causes visibility concerns.***

Error! Reference source not found. shows photos from the site visit of the intersection characteristics.

Metro Vancouver operates the park and administers traffic control at the park entrance. Paid parking is used for demand management. When the parking lot is full, an operator closes the entry gate and only allows entry of transit, emergency, taxi and local vehicles. Park gates are reopened when 50 parking spaces become available. Metro Vancouver wants to encourage parking turnover and reduce resources needed for traffic control.

The specific issues for the intersection are:

- Cars illegally park on the shoulder and in the turn lane of Bedwell Bay Road at the intersection
- Some people use belligerent behaviour towards park operators and traffic control personnel.
- Traffic on Bedwell Bay Road gets impeded by vehicles stopping to access the park when the parking lot is full.
- By law enforcement and the police find a high level of non-compliance to the parking bylaws, even with high amounts of ticketing and towing.
- Route 182 uses a “flag stop” system, which means that people can stand anywhere on the side of the road to flag down a bus to pick them up. Coast Mountain Bus has added a temporary bus stop that is not ideal because it is on a grade, narrow shoulders and insufficient space for transit users to wait.

White Pine Beach Road / Sasamat Lake Entrance

Bedwell Bay Road facing west towards Belcarra

Bedwell Bay Road facing east towards IOCO townsite

3.2 Tum Tumay Whueton Drive

The Tum Tumay Whueton Drive and Bedwell Bay Road intersection was identified as a key area of interest for this study. The intersection is currently an all-way stop controlled intersection. The problem statement for the intersection is stated below:

> ***The intersection of Bedwell Bay Road and Tum Tumay Whueton Drive is a skewed angle intersection located on horizontal and vertical curves. Low traffic control device compliance was observed with cars failing to come to a complete stop at the intersection. Police have recently indicated to the City at least one rollover collision has occurred, although the collision data does not show an excessive number of collisions at this location.***

The intersection skew and curve can cause driver confusion to identify which road is Bedwell Bay Road and which is Tum Tumay Whueton Drive when approaching the intersection. It may appear that Bedwell Bay Road continues onto Tum Tumay Whueton Drive. The official route to access parks west of Belcarra is along Tum Tumay Wheuton Drive, however unclear signage does not convey this to people approaching the intersection. There is some directional signage for the westbound approach but not on all approaches. The intersection does not have street lighting, which is typical for a rural intersection. Bedwell Bay Road has more traffic than Tum Tumay Whueton Drive and cars on Bedwell Bay Road destined for Belcarra were observed to be rolling the stop sign instead of fully stopping.

3.3 Floatwalk Access

The Boardwalk Walk Access point serves a secondary area of the park and provides an alternate entry point for individuals desiring access to Sasamat Lake generally. The problem definition statement is as follows:

> ***Parking is not supplied for the secondary park boardwalk area access causing cars to illegally park on the shoulder of Bedwell Bay Road where there is not enough space. Pedestrians walk from their parked cars to the boardwalk entrance in the travel lane which is a safety issue.***

There is a secondary consideration for this access point as Port Moody Police are often deployed to patrol this area of the park. There is currently emergency vehicle only parking near the park entrance.

3.4 Bedwell Bay Informal Turnaround Area / Floatwalk Access

The informal turnaround point is located at the northern end of the study corridor near the Belcarra border and the west Floatwalk access. The area has a wide unpaved shoulder where there is currently an informal bus stop. The problem statement for the turnaround is as follows:

> ***There is a lack of turn around opportunities on Bedwell Bay Road. An informal turn around location is not well defined or paved and cars must cross a double solid yellow line to turn around.***

People walking on the road are mostly park goers walking in groups and carrying beach equipment. Parked vehicles are hazardous due to the narrow road and shoulder width. Cars have been observed parked on shoulder on top of delineators.

Issues related to park going activities requiring police presence in the boardwalk entrance.
Turn around opportunities are limited even after entering Belcarra. Drivers who are not familiar with the area may find this confusing especially when the road is busy.

4 Problem Definition

The root issue is that there is a greater demand than supply for parking inside the White Pine Beach on peak demand days. MV closes the park gates when the parking lots are full to keep its internal road system clear and in case of an emergency. This has impacts on the operations and safety of the roadway and intersections. The following problems occur on Bedwell Bay Road when the parking lots are full (and the park gates are closed):

- People walk along the middle of the road.
- People riding bikes do not feel safe riding along the corridor due to vehicle speeds and lack of separated bike facilities.
- People park their vehicles illegally and unsafely.
- People illegally stop on the side of the road to wait to be allowed into the park and block Bedwell Bay Road and/or the White Pine Beach Road access for emergency vehicles, transit, and other vehicles.

During off-peak times, although there is opportunity to better utilize the corridor to encourage White Pine Beach to be an active transportation destination. Providing adequate facilities to allow people to visit the area by bus, bike, or walking will help vitalize the area.

5 Options Development

Conceptual options have been developed to address key issues along five key improvement areas within the study area. The concepts were developed with considerations of affordability and value, environmental impact, effectiveness, physical constraints, and technical feasibility. The five key improvement areas are:

- **Improvement Area 1: Pedestrian / Cyclist Facilities along Bedwell Bay Road**
- **Improvement Area 2: White Pine Beach Road Intersection**
- **Improvement Area 3: Floatwalk Access**
- **Improvement Area 4: Tum Tumay Wheuton Drive Intersection**
- **Improvement Area 5: White Pine Beach Visitation and Circulation**

The groups of options have been developed and are detailed below. Full detailed sketches of the options are included in **Appendix B.**

5.1 Improvement Area 1 – Pedestrian / Cyclist Facilities

This group of options provides a dedicated active transportation connection between White Pine Beach and the Ioco Townsite to help address an existing safety issue and encourage a mode shift to cycling. Options are intended to provide a facility for cyclists and pedestrians to travel along Bedwell Bay Road.

Most of the people who are walking along the corridor are walking between their parked cars and White Pine Beach. With this option, people can park at the Ioco Townsite and either walk to White Pine Beach or ride transit to the site. There is currently a SB bus stop on 2nd Avenue to service Route 181 and a NB bus stop on 1st Avenue for Route 150 and 181. Updating the bus stop locations at the Townsite at 1st Avenue – Ioco Road would create transit connections to/from White Pine Beach and the townsite.

5.1.1 Option 1A – Bi-Directional Facility (North Side MUP)

In this option, the cross section of Bedwell Bay Road will be widened to include one 3.3 m vehicle travel lane in each direction and a 3.3 m bi-directional multi-use path separated by 1.2 m continuous concrete barriers on the north side. 3.3 m is the minimum width to accommodate transit on an MRN route[3].

The clear separation of this facility through the use of continuous, concrete barriers will also eliminate illegal parking along the corridor. This option requires roadway widening, including adding retaining walls where steep slopes exist and rock blasting where rock outcroppings cause a width restriction. **Figure 5-1** shows this option.

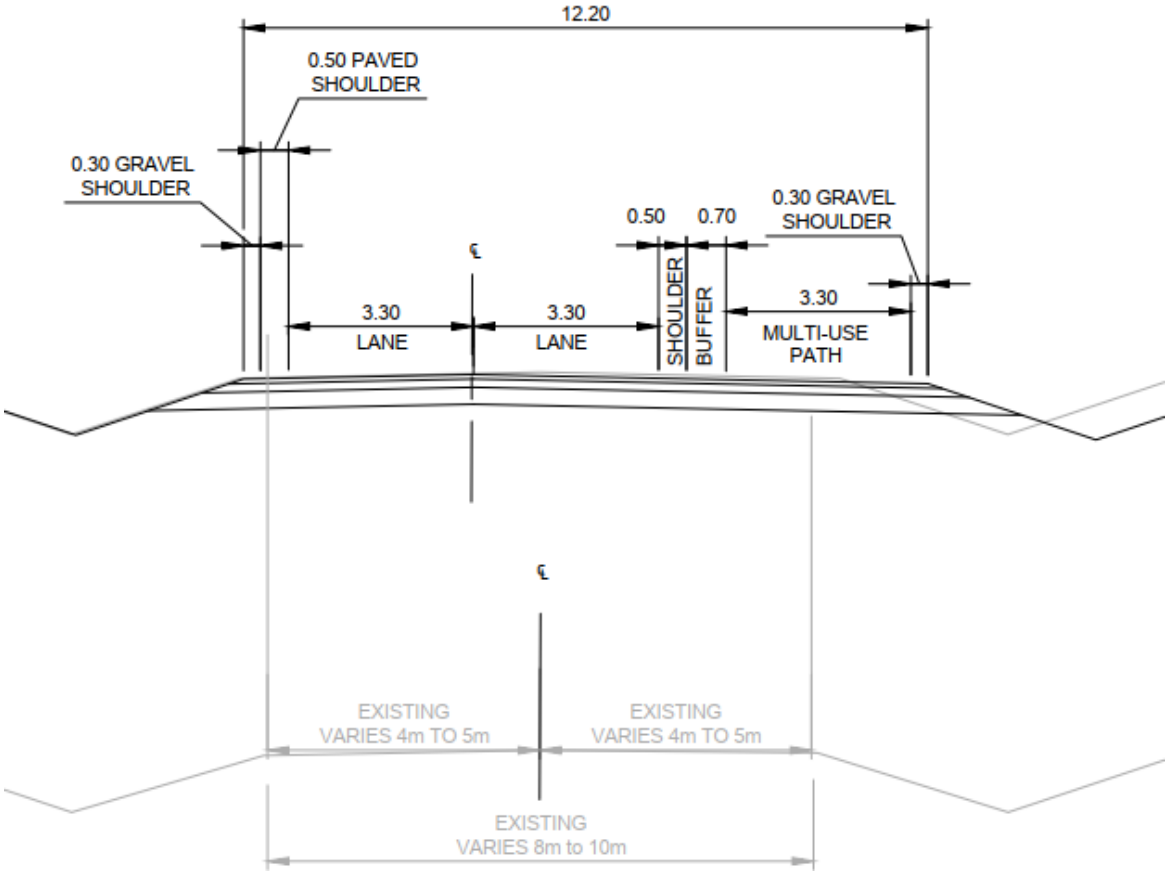


Figure 5-1
Option 1A – Bi-Directional Facility (North Side MUP)

5.1.2 Option 1B – Uni-Directional Facility (Delineated Buffered Shoulders Both Sides)

In this option, the cross section of Bedwell Bay Road will be widened to include one 3.3 m vehicle travel lane and 1.8 m unidirectional pedestrian and cyclist path separated by a 0.8 m buffer with on both sides. The overall cross-section width is similar to the width required in Option 1A, and once again while the preferred widths are 3.6 m lane width and 1.0 m shoulder, a reduced cross section is proposed due to the significant incremental cost to further widen the road.

[3] Travel lane width 3.3 m to 3.7 m. Translink Bus Infrastructure Design Guidelines, Section 2.3: https://www.translink.ca/-/media/translink/documents/plans-and-projects/managing-the-transit-network/bus_infrastructure_design_guidelines-sept_2018.pdf#view=fitH

Because the barrier/delineation proposed will have gaps, there may be issues with compliance by vehicles, as it is observed today that some drivers drive over or around delineators to park on the shoulder. The configuration of this option encourages people to cycle in the same direction as traffic and having a non-continuous barrier (such as delineators), will allow cyclists to move from the roadway to the path depending on their preference. People walking will have access to either side of the roadway.

This option also requires roadway widening, including adding retaining walls where steep slopes exist and rock blasting where rock outcroppings cause a width restriction. **Figure 5-2** shows this option.

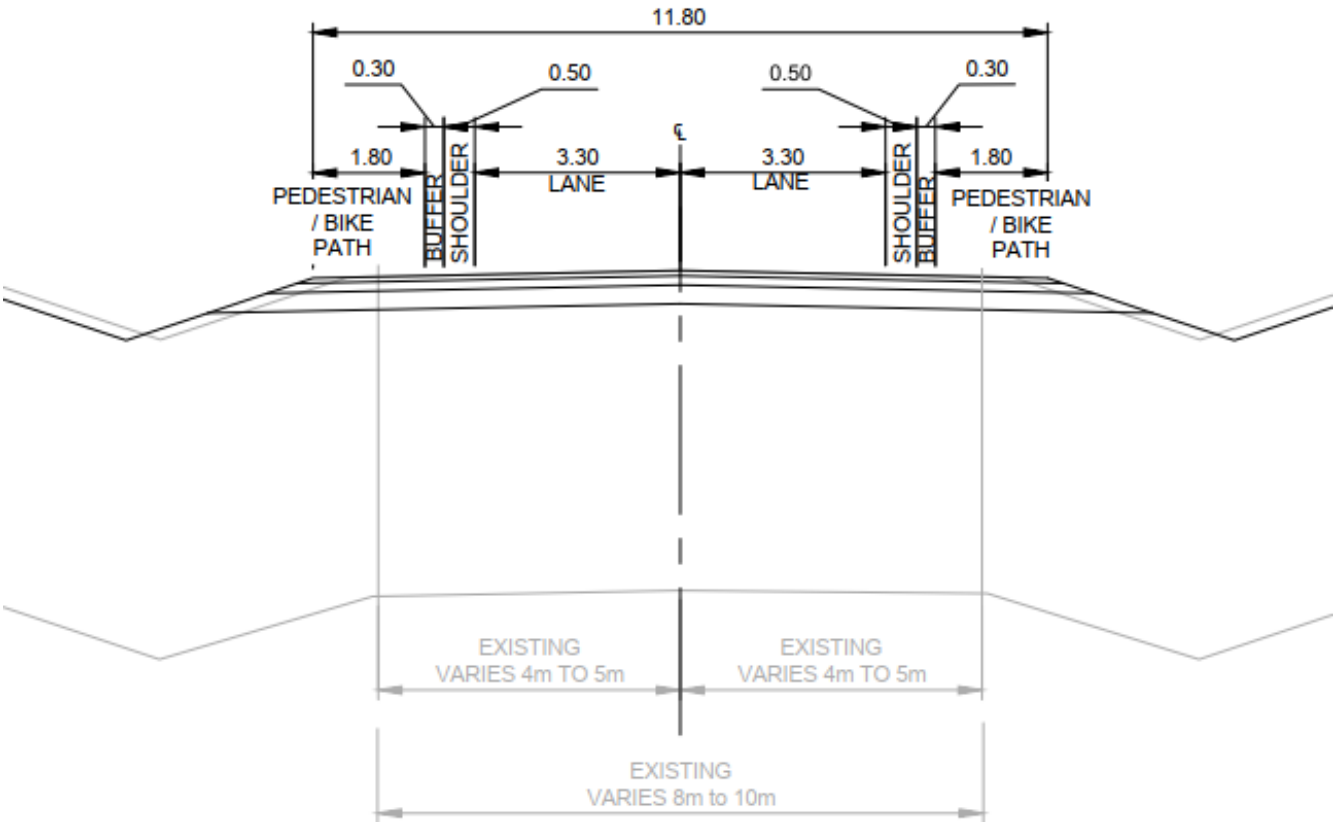


Figure 5-2
Option 1B – Uni-Directional Facility (Delineated Buffered Shoulders Both Sides)

5.2 Improvement Area 2 – White Pine Beach Road Intersection

The options for the area at Bedwell Bay Road and White Pine Beach Road intersection are intended to improve safety, facilitate transit operations, and enhance traffic operations at the intersection.

5.2.1 Option 2A – Formalized Transit and Pedestrian Facilities

In this option, the dedicated eastbound left turn lane will be removed to make room for an in-line bus stop with a passenger waiting area. A pedestrian activated cross walk with a rapid flashing beacon (RRFB) for enhanced visibility, will be placed on the west side of the intersection. Due to the steep grade west of the intersection, the bus stop is located east of the intersection, far enough away to avoid interference with intersection operations.

