# Investigative Plan

Please describe the details of your project to the extent known. Consult the guidance document for further information on regulatory requirements, rational for why the information is required, and how to find required information.

The scope and the timing for response will be provided. If information is requested and not received, it may result in the disallowance of the application.

Information on these topics may be required as part of the application processing and if further detail is necessary that is not part of the application and management plan received, you will be contacted and requested to provide additional information.

## 1.0 Background

## 1.1 Project Overview

Describe the potential project, including proposed work for the investigative stage and any phased development details:

The proposed project involves the construction of a multi-passenger Gondola to access the sub-alpine and alpine region above Bridal Falls. The Gondola would provide easy access to the mountain landscape and scenery for recreation and enjoyment for multi-generational guests, disabled guests and others looking for a nature based experience in the Cascade Mountains of BC. The project would include a proposed summit area trail system that would provide direct access to the ridge lines that connect Mt Cheam, Mt Archibald, Mt Thurston and Mt Mercer. This trail system would link up with the Elk Mountain and Mt Thurston, Fraser Valley Regional District (FVRD) Trail as well as the trail system that leads to the top of Mt Cheam.

The project is proposed to include the following:

Base area amenities would include parking area for approximately 600-700 vehicles. Base Terminal Buildings including Administration Offices, Gondola Building with covered reception area (FN and pioneer displays and story telling), Guest Services, Ticket sales, indoor/outdoor Coffee Shop/Restaurant with seating for 50 -100 ppl, Washrooms, Retail Store, Mechanical/Electrical Rooms and Repair Shop, First Aid Room, Staff and Locker Rooms. In addition, the base facilities may also include a Conference Building for meetings, weddings and events. Total sq footage is estimated to be approximately 10,000 - 15,000 sq ft not including Gondola Building.

Summit area amenities would include a Summit Terminal building including a covered reception area, Guest Services/Information area, Coffee Shop, 2 Restaurants with seating capacity for approx. 400 people and room for conference/events seating for approx. 300 additional guests serviced by a Central Kitchen. Other amenities will include Washrooms, Interpretive Center, FN Cultural Art & Gift Shop , Mechanical/Electrical Room, First Aid Room, General Office, Staff Rooms and multiple Viewing Decks. Total sq footage of the Summit Lodge is estimated to be approx. 15,000 - 20,000 sq ft. Outside decks would add another 5000 sq ft.

Summit area would also include a network of Walking & Hiking Trails (interpretive and non-interpretive) that would provide view access. Designated trails would lead guests to two Tea Houses located in the vicinity of Mt Archibald and Mt Mercer. Viewing platforms would be constructed as part of the trail system experience to provide destinations that offer even more dramatic accessible viewing locations. As mentioned above, the trail system would also link up with the Elk Mountain and Mt Thurston, Fraser Valley Regional District Trail as well as the trail system that currently leads to the top of Mt Cheam.

In order to achieve the vision described above, the Bridal Falls Gondola Project Team is committed to the following guiding principles:

- Respect the natural integrity and spiritual significance of Mount Cheam and the surrounding mountains
- Respect the base area around Bridal Falls and help to improve the existing park visitor experience
- Minimize the environmental footprint and impact of any improvements and development
- Provide mountain top area access with spectacular views to a wider user group, not just high level recreation users

Provide opportunities for cultural and environmental interpretation and enhancement, including the Cheam Band & Area First Nations

- Provide direct and indirect economic benefits and employment for residents of Chilliwack and the eastern Fraser Valley
- Collaborate with First Nations, Province of BC, FVRD, City of Chilliwack, Parks BC, local user groups, and the Chilliwack Community at large in helping to define the overall user experience;

#### Investigation Phase

The first phase of the project is centered on information gathering and investigations. The primary focus of this investigation phase will be the following:

#### Environmental/

• Determine if there are any environmental issues or possible "show stoppers" that might arise from the development or operation of the proposed project by conducting a Preliminary Environmental Overview of the proposed project lands.

• Determine local patterns in the summit area by establishing a remote weather station to collect ongoing data.

#### Geo-technical/

• Determine if there are any geo-technical issues or possible "show stoppers" that could impact the development or operation of the proposed project by conducting field studies and reviewing existing reports.

• Determine the best location for the gondola infrastructure including base and summit terminals and all towers by doing soils and rock sampling and potentially digging or boring test holes.

#### Engineering/

Road Access

• Determine proper access to the highway and existing roads (designed to meet MOTI requirements).

• Determine internal circulation and parking (designed to meet or exceed Best Management Practices standards).

• Determine best access to the summit area (either via a recommissioned Bridal Falls Forest Service road or an upgraded Chipmunk Creek Forest Service road).

