Traffic / Mobility issue in Silver Springs Community

This document presents all the traffic and mobility issues identified by the Silver Springs Community Association (SSCA). This list may not be exhaustive as some area of concerns may have been missed.

Most of the issues are from two prior reports released by the SSCA in 2016 and 2019. The issues that have been addressed by the city have been removed while some additional areas of concerns have also been added.

Issued: August 25th 2020

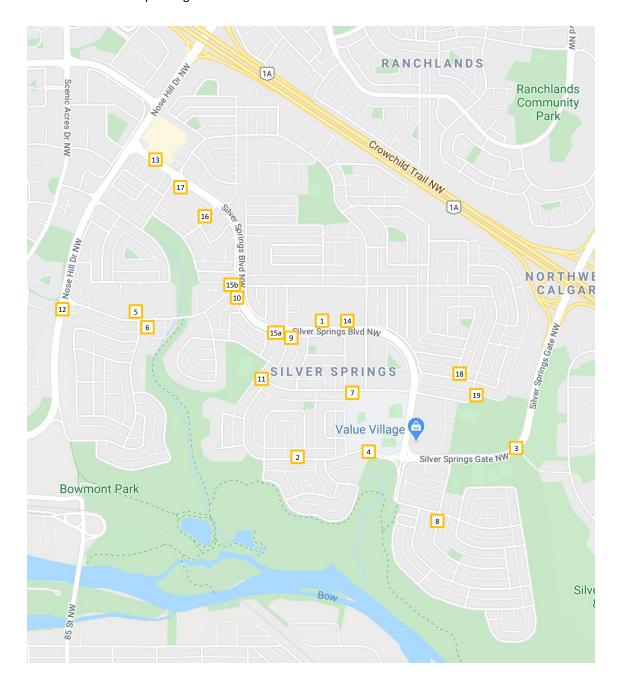
Revised: January 13th 2021

- Addition of Issue 18

Revised: April 12th, 2021

- Addition of Issue 19

Overview of the area of concerns. Hover the issue location with your mouse to have a short description and click to be directed to the corresponding issue in the document.



1. Sidewalk along Silver Springs Blvd

Existing condition

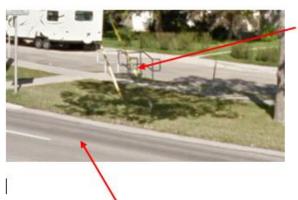
Due to tree roots the sidewalk slabs are extremely uneven. Making it very difficult to travel for people with low mobility using electric wheel chair or electric scooter. In addition sidewalk access from side street is sub-optimal for people with low mobility as access point are only sparingly provided. Section of the boulevard up to 500m do not provide any ramp access to the Blvd from side street. For example, the sidewalk at Silver Springs Rd can be accessed through stairs only from the east side of the Blvd (along Silver Ridge Way),. The next closest access point accessible by ramp is 200m south while no access point is provided at all north of Silver Springs Road.



Arial view of the stair access at Silver Springs Rd



Example of one of the long stretch without proper access to the sidewalk from the side street



West/ north bound Silver Springs Blvd. on the east side of the road

Stairs leading from Silver Ridge Way to sidewalk along Silver Springs Blvd.

Proposed improvement

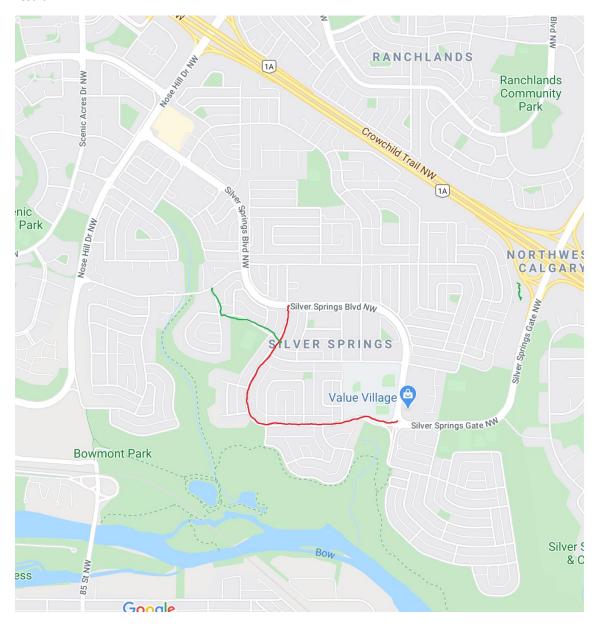
Fix the sidewalk so that it is even. Use the rubber material the city was testing maybe?

