

GALLATIN STREET

INTERSECTION STUDY



Existing Conditions Report

January 2024



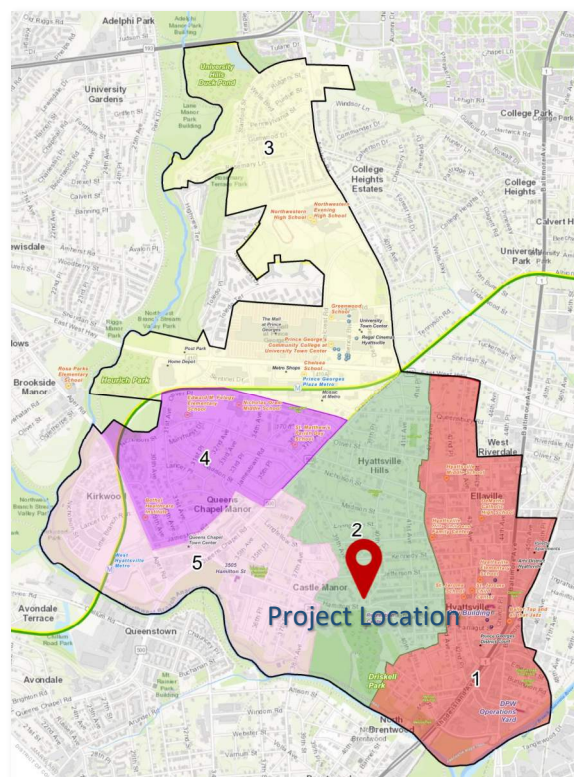
City of
HYATTSVILLE



Project Purpose and Location

The goal of the Gallatin Street Intersection Study for the City of Hyattsville, MD is to identify feasible solutions to improve the safety of pedestrians, cyclists, vehicles, and transit navigating the subject intersection. The proposed improvements will prioritize the most vulnerable road users while maintaining efficient traffic flow. To meet this goal, a complete streets approach is required to evaluate a variety of improvement options such as geometric adjustments, mini-roundabouts, curb extensions, streetscape treatments, crosswalks, sidewalks, pedestrian ramps, bike lanes, traffic calming and, tactical urbanism.

The project is located in the southeast quadrant of Hyattsville, MD. This 5-leg intersection is comprised of Hamilton Road on the west, 40th Avenue on the north, the David C. Driskell Community Park entrance on the south, and Hamilton Road and Gallatin Avenue on the east.



Source: City of Hyattsville

RK&K's Healthy Communities Team conducted a desktop survey of the site to gain familiarity with the project and research available GIS data. The findings of the desktop survey, site visit, and data provided by the City of Hyattsville are summarized in this document.

General Site Description

The Gallatin intersection is All Way Stop controlled (AWSC). The existing stop signs do not include the necessary R1-4 ALL WAY plaques. All roads are owned by the City of Hyattsville and are classified as local roads. The posted speed limit is 25MPH. The roadways that create this intersection are Hamilton St to the west and northeast, 40th Avenue to the north, Gallatin Street to the southeast, and the David C. Driskell Community Park Entrance. See map below.



The Hamilton-Gallatin Street corridor serves as a connection between the West Hyattsville Metro Station (Green Line) and Queens Chapel Road (MD 500) and the multiple points of interest and services that sit along US Route 1. This includes the Arts District, restaurants, retail, and City's government offices. This corridor, along with 40th Avenue also connects the City to the David C. Driskell Community Park. With an area of 32 acres, this is Hyattsville's largest park. It hosts multiple community events and provides amenities such as a recreation center, playground, playing fields, combination tennis & pickleball courts, pavilions, and walking and biking paths. The Hamilton Splash Park is situated in the northwest corner of the park. This aquatic facility is owned and operated by the County.

Existing Conditions

To better describe the existing conditions encountered, the site has been divided in different categories for each leg of the intersection:

The description of each section of the project is categorized by:



Roadway characteristics



Pedestrian Accessibility



Bicycle Infrastructure



Transit



Utilities

Hamilton Street – West Leg



The west leg of Hamilton Street is approximately 34' wide and consists of a two-lane road, one lane on each direction, with a parking lane on the south side (eastbound lane). As previously mentioned, this section of Hamilton Street has a posted speed limit of 25MPH, which is maintained throughout the corridor. Hamilton Street to the west begins at the West Hyattsville Metro Station.