In the westbound direction, the right-turn lane is removed to make room for a passenger waiting area and pedestrian connection to the bus stop. The bus will no longer need to leave the travel lane, into the intersection bulb-out and back onto Bedwell Bay Road. Space in the bulb-out is maintained to allow for passenger vehicle turn-around in the event that the gate into White Pine Beach is closed.

An outbound bus stop is proposed to be located southbound on White Pine Beach Road for any passengers taking the White Pine Beach shuttle.

Pedestrian crosswalks provide pedestrians with a dedicated and visible place to cross the road and access bus stops. Buses will occupy the travel lane during boarding and alighting of passengers. Removal of the left and right turn bays are not anticipated to have a significant impact on traffic performance during peak hours as the current practice during peak usage is to block the lanes off using traffic cones to control park access. **Figure 5-3** shows this option.

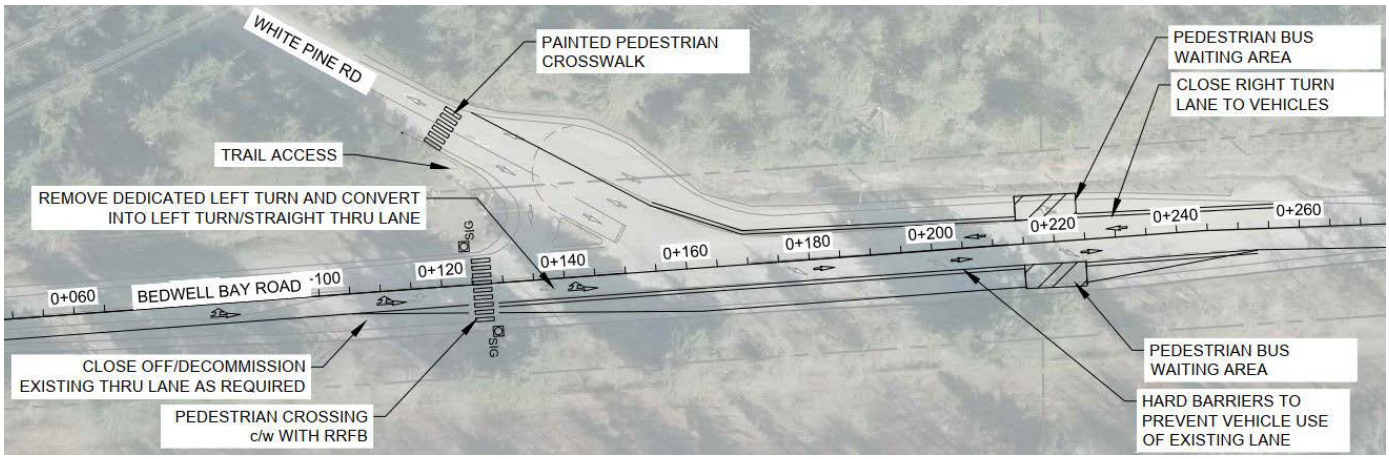


Figure 5-3
Option 2A – Formalized Transit and Pedestrian Facilities

5.2.2 Option 2B – Mini Roundabout with Formalized Transit and Pedestrian Facilities

In this option, the existing stop-controlled intersection of Bedwell Bay Road and White Pine Beach Road will be converted into a roundabout. The selection of a mini roundabout will minimize space requirement and the construction impact during implementation.

A pedestrian cross walk will be placed on the west side of the intersection and will provide pedestrians with a dedicated and visible place to cross Bedwell Bay Road and wait for the bus. Including RRFBs to cross Bedwell Bay Road will further help with pedestrian visibility. The roundabout will reduce the speeds of vehicles as they navigate the roundabout making it safer for pedestrians. Buses will be required to occupy the travel lane when loading and unloading passengers. The roundabout also improves the ease of making a left turn out of White Pine Beach Road. **Figure 5-4** shows this option.

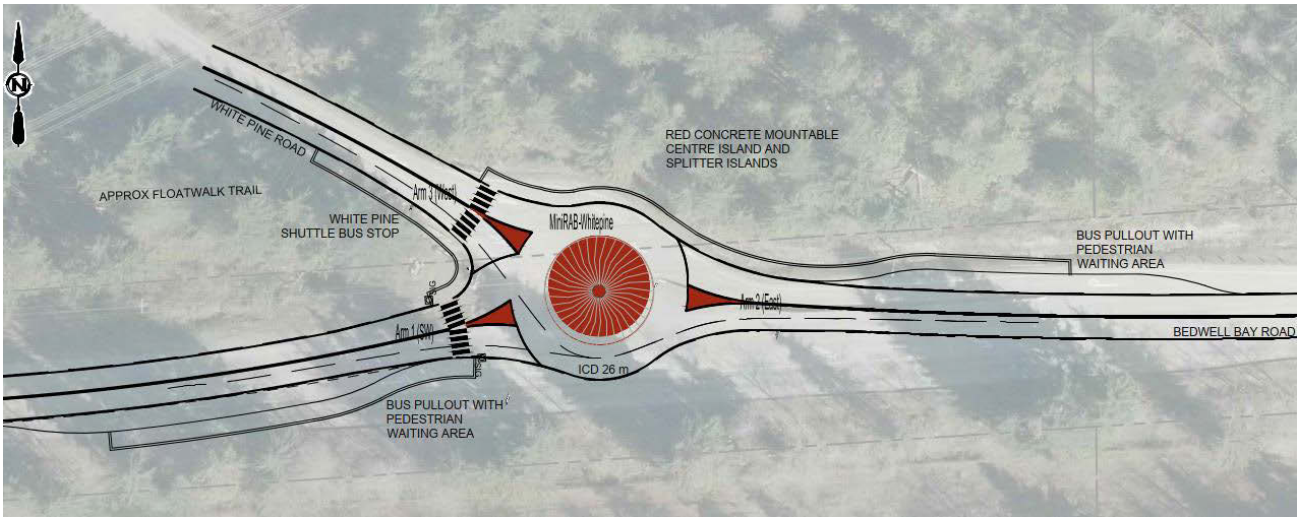


Figure 5-4
Option 2B – Mini Roundabout with Formalized Transit and Pedestrian Facilities

5.2.3 Ioco Townsite Park-and-Ride

In conjunction with the other options discussed, a park-and-ride facility located in the Ioco Townsite near Ioco Road – 1st Avenue could provide an overflow parking solution for vehicles that arrive when the White Pine Beach parking lot is at capacity. Drivers could drop off passengers at White Pine Beach and park at the townsite. The active transportation connection from the townsite to White Pine Beach would provide a connection for people to walk or bike to the beach. Transit stops at the facility would encourage park visitors to utilize transit as a mobility solution for accessing the park during peak times.

The feasibility of a park-and-ride at Ioco Townsite will require additional planning and reviews.

5.3 Improvement Area 3 - Floatwalk Access

Parking areas are proposed to be provided north of White Pine Beach Road for people accessing the floatwalk trail system. The roadway terrain will require widening to accommodate a cross-section that includes shoulder parking and a paved pedestrian sidewalk. The shoulder parking width will be enough to provide a buffer for vehicle occupants to open the doors. This option will provide parking for approximately 25 vehicles, with two spaces reserved for emergency service vehicles and one for MV staff. **Figure 5-5** shows the proposed plan and cross-section.

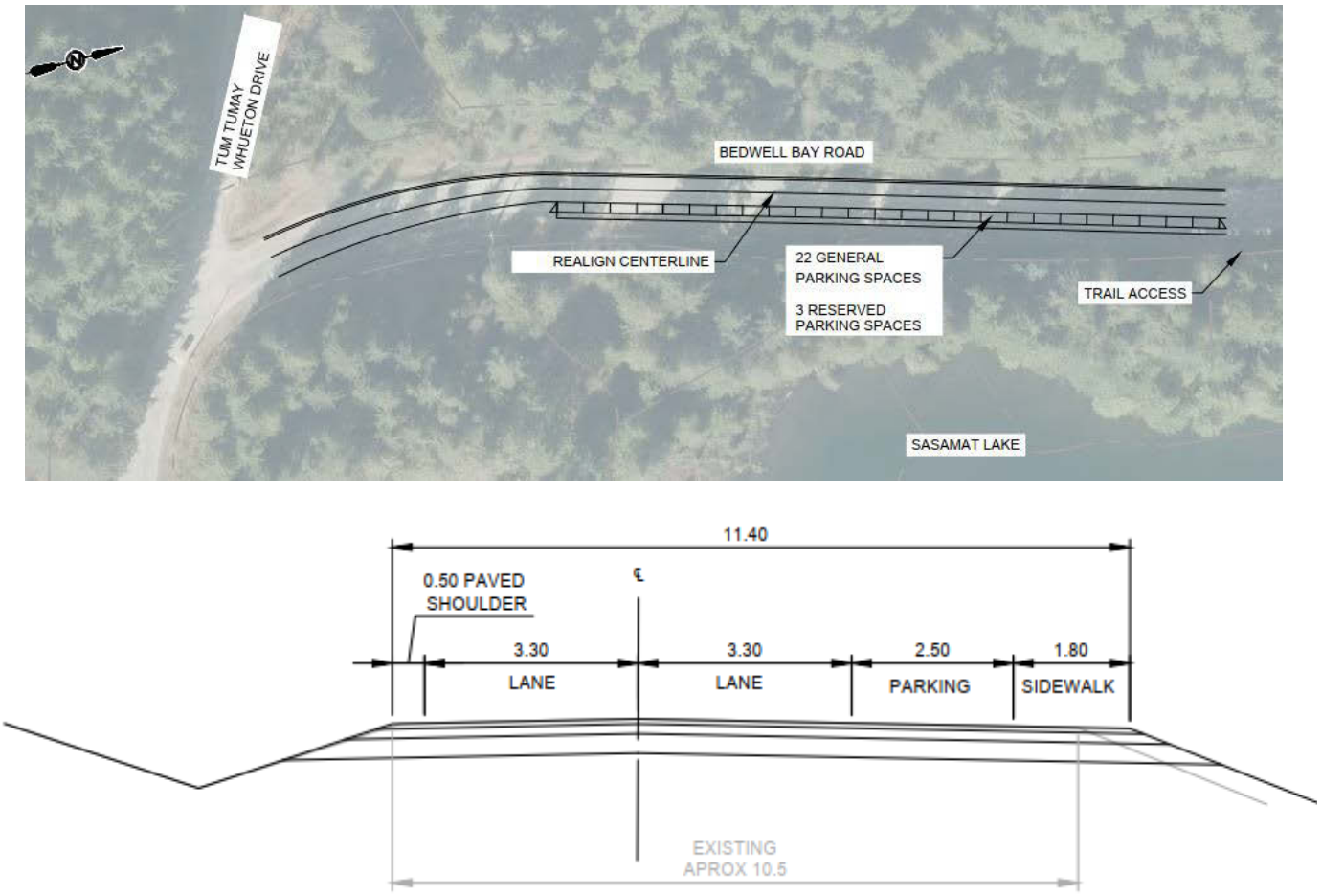


Figure 5-5
Floatwalk Parking

5.4 Improvement Area 4 – Tum Tumay Wheuton Intersection

To improve wayfinding, signage and intersection operations at the intersection of Bedwell Bay Road – Tum Tumay Wheuton Road, two options have been developed.

5.4.1 Option 4A - Improved Intersection and Lighting

The current intersection configuration creates a wide, skewed-angle has some existing westbound wayfinding signage, however, the multiple signs may be unclear. Adding pavement markings will better delineate and tighten up the intersection. Improving the wayfinding sign text and sign location may help drivers identify the correct direction to their destination. The existing stop signs may be difficult for drivers to see. Advanced warning signs and pavement markings would assist in visibility of stop signs and provide warning of the stop-controlled intersection.
Adding streetlighting in the intersection will enhance visibility during the night. **Figure 5-6** shows the proposed intersection improvement plan.

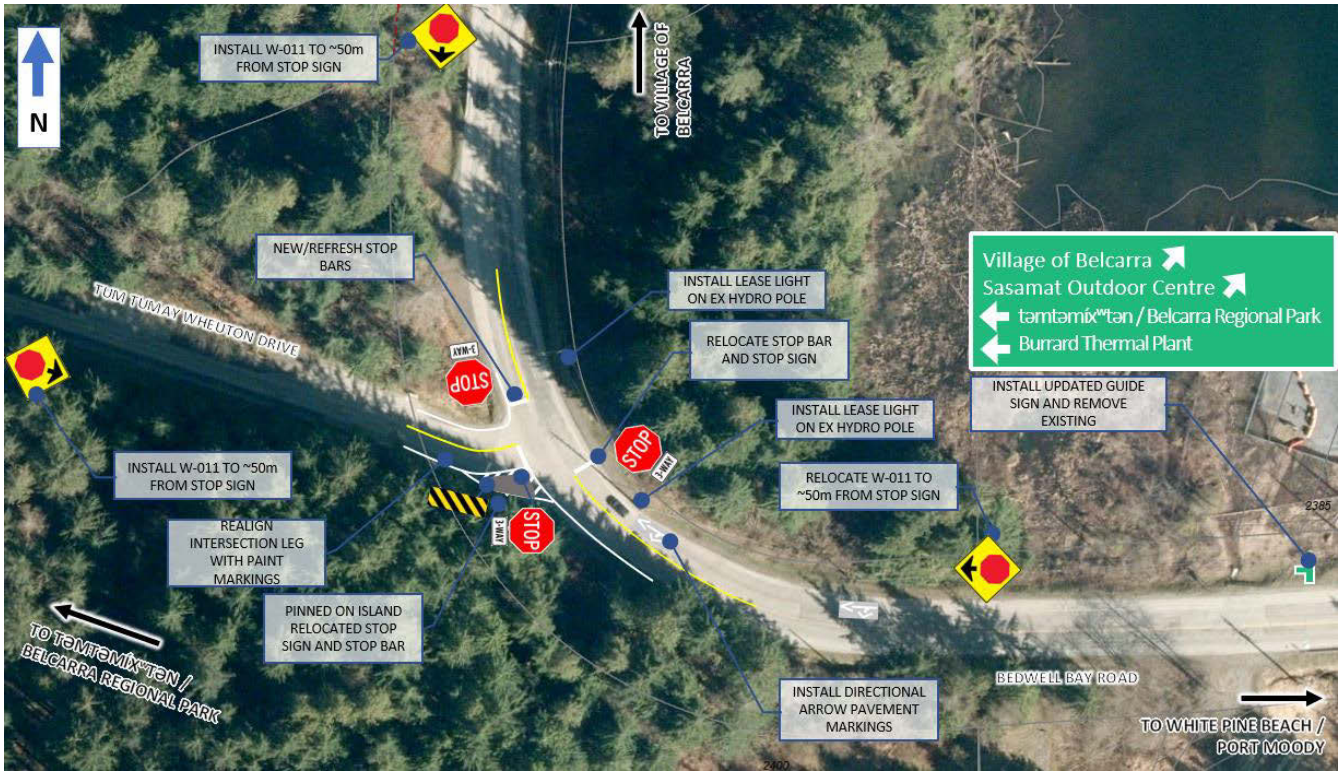


Figure 5-6
Improved Wayfinding Signage and Intersection Lighting

5.4.2 Option 4B - Mini Roundabout

In this option, the existing stop-controlled intersection of Bedwell Bay Road and Tum Tumay Wheuton Drive would be converted into a mini roundabout, similar to the proposed mini roundabout at the White Pine Beach intersection. Using a mini roundabout will minimize space requirement and the construction impact during implementation. A pedestrian cross walk could be placed on the east side of the intersection to provide pedestrians with a marked crossing of Bedwell Bay Road. The roundabout will reduce the speeds of vehicles as they navigate the intersection and help improve sight line restrictions that currently exist due to the skew of Tum Tumay Whueton Drive with Bedwell Bay Road.