Add sidewalk access point for low mobility resident.

2. Use of residential roads to avoid the Blvd 30 km/hr zone

Existing condition

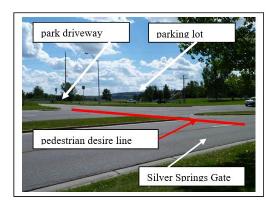
Drivers tend to avoid the school zone on the Blvd by going through other residential roads. The main short cut roads used is Silver Ridge Dr (in red). Also Silver Hill Rd and Silver Hill Way (in green) see excessive traffic as a result.



3. Bowmont Park access from Silver Springs Gate

Existing Condition

There is a strong desire for pedestrians and cyclists to cross Silver Springs Gate at this location to access the pathways in the Birthplace Forest/Botanical Gardens with the Bowmont Park pathway system. It is quite frequent to see pedestrian crossing at this location and obvious in the winter time as a clear path in the snow can be seen on the curb. A fenced dog park is also located on the other side of the road from the Birthplace Forest, many dog owner could benefit to be able to travel from one to another. Lastly there is a sign for a future bus stop east of Silver Springs Gate, just at the end of the curve. Based on a conversation with Calgary Transit this is because a school bus stops at that location. Given the number of car loosing control at this location in the winter it would make sense to try to slow down traffic at this location . Currently, the posted speed limit on Silver Springs Gate in at this location is 70 km/h.



Bowmont Park access looking southwest

Proposed Improvement

In order for pedestrians and cyclists to safely use this location to access the park, the City should consider installing a crosswalk with rectangular rapid flashing beacon (RRFB) along with reducing the posted speed limit.

4. Improving pedestrian access to the Silver Springs Community Centre

Existing Condition

There is no sidewalk along the south side of Silver Ridge Drive between Silver Springs Blvd. and Silver Crest Dr. (east). The absence of proper sidewalks in this area limits pedestrian access to Bowmont Park, the transit bus stop on the west side of Silver Springs Blvd as well as the Silver Springs Community Centre. There is also a need to install a crosswalk to the Silver Springs Community Centre in the vicinity of the driveway to the centre. Silver Springs Preschool and the after school care (SOKO) operating from the community centre, access Bowmont park very frequently. A crosswalk will allow to bypass the busy Silver Springs Blvd./Silver Springs Gate signalized intersection to access the community Centre. It will also be beneficial to pedestrians living along or south of 54 Avenue.

Bowmont Park and the community centre are major destinations centres in our community. The community centre offers residents many indoor activities as well as a swimming pool, hockey rinks, and other year round recreational facilities. The availability of vehicular parking spaces is limited and by providing attractive pedestrian access to these facilities, a "Greener" transportation system can be promoted in our community. In addition, a well mark crosswalk could help reducing the speeding issues currently affecting Silver Ridge Dr. NW



Missing sidewalk looking northwest



Missing sidewalk looking southeast



View of community centre driveway



Missing sidewalk looking east near Silver Crest Dr.

There is also a pedestrian access ramp west of the community center that was built to add access option to the community center from Silver Ridge Close (see figure below). This has been a very popular access route as it avoids the need for pedestrian to travel up to the vehicle access point when coming from the west on Silver Ridge Dr. Unfortunately the city as instructed the SSCA to close this access point as no side walk exists along Silver Ridge Close (community centre side).



View of the locked pedestrian access point on the west side of the community center, from Silver Springs Close.