West of the intersection there is an entrance to the Hamilton Splash Park, which can also be accessed via the David C. Driskell Community Park entrance road. At the Gallatin Street

intersection there is a curb extension, only on the southwest corner, and the stop sign at this location is missing the “All Way” plaque.



The westbound lane of Hamilton Street includes continuous sidewalks on both sides of the road. These sidewalks are right against the curb, with no green buffer between the westbound travel lane and the parking lane on the eastbound direction. The West leg of the intersection includes curb ramps with detectable warning surface, but they appear to be non-ADA compliant at initial inspection. The west leg has a designated crosswalk, but the pavement markings are faded and do not include high visibility markings.



There is a mid block crossing at approximately 560’ west of the intersection. This crossings are intended for transit users as there are bus stops on both sides of the street at this location. The mid block crossing does not include high visibility markings and it is supported by a warning device that at first glance does not appear to meet MUTCD standards for mid block crossing signalization.



There is a 900’ long bike lane that runs along the west leg of Hamilton Street. extending from approximately 190’ from the intersection to the next crossing street (38th Avenue). Similarly, east of 38th Avenue there is a bike lane that runs for about 200’ before ending abruptly without adequate signage. There are no shared lane markings (“sharrows”) or signage for the bike lane endings or for vehicles to share the road with bicycles.



The WMATA Metrobus 86 route serves this segment of Hamilton Street. This route runs between Calverton, MD and Rhode Island Metro in DC. In the Calverton direction, buses turn left onto 40th Avenue from Hamilton Street, while in the Rhode Island Metro direction they approach from 40th Avenue before turning right on to Hamilton Street westbound. The bus stops along the west leg of Hamilton Street are located, on both sides of the street, adjacent to the mid block crossing found at approximately 560’ west of the intersection.



Above ground utilities around this leg of the intersection include utility poles with overhead lines and mast arm luminaires on the eastbound side as well as streetlight poles on both east and westbound sides.

Other utilities include drop inlets on both sides of Hamilton Street adjacent to the intersection and curb inlets east of the Hamilton Splash Park entrance. Fire hydrants can be found at approximately 180' west of the intersection and to the east of the Splash park entrance.

Park Entrance Road – South Leg





The David C. Driskell Community Park entrance road is about 20' wide. This is the main entrance to the park, which can also be accessed through the Hamilton Splash Park parking lot. It has two-way traffic and no parking along the road. The road extends south to the parking lot and soccer fields. The park entrance road includes asphalt painting.



The Park entrance road includes a sidewalk on the northbound direction with no buffer. There's no sidewalk on the southbound side. The crosswalk at this leg of the intersection consists of stamped colored concrete and includes curb ramps with detectable warning surfaces.



There is a mid block crossing approximately 190' south of the intersection, that provides access to the parking lot for the Hamilton Splash park. This crossing does not include pedestrian warning signage and the curb ramps are missing detectable warning surfaces.



There are no dedicated bicycle facilities along the road. This is considered as a low stress roadway where it is adequate for cyclists to use the full lane and vehicles to share the road.



There is no transit service along this road



There are utility poles with overhead lines and mast arm luminaires on the southbound lane

Gallatin Street – East Leg



Gallatin Street is a two-way road, approximately 20' wide with no on-street parking. It serves as a continuation of Hamilton St. on the eastbound direction as Hamilton Street, east of the intersection runs only to the west. This connection Gallatin and Hamilton Streets forces vehicles to significantly shift lanes since these two roadways are not aligned. The westbound lane on Gallatin Street is aligned with the Hamilton Street eastbound lane. The stop sign at the intersection is missing the "All-Way" plaque.

The east leg of the intersection is shared between Gallatin Street and Hamilton Street westbound. This condition, the angle in which both streets meet the intersection, in addition to the grade differential between them, creates a poor visibility scenario for drivers approaching the intersection on both roads. They are required to look behind them to identify if there is a vehicle on the adjacent street in order to assess right of way.