Roundabout guide signage can be used in conjunction with the mini roundabout to inform drivers of which route to take into the Belcarra area. Furthermore, the use of a mini roundabout provides an additional turnaround point for drivers who are unable to access White Pine Beach due to parking lot gate closure. The roundabout concept was created to accommodate the swept path of a transit vehicle without mounting the islands. Large vehicles are able to mount the splitter or central islands to navigate the roundabout. **Figure 5-7** shows this option.

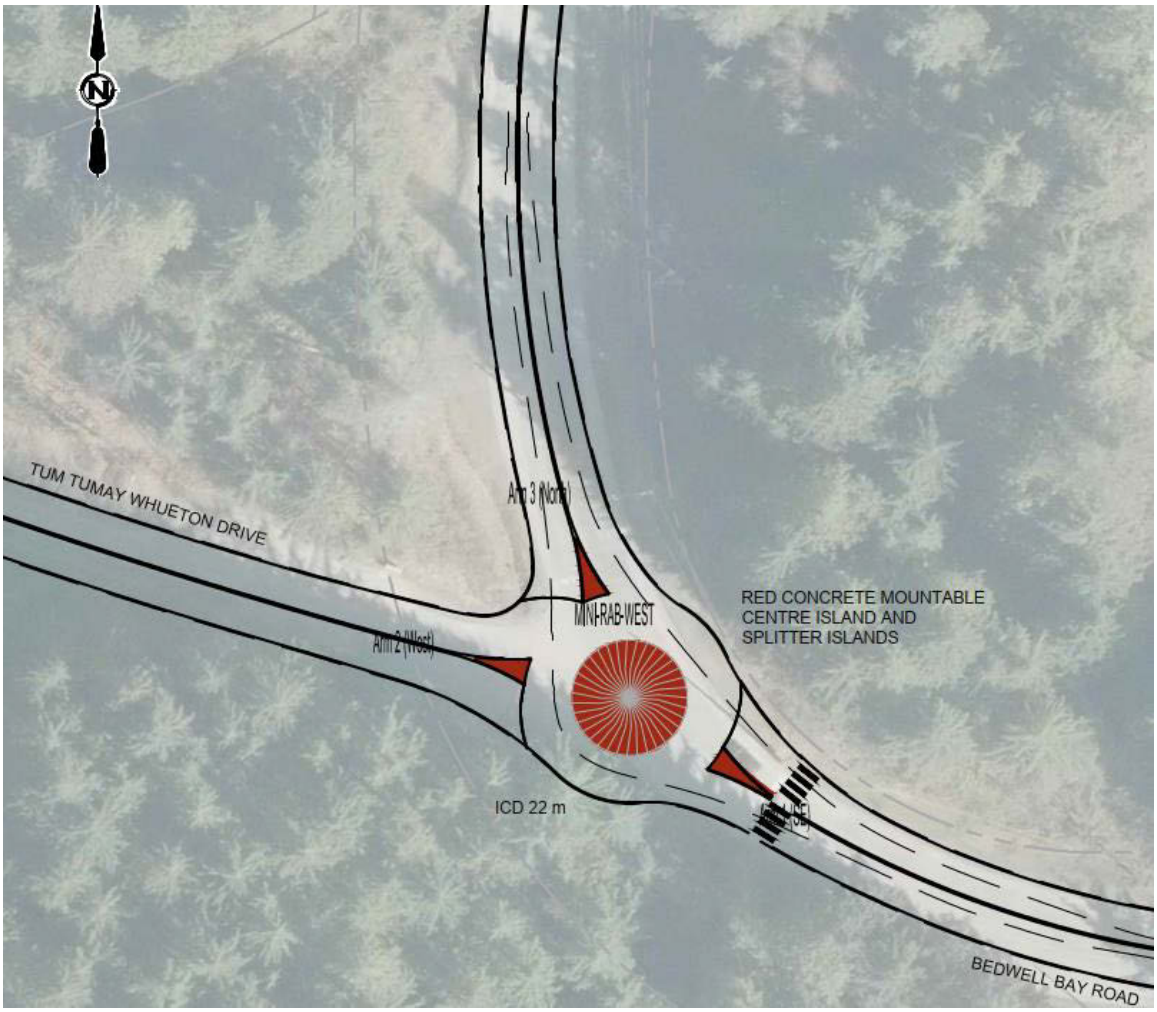


Figure 5-7
Tum Tumay Wheuton Mini Roundabout

5.5 Improvement Area 5 – White Pine Beach Visitation and Circulation

MVRD and PoMo use variable message signs to give advance warning that the park is at capacity, however, the inherent problem is that it is unclear what people should do if they arrive at the park and are not allowed in due to the parking lot reaching capacity. With the proposed removal of most parking along Bedwell Bay Road, many visitors have travelled long distances and understandably are determined to park where they can and walk in.

These options are related to improve transit flow and minimize delay within the White Pine Beach parking lot. It is recommended that in addition to potential operational improvements, travel demand solutions such as park permits, parking costs, improved ITS, and park status information should be considered to help inform potential visitors with up to date information.

The following options are provided for future study and discussion by MVRD and PoMo, and no further evaluation of the options will be conducted at this time.

5.5.1 Option 5A – Transit Routing, Parking Lot A and/or B

In this option, the drop off and boarding location for the transit vehicles will be relocated closer to the park entrance. This will reduce the travel time distance for buses and reduce the opportunity for them to be delayed by other vehicles and pedestrians within the park. Two variations were identified. Either utilizing Lot A as a transit stop and removing the parking spaces or utilizing Lot B as a transit stop and removing the parking spaces. In either of these options, the current transit stop near White Pine Beach would become a pedestrian drop-off/pick-up area.

Currently, CMBC has indicated that using the existing White Pine Beach stop and circulating around the entire loop road is working adequately. However, in the future, these proposed options may provide alternative routes to increase efficiency of the transit route. **Figure 5-8** shows this option.

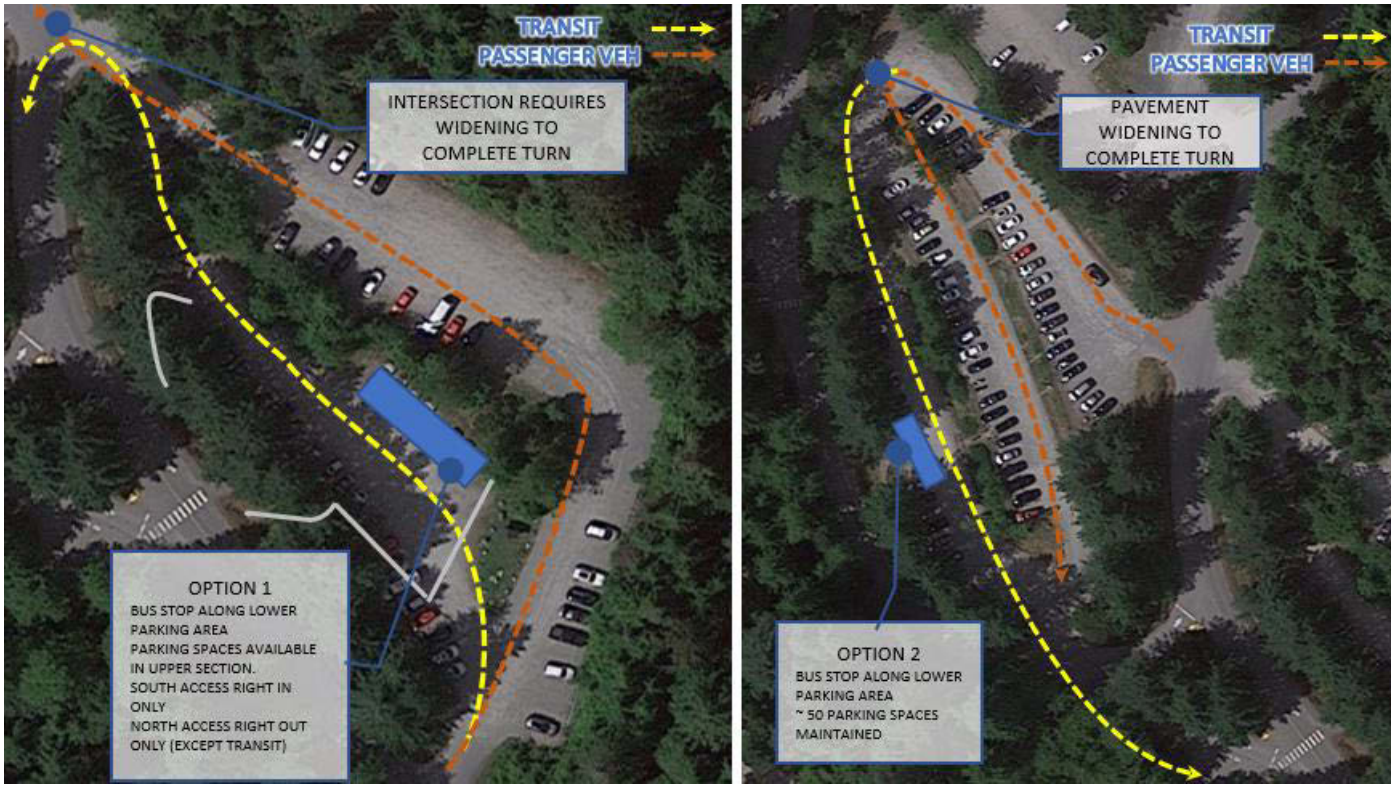


Figure 5-8
Option 3A – Transit Routing

6 Options Evaluation

6.1 Evaluation Framework

The options developed in each of the five improvement areas were compared using a qualitative 'stoplight' indicator framework to assist in the options evaluation process. The framework is used to evaluate the intersection improvements using the stoplight indicators; green for good, yellow for neutral, and red for poor. The evaluation completed for this study was preliminary based on the information available and stakeholder engagement. Due to the high-level nature of the study, most of the evaluation was qualitative rather than quantitative. The paragraphs below describe the evaluation criteria that were used in this evaluation. The Option Evaluation Framework is shown in **Appendix C**.

Order-of-magnitude opinions of probable costs (OPC) were prepared as supplementary information for each option but are not included an evaluation item. They are provided in **Appendix D.**

6.2 Stakeholder Engagement

Metro Vancouver was consulted throughout the project as a project partner. Discussions were held with PoMo, MV and AE to identify existing issues and review proposed improvements.

Two sessions were held with CMBC to identify issues related to the transit routes, and to review proposed improvements. CMBC indicated support for the proposed options for Improvement Areas 1 and 2, and provided feedback that was incorporated into the options.

AE and PoMo met with HUB Tri-cities Cycling committee to review the bike improvement options along Bedwell Bay Road and confirm it supports the HUB mission of " to get more people cycling more often". HUB indicated support for the project and provided their feedback and informal preference for the bi-directional facility.[4]

The HUB committee preference is for a bi-directional facility in Improvement Area 1 as it provides more flexibility with use of space. Single-sided facilities could be too narrow when space is constrained or when traveling downhill at speed. The MUP is also a good solution to restrict illegal parking.

A meeting was held to present the findings of the project to the Village of Anmore and the Village of Belcarra. Multiple other local authorities were also in attendance.

6.3 Option Evaluation

The evaluation of each Improvement Area compares options to each other and the existing condition using the evaluation framework to identify the expected performance of each option.

[4] HUB April Meeting Minutes, https://wiki.bikehub.ca/sites/committees/index.php?title=April_2022

6.3.1 Improvement Area 1 – Pedestrian / Cyclist Facilities

Evaluation Criteria	Base Case	Option 1 Bi-Directional Facility	Option 2 Uni-Directional Facility
Traffic Operations and Mobility	During peak times, pedestrians are walking in the travel lanes after parking their vehicles on the shoulders.	Provides space to keep pedestrians and cyclists from traveling in roadway. Prohibition of parking reduces congestion.	Provides space to keep pedestrians and cyclists from traveling in roadway. Gaps in the delineation do not prevent pedestrians and cyclists from entering and/or crossing the road.
Road Safety	Vehicles, pedestrians, and cyclists share the same space. No separation.	0.7 m buffer is wide enough to accommodate continuous concrete barrier which provides better protection between vehicles and active transportation modes.	0.3 m buffers on either side of the roadway are wide enough to accommodate delineator posts. Cyclists can ride on the roadway or the paths in the same direction of travel depending on traffic and comfort level.
Parking Compliance	Despite targeted enforcement of no-parking signs, vehicles continue to park where prohibited.	Compliance is more effective when concrete barriers are used to restrict parking along the shoulder.	Compliance is less effective when delineators are used to restrict parking along the shoulder.
Active Transportation – Walking	Pedestrians walk on shoulder, or on roadway when the shoulder is blocked	MUP provides separate space from vehicles for pedestrian and cyclists to travel along the roadway. Provides a space for those who want to park at the Ioco Townsite and walk to the park. Wide MUP provides more space for groups to walk together and/or cyclists to pass peds.	Paths provide separate spaces from vehicles for pedestrian and cyclists to travel along both sides of the roadway. Provides spaces for those who want to park at the Ioco Townsite and walk to the park.
Active Transportation – Cycling	Cyclists ride in vehicle lane, or in shoulder if space is available	MUP separates vehicles from pedestrians and cyclists. During off peak times there is low pedestrian demand and the MUP accommodates cyclists of all abilities. During peak times pedestrian volumes may make it difficult for cyclists to use the facility.	Paths separate vehicles from pedestrians and cyclists. During off peak times there is low pedestrian demand and the paths accommodate cyclists of all abilities. Cyclists have the ability to move between the road and path depending on rider comfort level and how busy each facility is.
Road Cross-Section	Two-lane cross-section with painted shoulder spaces. Some roadside barriers due to steep terrain on both sides of ROW. Total width varies from 8-10 m.	Option 1 maintains two travel lanes and separated 3.3 m MUP with a continuous barrier. Total width of 12.2 m needed.	Option 2 maintains two travel lanes, with uni-directional paths on either side separated by delineators. Total width of 11.8 m needed.
Enviro/Tree removal	Rural setting in the right of way has steep side-slope grades and heavily treed areas.	Tree removal may be needed, ditches will need to be rebuilt to accommodate widened cross-section. Continuous barrier may affect drainage pattern.	Tree removal may be needed, ditches will need to be rebuilt to accommodate the widened cross-section.
Constructability	n/a	MUP construction will require retaining walls, reditching, and side slope stabilization	Bike/ped paths will require retaining walls, reditching, and side slope stabilization
Totals	***N/A***	***4 Green 2 Yellow 2 Red***	***1 Green 5 Yellow 2 Red***

The recommended option for a pedestrian and cyclist facility is the MUP. While very similar in terms of price and constructability, the MUP provides better safety advantages to pedestrians and cyclists, while providing a better barrier for parking compliance. Based on discussions with PoMo, MV, and HUB, the MUP is the preferred option along the north side of 1st Avenue / Bedwell Bay Road.