Proposed Improvement

Place a crosswalk on Silver Ridge Dr. in front of the community centre along with some traffic calming curbs. This could take the form of a large painted area promoting speed reduction as shown on the figure below



Suggestion for a large crosswalk in front of the community center

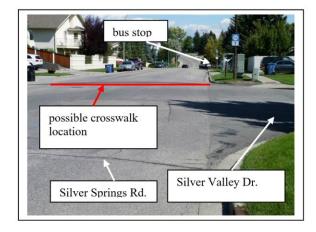
Construct a continuous concrete sidewalk along the south side of Silver Ridge Drive between Silver Springs Blvd. and Silver Crest Drive (east).

Re-evaluate the closure of the pedestrian access point to the west side of the community centre.

5. Need for a Crosswalk along Silver Springs Rd. at Silver Valley Dr. intersection

Existing Condition

Silver Springs Rd. is an important east/west roadway connecting Nose Hill Drive to Silver Springs Blvd. The road is one lane per direction with on-street parking on both sides. There is a mixture of multi-family and single family homes along this road with many of the homes having driveways connecting directly onto Silver Springs Rd. The road is used by Calgary Transit and has bus stops on both sides of the road. Silver Valley Dr. provides access to all the residences located south of Silver Springs Rd. between Nose Hill Drive to the west and Bowmont Park to the east. Full-grown trees and on-street parking limits the ability of motorists to see pedestrians crossing Silver Springs Rd. at this "T intersection.





Silver Springs Rd. looking east

Silver Springs Rd. Looking west

Proposed Improvement

Consider constructing a crosswalk with curb extensions (if space is available) at this intersection to improve the safety of pedestrians crossing this roadway.

6. Silver Valley Dr. grade/alignment/site distance concerns/missing crosswalk

Existing Condition

Silver Valley Dr. is used to access all the homes south of Silver Springs Rd. between Nose Hill Dr. and Bowmont Park. A stop sign is located on Silver Valley Rd. for northbound traffic. Site lines are restricted at this intersection by on-street parking and the fir tree in the southwest quadrant of the intersection.

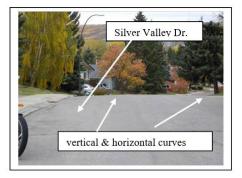
Pedestrians as well as motorists have difficulty seeing oncoming traffic due to restricted visibility at this intersection. Northbound vehicles on Silver Valley Dr. need to extend into Silver Springs Rd. right-of-way in order to see oncoming traffic. This can block the road space used by pedestrians to cross Silver Valley Dr. It also restricts the visibility of pedestrians and vehicles at this intersection. Vehicle tend to speed on Silver Springs Rd which does not help the situation.

A bus stop is also located at this intersection but no crosswalk is provided on Silver Springs Rd. Also, the curb on the SW corner is missing a ramp for wheel chair access.

Another concern at this intersection is the steep downward sloping vertical curve when traveling southbound on Silver Valley Dr. which leads into a horizontal curve at the bottom of the hill. Drivers tend to speed down the Silver Valley Rd. hill and can loose control at the bottom when trying to maneuver through the horizontal curve, particularly in winter driving conditions.



Fir tree & on-street parking restricts site lines



Steep vertical curve & sharp horizontal curve

Proposed Improvement

Determine if the fir tree is on city or private land and take appropriate action to improve the visibility of pedestrians and vehicular traffic in the southwest quadrant of the intersection.

Add a crosswalk on Siver Springs Rd and traffic calming measure to reduce the vehicle speed on Silver Springs Rd.

Review on-street parking to see if there are ways to improve the visibility of pedestrians and motorists at this intersection.

For the problem with vehicles speeding southbound on Silver Valley Dr., could traffic-calming methods such as vertical deflection measures be used on Silver Valley Dr. to reduce speeding vehicles?

7. Crosswalk Need on Silver Mead Rd @ Silver Mead Cres.

Existing Condition

Silver Mead Rd is a 30km/hr zone at that location as it is next to a playground and a school. The crosswalk in front of Silver Springs School (east of Silver Mead Crescent) is marked (zebra mark) however there is no marking at Silver Mead Rd despite the fact that it is a high-volume crossing. At this location there is an opening to the chain link fence to access a very popular playground and it is also used by pedestrian to access the community center from the north. In addition, this is the route used by the children traveling between SOKO (before/after care program) and St Sylvester School 3 times per day.



