

TRAIL CONNECTIVITY ASSESSMENT REPORT

To Cassandra Zerebeski, Executive Director Destination Silver Star	From Magi Scallion, Project Manager McElhanney
Re Destination Silver Star Trail and Transit Connectivity	Date May 31, 2024 (revised October 16th, 2024)

1. Summary

Silver Star is a popular year-round destination for visitors and locals alike. The incredible alpine and cross-country ski opportunities paired with the mountain bike park and other local recreation, like snowmobiling, make a true destination of the area. This volume of visitors and the diversity of recreation types undertaken at Silver Star and in the surrounding area has highlighted numerous opportunities to improve the current, established intra- and inter- trail network connectivity, as well as a desire for increased additional connectivity.

This memo will define connectivity, provide context by defining the various trail user types and areas of interest, describe the existing state and potential future options of connectivity amongst the current trail systems at Silver Star, as well as between the resort and the surrounding communities. This connectivity assessment also serves to support connectivity goals outlined in the 2022 Greater Vernon Trails & Natural Spaces Master Plan. Limitations of this memo are discussed in **Appendix A**.

2. What is Connectivity?

The essence of connectivity, in the context of trails, is an interaction of trails and trail systems that provide users with pathways to move within and between trail systems and locations of interest. Good trail connectivity allows trail users to easily navigate between trail systems and destinations and do so in a manner that is appropriate to their mode of travel and skill level. A well-connected trail system will provide trail users with connections that are logical and utilize safe junctions, while also meeting the anticipated desires of the intended trail users. For example, trail connections from a parking or staging area may be optimized to allow a variety of user types and are designed for maximum efficiency to reach the desired trails, but a connection between two mountain bike trail systems may provide a less efficient, but more fun

trail experience. Good trail connectivity will vary depending on factors such as season of use, mode of travel, use type (single use, multi-use, or mixed-use), and the distance between two connected points.

3. Methodology

Connectivity assessment was conducted solely via desktop review and consisted of three primary elements: collection of publicly available trail data, verification of lines and collection of connectivity desires through engagement, and map review for connectivity. Trail lines were collected from publicly available sources such as Trailforks, AllTrails, and trail maps. A thorough review of all trail lines was completed and compared against anecdotal trail descriptions from local knowledge expressed during the engagement sessions.

Using information and desires gleaned from engagement sessions, and the strong base dataset, the existing connectivity options were compared against the areas of desired connectivity. The areas of connectivity interest are:

- Within Silver Star
- Between Silver Star and Silver Star Provincial Park / Sovereign Lake
- Between Silver Star and Vernon
- Between Silver Star and Armstrong
- Between Silver Star and Coldstream
- Between Silver Star and Lumby

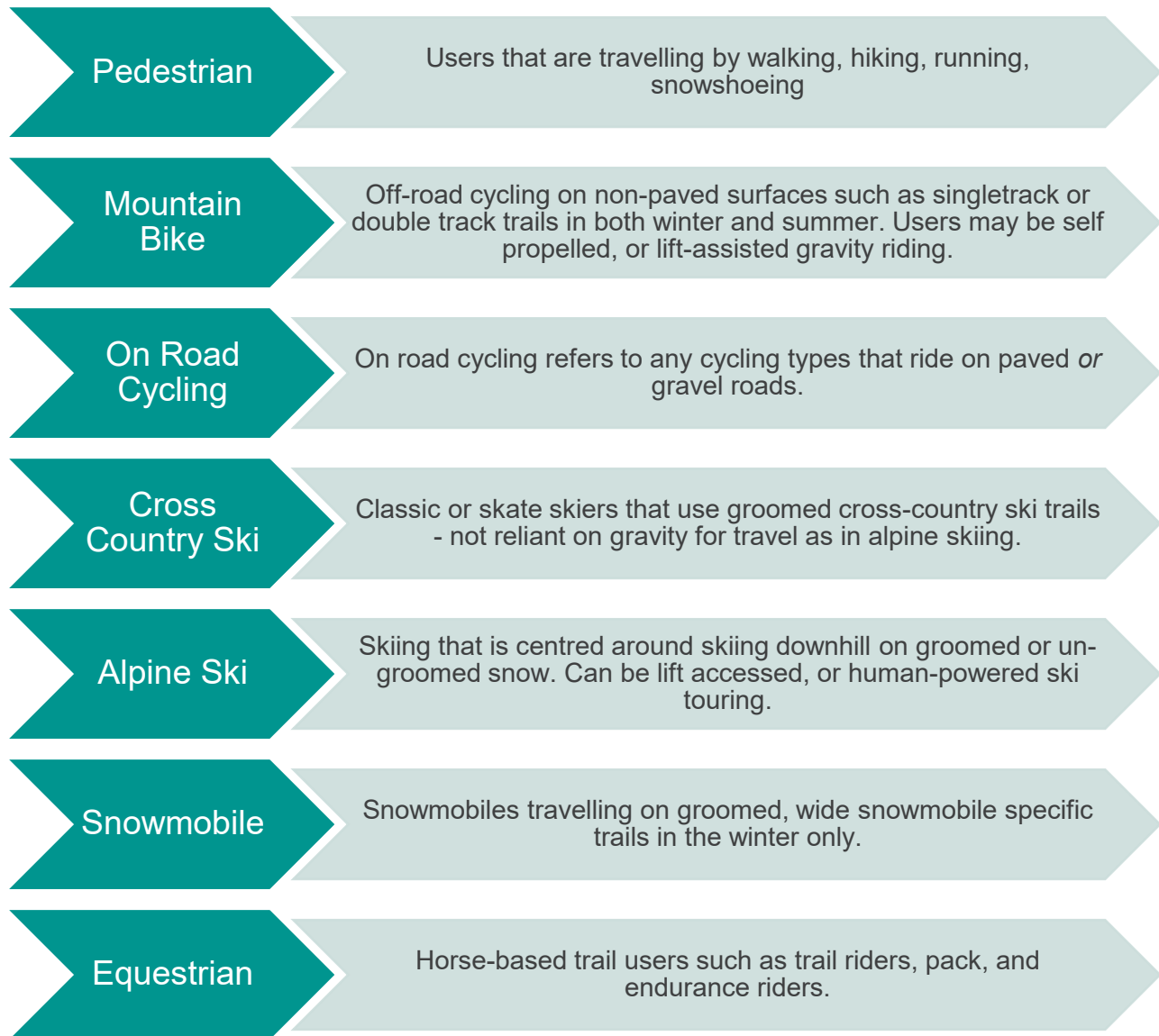
Existing trail and other linear disturbances were inventoried in these areas based on user type and difficulty. Additional factors considered were summer and winter use and the distance between connected points. This exercise aimed to identify existing or potential connections that are appropriate to the intended user groups based on season of use, difficulty level, and distance of travel capabilities. The optimal goal was to have easy or “beginner” level connectivity where trail distances are appropriate.

4. Modalities of Use

This connectivity assessment explored existing and potential connections for numerous modes of travel. Identifying the modalities of use within the scope (Figure 1) of the assessment was an important step in assessing for current and future trail connections. Key exclusions from the trail connectivity scope were vehicular travel on roadways and off-road motorbike use. There is a well-established off road motorbike trail system that exists between Coldstream and Silver Star; however, this use type is not permitted within Silver Star Provincial Park or at Silver Star Resort. Likewise, ATV use has been excluded as it is not permitted at Silver Star Provincial Park.



