

10. Preferred Solution

Building on evaluation of the Alternatives, and the identified Preferred Alternative as Alternative 1, the following sections present the Preferred Solution, which includes the proposed road network, transit network, cycling network, and pedestrian network. In combination, these four proposed networks will support redevelopment and reinvestment in the community, result in an improved pedestrian realm and environment, and encourage the usage of transit, cycling, and walking. Recognizing the importance of the parking supply to the livelihood of both existing and future businesses, the long-term parking concept for the Village is also presented.

10.1 Road Network and Streetscape

The road network of the Preferred Solution, referred to as the Proposed Road Network, (as established by Alternative 1) forms the basis upon which the Proposed Transit, Cycling and Pedestrian networks are built. The vast majority of the Proposed Road Network consists of modifications to existing road rights of way, including intersection improvements (e.g., new traffic signals and turning lanes) and closures of existing ramps and accesses to Highway 2A.

With the exception of the new laneway and the new "loop" road connection between Old Kingston Road and Morrish Road, new roadways are not required to support the redevelopment of the Village area. The transformation of Highway 2A into a more walkable and Village-friendly arterial road, similar to the existing cross-section of Kingston Road to the west of the study area, is one of the defining features of the Proposed Road Network. A consistent three lanes of through traffic is required along the new Highway 2A arterial to accommodate traffic demands between the two new signalized intersections. This requirement was initially determined as part of the Transportation Assessment described in **Section 8.3** and confirmed as part of **Section 9**. Highway 2A currently provides between 2 and 3 through lanes in each direction in the study area.

The 10 major roadway "Elements" of the Proposed Road Network are illustrated in **Exhibit 10-1** and summarized below.

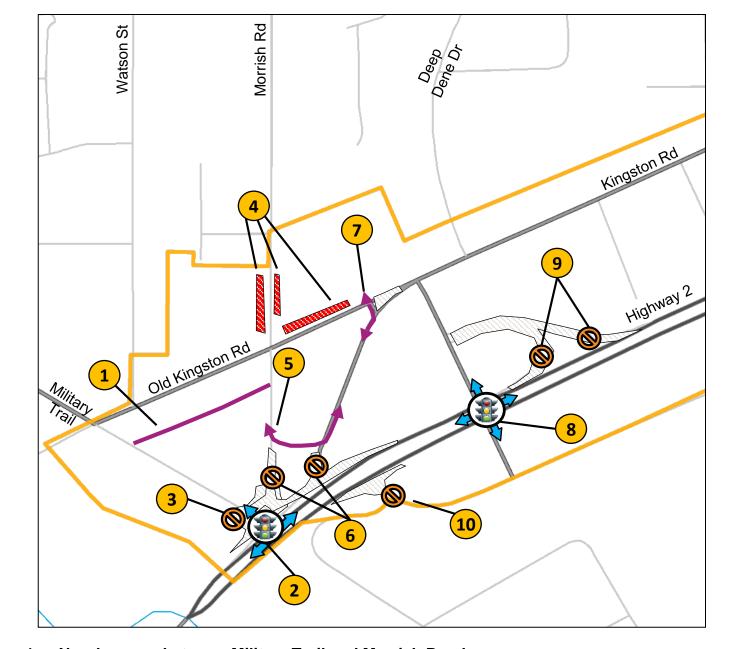


Exhibit 10-1: Proposed Road Network Elements

1. New laneway between Military Trail and Morrish Road:

Provides rear access for service and delivery vehicles to allow for these activities to occur away from Old Kingston Road.

2. New Signalized "T" Intersection at Highway 2A and Military Trail:

New intersection will provide new routing options for motorists by allowing all turns to / from eastbound and westbound Highway 2A. Also provides additional safer connections for other road users (i.e., transit vehicles and users, pedestrians, and cyclists).



3. Closure of Accesses between Highway 2A and Military Trail:

New Signalized "T" Intersection (Road Network Element 2) will replace the existing offramp from westbound Highway 2A to Military Trail and the on-ramp from Military Trail to westbound Highway 2A.

4. Conversion of Angled and Perpendicular Parking to Parallel Parking:

Existing angled and perpendicular parking on Old Kingston Road and Morrish Road will be converted to parallel parking to provide additional space for streetscape improvements and to address safety concerns. Additional parallel parking is also proposed throughout the study area to offset the reduction in spaces caused by this conversion to parallel parking. Please refer to **Section 10.4** for more details on the parking recommendations of this study.

5. New Road Connection between Kingston Road and Morrish Road:

Creates a new local "Loop" road connection between Kingston Road and Morrish Road. Provides access to future development lands on former ramp access lands in the vicinity of Highway 2A (Road Network Element 6).

6. Closure of Accesses between Highway 2A and Morrish Road and Kingston Road:

Allows for the development to occur on former ramp access lands in the vicinity of Highway 2A. The New Signalized "T" Intersection at Military Trail (Road Network Element 2) and the New Signalized Intersection at Highland Creek Overpass (Road Network Element 8) will replace existing on-ramps and off-ramps from Kingston Road and Morrish Road to / from Highway 2A westbound.

