# Greenfield Avenue, Main Street, Hawthorne Avenue et al. reconstruction project: Questions & Answers

Contract (Advanced or Ultimate)	Comments / Questions	Consolidated Response
Advanced	Please consider allowing left turns at the Main Street and Colonel By Drive intersection. Doing so would take pressure off the Hawthorne Street and Colonel By Drive intersection. This would improve traffic flow at this very busy intersection.	To accommodate vehicle movement from Main Street westbound to southbound Colonel By Drive, a separate westbound right-turn lane on Main Street would be required. This constrained area is not well suited to accommodate an additional turn lane. The Main Street westbound to southbound Colonel By Drive turn prohibition is to remain in effect with the proposed work.
Advanced	Request that there be a left turn from westbound Main Street to Colonel By Drive (southbound), as currently you need to make a left onto Main Street, then turn right on Clegg Street and drive through a residential area. This new intersection gives a great opportunity to add a left turn directly to Colonel By Drive, which will allow the motorists to avoid driving through residential and recreational areas on Main Street and Clegg Street.	To accommodate vehicle movement from Main Street westbound to southbound Colonel By Drive, a separate westbound right-turn lane on Main Street would be required. This constrained area is not well suited to accommodate an additional turn lane. The Main Street westbound to southbound Colonel By Drive turn prohibition is to remain in effect with the proposed work.  The geometry modifications are intended to facilitate safe pedestrian and cyclist crossings of the Colonel By Drive and Main Street intersection.
Advanced	It is noted that the work at the Colonel By Drive and Main Street intersection is intended to create a safe crossing for pedestrians and cyclists, however the intersection itself seems to expand options for vehicular traffic where there are currently directional limits in place. Is the design intended to facilitate better access to Highway 417 westbound by removing the need for cars to turn left at Hawthorne/Pretoria?	The intent of the work is to provide a formal crossing of Colonel By Drive as an extension of the cycling / pedestrian facilities that extends from the Rideau River to the Canal. Having Main Street connect with both Echo Drive and Colonel By Drive at a closer right angle will also enable a crossing of Main Street on the East side of Colonel By Drive and be more in line with driver's expectations. The existing left turn prohibition from westbound Main Street to southbound Colonel By Drive will remain in place and additional signage will be installed. The median just north of the southern crossing is intended to deter left hand turns as well. The Road Authority for Colonel By Drive, which is the National Capital Commission (NCC), is in support of this intersection improvement.  It appears you are concerned about vehicles travelling southbound on Colonel By Drive having an easier time accessing the westbound 417 Greenfield on-ramp with the geometry changes. Although it potentially may make things easier for vehicles, the intent of the work is to improve pedestrian and cycling safety at the intersection, introducing crossings of Colonel By Drive. The anticipated increases in pedestrian and cyclist volumes at this crossing, due to the planned future improvements along Main Street and Greenfield Avenue, make full signalization desirable at this time.