Figure 1 - Key user modalities identified for connectivity analysis.



5. Areas of Existing Use

A key step in understanding the required trail and user connections amongst the areas of interest described above was identifying the key areas of concentrated use. Silver Star offers trails and recreation opportunities for cross country and alpine skiing, snowshoeing, and biking in the winter, as well as hiking and both lift- and pedal-accessed mountain biking in the summer. Key areas of use and destination locations were identified for both summer and winter (Figures 2 & 3).

Figure 2 - Summer Use

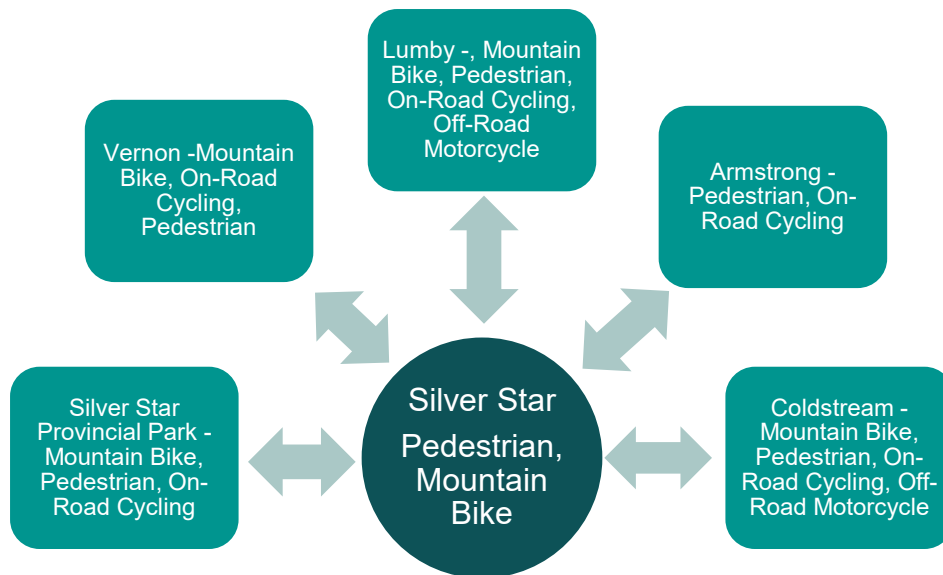
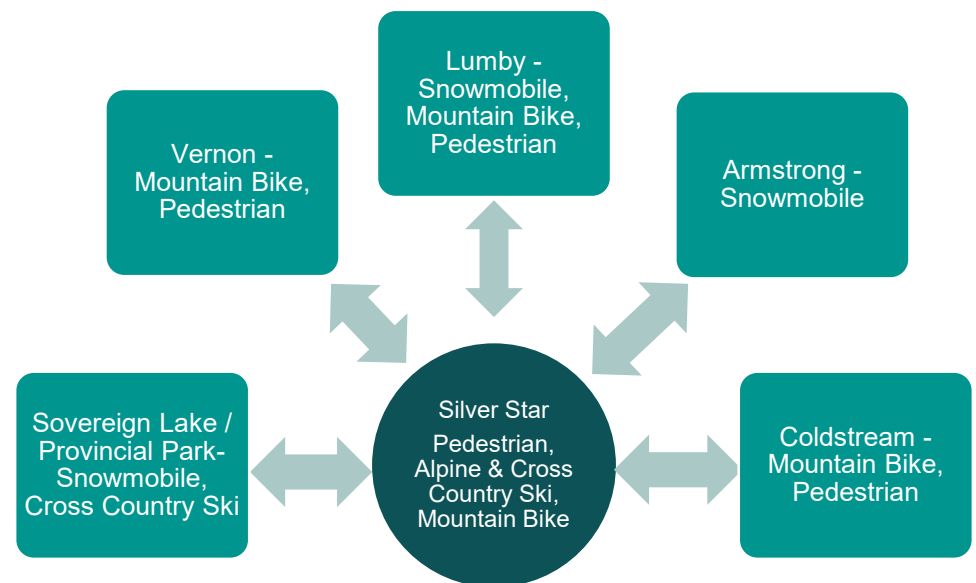


Figure 3 - Winter Use



6. Connectivity Opportunities

Trail connectivity was assessed for current state and potential future connectivity opportunities in all six areas of interest. This section highlights the current connections that exist and the condition of these connectivity features. Additionally, opportunities for improvement or increased connectivity are highlighted and general connectivity links are shown on reference maps that can be found in **Appendix B**.

6.1. WITHIN SILVER STAR

Trail connectivity within Silver Star Mountain Resort (SSMR) is currently well-established but currently has some pain points. The nature of the resort allows alpine ski, mountain bike, and cross-country ski users to easily access the different reaches of the resort from the centrally located village. There are numerous ski ways available for use in the winter, and multiple chair lifts provide alpine and downhill skiing trail access. With the volume of tourism and local recreation, logical, efficient, and user appropriate connectivity within the resort area at Silver Star is a necessity.

Connectivity Element	Modality	Description	Condition or Gaps	Recommendations	Map Reference
Multi-Use Trails (All-Season)	Alpine Ski Cross Country Ski Pedestrian	Numerous ski-ways are established at Silver Star to connect the residential areas to the recreational areas and village centre. These ski ways are a key factor in Silver Star being recognized as a completely ski-in/ski-out resort.	Some of the ski ways have signage, others do not. Mapping is also inconsistent.	Establish signage plan and program for all skiways to ensure consistency in branding and a seamless user experience in both summer and winter. Incorporate signage notifying users where skiways cross private property.	Map 3 (Tin highlighted in Blue)
		Some of the ski ways are established on resort property, while others are easements across private land.	Not all ski ways are groomed in the winter.		
			Many of the ski ways are not maintained in the summer – there is no mowing program or establishment of a year-round trail tread.	Develop “village” map that clearly shows all skiways and connectivity routes in both summer and winter. Provide map in virtual online formats as well as print versions. Maps may also be incorporated	
			There is a desire for more natural/aggregate surface		



		Ski Way #9 (part of Tin Tin) is a particularly heavily used ski way in the winter and is also used heavily in the summer as it is a gravel pathway connecting the knoll residences.	trails throughout the resort to provide better off-road pedestrian and bike connectivity in the summer and to connect the Knoll and Ridge neighbourhoods.	<p>into signage for wayfinding on the trails.</p> <p>Clear brush/grass from routes in summer.</p> <p>Prioritize key ski ways for trail tread establishment, such as adding gravel crush to key connectivity routes.</p>	
<p>Execution: SSMR (operations) or DSS (maps and signage) would lead this initiative with the support of homeowners. Detailed review of all easements required. Mapping is also required; signage to follow mapping with details on locations, sign, and post design. Estimated cost to execute the easement review and signage plan is between \$20,000 and \$30,000.</p>					
User Optimized Trails (Winter)	Pedestrian	Silver Star provides groomed and signed snowshoe trails for visitor use.	<p>Connection and access between local residences and snowshoe trails is overlooked.</p> <p>Snowshoeing is typically incompatible with faster activities, such as skiing.</p>	<p>Integrate signage and potentially grooming along Chakra mountain bike trail in winter for snowshoe access.</p> <p>Where skiways are wide enough for multi use, recommend having a delineated snowshoe corridor on one side.</p>	Map 1 (Yellow Highlight)
<p>Execution: SSMR Would lead this initiative and inform DSS of enhancements for marketing, communications, etc. Detailed review of where skiways can accommodate snowshoe use, where is currently groomed, and where other grooming and signage opportunities may lie. Identification of private land adjacent ski ways or desired snowshoe routes should be completed.</p>					



