

# Stoney Trail North Interchanges Shaganappi Trail Interchange Q&A

#### Overview

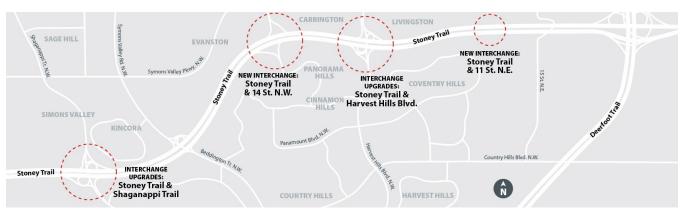
The north side of Calgary has experienced significant population and traffic growth over the last few years. With the planned addition and development of the new communities of Carrington, Livingston, Keystone Hills and other developments in the area, further traffic stress will be added to the surrounding roadways and interchanges requiring improvements to the network in order to maintain traffic flow and support development.

The City of Calgary has allocated funding through developer levies to construct a number of interchanges along Stoney Trail North. The first to move forward on construction was the new interchange at Stoney Trail and 14 Street N.W, which is currently under construction. The other interchange projects include:

- Stoney Trail/11 Street N.E. new interchange
- Stoney Trail/Harvest Hills Blvd. N. twinning
- Stoney Trail/Shaganappi Trail N.W. twinning

Construction on all three interchanges are planned to commence in 2021 with completion by Fall 2022.

The interchanges will be constructed within the Transportation Utility Corridor and will be owned, operated, and maintained by Alberta Transportation upon completion. As such, the project teams for these interchanges will be working closely with Alberta Transportation and their owner's engineer throughout the design process.



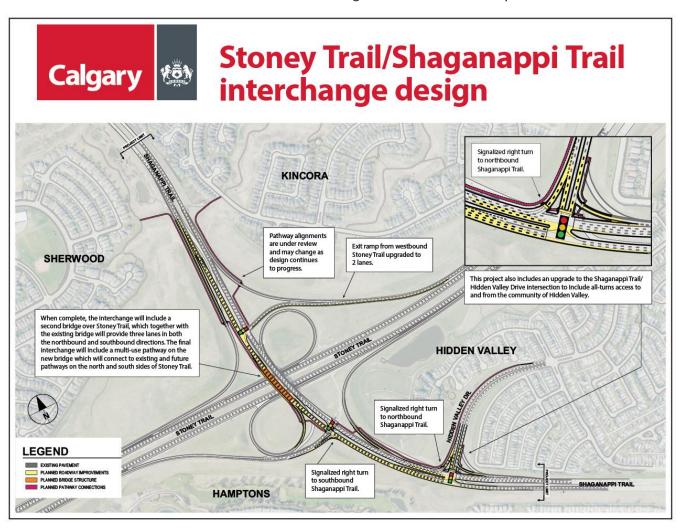
Stoney Trail North Interchanges Projects

## Design of the Stoney Trail/Shaganappi Trail Interchange

The existing interchange at Stoney Trail and Shaganappi Trail N.W. was constructed in 2006-2007 and is three lanes wide, with two lanes southbound and a single lane northbound.

This project will upgrade the interchange by building a second three-lane bridge adjacent to the existing north-south bridge, providing three travel lanes in each direction when completed. The interchange is already designed to accommodate the addition of the second bridge. The interchange will also accommodate a multi-use pathway that will connect to existing and future pathways on the north and south sides of Stoney Trail.

In conjunction with the review and design of the Stoney Trail & Shaganappi Trail N.W. interchange, the Hidden Valley Drive connection to Shaganappi Trail will also be reviewed and incorporated into the design and construction of this project. There is a strong desire from the Hidden Valley community for an all-movements connection at this location to facilitate better access and egress from the community.



#### **Summary of Questions & Answers**

We are currently in the design phase of the Stoney Trail/Shaganappi Trail interchange project. Due to COVID-19 restrictions and in an effort to keep everyone safe, the interchange design above was shared online on the project website at <u>calgary.ca/stoneyNinterchanges</u> and the public and stakeholders were encouraged to ask questions of the project team through an online survey. The survey was open from October 23 – November 13, 2020 and was promoted in a mailout sent to approximately 22,000 homes and businesses as well as through City of Calgary social media accounts and adjacent community associations.

We received 52 questions specifically about the Shaganappi Trail interchange, and the summary of questions and answers is provided below.