6.3.2 Improvement Area 2 – White Pine Beach Road Intersection

Evaluation Criteria	Base Case	Option 1 Transit Improvements	Option 2 Mini Roundabout
Traffic Operations, Mobility, Parking	Bedwell Bay Road – White Pine Beach Road intersection is wide, with turn lanes and skew. Two lanes at White Pine allow traffic control personnel to utilize one lane for priority vehicles to access park while passenger vehicles queue in the other. Vehicles queuing for entrance sometimes block travel on Bedwell Bay Road. EB buses utilize flag stop system and may stop in travel lane for passenger boarding.	Left and right turn lanes are removed and buses stop in the travel lanes both EB and WB. Vehicles queuing for entrance into White Pine Beach may also increase delay on roadway in the WB direction. Turn around area is maintained so vehicles can turn around back to Ioco Park and Ride. WB through traffic may be delayed by vehicles trying to access the park when park gates are closed.	Mini RAB fits within the existing intersection geometry. Mountable islands accommodate large vehicles, while design accommodates transit movements. Buses pull out of travel lane at bus stops and do not block flow of traffic. When the park gate is closed, vehicles have a way to turn around back to the Ioco Park and Ride. WB through traffic may be delayed by vehicles trying to access the park when park gates are closed.
Road Safety	Skew and vertical grades may reduce sightlines. Vehicles found to travel at excessive speeds on Bedwell Bay Rd.	Pedestrian paths and RRFB controlled cross walk help people cross Bedwell Bay Road and access transit more safely. Simplified intersection reduces confusion.	Mini RAB provides an intersection to help reduce speeds along Bedwell Bay Road. RAB eliminates skew angle and reduces the frequency and severity of collisions. Pedestrian paths and RRFB controlled cross walk help people cross Bedwell Bay Road and access transit more safely.
Active Transportation – Walking	Pedestrians walk on shoulder, or on roadway when shoulder is blocked	People have dedicated connections to transit stops and paths.	People have dedicated connections to transit stops and paths.
Active Transportation – Cycling	Cyclists ride on vehicle lane, or on shoulder if space is available	No Change	No Change
Transit	This route operates with a flag-stop system. There is one permanent WB transit stop in the intersection bulb-out, and a temporary EB transit stop across from White Pine Beach with no passenger wait area.	In-lane bus stops with adequate passenger wait areas improve accessibility while reducing delay time for bus. Designated bus stop is better than flag-stop for high passenger-demand locations within the corridor . Additional transit stop at floatwalk trail head allows additional passenger pickup location.	Pull-out* bus stops with adequate passenger wait areas improve accessibility, but may cause delay for buses to return to travel lane. Designated bus stop is better than flag-stop for high passenger-demand locations. Additional transit stop at floatwalk trail head allows additional passenger pickup location.
Road Cross-Section	Two-lane cross-section with painted shoulder spaces. Some roadside barriers due to steep terrain on both sides of ROW	Improvements can be achieved with no additional paving needed.	Mini Roundabout can be constructed within the footprint of the existing intersection. Turning radii of transit vehicles were accommodated in the design of the mini RAB.
Enviro/Tree removal	n/a	Construction is within the road ROW. Minimal environmental impacts.	Construction is within the road ROW. Minimal environmental impacts.
Constructability	n/a	Minimal reconstruction of road required.	Some roadway adjustments and reconstruction required.
Totals	***N/A***	***5 Green 3 Yellow 0 Red***	***6 Green 2 Yellow 0 Red***

**Roundabout design can be modified to include in-lane bus stops if CMBC desires.*

The recommended option is the mini roundabout presented in Option 2A. The mini roundabout provides many improvements to pedestrian safety and accessibility while providing improved access to transit and transit operations. Although Option 2A has a higher expected cost, the mini roundabout also has the added benefits of controlling

vehicle speeds along Bedwell Bay Road, simplifying intersection operations while allowing for safe turnaround of would-be park visitor vehicles.

6.3.3 Improvement Area 3 – Floatwalk Access

Evaluation Criteria	Base Case	Option 1 Floatwalk Parking Area and Pedestrian Access
Traffic Operations, Mobility	During peak times, pedestrians are walking in the travel lanes after illegally parking their vehicles on the shoulders.	Pedestrians are no longer walking on the travel lanes.
Road Safety	Vehicles, pedestrians, and cyclists share the same space. No separation.	**Pedestrian sidewalk separated by the parking provides a buffer space for pedestrians away from the road travel lane.**
Parking Compliance	Despite targeted enforcement of no-parking signs, vehicles continue to park where prohibited.	**Compliance is more effective when dedicated parking spaces are provided.**
Active Transportation – Walking	Pedestrians walk on shoulder, or on roadway when the shoulder is blocked.	Sidewalk separates **pedestrians from vehicles and provides access to the trail head leading to the float walk.**
Active Transportation – Cycling	n/a	No Change
Transit	n/a	No Change
Road Cross-Section	Two-lane cross-section with painted shoulder spaces. Some roadside barriers due to steep terrain on both sides of ROW. Total width is approximately 10.5 m.	This option maintains two travel lanes, permitted parking space, and sidewalk area. Total width of 11.4 m needed.
Constructability	n/a	Parking and sidewalk will require minimal widening.
Totals	***N/A***	***5 Green*** ***2 Yellow*** ***0 Red***

The parking solution for the floatwalk is recommended as it will provide parking and pedestrian access to the floatwalk trailhead.

6.3.4 Improvement Area 4 – Tum Tumay Wheuton Intersection Improvements

Evaluation Criteria	Base Case	Option 1 Wayfinding Improvements	Option 2 Mini Roundabout
Traffic Operations, Mobility, Parking	Intersection has unclear wayfinding signage and stop signs are difficult to see	Simplifying and adjusting Updating wayfinding signage and providing warning signs will help clearly communicate to drivers of the intersection ahead.	Roundabout directional signage will provide information to drivers upon approach to intersection
Road Safety	Collisions have occurred at the intersection both during daylight and night.	Advanced wayfinding signage will help direct drivers along Tum Tumay Wheaton to the parks at the west end of Belcarra. Increased signage to warn drivers of stop ahead will help with stop compliance. Tightening up the intersection geometry using pavement markings will improve sightlines and improve intersection visibility.	Mini RAB provides an intersection to help reduce speeds along Bedwell Bay Road. RAB eliminates skew angle and reduces the frequency and severity of collisions.
Active Transportation – Walking	Pedestrians walk in shoulder, or on roadway when shoulder is blocked. No formal crossing facilities.	No Change	Crosswalk on the east leg of mini RAB facilitates pedestrians crossing from Bedwell Bay to access Tum Tumay Wheaton Drive.
Active Transportation – Cycling	Cyclists ride in vehicle lane, or in shoulder if space is available	No Change	No Change
Transit	Transit bus currently operates as a flag stop along Bedwell Bay Road to/from Belcarra	No Change	No Change
Road Cross-Section	Wide intersection with legs that intersect at skewed angles.	Improvements can be achieved with no additional pavement needed.	Mini Roundabout can be constructed within the footprint of the existing intersection. Turning radii of transit vehicles were accommodated in the design of the mini RAB.
Enviro/Tree removal	n/a	Construction is within the road ROW. Minimal environmental impacts.	Construction is within the road ROW. Minimal environmental impacts.
Constructability	n/a	Minimal reconstruction of road required.	Some roadway adjustments and reconstruction required.
Totals	***N/A***	***4 Green 4 Yellow 0 Red***	***4 Green 4 Yellow 0 Red***

The recommended option is the low-cost intersection improvement option, as it is sufficient to improve driver expectation and wayfinding and is appropriate for a location with a multi-way stop sign with a low collision history. The proposed pavement markings can improve the skew and space within the intersection. Maintaining a 3-way stop helps control speed along the Bedwell Bay corridor. A mini roundabout helps control speeds along Bedwell Bay Road, addresses the intersection skews and simplifies the intersection operations but at a greater cost.

7 Recommendations

The following recommendations are based on the review of the Bedwell Bay Corridor. They have been selected as the recommended options to improve the safety of the corridor for all users, resolve the on-street parking issues and address the need for inclusive active transportation along Bedwell Bay Road.

Improvement Area 1 – Bedwell Bay Road Pedestrian / Cyclist Facilities

- A bi-directional facility along Bedwell Bay Road to provide an active transportation connection for people walking and biking along Bedwell Bay Road from Ioco Road to White Pine Beach. Separation from the travel lanes using concrete barriers will provide separation between active transportation and vehicles while restricting parking along the Bedwell Bay Road.
- OPC $9.7 mil.

Improvement Area 2 – White Pine Beach Road Intersection

- A mini roundabout at the intersection of Bedwell Bay Road and White Pine Beach Road would improve operations at the intersection, and help control vehicles arriving at White Pine Beach when the gate is closed.
- OPC $420,000.

Improvement Area 3 – Floatwalk Access

- Additional parking at the south end of the floatwalk would provide parking and pedestrian access to the floatwalk trailhead.
- OPC $140,000.

Improvement Area 4 – Tum Tumay Wheuton Intersection

- Improving the intersection at Bedwell Bay Road – Tum Tumay Wheuton Road by adding pavement markings and new signage is recommended to direct people driving to təmtəmíxʷtən/Belcarra Regional Park identify the intersection.
- OPC $50,000.

The conceptual improvement designs provided serve as a basis for the City of Port Moody to further develop designs and obtain funding to improve Bedwell Bay Road.

CLOSURE

This report was prepared for the **City of Port Moody** and summarizes the current traffic characteristics, operations, and needs for improvement along the Bedwell Bay Road study corridor. It explores improvement options and evaluated based on feasibility to recommend improvement options.

The services provided by **Associated Engineering (B.C.) Ltd.** in the preparation of this report were conducted in a manner consistent with the level of skill ordinarily exercised by members of the profession currently practicing under similar conditions. No other warranty expressed or implied is made.

Respectfully submitted,

Associated Engineering (B.C.) Ltd.
Engineers & Geoscientists BC Permit Number 1000163

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Project Engineer

BJ/MB/sn

APPENDIX A – SITE VISIT

Associated Engineering | GLOBAL PERSPECTIVE. LOCAL FOCUS.

RECORD OF MEETING

Date:	November 8, 2021	**File No.:**	2021-2344-02
Time:	13:00-16:00	**Location:**	Parkview Meeting Room, Port Moody City Hall and along the study area
Client:	City of Port Moody	**Project Name:**	Bedwell Bay Road Transportation Study
Subject:	Site Visit Meeting	**Project Number:**	2021-2344-02
Attendees:	Monique Beaudry (AE) Justin Ng (AE) Marcel LaBreche (MV) Tyler Courage (MV) Jeff Little (PoMo) Geoffrey Keyworth (PoMo) Patrik Kolby (PoMo) Stephen Judd (PoMo) (City Hall only)		
Distribution:	Those Present		

This Record of Meeting is considered to be complete and correct. Please advise the writer within one week of any errors or omissions, otherwise this Record of Meeting will be considered to be an accurate record of the discussions

Action by **Discussion:**

1 BACKGROUND

Study Area is 1st Avenue from IOCO Road to Sunnyside Road, and Bedwell Bay Road from Sunnyside Road to the border of the Village of Belcarra. The meeting started at Port Moody City Hall with a boardroom meeting before a site visit by vehicle.

2 BACKGROUND INFORMATION:

- City Council directed that this project be initiated to address the parking issues along Bedwell Bay Road.
- On-street parking on Bedwell Bay Road has existed for an extended period of time prior to current restrictions
- An assessment was previously completed that identified pedestrians walking on the narrow roadway presented a safety concern that needed to be addressed.
- City had previously limited parking in 2019 and placed signage and white delineators.
- In 2020 Council passed resolution to ban parking on Bedwell Bay Road to limit demand for park usage during the early phases of the Covid-19 Pandemic.
- Parking did not become a major issue until Covid-19 Pandemic caused an increase in park popularity and user demand.
- There are hundreds of cars parked along Bedwell Bay Road on peak demand days
- The City has placed no parking signs, delineators and concrete roadside barriers to try and discourage parking along the corridor.
- Sasamat Lake also has an alternate access point via a boardwalk further west of White Pine Beach Road park entrance. MV indicated they haven't experienced problems there.
- There are two user groups of Sasamat Lake. One group are families and people looking to go to the park and beach to relax for a day trip. Second group are a younger demographic

Action by **Discussion:**

that engages in activity that often requires the presence of the Port Moody Police Department. The latter group usually access the park at the boardwalk entrance. The police sometimes will even have the police boat active at the lake to patrol and police cruisers looking for intoxicated drivers.

- The corridor has four pressure points where congestion builds:
  - Entrance to the park at White Pine Beach Road
  - At the boardwalk which has a trail head next to Bedwell Bay Road but no parking supply
  - At turnaround areas toward Belcarra
  - At the turnoff to Anmore

3 EXISTING TRAFFIC MANAGEMENT PRACTICES

- Traffic Management is currently coordinated by Metro Vancouver
- There is a message board operated by Metro Vancouver that indicates the parking lot status for Sasamat Lake and Buntzen Lake at the IOCO town site in the summer.
- Metro Vancouver has signed an agreement with a contractor to administer pay parking at the parking lot. This is MV's demand management tool. Parking is $2 dollars an hour with an initial three-hour grace period of free parking.
- Traffic cones are set up upstream and downstream of the park entrance to restrict vehicular park access during busy days.
- The parking lot gate is closed once the parking lot reaches capacity and is closed until 50 parking spots are available again. This closing and reopening cycle can take between a few hours in the morning to every 15 to 30 minutes later in the day. In the summer, the park has been full and gates closed by as early as 8:00 AM. People use the taper lane to wait to get in even though they are told not to do that. Some vehicles partially block the travel lane while queuing. A question is whether a queuing lane should be provided.
- Emergency vehicles, residential access, buses, service vehicles and commercial vehicles are allowed into the park when the gates are closed. They need to pull up and signal or speak with traffic control who then opens the gate if access is permitted.
- Some people were parking near the IOCO townsite and taking the bus to the park. Route 181 /182 that comes from Moody Centre Station is a small bus that stops at the park gate. Route 150 is a large bus in the summer months from Coquitlam Central Station to go into the park. The City expects that if a formal park and ride is established at the IOCO townsite that it may overwhelm the area. The City also started encouraging people to use the bus starting in August and that seemed to help some of the parking issues. They also increased the bus service at this time.

4 EXISTING ENFORCEMENT

- No parking signs are placed throughout the corridor (with some exceptions) both on sign posts and large overhead signage.
- Parking fines were $50 to begin with which council has doubled to $100.

Action by **Discussion:**

- The City has indicated that the parking tickets were not as much of a deterrent as they would have liked.
- The City has partnered with private towing companies in the past for enforcement. The City had set up a temporary tow yard in the IOCO townsite to maximize the number of vehicles towed and still could not keep up with illegal parking demand.
- The City has reported incidents of people stealing tickets off other vehicles and placing them on their own. This backfires on them because ticketed vehicles are the ones that towed.
- Metro Vancouver and the City mentioned that sometimes drivers will stop in the travel lane and refuse to move their vehicles to allow traffic flow. Metro Vancouver and bylaw enforcement have no authority here. The Port Moody Police would have authority to issue a moving violation.
- Belcarra is under RCMP jurisdiction. City Police and RCMP will cooperate.
- The City does not enforce no parking during off peak periods.

5 CONSIDERATIONS

- The City and Metro Vancouver would like a permanent solution that will require less enforcement and human resources.
- The City has had feedback that the parking restrictions in some locations in the corridor negatively impact non-park users in off peak times.
- The City and Metro Vancouver are not expecting the park to return to pre-pandemic usage levels
- MV has noticed that both Buntzen Lake and Belcarra fill up at the same time. That causes additional traffic as people look for alternate places to go once the parks are filled up.