Multi Use (All-Season)	Pedestrian	Parking lots are used by day visitors to Silver Star who drive their personal vehicles to resort. There are a number of parking lots immediately adjacent to the village area and connected to ski ways. Parking Lot E is the most remote parking area and is connected to the resort by the Criss-Cross ski way or Silver Star Road.	Parking Lot E has limited pedestrian connectivity and visitors that do not use Criss-Cross Ski way must walk a distance along Silver Star Road, where there is no shoulder or sidewalk.	Provide pedestrian access via a pedestrian corridor (crushed gravel or asphalt), from parking lot E to the village that is maintained year-round and protected from traffic via bollards or barricade. This may provide safer solutions for connecting lots B and C. (See also campground connection recommendations in 6.2 and 6.4)	Map 1
Execution: SSMR will lead this initiative. There may be additional permissions required from BC Parks and Ministry of Transportation and Infrastructure.					
User Optimized Trails	Mountain Bike	In the summer, mountain bike trails are well-connected throughout the resort using a combination of mountain bike optimized and multi-use trails. In the winter, the fatbike trail network is easily accessed via ski ways from the Knoll area. Fat biking is compatible with faster activities such as skiing on hard-packed groomed trails.	The knoll mountain bike network is a bit isolated, requiring multi-use trails connect. The fatbike network is multi-use on many trails and it is unclear if this is clearly signed. Based on map review, there is opportunity for improvements of the trail system at the top of the	Develop a mountain bike optimized trail from the bottom of the Comet Express to the upper reaches of the knoll network. Improve junction arrangement at the mountain top to provide clearer direction to users for easier navigation and less stopping once on trail.	Map 2



			gondola to better disperse mountain bike and hike users.	Review/improve signage for fatbike trail network, indicating multi-use, if necessary.	
Execution: SSMR will lead this initiative, incorporating this development into any planned MTB trail development. Trail junction improvements and trail development to connect the Knoll network to the Comet Express will involve ~4km (+/- 50%) of trail development. At a 2024 unit rate of \$50/m, this may cost between \$100,000-200,000.					
User Optimized Trails (Other)	Snowmobile Equestrian	There are no user optimized trails for these modalities at Silver Star.	N/A	No desire for these trails has been raised.	N/A
Execution: N/A.					

6.2. BETWEEN SILVER STAR AND SILVER STAR PROVINCIAL PARK / SOVEREIGN LAKE

Silver Star and the surrounding Silver Star Provincial Park, as well as Sovereign Lake are all in immediate proximity to one another and are primed for excellent connectivity. There are multiple trail users that recreate in the area, as shown in Figures 1 & 2. Currently there are a few connections along the western edge of the resort boundary, limited to cross-country ski trail connections that are used in the snow-free season for mountain bike trail connections. Due to stipulations laid out in the Parks Use Permit, Sovereign Lake Nordic Club (SLNC) is not able to build new trails on park land, which limits the potential for increased connectivity. Despite these limitations, there are numerous existing opportunities for trail-based connectivity between the two recreation destinations. A primary concern with connectivity between the resort and the provincial park is limited the number of access points at the provincial park boundary. The shape of the park boundary is conducive to minimizing unnecessary access points around the periphery while still providing access from multiple directions.



Connectivity Element	Modality	Description	Condition or Gaps	Recommendations	Map Reference
Optimized Use (Winter)	Cross-Country Ski	<p>Currently there are three connections between the Silver Star and Sovereign Lake cross country ski networks – Gold Mountain, Aberdeen and Comin' Round Connector. The latter two interfaces are challenging trails due to the distance, elevation change, and grade faced when travelling them. Accessing these trails via Silver Star requires traversing alpine ski trails.</p> <p>Gold Mountain Ski trail is the shortest connector with the least amount of elevation gain between Sovereign Lake and Silver Star; however, it requires crossing the Silver Star Road, navigating the waste transfer station and has multiple steep sections. The trail entrance is adjacent to a snowmobile trail with inadequate signage that makes navigating difficult.</p>	<p>Aberdeen and Comin' Round the Mountain are long and strenuous trails that are challenging for recreational skiers.</p> <p>Gold Mountain Trail is technically difficult and requires users to remove their skis to cross parking and roadway areas.</p> <p>There are no truly “easy” or “gentle” ways to ski from Sovereign Lake to Silver Star. More people might ski back/forth if there were a direct, easy way.</p>	Provide an easy level connection between Sovereign Lake and Silver Star cross country ski trails through new construction or refurbishment of existing trails. Re-working of Gold Mountain could accomplish this end – decrease grades, establish better crossing location at Silver Star Road, and improve signage at the start.	Map 4
<p>Execution: SSMR, DSS, and SLNC will need to work cooperatively on this recommendation with BC Parks. Any interface with the snowmobile trails will also require notification being shared with the snowmobile club. Detailed design should be carried out to ensure the revised trail meets trail user and management objectives. Safe junction and road crossing design must be incorporated.</p>					



Optimized Use (Summer)	Mountain Bike Pedestrian	<p>Mountain bike trails at Sovereign Lake are concentrated in the eastern portion of Silver Star Provincial Park. The Silver Star and Sovereign Lake mountain bike networks currently connect via the Rubber Boot and Aberdeen trails. There is not extensive connection as the trails at Silver Star require paid passes, while the trails outside of the resort area do not.</p> <p>Gold Mountain (cross country ski trail) is often used as a connector between Sovereign Lake and Silver Star. Popal Pass (snowmobile trail) may also be suitable, pending ground conditions.</p> <p>There is a campground currently being developed between SLNC and SSMR.</p>	<p>The existing trail connections between Silver Star and Sovereign Lake are challenging – either due to distance and elevation or due to technical challenge.</p> <p>Campground and connection to the campground location does not yet exist.</p>	<p>A project to upgrade Gold Mountain for winter use could be expanded to establish a proper mountain bike alignment within the same corridor. Connecting the future campground may be facilitated by a multi use pathway connecting to the Upper BX Creek trail along Silver Star Road (to the south), or by encouraging use of Gold Mountain Connector.</p> <p>Utilize the provincial destination development campground project as a driver to upgrade Gold Mountain or create the new route to the south, and also provide for important connectivity between Sovereign Lake and Silver Star.</p>	Map 4
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				(See also recommendation re: Parking Lot connectivity in 6.1 and BX creek in 6.4)	
<p>Execution: SSMR, DSS, and SLNC will need to work cooperatively on this recommendation with BC Parks and RDNO. Any interface with the snowmobile trails will also require notification being shared with the snowmobile club. Detailed design should be carried out to ensure the revised trail meets trail user and management objectives for both summer and winter use. Safe junction and road crossing design must be incorporated. Active transportation funding may be accessible for this upgrade by prioritizing connectivity between the campground, Sovereign Lake, and Silver Star.</p>					
Optimized Use (Summer)	Equestrian	Equestrian use is desired in the project area, but the desire is mostly focused at Silver Star Provincial Park. There is no public equestrian use currently provided at Silver Star resort; Equestrian connectivity is not necessary.	<p>Limited equestrian use currently.</p> <p>Hooved animals can make deep divots on trail surfaces, resulting in damage or uneven surfaces that are difficult to groom in low snow conditions.</p> <p>Horses and mountain bikes are incompatible users types.</p>	Equestrian use may be suitable only in dry conditions and on suitable trails, where tread damage will be minimized. New equestrian use should be limited to trails that are not used for mountain biking, or that do not intersect mountain biking trails. Use can be constrained to Sovereign Lake, as connectivity to other areas not required or prioritized at this time.	N/A
<p>Execution: SLNC and BC Parks will be responsible for this initiative in conjunction with the local equestrian organization, likely the Vernon District Riding Club or the Backcountry Horsemen of BC. The existing wide, smooth trails are an opportunity for this development, but consultation with the users of trails at Sovereign Lake may be required.</p>					