#### **Construction and construction impacts**

- Q. When will construction begin and be complete?
  - A. Construction will begin Spring 2021 and is anticipated to be complete Fall 2022, weather permitting.
- Q. How will construction noise and traffic noise be managed for the Hamptons?
  - A. The majority of the construction activities will take place during the day to minimize construction noise disruptions to the adjacent residents. Major activities, such as bridge girder installations, concrete deck pours, etc., may occur at night to minimize impacts to traffic, but noise from these activities are not typically disruptive.
- Q. Will there be detours?
  - A. The majority of construction is expected to occur outside the major travel lanes, so will not affect traffic; however, some detours and lane closures are anticipated, but where possible, these will be limited to short durations in off-peak hours and at night to reduce traffic impacts.
- Q. Will construction slow traffic along Shaganappi Trail?
  - A. Traffic speeds may be reduced in the construction zone, however impact to the flow of traffic should be minimal.
- Q. Will the Hidden Valley Drive intersection be completely inaccessible (in any currently available direction) at any time during construction?
  - A. Traffic on existing roadways will be maintained during construction, however there may be some isolated closures/detours to complete tie-in work which would be scheduled for off-peak or night work.
- Q. Will a temporary entrance/exit for Hidden Valley Drive be provided?
  - A. The existing entrance will be maintained during construction. Detours will be in place to construct the proposed improvements and to minimize traffic disruption as much as possible.
- Q. During construction, how will traffic flows and/or the existing residential speed limit be handled to mitigate increased traffic using Hidden Valley Drive to avoid the construction?
  - A. Traffic delays and impacts during construction are expected to be minimal, so additional traffic along Hidden Valley Drive and other residential roadways are not expected. There are no plans to change the residential speed limit on Hidden Valley Drive.

- Q. When will work on Hidden Valley Drive begin and can it be expedited?
  - A. Construction will occur anytime between Spring of 2021 and Fall of 2022. As this project has not yet been tendered, an exact start date has not been determined.
- Q. How can we ensure the project gets done on time?
  - A. We are currently targeting to complete construction on this interchange by the end of 2022. We are optimistic this schedule can be met, however, as with all construction, there is always risks with procurement, construction, and weather which may impact the completion of the project.

#### Interchange design

- Q. Why not build the originally planned full-systems interchange with the eastbound to southbound and westbound to northbound flyovers that the area is already graded for?
  - A. Based on current functional planning with projected traffic volumes, the eastbound to northbound flyover is not deemed to be required anymore. There is future allowance for the westbound to southbound flyover, however it wouldn't be required within the next 30 years.
- Q. Is it possible to make the two loop -ramp exits from the main road before the interchange so it can bypass the lights like the Beddington Trail north to Country Hills West loop?
  - A. Given the improvements at the Hidden Valley Drive intersection to accommodate turns in all directions, this alternative is not feasible.
- Q. If you are merging onto Stoney Trail going eastbound and you have to take the exit to Beddington Trail you have to merge back into the right turning lane. It would be nice to take exit ramp from Shaganappi Trail to Stoney Trail and stay in that lane to get onto Beddington Trail.
  - A. Lane balance along Stoney Trail is required to accommodate all the interchange ramps. Ultimately, in this location, the Shaganappi Trail northbound to Stoney Trail eastbound ramp will have its own lane that exits at Beddington Trail.
- Q. Why is there a signalized right turn? Would it not flow better with just a regular merge or yield on red?
  - A. In order to accommodate the forecasted traffic volumes, dual right-turns have been provided. They are signalized for safety purposes and to provide the necessary breaks in traffic for weaving to get across multiple lanes to access the new southbound left turn at Hidden Valley Drive.
- Q. Why is there not a loop ramp for westbound Stoney Trail to southbound Shaganappi Tr? / Why not complete the two remaining cloverleaf loops to eliminate the need for traffic lights on Shaganappi Trail? / Why does the design include the two traffic lights which can be eliminated by simply constructing an exit ramp?
  - A. Based on current functional planning with projected traffic volumes, a full cloverleaf interchange design is not required. There is future allowance for a westbound to southbound ramp, however, based on forecasted traffic volumes, it wouldn't be required within the next 30 years.

#### **Pedestrians and Pathways**

- Q. Why is the pedestrian pathway only on the west side of the bridge over Stoney Trail?
  - A. The existing Shaganappi bridge over Stoney Trail does not include room for a pathway/sidewalk, so a pathway can not be provided on the east side of the bridge to cross Stoney Trail.
- Q. Will there be a pedestrian crossing signal for the north crossing to Kincora on the ramp to Shaganappi Trail?
  - A. Yes; pedestrian actuated rectangular rapid flashing beacons will be provided for the ramp crossing.

Q. Is it possible to include a pedestrian crossing of some sort from Sherwood Way to Kincora Boulevard? It would be useful for the residents of these communities to not have to walk all the way to one intersection or another.

A. The Rotary Mattamy Greenway connects Sherwood Way to Kincora via crossing Shaganappi Trail at Sherwood Gate (see <u>Pathway and Bikeway Plan (calgary.ca)</u>). To our knowledge no other crossings across Shaganappi Trail are planned.

#### **Hidden Valley intersection design**

Q. Will the new design incorporate an easier way to get from Hidden Valley Drive to Shaganappi Trail heading north?/Will access to northbound Shaganappi be provided?

A. Access from Hidden Valley Drive to northbound Shaganappi Trail will be provided by a signalized dual right turn.

Q. Why is the Hidden Valley Drive intersection not grade-separated? Will there be an overpass or stoplights?

A. In order to provide an 'all-turns' intersection and given its proximity to the Stoney Trail interchange, this is not possible. The intersection will be signalized.

Q. Why is a traffic circle not considered?

A. A roundabout was evaluated as part of the Functional Planning review. It would not provide the necessary traffic capacity needed for this location and was discounted.