Gallatin Street splits at 40th Place where it continues as a one way only in the eastbound direction with parking on both sides. This condition ends at a T intersection with 42nd Ave. North of this intersection Gallatin Street resumes but runs on the westbound direction only from US Rt 1.



Gallatin Street. provides a continuous sidewalk along the eastbound lane. The crosswalk markings at the intersection are faded and do not include high visibility markings. The southeast corner includes a curb ramp connecting to a pedestrian opening at the tip of the separation between Gallatin Street and Hamilton Street. Both include detectable warning surfaces.



Sidewalk on the westbound lane can be found at approximately 180' east of the intersection. This sidewalk connects to Hamilton Street via a stairway adjacent to the new housing development prior to continuing to the east along Gallatin Street. Similarly at approximately 405' east of the intersection, there is a mid block crossing where 40th Place splits from Gallatin Street. This is a stop controlled raised crossing with advance warning signage. This crossing provides connectivity along the north side of Gallatin Street. This segment of Gallatin St. includes sidewalks on both sides, however to continue on the south side, it is required to cross once again just north of the split.



There are no dedicated facilities along Gallatin Street. The section east of the split with 40th Place includes shared lane markings, so it is assumed that the segment east of the intersection is also a shared lane.



There is no transit service along this segment of Gallatin St.



There is one utility poles with overhead lines and mast arm luminaire on the southeast corner. One set of overhead lines connects to a pole on the median, prior to continue north on Hamilton Street. Another overhead lines crosses Gallatin Street and connects to another pole on the northside of the street that is connected to the ground.

Hamilton Street – East Leg





This section of Hamilton Street consists of a one-way lane to the west. The approximate width is 27' and it includes on-street parking on both sides. There are a few residential driveways for the single unit homes located on the north side of the street. The intersection approach includes curb extensions on both sides of the road. The stop signs for this leg are missing the corresponding "All Way" plaques.



This leg of the intersection has a significant grade differential as the road elevation increases to the east. As previously mentioned, this differential, in addition to the angle in which Hamilton Street meets the intersection, and the fact that this leg is shared with Gallatin Street, all contribute to a poor visibility condition for drivers, in which they are required to look behind them to identify if there is a vehicle on Gallatin Street and assess right of way. To the east, Hamilton Street runs up to 42nd Avenue where it terminates at a T-shaped intersection.



Hamilton Street includes continuous sidewalk only on the north side of the street. There is a sidewalk on the south side but it abruptly ends 110' east of the intersection. At this point there are curb ramps on both sides of the street but no marked or signed crosswalk.



At the Gallatin Street intersection, this leg includes a curb ramp on the north corner and the pedestrian opening at the separation between Hamilton Street and Gallatin Street to the

south. Both include detectable warning surfaces. These are connected by a crosswalk with faded line markings and no high visibility markings.



This segment of Hamilton Street is marked as a share lane.



There is no transit service along this segment of Hamilton Street.



This leg of Hamilton Street includes utility poles with overhead lines on the south side of the road. Surface runoff is collected upstream of the curb extensions by curb openings on both sides of the street. In addition there are drop inlets on each side of the crosswalk at the northeast corner.



40th Avenue – North Leg





40th Avenue provides connectivity to the multiple east-west roadways to the north, this includes East-West Hwy (MD 410) via 41st Avenue and Jefferson Street which connects directly to the retail and restaurants on US Rt 1 north of the Art District. The section north of the Gallatin Street intersection is about 22' wide and it runs straight for approximately 150' where 39th Avenue southbound traffic merges into it. On-street parking is restricted on both sides of the street. There are a couple of residential driveways on both sides, just north of the intersection. The northwest corner includes a large curb radius to accommodate buses turning right onto Hamilton Street.



There are continuous sidewalks with green buffer on both sides of 40th Avenue. The intersection includes a colored stamped concrete crossing with curb ramps on both ends with detectable warning surface. This crossing is not ADA compliant as a drop inlet is located at the east end of the crosswalk. The markings for the crosswalk are faded. At the 39th Avenue merge point there are curb ramps but no designated crosswalk.