Optimized Use (Winter)	Snowmobile	Snowmobile use is not permitted at Silver Star Resort and therefore snowmobile connectivity with the resort has not been indicated as a priority.	N/A	No desire for additional trails or connectivity has been indicated.	N/A
Execution: N/A					
Optimized Use (Winter)	Alpine Ski	There is currently no alpine skiing in Silver Star Provincial Park.	N/A	No desire for additional trails or connectivity has been indicated.	N/A
Execution: N/A					

6.3. CONNECTION POINTS TO SILVER STAR PROVINCIAL PARK

Silver Star Provincial Park exists to conserve the environment and provide for recreation, as with many parks in the BC Parks system. Due to the remote and vast nature of the park, connectivity into the park must be carefully designed to ensure that unmanaged or unauthorized uses do not impact the goals and objectives of the park. As such, intentionally designing access points to the park, as well as trails that are close to the boundaries, is important. Entrance to points to the park should be minimized, have appropriate signage, and should be easy to monitor. See the **Overview Map** in **Appendix B**.

6.4. BETWEEN SILVER STAR PROVINCIAL PARK AND VERNON

Currently, the only formal connection between Silver Star and Vernon is Silver Star Road. While roadways are outside the scope of this connectivity assessment, it is important to mention because it was noted during the engagement sessions that the road is commonly travelled by road cyclists. By extension, it can be inferred that there is likely additional mountain bike and gravel bike traffic. Any potential future connections from Silver Star to Vernon could serve to support uphill traffic via transit and provide a downhill route from the resort back to Vernon.



Connectivity Element	Modality	Description	Condition or Gaps	Recommendations	Map Reference
Mixed-Use (All-Season)	On-Road Cycling	Silver Star Road from Vernon to Silver Star is used for on-road cycling connectivity between Vernon and the resort. While not often used as a commuting route to the resort due to the significant elevation gain it is likely used as return to Vernon. It is also frequently used by enthusiasts looking for a challenging fitness ride on the roads.	There is no shoulder on most of the road: the road is not suitable for all users, or a high volume of users.	Due to the elevation gain between Vernon and Silver Star it is not anticipated that a connecting trail between Vernon and Silver Star will be heavily used as a commuter route. Additional paved sidewalks or shoulder-widening projects on the road will enhance safety and connectivity.	N/A
Execution: N/A					
Multi-use (Summer)	Pedestrian Mountain Bike	A multi use paved pathway has been constructed between Pleasant Valley Road and BX Creek Falls trail and a new multi-use trail along upper BX Creek has been constructed between	Official trail connection does not exist between these areas and is unlikely due to a high volume of private land. Condition of existing resource road	This route could provide two-way pedestrian connectivity between the Grey Canal trails and Silver Star via Silver Star Foothills and Vernon. The RDNO has purchased property in this area and could facilitate enhanced connection. Explore opportunities to continue the	Maps 5 & 6



		<p>Forsberg Road and Sovereign Lake Road.</p> <p>There are also numerous existing resource roads that could be used for connecting Silver Star and the Silver Star foothills neighbourhood via gravel roads.</p> <p>A new campground is being constructed at Silver Star Mountain Resort through DSS destination development funding near Sovereign Lake Road. (See Section 6.1 and 6.2)</p>	<p>alignments are unknown.</p> <p>Terrain is steep adjacent to Silver Star Road between Upper BX Creek trail and the future campground location.</p>	<p>multi-use paved pathway to Forsberg Road. Connecting the future campground may be facilitated by a multi use pathway connecting to the Upper BX Creek trail along Silver Star Road (to the south), or by upgrading and encouraging use of Gold Mountain Connector (see Section 6.2)</p> <p>Existing linear disturbances (primarily Forest Service Roads) could be utilized to provide a continuous route along resource roads from Silver Star Foothills to Silver Star. Mountain bike trails through the Sovereign Lake network could be utilized to facilitate this connection.</p> <p>Ensure entrance points to Silver Star Provincial Park are concentrated in one or two locations. One location could be where the</p>	
<p>Execution: BC Parks, RSTBC and RDNO should collaborate to facilitate this connection and enhance areas where necessary. Once the route is established, connectivity can be promoted through the <i>BC Trails Capital</i> online map initiative. The new Upper BX creek trail should be assessed</p>					



to determine if two-way multi-use traffic can be accommodated between Sovereign Lake Road and Forsberg Road. If Upper BX Creek trail is deemed unsuitable for uphill multi-use travel, a conceptual alignment with appropriate grades for uphill travel, has been included in Maps 5 & 6 that utilizes existing portions of Upper BX Creek and a single existing entrance point to Silver Star Provincial Park.

Options to connect the campground to the Upper BX Creek trail include improvement to and promoting use of the Gold Mountain Connector from Upper BX Creek at Sovereign Lake Road to Silver Star Road and constructing a connection from the transfer station to the campground, or construction of a multi-use pathway connecting the campground and Upper BX Creek trail. This will require a new connection from the junction of SLNC road and Silver Star Road to the existing Gold Mountain Trail and upgrades to the Gold Mountain Trail.

Construction of a 500m long, 3.0m wide multi-use trail between the campground and the road crossing of Gold Mountain may cost between \$80,000 (crushed gravel) and \$400,000 (paved). Construction of a similar trail, spanning 800m between Upper BX Creek and the campground may cost between \$130,000 (crushed gravel) and \$700,000 (paved). This option will likely be challenging to build with limited terrain adjacent to Silver Star Road to the South. Active transportation funding may be available to support this opportunity in conjunction with campground development at SSMR. (Estimated 2025 rates of \$160/m for crushed gravel and \$750/m for paved surface were used).

Multi-use (Winter)	Cross Country Ski Alpine Ski	There are no known connections between Vernon and Silver Star	N/A	This has not arisen as a desired connection modality.	N/A
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Execution: N/A

User Optimized (Summer)	Equestrian	There are no known connections between Vernon and Silver Star	N/A	This has not arisen as a desired connection modality. If a connection is sought, it should be separate from cycling uses.	N/A
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Execution: N/A



Optimized Use (Winter)	Snowmobile	There is no known connection between Vernon and Silver Star. Snowmobile users currently drive to a staging area within Silver Star Provincial Park.	N/A	This has not arisen as a desired connection modality.	N/A
Execution: N/A					
All Use Types, All Seasons	All Users	There is no online map clearly showing trail connections for all modalities	Paper maps are dated.	Develop an online map resource showing all trails in the Greater Vernon Area.	N/A
Execution: RDNO with the support of DSS and Tourism Vernon. Promote trail connectivity through the <i>BC Trails Capital</i> online map initiative that is currently underway					

6.5. BETWEEN SILVER STAR PROVINCIAL PARK AND COLDSTREAM

Coldstream is a prime candidate for trail connectivity from Silver Star. There is a high density of current resource roads and trails in the project area exist along the direct path between Silver Star and Coldstream, as well as proposed trails in the Vernon Hills area, and existing mountain bike trails in the Ranchlands (Cypress) network. These routes would primarily serve mountain bike and off-road motorcycle users in the summer and could support snowmobile connections to the snowmobile network in the winter.