Advanced	Concerns about the existing traffic with the closure of Colonel By Drive and motorists ignoring the traffic signals to make the westbound Main Street to northbound Greenfield Avenue movement, which puts pedestrians at risk who are crossing Greenfield Avenue. There is concern that this condition will continue or may worsen during the construction phase.	The intersection at Greenfield Avenue and Main Street will remain functional through the advanced works with construction traffic accessing the intersection from west of Greenfield Avenue. The City remains committed to ensuring compliance with accessing the intersection during construction. The City will explore the use of police enforcement, if necessary.
Advanced	Strongly supportive of the introduction of a safer crossing for pedestrians and cyclists at the intersection of Main Street and Colonel By Drive.	Thank you for your comments.
Advanced	Would like to see the use of black painted poles for signals/lighting at the intersection of Colonel By Drive and Main Street, consistent with what has been done in other areas recently along Colonel By Drive.	Black painted poles will be used at the intersection, consistent with other recently completed works along Colonel By Drive.
Advanced	The NCC provided some general comments on landscaping and tree plantings in the area between the Rideau Canal multi-use-pathway at the planned multi-use-pathway connection from the intersection down to the Rideau Canal multi-use-pathway.	The project team has made modifications to the intersection landscape plan in concert with the NCC to their satisfaction.
Advanced	The NCC is in agreeance with the removal of the north multi-use-pathway connection down to the Rideau Canal multi-use-pathway to limit extent of hard surface features along this scenic corridor. They request that measures be considered to prevent users from trying to "cut through" down to the Rideau Canal multi-use-pathway on the north side of the intersection, and that tree plantings be used to soften the landscape and provide shade.	The City welcomes the support of the NCC to construct the intersection with one (1) Accessibility for Ontarians with Disabilities Act (AODA) compliant multi-use pathway connection down to the Rideau Canal Eastern Pathway, as there would be potential issues with including a north link that was AODA compliant. Surface treatments, including appropriate vegetation, will be used to deter "cut through" movement down to the Canal Pathway on the north side of the intersection.
Advanced & Ultimate	Requesting information on the construction detour plans to support both the early works and the main construction works for the Greenfield Avenue, Main Street, Hawthorne Avenue Integrated project.  Please provide details for the impacts to vehicles for both the Advanced Works Contract and the main Contract for Greenfield Avenue, Main Street, Hawthorne Avenue et al. – including detours for regular traffic, as well as buses, and plans for access to the Queensway west on ramp? There are concerns with the increase in traffic on Lees Avenue to support these works – and would appreciate all details including: length of detours, advance notice that can be expected from residents, measures to decrease	With respect to traffic, it is too early to provide specific traffic information for 2022 and later detour routes and closures, as traffic analysis and modeling will confirm the best approach. Traffic impacts will be shared in advance of construction. This will include traffic coordination with City internal staff as well as the NCC (Colonel By Drive), and the Ministry of Transportation. Old Ottawa East however does have limited options for through traffic and, roads suitable for detouring truck traffic. We expect at times from 2022 to 2024 to impact major truck routes, Hwy 417 detour routes, emergency routes, as well as bus routes through this area (Main Street, Hawthorne Avenue, and Greenfield Avenue). On Greenfield Avenue we will be disrupting access to the west Hwy 417 on-ramp, but the intent is to minimize the impact to the ramp as much as possible through coordination with the MTO. Lees Avenue will factor into detour plans, but to

speed during detours, enforcement, etc.

There are many families, and many young children who live on Lees Avenue. Requests have been made for additional measures to decrease the speed at which people travel on Lees Avenue for a long time – and have, as of yet, been unsuccessful in doing so. Please don't just default to Lees Avenue thinking that nobody lives here, and nobody cares. Please ensure that the residents of Lees Avenue aren't alone in carrying the burden of these detours.

what extent remains unclear at this time. We will look to communicate this information once it has been confirmed, in advance of the initiation of the larger construction contract.

Regarding Traffic disruptions in the fall of 2021, motorists should expect the following disruptions:

- -Closure of Main Street from Colonel By Drive to Greenfield Avenue
- -Closure of southbound Colonel By Drive from Daly Avenue to Hawthorne Avenue northbound Colonel By Drive Traffic to be maintained.
- Closure of eastbound Lees Avenue from Greenfield Avenue to westbound Highway 417 off ramp (for an approximately 2 week period).

Further details of these traffic disruptions will be communicated to the public via notification in advance of traffic network changes.