6 SITE VISIT OBSERVATIONS

- The bus stop for the southbound direction is temporary. Since there is no layby, it stops in the driving lane for boarding and alighting.
- The furthest point parking is occurring for park usage is at the intersection of Sunnyside Road. Currently, no-parking signs are generally not posted on Bedwell Bay Road between Sunnyside Road and Crystal Creek Drive even though parking is prohibited for all of Bedwell Bay Road.
- Appears that there are more no parking signs on the south side of Bedwell Bay Road than the north side.
- Sight lines may be an issue on the corridor due to both vertical and horizontal curves
- There are multiple pinch points in the corridor restricted by grades and rock outcroppings
- Improvements to the intersection configuration of Bedwell Bay Road and White Pine Beach Road could be considered.

November 8, 2021

City of Port Moody

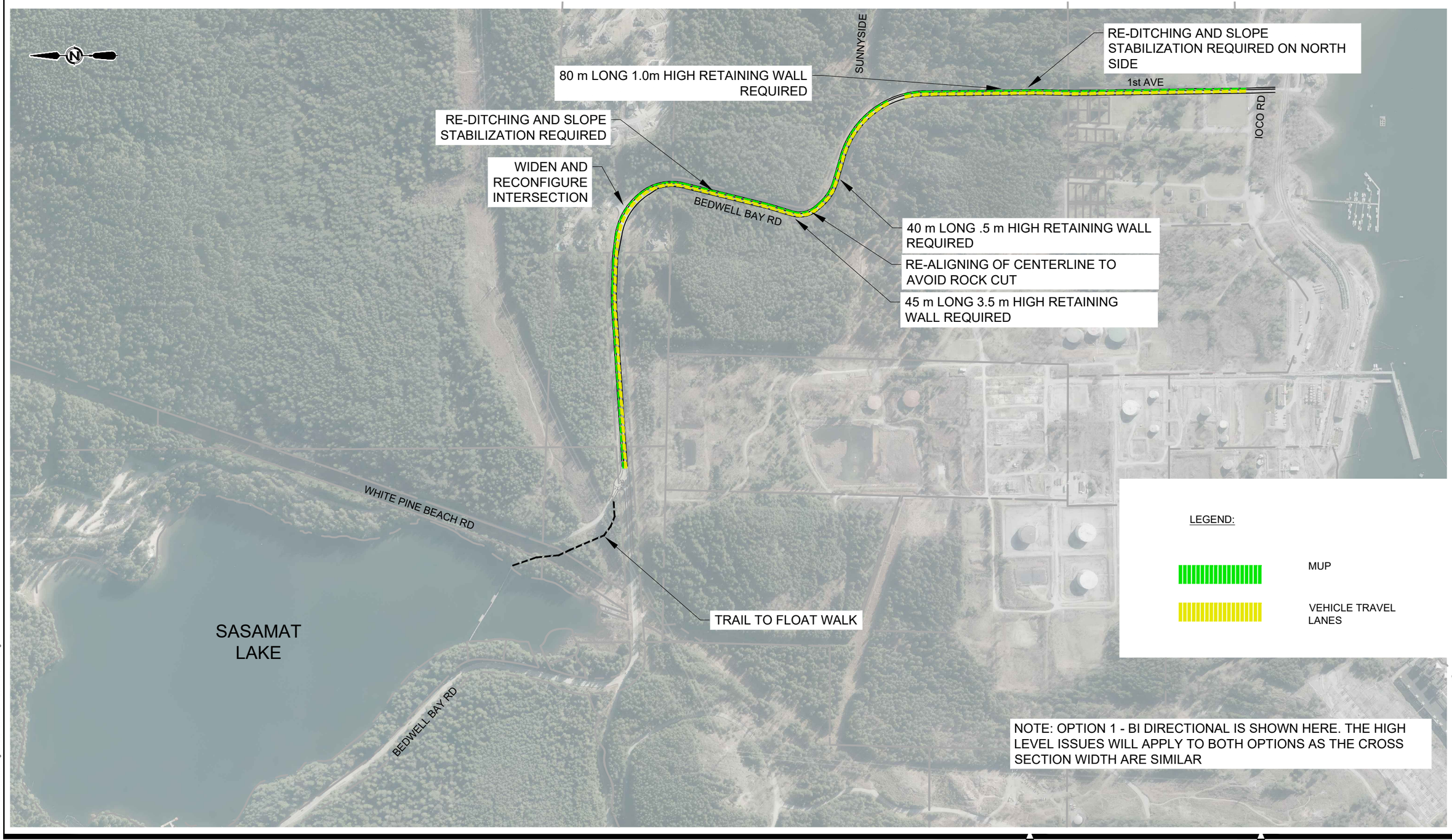
Action by	Discussion:

- Multiple white delineators, installed in 2019, appear to be missing or damaged near the trail head at the boardwalk. The City indicated that most of this was from drivers with off-road type vehicles running them over or parking on top of them.
- Bedwell Bay Road appeared to have more than expected traffic even during off peak times. With cars often coming in waves due to passing restrictions.
- There are limited places for cars to turn around on Bedwell Bay Road.
- Belcarra residents often complain about the delays caused by recreational traffic during peak times. The illegal parking and congestion around the park is affecting their ability to drive through the area when travelling to and from their homes. People who don't get into the park go into Belcarra to turn around which is a nuisance for local residents.
- The intersection of Bedwell Bay Road and Tum Tumay Whueton Drive may have sight line issues and low driver compliance of the 3 way stop controlled intersection as many vehicles were observed to have completed a rolling stop instead of a full stop at the intersection.
- Difficult wayfinding for drivers rerouted to Belcarra.
- Concrete barriers may make plowing more difficult along the corridor.

APPENDIX B - PROPOSED OPTION SKETCHES

IF NOT 25 mm ADJUST SCALES
25 mm

SCALE(S) SHOWN ARE INTENDED FOR TABLOID (11X17) SIZE DRAWINGS UNLESS NOTED OTHERWISE



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SAVE DATE: 2022-03-29 6:28:37 PM SAVED BY: ZAPOROZHETS A.
DWG PATH: \\ae.ca\data\workgroup\2021\2234-02\civil\2234-02-c7001.dwg

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AE PROJECT No.	2021-2234-02
SCALE	1:7500
APPROVED	A. ZAPOROZHETS
DATE	2022APR01
REV	A
DESCRIPTION	ISSUED FOR INFORMATION

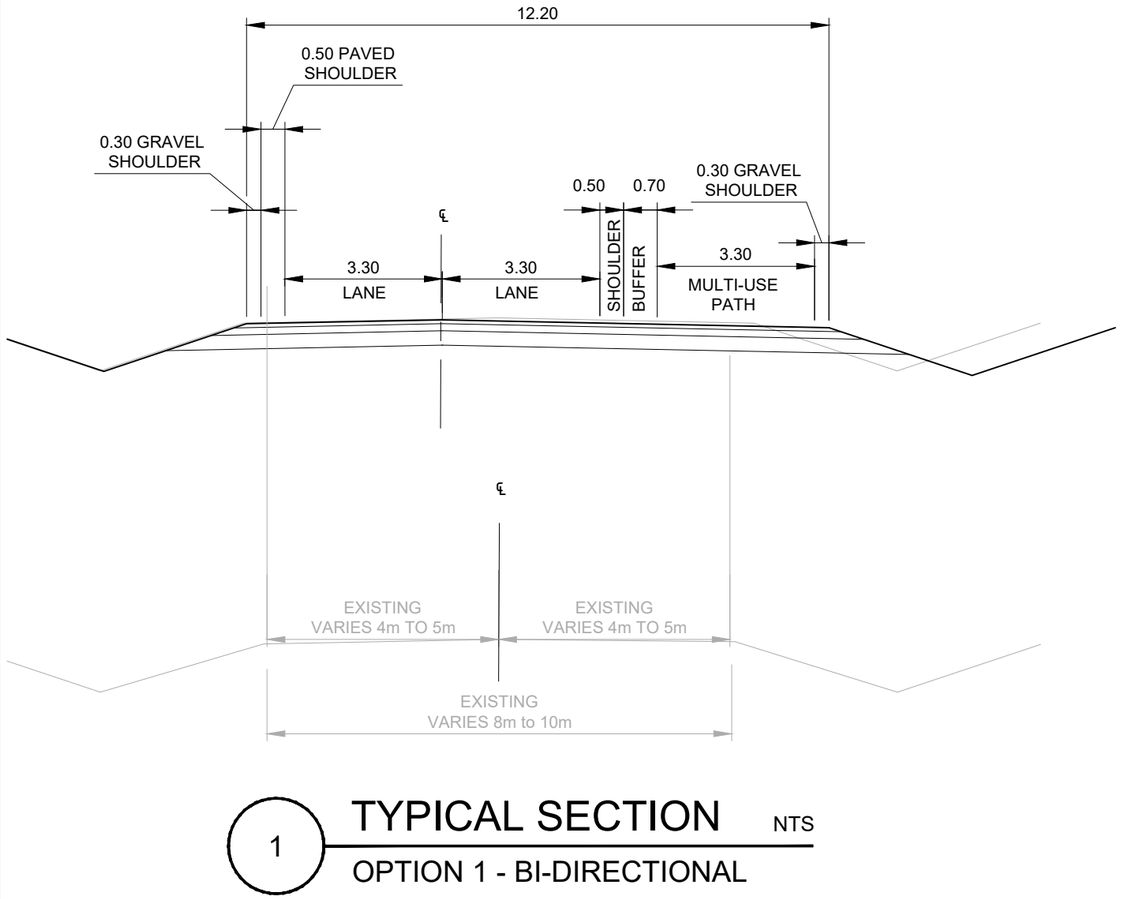
FIGURE 1-1

CITY OF PORT MOODY

CIVIL
ISSUES DRAWING
AREA 1 PLAN

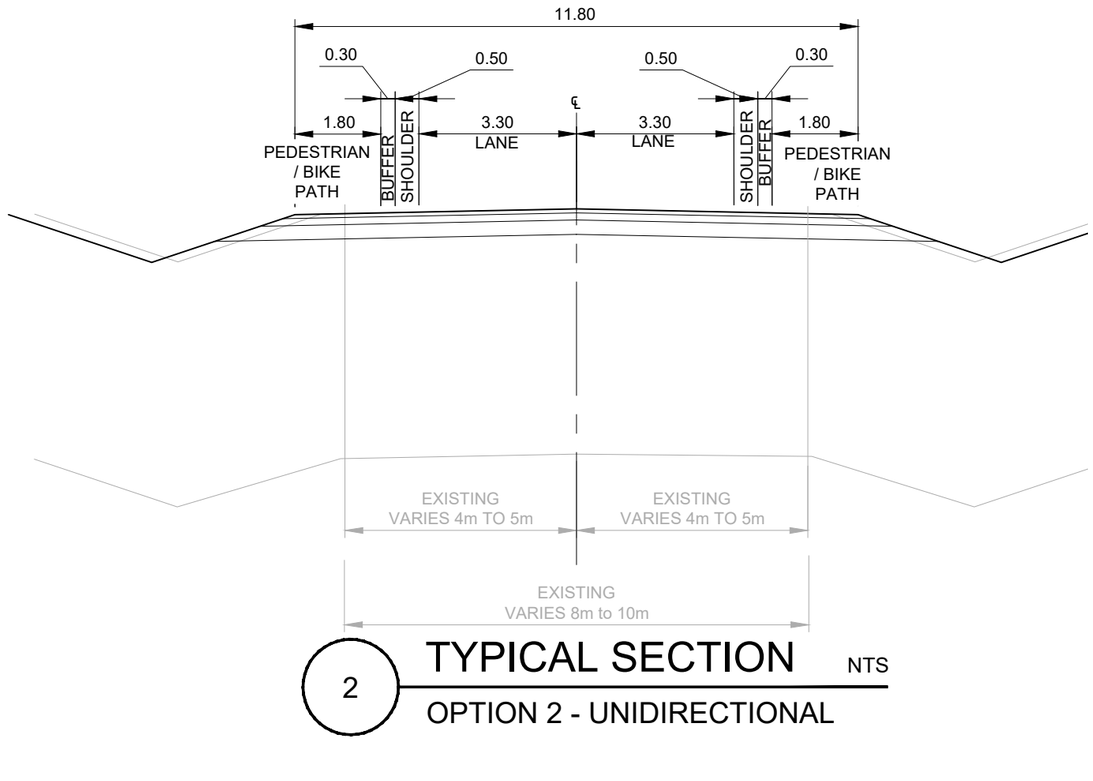
IF NOT 25 mm ADJUST SCALES
25 mm

SCALE(S) SHOWN ARE INTENDED FOR TABLOID (11X17) SIZE DRAWINGS UNLESS NOTED OTHERWISE



1 TYPICAL SECTION NTS

OPTION 1 - BI-DIRECTIONAL



2 TYPICAL SECTION NTS

OPTION 2 - UNIDIRECTIONAL

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Associated Engineering

BEST MANAGED COMPANIES Platinum member

AE PROJECT No.	2021-2344-02
SCALE	AS SHOWN
APPROVED	A. ZAPOROZHETS
DATE	2022APR01
REV	A
DESCRIPTION	ISSUED FOR INFORMATION