7. Reconfigure intersection of Old Kingston Road and Kingston Road:

Allows for the normalization of this intersection and the removal of the existing stop-controlled approach for eastbound traffic travelling along Old Kingston Road. The reconfigured intersection will provide access to / from the new "Loop" road connection between Kingston Road and Morrish Road (Road Network Element 5). Intersection movements will be limited to right-turn in (from Old Kingston Road eastbound) and right-turn out movements (from northbound on the "Loop" road) to prioritize traffic operations along on Old Kingston Road. Left-turning traffic may use the Morrish Road signalized intersection.

8. New Signalized Intersection at Highway 2A and Highland Creek Overpass:

Includes the removal of the Highland Creek Overpass and the regrading of surrounding lands to create an at-grade signalized intersection.



9. Removal of Highway 2A on and off ramps at Highland Creek Overpass:

The New Signalized Intersection at Highway 2A and Highland Creek Overpass (Road Network Element 8) will replace the existing on and off-ramps to / from Highway 2A westbound.

10. Closure of accesses between Highway 2A and Lawson Road:

The New Signalized Intersection at Highway 2A and Highland Creek Overpass (Road Network Element 8) will replace the existing on and off-ramps to / from Highway 2A eastbound.

In addition to the specific road network elements listed above, an enhanced streetscape and public realm is proposed through the Village. The roadway cross-sections and example renderings shown in **Sections 10.1.2** to **Section 10.1.7** serve to illustrate the proposed streetscape treatments and improvements on each roadway.

10.1.1 Roadway Classifications and ROW Widths

A Road Classification System groups roads in a hierarchical manner in accordance with the function and type of service they provide. The classification system is applied because designating and operating a road to serve its intended purpose provides for the most efficient and safe operation of that road from both a traffic operations and road safety perspective. In general, the hierarchy provides for a gradual change in intended function between the higher and lower road classes, with higher classes of roadways operating at higher speeds and carrying higher traffic volumes and lower classes operating at lower speeds with lower traffic volumes. The amenities that are provided with each road class vary, and depending on the classification include boulevards, sidewalks, bicycle lanes, multi-use pathways, and / or cycle paths. The City of Toronto Road Classification System consists of the following five classifications:

Local Road:

Provides access to property, accommodating a low traffic speed; generally, there is no provision for bus routes. Sidewalks are required on at least one side of the road, cyclist facilities are provided as required, and truck restrictions are preferred. Watson Street is a current example of a local road in the vicinity of the study area.

Collector Road:

Provides access to property and supports traffic movement. Includes signalized intersections at arterial roads, and sidewalks are required on both sides of the road. Cyclist facilities are provided as required, and truck restrictions are permitted.



Minor Arterial Road:

Traffic movement is a primary function. Some property access control is required. Traffic signals, not stop signs, are provided at main intersections, and sidewalks are required on both sides of the street. There are no truck restrictions.

Major Arterial Road:

Traffic movement is a primary function; resulting in more property access controls than along Minor Arterials. Special cyclist facilities are desirable and there are no truck restrictions.

City Expressway:

Traffic movement is a primary function. No property access is allowed. Speed limits range from 80 to 100 km/h. Pedestrians and cyclists are prohibited. Grade separated intersections are provided with no at-grade signal-controlled intersections.

The proposed ROW widths are consistent with the Urban Design Guidelines that were produced as part of the Highland Creek Village Area Study (see **Section 3.2.13** for details). The proposed ROW widths and classifications are selected to allow each roadway to serve its intended form and function. **Exhibit 10-2** shows the existing and proposed ROW widths for the roads within the HCV study area. The existing and proposed roadway classification is also noted for each roadway.

Changes to the existing ROW width are proposed for Old Kingston Road, Military Trail, and Morrish Road to accommodate an enhanced public realm with more generous sidewalks and streetscape improvements and bicycle lanes (in the case of Military Trail). ROW width decreases, on the other hand, are proposed for Kingston Road, the Highland Creek Overpass, and Highway 2A. Official Plan Amendments for Map 3, Schedules 1 and 2 are required to support these proposed ROW changes.

A classification change is proposed for Military Trail, which is currently a Collector Road between Old Kingston Road and Highway 2A. Changing the classification of this section of Military Trail to a Minor Arterial would make this segment consistent with the existing classification to the north of the study area and reflects the increased importance of this road with the proposed new T-intersection at Highway 2A. Morrish Road and Kingston Road, on the other hand, are proposed to be classified as Local Roads in the areas where they are replaced by the new "Loop" road located to the south of Old Kingston Road. This is consistent with the fact that the new "Loop" road is only intended to provide local access for new developments. All other roads and segments are proposed to maintain their existing classification.

The following sub-sections describe and illustrate the proposed cross-section for each of the corridors that are a part of the Recommended Road Network.