Left: Areal view of the intersection, right: view of the intersection looking South from Silver Mead Crescent.

Proposed Improvement

Mark the pedestrian crossing with zebra marks as the other crosswalk in front of Silver Springs School.

8. 54th Ave and Silverdale Drive NW.

Existing Condition

Traffic control at the intersection of 54th Ave. and Silverdale Dr. consists of two stop signs on 54 Ave. and no stop signs along Silverdale Rd. Due to the increased speed of vehicles (over 50km/ hr) along 54th Ave., poor visibility of the intersection due to on-street parked vehicles near this intersection and heavy traffic volumes when the soccer and baseball diamonds are in use, safety at this intersection is a concern.



Aerial view of the intersection of 54 Ave and Silverdale Dr. Parking along Silverdale Drive on both sides of the intersection make it challenging for vehicles on 54th Ave to safely enter the intersection.

Proposed Improvement

- 1. A round about could work quite well at this intersection
- 2. A 4 way stop would be another solution but this may increase traffic noise

9. Crossing Silver Ridge Drive at Silver Springs Blvd.

The crosswalk to cross Silver Springs Blvd. at Silver Ridge Dr. is on the east side of the intersection. Individuals walking east along the south side of Silver Springs Blvd. (for example, to access St. Sylvester School), must cross Silver Ridge Dr. to access the crosswalk to cross the Blvd. Visibility for drivers heading north on Silver Ridge Dr., as they approach the intersection is poor due to topography of the road (driving uphill) and vehicles parked on the east side of Silver Ridge Dr. There is no marked crosswalk on Silver Ridge Dr. and no signage indicating that drivers are approaching an intersection. The playground/ school zone for St. Sylvester begins just before drivers reach the intersection, when many are still transitioning to 30km/ hr from 50km/ hr.



The view driving north on Silver Ridge Dr. approaching the crosswalk at Silver Springs Blvd. from 85 meters south of the intersection. The stop sign is indicated by the red star and the crossing indicated by the yellow line.



Approaching the crossing on Silver Ridge Dr. at Silver Springs Blvd. The stop sign (in front of the truck, indicated by the red star) and first part of the intersection (marked with the yellow line) is blocked from view by the parked truck

Proposed Improvement

Adding a marked crosswalk across Silver Ridge Drive at Silver Springs Blvd. on the south side of the intersection and changing the current signage to notify drivers of the crossing.

10. Silver Springs Road and Silver Springs Blvd.

There is no marked crosswalk on Silver Springs Road at Silver Springs Blvd. and visibility for traffic coming east from Silver Springs Road onto Silver Springs Blvd. is poor due to there being a slight bend in the road as vehicles approach the intersection, and vehicles parked along the south side of Silver Springs Road. Several individuals shared stories of being cut-off by vehicles while crossing Silver Springs Road or drivers approaching the intersection at a high speed. This is of particular concern since this is the path children tend to use when walking to schools in the community

Approaching Silver Springs Blvd. from east-bound Silver Springs Road with a vehicle parked on the south side of the road.





Looking west along Silver Springs Road from the south corner of the intersection with Silver Springs Blvd.

Suggested Solutions

Reducing speed on Silver Springs Road, add a marked crosswalk at the intersection and signage warning drivers of approaching crosswalk.

11. Crossing Silver Ridge Drive at Silver Mead Road

There is a t-intersection where Silver Mead Road ends at Silver Ridge Drive, with a marked crosswalk, across Silver Ridge Drive to access Silver Mead Road. The crosswalk is on the south side of the intersection and cars travelling north on Silver Ridge Drive crest a hill as they approach the intersection. They have limited visibility of the crosswalk and several residents have stated that they have experienced near misses while in the crosswalk, due to drivers at or above the speed limit cresting the hill and having little time to stop. There are often vehicles parked on the east side of Silver Ridge Drive potentially restricting the driver's ability to see pedestrians in the crosswalk.