40th Avenue is marked and signed as a Bike Route as it serves as a key link in the City's bicycle network connecting the different shared lanes north of the intersection to the David C. Driskell Community Park.



As previously mentioned, the WMATA Metrobus 86 route serves this segment of 40th Avenue. This route runs between Calverton, MD and Rhode Island Metro in DC. In the Calverton direction, buses travel south on 40th Avenue, at the Gallatin Street intersection they turn right on to Hamilton Street, while in the Rhode Island Metro direction they approach the intersection from Hamilton Street westbound before turning left onto 40th Avenue.

There are bus stops for both directions on 40th Avenue at approximately 33' and 140' north of the intersection for the southbound and northbound direction respectively.



On this short segment of 40th Avenue there is one utility poles with overhead lines and mast arm luminaires on each side of the street.

Existing Traffic Conditions

The Hamilton Street, Gallatin Street, 40th Avenue, and 36th Avenue intersection is an All-Way-Stop-Controlled (AWSC), five-legged intersection. The east leg of Hamilton Street is one-way westbound only. Each of the other four legs of the intersection accommodates two-way travel. Crash data and traffic count

data were summarized as a part of the effort to evaluate the feasibility of reconfiguring the existing intersection to improve pedestrian and vehicular safety and circulation.

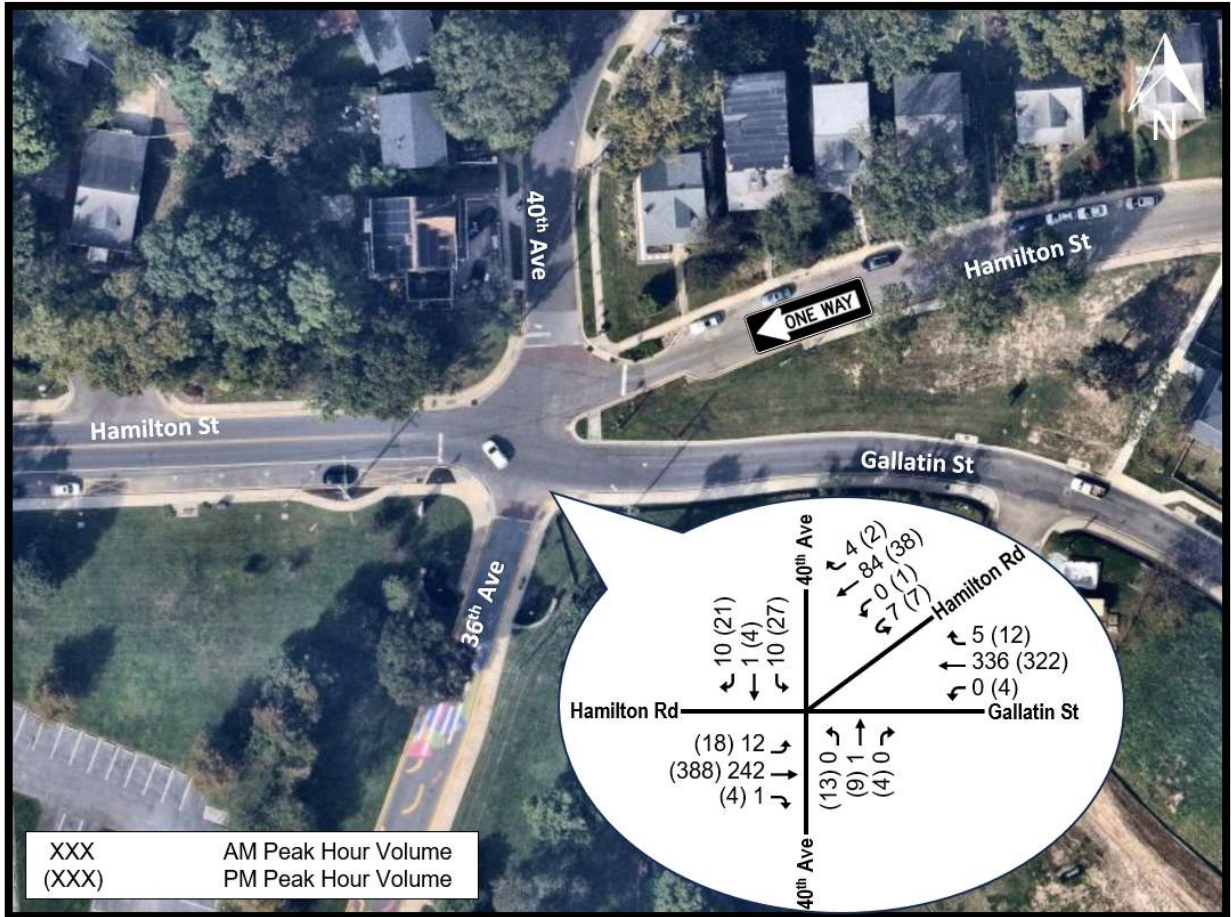
Crash Data

Crash data for the period from January 1, 2018, through October 22, 2023, was obtained and reviewed. During the five-year period, there were a total of 36 reported crashes in the area surrounding the Driskell Community Park. Of the 36 crashes, two (2) crashes involved injuries. Both occurred on the 3900 block of Hamilton Street, and both were hit-and-run crashes. Of the 36 crashes, one (1) pedestrian crash occurred at the Gallatin Street and 40th Place intersection, east of the five-legged intersection (see Table below).

Driskell Community Park Crashes				
Location	Number of Crashes	Number of Injury Crashes	Number of Pedestrian/Bike Crashes	Number of Hit and Run Crashes
3900 blk Hamilton Street	23	2	0	9
4000 blk Gallatin Street	3	0	0	1
Hamilton Street @ Gallatin Street	3	0	0	1
Gallatin Street @ Hamilton Street	3	0	0	0
Gallatin Street @ 40 th Place	4	0	1	0
40 th Place @ Gallatin Street	0	0	0	0
Total Reported Incidents	36	2	1	11

Count Data

Volumes were recorded for the Hamilton Street, Gallatin Street, 40th Avenue, and 36th Avenue intersection on Tuesday, November 5, 2019. Peak hourly volumes were collected from 7:00 to 8:00 AM and from 4:30 to 5:30 PM (See figure below).



Peak Hourly Volumes at the Hamilton Street, Gallatin Street, 40th Avenue, and 36th Avenue Intersection

