CONSULTATION REPORT

Kicking Horse Canyon Project Community Input Open House April 15, 2008

Prepared by: Jack Stuempel &

Jack Stuempel & Associates Ltd.

September 12, 2008

Introduction

A public open house was held at the British Columbia Visitor Centre @ Golden from 4:30 pm to 8:30 pm on April 15, 2008 to obtain public feedback on updated designs for improvements to the Trans-Canada Highway, and to view construction plans for two segments of work to be carried out under Phase 3 of the Kicking Horse Canyon Project.

The project team was represented by:

Murray Tekano, Project Director
Jon Jensen, Project Manager
Darcy Grykuliak, Lead Engineer
Alex Izett, Roadway Design/Geomatics Engineer
Bill Harper, Wildlife Advisor
Doug Kelly, Environmental Advisor
André Fillion, Senior Civil Engineer
Cam Macleod, Property Advisor
Starla Weigel, Administrative Assistant
Lauri Frausell, Document Control
Jack Stuempel, Stakeholder Relations

In addition, the TRAN Rocky Mountain District was represented by Art McClean, Area Manager.

Publicity and Notification

The public was notified of the consultation opportunity with newspaper advertisements, a media advisory issued by the MoT Public Affairs office, direct mail and the project website. Approximately 211 addressed direct mail and email invitations were sent to property owners and other stakeholders with an identified interest. Members of the project's Community Liaison Committee were invited directly and received a preview of the open house panels in a meeting the week before the public event.

Attendance and Results

There were approximately 164 attendees (a record), and there was considerable discussion with project team representatives. However, only two feedback forms were completed. Attendees generally appeared to be supportive of the designs being prepared for construction, and initiatives to accommodate cyclists, pedestrians and wildlife were well-received.

Open House Results Summary				
Total Attendees Feedback Forms (including post-session responses)		Feedback %		
164	2	1%		

Feedback at a Glance – Subjects of Interest					
Subject/Opinion	Number of Comments*	% of Total Respondents			
Move to finish project by 2015.	1	50%			
Need better & more wildlife corridors, e.g. habitat area at top of Golden Hill by the Tourist Info Center	1	50%			
Proceed with the long tunnel option; surface route will have more closures, accidents & maintenance costs.	1	50%			
Look at ways to improve pedestrian & cycle experience & safety	1	50%			
Save Chinese workers' hut at Hunter Creek	1	50%			
*Note: One form contained multip	ple comments	1			

Sustaining Activities/Follow-up

- The Open House panels and fact sheet were posted to the project website by April 16, 2008. Project updates are posted regularly.
- Regular meetings with the Community Liaison Committee are ongoing.
- Construction on Phase 3 is to begin in September 2008.

Evaluation/Measurement

Attendance

Attendance was the highest ever experienced by the project. Ongoing interest, fed in part by the high-profile completion of Phase 2 some months earlier, and the convenient location of the Visitor Centre likely contributed to the high attendance level.

Media contacts and monitoring

The open house was attended by the Golden Star newspaper, which featured an extensive article with a photo in its subsequent edition.

Feedback forms

Despite record attendance, both the total number and rate of feedback forms (including postsession responses) was a record low, at just 1%. The low level of formal feedback is considered indicative of approval of the project designs which reflect input received in past consultations.

Appendices

- 1. Detailed public comments
- 2. Newspaper Advertisement
- Sample invitation letter
 Media advisory
- 5. Fact Sheet (Handout)
- 6. Display Panels
- 7. Media clippings

Comments

It's taking far too long to finish the total project. Let's get the project moving forward. Finish everything by 2015. It will save lives, improve safety, reduce transportation costs & bring economic benefits to the area. Get moving.

Need better & more wildlife corridors. Need one at top of Golden Hill by the Tourist Info Center. This is currently a major habitat area & needs to be maintained.

Move forward with the long tunnel option. Europe has shun us the way & proved the expertise & experience. "On surface" is old style & long term will cost more & result in more closures, accidents & maintenance costs.

Look at ways to improve pedestrian & cycle experience & safety.

Save the Chinese workers' hut at Hunter Creek

Public Open House Kicking Horse Canyon Project The Ministry of Transportation invites the public to comment on updated designs

The Ministry of Transportation invites the public to comment on updated designs for improvements to the Trans-Canada Highway, and to view construction plans for two segments of work under Phase 3 of the Kicking Horse Canyon Project.