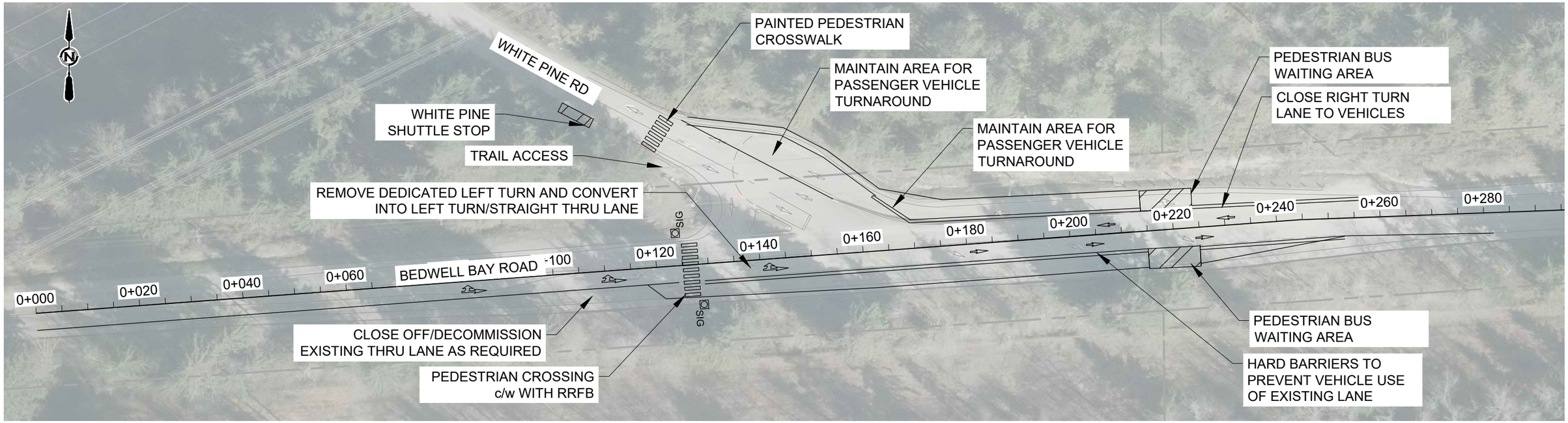
FIGURE 1-2

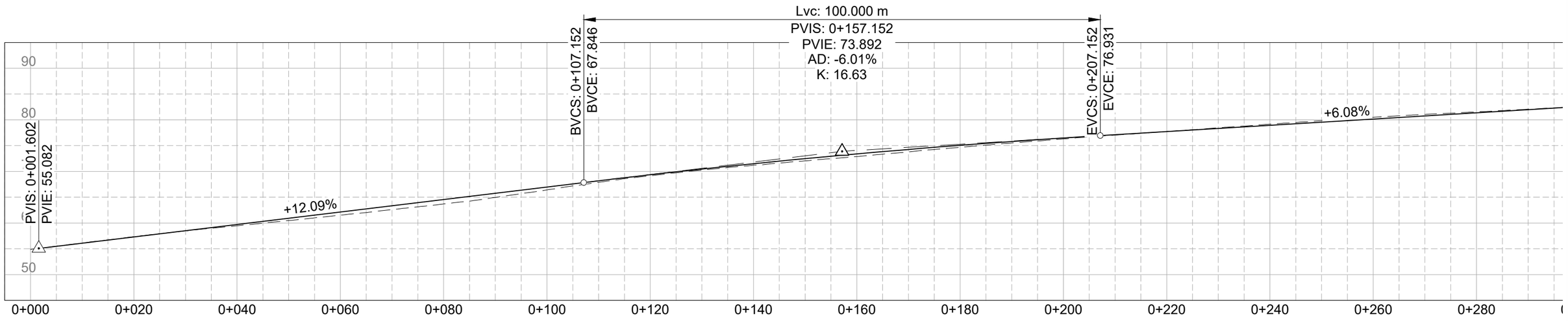
CITY OF PORT MOODY

CIVIL
PROPOSED CROSS SECTIONS
AREA 1: TYPICAL SECTIONS

IF NOT 25 mm ADJUST SCALES
25 mm

SCALE(S) SHOWN ARE INTENDED FOR TABLOID (11X17) SIZE DRAWINGS UNLESS NOTED OTHERWISE





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Associated Engineering

BEST MANAGED COMPANIES
Platinum member

AE PROJECT No.	2021-2344-02
SCALE	1:750
APPROVED	A. ZAPOROZHETS
DATE	2022APR01
REV	A
DESCRIPTION	ISSUED FOR INFORMATION

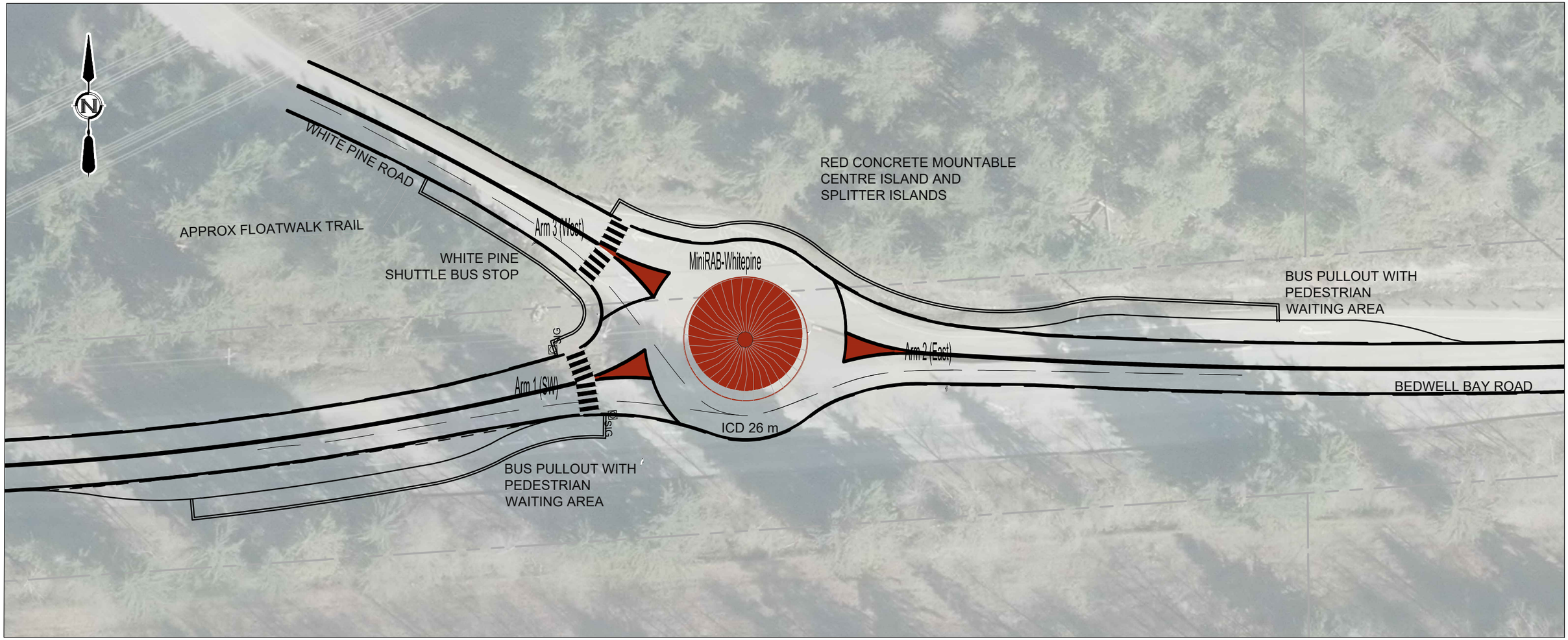
FIGURE 1-3

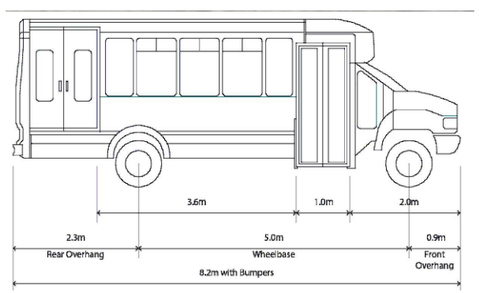
CITY OF PORT MOODY

CIVIL
IMPROVEMENT FOR AREA 2
FORMALIZED TRANSIT AND PEDESTRIAN FACILITIES

IF NOT 25 mm ADJUST SCALES
25 mm

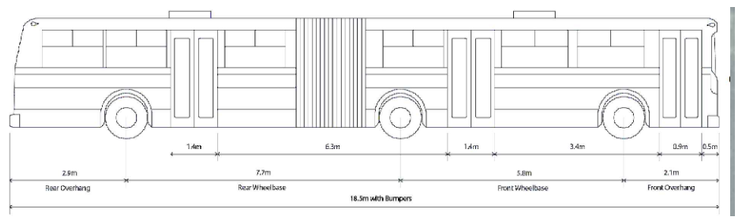
SCALE(S) SHOWN ARE INTENDED FOR TABLOID (11X17) SIZE DRAWINGS UNLESS NOTED OTHERWISE





RAB ACCOMODATES SWEPT PATH OF
TRANSLINK COMMUNITY SHUTTLE
WB BEDWELL BAY ROAD
EB BEDWELL BAY ROAD

TRANSIT STOP EACH DIRECTION
ADJACENT TO ROUNDABOUT LEGS



TRANSLINK NEW FLYER ARTICULATED BUS
WHITEPINE BEACH SHUTTLE
WB BEDWELL BAY ROAD TO NB WHITEPINE BEACH
SB WHITEPINE BEACH TO EB BEDWELL BAY ROAD

SHUTTLE STOP AT FLOATWALK TRAILHEAD

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Associated Engineering

CANADA'S BEST MANAGED COMPANIES
Platinum member

AE PROJECT No.	2021-2344-02
SCALE	1:750
APPROVED	B. JACKSON
DATE	2022MAR14
REV	A
DESCRIPTION	ISSUED FOR INFORMATION

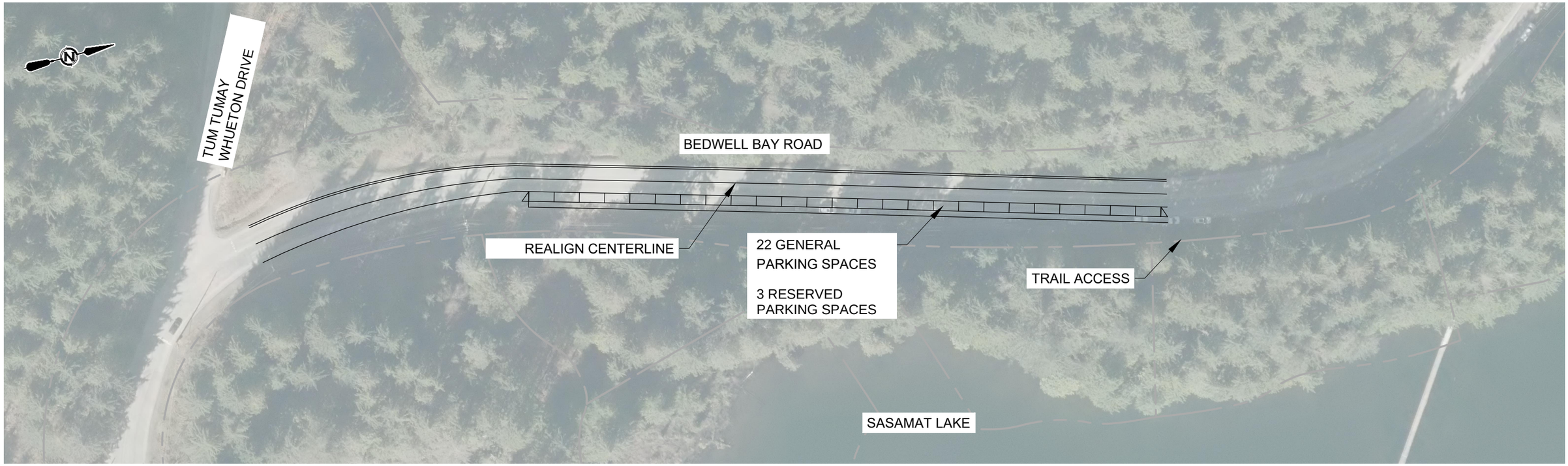
FIGURE 1-4

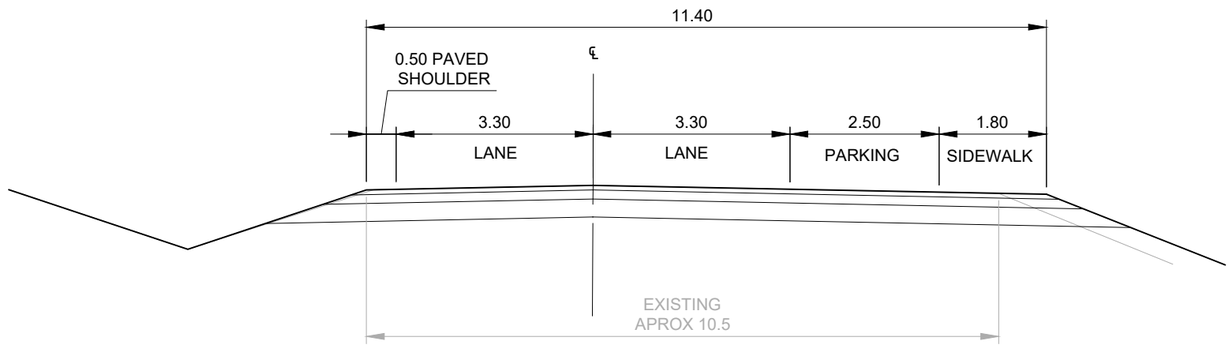
CITY OF PORT MOODY

CIVIL
PLAN
IMPROVEMENT AREA 2
BEDWELL BAY ROAD - WHITE PINE ROAD
MINI ROUNDABOUT

IF NOT 25 mm ADJUST SCALES
25 mm

SCALE(S) SHOWN ARE INTENDED FOR TABLOID (11X17) SIZE DRAWINGS UNLESS NOTED OTHERWISE





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Associated Engineering

BEST MANAGED COMPANIES
Platinum member

AE PROJECT No.	2021-2344-02
SCALE	1:750
APPROVED	A. ZAPOROZHETS
DATE	2022APR01
REV	A
DESCRIPTION	ISSUED FOR INFORMATION

FIGURE 1-5

CITY OF PORT MOODY

CIVIL
IMPROVEMENT AREA 3
FLOATWALK PARKING AREA

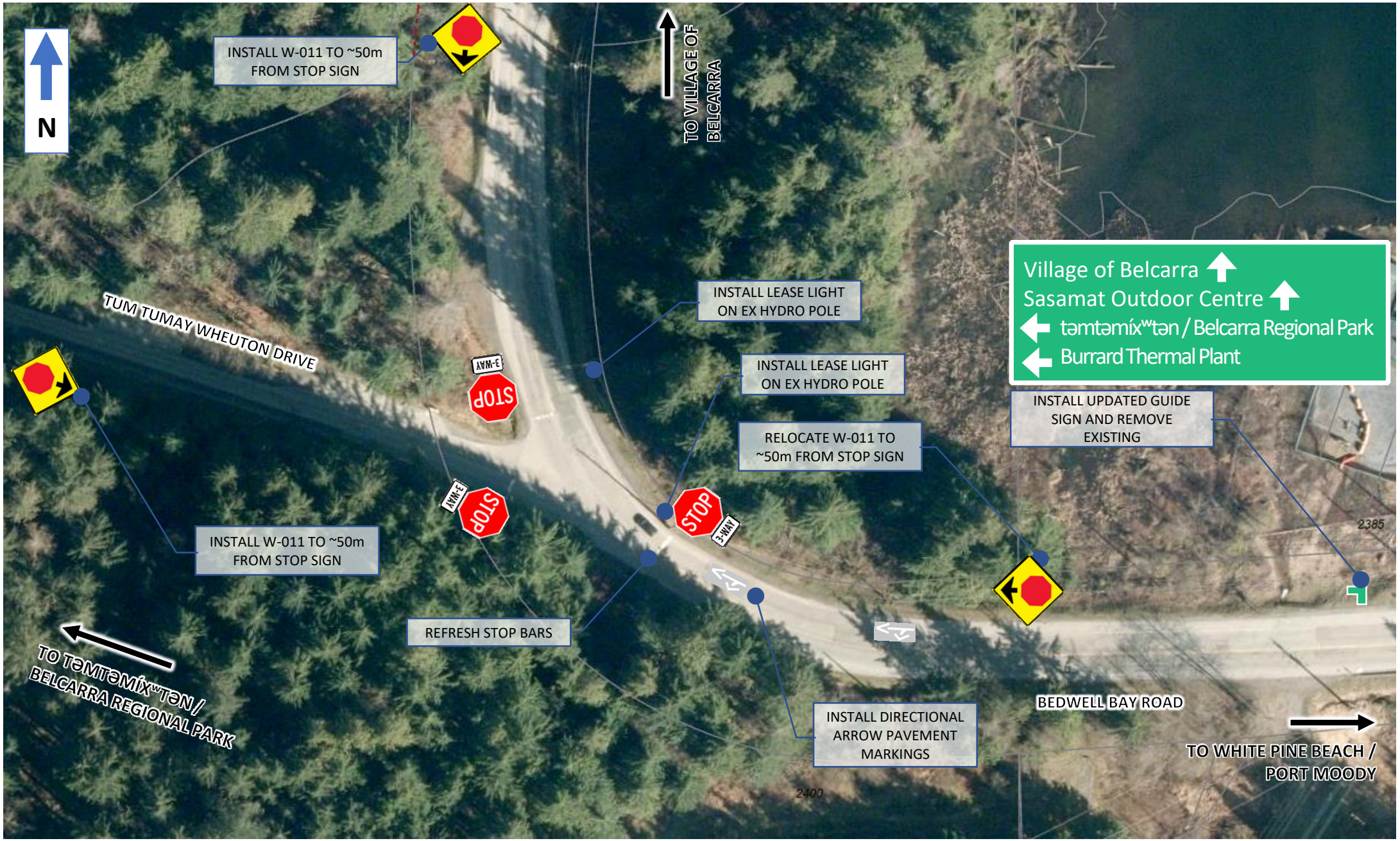
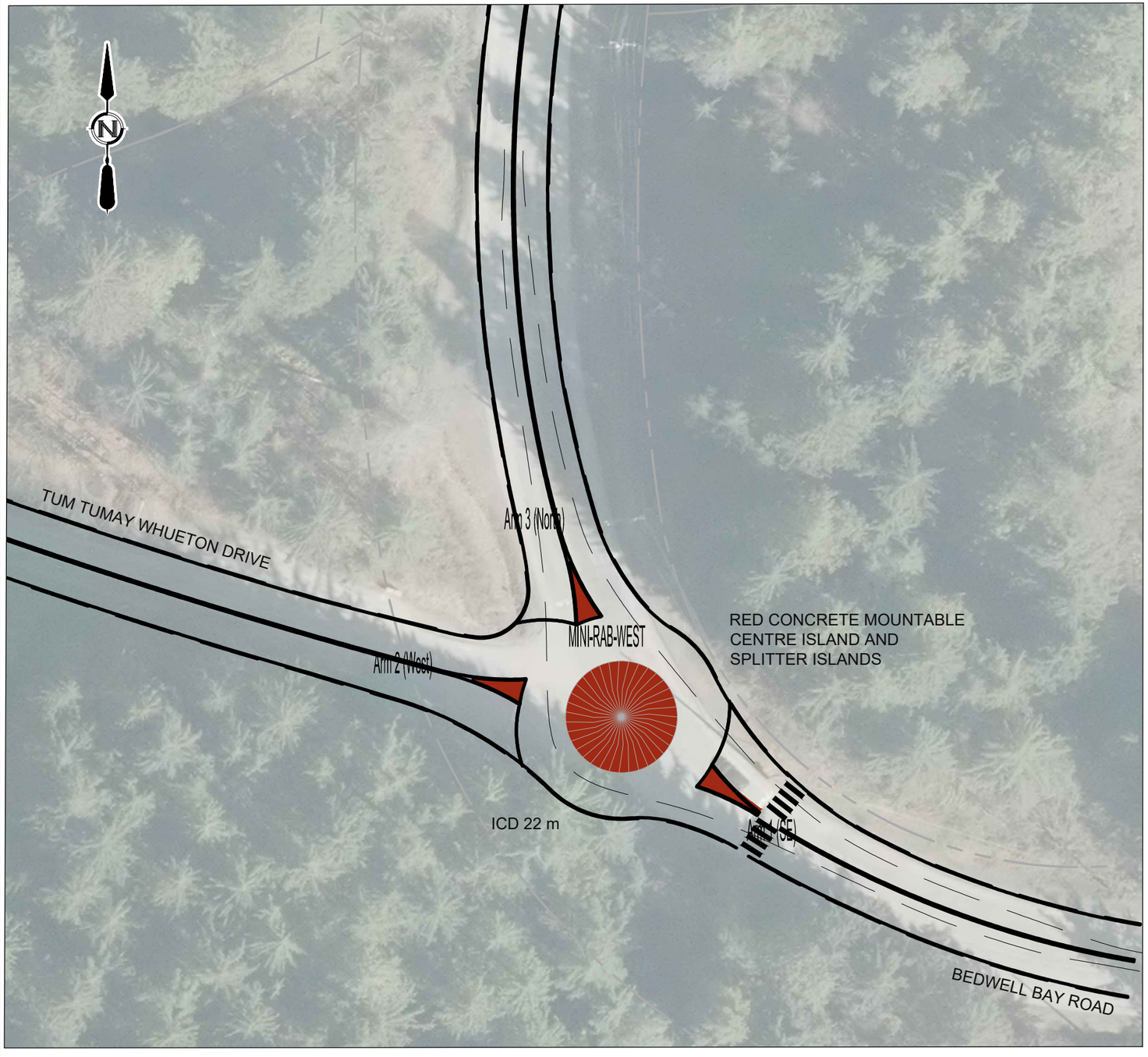