Conclusion

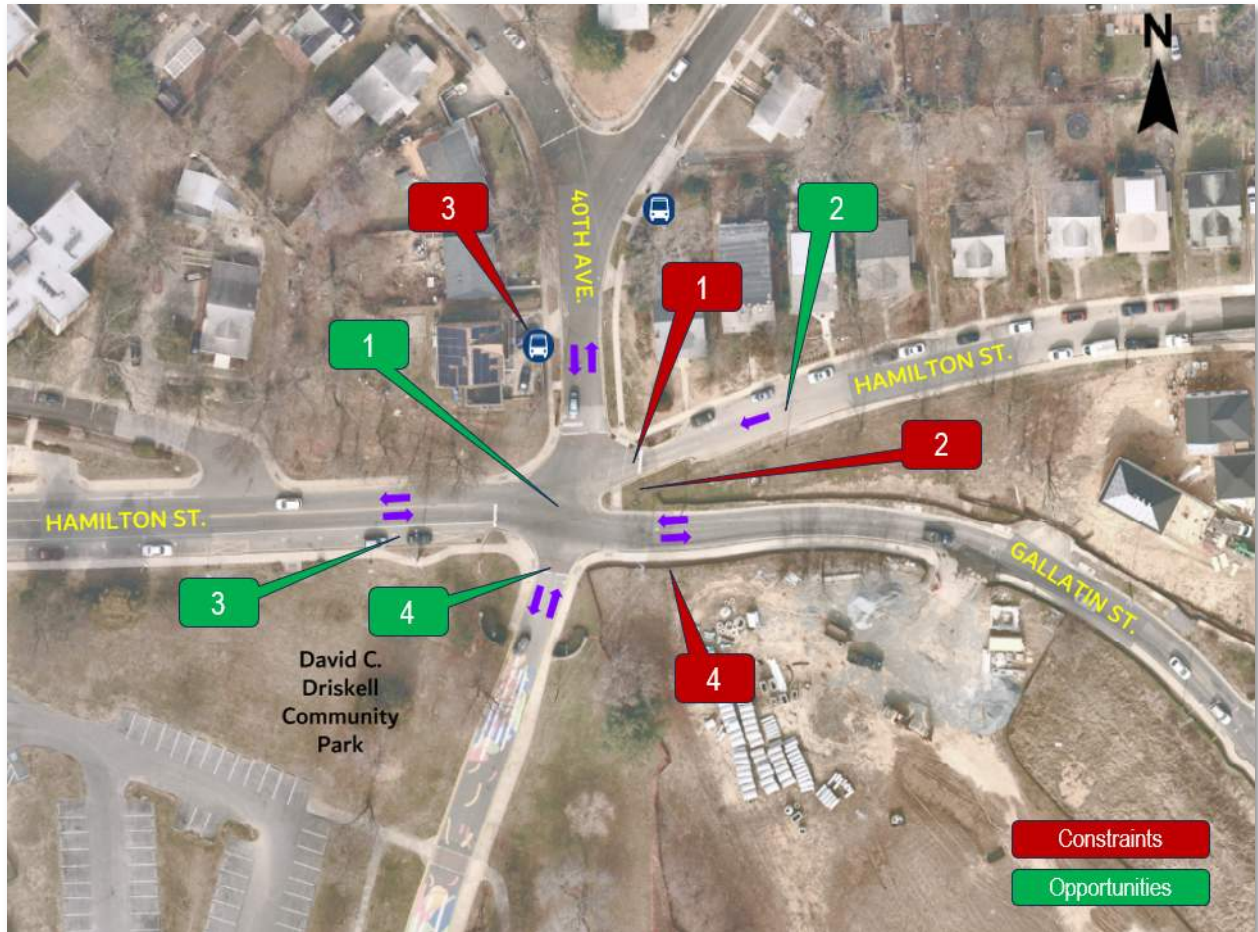
The intersection accommodates low volumes of traffic, both vehicular and pedestrian, during the peak hours. The west leg of Hamilton Street and the east leg of Gallatin Street are the primary approaches, but it is recommended that the intersection not prioritize the right of way of one approach or movement over another due to the unusual geometry of the intersection and the grade differential of the approaches.

With limited information about the crashes in the area, no pattern or safety concern can be identified. Recommendations include the following:

1. All approaches should be upgraded to include R1-4 ALL WAY plaques supplementing R1-1 STOP signs.
2. All crosswalks should be upgraded to high visibility crosswalk markings.
3. Due to the low volumes, alternative configurations are not expected to result significant trip diversions to other neighborhood streets that would cause an adverse impact to residents and road users.
4. Alternative configurations may consider a variety of traffic management treatments and countermeasures identified in the Prince George's County DPW&T Neighborhood Traffic Management Program guidelines – mini roundabouts, semi-diverters, diagonal diverters, or full closures.