Proposed Improvement

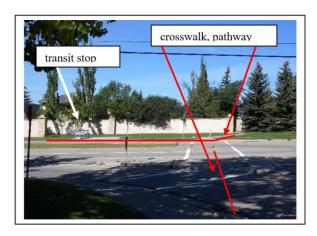
Moving the crosswalk to the north side of the intersection (there are cut-outs on both corners of Silver Mead Road). This will give motorists a greater distance to see pedestrians when they are driving northbound down the hill. Moving the signage further away from the crosswalk (south along the road), giving the drivers more notice of the approaching intersection. In addition traffic calming curbs could be added to improve pedestrian safety but also help the speeding issue on Silver Ridge Dr.

12. Pedestrian signal at Nose Hill Dr. and Silver Springs Rd.

Existing Condition

Nose Hill Dr. is a major roadway separating Silver Springs and Scenic Acres communities. The intersection of Nose Hill Dr. and Silver Springs Rd. is unsignalized. There is an extensive pathway system on the west and east sides of Nose Hill Dr. used by pedestrians to access the transit stop. Cyclists and pedestrians use this crosswalk to access pathways leading into their communities as well as Bowmont Park to the south.





Nose Hill looking south towards the crosswalk

Pathway system on west side of Nose Hill Dr.

Proposed Improvement

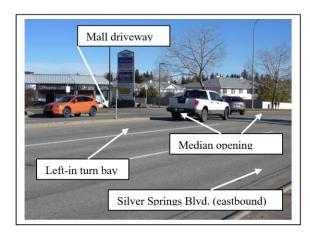
Consider installing a pedestrian activated crosswalk or traffic signal at the intersection of Nose Hill Dr. / Silver Springs Rd. so that pedestrians and cyclists can cross Nose Hill Drive safely. Until such an improvement can be carried out, consider installing the yellow crosswalk sleeves on the crosswalk signposts.

13. Improve vehicular safety at Silver Springs Blvd. / Spring Hill Village Mall intersection

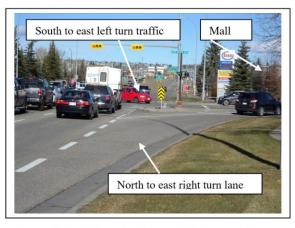
Existing Condition

Fronting the Spring Hill Village mall, Silver Springs Blvd. has two travel lanes per direction, a raised median and a posted speed limit is 50 km/hr. The mall driveway accessed from Silver Springs Blvd. provides all turn movements without any form of traffic control on Silver Springs Blvd. City of Calgary Transportation staff has indicated it is not feasible to install stop signs on Silver Springs Blvd. to control traffic flow between the boulevard and the mall driveway. A left turn bay is provided in the median for inbound left turn traffic into the mall. Vehicles queuing in this turning bay can extend well into the median opening. This restricts the space available in the median opening for exiting left-out traffic and also restricts the driver's ability to see gaps in the eastbound traffic required to merge safely.

The intersection of Nose Hill Dr. and Silver Springs Blvd. has a left turn bay for the south to eastbound turn movement. Currently, for this left turn traffic, the traffic signal has a protected left turn phase and also allows for left turns on the thru movement green cycle. The north to eastbound right turn movement is provided by an exit lane where motorists yield to oncoming eastbound traffic. Taking into account the signal cycle length where the south to east left turns are permitted, and the relatively free flow operation for the north to east right turn movement, there are few gaps in eastbound traffic for motorists to make the left-out movement from the mall driveway during peak traffic periods.



Median configuration at mall driveway



Nose Hill Dr./Silver Springs Blvd. intersection looking north



Ariel view of the exit from Spring Hill Plaza onto east-bound Silver Springs Blvd. The green star indicates <u>Silvergrave</u> Drive and the red, the exit from the shopping centre.

Proposed Improvement

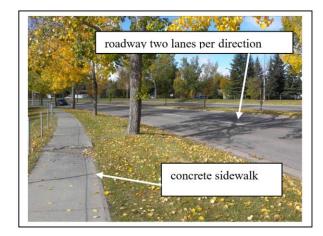
Three alternatives could be examined to improve the safe operation of this driveway on Silver Springs Blvd.