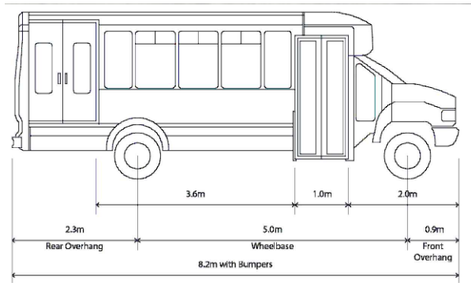
Figure 1-6
2022MAR29
City of Port Moody

Improvement Area 4
Tum Tumay Wheuton Dr
Improved Signage & Lighting

IF NOT 25 mm ADJUST SCALES
25 mm

SCALE(S) SHOWN ARE INTENDED FOR TABLOID (11X17) SIZE DRAWINGS UNLESS NOTED OTHERWISE





RAB ACCOMODATES SWEPT PATH OF
TRANSLINK COMMUNITY SHUTTLE
WB - NB BEDWELL BAY ROAD
SB - EB BEDWELL BAY ROAD

PLOT DATE: 3/25/2022 6:07:17 PM
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Associated Engineering

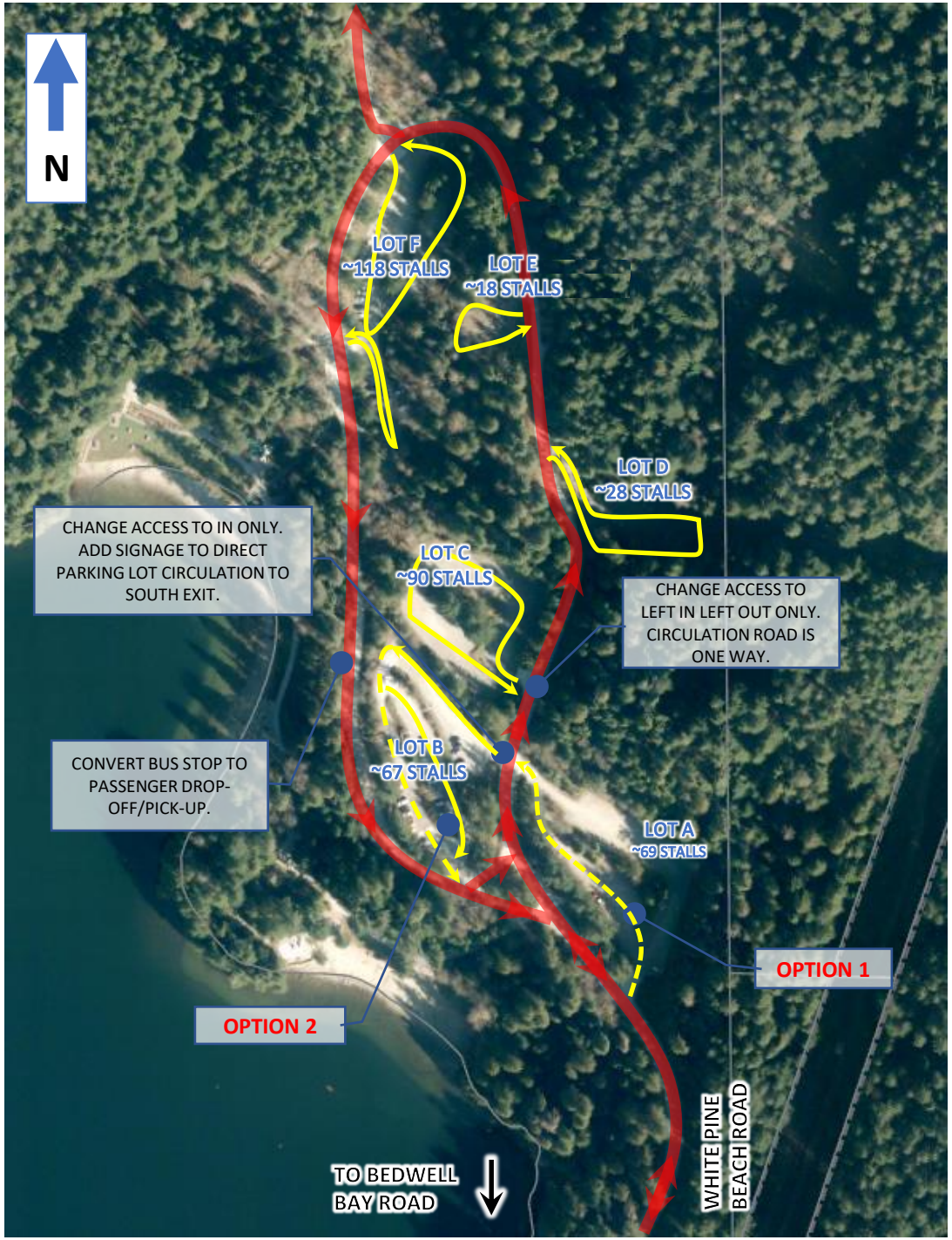
BEST MANAGED COMPANIES
Platinum member

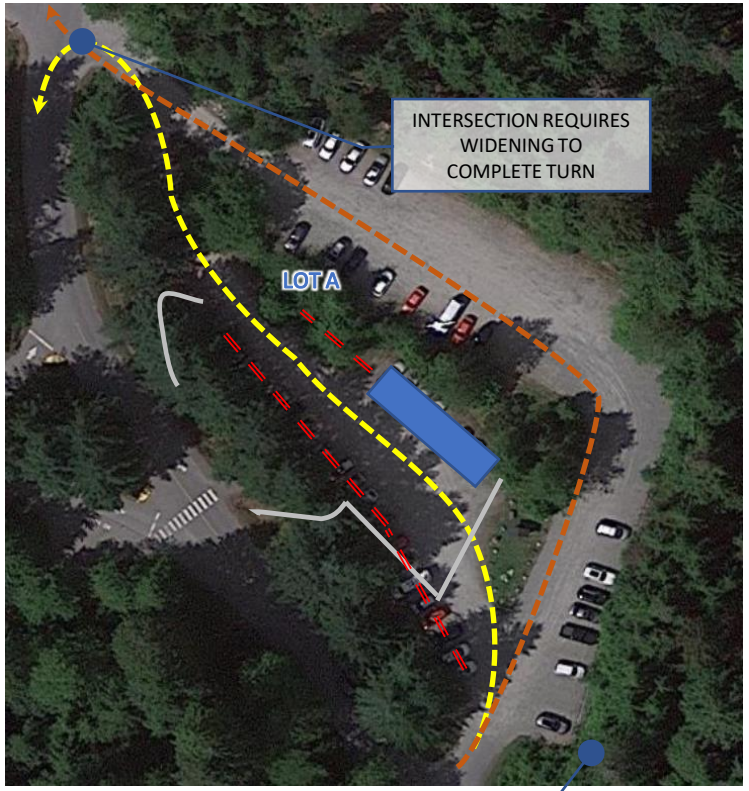
AE PROJECT No.	2021-2344-02
SCALE	1:500
APPROVED	B. JACKSON
DATE	2022MAR29
REV	A
DESCRIPTION	ISSUED FOR INFORMATION

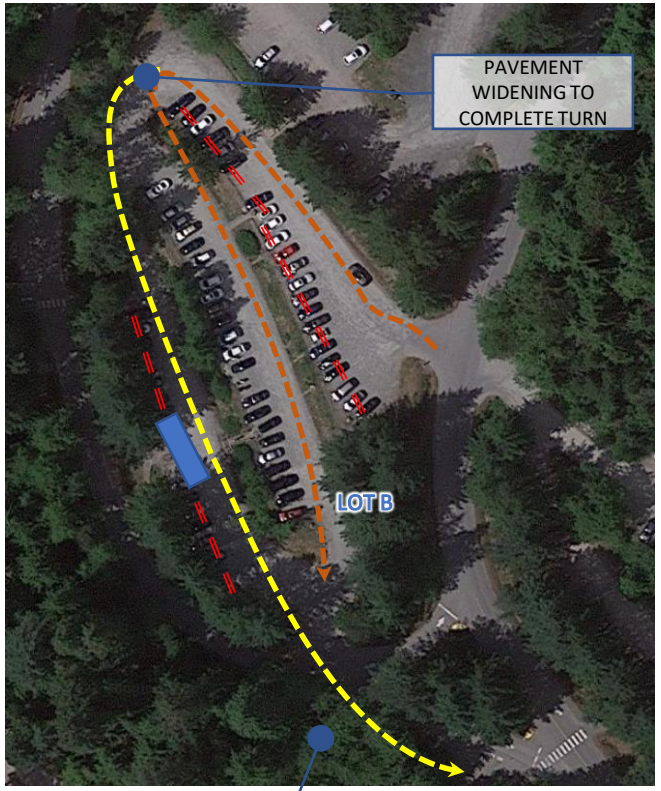
FIGURE 1-7

CITY OF PORT MOODY

CIVIL
PLAN
IMPROVEMENT AREA 4
BEDWELL BAY - TUM TUMAY WHEUTON
MINI ROUNDABOUT OPTION







TRANSIT
PASSENGER VEH
PARKING REMOVED

OPTION 1 – LOT A
BUS STOP ALONG LOWER PARKING AREA OF LOT A
REMOVAL OF PARKING SPACES IN LOWER PARKING AREA TO PROVIDE SPACE FOR TRANSIT STOP
LOT BECOMES ONE-WAY CIRCULATION
PARKING SPACES AVAILABLE IN UPPER SECTION.
SOUTH ACCESS RIGHT IN ONLY
NORTH ACCESS RIGHT OUT ONLY (EXCEPT TRANSIT)

OPTION 2 LOT B
BUS STOP ALONG LOWER PARKING AREA IN LOT B
REMOVAL OF PARKING SPACES ALONG TRANSIT ROUTE TO PROVIDE SPACE FOR TRANSIT OPERATIONS
LOT BECOMES ONE WAY OPERATIONS

Figure 1-8
2022MAR29
City of Port Moody

Improvement Area 5
White Pine Beach
Alternate Transit Routes

APPENDIX C – EVALUATION CRITERIA

Qualitative Criteria	Good	Neutral / Fair	Poor
Traffic Operations, Mobility and Parking Identifies the impacts of each option on roadway mobility and the traffic operations and at intersections.	• Improves traffic operations • Improves roadway mobility.	• It does not impact traffic operations (It does not impact roadway mobility.	• Hinders traffic operations • It negatively impacts roadway mobility.
Road Safety Identifies the affects of each option on road safety in terms of perceived safety, incident potential when compared to the base case.	• Potential to decrease perceived safety concerns, increase separation between transportation modes, and reduce incident potential.	• Not expected to affect perceived safety concerns, transportation mode separation or reduce incident potential.	• Potential to increase perceived safety concerns, separation or increase incident potential.
Parking Compliance Identifies the impacts of each option on parking, including compliance to parking restrictions and provision of parking alternatives.	• Improves compliance to parking by improving parking options and alternatives, or better enforcing existing parking restrictions.	• No change to parking operations, configuration or compliance	• Potential to have impact on parking to encourage parking where not permitted.
Active Transportation - Walking Identifies the impacts of each option on walking accessibility, mobility, and safety.	• Improves active transportation safety and mobility	• No affect on active transportation safety and mobility	• Negatively impacts active transportation safety and mobility
Active Transportation - Cycling Identifies the impacts of each option on cycling accessibility, mobility, and safety	• Improves active transportation safety and mobility	• No affect on active transportation safety and mobility	• Negatively impacts active transportation safety and mobility
Transit Identified the impact of each option on transit accommodation and accessibility.	• Positive affect on transit operations and accessibility for passengers	• No affect on transit operations and accessibility for passengers	• Negative affect on transit operations and accessibility for passengers.
Geometry/ Road Cross-Section Identifies constraints for the project.	• No geometric constraints.	• Minor geometric constraints.	• Significant geometric constraints.
Environmental Considerations Identifies the potential environmental impact of each option.	• The option has no environmental impact.	• The option has some environmental impacts	• The option has significant environmental impacts
Constructability Identifies the potential construction challenges or benefits of each option	• Construction of the option will likely remain within the existing right of way, impact traffic operations (e.g. traffic flow on the highway, access to surrounding land uses, etc.). Minor traffic management is required.	• Construction of the option will likely have minor impacts on traffic operations (e.g. traffic flow on the highway, access to surrounding land uses, etc.). • Minor traffic delays due to construction. • A moderate level of traffic management is required.	• Construction of the option will likely have major impacts on traffic operations (e.g. traffic flow on the highway, access to surrounding land uses, etc.). • Major traffic delays due to construction. • A significant level of traffic management is required.