# Advanced & Ultimate

Please consider raised crosswalks and raised bike paths be added to 3 sections of the project that are problem areas. These areas have noted speeding drivers who are inattentive. Raised crosswalks and raised bike paths on streets like Queen Elizabeth have helped immensely with safety and should be considered for implementation

Problem Areas are:

- Main Street/ Colonel By
- Greenfield and Concord
- Greenfield and Queensway Onramp

Discussion has been undertaken for the following intersections:

- Main Street/ Colonel By Drive intersection Colonel By Drive, at this intersection, is along a dignitary route, and we have had discussions in the past about raised crossings with the Ottawa Police Services / Federal agencies and they are not supported. The implemented raised crossing at the University of Ottawa is also of concern to these agencies. Queen Elizabeth Drive's raised crossings at Commissionaires and Bank Street are not on a dignitary route.
- Greenfield Avenue and Concord Street intersection Greenfield Avenue is a designated Truck Route, Bus Route, and Emergency Detour Route for the highway. Raised crossings are not supported by the City on this class of roadway.
- Greenfield Avenue and the Highway 417 On-ramp – Similarly raised crossings on Greenfield Avenue and the Highway 417 onramp are not supported by the City.

Much of the discussion about speed reduction signage and vertical measures (Raised crosswalks, speed humps, speed tables, raised intersections) are governed by City policies for suitable conditions or warrants. In preparing the design, adherence to these policies and direction from traffic services is required.

### **Ultimate**

Note the formation of a sinkhole at the corner of Concord Street North and Greenfield Avenue. The catch basin is in the southwest quadrant of the intersection. A service request with the City of Ottawa has been With regards to the catch basin, proposed construction will replace the existing combined sewer with separated storm and sanitary sewers and replace the existing catch basins and leads as well as building connections to the property line. It is likely that the connection to the catch basin has

#### initiated. The project team is being failed. With the service request, road advised for awareness operations will be the lead on this immediate issue. Ultimate Request that cycling facilities should Much of the design guidance related to be at the same level as sidewalks cycling infrastructure has changed in recent (like the new cycling pathways on years, particularly at signalized intersections. Main Street built a few years ago). Many of the design elements in the previous This set-up seems much safer than Main Street project are no longer supported locations where cycling lanes are by current guidelines. These changes are placed on the road with only related to Ontario and Transportation pavement markings separating Association of Canada (TAC) guidelines. cyclists from Motorists. Consider The City of Ottawa follows industry best practices pertaining to cycling treatments at changes to keep cyclists segregated. signalized intersections. Current practice dictates that a cycling crossride through an intersection should have an ideal separation of 4-6m from the curbline for off-road cycling facilities, with 2m as an absolute minimum. This is to increase visibility of cyclists for right-turning motorists. If this cannot be achieved, then Ontario and TAC standards provide for an on-road bike lane with a dashed lane-line on approach to the intersection. There are also additional requirements related to accessibility and accommodating the visually impaired, as well as those with mobility issues. These are mandated requirements under the Accessibility for Ontarians with Disabilities Act (AODA). Where possible raised cycling facilities have been used in the design **Ultimate** Please consider planting more Much of the area that will be impacted during native trees, shrubs, and plants. the capital project is frontage to developed property, and very little will be in overgrown Many areas of public land in Ottawa (e.g., land along the highway) are areas of the City ROW. Much of the property overgrown with non-native, invasive that is noted to contain non-native/invasive species, such as dog-strangling vine species is Ministry of Transportation Ontario and creeping bellflower which are (MTO) land on either side of the Highway. harmful to the environment. If land is The MTO as part of their Downtown Bridges being dug up for construction, such Project which includes the Canal Bridge, and areas could easily be seeded with the Main Street Bridge are likely to impact beneficial native plants (e.g., these overgrown areas with their bridge milkweed, coneflower, aster, etc.) construction activities which are scheduled to and shrubs (e.g., serviceberry) occur after the City's capital project is completed. Comments have been forwarded following construction, to prevent invasive species from taking over. to the MTO for consideration. **Ultimate** In the area of Springhurst Avenue As part of the larger project (works starting in and Rosemere Avenue even without 2022) an in-depth traffic analysis will be conducted to inform construction traffic construction on Main Street / decisions. Given that there are concerns Hawthorne Avenue there is significant traffic during rush hour. about the existing level of traffic, it is Many drivers ignore the no left turn reasonable to conclude that the capital from Springhurst Avenue to construction project may exacerbated issues Rosemere Avenue (prohibited as drivers seek alternate routes. 3:30PM to 5:30PM). This cut through Internally, extensive coordination is traffic negatively impacts the local residential neighbourhood. It would undertaken to develop traffic management be appreciated if there could be strategies aimed at minimizing the impact of some measures to avoid an increase construction of traffic and movement through in traffic in this neighbourhood the city. during the construction period.