- 1. Consider a round about so that the left-in traffic would have to give priority to the left-out traffic.
- 2. Consider constructing a "pork chop island" in the median opening to separate left-in from left-out traffic. It would also provide left-out traffic with a safe place to wait for gaps in eastbound traffic. It would improve the driver's ability to see eastbound traffic gaps.
- 3. Another option would be to alter the operation of the Nose Hill/Silver Springs Blvd. intersection. Can the signal timing be altered to provide less continuous flow of the left turn traffic without significantly altering the level of service of the intersection? Can the right turn exit lane be altered to reduce the ease of this movement, thereby providing more gaps in eastbound traffic?

14. Improve bicycle facilities along Silver Springs Blvd. from Nose Hill Dr. to 54 Ave.

Existing Condition

Silver Springs Blvd. is the major north/south arterial roadway in Silver Springs. It has a posted speed limit of 50 km/h. and has two traffic lanes per direction with a raised median. Concrete sidewalks are located on both sides of the road. Currently, cyclist shares the roadway with motorized vehicles. Cyclists have expressed safety concerns regarding the speed vehicles travel on this roadway, the serpentine alignment of the road that can make it difficult for motorist to maneuver around cyclists, and the rather steep grade along the road that increases the exposure time of cyclists on the roadway.





Current road and sidewalk layout -

Sample of pathway for cyclist and pedestrians

Proposed Improvement

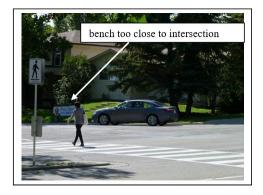
A member of the Silver Springs Traffic Subcommittee should meet with a City staff cycle network specialist to identify a range of options aimed at improving cycling safety along Silver Springs Blvd. Options could range from a separate pathway to converting one travel lane per direction as a bike lane.

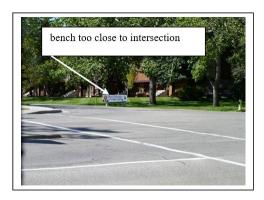
In addition, with minor improvements to the pathway system along the west side of Nose Hill Drive, this could provide a continuous pathway stretching from Bowmont Park's southern access at 54Ave. all the way north to Citadel, connecting Bowmont Park, Crowfoot Town Centre, Crowfoot library and residential areas as Citadel.

- 15. a Location of transit bench on the north side of Silver Ridge Dr. just west of Silver Springs Blvd.
 - b Location of transit bench on the north side of Silver Springs Rd. just west of Silver Springs Blvd.

Existing Condition

Transit benches are located close to the intersection. In the winter, there is a safety concern for transit users using the benches if vehicles making the north to westbound left turn movement lose control of their vehicle and hit people at the benches waiting for the bus.





8a- Bench on north side of Silver Ridge Dr.

8b- Bench on north side of Silver Springs Rd.

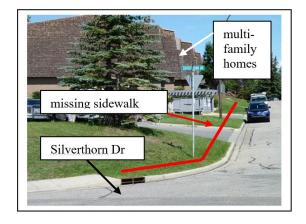
Proposed Improvement

Move the benches further west past the transit stop and away from the curb so that if a vehicle does lose control, transit users will not be in danger.

16. Sidewalk needs along Silverthorn Rd. from Silver Springs Blvd. to Silverthorn Dr.

Existing Condition

There is a need for a sidewalk along the west side of Silverthorn Rd. from Silver Springs Blvd. to Silverthorn Dr. The sidewalk is needed so that residents in the multi-family residences can access the park located south of Silverthorn Rd. and areas north of the residential complex such as the Spring Hill Village Mall in a safer and more convenient manner.