APPENDIX D – OPINION OF PROBABLE COSTS

Order-of-magnitude opinions of probable costs (OPC) were prepared as supplementary information. Each OPC considered the following:

- Construction costs for each option included estimates for earthworks, pavement structure, pavement, signage and pavement markings, guide signage as needed, barriers, crash attenuators, street lighting, traffic signals and retaining walls.
- Some allowances in the construction OPC were included for rock excavation, utility relocations if known, traffic management during construction and construction contingency.
- 100% contingency which is higher than the 50% contingency typically used for Class D cost estimates due to the high-level conceptual nature of the options and the number of physical constraints in the area requiring further investigation. Construction costs have also been highly variable during this period of inflation related to the Covid-19 pandemic, rising fuel costs and global supply issues at this time.

The following are limitations of the order-of-magnitude OPCs prepared for each option:

- Property costs were not available at the time of this study and property is not expected to be required. Some options may have some impacts to individual properties but these impacts, if any, would be determined during preliminary and detailed design of the project.
- Costs related to geotechnical and environmental assessments have not been included.
- Soil remediation costs and utility relocation costs, if required, have not been included.
- Quantity estimates were based on the terrain model provided by the City.
- No allowance has been made to upgrade utilities, culverts and other infrastructure in the study area that is not affected by the option. Should the existing utilities, culverts and other infrastructure be affected by an option it may need to be upgraded or replaced.
- The long-term effects of the COVID-19 virus and recent global events on construction costs have not been evaluated and have not been included in the OPCs.

Table D-1, Table D-2, Table D-3, and Table D-4 summarize the opinion of probable costs for each option.

Table D-1
Improvement Area 1 OPC Comparison

Improvement Component	Option 1A	Option 1B
Road Widening(MUP/Path) (not including asphalt)	$2,600,000	$2,600,000
Barrier (Concrete/Delineators)	$380,000	$150,000
Mill and Overlay Asphalt*	$1,700,000	$1,700,000
100% Contingency	$4,800,000	$4,600,000
Total	$9,700,000	$9,500,000

Note: *Mill and overlay along entire roadway to accommodate shift in road centreline.*

Table D-4
Improvement Area 2 OPC Comparison

Option	Order of Magnitude OPC
Option 2A – Transit and Pedestrian Improvements	$100,000
Options 2B – Mini Roundabout	$420,000

Table D-3
Improvement Area 3 OPC

Option	Order of Magnitude OPC
Improvements	$70,000
100% Contingency	$70,000
Total	**$140,000**

Table D-4
Improvement Area 4 OPC Comparison

Option	Order of Magnitude OPC
Option 4A – Improved Signage and Lighting	$50,000
Option 4B – Mini Roundabout	$300,000

Bedwell Bay Road Widening - Ioco Rd to Whitepine Beach road

Summary Sheet

		Estimate	
Division	***Title***	***Amount***	***Amount***
01	General Requirements	$ -	
03	Concrete	$ 745,000.00	
31	Earthwork	$ 625,000.00	
32	Roads and Site Improvements	$ 3,450,000.00	
34	Transportation	$ -	
	Contingency (100%)	$ 4,820,000.00	
	Estimate	$ 9,640,000.00	

01	General Requirements					Sub Total	$ -		
Section	*Para*	*Specification Title*	*Unit*	*Neatline Qty*	*Quantity*	*Unit Price*	*Amount*	*Unit Price*	*Amount*
03	**Concrete**					**Sub Total**	$ 745,000.00		
Section	*Para*	*Specification Title*	*Unit*	*Neatline Qty*	*Quantity*	*Unit Price*	*Amount*	*Unit Price*	*Amount*
03 40 01		**Pre-Cast Concrete**							
	1.4.2	**Concrete Block Retaining Wall**	Square Metre	260	290	$ 500.00	$ 145,000.00		
	1.4.4	**Deliniators**	Lineal Metre	4000	4000	$ 150.00	$ 600,000.00		
31	**Earthwork**					**Sub Total**	$ 625,000.00		
Section	*Para*	*Specification Title*	*Unit*	*Neatline Qty*	*Quantity*	*Unit Price*	*Amount*	*Unit Price*	*Amount*
31 24 13		**Roadway Excavation, Embankment and Compaction**							
	1.8.4	**Remove Existing Asphalt or Concrete Pavement,Curbs and Gutters,Sidewalks, Utility Strips, Driveways**	Square Metre				$ -		
	1.8.5	**Common Excavation** - On-Site Re-Use	Cubic Metre	3660	5000	$ 50.00	$ 250,000.00		
	1.8.5	**Common Excavation** - Off-Site Disposal	Cubic Metre	3593	5000	$ 75.00	$ 375,000.00		
32	**Roads and Site Improvements**					**Sub Total**	$ 3,450,000.00		
Section	*Para*	*Specification Title*	*Unit*	*Neatline Qty*	*Quantity*	*Unit Price*	*Amount*	*Unit Price*	*Amount*
32 11 16.1		**Granular Sub-Base**							
	1.4.2	**Granular Sub-Base** Variable Thickness for Roads or Sidewalks	Tonne	5671.68	8000	$ 150.00	$ 1,200,000.00		
32 11 23		**Granular Base**							
	1.4.1	**Granular Base** Variable Thickness for Roads or Sidewalks	Tonne	2840.32	4000	$ 150.00	$ 600,000.00		
32 12 16		**Hot-Mix Asphalt Concrete Paving**							
	1.5.1, 1.5.2	**Asphalt Pavement**	Tonne	8238.72	11000	$ 150.00	$ 1,650,000.00		

Bedwell Bay Road at White Pine Road
Bus Stop Addition

Summary Sheet

		Estimate	
Division	***Title***	***Amount***	***Amount***
01	General Requirements	$ -	
03	Concrete	$ 21,000.00	
31	Earthwork	$ -	
32	Roads and Site Improvements	$ 10,000.00	
34	Transportation	$ 30,000.00	
	Contingency (100%)	$ 31,000.00	
	Estimate	$ 92,000.00	

01	General Requirements				Sub Total	$ -		
Section	***Para***	***Specification Title***	***Unit***	***Quantity***	***Unit Price***	***Amount***	***Unit Price***	***Amount***

03	Concrete				Sub Total	$ 21,000.00		
Section	***Para***	***Specification Title***	***Unit***	***Quantity***	***Unit Price***	***Amount***	***Unit Price***	***Amount***
03 40 01		**Pre-Cast Concrete**						
	1.4.4	**Deliniators**	Lineal Metre	140	$ 150.00	$ 21,000.00		

32	Roads and Site Improvements				Sub Total	$ 10,000.00		
Section	***Para***	***Specification Title***	***Unit***	***Quantity***	***Unit Price***	***Amount***	***Unit Price***	***Amount***
		Paint Markings						
		Paint Markings	LS	1	$ 10,000.00	$ 10,000.00		

34	Transportation				Sub Total	$ 30,000.00		
Section	***Para***	***Specification Title***	***Unit***	***Quantity***	***Unit Price***	***Amount***	***Unit Price***	***Amount***
34 41 13		**Traffic Signals**						
	1.9	**Two Pedestrian Activated Signals**	Lump Sum	1	$ 30,000.00	$ 30,000.00		

metrovancouver
SERVICES AND SOLUTIONS FOR A LIVABLE REGION

To: Regional Parks Committee

From: Mike Redpath, Director, Regional Parks

Date: May 18, 2022 Meeting Date: June 8, 2022

Subject: **Manager's Report – Regional Parks**

RECOMMENDATION

That the Regional Parks Committee receive for information report dated May 18, 2022 titled "Manager's Report – Regional Parks."

EXECUTIVE SUMMARY

The attachment to this report sets out the Regional Parks Committee Work Plan for 2022. The status of work program elements is indicated as pending, in progress, or complete. The listing is updated as needed to include new issues that arise, items requested by the Committee and changes in the schedule.

REGIONAL PARKS BEAR-HUMAN CONFLICT PREVENTION GUIDELINES

Metro Vancouver Regional Parks provide important natural spaces and help connect people with them. These lands provide significant habitat and travel corridors for wildlife, including black bear. The majority of black bears within Regional Parks are concentrated north of the Fraser River. Interactions between people and bears have the potential to create conflict. However, there are recognized strategies to decrease potential conflict while keeping both people and bears safe.

Kanaka Creek Regional Park

Metro Vancouver Regional Parks has the responsibility to protect natural resources within the parks while managing public safety, access and use. Regional Parks has recently developed a new set of *Bear-Human Conflict Prevention Guidelines* to provide direction to staff to best manage for the presence of black bears within the park system.

The new guidelines provide resources for staff regarding its regulatory framework, park planning and development considerations, park management and operations, visitor information and communications, training and the documentation of bear activity. The guidelines introduce new appropriate response levels for staff that encounter bear activity while on duty. Actions are suggested based on assessed level of risk to staff and public (from low risk to high risk).

The intent of the guidelines is to equip staff to minimize the probability of bear-human conflicts while maintaining suitable bear habitat to support natural bear populations and movements.

ALDERGROVE REGIONAL PARK – WESTERN PAINTED TURTLES

Remnants of western painted turtle egg at Aldergrove Regional Park

Western painted turtles (*Chrysemys picta bellii*), named for the bright yellow stripes on their head, neck, tails and legs and the red markings on their plastron (the shell covering the belly), are the only native freshwater turtle in BC.

Metro Vancouver has been a longstanding champion of these turtles, working with the Coastal Painted Turtle Project for many years to introduce hatchlings into several regional parks (e.g. Aldergrove, Campbell Valley, Minnekhada, Burnaby Lake).

Aldergrove Regional Park received its first batch of hatchlings in 2015 when they were released into Marsh Pond. Over five years, 117 juveniles were released. In 2017, basking logs and a sandy beach for spawning were installed.

All the turtles were marked before their release; some have been recaptured over the years to monitor their growth. Males reach sexual maturity from 2 to 9 years old and females from 6 to 16 years.

Last year, researchers monitored the spawning beach with a wildlife camera hoping to see the first eggs being laid. The turtles managed to evade the movement-sensitive camera but when the beach was checked, shells were found from three eggs that successfully hatched.

Coastal populations of western painted turtle are federally endangered and many historically occupied sites no longer support viable populations. Regional parks now provide vital habitat for this species.

In addition to supporting augmentation and habitat restoration efforts, Metro Vancouver Regional Parks has also aided recovery efforts by restricting recreational fishing in waterbodies that support these turtles.

WIDGEON MARSH REGIONAL PARK – WILDLIFE CAMERA STUDIES

Important information can be gained from wildlife camera studies, including documenting the changes in range for species, especially as the climate is changing, and detecting the presence of species that are more difficult to find otherwise, like the wolverine.

They also allow us to take a peek into more intimate moments of animal behaviour, including bear cubs playing, animals feeding or foraging for food.

At Widgeon Marsh Regional Park (not yet open to the public), we are in the second year of a camera study. In 2021, over 1,100 animal visits were seen on wildlife cameras, which ran from May to December. Animals ranging from songbirds, to flying squirrels, deer, coyotes, cougars, and even a wolf were detected.

With these cameras, we can learn when animals are on the move, which areas of the park they spend the most time in and during which parts of the year. We hope to gain more data on animal movements and presence that will help us plan for the park to avoid future human-wildlife conflict.

Widgeon Marsh Regional Park (not yet open to public)

Attachment
Regional Parks Committee 2022 Work Plan

52953582

Regional Parks Committee 2022 Work Plan
Report Date: May 18, 2022

Priorities

1st Quarter	Status
Regional Parks Committee Priorities and 2022 Work Plan	Complete
Draft Regional Parks Plan	Complete
Surrey Bend Regional Park - Province of BC Habitat Compensation	Complete
Delta Nature Reserve Phase I Engagement Summary	Complete
Widgeon Marsh Regional Park Development Update	Complete
Iona Island WWTP PDR & Conceptual Design	Complete
Iona Island WWTP PDR - Engagement Results	Complete
Burnaby Lake Regional Park Lease Renewal Update	Complete
Manager's Report (Monthly)	
2nd Quarter	
Iona Island WWTP Land Exchange – MoU between MVRD and GVS&DD	Complete
Iona Island WWTP Projects – Authorization of Land Exchange between MVRD and GVS&DD	Complete
Pacific Spirit Regional Park - Wreck Beach – Access and Security	Complete
Draft Nature and Ecosystems Road Map (Climate 2050)	Complete
Regional Parks Annual Report 2021	Complete
Widgeon Marsh Regional Park Development Update	Complete
Burnaby Lake Regional Park Lease Renewal	Pending
Regional Parks Community Relationships Strategy	Pending
Tree Management on Metro Vancouver Lands	Pending
Bedwell Bay Road - Port Moody Transportation Study	Pending
Alternative Transportation Study – Phase 2	Pending
Regional Parks Land Dedication Bylaw	Pending
Manager's Report (Monthly)	
3rd Quarter	
Regional Parks Development Cost Charges Update	Pending
Nature and Ecosystems Road Map (Climate 2050)	Pending
Regional Parks Plan	Pending
Widgeon Marsh Regional Park Development Update	Pending
Regional Parks Committee Tour of Regional Parks	Pending
Review/Renew Park Association Contribution Agreement – Colony Farm Regional Park	Pending
Pacific Parklands Foundation Update	Pending
Pacific Parklands Foundation Agreement	Pending
Regional Parks Building Strategy	Pending
Asset Management Plan	Pending
Cultural Planning and Cooperation Agreement- Tsleil-Waututh Nation Update	Pending
Regional Parks Real-time Parking Availability Pilot	Pending
Manager's Report (Monthly)	
4th Quarter	
Regional Parks Public Programming	Pending
Regional Parks Capital Development Update	Pending
2023-2027 Financial Plan – Regional Parks	Pending

Regional Parks Natural Assets	Pending
Regional Parks Regulation Amending Bylaw	Pending
MVRD Notice of Bylaw Violation Enforcement and Dispute Adjudication Amending Bylaw	Pending
MVRD Ticket Information Utilization Amending Bylaw	Pending
Widgeon Marsh Regional Park Development Update	Pending
Manager's Report (Monthly)	

Status = Pending, In Progress or Completed

METRO VANCOUVER REGIONAL PARKS
Upcoming Events
June 2022

DATE	UPCOMING EVENTS
12 JUN 2022	**Coho Bon Voyage** CRIPPEN REGIONAL PARK
15 JUN 2022	**The Secret Life of Trees** PACIFIC SPIRIT REGIONAL PARK
18 JUN 2022	**Learn to Hike** TYNEHEAD REGIONAL PARK
19 JUN 2022	**Indigenous Plant Walk** CAMPBELL VALLEY REGIONAL PARK
22 JUN 2022	**The Secret Life of Trees** DERBY REACH REGIONAL PARK
23 JUN 2022	**Forest Bathing** PACIFIC SPIRIT REGIONAL PARK

**Note: For more information on Regional Parks Programs & Events, please visit* http://www.metrovancouver.org/events/calendar