Tuesday, April 15, 2008 4:30 p.m. to 8:30 p.m. Visitor Centre@Golden 111 Golden Donald Upper Road Golden, BC

Questions? Call 344-3820 or visit our website at www.kickinghorsecanyon.ca





	File No:DRAFT		
March 31, 2008			
Name stakeholder list title fax			
Dear:			
Re: Kicking Horse Canyon Project Open House			

The Ministry of Transportation invites you to attend a public open house from 4:30 - 8:30 pm at the Visitor Centre@Golden, located at 111 Golden Donald Upper Road. The purpose of this open house is to obtain your feedback on updated designs for improvements to the Trans-Canada Highway, and to view construction plans for two segments of work under Phase 3 of the Kicking Horse Canyon Project. Staff will be available to provide project information and answer questions.

Tuesday, April 15, 2008

We look forward to seeing you there.

Sincerely,

Murray Tekano Project Director Kicking Horse Canyon Project Ministry of Transportation



MEDIA ADVISORY

April 7, 2008

Ministry of Transportation

ATTENTION: ASSIGNMENT EDITORS

GOLDEN – The Kicking Horse Canyon Project will hold an open house to display updated designs for future improvements to the Trans-Canada Highway, as well as construction plans for two segments of work under Phase 3.

Ministry of Transportation and project engineering staff will be present to receive input and answer questions.

Date: Tuesday, April 15, 2008

Time: 4:30 - 8:30 pm

Location: Visitor Centre@Golden

111 Golden Donald Upper Road

Golden, BC

-30-

Contact: Jeff Knight

Public Affairs Bureau Ministry of Transportation

250-356-7707



KICKING HORSE CANYON



Fact Sheet – Spring 2008

Kicking Horse Canyon Project - Overview

- The Kicking Horse Canyon project involves upgrading approximately 26 kilometres of the Trans-Canada Highway from the junction of Highway 95 in Golden to the western boundary of Yoho National Park
- Improvements include highway widening to 4 lanes with a design speed of 100 km/hr, improved alignments, replacement of narrow bridge structures, and other design innovations to reduce hazards
- Upgrading this corridor will support growing Asia-Pacific trade through the Pacific Gateway and increasing tourist travel, contributing significantly to the economy on regional, provincial and national levels
- The Kicking Horse Canyon Project Team won the Premier's Award for Innovation for innovative solutions to construction challenges which saved \$18 million and significantly shortened the construction timeline
- The route carries over 10,000 vehicles per day during the summer
- It is one of the Province's top transportation priorities
- For more information, visit the project website at www.kickinghorsecanyon.ca

Phase 1 - Yoho (5 Mile) Bridge

- The Government of British Columbia contributed \$43 million toward the \$64 million project, with \$21 million provided by the Government of Canada
- 3.2 km of highway upgrades
- Contract 1 rock work at 6 Mile Hill (completed in 2001 by Dawson Construction Inc.)
- Contract 2 new Yoho Bridge and rock debris protection wall (awarded in 2002 and open to traffic in fall 2004 by Peter Kiewit
- Contract 3 4 lane re-alignment of the highway from 6 Mile Hill to the rest area approximately two kilometres east of the Yoho Bridge (awarded in 2004 and completed in fall 2006 by Emil Anderson Construction Inc.)



Phase 2 - Park (10 Mile) Bridge



- Trans-Park Highway Group was selected in a competitive process to design, build, finance, operate and maintain improvements
- The Province invested \$80.5 million and the federal government funded \$62.5 million towards a total cost of \$143 million
- Included the new Park Bridge and the upgrade of 5.8 kilometres of highway approaches between the rest area and the commercial vehicle brake check at the top of 10 Mile Hill, as well as the operations and maintenance of the entire 26 kilometre section of the Trans Canada Highway between Golden and Yoho National Park
- The new bridge and highway approaches opened to traffic August 30, 2007

Phase 3 - Improvements to the balance of the corridor

- An upgrade to slightly more than 17 kilometres of highway to four lanes, including significant realignment to reduce rock fall hazards and improve traffic operations and safety
- Two segments (Golden to West Portal and Brake Check to Yoho National Park) have received joint provincial-federal funding under the new Building Canada infrastructure plan, and will commence construction in 2008
- Planning and design are under way for the remaining 2 segments (Highway 95 interchange and West Portal to Yoho Bridge), which still require a cost-sharing arrangement with the federal government
- The estimated cost of this phase is approximately \$765 million