Connectivity Element	Modality	Description	Condition or Gaps	Recommendations	Map Reference
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Multi-Use (Summer)	Mountain Bike Pedestrian	Using the new Upper BX Creek proposed trails, portions of the new paved multiuse trail, and a combination of existing trails and/or roads, Silver Star could then connect to the Ranchlands (Cypress) mountain bike network.	Steep and difficult trail that isn't suitable for all users Uphill pedestrian traffic would be a concern if downhill mountain bike use is adopted.	Explore opportunities to make agreements with private landowners along this route. Explore opportunities for connection from Upper BX Creek trail to Ranchlands (Cypress) mountain bike network.	Map 7
Execution: This connectivity opportunity could be explored with collaboration between the RDNO, District of Coldstream, NOCS, and private landowners along the route.					
Multi-Use (Summer)	Mountain Bike On Road Cycling Equestrian	Potential connection between Coldstream and Silver Star via existing resource road alignments	Existing linear disturbances such as deactivated resource roads can provide connectivity.	Existing linear disturbances could be utilized to provide a continuous route along resource roads to Silver Star. Ensure entrance points to Silver Star Provincial Park are concentrated in one or two locations. Try to minimize interaction of equestrian users and wheeled users.	Map 6



Execution: Collaboration between Vernon Snowmobile Association, BC Parks, and RSTBC, SLNC, DSS, and SSMR to assess route options and if existing linear disturbances (Cut lines, resource roads, etc) are passable for the above modalities. Private land and residences exist between Coldstream and Silverstar Provincial Park that must be considered.

Multi Use (Winter)	Alpine Ski Cross Country Ski	There are no known connections between Coldstream and Silver Star.	N/A	This has not arisen as a desired connection modality.	N/A
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Execution: N/A

Optimized Use	Snowmobile	There are no known connections between Coldstream and Silver Star	N/A	This would be possible on existing resource roads, if desired.	N/A
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Execution: N/A

Optimized Use	Off-Road Motorbike	There are no known connections between Coldstream and Silver Star	N/A	This would be possible on existing resource roads, if desired.	N/A
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Execution: N/A

All Use Types, All Seasons	All Users	There is no online map clearly showing trail connections for all modalities	Paper maps are dated.	Develop an online map resource showing all trails in the Greater Vernon Area.	N/A
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Execution: RDNO with the support of DSS and Tourism Vernon. Promote trail connectivity through the *BC Trails Capital* online map initiative that is currently underway



6.6. BETWEEN SILVER STAR PROVINCIAL PARK AND ARMSTRONG

There is currently no official connection between Silver Star and Armstrong. Connectivity via snowmobile is likely possible in the current state. At the far north end of the snowmobile network is the “Armstrong Cabin” which is accessible via resource roads that are accessible from Armstrong and Enderby. The snowmobile network is then well connected from there, throughout the network, and to parking at Sovereign Lake.

There is potential here for mountain bike, off-road motorcycle access, or potentially equestrian in the summer currently, depending on the state of snowmobile trails in the snow-free season. If access is not currently available, this could be a potential trail-based connection to be explored in the future.

Connectivity Element	Modality	Description	Feature Condition	Recommendations	Map Reference
Multi-Use (Summer)	Mountain Bike On Road Cycling Equestrian Pedestrian	Numerous existing resource roads and snowmobile trail alignments provide connection opportunities between Armstrong and Silver Star.	Well-established existing network of snowmobile trails.	Assess snow-free trail surfaces and establish a continuous route if surfaces are appropriate for mountain bike and/or equestrian use. Ensure entrance points to Silver Star Provincial Park are concentrated in one or two locations. Try to minimize interaction of equestrian users and wheeled users.	Map 6
Execution: Collaboration between Vernon Snowmobile Association, BC Parks, and RSTBC, SLNC, SSMR, and DSS to assess route options and if existing linear disturbances (Cut lines, resource roads, etc) are passable for the above modalities.					
Optimized Use (Winter)	Snowmobile	There are existing routes to snowmobile between Armstrong and Silver Star,	Snow coverage and resource road usage in	Establish a route and access point for snowmobile users to access the	Map 6



		or even all the way to Lumby, via existing resource roads and snowmobile trail alignments.	the winter could affect travel.	network from Armstrong. Once established, promote connectivity. Ensure entrance points to Silver Star Provincial Park are concentrated in one or two locations.	
Execution: Vernon Snowmobile Association, BC Parks, and RSTBC will be the main groups responsible for this initiative. Consultation or notification should be undertaken with the Sovereign Lake Nordic Club.					
Multi Use (Winter)	Alpine Ski Cross Country Ski	There are no known connections between Armstrong and Silver Star.	N/A	This has not arisen as a desired connection modality.	N/A
Execution: N/A					
All Use Types, All Seasons	All Users	There is no online map clearly showing trail connections for all modalities	Paper maps are dated.	Develop an online map resource showing all trails in the Greater Vernon Area.	N/A
Execution: RDNO with the support of DSS and Tourism Vernon. Promote trail connectivity through the <i>BC Trails Capital</i> online map initiative that is currently underway					



6.7. BETWEEN SILVER STAR PROVINCIAL PARK AND LUMBY

There is currently no official connection between Silver Star and Lumby. Desire has been expressed in the past for connection between the two locations, potentially utilizing Trinity Valley Road. Similar to the land between Silver Star and Coldstream, here is an expansive network of resource roads in the immediate vicinity of Lumby that could connect Silver Star to Lumby via gravel roads. These routes would primarily serve mountain bike and off-road motorcycle users in the summer, with the possibility of equestrian use, and could support snowmobile connections to the snowmobile network in the winter.

Connectivity Element	Modality	Description	Feature Condition	Recommendations	Map Reference
Multi-Use (Summer)	Mountain Bike Equestrian Pedestrian On Road Cycling	There is good potential for connection between Silver Star Provincial Park and Lumby on existing resource roads and linear disturbances.	Condition of road and linear disturbance has not been assessed.	<p>Existing linear disturbances could be utilized to provide a continuous route through Trinity Valley and along resource roads to Silver Star. Controlling vehicular access to resort tenure will be a critical element if this connection is promoted.</p> <p>Ensure entrance points to Silver Star Provincial Park are concentrated in one or two locations.</p> <p>Try to minimize interaction of equestrian users and wheeled users through intentional trail design.</p>	Map 6
Execution: Collaboration between the Village of Lumby, SSMR, DSS, RSTBC, and BC Parks should be carried out to explore the potential of this opportunity. Existing private land and the use of resource roads should be taken into consideration.					