Exhibit 10-2: Existing²⁰ and Proposed ROW Widths and Classifications

Roadway	Segment	ROW Width		Classification	
		Existing	Proposed	Existing	Proposed
Old Kingston Road	Military Trail to Meadowvale Road	20 m	23 m	Minor Arterial	Minor Arterial
Military Trail	Old Kingston Road to Highway 2A	20 m	27 m	Collector	Minor Arterial
Morrish Road	Bush Gate to Old Kingston Road	Varies (20-26 m)	23 m	Collector	Collector
	Old Kingston Road to Highway 2A	20 m	n/a ²¹	Collector	n/a ²⁰
Kingston Road	Old Kingston Road to Highway 2A	26 m	n/a ²⁰	Minor Arterial	n/a ²⁰
Highway 2A	East of Highland Creek Overpass to Kingston Road	Varies	Varies (46- 54m)	Toronto Expresswa y	Major Arterial
Highland Creek Overpass	Kingston Road to Lawson Road	Varies (30-33 m)	27 m	Minor Arterial	Minor Arterial
"Loop" Road (NEW)	Old Kingston Road (at Morrish) to Old Kingston Road (west of Overpass)	n/a	23 m	n/a	Local

10.1.2 Old Kingston Road

A 23 metre (m) ROW width is proposed for Old Kingston Road, accommodating two traffic lanes, two parking lanes, and boulevards with generous sidewalks, tree plantings, decorative lighting, and street furniture. The existing 20 m ROW is increased to 23 m by acquiring a 3.0 m road widening on the south side of Old Kingston Road where necessary. This allows for a 5.5 m minimum distance from the road curbs to the property lines on both sides of the street to accommodate the streetscape elements. The existing angled parking on the north side of the street is proposed to be removed and replaced with parallel parking to provide room to

^{20. &}quot;Existing" ROW and Classification refers to the existing classifications as identified at the following link: Road Classification System

— City of Toronto

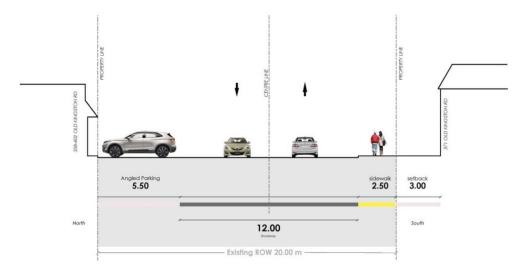
^{21.} Replaced by new "loop" road.



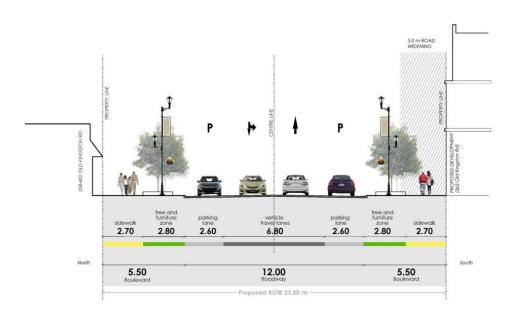
accommodate the streetscape elements. Please refer to **Section 10.4**, for a more detailed discussion about the long-term parking plan for the Village area.

Exhibit 10-3 illustrates the existing and proposed typical cross-section for Old Kingston Road to the east of the intersection with Morrish Road. A representative rendering of the proposed streetscape enhancements is also shown in **Exhibit 10-4**.

Exhibit 10-3: Old Kingston Road ROW Existing and Proposed (Typical Section)



EXISTING OLD KINGSTON ROAD TYPICAL SECTION (East of Morrish Road Intersection)



PROPOSED OLD KINGSTON ROAD TYPICAL SECTION (East of Morrish Road Intersection)



Exhibit 10-4: Old Kingston Road Streetscape Existing Conditions Photo and Proposed Future Conditions Rendering (Facing West)

EXISTING (facing west)



PROPOSED (facing west)





10.1.3 Morrish Road

A 23 m ROW width is proposed for Morrish Road, accommodating two traffic lanes, one parking lane, and boulevards with generous sidewalks, tree plantings, decorative lighting, and street furniture. The existing 20 m ROW is increased to 23 m by acquiring a 1.5 m road widening on both sides of Morrish Road. This allows for a 7.2 m minimum distance from the road curbs to the property lines on both sides of the street to accommodate streetscape elements. The cross-section is updated from rural to urban incorporating curb and gutter drainage and marked parking spaces. Please refer to **Section 10.4** for a more detailed discussion about the long-term parking plan for the Village area.

Exhibit 10-5 illustrates the existing and proposed cross-section for Morrish Road to the south of the intersection with Old Kingston Road. A representative rendering of the proposed streetscape enhancements is also shown in **Exhibit 10-6**.

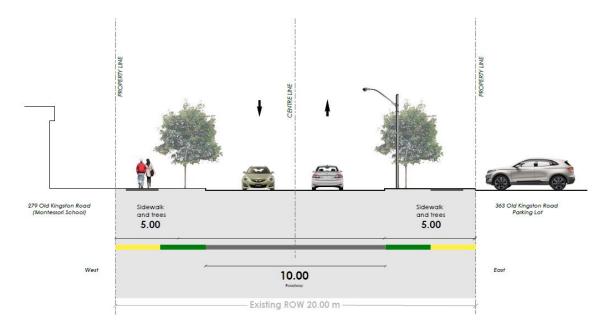
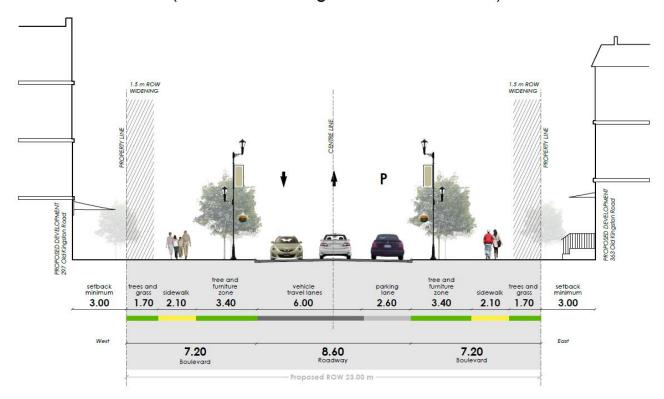