With respect to driver non-compliance with time of use restrictions, the City will explore the use of police enforcement, if necessary.

#### **Ultimate**

Request that the crosswalk at Greenfield Avenue and Concord Street North be moved to the south side of Concord Street North. It is suggested that this change would have the following benefits:
-Allow extra space / distance for drivers to see pedestrians at a crossing. (northbound drivers on Greenfield Avenue have greater visibility of the intersection given the straight geometry)

It is also suggested that traffic calming on Greenfield Avenue is needed. The loss of the median on the north side of the Concord Street North at Greenfield Avenue intersection is also thought to eliminate an existing traffic calming element.

There are sight line issues with the shifting of the cross walk to the south as the eastern side of the roadway is obscured by the Electrical Contractor's building as you go south on Greenfield Avenue. Additionally, there are road geometry requirements for accessibility where the cycling pathway is crossed by pedestrians which cannot be achieved with a south crossing.

The City is aware of compliance issues at the existing temporary crossing, and video and traffic data has been collected at this intersection. The proposed design will implement improved streetlighting, hard wired flashers (more stable), as well as road narrowing to the extent possible while still accommodating design vehicles (Truck Route accommodates transport trailers). The Design team in collaboration with the Traffic Signals group is exploring the option of putting in an advance warning flasher (continuous) to notify southbound vehicles of the crossing. The existing speed limit has been lowered already, although it is recognized that passenger vehicles frequently will exceed this limit as those vehicles will not feel as constrained as the larger commercial vehicles.

The removal of the existing median will correspond to the narrowing of the existing roadway with the addition of cycle tracks. There is also the issue of the odd transport trailer that finds its way onto Concord Street North and ends up hitting the existing signal poles on the north east quadrant, as they try to execute a right turn to go northbound Greenfield Avenue. Removal of the median will allow for large trucks to encroach on the opposing lane for those odd occasions when it is required.

#### **Ultimate** Homes around the neighborhood Vibration complaints have been noted within (Greenfield Avenue & Concord the community especially at the corner of Street North Area) started shaking Greenfield Avenue and Concord Street North and vibrating once busses started going down the hill. The design consultant running regularly to the University of will seek to limit iron (maintenance hole Ottawa train station. covers) in the wheel path as much as possible, and new asphalt that comes with the construction should reduce vibrations. It should be noted that there are still likely to be nuisance vibrations from vehicles even after construction, as roadway imperfections are only one factor that can cause vibrations. It is understood that OC Transpo has been engaged by the Councillor's office to look at limiting the speed of buses to reduce noise and nuisance vibrations. **Ultimate** The pedestrian crossover at Although we cannot confirm how the flasher Greenfield Avenue and Concord pole is being damaged, one change that will be implemented that would reduce future Street North has been repeatedly damaged by large transport trucks occurrences is the removal of the center on the eastern side of Greenfield. median on Greenfield Avenue. What can be done to prevent / reduce this from happening. This would allow large vehicles to utilize the opposing lane to accommodate their turn. Currently westbound Concord Street North vehicles need to avoid the center median along with the hazard marker signs, which makes them cut this corner. For the local side streets, the turn radii are not meant to accommodate a transport trailer and are typically designed for a garbage truck or similar sized vehicle to turn from lane to lane. **Ultimate** The Following were areas which Regarding the drop off and pick up of concerned the residents of the 29 residents, and deliveries at the Main Street Main Street Building: Entrance of 29 Main Street, currently both sides of the roadway are signed no stopping, With the addition of a bike lane on and changes are not something that is being Main Street, will this interfere with considered as part of the design, even with building access in situations such as the inclusion of raised cycle tracks in this delivery/moving? The only access to section of Main Street. the elevator for the building is through the main entrance on Main Trees on the Main Street frontage of 29 Main Street. Currently, vehicles park on Street are planned to be removed due to Main Street directly in front of the shifting of the back of sidewalk closer to the building, using their flashing hazard building to accommodate the raised cycle lights and traffic cones are also tracks. Even if the trunk of the tree is not provided for safety. directly impacted, damage to the roots, and compromised stability often require their There are mature trees on Main removal Street and Greenfield Avenue, in front of our building. We are aware On the Greenfield Avenue frontage of 29 of the sewer and road replacement; Main Street, Hydro burial efforts will impact we just hope some of those trees this area of the Right of way (ROW). New can be saved. The current plan does duct work will connect to the existing show trees on both sides of our underground feed in the building. It is building. anticipated that detailed Hydro Ottawa burial design information will be available to share in an upcoming online engagement opportunity, which should provide more information on specific impacts. **Ultimate** The traffic calming measures that Greenfield Avenue, being a designated truck are proposed for future stages route, bus route, and Highway Emergency involving Greenfield Avenue are Detour Route, is meant to support larger appreciated, however it is suggested vehicles, which is reflected in its roadway that some additional measures be width. Given this wider required roadway

