

Highway 1A/22 Cochrane Interchange Frequently Asked Questions

Why is this interchange needed?

The interchange is needed to address population growth in the area and increasing traffic demands at the Highway 1A/Highway 22 intersection. The new interchange will expand the capacity of both highways, enhance safety and accommodate future growth.

Once the interchange is complete, what improvements will drivers notice?

Noticeable improvements for drivers include:

- expansion to 4 lanes on Highway 1A (two lanes in each direction) from east of Big Hill Creek to west of Highway 22;
- elimination of the existing Highway 1A traffic signal on Highway 22;
- addition of two new bridges over Big Hill Creek, with removal of the existing bridge;
- replacement of the Highway 22 Canadian Pacific Railway overpass with a wider overpass which will accommodate the new interchange ramps,
- addition of a new overpass to carry Highway 22 over Highway 1A; and
- new interchange ramps to connect the two highways.

Why was the Partial Cloverleaf (Parclo AB) design option selected?

This interchange was rigorously evaluated to ensure it can effectively accommodate population changes in the area, traffic growth and transportation corridor use.

The Partial Cloverleaf (Parclo AB) design will meet growing traffic volumes now and in the future and provides more efficient traffic flows, in the Town of Cochrane and the surrounding area, while minimizing the footprint of the interchange and cost of overpass structures.

Several considerations were addressed in determining the configuration of this interchange:

- accommodating proximity of the highways to the Canadian Pacific Railway tracks;
- limiting impacts upon adjacent lands (Cochrane Ranche, the Cochrane & District Agricultural Society site, historical and environmental considerations, etc.);
- limiting impacts to Big Hill Creek;
- accommodating existing and future major oil and gas pipelines;
- accommodating existing and projected future traffic volumes; and
- minimizing noise and visual impacts to adjacent homes and businesses.

The Parco AB includes two intersections on Highway 1A. As part of the design process, the merits and feasibility of traffic signals and roundabouts were reviewed, with roundabouts showing to improve traffic flow and enhance safety.

Why not build a full cloverleaf?



Cloverleaf configurations are not commonly built anymore due to short acceleration/deceleration distance between the loops, which becomes problematic and less safe with higher traffic volumes and it has a larger footprint than other options.

Constraints for a full cloverleaf at this location include:

- The presence of the Canadian Pacific Railway tracks and the large land footprint (historical lands, native grasses, private residences, etc.) of the interchange configuration.
- Additional bridges for the loop ramps would be needed to cross the tracks, adding considerable costs, increasing both the project footprint and land requirements.

Why not build a “free flow” interchange with fly-over ramps?



Building a “free flow” interchange with flyover ramps would require significantly more land, resulting in significantly larger costs. Having two free-flow highways also requires elimination of access points for residential and business, which is not consistent with the function of Highway 1A.

How long will the interchange take to construct?

Budget 2018 provides funding for continued design work. Design is expected to be completed by Fall 2019, and if approved, construction could begin later the same year. Once the project has been tendered, construction is expected to take approximately two years.

How will pedestrian access be accommodated?

The selected design will accommodate pedestrians within the interchange area. Details will be available as design proceeds.

Why are you considering roundabouts at the entrance to the interchange ramps?

A roundabout provides the required controlled intersection and allows for traffic signals to be removed. Additional information on roundabouts can be found on our website at: <http://www.transportation.alberta.ca/roundabouts.htm>

Are alternate access points being considered at Range Road 43 / Ranche Road to/from Highway 22?

Based on previous planning studies and approved plans for Sunset Ridge, the proposed interchange will require alternate access points to and from Highway 22 at Range Road 43 / Ranche Road. The northbound entrance and southbound exit ramps of the interchange will extend through the existing access at Range Road 43 / Ranche Road to accommodate steep grades of the site and to safely tie-in the ramps to Highway 22. As a result, the existing right-in/right-out access to Ranche Road, and the all-turns access at Range Road 43, cannot operate safely. Alberta Transportation is in conversation with Rocky View County and the Town of Cochrane, and alternate access is under review.

How will potential impacts to the environment be mitigated?

An Environmental Evaluation will be completed to determine the best way to minimize and address potential impacts near Big Hill Creek and Cochrane Ranche. The current concept has been developed based on previous environmental impact studies completed for highway twinning designs. All required environmental permits and approvals will be in place before construction starts.

Will there be increases in traffic noise?

As part of the interchange design, a traffic noise study will be completed, based on future traffic volumes and posted online when completed.

How much will this interchange cost?

The interchange is estimated to cost between \$40 and \$50 million.

Where are project updates available?

Project updates or additional information is available at <http://www.transportation.alberta.ca/6056.htm> or by emailing hwy1A22@islengineering.com