Exhibit 10-5: Morrish Road ROW Existing and Proposed (Typical Section)

EXISTING MORRISH ROAD TYPICAL SECTION (South of Old Kingston Rd Intersection)



PROPOSED MORRISH ROAD TYPICAL SECTION (South of Old Kingston Rd Intersection)



Exhibit 10-6: Morrish Road Streetscape Existing Conditions Photo and Proposed Future Conditions Rendering (Facing South)

EXISTING (facing south)



PROPOSED (facing south)





10.1.4 Kingston Road

A 23 m ROW width is proposed for Kingston Road, accommodating two traffic lanes, one parking lane, and boulevards with generous sidewalks, tree plantings, decorative lighting, and street furniture. The existing 26 m ROW will be reduced to 23 m through the development process as development proceeds. A 1.5 m ROW reduction on both sides of Kingston Road will be negotiated. This allows for a 7.2 m minimum distance from the road curbs to the property lines on both sides of the street to accommodate the streetscape elements. Marked parking spaces are incorporated along one side of the street; please refer to **Section 10.4** for a more detailed discussion about the long-term parking plan for the Village area.

Exhibit 10-7 illustrates the existing and proposed cross-section for Kingston Road to the south of the intersection with Old Kingston Road.



Grassfrees and Sidewalk 8.50 9.00

West 8.50 Features

Existing ROW 26.00 m

Exhibit 10-7: Kingston Road ROW Existing and Proposed (Typical Section)





PROPOSED KINGSTON ROAD TYPICAL SECTION (South of Old Kingston Road)



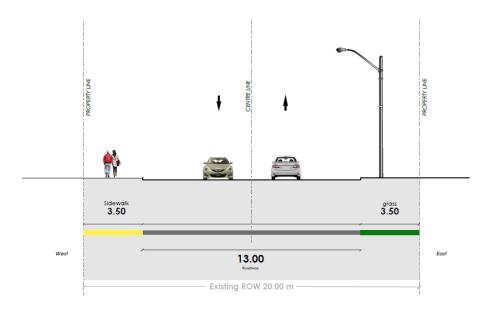
10.1.5 Military Trail

A 27 m ROW width is proposed for Military Trail and will accommodate two traffic lanes, two parking lanes, an on-street cycle lane, and boulevards with generous sidewalks, tree plantings, decorative lighting, and street furniture. The existing 20 m ROW is increased to 27 m by acquiring a 3.5 m road widening on both sides of Military Trail. This allows for a 5.9 m minimum distance from the road curbs to the property lines on both sides of the street to accommodate the streetscape elements. Marked parking spaces are incorporated along both sides of the street; please refer to **Section 10.4**, for a more detailed discussion about the long-term parking plan for the Village area.

Exhibit 10-8 illustrates the existing and proposed cross-section for Military Trail to the south of the intersection with Old Kingston Road.



Exhibit 10-8: Military Trail ROW Existing and Proposed (Typical Section)



EXISTING MILITARY TRAIL TYPICAL SECTION (South of Old Kingston Road)



PROPOSED MILITARY TRAIL TYPICAL SECTION (South of Old Kingston Road)



10.1.6 Highland Creek Overpass

A 27 m ROW width is proposed for the Highland Creek Overpass (for the at-grade signalized intersection condition), accommodating two through traffic lanes (one northbound, one southbound), one southbound right turn lane, one southbound left turn lane, and boulevards with generous sidewalks, tree plantings, decorative lighting, and street furniture. The existing 30 to 33 m ROW (the existing ROW varies) is reduced 27 m, allowing for additional developable area on both sides of the road when the Highland Creek Overpass is removed in the future. This allows for a 6.5 m minimum distance from the road curbs to the property lines on both sides of the street to accommodate the streetscape elements. No parking is provided along this section of roadway; please refer to **Section 10.4** for a more detailed discussion about the long-term parking plan for the Village area.

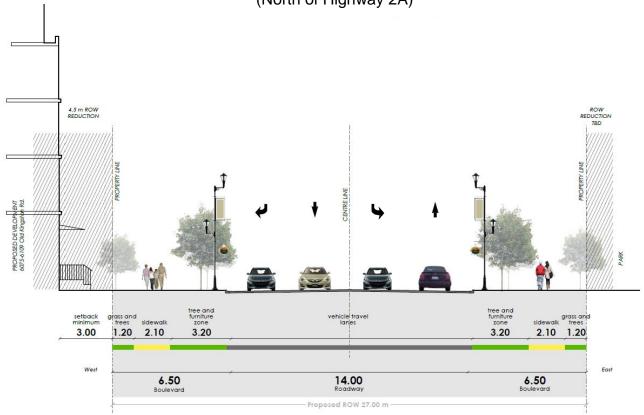
Exhibit 10-9 illustrates the existing and proposed cross-section for the Highland Creek Overpass to the north of the intersection with Highway 2A.