DISPLAY PANELS

WELCOME

Kicking Horse Canyon Project

Public Open House



Canada

KICKING HORSE CANYON



OPEN HOUSE OBJECTIVES

April 15, 2008

- Report on completion of Park Bridge and approaches
- Display design updates & construction schedule for:
 - Golden Hill to West Portal
 - Brake Check to Yoho Park
- Progress report on planning & design of West Portal to Yoho Bridge (Canyon Section)
- Report on Climate Action & other environmental initiatives
- Receive feedback



PROJECT OVERVIEW

PHASE 3 Hwy 95 to

Yoho Bridge (8.5 km)

Partially funded for construction

PHASE 1 Yoho Bridge (3.2 km)

Completed 2006

PHASE 2 Park Bridge (5.8 km)

Completed 2007

PHASE 3
Brake Check to Yoho Park (8.8 km)

Funded for construction



- Government of British Columbia
- Total project length is 26 kilometres
- The project has been divided into four major sections to be constructed in three phases
- Total cost is estimated at \$972 million, shared with the Government of Canada
- The route carries up to 10,000 vehicles daily during
- 100 km/h (80 km/h within Town of Golden)
- Improved alignments, replacement of narrow bridge structures
- Improved pedestrian and cycling facilities
 Other design innovations to reduce hazards
- Wildlife protection, revegetation and other environmental measures

KICKING HORSE CANYON

REPORT ON PHASE 2

April 15, 2008

The new Park Bridge and approaches were completed and opened to traffic on August 30, 2007, 21 months ahead of schedule.







Before Construction

September 2006

September 2007



The Park Bridge was dedicated to the past and present highway and bridge workers of British Columbia for their contributions on behalf of the citizens of the Province.



A unique partnering arrangement with the private sector that achieved time and cost savings received recognition with a Premier's award.





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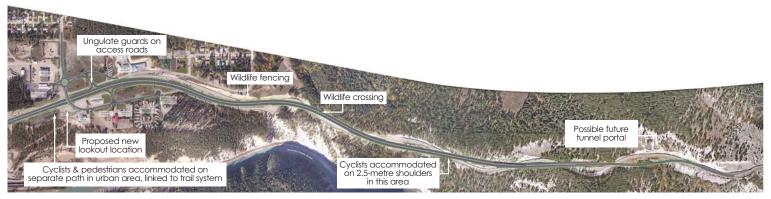
PHASE 3 DESIGN UPDATE - HIGHWAY 95 INTERCHANGE



Preliminary design of the Highway 95 Interchange is complete. Portions of the old highway alignment will be used to enhance the accommodation of cyclists and pedestrians.

Canacki Kicking Horse Canyon —

PHASE 3 DESIGN UPDATE - GOLDEN HILL TO WEST PORTAL



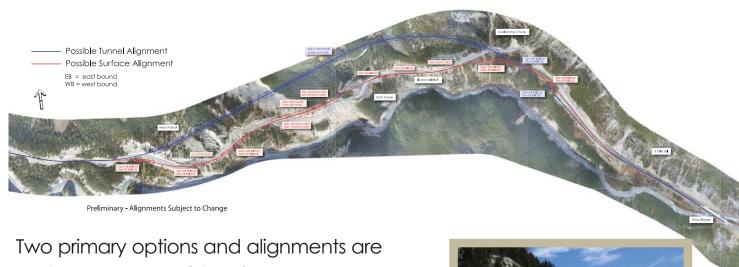
Federal-provincial funding has been announced for construction between Golden Hill and the "West Portal", or potential tunnel entrance. Construction is targeted for a late 2010 start, and will include an interchange at Golden Donald Upper Road, cycling/pedestrian trails and wildlife protection.

Canada

KICKING HORSE CANYON



PHASE 3 DESIGN UPDATE - WEST PORTAL TO YOHO BRIDGE



under current consideration:

- One long tunnel alignment, approximately 3,000 metres in length
- One surface option, requiring one 340-metre tunnel, approximately six rock sheds and up to 12 bridges







PHASE 3 DESIGN UPDATE — WEST PORTAL TO YOHO BRIDGE

April 15, 2008

Evaluating the Options

Extensive review of both tunnel and surface options is required to compare advantages and disadvantages, including those listed at right.