Q. Will the current configuration of Hidden Valley Drive connecting to Shaganappi Trail cause future projects to have a better review of the designs so this situation does not occur again??

A. The City of Calgary is aware of the concerns with the current configuration of this intersection and will take these concerns into consideration when working with Developers in designing connections to future communities.

Q. Is Hidden Valley Dr. accessible from southbound Shaganappi Tr?/If I were heading south from Nolan Hill crossing over the Stoney Trail bridge, would I be able to access Hidden Valley?

A. Yes; a signalized dual left-turn from southbound Shaganappi Trail to Hidden Valley Drive will be provided.

Q. Will Hidden Valley residents still have access to northbound and southbound Stoney Trail in this design?

A. Yes; residents will have access to northbound and southbound Shaganappi Trail from Hidden Valley Drive with this design and will be able to access Stoney Trail from northbound Shaganappi Trail.

Q. Is introducing another traffic light at Hidden Valley Drive going to cripple traffic on Shaganappi Trail?

A. The upgrades to Shaganappi Trail and twinning the existing interchange bridge will add traffic capacity and reduce congestion on Shaganappi Trail. The traffic signals on the interchange are planned to be synchronized with the new traffic signal at Hidden Valley Drive to minimize delays and improve traffic flow. The only way to provide an 'all-turns' intersection to Hidden Valley is with the addition of the signalized intersection.

Q. Will turning right from Hidden Valley Drive include access to Stoney Trail and Shaganappi Trail north?

A. Yes.

Q. Is there another intersection possibility for Hidden Valley Drive and the exit ramps that does not involve more traffic lights (traffic circle or other)?

A. Several intersection configurations were reviewed for the Hidden Valley Drive intersection and the one carried forward provides the best fit for this location. A roundabout was evaluated as part of the Functional Planning review. It would not provide the necessary traffic capacity needed for this location and was discounted.

Q. Have we considered a design where vehicles don't have to stop on the Shaganappi Trail overpass as it is already very congested at rush hour (pre COVID)?

A. Given the constraints with upgrading the existing interchange and providing an 'all-turns' intersection at Hidden Valley Drive, eliminating traffic lights is not feasible. The planned upgrades will add additional lanes and capacity to the intersection so congestion will be reduced.

Q. Would you consider dedicating one or two lanes on the right hand side of Shaganappi Trail eastbound that would not have to stop at the traffic lights at Hidden Valley Drive? In other words, only allow a single left-turn to leave Hidden Valley onto Shaganappi Trail using a traffic light. Permanent safety cones can be installed to direct people turning into that direction. This way, we can reduce the congestion travelling in that direction.

A. Given the projected traffic volumes a dual left turn onto Shaganappi Trail southbound is required. Given the relatively short distance between the interchange and Hidden Valley Drive intersection, there are limited alternatives to accommodate all movements.

#### **Planning**

Q. Was this interchange already changed once?

A. There may have been minor upgrades to this interchange in the past, but the long-term plans was always to construct a second bridge structure to accommodate the southbound lanes for this interchange.

Q. Do planners look ahead for expected city growth?

A. Yes, The City of Calgary Transportation Planning business unit looks after long-range planning for the city. Construction of the second bridge structure for this interchange was part of the long-range plans and space was set aside for this purpose when the original interchange was planned and constructed by Alberta Transportation.

#### **Speed limit**

Q. Is it possible to make the speed limit 70 km/hr between Sherwood Gate and Hidden Valley Drive?

A. This suggestion has been passed on to Roads for consideration. Shaganappi Trail north of Stoney Trail is an arterial street with lower speeds than Shaganappi Trail south of Stoney Trail which is classified as a skeletal roadway.

#### **Traffic lights**

Q. How will the traffic lights be synchronized as there will now be three sets of lights in a relatively short distance?/Is it possible to have existing and new traffic light patterns changed/timed so the three are in unison?

A. Signalization will be reviewed to synchronize the lights as much as possible to provide maximum traffic flow efficiency for Shaganappi Trail.

Q. Can you eliminate or reduce traffic lights?

A. Roundabouts were evaluated as part of the Functional Planning review, however were discounted as they could not handle future traffic volumes.

Q. How is this going to improve traffic flow with an extra set of lights being added for northbound traffic on Shaganappi Trail?/Why ANOTHER traffic light at Hidden Valley Drive/Shaganappi Trail intersection?/Would that increase the already long wait time to cross that bridge?

A. Signalization will be reviewed to synchronize the lights as much as possible to provide maximum traffic flow efficiency for Shaganappi Trail. The second bridge will also provide additional lanes for Shaganappi Trail which will allow for additional capacity on Shaganappi Trail.

### Survey

Q. If you really wanted input from citizens/taxpayers why do you limit the number of characters in the question format?/Where can I find responses to my questions and also responses to questions submitted by other taxpayers?

A. The character limits were put in place to encourage participants to break-up their questions so that we could better respond to them. Multiple question fields were provided if participants had more than one question. The questions and answers will be posted to the project website and will be provided to the community associations.