Opportunities And Constraints

There are different opportunities and constraints that have been identified during the review of the existing conditions.



Opportunities:

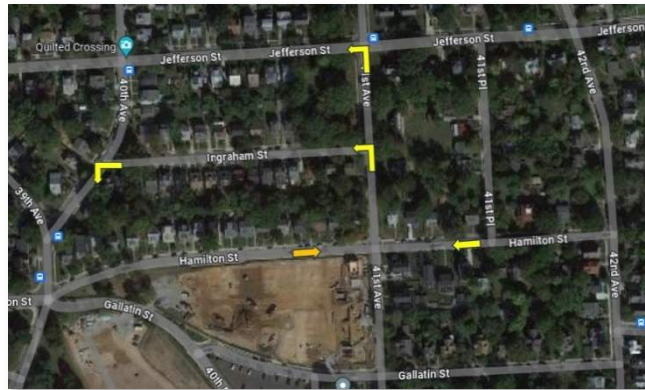
1 Mini-Roundabout Configuration:
The extents and characteristics of the intersection present an opportunity to install a mini-roundabout. These types of treatments are proven to efficiently reduce the number of collisions and the severity of vehicular crashes. The roundabout will simplify the right of way decision making and will make traffic movements more predictable, as vehicles will no longer be able to do U turns at the intersection. Special consideration must be given to preserve transit operation, as buses currently make turns to and from Hamilton St. and 40th Ave. Similarly, drainage will need to be considered and analyzed while exploring this opportunity. With or without the mini-round, there is also an opportunity for tactical urbanism such as asphalt painting at the intersection that can be an extension of the asphalt art