added to help deal with the new users of the "shortcut" (understood to be easier access to Greenfield Avenue via Colonel By Drive). This is because the long, wide, perfectly straight section of Greenfield Avenue (northbound) before you approach the pedestrian crossing at Concord Street North is ideal for speeding, and the preliminary designs don't seem to account for the influx of traffic from Colonel By Drive at rush hour. A suggestion would be flex posts down the center line or perhaps a landscaped median along part of the long, straight stretch. Medians are already in place further down Greenfield as you approach the highway and seem to be quite successful.

width, particularly as it pertains to buses and transport trailers, Greenfield Avenue is being narrowed down as much as is feasible, with 3.5m lane widths on the straight sections. Where the roadway bends the design needs to accommodate the sweep of the design vehicles within their lanes, which results in localized flaring of the roadway.

There are restriction on the use of vertical measures, such as speed humps, on truck routes and bus routes like Greenfield. Implementing a central median would not be possible due to spatial constraints within the right-of-way (ROW) (buildings, utilities poles, etc.), and would also result in wider vehicle lane widths (to accommodate plows) and be problematic at private accesses in providing adequate full movement access/egress.

#### **Ultimate**

Request removing /relocating maintenance hole covers within the Greenfield Avenue roadway near Concord Street North to reduce vibrations from large vehicles driving over them.

Elimination of maintenance holes on Greenfield Avenue at this location is not feasible given that the sewers and watermain valve chambers follow the curve of the road to keep the infrastructure in the right-of-way for future access / maintenance.

Best practice is to position the maintenance holes so that they are out of the wheel path of vehicles. This is difficult on a curve as the size of the vehicle will determine the wheel path, and you may accommodate certain types of vehicles bypassing the maintenance holes and then have certain types hit almost every time.

## **Ultimate**

Concerns about the loss of tree cover along Main Street to accommodate cycling facilities both in front of 29 Main Street and on the opposite side of the roadway. Trees act to provide shade, clean the air, and provide some attenuation of noise from traffic, especially Highway 417. It is felt that accommodation of cycling is prioritized over pedestrians along this corridor.

Within the project limits, the design team is cognizant of the desirability of tree cover as it relates to aesthetics, protection from the sun, and reducing temperatures in the urban core. Where possible, every attempt is made to save trees, or to plant new ones. Given the narrow right-of-way within this section of Main Street, there are limited areas where trees can be planted. The proposed design seeks to tie-in existing cycling infrastructure south of Harvey Street to the pathway along Colonel By Drive, while providing a parallel pedestrian facility.