Optimized Use (Winter)	Snowmobile	Existing linear disturbances and resource roads can be used to connect Silver Star Provincial Park to Lumby (including the extended network to Armstrong.	Condition and snow coverage on existing routes unknown.	Establish a route and access point for snowmobile users to access the network from Armstrong. Once established, promote connectivity between Armstrong, Silverstar Provincial Park, and Lumby Ensure entrance points to Silver Star Provincial Park are concentrated in one or two locations.	N/A
Execution: Vernon Snowmobile Association, BC Parks, and RSTBC will be the main groups responsible for this initiative. Consultation or notification should be undertaken with the Sovereign Lake Nordic Club. Permission to utilize resource roads and to cross SSMR may be required.					
Multi Use (Winter)	Alpine Ski Cross Country Ski	There are no known connections between Lumby and Silver Star.	N/A	This has not arisen as a desired connection modality.	N/A
Execution: N/A					
Optimized Use	Off-Road Motorbike	There are no known connections between Lumby and Silver Star	N/A	This would be possible on existing resource roads, if desired.	N/A
Execution: N/A					



All Use Types, All Seasons	All Users	There is no online map clearly showing trail connections for all modalities	Paper maps are dated.	Develop an online map resource showing all trails in the Greater Vernon Area.	N/A
Execution: RDNO with the support of DSS and Tourism Vernon. Promote trail connectivity through the <i>BC Trails Capital</i> online map initiative that is currently underway					

6.8. SUMMARY

Amongst the six main areas of interest, trail-based connectivity is generally established with minor adjustments or improvements to accommodate a variety of user types. Where trail connectivity does not currently exist, such as between Silver Star and the communities of Lumby and Armstrong, there are potential opportunities for trail connectivity that can be explored. Below is a summary of the three top priority trail connectivity recommendations made above.

Priority		Modality	Description
1	Ski Way Signage and Mapping	Pedestrian Cross Country Ski Alpine Ski Mountain Bike	The existing network of ski ways throughout the resort is an excellent connectivity feature that is already available to users and residents at the resort, however use is limited by confusion and unclear mapping. Providing a clear map and clear, consistent signage throughout the ski way system will improve the navigation experience for users. Surface standardization and maintenance for snow-free use such as using aggregate surface or mowing grass should be prioritized as well. Additional signage indicating where ski ways cross private land and property easements will improve peace of mind for property owners at the resort.



2	Gold Mountain Improvement	Cross Country Ski Mountain Bike	Improving the alignment on Gold Mountain trail to connect SLNC and SSMR is an easy win that will benefit users year-round. Re-routing the trail to eliminate unnecessarily steep sections and to avoid the transfer station will benefit cross country ski and mountain bike users connecting Sovereign Lake/Silver Star Provincial Park and Silver Star. Adding a short section of summer trail to connect from the SLNC Road, BX Creek and Silver Star Road junction to Gold Mountain is also desirable. Doing so will improve the experience for users of all abilities, with the potential to make the connection more fun. As noted in Sections 6.1, 6.2 and 6.4, connection to the new campground will also be improved.
3	Create Map Highlighting Connectivity Routes	All	There is a substantial amount of existing trail and resource road infrastructure that exists between Silver Star and the four surrounding communities of interest. Through map work, connectivity routes can be established along existing infrastructure and communicated to the public to highlight the options available. Specifically, not only the existing trail segments should be highlighted, but also routes to connect communities. Descriptions on trail experience and modalities should be clearly stated. This recommendation is being addressed as an outcome with the <i>BC Trails Capital</i> online map initiative that is currently underway.
4	Epic Loop Options	On Road Cycling Mountain Bike Pedestrian Equestrian Snowmobile	<p>Create “epic” ride loops or traverse options for mountain bike, gravel bike, and hike users to connect Coldstream, Lumby, and Armstrong with Silver Star and each other. Promoting these long route options, with the potential for camping/accommodation in each location will appeal to endurance users and demonstrate excellent connectivity.</p> <p>Snowmobile opportunities already exist and could be promoted seasonally. However, due to the fact that snowmobiles are typically trucked to a trailhead, a</p>



			<p>loop route may be preferable as most riders will want to return to their own vehicle at the end of the day. Food and fuel enroute will be important.</p> <p>Equestrian use may also be promoted in the summer, if the trail tread and user experience are suitable. Similar to snowmobile users, a looped route may be preferable.</p>
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CLOSING

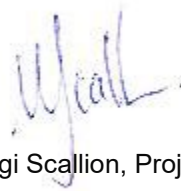
Sincerely,
McElhanney

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APPENDIX A

Statement of Limitations

Statement of Limitations

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Information from Client and Third Parties. McElhanney has relied in good faith on information provided by the Client and third parties noted in this report and has assumed such information to be accurate, complete, reliable, non-fringing, and fit for the intended purpose without independent verification. McElhanney accepts no responsibility for any deficiency, misstatements or inaccuracy contained in this report as a result of omissions or errors in information provided by third parties or for omissions, misstatements or fraudulent acts of persons interviewed.

Effect of Changes. All evaluations and conclusions stated in this report are based on facts, observations, site-specific details, legislation and regulations as they existed at the time of the site assessment/report preparation. Some conditions are subject to change over time and the Client recognizes that the passage of time, natural occurrences, and direct or indirect human intervention at or near the site may substantially alter such evaluations and conclusions. Construction activities can significantly alter soil, rock and other geologic conditions on the site. McElhanney should be requested to re-evaluate the conclusions of this report and to provide amendments as required prior to any reliance upon the information presented herein upon any of the following events: a) any changes (or possible changes) as to the site, purpose, or development plans upon which this report was based, or b) new information is discovered in the future

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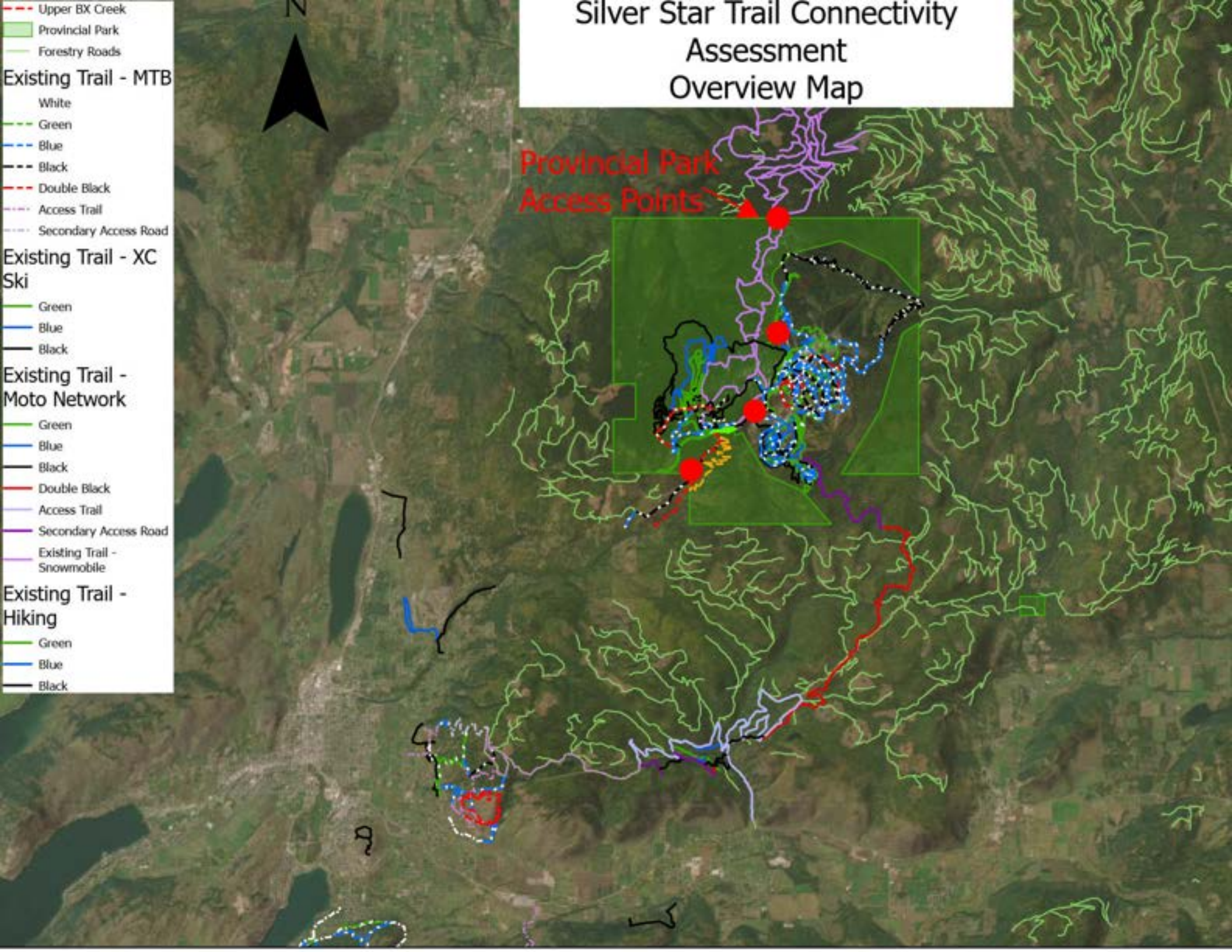
APPENDIX B