Exhibit 10-9: Highland Creek Overpass ROW Existing and Proposed (Typical Section)



EXISTING HIGHLAND CREEK OVERPASS TYPICAL SECTION (North of Highway 2A)



PROPOSED HIGHLAND CREEK OVERPASS (AT GRADE) TYPICAL SECTION (North of Highway 2A)



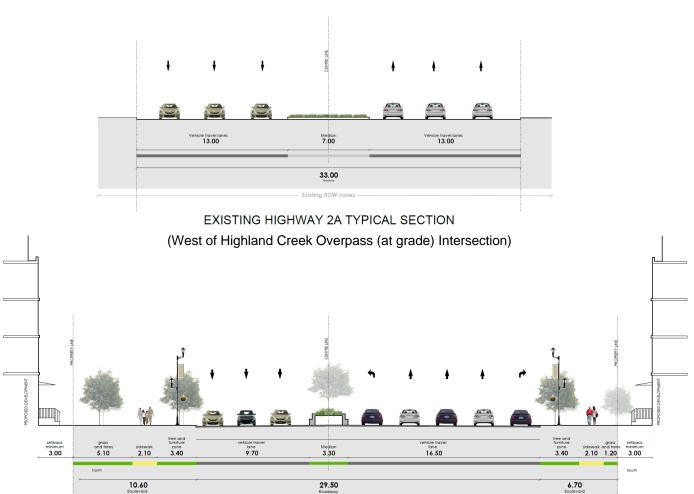
10.1.7 Highway 2A

A 46.7 m ROW width is proposed for Highway 2A, accommodating six traffic lanes plus turn lanes, and boulevards with generous sidewalks, tree plantings, decorative lighting, and street furniture. The existing approximately 33 m ROW that varies through the study area is increased to 46.7 m. This allows for a 10.6 m minimum distance from the road curb to the property line on the south side of Highway 2A, and a 6.7 m minimum distance on the north side of Highway 2A to accommodate the streetscape elements. Parking is not provided along Highway 2A in the study area; please refer to **Section 10.4** for a more detailed discussion about the long-term parking plan for the Village area. Refer to **Section 10.2** for more details on the proposed active transportation / cycling path to be located on the south side of Highway 2A.

Exhibit 10-10 illustrates the existing and proposed cross-section for Highway 2A to the west of the intersection with the (future at-grade) Highland Creek Overpass.



Exhibit 10-10: Highway 2A ROW Existing and Proposed (Typical Section)



PROPOSED HIGHWAY 2A TYPICAL SECTION
(West of Highland Creek Overpass (at grade) Intersection)



10.2 Active Transportation

This TMP recognizes that there is a significant opportunity to improve the pedestrian and cycling network in the HCV study area. Currently, there are no on-street or off-street cycling facilities, with one exception as the Highland Creek Trail is in the valley to the west of the Village. The streetscape is generally inhospitable to pedestrian activity (particularly outside of the Village core), and the pedestrian network is discontinuous with many gaps where sidewalks do not exist on one or both sides of the street. This TMP recommends a well-integrated network of pedestrian and cycling infrastructure within the study area that will be safe, convenient, and attractive to use.

In 2017, the City of Toronto introduced Vision Zero, Toronto's road safety plan for 2017-2021. Although this TMP was completed prior to the Vision Zero, the following provides a summary of pedestrian-oriented enhanced measures (principles and safety measures) that will be considered and implemented for each of the identified projects within this TMP.

- Improvements to pedestrian street lighting
- Automated pedestrian detection
- · Pavement marking improvements
- Advance green for pedestrians
- Protected intersection design

The pedestrian network has been designed around the following principles that will promote walking and transit use within the Village:

Reducing Barriers:

Two new signalized intersections at Military Trail and the Highland Creek Overpass provide enhanced connectivity across Highway 2A.

Well-Connected and Complete Sidewalks:

Existing gaps in the sidewalk network have been filled and sidewalks have been proposed on both sides of all streets within the Village core.

Neighbourhood / Off-Road Connections:

Off-road connections will maintain and enhance connectivity through and within the Village. These connections are not located within the road right of way and may include connections through parks or walking paths through future development areas. It is recommended that walkways are provided on private development sites to facilitate pedestrian travel (e.g., to maintain connectivity between Morrish Road and Kingston



Road and Highway 2A). There are also opportunities to establish new pedestrian connections to the proposed Village Green (Morrish Parkette) from Military Trail and Old Kingston Road.

High Quality Pedestrian Realm:

As previously highlighted in the roadway cross-sections shown in **Section 10.1**, this TMP is emphasizing a high-quality public realm that includes enhanced streetscaping, widened sidewalks, and landscape elements. These improvements will transform the Village into a walkable, attractive, and pedestrian friendly destination.

The Preferred Solution includes the Proposed Pedestrian Network as shown in **Exhibit 10-11**.



Exhibit 10-11: Proposed Pedestrian Network

The Preferred Solution includes the Proposed Cycling Network as shown in **Exhibit 10-12**. This cycling network has been designed to realize the key connections proposed by the 2001 City of



Toronto Bike Plan and the 2016 Cycling Network Plan, including new routes and enhancements to existing routes. In particular, the proposed on-street bike lanes and off-road trail within the study area serve to provide a direct connection between planned bike lanes on Military Trail (to the north of Old Kingston Road) and on Lawson Road (to the east of the Highland Creek Overpass). Once fully realized, this route will provide an important direct connection to UTSC (via Military Trail) and the Rouge Hill GO Station and the existing Waterfront Trail along Lake Ontario (via Lawson Road and Port Union Road).