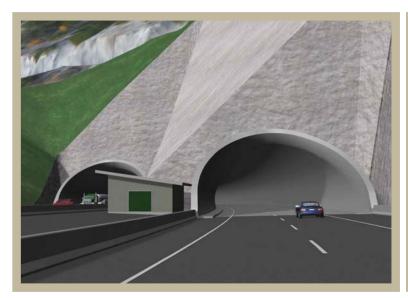
Some Issues and Considerations – Tunnel vs. Surface Option					
Issue	Tunnel Option	Surface Option			
Safety	More protection against outside conditions	More susceptible to outside conditions			
	Confined spaces	Less confinement			
	Drivers must adjust to differences in light conditions	Light conditions are consistent			
Geotechnical risks	Less subject to avalanches, debris and rockfalls	Requires avalanche and rockfall mitigation			
	Unstable rock increases tunnel lining and reinforcement requirements	Stability and terrain issues limit alignment options			
Constructibility/Cost to Construct	Tunnel construction is costly	Numerous costly structures required; more slope stability risks			
	Minimal traffic management required	Significant traffic impact			
	More material disposal; waste area required	More opportunity to balance excavation with fill requirements			
Cost to operate & maintain	Active monitoring required	Typical highway monitoring required			
	Snow removal not required	Snow removal required; maintenance and repairs required for avalanche and rockfall protection structures			
	Power required for ventilation and lighting	No extraordinary power or lighting requirements			
Environmental impact	No barrier to wildlife	Wildlife protection and passage opportunities more challenging			
Emergency response	More challenging; special features must be built in	Challenges are more typical			
Accommodating cyclists	Greater separation of cyclists by preserving old highway for cycling use	Cyclists accommodated on wide shoulder			





PHASE 3 DESIGN UPDATE - WEST PORTAL TO YOHO BRIDGE

Tunnels will require lighting, ventilation and safety monitoring.



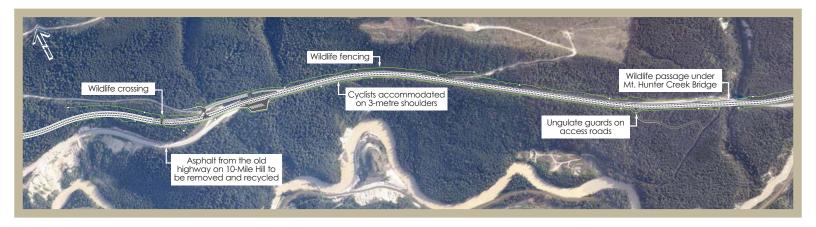


This long tunnel concept contains driving lanes 3.7 metres wide, vertical clearance of 5.5 metres and 2.5-metre outside shoulders. Other features include lane control and lighting, ventilation, fire suppression, cross-passages for emergency access and evacuation, communication systems, waterproofing, and portals designed to reduce rockfall hazards at the tunnel entrance. Shorter tunnels would contain many of these features.



PHASE 3 DESIGN UPDATE — BRAKE CHECK TO YOHO PARK

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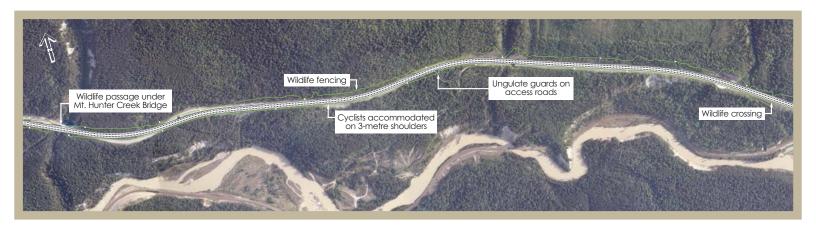


Federal-provincial funding has been announced for construction east of the Brake Check, to begin in Fall 2008. Improvements will include concrete median barrier to reduce the risk of head-on crashes, a new crossing of Mount Hunter Creek, and 3-metre shoulders to accommodate cyclists.



PHASE 3 DESIGN UPDATE — BRAKE CHECK TO YOHO PARK

April 15, 2008



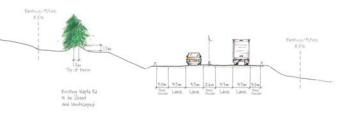
The 4-lane divided highway will have a 100 km/h design speed, and will feature fencing to protect against collisions with wildlife. Special overpasses and underpasses will be included for wildlife passage.