• Determine proper works plan for all road upgrades consistent with the Ministry of Forests requirements.

Soils and rock testing may be required.

#### Water

• Determine water demand requirements for all facilities (minimized by using low flow and ultra-low flow high efficiency fixtures).

• Determine adequate and appropriate water sources for base and summit facilities (system will be independent and self-reliant).

• Design system to meet or exceed the requirements of current regulations and standards.

• Establishing flow monitoring equipment on certain creeks may be required.

#### Sewer

Determine sewer demand requirements for all facilities (minimized by using low flow and ultra-low flow high efficiency fixtures).
Determine adequate and appropriate septic systems, including the location of any septic fields, for base and summit facilities (system will be independent and self-reliant).

• Design system to meet or exceed the requirements of Ministry of Environment regulation and have no negative implications for creek water quality or downstream water systems.

• Digging test holes may be required.

#### Storm Water

• Determine the natural site drainage and hydrology of both the proposed base and summit areas.

• Design a storm water drainage system for both areas that enhances the natural characteristics of each site via the use of permeable road surfaces, rain gardens and infiltration features. (These works would be privately maintained on site).

• Digging test holes may be required.

#### Hydro

• Determine the power demand for the base and summit areas.

Determine power source and servicing for both areas.

#### Natural Gas/Propane

• Determine the heating requirements for the base and summit area facilities.

• Determine source and servicing for both areas.

Telephone/Communication Systems

Determine Tel/Com needs for the base and summit areas.

• Determine Tel/Com source and servicing for both areas.

## 1.2 Current Zoning / Land Use

Are there any management plans, zoning or use restrictions in place that limit or preclude your proposed use of the land?

🔿 Yes 💿 No



## 1.4 First Nations Consultation

Describe any contact you may have had, including the name of the First Nation(s) and representatives contacted:

Several meetings have been held with members of the Cheam First Nation regarding the proposed project including the following:

• Initial meeting: Wednesday Feb 1, 2017 (855 Davie St, Vancouver, BC) In attendance: Darwin Douglas, Cheam FN Economic Development Officer & Council Member; Jayson Faulkner - BFG

Notes of meeting - Very interested and we briefly spoke about the project. He thinks it could/should be a very good fit for the band and where they want to go with their economic development, the Living landuse study they did last year, etc. They are very interested in Tourism/Recreation for their band...Very positive, said it met all the criteria for their economic development and in line with their goals and values. Very intrigued and excited. Wants a follow up meeting and presentation to Council asap.

• 2nd Meeting: March 7, 2017 (Cheam First Nations Council Offices, Rosedale, BC) In attendance: Chief Ernie Crey, CFN Councilors Darwin Douglas, Andrew Victor, Dionne Shaw, Chad Douglas, Muriel Victor and Elder Eleanor; Jayson Faulkner - BFG

Notes of meeting - Full presentation was made and discussed the project and significance and interests for the CFN. CFN expressed enthusiasm and support. Very positive comments all around. Discussed the traditional uses of some of the area and how to incorporate into the experience of the project. Other themes that could be helpful and overall business plan and viability for the project and the Nation.

• May 12, 2017

Received letter of support from Chief Ernie Crey on behalf of CFN council.

• 3rd Meeting: May 24, 2017 (Tzeachten First Nation Administration Offices, Chilliwack, BC) In Attendance: Chief Ernie Crey and CFN Council and Naleen Narayan (Executive Director); Jayson Faulkner - BFG

Discussed the project with updates and potential financial involvement from CFN as well as overall context of project. Discussed the Letter of Support and implications, next steps for the project. Council will form a working group to expedite the project for the Nation and discussed initial terms of Joint Benefits Agreement.

• 4th Meeting: July 27th, 2017

In Attendance: Chief Ernie Crey, Councillors Muriel Victor, Dionne Shaw, Darwin Douglas (by phone), Naleen Narayan (Executive Director); Jayson Faulkner – BFG, Pete Tatham - BFG (by phone).

Reviewed Joint Benefits Agreement first draft and discussed update on project progress. Discussed how CFN would like to participate as an equity partner in project as well as how facilitation of other stakeholders and First Nations consultations would be undertaken. Leadership and partnership with Bridal Falls Gondola team and CFN working group to expedite process with the Province, FVRD and other agencies. Working group was announced and Council confirmed it would review the JBA for more input and feedback at next council meeting as well as follow up on a number of issues outlined in meeting notes supplied to Chief and Council on August 16th via email.

• November 29, 2017

After several months of negotiations a comprehensive Joint Benefits Agreement was agreed to and signed by Chief Ernie Crey on behalf of the Cheam First Nation. The Joint Benefits Agreement was later ratified by Council in the form of a Band Council Resolution.