Missing sidewalk looking north

Missing sidewalk looking south

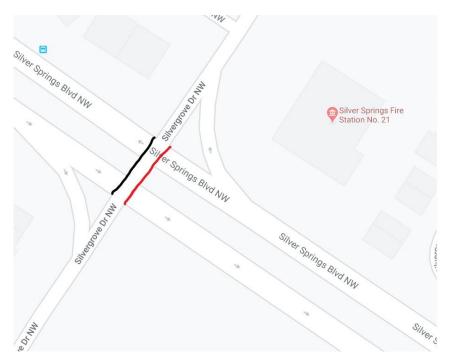
Proposed Improvement

Construct a sidewalk along the west side of Silverthorn Rd. between Silver Springs Blvd. and Silverthorn Drive.

17. Barrier needed to keep pedestrian crossing

Existing condition

Rectangular rapid flashing beacon (RRFB) have been installed on Silver Springs Blvd at Silvergrove Dr, on the west side of the intersection (Black line on figure below). In addition, the crosswalk has been painted with zebra mark. The crosswalk on the east side of the intersection (Red line on the figure below) has been removed however pedestrian continue to cross at this location. This defeats the purpose of the signal and put pedestrian at greater risk.



View of the Silver Springs Blvd and Silvergrove Dr. intersection. Black line is the crosswalk with RRFB and redline is the crosswalk that was removed.

Proposed Improvement

A guard rail should be installed on both side of Silver Springs Blvd to discourage pedestrian to cross on the east side of the intersection.

18. Silver Brook Dr. and Silver Brook Way

Current Situation



Aerial view (Google Map)



View from NE corner



View from Silver Brook Drive towards NE corner



View from Silver Brook Drive towards NW corner

This is an uncontrolled intersection without a yield or stop sign. The large sweeping NE corner of the intersection allows vehicles to come around the corner without slowing down. This is observed for vehicles driving South on Silver Brook Way and taking a left turn to go West on Silver Brook Dr. It is also the case for vehicles traveling West on Silver Brook Dr. and turning right on Silver Brook Way. Fast traffic is also observed for vehicles turning West on Silver Brook Dr coming from Silver Brook Way.

This intersection has a great history of incident:

- December 15, 2020: A car parked on Silver Brook Dr. was hit by a vehicle traveling from Silver Brook Way and taking the turn to Eastbound Silver Brook Dive.
- Between October and December of 2020 a total of three other vehicles got hit from vehicles losing control at his intersection.

• In December 2020 skid marks were observed up over the sidewalk and in the yard of the house on the NW corner from a vehicle unable to manage the turn. See picture below.



- 2005: A car parked on Silver Brook Dr. was hit by a vehicle taking a turn from Silver Brook Way to Eastbound Silver Brook Dive.
- Cars have ended up multiple times on the front lawn of the house just South of the intersection.
- Homeowners of the same house have witnessed cars hitting the curb and going over the sidewalk on multiple occasions while shoveling snow or mowing the lawn. On some occasions they had to step out to avoid getting hit by the car.

All of those incidents seem to be the result of excessive speed at the intersection. The issue is exacerbated in the winter when the intersection may be slippery. Given the nature and number of incidents we are greatly concerned that a pedestrian or cyclist will be injured on day.

Proposed Improvements

Traffic calming measures should be implemented. Suggested solution could consists of:

- Placing low impact speed bumps on Silver Brook Way AND Silver Brook Dr (east side of the intersection)
- Placing a stop or yield sign on a temporary traffic calming curb located between the two lanes of traffic on Silver Brook Way. This would force car not to cut the corner at excessive speed.
- Placing temporary traffic calming curb on the NW corner of the intersection.
- Add signalisation warning drivers of a high impact intersection.

19. Access Road to the Botanical Garden / Off Leash Area Parking Lot (Off Silver Springs Dr. NW)

Existing Conditions

The access road to the Parking Lot at the Botanical Garden and Off Leash Area sees a lot of car, cyclists and pedestrian. Historically it has been a gravel road but it has been repaved recently. Since then, drivers tend to drive too fast for the conditions. The topology of the parking space seems also challenging.



Figure: View of access road to the botanical garden / off leash area parking lot

Suggested solution

Study the situation and implement solution that could improve the parking topology and also limit vehicle speed.P