PHASE 3 DESIGN UPDATE — BRAKE CHECK TO YOHO PARK



will provide for safer and more effective access.



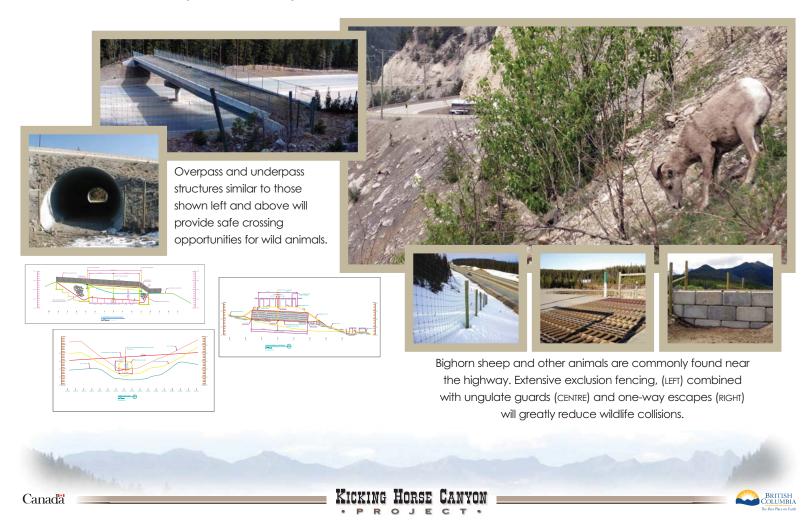
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WILDLIFE PROTECTION

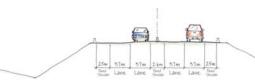
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Highway improvements will include protection for wildlife to reduce the risk of collisions and improve safety for both animals and motorists.



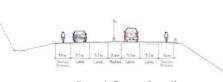
ACCOMMODATING CYCLISTS AND PEDESTRIANS

April 15, 200

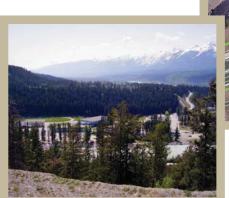


Urban Cross Section

Cycling facilities will be improved throughout the Canyon route. On Golden Hill, cyclists and pedestrians will be able to follow paved pathways a short distance from the highway to connect to the local trail system and a new lookout.



Rural Cross Section



Cycling/pedestrian path

ABOVE: Connectivity will be

provided with local trail system
LEFT: View from new
lookout location

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KICKING HORSE CANYON



PHASE 3 CONSTRUCTION SCHEDULE

April 15, 200

	2008	2009	2010	2011	2012	2013
Brake Check to Yoho National Park						
Golden Hill to West Portal						
Highway 95 Interchange		TBA—Sub	ject to Fed	deral Fund	ing Annou	ncement
West Portal to Yoho Bridge		TBA—Sub	ject to Fed	deral Fund	ing Annou	ncement



The Kicking Horse Canyon Project is at the forefront of innovation, applying research being conducted by the Ministry of Transportation and other agencies to quantify and minimize the direct (on-site) and indirect (embodied in the manufacture and delivery of materials) greenhouse gas (GHG) emissions associated with highway construction.

Measures to reduce GHG impacts from construction, many of which are already common MoT practice, include:

- Emphasizing the use of recycled materials in the production of steel, concrete, asphalt and aggregates
- Local sourcing where possible to reduce deliveryrelated emissions
- Use of biofuels and certified green electricity
- Mulching and use of organic waste on-site; sorting
 & recycling of other waste materials
- Revegetation of disturbed slopes; protecting, restoring and creating aquatic habitat



Straw "log" terraces are created to encourage moisture retention and improve surface soil stability while plantings of native vegetation become established.



On some steeper slopes, steel mesh is tightly anchored into the soil and underlying rock to prevent surface movement. Seeding follows to provide additional stability.





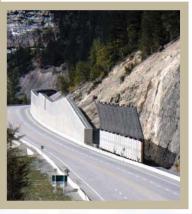
CLIMATE ACTION

April 15, 2001

Greenhouse gas emissions from construction are only part of the picture. Having long considered financial life-cycle costs in the evaluation and implementation of transportation infrastructure designs, the Ministry of Transportation now also considers the "carbon expenditure" or GHG impact of operating, maintaining and using its facilities. This has led to an increasing emphasis on alignments that reduce the load on engines, and on facilities that can be operated and maintained with as low a net carbon footprint as practicable.