# 2.0 Location

### 2.1 Description

Provide a general description of the location of any proposed activities shown on the accompanying Detailed Site Map:

The base area of the gondola will reside on what is now the Bridal Falls Golf Course lands located immediately south of the Trans Canada Hwy at the junction of Hwy 9 east of Chilliwack.

The top terminus of the gondola and related summit facilities will be located on the ridge to the west of Mt Archibald at the junction of the Bridal Falls and Chipmunk Creek Forest Service roads.

The summit area trail system will be located primarily along the ridge lines that connect Mt Cheam, Mt Archibald, Mt Thurston and Mt Mercer. This trail system would link up with the Elk Mountain and Mt Thurston, Fraser Valley Regional District Trail as well as the trail system that leads to the top of Mt Cheam. The two tea houses are proposed to be located on the ridges adjacent to Mt Archibald and Mt Mercer.

## 2.2 Location Justification

Provide your reasons/justification of the need for this type of project at this location:

With over 2.8 million people living in the Lower Mainland and the rapidly growing population south of the Fraser and within the Fraser Valley Regional District (1.8 million combined), there is an increasing need for easy access, day use recreation amenities in the region. To meet this growing need investment in more sustainable recreation amenities will provide jobs, infrastructure and related business opportunities that will help to diversify the tourist economy in the area. A focus on tourism is a key component of the OCP of the FVRD (provide link), Cheam First Nation values (http://www.fvrd.ca/assets/Government/Documents/Bylaws/Planning~and~Land~Use/Area% 20D%20-%20OCP%20Bylaw%200200%20-%20Popkum%20and%20Bridal%20Falls.pdf) and for the Chilliwack area (http:// www.chilliwack.ca/main/page.cfm?id=2387. This project meets all of these stated values and goals for both these jurisdictions both current and aspirational.

The Bridal Falls Gondola will provide unparalleled access to extraordinary landscapes for the residents of the Fraser Valley, visitors to BC and Lower Mainland residents. Outdoor education, experiential opportunities for young and old alike. A First Nations Cultural Centre and profile of language and culture, which will be part of the project, will provide an educational experience and celebrate the unique FN cultures that are resident in the valley.

Annual visits are forecast to exceed 500,000 by the fourth year of operation and provide over 180 full and part time jobs year round. The location provides unparalleled access to the market. The most recent traffic data (BC Transportation Study 2015) shows over 12 million vehicles pass by the site each year which equates to over 24 million people.

The opportunities and benefits created by this project will be both economic (over \$35 million will be spent in construction which will support local trades) and cultural while at the same time promoting healthy community values such as fitness, outdoor education and environmental stewardship. It is a proven model and one that creates opportunities for decades and generations to come.

The project also reflects Chilliwack's OCP stated goals and objectives to diversify the economic base and develop more tourism, parks and green spaces, recreation and destination tourism:





## 3.0 Infrastructure

#### 3.1 Improvements

Describe any improvements to existing infrastructure, as well as any planned construction or installations:

• All new roads and utilities within the development will be privately owned and operated with the exception of Hydro and Telus, and will have no impact on FVRD or Forestry operations;

• A proper intersection will be re-established at the north end of Hwy 9 at the existing entrance to the site. In this manner, impact on the highway will be negligible. Road access to the highway will meet MOTI requirements. Internal circulation and parking will be designed to Best Management Practices.

• Road access to the upper area will be via a recommissioned Bridal Falls Forest Service road from the north and the Chipmunk Creek Forest Service road to the south. All upgrade work done consistent with the Ministry of Forests requirements.

• Water supply systems for the project are designed to be independent and self-reliant. The Lower Base Area is proposed to be serviced by a well. The upper site is planned to be serviced via a surface water source with microfiltration and UV treatment. Water demand for the facilities is to be minimized through the use of low flow and ultra-low flow high efficiency fixtures.

 Sewer will be handled through a passive type 2 septic system for the lower base area. The system will meet or exceed regulation and will have no negative implications for creek water quality or downstream water systems.
 The upper system will have a Class B treatment system per the requirements of Ministry of Environment and the effluent will be disposed of via infiltration fields. The systems will be privately maintained and operated.

Storm water engineering for the project will be addressed in a manner to maintain or enhance the natural site drainage and hydrology
via the use of permeable road surfaces, rain gardens and infiltration features. These works will be privately maintained on site. The
overall storm water system will exceed current FVRD standards.

• The existing hydro feed to the lower site has been reviewed and preliminary investigations have confirmed it is adequate to meet the needs of the site. All wiring on site will be underground other than wiring and controls on the Gondola itself. The upper area will be serviced by a new aerial hydro line following the forest service road or a buried cable along the gondola right-of-way.