8 Watson St Morrish Alignment of multi-use path connection between Kingston Rd Military Trail and Lawson Road to be reviewed as part of future detailed design activities. Old Kingston Rd Lawson Rd Meadowvale Rd olonel Danforth "Quiet Street Route" Proposed Bike Lane Existing Off-Road (Cycling Network Plan) (this TMP) Proposed Multi-use Trail (this TMP)

Exhibit 10-12: Proposed Cycling Network

It is recommended that cycling infrastructure design options for the proposed bike lanes along Military Trail and the multi-use trail connection between the intersection of Highway 2A and Military Trail and the Highland Creek Overpass and Lawson Road be examined in more detail during design. In particular, the appropriate level of separation should also be examined in detailed design, including conventional bicycle lanes, separated bicycle lanes (with physical,



marked, or un-marked buffer), raised cycle track, or in-boulevard facilities, and weighed against available ROW space. Given the proposed parallel parking on Military Trail, a 0.5 m to 1.0 m buffer may also be considered to minimize the potential hazard of motor vehicle doors opening into the travelled portion of the bicycle lane, consistent with recommendations of the Ontario Traffic Manual (OTM) Book 18.

For the off-road trail, the proposed alignment should be selected by considering the steepness of the grades to the south of the Highway 2A and Military Trail intersection together with feasible intersection crossing options and space constraints.

The provision of convenient bicycle storage facilities and amenities at key destinations, such as rest areas and showers at places of employment, as well as posts and rings with the zone for street furniture for bicycle parking, can play a role in further encouraging cycling in the Village. Examples of these facilities can also include implementing bike racks / secure storage at community buildings. Private sector participation and co-operation in supporting the provision of cycling facilities in the Village can be encouraged through the development application and approvals process.

Opportunities to implement enhanced wayfinding signage will also be considered to make active transportation options more visible to the travelling public. This could include signage that directs cyclists to / from the existing trail in the Highland Creek valley, the Rouge Hill GO Station, the Waterfront Trail, and other community amenities. Signage could be implemented together with planned improvements to the Village's park space and should be developed and implemented in a manner that is consistent with the branding of existing and planned cycling wayfinding signage in the City of Toronto²².

10.3 Transit

Although no new dedicated transit infrastructure is anticipated in the study area, the enhanced streetscape, pedestrian network, and public realm that is proposed is expected to support access to and usage of transit in the study area. While the determination of future TTC bus routes and stops is beyond the scope of this TMP, it is recognized that it is important for the proposed roadway network to have the ability to accommodate bus movements on key roads where buses are expected to operate. Furthermore, it should be noted that the TTC is circulated on all applications for development and can be expected to adjust service in the Village as

^{22.} For more information on the City of Toronto's Wayfinding Strategy visit: Parks & Trails Wayfinding Strategy - City of Toronto



population in the area increases. Potential service changes that may be considered or are already implemented include:

- New Highway 2A intersections and access closures require consideration of new routing
- Potential new bus stop locations to serve development
- Improved GO Expansion connections for improved Guildwood station and planned improvements to Rouge Hill Station.
- Improved service / added connections to future Scarborough Subway extension at Scarborough Centre.
- Improved service / added connections to future Eglinton East LRT at Military Trail and Ellesmere (UTSC) and Kingston Road and Morningside Avenue. Pedestrian, cycling, and transit connections to the north along Military Trail will be important to consider since the LRT at UTSC will be less than 1.5 km from the study area.

The study area is currently served by two TTC bus routes: #38 Highland Creek and #86 Scarborough. The paths of these two existing routes are illustrated in **Exhibit 10-13**.

Route #38, which operates between Scarborough Town Centre Station on the Scarborough RT and the Rouge Hill GO Station, will not be impacted by the proposed changes to the roadway network in the HCV study area. Route #86, which connects to Kennedy Subway Station in the west and to Sheppard Avenue in the East, will be impacted by the proposed closure of the Kingston Road access to Highway 2A; this connection is currently used in the westbound direction. In the future, this connection may be made via Old Kingston Road and Military Trail or via the Highland Creek Overpass / Lawson Road and Highway 2A intersection (once this becomes a signalized intersection). These routes may need to be adjusted or complemented with additional services once the Eglinton East LRT is in operation.

To provide for the most flexibility in the future re-alignment and adjustment of routes, the roadway design has allowed for bus movements on the following roads that are within the Village: Old Kingston Road, Military Trail, Highway 2A, and (future at-grade) Highland Creek Overpass. It is recommended that future detailed design activities continue to protect and allow for the movement of buses on these roads.

Through discussion with the TTC, it has been established that retaining both the west-to-south and north-to-east turns at the Military Trail and Old Kingston Road intersections would provide flexibility to serve the Village on both the eastbound and westbound trips of the #86 Scarborough Route.