MAPS

Silver Star Trail Connectivity Assessment Overview Map

- Upper BX Creek
- Provincial Park
- Forestry Roads
- Existing Trail - MTB
 - White
 - Green
 - Blue
 - Black
 - Double Black
 - Access Trail
 - Secondary Access Road
- Existing Trail - XC Ski
 - Green
 - Blue
 - Black
- Existing Trail - Moto Network
 - Green
 - Blue
 - Black
 - Double Black
 - Access Trail
 - Secondary Access Road
 - Existing Trail - Snowmobile
- Existing Trail - Hiking
 - Green
 - Blue
 - Black

Provincial Park
Access Points



Silver Star Trail Connectivity Assessment Map #1



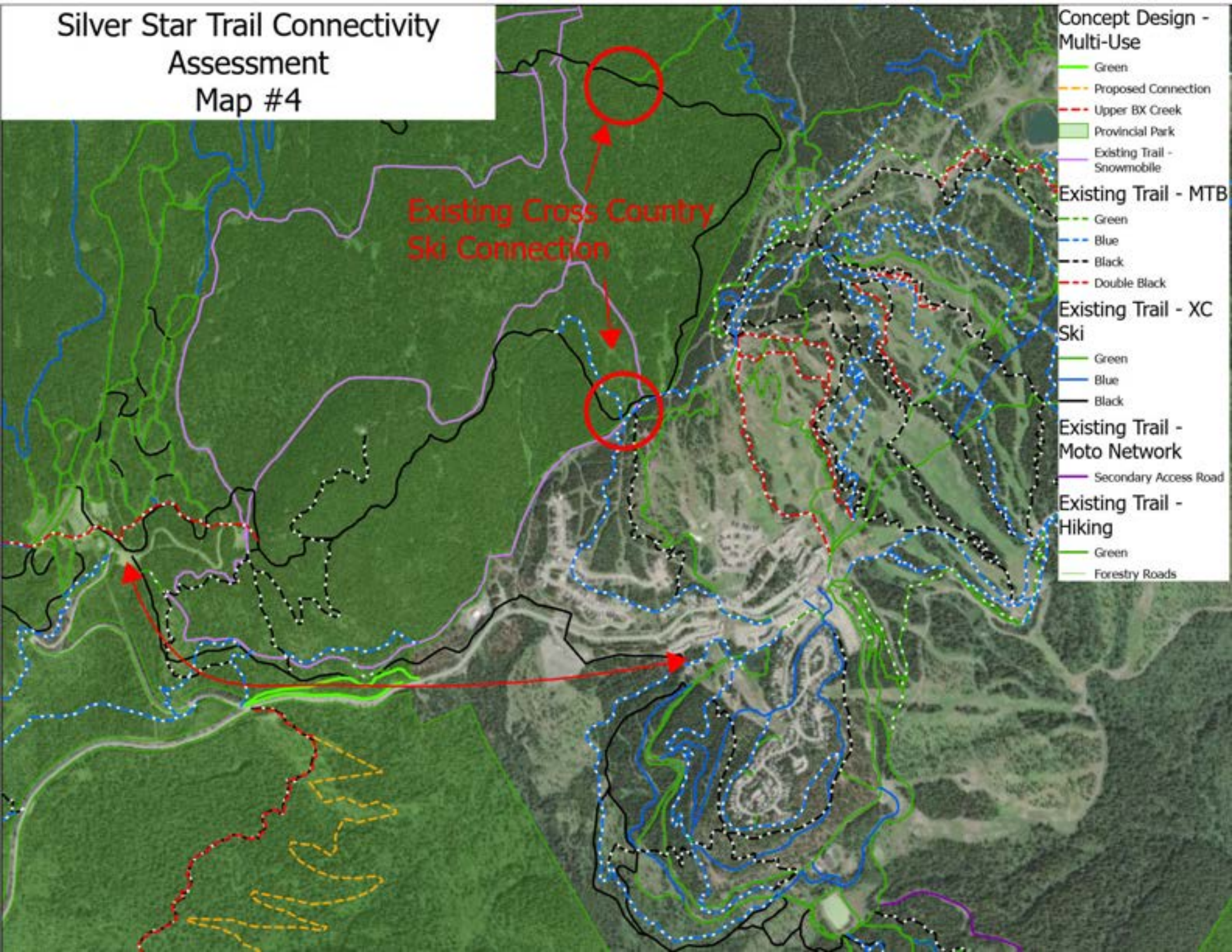
Silver Star Trail Connectivity Assessment Map #2