work on the park entrance road and the intersection of 40th Avenue and Jefferson Street. Alternatively, asphalt painting here can be used for placemaking or branding for the park.

2 Hamilton Street Conversion to One-way Eastbound:

Currently, the east leg of Hamilton Street consists of a single lane in the eastbound direction exclusively. As mentioned before, Hamilton Street ends at 42nd Avenue. Reverting the direction of Hamilton Street to the westbound direction, for the block between 40th Avenue and 41st Avenue provides an opportunity to improve traffic along the intersection. With this modification, vehicles traveling west on Hamilton Street, either from this block or from 42nd Avenue, will have to use Ingraham Street and 40th Avenue to continue west, or use Jefferson Street depending on their desired destination.



This traffic modification will eliminate the existing conflict between vehicles approaching the intersection from Hamilton St. and Gallatin St. In addition, it will eliminate U turns at the intersection from vehicles traveling west on Hamilton wanting to go east on Gallatin St. This movement was constantly observed during the site visit and will be no longer needed as vehicles will be already traveling east.

3 Approach Realignment:

As previously mentioned, the west leg of Hamilton Street and the westbound lane of Gallatin Street are misaligned. The parking lane at the north end of Driskell Park on Hamilton Street presents an opportunity to slightly shift the west leg approach on Hamilton Street to reduce the lane shift downstream from the intersection. A few parking spaces, as well as the curb extension, will inevitably be lost with this design approach.



4 Coordination with Park Redevelopment:
The Driskell Park will be going under a major renovation, this includes the entrance road and pedestrian access. This presents an opportunity for the City and the design teams to collaborate and ensure that the improvements proposed by both projects are coordinated and provide seamless connectivity.



Constraints:

1 Elevation Change:
The existing topography, particularly at the northeast corner of the intersection, makes any improvement that requires a curb relocation very challenging since this will translate into earthwork movement, retention structures, and potential impact to private property and existing walls. Similarly, the drainage structures at this corner may have to be relocated or modified.



2 Roadway Geometry:
Maintaining the existing road alignments and configuration will require to maintain the existing pedestrian refuge at the end of the area separating Hamilton Street westbound and Gallatin Street. This space is essential for pedestrian to traverse the intersection as it not only shortens the distance to cross but also gives them better visibility.



Furthermore, any alternative that may require temporary or permanently acquiring land along this separation is unfeasible since it is part of a current development.

3 Transit Routes:
The presence of a transit route between Hamilton Street and 40th Avenue presents two constraints. One is that the large turning radius at the northwest corner of the intersection will need to be maintained. This limits the installation of curb extensions or any treatment that can induce a speed reduction as vehicles make this turn. Tightening this radius will make buses encroach onto the eastbound lane, which is a condition already occurring based on the observations during the site visit.

The second constrain is posed by northbound buses turning left from Hamilton Street onto 40th Avenue This maneuver requires a large envelope of roadway that may impede the installation of a mini roundabout. In other circumstances, turning maneuvers for larger vehicles, along any type of roundabout can be addressed by installing mountable aprons. However, this are not recommended along where public transit buses regularly operate.



- 4** Right of Way: Similar to the area between Hamilton Street westbound and Gallatin Street, any design alternative that requires temporary or permanently acquiring land on the parcel at the southeast corner of the intersection, at Gallatin Street westbound, is unfeasible since it currently being developed.