Exhibit 10-13: Existing TTC Routes in Highland Creek Village Area

Due to the skew of the Military Trail and Old Kingston Road intersection, the bus turning movement envelopes were examined at this Functional Design stage through the use of a bus turning movement template to verify the feasibility of protecting for these bus movements and confirm that there is no encroachment into the adjacent lanes for the above noted turning movements. It is recommended that future detailed design activities simulate all turning movements (i.e., using AutoTurn in a CAD environment) on these roads in the Village. The simulated turning movements should reflect the generic movement of buses in normal operation (i.e., no sudden changes in direction, smooth entry and exit on curves, adequate clearances to account for varying operator driving capabilities).

It is anticipated that most of the bus stops in the study area will continue to be served by one or more of the re-aligned routes in the future. However, the existing westbound bus stop located on Kingston Road to the west of the Old Kingston Road and Kingston Road intersection is not anticipated to be served by a route once the new "loop" road is connected and the connection from Kingston Road to Highway 2A is closed; existing stops on Old Kingston Road and the Highland Creek Overpass may be considered as replacements. New bus stop locations may also be considered along Military Trail (e.g., between Old Kingston Road and Highway 2A) and



Highway 2A (e.g., at the Overpass once it is removed) to serve re-aligned routes and development locations. Decisions regarding the implementation of transit network changes are subject to further review and approval by City and TTC staff.

10.4 Parking

As previously discussed in **Section 5.4**, the Highland Creek Village area has a mixture of public on-street parallel, angled, and perpendicular parking and off-street lots that are managed by private property owners. Due to safety concerns, inconsistency with City standards and best practices, and desired improvements to the public realm and streetscape, this TMP is recommending that existing on-street angled and perpendicular parking in Highland Creek Village be converted to parallel parking in the long-term.

Overall, stakeholders in the study area have expressed support for maintaining and / or increasing the on-street parking supply in the Village where possible. However, it is also recognized that there are strong and differing opinions regarding the continued use of the perpendicular and angled parking areas within the Village. In particular, tenants of the Morrish Plaza are strongly opposed to the TMP's proposed conversion to parallel parking since the conversion will result in fewer available parking spaces located directly in front of their businesses. Some of the other businesses that are not directly impacted have expressed less concern since many other locations in the Village have access to parking on private lands. Some Village residents have also expressed support for the conversion of the perpendicular and angled parking to parallel parking due to safety concerns (limited visibility when backing out from perpendicular and angled parking spaces).

At the heart of the debate about the merits of angled and perpendicular parking versus parallel parking, is the fact that a parking stall is over twice as long as it is wide (minimum of 5.6 m long and 2.6 m wide per City of Toronto Parking Space Regulations). Consequently, the orientation of the parking space relative to the curb impacts the number of spaces that may be provided and how far each space extends into the ROW. Although angled and perpendicular parking result in more parking spaces per length of curb, their angled orientation means that each parking stall must extend lengthwise into the roadway. This limits the amount of room in the ROW that is available to the boulevard / sidewalk. Parallel parking, on the other hand, minimizes the amount of room that is required for parking within the ROW but also limits the number of parking spaces that may be accommodated per length of curb.

The replacement of the non-standard angled and perpendicular parking with parallel parking on Old Kingston Road (east of Morrish Road) and Morrish Road (north of Old Kingston Road) has been proposed as part of this study primarily to allow for the widening of sidewalks / boulevard



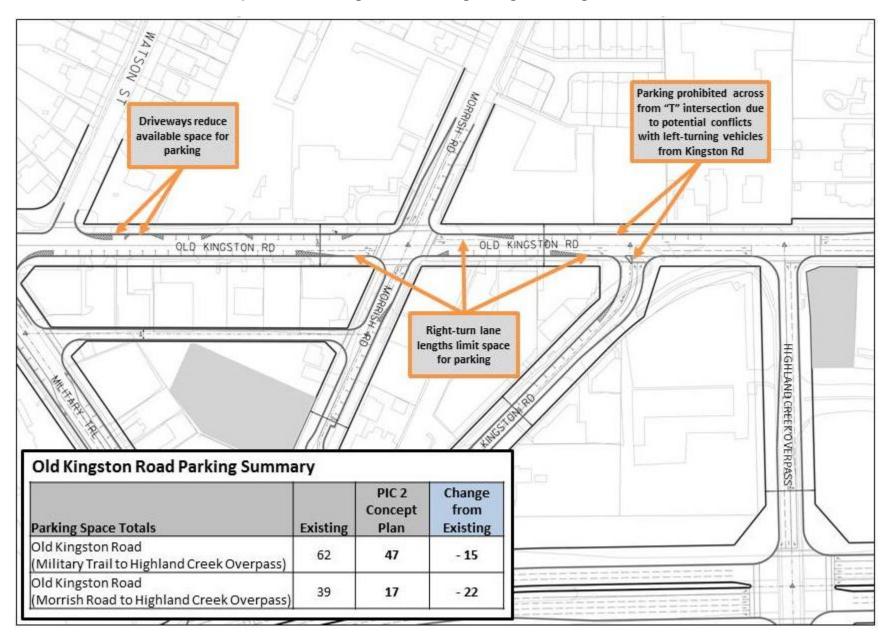
areas and to improve the pedestrian environment in the Village Centre. The additional ROW space that is created by the conversion allows for a wider boulevard that can accommodate wider accessible sidewalks, street trees and plantings, decorative lighting, and new street furniture. As illustrated by the renderings that were previously shown in **Section 10.1**, these improvements will help to make the area more pedestrian friendly, accessible, and safer for all users. It is also anticipated that the conversion has the potential to increase safety due to the improved visibility that parallel parking spaces provide when exiting the space.