• Telus and communication systems will also be run underground once reaching the site.

• Propane is intended to be used for heat and kitchen equipment that would be serviced by a freestanding tank. The upper site would be managed similar to Grouse Mountain, in that no refilling would be contemplated in winter months.

### 3.2 Access

How are you planning to provide access to the site during the investigative phase?



Access to the base area of the project is directly off of Bridal Falls Road immediately south of the Trans Canada Hwy at the junction of Hwy 9.

Access to the summit area of the project is via the decommissioned Bridal Falls Forest Service Road. Currently, four wheel drive vehicles can be driven to a point where the road becomes impassable about 1.5 km from the subject lands. From there, it takes approximately 20 minutes to hike to the proposed Top Terminal site. Access to the summit area can also be made via the Chilliwack River Road and then via the the decommissioned Chipmunk Creek Forest Service Road which allows for four wheel drive access directly to the site.

The upper site is to be accessed via the Bridal Falls and Chipmunk Creek Forest Service roads for construction and maintenance. Regular staff, operation and user access would be via the gondola. The Bridal Falls Forest Service road is decommissioned at approximately 1.5 km from the upper base area. The intention is to recommission the road to allow for construction and maintenance requirements. This work would be done to the approval of Ministry of Forests per their standards. Additional upgrades are expected to be initiated by the proponent as approved by MOF to facilitate reasonable access and an aerial hydro feed to the site. Current public access is to be

maintained consistent with current opportunities.

The upper site Forest Service access road requires upgrades in some areas and the upper 1.5 km of road require recommissioning. A proposed plan, profile and cross sections will be submitted to MFLNRO as per their standard requirements. Surfacing, drainage and cross section upgrades will be required on some of the existing commissioned road. The proponent will coordinate with MFLNRO on scheduling the construction works in conjunction with other users. This will benefit MFLNRO users as well as current public access. The road will remain a

MFLNRO road and would be designated as four wheel drive access. Coordination with

MFLNRO will be initiated to manage impacts and co-use with other users. Notice of use will be posted on site and via the MFLNRO website.

### 3.3 Water Use

Identify water requirements and sources for the Investigative Phase. Include any agreements outside of *Water Act* permits identified above, such as Municipal water supply.

The base area currently consists of an operating golf course which has its own water supply consisting of a well. Preliminary investigations indicate there should be sufficient supply from this source to service the ongoing needs of the proposed base area infrastructure.

The upper area is located on Crown Land and consists of forested land with no installed infrastructure. Preliminary investigations of existing rock structure in the area indicates the site does not represent a probable groundwater source for water. Existing creeks have been identified in the area with flows that should be sufficient to meet the needs of the proposed summit area infrastructure. This will be confirmed during investigation phase.

Water quality testing and flow monitoring will be undertaken during the investigation phase. It is anticipated that microfiltration would be the preferred treatment method at this location with UV disinfection.

## 4.0 Schedule

### 4.1 Investigative Schedule

Please complete the table showing what types of activities are proposed, which season(s) they will be conducted, the potential impacts of the activity and any mitigation or management of potential impacts.

Activity	Brief Description of Activity	Season	Potential Impact	Mitigation / management of potential impact
Geotechnical Studies	Field tests to establish proper siting of Roads, Buildings, Gondola Terminals and Towers	May - Oct 2018	Minimal	
Hydrology	Water monitoring and testing to confirm flows in subject creeks for water supply needs.	May 2018 - Oct 2019	11 1	If creeks are determined to be fish bearing, monitoring equipment will be placed away from any potential spawning grounds.

Activity	Brief Description of Activity	Season	Potential Impact	Mitigation / management of potential impact
Remote Weather Station	Establish remote weather station in summit area to monitor wind, precipitation and temperature.	Summer 2018	Minimal	Will be established in non-sensitive site away from any water source or riparian area.
Environmental Studies	Field inventories and ground truthing.	May 2018 - Oct 2019	Minimal - flagging	
Wastewater	Identify and prove out treatment and disposal options.	May 2018 - Oct 2019	Minimal - temporary test holes to measure infiltration rates	
Add Field				

## 5.0 Diligent Use

## 5.1 Evidence of On-going Diligent Use (For Replacements Only)

Review the investigative schedule information and table provided in your previously submitted Investigative Plan for this site, during the previous term of tenure. Provide a report on investigative work completed, incomplete or ongoing.

Activity	Brief Description of Activity	Status (e.g. Complete, incomplete, ongoing	Comments / Milestones
Add Field			

**END OF FORM**