KICKING HORSE CANYON



KICKING HORSE COUNTRY IN THE SPOTLIGHT

April 15, 200

The Trans-Canada Highway in this region has provincial and national significance.

- It supports Pacific Gateway and ports system enhancements worth an additional \$6.6 billion/year in economic output to the Canadian economy by 2020, with \$4.7 billion of that occurring in British Columbia.
- It also means the creation of 45,000 new highpaying jobs, including 32,000 in British Columbia.
- The project has generated significant local employment. During the height of Phase 2 construction, the annual payroll was in the millions of dollars.
- It will leave a legacy of better access to area recreation opportunities, estimated as worth \$46 million, generating 1,350 additional full-year jobs, \$24 million in taxes and nearly \$2.5 million for local municipal governments.







WHAT DO YOU THINK?

Thank you for attending the Kicking Horse Canyon Project Open House

If you have any comments, please take a moment and fill in the feedback form provided. This information is voluntary.

The project team will use your input when developing the project plans.

You will find more information about our project at our public website: www.kickinghorsecanyon.ca

Thank you for your participation!



MEDIA CLIPPINGS

Kicking Horse Canyon Project unveils third phase to town

COLIN PAYNE

Star Reporter

Last Tresday night more than 165 people packed into the Visitor Centre @ Golden for the Kicking Horse Canyon Pro-

ject public open house.

The open house gave people the chance to learn and give feedback about plans and designs for the upcoming work to be done on the Trans-Canada Highway (TCH) through the Kicking Horse Canyon during the third phase of the project.

The first phase of the project involved the twinning of the highway at the Five Mile rock bluff, and the construction of the new Yoho Bridge. The second phase saw the construction of the massive engineering marvel that is the new Park Bridge across the Kicking Horse River.

Kicking Horse Canyon Project director, Murray Tekano

Kicking Horse Canyon Project director, Murray Tekano says the third phase of the project is the largest and most involved of three, and because of that it's also being divided

up into three parts.

"We'te talking over \$760 million of work yet to be carried out in the canyon," Tekano says. "The facts are that's a significant amount of work. So we had to break it up into parts."

The first part of the project involves the twinning of the TCH between the brake check at the top of 10 Mile Hill to the

entrance to Yoho National Park. 300

"That nine kilometre bit will be widened into four lanes," Tekano explains. "It will be a divided highway. It's going to have wildlife exclusion fencing throughout the entire corridor, with about three wildlife crossing opportunities built into the project."

It will also include widened shoulders for cyclists, and an interchange for access to the Beaverfoot and Wapta roads.

Tekano notes that this part of the project will open to tender from contractors late this summer, and is anticipated to

be completed by 2010.

The next part of the project is expected to begin in 2010, and involves the twinning and realignment of the highway from the top of Golden Hill at Upper Donald Road, to the goat viewing area to the east, an area Tekano calls the "west roots!"

"That's a fairly problematic area for speed-related accidents," Tekano says. "The alignment is not the greatest. We have quite a few issues there. This project will allow us to extend four lanes through there so there will be more passing opportunities. By that point, traffic is getting pretty frustrated from following transport trucks.

"Just like the brake check to Yoho Park section, there'll be continuous wildlife fencing, along with a wildlife overpass constructed to allow local migration and ranging for wildlife

in the area.'

Perhaps one of the most interesting features built into this part of the project is the plan for the area of the North Bench at

the top of Golden Hill.

Right in front of the Visitors Centre @ Golden, the highway incorporates a traffic circle, or 'roundabout," which Tekano says is becoming a more popular way of controlling the flow of traffic as opposed to signals.

An overpass will allow access to and from Golden View



SUBMITTED PHOTO

MORE THAN 165 PEOPLE showed up to the Kicking Horse Canyon Project open house, held at the Visitors Centre @ Golden last week. The open house gave resi-Road, and also links the North Bench to the rest of Golden via a perfection and his vole path

a pedestrian and bicycle path.

"It begins to introduce the urban features we're moving more toward now," Tekano says. "We're incorporating cycling and pedestrian movements across the highway at Upper

Donald Road.