At PIC #2, a concept plan was presented for comment. This concept plan is shown in Exhibit 10-14. Following PIC #2 (see Section 2.7.2) the on-street parking areas were further revised through discussions with local businesses and a property owner. It should be noted that the concept plan for the parking areas presented at PIC #2 was based on typical parking standards and turning lane storage lengths. The further revisions that were pursued after PIC #2 are more consistent with minimum allowable requirements for turning lane storage lengths, as agreed to by the City. This review and revision process was a concerted effort to provide more area for onstreet parallel parking along Old Kingston Road as well as along the proposed Morrish Road and Kingston Road "loop", and on Military Trail. The revisions to the concept plan resulted in a larger number of parking spaces in the final proposed parking plan in comparison to the concept plan that was presented to the public at PIC #2. Exhibit 10-15 identifies the proposed parking areas that form part of the Preferred Solution along with the road network, active transportation, and transit components discussed in Section 10.1 through Section 10.3. As shown in the summary table within **Exhibit 10-15**, there are an additional 17 parking spaces on Kingston Road between Military Trail and the Highland Creek Overpass, which includes an additional 13 spaces from Morrish Road east to the Highland Creek Overpass beyond what was shown in the PIC #2 concept plan.

Exhibit 10-15 also provides a comparison of the number of existing parking spaces to the number of proposed parking spaces shown in this final plan. The proposed parking plan shows an overall decrease of 9 on-street parking spaces relative to existing conditions (30 spaces proposed vs. 39 spaces in existing) for the areas along Old Kingston Road between Morrish Road and the Highland Creek Overpass. This reduction is due to the conversion of the existing angled parking to parallel parking on the north side of Old Kingston Road in front of the Morrish Plaza. Even though additional parking was created as a result of the changes following PIC #2, it was not enough to completely offset the losses in this area. Considering a slightly broader area along Old Kingston Road between Military Trail and the Highland Creek Overpass, on the other hand, reveals that the proposed parking plan results in a net increase of 2 parking spaces (64 spaces proposed vs. 62 spaces existing).



Exhibit 10-14: Concept Plan for Long-Term Parking along Old Kingston Road as Presented at PIC #2





Left-turns from Kingston Rd prohibited to allow Driveways closed to for parking across from allow for more "T" intersection parking OLD KINGSTON RD , QLD KINGSTON, RD . THIGHDAND CREEK OVER BASS -- -Shorter right-turn lane lengths allow for more parking "T" intersection shifted to the east to allow for more parking Old Kingston Road Parking Summary Change PIC 2 Updated Change Concept Concept from PIC 2 from **Parking Space Totals Existing** Existing Concept Plan Plan 2115 Old Kingston Road 47 62 64 +2 + 17 (Military Trail to Highland Creek Overpass) -----Old Kingston Road 39 17 30 - 9 + 13 (Morrish Road to Highland Creek Overpass)

Exhibit 10-15: Proposed Long-Term Parking Plan for Old Kingston Road



Beyond Old Kingston Road itself, the proposed parking plan includes converting the existing perpendicular parking along Morrish Road (north of Old Kingston Road) to parallel parking, adding additional parallel parking to Military Trail, Kingston Road, and Morrish Road (south of Old Kingston Road). Overall, the proposed parking plan results in a net increase of 30 on-street parking spaces when considering all streets in the study area. Please refer to the Functional Design Plan of the Recommended Solution in **Section 13.1** for more details on the proposed on-street parking areas and marked stalls along each road in the study area.

Although the proposed parking plan results in a net increase in parking spaces in the overall study area and along Old Kingston Road from end-to-end, it is recognized that the conversion of existing angled and perpendicular parking to parallel parking will result in a decrease in parking that is available in the immediate vicinity of the Morrish Plaza. It is expected that these spaces will be in high demand during peak times and consequently, parking management may be a viable future consideration to encourage a faster turnover in these spaces and allay concerns that there may be limited short-term parking for customers. For example, introducing limited-stay parking (i.e., max. 30 or 60 minutes), may be an initial step that could be implemented with minimal cost for posting signage, compared with a larger cost for proceeding with a pay-parking system. With either parking management strategy, enforcement may be required to be effective.

Lastly, it should be noted that the proposed parking plan presented in this Section is a long-term plan that represents the ultimate vision for parking in the study area at full build-out. As development proceeds, new development applications will be required to secure the minimum on-site parking requirements as prescribed by the applicable zoning by-laws in addition to the on-street parking provided in this plan.

The minimum number of required on-site (i.e., private) parking spaces is allocated based on land use type (e.g., gross floor area of retail or office use). The City of Toronto Zoning By-law 569-2013, as amended (Office Consolidation), Chapter 200 Parking Space Regulations, identifies how to calculate the number of on-site parking spaces that are to be provided collectively for each use on a lot. There are no City by-laws that identify requirements for a minimum number of on-street (i.e., public) parking spaces to be provided for each business.