Silver Star Trail Connectivity Assessment Map #3

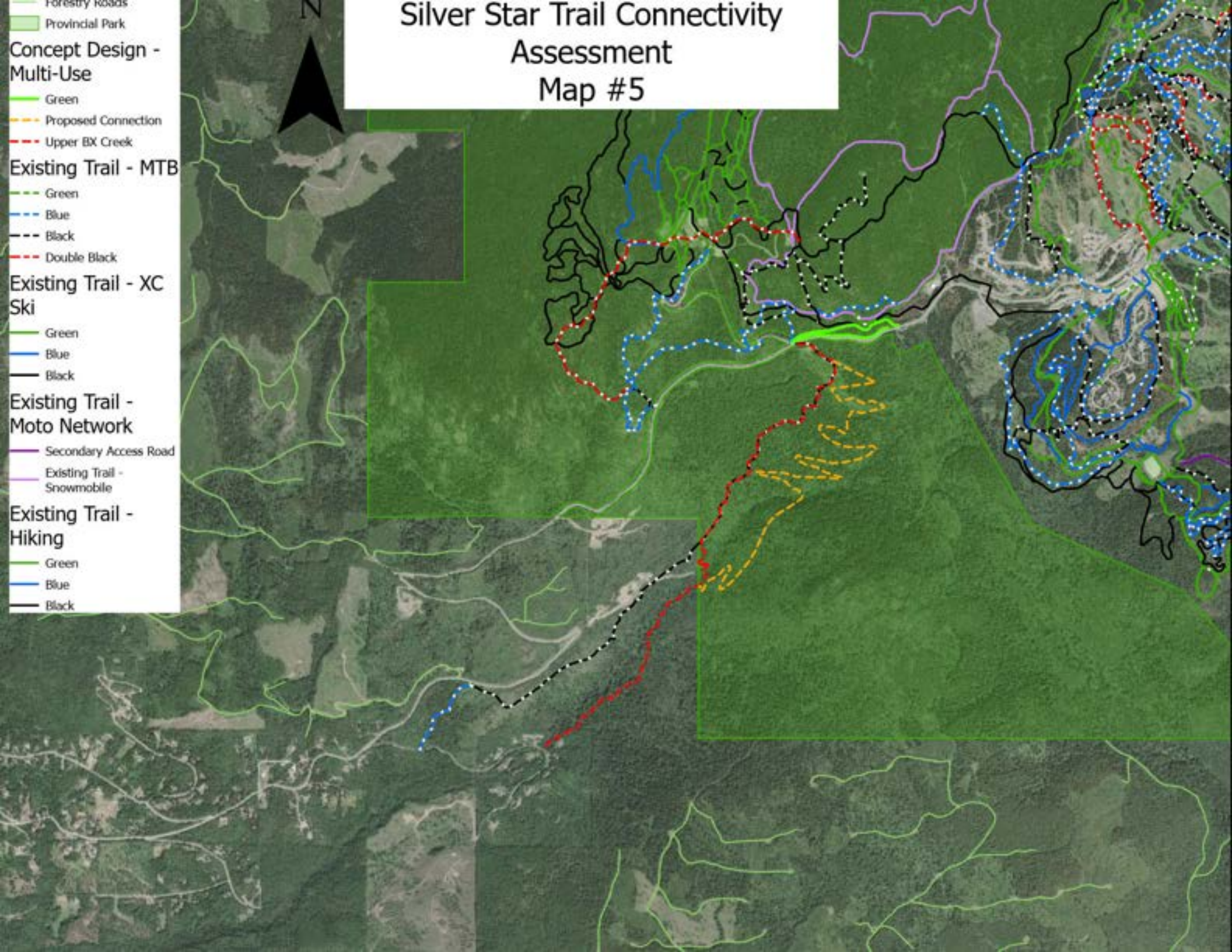


Silver Star Trail Connectivity Assessment Map #4

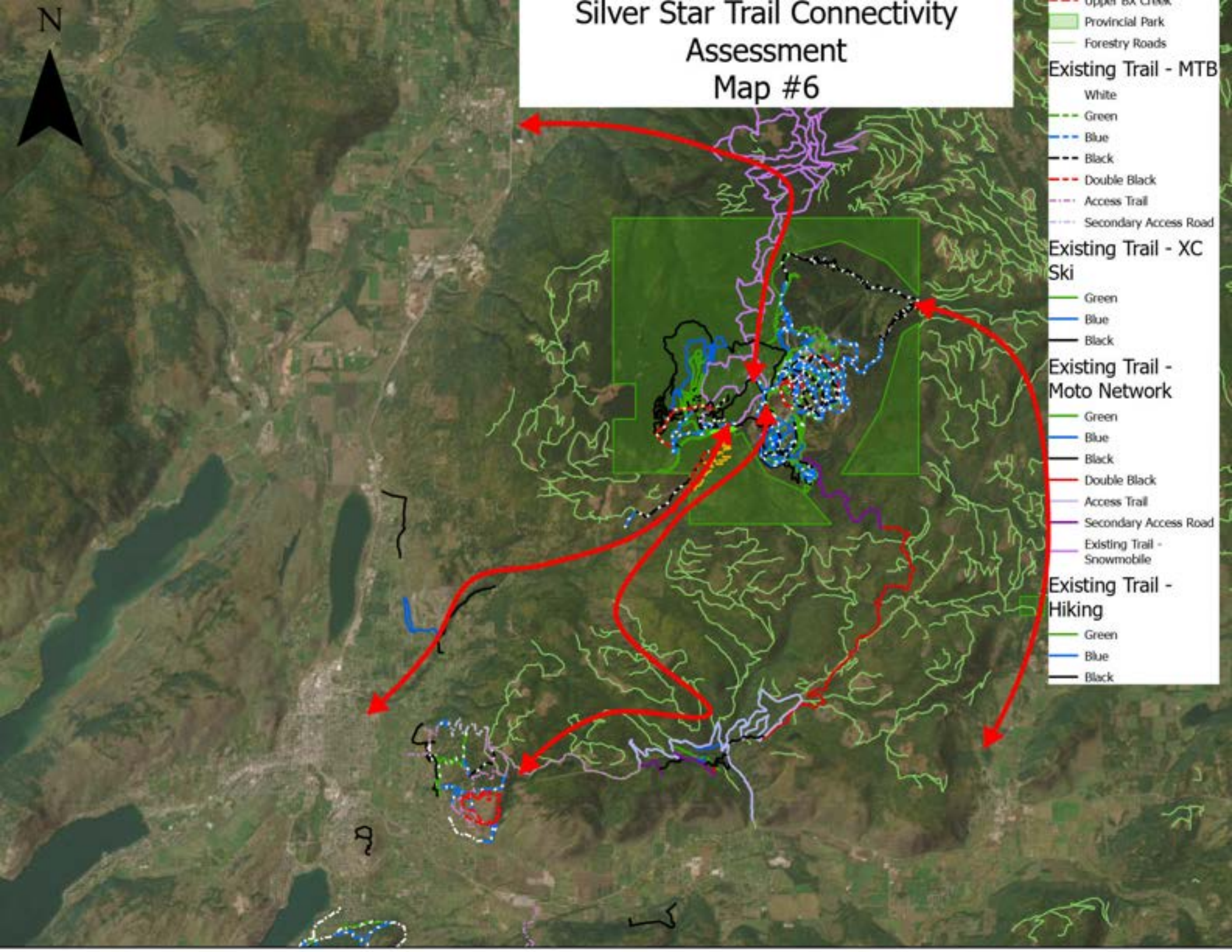


Silver Star Trail Connectivity Assessment Map #5

- Forestry Roads
- Provincial Park
- Concept Design - Multi-Use
 - Green
 - Proposed Connection
 - Upper BX Creek
- Existing Trail - MTB
 - Green
 - Blue
 - Black
 - Double Black
- Existing Trail - XC Ski
 - Green
 - Blue
 - Black
- Existing Trail - Moto Network
 - Secondary Access Road
 - Existing Trail - Snowmobile
- Existing Trail - Hiking
 - Green
 - Blue
 - Black



Silver Star Trail Connectivity Assessment Map #6



Silver Star Trail Connectivity Assessment Map #7



- Concept Design - Multi-Use**
 - Green
 - Proposed Connection
 - Upper BX Creek
 - Forestry Roads
 - Provincial Park
- Existing Trail - MTB**
 - White
 - Green
 - Blue
 - Black
 - Double Black
 - Access Trail
 - Secondary Access Road
- Existing Trail - XC Ski**
 - Green
 - Blue
 - Black
- Existing Trail - Moto Network**
 - Green
 - Blue
 - Black
 - Double Black
 - Access Trail
 - Secondary Access Road
 - Existing Trail - Snowmobile
- Existing Trail - Hiking**
 - Green
 - Blue
 - Black

Ranchlands