"We're proposing a lookout area to replace the lookout area that's halfway up the hill right now. That lookout and plaque would be relocated to an area just at the Upper Donald Road intersection. That will also be part of a cycling trail that will use parts of the old highway and make its way down to the road systems in Golden at the bottom of the hill."

This part of the project is slated for completion by 2012.

The final parts of the project involve the twinning of the TCH from the Highway 95 interchange to the top of Golden Hill, along with improvements to the interchange, and significant changes to the winding section of highway between the west portal and the Yoho Bridge.

Two options are being proposed to improve the section of highway between the west portal and the Yoho Bridge,

Tekano says.

The most efficient and ambitious of the two proposed plans is a three kilometre-long, state-of-art tunnel that would make the drive between the area where the goat viewing area cur-

dents the chance to give input and learn about the third phase of the project which will be gearing up to start late this summer.

rently is to the avalanche wall before the Yoho Bridge as flat as a parking lot.

"The tunnel would be virtually flat," Tekano says. "You would-come up from the Yoho Bridge toward Golden, and just as you got to the avalanche wall you'd leave on a little viaduct and it would be almost flat all the way until you daylighted at the portal area just east of the goat viewing station right now."

The other option involves an overland route consisting of various bridges, small tunnels and snow sheds.

Tekano notes that they have to consider alternatives because the option to build the large tunnel is an ambitious

"We have to recognize that in North America these would be the longest tunnels of their kind," he says. "But that kind of uniqueness brings a price with it, and means there are very few contractors that would perhaps want to engage in that kind of work."

But Tekano feels there is a good possibility a tunnel will be built through that section of the canyon.

"I'm thinking and believing (that by) the interest being shown by both national and international contractors on the

CANYON CONTINUED ON A4

MUNITY

CANYON: Project 'a great new reality'

'When it's done, it's going

to eliminate, or significantly

reduce the incident rate...'

- Murray Tekano

CONTINUED FROM A2

tunnel portions we've been looking at to date, it's going to be a foot race," he says. "And I wouldn't be surprised at all if tunneling is the winner in the final analysis."

The latter two parts of the project have no projected dates because they're still awaiting approval for funding from the federal government. But Tekano is confident the federal government is fully committed to the project.

In the big picture, Tekano feels these highway improvements will mean much greater

safety for highway motorists.

"When it's done it's going to eliminate, or significantly reduce the incident rate on the Trans-Canada," he says. "There'll be a divided highway from Yoho Park all the way to the Highway 95

interchange, which will reduce the incidence of head-on collisions. It also reduces the incidence of wildlife collisions."

dence of wildlife collisions."

Beyond safety improvements, Tekano says many people attending the open house were largely interested in both the economic benefits this project will bring to the community, and the environmental impacts involved.

Tekano says Golden will experience many benefits from the completion of this project.

"These just aren't from dollars coming in from construction work," he says. "Those are benefits resulting from improved transportation from points east of us - from Alberta and the immediate vicinity."

Golden Area Initiatives director, Rob Miller agrees that the highway improvements will be economically beneficial to the area.

He says an increased perception of traffic safety will bring more people into the area

and having better access to the visitors centre will help put Golden on the map as a provincial gateway.

"From an economic development, public relations and marketing perspective, it's a

great new reality," Miller says.

Tekano also notes their emphasis on carrying out the project in an environmentally sustainable fashion.

He says they'll be pioneering "bioengineering" techniques as part of the project, which aim to reduce the number of greenhouse gas emissions created during the construction of

the project and after it's completed.

"We're also developing a better list of plant species we can use to rehabilitate slopes, and different treatments we can apply to things like wood waste generated by the project," Tekano notes. "We're just looking at general environ-

mental stewardship in the corridor. It's leading us into some new and interesting areas."

Wildsightprogram director, Rachel Darvill says she is pleased with the environmental sustainability of the projects.

One thing she points to in particular is the proposed anti-idling policy involved in the

Kicking Horse Canyon Project.

"From what I understand they're going to be placing anti-idling signs at all the rest areas and pullouts," Darvill says. "They're also going to be placing anti-idling signs (in areas) where traffic gets stopped for highway improvements.

"I think that's great and it would be awesome if the rest of the highway projects could

take on that same initiative."

For more information about the Kicking Horse Canyon Project, visit http://www.th.gov.bc.ca/kickinghorse/index.htm